

Thesis

University of Stirling
Department of Management and Organization

**Investigations into the Quality of
Public Services in Malaysia**

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ABSTRACT

This thesis emerged as a result from the desire to know how the Public Service of Malaysia is coping up with the demands of quality services from the public. The Public Service, in meeting the aspirations of the Government, on providing quality services to the public, has introduced a number of quality programmes. In spite of this positive move to inculcate a quality work culture among the Public Service employees, the public is said to be still complaining about public services. In this situation, investigations are required to determine the true status of the level of quality of services delivered by the Public Service.

These investigations involved measuring service quality and the SERVQUAL instrument of measuring service quality, which has been tested for its reliability, has been introduced. After obtaining the measurements, shown in the form of service quality gaps, further investigations was carried out to identify the cause of the service quality gaps. It was discovered that service quality can be affected by the internal service gaps and in this case, the service performance gap is the main cause of the service quality gap.

Further investigations narrowed down the cause of the service quality gap to performance appraisal. Therefore insight was gained about the improper implementation of performance appraisal which can affect quality. The invaluable findings obtained from the thesis about the Public Service prompted suggestions to be made about ways of improving quality services delivered by the Public Service.

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CHAPTER 1

INTRODUCTION

Malaysia comprises of the Malay Peninsular, Sabah and Sarawak with a total land area of 329,758 square kilometres. The peninsular makes up nearly 40 per cent of the land area while Sarawak and Sabah form 38 per cent and 22 per cent respectively. The peninsular is situated between Thailand in the north and Singapore in the south while Sabah and Sarawak occupy northern Borneo. Sabah and Sarawak are separated from the Peninsular by the South China Sea. Malaysia has a population of 18 million people with 82 per cent of the population living in the peninsular, 10 per cent in Sarawak and 8 per cent in Sabah.

Malaysia is a federation of 15 states including the Federal Territory of Kuala Lumpur and Labuan. It has a constitutional monarchy headed by His Majesty, the Yang di Pertuan Agong, elected every five year term from either one of the nine state rulers from the states which have the king as the head of state. The country practices parliamentary democracy and has a bicameral parliament consisting of a Senate (Dewan Negara) and a House of Representatives (Dewan Rakyat). Elections to the Lower House are held every five years on the basis of universal adult suffrage, each constituency returning one member.

The Cabinet, headed by the Prime Minister consists only of members of the legislature and is collectively responsible to Parliament. These members are head

of the Ministries of the Prime Minister's Department; Home Affairs; Finance; Transport; Public Works; Primary Industries; Energy, Telecommunications and Post; International Trade and Industry; Agriculture; Domestic Trade and Consumer Affairs; Education; Information; Culture, Arts and Tourism; Human Resources; Science, Technology and Environment; Housing and Local Government; Defence; Rural Development; Foreign Affairs; Land and Co-operative Development; Youth and Sports; National Unity and Social Development; Health; and Entrepreneur Development.

The distribution of legislative power between the Federal and State Governments is enumerated in the schedule of the Federal Constitution and is set out in the Federal List, State List and the Concurrent List.

The main subjects of the Federal List are external affairs, defence, internal security, civil and criminal law, citizenship, finance, commerce and industry, shipping, communications, health and labour. The State List comprises matters pertaining to land, agriculture, factory, local government and riverine fishing.

In the Concurrent List, where both Federal and State Governments are competent to legislate on subjects such as social welfare, scholarships, protection of wild life and town and country planning. The Government's administrative system is made up of three levels, Federal, State and District. It is through this administrative system that the Government is able to reach out to the public to provide public services.

1.1. BACKGROUND

The Government of Malaysia employs 880,000 public sector employees to help execute its public duties. According to the Chief Secretary of Malaysia (1995), “The Public Service of Malaysia implements the policies and programmes of the government, and may be described as a professional body of officials, permanent, paid and skilled. Public servants in Malaysia writing to the public appropriately sign themselves as ‘your obedient servant’. Despite the make-believe humble position as servants of the public by whom they are paid and employed and to whom they serve, they are in practice most important for the well-being of the country”.

The public sector of Malaysia has come a long way in promoting service excellence among its public employees. The public sector has had a long history in promoting excellence beginning with productivity improvement efforts in 1948, which was before the Independence of Malaya in 1957.

The Prime Minister of Malaysia, Dr. Mahathir Mohamad, when he took office in 1981, was very concerned about providing excellent public services to the public. In 1984, Dr. Mahathir Mohamad wrote an article, ‘Quality Control in Government’. According to the Prime Minister, “In Malaysia, the most frequent complaint is the inability of Government staff to serve the public well. This poor service may be due to lack of knowledge on how to go about doing the work or lack of courtesy. Work is not done as a team. Mistakes made are not corrected even if notified

because the workers do not care about the work of others. But as government procedures on a single piece of work often involve dozens or even hundreds of steps, the lack of co-ordination and teamwork cannot but result in a very poor quality of service”.

The Prime Minister wants the Public Service to meet customers’ needs. Special emphasis and focus on meeting customer requirements began with the launching of the Excellent Work Culture Movement at the national level on 27 November, 1989 by the Prime Minister of Malaysia. The objective of this movement is to enhance public employees’ awareness on the importance of quality of products and services. The final objective is to institutionalise a quality culture so that quality consciousness becomes a way of life.

The Prime Minister, speaking at the presentation of the ‘Prime Minister’s Quality Award’, says that “It is the hope and wish of the Government that all individuals in the public and private sector will be more committed to their duties and responsibilities to achieve quality in all aspects of work. The slogan ‘The customer is always right’ must be our slogan. If we work to satisfy our customers, the chances of success will be brighter” (New Straits Times, 10 November 1990).

In line with what the Prime Minister says, the Chief Secretary to the Government of Malaysia, in his speech on ‘Administrative Reforms in the Context of Malaysia Incorporated’ on 8 April 1993 said, “At one point, the notion of providing timely, accurate, reliable and trustworthy support services to satisfy customers and to be

willing to listen to feedback and constructive ideas from customers was relatively new to the Public Service. The question then was: 'Are the public sector agencies, characterised by vertical hierarchy, policies, rules and regulations, routine procedures and more so by their ingrained value system, able to meet the demand for providing quality services?' What matters now is the ability to inspire and to infuse the culture of performance. It is clear that the emphasis of the Malaysian Public Service reform is on delivering quality services to customers".

Hence, to improve the Civil Service it must undergo change. The Chief Secretary to the Government of Malaysia in a speech at the closing ceremony of the National Conference on 'Organisational Transformation and Managing Change' on 15 April 1993, said that, "As Heraclitus once said 'the only permanent thing is change'. Change is seen as the vehicle to move the country towards a fully developed nation by the year 2020. The need to change, thus presents opportunities for the public sector to move away from past habits and practices towards new methodologies. We, in the Public Sector, can no longer exist in the old bureaucratic traditions with rules and regulations which often hinder the move towards greater flexibility and adaptability" (Sarji, 1994).

In another of his speech, in relation to change, The Chief Secretary to the Government of Malaysia in his keynote address at the opening ceremony of 'The Seminar on Business Process Re-engineering' on 7 April 1994, said that, "In this process of adapting to the needs of the present and future, the organisation must be open to new management concepts and technology, which will give us the key to

identifying and overcoming current weaknesses or to help us take the quantum leap to breakthrough improvement” (Sarji, 1995).

On how the changes are taking place in the Malaysian Public Service, according to The Chief Secretary to the Government of Malaysia, Ahmad Sarji Hamid (1994), “The Mission and Vision of the Public Service is to transform it into a strong, progressive and dynamic service. In the transformation, firstly the government wants to create a civil service which is efficient, effective, dynamic and innovative; secondly, we need to have a civil service which is highly disciplined with the highest standards of integrity; and thirdly, we require a civil service which is action-oriented, people-oriented, and customer focused”.

In the transformation, the Government has embarked on a journey to build a culture of excellence in the civil service through the adoption of the Total Quality Management. The introduction of Total Quality Management in the public sector marks the transformation of the existing culture into one that is customer driven and ultimately enables government agencies to achieve total quality in all operational aspects. Foremost, TQM requires all agencies to formulate their respective vision through the process of strategic quality planning. A carefully formulated vision serves as a source of motivation for the departmental staff, and lays the foundation of the department’s quality objectives and improvements activities.

This was followed by the introduction of the Client’s Charter. The Charter is a written commitment made by all government agencies pertaining to the delivery of

outputs or services to their respective customers. In essence it is an assurance by agencies that their outputs or services will comply with the declared quality standards - that is, in conformance with the requirements of the customer. All agencies would announce their commitments and agreements for the knowledge of the public. The primary objective is to galvanise public sector agencies to be market driven and to institutionalise a distinct customer-orientation in the delivery of services. In this context, the Client's Charter introduced in 1993, forms the apex of all the government's efforts in inculcating and internalising the quality ethos.

Through this Charter, the Public Service is able: (1) to make known to the public about certain expectations of a specific quality service; (2) to make it easy for the public to assess the quality of services given; (3) to reduce ambiguity toward the services given; (4) to formulate specific performance indicators to make it easy for the government agencies concerned to evaluate themselves; (5) to enable comparisons to be made among agencies that provide similar services; and (6) to improve discipline and accountability in public services. This would contribute toward a more *transparent* public service.

The civil service has also embarked on a behavioural change. To do this, the basic incentives that shape that behaviour must be changed. The Public Service has created a new set of dynamics through the use of competitions, the measurement of results, the decentralisation of authority, and the creation of real consequences for success. It has instituted a plethora of quality and innovation awards. Under the Excellence Service Awards, civil servants whose performance appraisal merit them

what is described as diagonal salary progression, will receive a bonus equivalent to a month's salary. Also, has been decided that civil servants that receive the vertical salary progression after the performance appraisal will also receive a bonus. The annual awards of these bonuses to 5 per cent of the civil service population are consistent with the government's policy to reward civil servants on the basis of *quality performance*.

The Public Service need to change some beliefs and accepted practices that may be basic to the administrative culture. As the Public Service changes these beliefs and practices the administrative culture will also change. The head of department must now think that the people who achieve the quality or satisfy the customers are as important as the management. In the public sector, the most critical element in the change process is the translation of the common national vision into departmental goals, objectives and strategies.

This public sector reform is a global phenomenon. Malaysia is not alone in undergoing reforms in its public service, the pace-setters are the developed countries. The 1980s witnessed a renewed emphasis on reforming the public sector in most developed countries such as Australia, Britain, New Zealand and the United States of America. Governments throughout the world are therefore under intense pressure to use every resource which advancing technology or new management techniques can provide in order to squeeze out a greater return for the taxpayer's money. In the United States of America, President Clinton, both before and after taking office, warmly praised the book, *Reinventing Government* by David Osborne and Ted Gaebler

(1992), recommending it as reading for elected officials in America. The title was used as the theme for Vice-President Al Gore's announcement of the President's programme for the streamlining and improvement of the federal government (Butler, 1994). Reform of the public sector refer to changes in the tasks, structure, and objectives of political institutions and administrative agencies, thus reflecting the changing values of their respective societies (Mascarenhas, 1993).

Major influences on these countries for adopting public sector reforms, among others are (1) the public disenchantment with quality of public services; and (2) the influence of the new right or neo-conservative philosophy that favours more market-oriented approaches to public sector management. As a result, these countries: (1) adopted economic liberation and deregulation of the economy; (2) reorganised the public services to make them efficient and more effective; and (3) adopted privatisation to bring about more market-oriented approaches such as user pay and contracting and selling of assets.

In other words, the significance of the reforms in the 1980s compared with past efforts is that they are more comprehensive and aimed at altering the relationship between the public and private sectors of the economy by essentially re-examining the role of the state in the economy and promoting fundamental values such as freedom of the individual, consumer choice and greater initiative for the private sector in economic development. In essence, the fundamental purpose of 'rolling back the state' through deregulation, economic liberalisation, and privatisation was to incorporate into the public sector core values identified with private enterprise

economies. Essentially it marked a radical shift from a public service whose purpose was to promote public welfare to an enterprise culture based on efficiency and economy (Mascarenhas, 1993).

In looking at the public service sector reform in the UK, the Cabinet Secretary to the Government of Great Britain says that the pressures to new approaches in managing the public sector was due to three characteristics of modern public life - the growing demand for public services; the growing potential, scope and range but also cost of those services which advancing technology has brought about, for example in defence and health; and the stage of resistance which has been reached in the developed countries to pay higher taxes. There is an awareness of the political potency of the demand for an ever growing range of health services of greater cost and complexity. There is an awareness of the demands for better transport, more effective crime prevention, better schools and universities, more comprehensive and generous social security for the poor and disadvantaged. At the same time, while people often claim that they are willing to pay higher taxes for better public services, it is a dangerous assumption that they will actually be happy to do so.

Therefore, for the United Kingdom experience, in considering the reform process of the 1980s, now continuing into the 1990s, it is helpful to categorise it under four headings - not exclusively, since one category may serve the purposes of the others. The four categories are: (1) Ownership (privatisation); (2) Management (by which it means the reduction in numbers, the Financial Management Initiative, efficiency scrutinies, Next

Steps, deregulation and the Citizen's Charter); (3) Competition (Compulsory Competitive Tendering); and (4) Openness' (Butler, 1993).

The Cabinet Secretary to the Government of the United Kingdom went on to say that in applying to the public services these sort of management techniques, they have not done anything wholly original or discovered a philosopher's stone. Some of the techniques are not without their problems and dangers (Butler, 1994).

Stewart and Walsh (1992) quoted, "We accept, however, that the nature of public service management is changing and we will argue that, while some of the changes strengthen it, others create major problems because they involve the adoption of models based on the private sector - and often over-simplified private sector models - without regard to the distinctive purposes, conditions and tasks of the public sector. This has meant that, in some cases, the practical impact has been small".

According to Dicken (1994), "With greater concern about efficiency, effectiveness and quality in industry and public services it is not enough just to provide a service; it must be demonstrated to be of sufficient quality to justify its existence".

One example is on privatisation. The Times, 1 April 1996 reported that ever since the water industry was privatised in 1989, household bills have soared almost as fast as the pay of the directors of the ten biggest companies. Profits stand at a record £1.6 billion a year. Last year Labour disclosed that 25 water company directors became at least £500,000 better off as a result of the privatisation - including five new millionaires. In

August, OFWAT, the regulator, said that the average family was paying £211 for its water, up from £ 119 at privatisation. Shareholders payouts had increased at four times the rate of inflation. Taxable profits rose by almost 150 per cent. Northumbrian Water's profits increased by 804 per cent. Until now, competition has had little impact, quality varied widely.

Again on the effect of quality of service with privatisation, Goodman (1992), points out that: (1) neither public nor private managers will always act in the best interest of their shareholders. Privatisation will be effective only if private managers have incentives to act in the public interest, which includes, but is not limited to, efficiency; and (2) Profits and the public interest overlap best when the privatised service or asset is in a competitive market. It takes competition from other companies to discipline managerial behaviour. When these conditions are not met, continued governmental involvement will likely be necessary. The simple transfer of ownership from public to private hands will not necessarily reduce the cost or enhance the quality of services.

In making comparisons between the Malaysian Public Service sector reforms with that of the public sector reforms in the United Kingdom, there are a few programmes introduced in Malaysia which are very similar with those of the United Kingdom.

The most obvious is of course, privatisation and another one is the Citizen's Charter. The public service sector in Malaysia too with the implementation of these programmes will have profound effects on its service quality. According to the Prime Minister of Malaysia, Dr. Mahathir Mohamad (1994), "Malaysia has one of the most prolific and

vigorous privatisation programmes in the world". The Government has, under its privatisation programme from 1983 to 1995 privatised 374 projects. In future, the sectors identified for privatisation between the year 1996 to the year 2000 are, the Bakun Hydro Electric Project, the Bumiputra Bank, Perwaja Steel, the Malaysian Postal Service, the LRT project in Penang and the Southern Coastal Highway (Berita Harian, 22 May 1996). The public still doubts whether public services can be more effectively and efficiently delivered when put into the hands of the private sector. C. S. Ling a Member of Parliament from Kluang says that if privatisation means giving a monopoly to a small group, then privatisation may not be the answer. Citing the Telephone Company, she said that there is no difference between the Telephone Company and the Telephone Department. The Government should consider the people's interest first and not the interest of those who run the privatised operation (New Straits Times, 30 October 1987).

Another opinion on privatisation, is that the principles and mode of implementing privatisation in Malaysia should be pragmatic and meet the needs of the country, which at present, are to ease the Government's financial burden and to raise productivity in the economy. Seen in this light, government projects or units that are self reliant or profitable should not be privatised. Otherwise, the government will be seen as 'privatising profits and socialising losses', as it sells profitable units to a minority in the private sector.

One other opinion presented by the President of the Congress of the Union of Employees of Public and Civil Service (CUEPACS), is that, the key to improving

public services and lowering costs is through good management and not by selling public agencies to private companies. Privatisation is a capitalistic concept which seeks to boost riches of the elite at the expense of the working class (Business Times, 26 October 1987).

Lately, the public are beginning to voice out their dissatisfaction over public services that have been privatised but have not provided the level of services expected of them. Some of the complaints are: (1) Late deliveries of letters by the Postal Company (Pos Malaysia) (The Star, 11 June 1996); (2) No justification for increase of telephone rates (The Star, 10 June 1996); (3) High charges for sewage treatment by Indah Water Konsortium (The Star, June 10 1996); (4) High water rates in Kelantan (The Star, 7 June 1996); The telephone company's (STM) profit exceeds the Ringgit 1 billion mark but still increases rates; (6) The electrical company (TNB) and the telephone company (STM) have not been providing quality services (Berita Harian, 3 January 1996); (7) The Post Office in Temerloh, Pahang has only one counter out of four counters open to the public (Berita Harian, 4 July 1995); and (8) No delivery of recorded letters even though occupants were at home (Berita Harian, 3 January 1996).

Whatever, the advocates of change are very confident that these changes in the public service can have a dramatic effect on the improvement of the delivery of quality services to the public. The Director General of the Malaysian Administrative Modernisation and Management Planning Unit (1992) says that a significant number of agencies have been successful in effectively introducing quality improvement programmes within their departments. Improvements to systems and

procedures have been made to streamline decision-making whereby the issuance of licences, permits and other approvals have been simplified and speeded up. The feedback received from various government departments as well as evidences gathered by the Inspectorate and the visit teams instituted under the Quality Awards Programmes have shown improvement in delivering quality services. Quality is the 'language' that is widely spoken in the public service departments and public servants are no longer strangers to the definition on quality. Most departments at the federal and state levels have established some form of structure for programme formulation, implementation and monitoring.

A significant number have active Quality Control Circles (QCC) which achieved remarkable success. This is borne out by the number of government departments participating at state level and national level QCC conventions and the high standard of presentations made. The quality and productivity programmes in the public service will always continue to receive the enthusiastic support and commitment of all public employees (New Straits Times, 31 Oct. 1992).

According to the Prime Minister of Malaysia, "Because of our success in the administrative system, we have earned the respect of the others and are able to stand tall even amongst the developed countries. It is a precious gift which Malaysians cherish" (New Straits Times, 27 April 1993).

It is a question whether the Public Service has actually improved after all these years. To date, the public is still complaining about the Public Service. Some of

the complaints extracted from a few national newspapers were, (1) The surgeons at the Sultana Aminah Hospital were very rude to their nurses during operations (Berita Harian, 18 May 1995); (2) Public given round-around, having to visit the Land Office 15 times, by the Land Office Chief Clerk for his strata title application for his flat (New Straits Times, 16 January 1996); (3) Five years having to wait for new identity card (Berita Harian, 18 October 1995); (4) The Malaysian judicial system with the huge backlog cases accumulated over the years (New Straits Times, 16 January 1996); (5) Lecturers of the National Institute of Public Administration are incompetent (Berita Harian, 19 May 1995); (6) Staff of Registry of Business angered by public who asked too many questions (Berita Harian, 7 July 1995); (7) Public Service Department took too long in giving pensioner his pension (Berita Harian, 4 July 1995); (8) Public employees creating hassle for people collecting new identity cards (New Straits Times, 4 January 1996; and (9) Road conditions, especially potholes, street lighting, warning signs and road divider lines not attended to and road projects undertaken by contractors not properly supervised by the authorities, especially on safety aspects (New Strait Times, 5 January 1996).

Just for the sake of comparison with other public services in the world, according to Carr and Litman (1990), "Citizens are your ultimate customers, the final beneficiaries of your products and services. How satisfied are they with what government is doing? The results of a 1988 survey of consumers by the American Society of Quality Control showed that only 1 in 11 Americans think government does a very satisfactory job in producing quality services. At the same time, about half the survey respondents said they think governments should make more efforts

to improve, but a third have given up hope and said that the government services should be turned over to the private sector”.

The public sector in U.K too has not escaped allegations of inefficiency and ineffectiveness. It was quoted in the Sunday Times, “How many civil servants does it take to answer a letter? The answer, so far as the Department of Health is concerned, is about 20, with the reply ploughing through 72 different stages of bureaucracy before it can be signed, sealed and sent” (The Sunday Times, 9 Oct., 1994).

The newspaper reported that, after a review of department’s procedures, it was discovered how armies of civil servants draft, discuss, type, check, authorised and send even the most basic of letters. Answering a parliamentary question involves even more civil servants - about 25. The department spends 120 man hours and £2,693.00 to prepare for a single committee meeting and take the minutes, which are then reviewed by six more, who amend them, add their comments, then pass them back to the original authors. Coopers and Lybrand, the management consultancy that helped to conduct that review, concluded that if the red tape was hacked away taxpayers could save at least 20 per cent of the £282 million spent every year on the Whitehall department.

Eric Caines, a former deputy secretary of the department, endorsed the criticism: “It’s not just the Department of Health, all government departments are Victorian and bureaucratic in their rigid procedures” (The Sunday Times, 9 Oct., 1994).

These allegations were refuted by Graham Hart, Permanent Secretary, Department of Health who quoted, “We accept that like most organisations we have scope to do things better. We have to reply to 84,000 letters a year. Ministers personally reply to 25,000. 72 per cent were answered within our four-week target in 1993. This year we have improved that to 82 per cent. It was also misleading to imply that 20 people are needed to reply to a typical letter. The answer in such a case would normally be prepared by one or two people at the most” (The Sunday Times, 16 Oct., 1994).

These complaints on the Public Service could be a one off case as there cannot be absolute perfection in delivering public services and at the same time the public service is comprised of 880,000 people and there are bound to be some bad bananas (or in the UK bad apples) among that huge crowd. In support of this argument, the Chief Secretary to the Government of Malaysia says that the overall performance of the Public Service has improved despite complaints against some agencies. He attributed such complaints to the occasional failure to anticipate an ‘unexpected demand’ for services. At times, the demand were overwhelming and complaints arose when the response was inappropriate (The Star, 12 June 1996).

According to a former Permanent Secretary, Navaratnam (1996), “The Prime Minister of Malaysia and the Chief Secretary to the Government of Malaysia have done a great deal to exhort the public service to be more efficient. All this undoubtedly helped to some extent to improve the quality and standard of the civil service. But these improvements have not been enough to meet the dynamic

challenges and changes taking place internationally and at home. What is required is a review and reform of the whole public service for it to really improve to match our aspirations and expectations for Vision 2020”.

As far as we can see, there have been contrasting views on the quality of services delivered by the public service to the public. Quality services cannot be delivered if the Public Service do not know its current position in delivering quality services. It will be problematic if the Public Service is not providing quality services but claim that it is doing so. Complacency will set in and there will not be much initiative to deliver quality services. Therefore, my research objectives that are described in detail below are to explore this area of uncertainty.

1.2. RESEARCH OBJECTIVES

I am now into my 15th year working with the public sector. I had my first experience working, as a surveyor, with the public sector when I was attached to the Seberang Perai Municipal Council, Penang, which is a local authority that takes charge of providing local authority services in the Northern, Central and Southern Districts of Seberang Perai. From the sixth year onwards, I have been with the Malaysian Civil Service. Under this service, I was attached to the Service Division, Ministry of Public Works. As I acquire more and more public service experience from year to year, I begin to question whether we are providing quality services to the public.

The very senior managers of the Public Service are of the opinion that the Public Service is providing excellent quality services to the public. On the other hand, we can hear the public complaining about public services. The public is fond of comparing the public service sector to the private sector. Of course, in making comparisons, the latter is seen as the provider of quality services as compared to the former. Base on my experience, throughout my career with the Public Service, I have never heard any praises for the Public Service from the public. I believe the public is not appreciative of the services provided by the public service for the mere reason of not understanding the *modus operandi* of the public service sector nor understanding about resource constraints faced by the public sector. It is partly due to this negative attitude of the public towards the Public Service that arouse my interest to carry out a research into this area to actually find out how the Public Service is faring in delivering quality services.

Therefore, my first objective of carrying out this research is to find out *what is the level of quality of public services delivered to the public*. In order to know what is the level of quality of services delivered to the public, my second objective is, I need to know *how to measure quality*. If the measurement shows that the Public Service is not providing quality services, I want to find out *what causes the delivery of poor quality of services*. This forms my third objective. Following from discovering what causes poor quality, my final objective is to see *how can the causes of poor quality be eliminated*.

In order to be able to meet these research objectives, a public service organisation which provides internal services among its workers and external services to the public at large has to be selected. In this case, I chose the Ministry of Public Works because of two reasons. Firstly, I was previously attached to that organisation which can give me better access to carry out my research which means there will be 'no stones unturned' during the research work; and secondly, it is one of the biggest ministries and therefore should be representative enough to enable me to form an opinion of the public sector as a whole. The Ministry of Public Works is headed by a Cabinet Minister assisted by the Permanent Secretary, Dato' Yahaya Yaacob who takes charge of the administration of the Ministry. The structure of the organisation is shown in Figure 1.1. As indicated in the organisation chart, the Public Works Department comes under the Ministry of Public Works. The organisation chart for the Public Works Department is shown in Figure 1.2.

1.3. ORGANISATION OF THESIS

This thesis runs from Chapter 1 to Chapter 10. The first chapter is the introductory chapter. The Chapter starts off by giving a brief overview of Malaysia and its governmental set-up. Later in the chapter, the background to the research is described, followed by a description of the aims and objectives of the research. The final part of the chapter discusses on the organisation of the thesis.

Chapter 2 describes about delivering quality services where in delivering quality public services, clear understanding of the meaning of services; quality; service quality; and what are public services is required. At the same time, since the TQM approach is adopted as a major approach in managing service quality in the Malaysian Public Service, this approach is also discussed here in order to get a clear understanding on how TQM is linked to delivering quality services.

Chapter 3 describes about measuring service quality. The chapter discusses how service quality can be measured and the barriers to measuring service quality.

Chapter 4 describes on the application of the SERVQUAL technique of measuring service quality. The chapter also explains why the SERVQUAL technique of measuring service quality is selected and how it is applied in the different type of services both in the private and public sector. Following the discussions on the positive implementations of SERVQUAL, this instrument for measuring service quality is adopted for measuring service quality in the Public Service.

Chapter 5 is the research methodology chapter that discusses on research methods and techniques that can be used to apply the SERVQUAL approach. This chapter too discusses on the application of the SERVQUAL in the five survey subject areas.

Chapter 6 is the chapter on Data Analysis where the results from the analysis of the data obtained from the surveys are discussed. In the discussion it was discovered the SERVQUAL instrument shows there are gaps over the service quality of

services delivered by the organisation. These findings cause the research to be extended further into Chapter 7.

The aim of Chapter 7 in looking at 'The Effects of the Internal Service Gaps on the Service Quality Gaps' is to search for the causes of the service quality gaps. The research carried out under Chapter 7 was able to identify a few causes of service quality gaps. It was revealed that performance appraisal is one of the main causes of service quality gaps.

Chapter 8 describes the performance appraisal system under the performance management system and how it can affect service performance. It has to be empirically proven that the appraisal system in the Public Service of Malaysia is actually flawed. Only then, it can be established that the flawed performance appraisal system does cause service quality gaps. Therefore, an empirical research study was carried out.

The research into the application of performance appraisal is discussed in Chapter 9. The results from the data analysis showed that the performance appraisal system is flawed. Since a flawed performance appraisal system can cause service quality gaps, as well as undermine the Total Quality Management programmes adopted by the Government in managing the quality of services, a solution is need to overcome the problem of delivering quality services to the public.

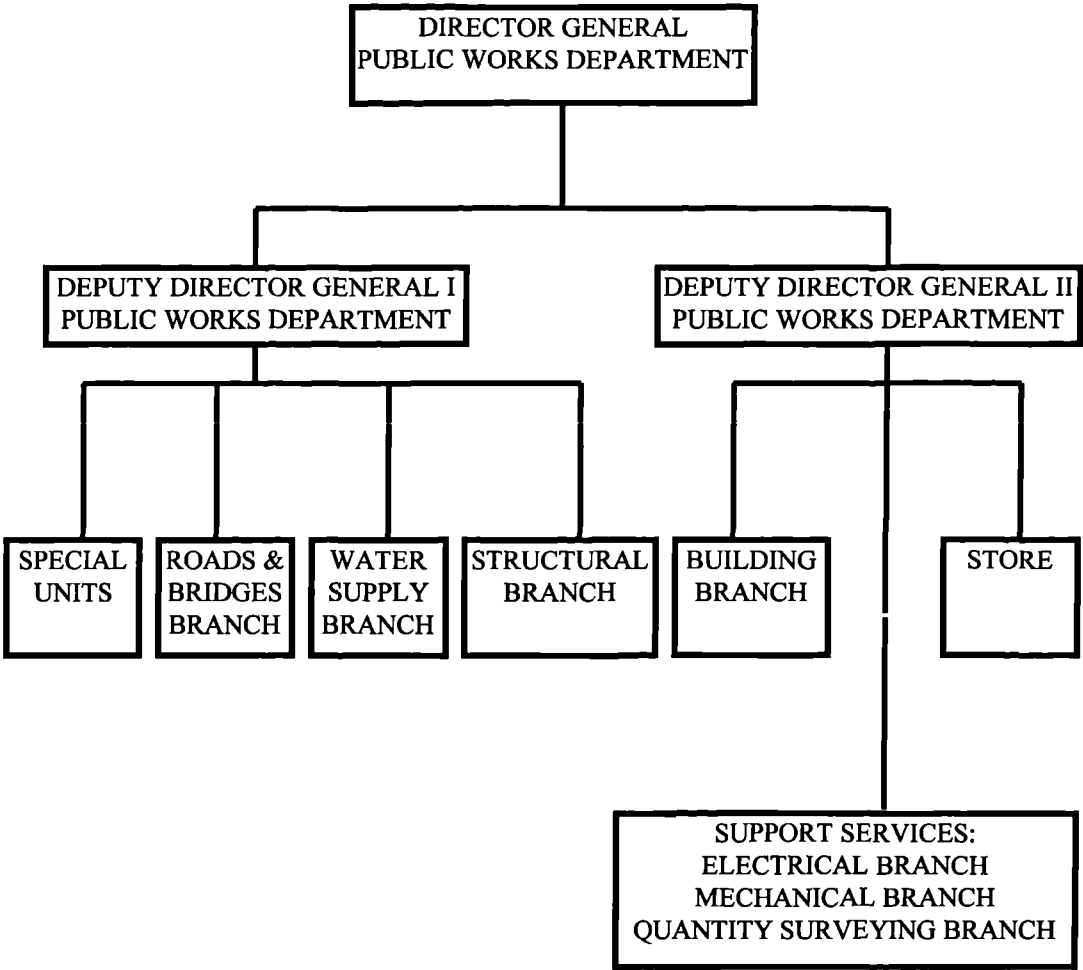
Chapter 10 is the concluding chapter to the research study.

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graph TD; A[PERMANENT SECRETARY OF THE MINISTRY OF PUBLIC WORKS] --> B[PUBLIC WORKS DEPARTMENT]; A --> C[DEPUTY PERMANENT SECRETARY OF THE MINISTRY OF PUBLIC WORKS]; C --> D[DEVELOPMENT AND IMPLEMENTATION DIVISION]; C --> E[ROAD PLANNING DIVISION]; C --> F[FINANCE AND ACCOUNTING DIVISION]; C --> G[SERVICE BRANCH]; C --> H[ESTABLISHMENT BRANCH]; C --> I[PROMOTIONS AND DISCIPLINARY BRANCH]; C --> J[ADMINISTRATION AND MAINTENANCE BRANCH]; C --> K[LEGAL ADVISORY UNIT]; C --> L[INTERNAL AUDIT UNIT]; C --> M[PUBLIC RELATIONS UNIT];
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The organizational chart for the Ministry of Public Works is structured as follows:

- PERMANENT SECRETARY OF THE MINISTRY OF PUBLIC WORKS**
 - PUBLIC WORKS DEPARTMENT**
 - DEPUTY PERMANENT SECRETARY OF THE MINISTRY OF PUBLIC WORKS**
 - DEVELOPMENT AND IMPLEMENTATION DIVISION**
 - ROAD PLANNING DIVISION**
 - FINANCE AND ACCOUNTING DIVISION**
 - SERVICE BRANCH**
 - ESTABLISHMENT BRANCH**
 - PROMOTIONS AND DISCIPLINARY BRANCH**
 - ADMINISTRATION AND MAINTENANCE BRANCH**
 - LEGAL ADVISORY UNIT**
 - INTERNAL AUDIT UNIT**
 - PUBLIC RELATIONS UNIT**

Figure 1.2. Organisation Chart - Public Works Department, Malaysia



CHAPTER 2

DELIVERING QUALITY SERVICES

The fundamentals of delivering quality services is understanding the meaning of (1) quality, (2) customer, (3) services, (4) service quality, (5) public services, and (6) delivering quality public services. Therefore Chapter 2 starts off the discussions by looking at the definition and the concern for quality followed by the discussion on customers.

The discussions are further extended to look at services in detail that include among others, the definition of services. Only a clear understanding of the meaning of quality and services can help form a clear picture of the meaning of service quality. From here, the next discussion is on service quality and since the research is on the Public Service, a discussion on the Public Service is included. These discussions can help differentiate the type of services provided by Public Service Sector when compared to the Private Sector which in the later part of the research can identify ways of measuring the Public Service service quality.

Also since the TQM concept, which is considered as one of the most effective means for delivering quality services has been adopted by the Public Sector, a discussion on this concept and how it affects service quality is also included.

The combined understanding of the meaning of quality, total quality management (TQM), customer, services, service quality and public services will form a strong foundation for carrying out research on the quality of public services.

2.1. DEFINITION OF QUALITY

Some typical definitions of quality quoted by the quality experts are shown below. The definitions do not focus explicitly on all the three elements of delivering quality service mentioned below by Dale and Cooper (1992) but the definitions do focus on the elements implicitly.

- Quality is product performance which results in customer satisfaction, freedom from product deficiencies, which avoids customer dissatisfaction (Juran, 1985).
- Quality...is the extent to which the customer or users believe the product or service surpasses their needs and expectations (Oppenheim & Oppenheim, 1989).
- Quality: the totality of features and characteristics of a product that bear on its ability to satisfy stated or implied needs (International Standards Organisation, 1986).
- Good quality ...means a predictable degree of uniformity and dependability at low cost with a quality suited to the market (Deming, 1986).

- (Quality is) the total composite product and service characteristics of marketing, engineering, manufacturing and maintenance through which the product in use will meet the expectations of the customer (Feigenbaum, 1986).
- We must define quality as 'conformance to requirement' (Crosby, 1979).
- Garvin (1984) has analysed the range of quality definitions, classifying them into five groups:
 - transcendental: excellence, the highest standard;
 - product based: dependent on the attributes;
 - user-based: satisfying the wants of the customer, fitness for use;
 - manufacturing-based: conformance to requirements; and
 - value based: value for money.

According to Dale and Cooper (1992), quality as a concept is quite difficult for many people to grasp and understand, and there is much confusion. There is no single accepted definition of quality. For the word to have the desired effect as intended by the user, and to prevent any form of misunderstanding in the communication, the following points need to be considered:

- The person using the word must have a clear understanding of its meaning.
- Those to whom the communication is directed should have a similar understanding.

- When quality is discussed within an organisation, to prevent confusion and to ensure that everyone in each department is focused on the same objectives there should be an organisational definition of quality.

In 'The Guide to Total Quality Management' (1992), in an organisation, quality can be focused on the product, the process and the customer. With the product as the focus of quality, organisations will adopt definitions such as 'Quality means products which don't come back from customers who do'. Here the emphasis is on what is being delivered from the organisation or system - the outputs.

A second focus on quality is on the process. When the process is the focus of quality, the definition of quality will be 'getting it right first time, every time'. The 'it' refers to the input, the process and the output.

A third focus for quality is the customer. The customer is anyone who receives products or services. This means that all organisations have internal customers - those people who depend on somebody else job - and external customers who depend on the organisation doing its job. When organisations make customer the primary focus of their quality initiatives, definitions such as 'Quality means meeting the customer's requirements' or 'Quality is satisfying the customer' are used (A Guide to Total Quality Management, 1991).

Sarji (1994) further supports the focus on product, process and customer in delivering quality services. He says that, quality not only mean quality of product or quality of

services but also quality of works, quality of information, quality of process, quality of division, quality of people, quality of systems, etc. If an organisation exercise quality in all its stages of work or its work processes, its output of services will definitely meet the needs of the customers. The definitions of quality indicate that customers are concern over quality.

2.2. THE CONCERN FOR QUALITY

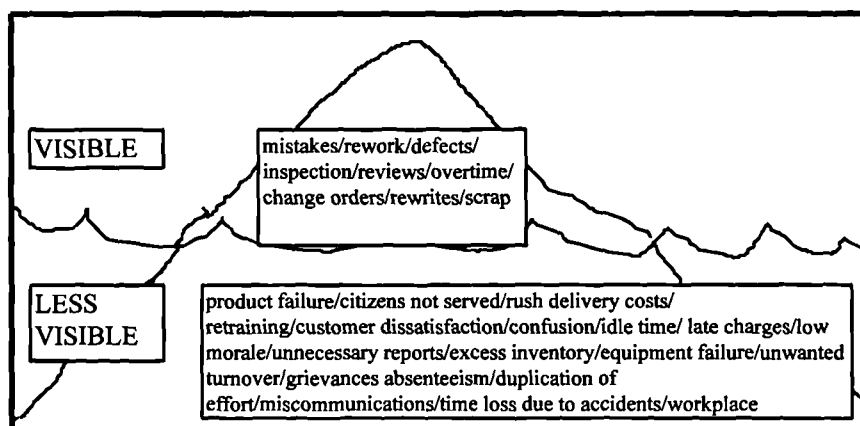
There are a number of influences that have brought about the increased concern for quality such as limited resources; major changes in values, organisational structure and operational methods; and the rise of consumers' influence on services provided.

2.2.1. Limited Resources

Most public services have come under increased financial restraint. World recession has forced many countries into a re-examination of public spending priorities, with a consequent stress on cost effectiveness and efficiency. At the same time, increased public scrutiny expects tax-supported institutions to perform on the basis of decreasing costs. The public wants more productivity for lower costs. All are indicating that government can get by without additional costs. In this kind of competitive environment, services can be delivered effectively and efficiently if the costs of quality are eliminated. Costs of quality are on costs of satisfying customers' service needs.

Most managers believe that cost, productivity and quality improvements are mutually exclusive objectives. They often say that their organisations do not have the time to ensure that product/service quality is right the first time. They argue that to concentrate on planning for quality will mean losing valuable production and operating time, and as a consequence output is lost and costs will rise. In this case, according to Murphy's Law: There is never time to do it right, but always time to do it once more. Management and staff will make the time to rework the product/service a second or even a third time and spend considerable time and organisational resources in corrective action and placating disappointed customers. This is what increases cost. Figure 2.1 shows that an organisation has to spend more money to eliminate the less visible costs rather than the visible cost before the organisation can provide quality services (Stebbing, 1990; Carr and Litman, 1990; Wagenheim and Reurink, 1991; Dickens, 1994).

Figure 2.1. The Cost of Quality Iceberg



(Carr & Litman, 1990)

The costs of poor quality, according to the Guide to Total Quality Management (1991) can be classed under four main headings:

Prevention costs, which include the cost of attempting to ensure that the inputs and processes are fault free. Prevention costs would also include:

- Testing of incoming goods and materials
- Routine maintenance and preventive maintenance
- Security systems
- Design and development of all quality assurance, inspection and testing systems and procedures
- Education and training of staff in all aspects of quality and safety.

Appraisal costs, which include all the inspection, checking, testing and auditing activities required to ensure that outputs, products and services come up to the required standards. Also to be included in these costs are:

- Salaries of inspectors, checkers, auditors etc.
- Testing equipment and facilities, its depreciation and maintenance
- Test runs, prototypes and parallel running costs
- Consultants fees for quality audits
- Disruption costs

Failure cost, which include the waste, scrap, rework, repairs, warranty claims, liability claims and excess stock. Also to be added are:

- Labour turnover costs.

- Cost of retyping/amending letters, memos, reports etc.
- Time spent in answering customer complaints
- Cash flow costs due to incorrect ordering

Non-measurable costs such as poor morale, bad reputation and loss of potential or existing business. Also to be considered:

- Excessive costs in recruitment due to poor company image
- Low staff performance due to lack of commitment
- Loss of potential ideas for improvement
- Low levels of feedback from staff causing small problems to become crises
- Low staff confidence in management resulting in resistance to change.

2.2.2. Changes in Values, Organisational Structure and Operational Methods

A second influence causing increased concern for quality has been due to the major changes in values, organisational structure and operational methods that have occurred. In many ways quality has become something of a bandwagon, with fashionable topics such as 'TQM' dominating concerns, and with a large number of quality 'gurus' selling their own ideas of what constitutes quality. At the same time there have been serious attempts to improve the quality of industrial products and systems and of services including the development of quality accreditation schemes such as the international standard for quality systems ISO9000 (BS5750 in Britain) (Walsh, 1990; Dickens, 1994).

2.2.3. Consumer Influence on Services

There has been the rise of consumer influence on service provision, and the greater importance attached to 'customer satisfaction'. In all the work elements of product, process and customer that focus on quality initiatives, quality is tied up with customer needs (Walsh, 1990; The Guide on Total Quality Management, 1991; Dickens, 1994).

In Malaysia, under the concern for quality, the year 1989 is seen as a watershed in the historical development of the productivity and quality management programme. It was a year of stock taking of past efforts that culminated in a renewed and concentrated focus on productivity and quality management. This is attributable to the perceived need on the part of the public service to respond to the rapidly changing domestic and international scenario, as well as the imperative to face the challenges of the decade of the 1990s. The role of the public sector is envisaged to be one of pacesetter and facilitator to the private sector. The challenge as such is to develop a public sector that is more proactive in the delivery of quality services to the public. This is only possible if it adopts the concept of quality where the focus is always on customer satisfaction (Rahman, 1990; Sarji, 1993). Customer satisfaction can only be derived if organisations know who are their customers.

2.3. CUSTOMERS

In the Public Service, in order to be mission-oriented, it is imperative that the Civil Service clearly establishes the goals for the performance of the role expected of it. These goals must of necessity be premised on the needs of the clientele. If the *raison d'être* of the Civil Service is the delivery of services to its clientele, then satisfying the multifarious customers' needs and conforming to their requirements would ultimately determine its effectiveness. Hence it is very important to identify these multifarious customers.

The public character of government-provided services is also important in how the public service customers are identified. There is no sale but rather allocation according to criteria of need or rights. It may not be clear who the customer is, for example for enforcement services such as policing or trading standards. There may be many clients for any given service at very different levels. Education may affect the child, parents, future employer or the whole population. Social services may benefit families as well as individual clients. There may also be wider public questions that go beyond the interests of the individual consumer.

The identification of the customer is a prerequisite to determining expectations, needs and wants. Any organisation that goes through the process of defining who its customers are automatically increases its effectiveness through a more precise focusing of organisational energy. The traditional view holds that the person outside the organisation is the one who receives or buys a service. From this view, customers of

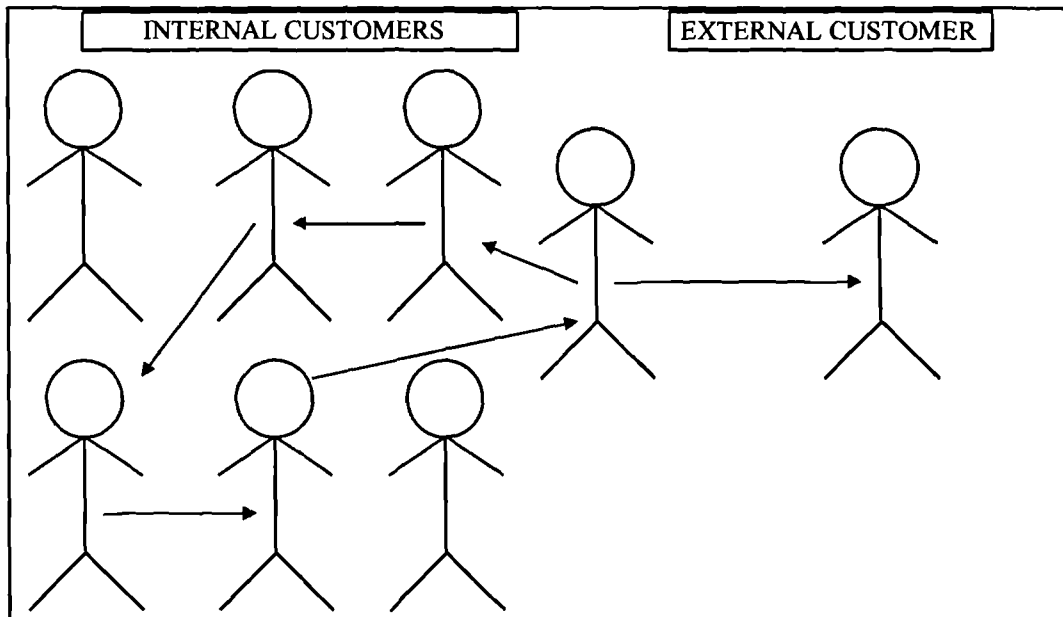
public administration would include all citizens who have dealings with the public sector (Wagenheim and Reurink, 1991; Sarji, 1994).

Customer here includes the internal and external customer. In delivering service quality there are the service chains linking internal and external customers. This link is shown in Figure 2.2. The link is further illustrated by showing the details of how the individual receives service and then deliver the services to the other customers. This blown-up link is shown in Figure 2.3.

Regarding internal customers, according to Bailey (1992), “internal customers are the people who work within the same organisation as ourselves, who share the same external customers and organisational goals, and whose work is in some way dependent on the work done by us, or by others within the organisation. They are our colleagues. They need our support to achieve success”.

The idea of treating colleagues as customers contributes substantially to quality service and customer satisfaction. The idea only works however if workers take personal responsibility for it and adapt behaviour and in some cases, working methods to make sure internal customers receive what they need. Internal customers do not only refer to the individuals who are the recipients of internal services supplied by internal suppliers but it also refers to departments or units that receive services from other departments or units.

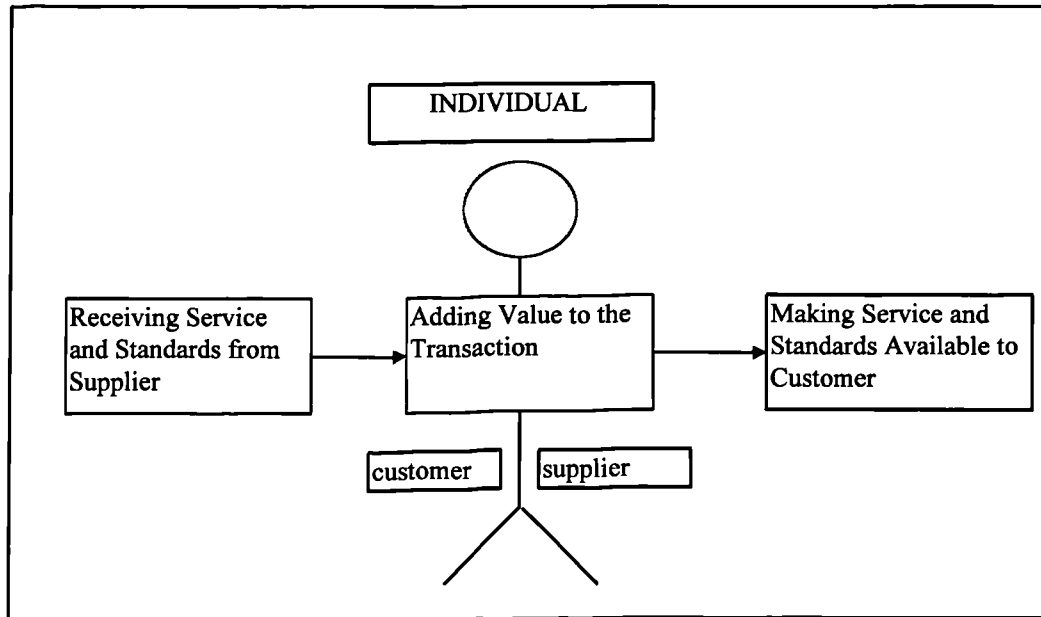
Figure 2.2 the Service Chain



(Bailey, 1992)

In the service chain, one of the situations common to all organisations, small and large, public and private sector is that of people working with other people to achieve organisational goals. During this process countless thousands of person to person (customer to supplier) contacts are made daily (See figure 2.3). The quality of the service provided by the organisation depends as much as on the success of these contacts as it does on the efficiency of systems and the appropriateness of procedures.

Figure 2.3. Customer-Supplier Chain



(Bailey, 1992)

The level of service delivered to the external customer is dependent on the contribution of all the individuals working within the service-providing organisation. Everyone's willing and efficient contribution is vital. It is only collectively, pulling together as a team of committed and quality conscious individuals, which an organisation is able to offer any realistic guarantee of quality service to its end customers.

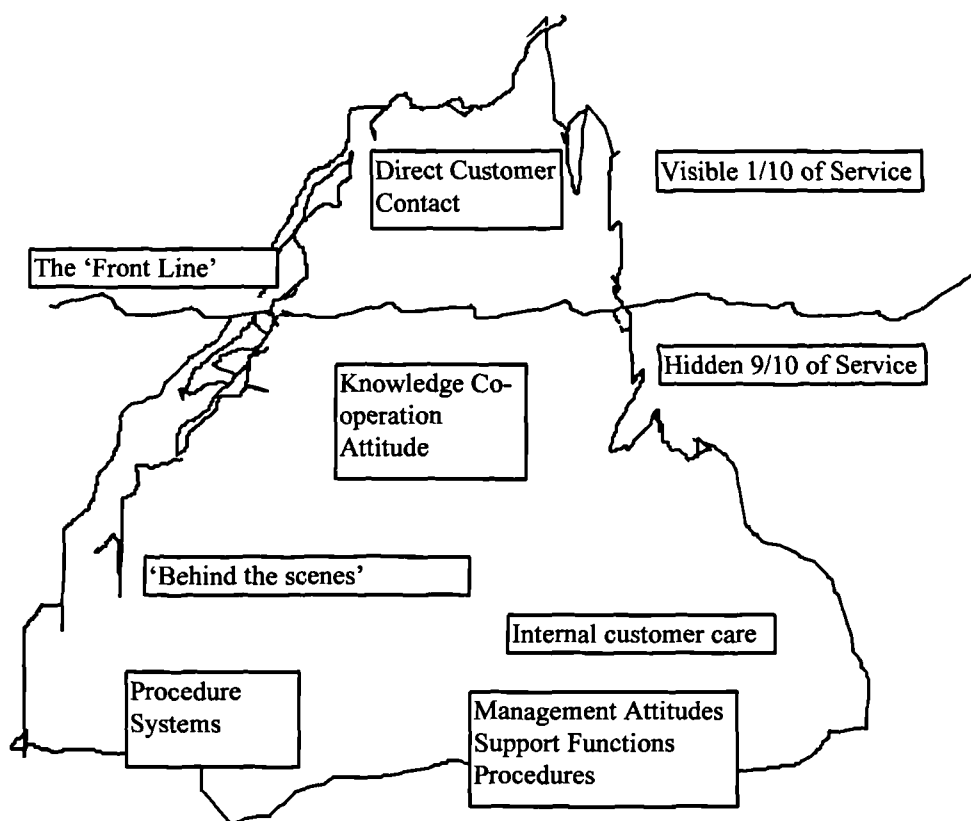
If organisations are to become more aware of the customers they serve, their internal services should be designed not, as they often are, with efficiency in mind but according to the needs of the customer. Everybody in the organisation should therefore have a customer for their work. Not only would such an approach improve customer service but also it would serve to heighten the customer culture within the organisation.

An organisation can only operate at its maximum effectiveness if each of its various functions is co-ordinated. If the operations of the individual areas are in harmony, then the organisation will benefit. If they work in opposition, ultimately the productivity of the organisation will suffer. For example, if the marketing department notifies production and inventory control of its projected sales forecast for the coming quarter, the proper levels of inventory can be stockpiled to satisfy the anticipated demand. This type of communication is particularly important when special sales promotions are planned. Without this communication, the sales items may be quickly sold out. The end result may be directly opposite of what was intended. Instead of producing new, satisfied customers, the sales promotion may result in disgruntled customers (Bailey, 1992; Lovell, 1992; Peppard, 1994; Sarji (1994).

The above discussion shows that quality service is very dependent on services delivered between internal customers. It is humanly impossible for the management to know in minute details all the information necessary for the organisation to perform effectively. Therefore, every employee (the general workers, typists, clerk, technicians, etc.) in the organisation with their intimate knowledge should be tapped to improve its operations. By mobilising them to work together in a team to solve problems that arise and make a 1 per cent improvement in a thousand areas, the gains in productivity can be tremendous. Organisations that failed to draw upon the creativity and enthusiasm of their employees are under utilising their most valuable assets and are unnecessarily handicapping themselves in the continuous race to maintain competitiveness.

Therefore, in the public service where the public gets direct services from the public employees, the quality service iceberg theory put forward to by Bailey (1992) can be applied (see Figure 2.4). According to the theory, only 10 per cent of services delivered to the external customers are visible to them. The other 90 per cent of services are carried out between internal customers and suppliers.

Figure 2.4. Quality Service Iceberg

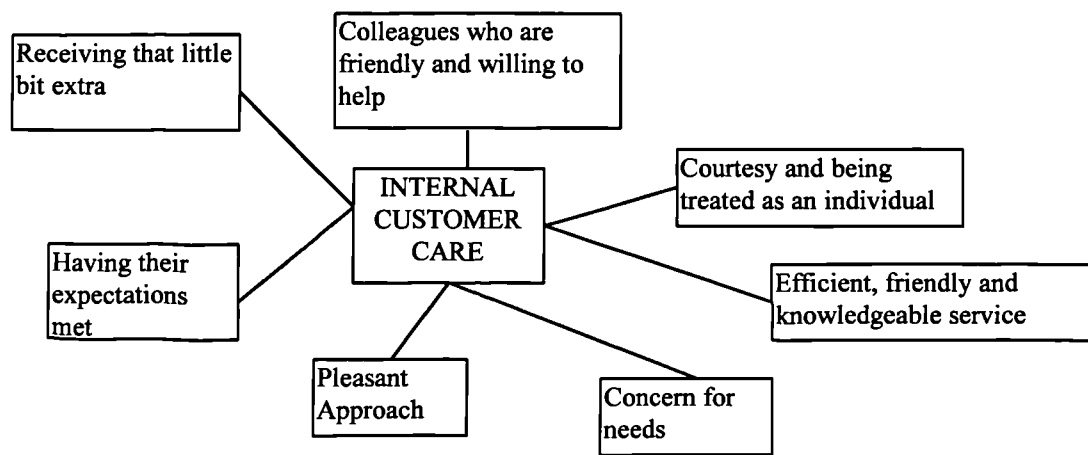


(Bailey, 1992)

The 10 per cent of visible services are provided by the front-line staff, in person or by phone is the public face of the organisation. Their own knowledge, skills and attitudes are vital in offering quality service but even so, they cannot do it alone. They require the support of the other 90 per cent of the hidden services.

In this work relationship between internal customers a climate of internal customer care challenges people to strive for excellence, not only in the quality of what they do as individuals, but also in the quality of their relationships with colleagues. In order to be able to reap the benefits that can be derived from internal customer care, we need to know what internal customer wants. Internal customer wants is illustrated in Figure 2.5.

Figure 2.5. Internal Customer Wants



(Bailey, 1992)

Attitude and Behaviour of Employees in Internal Customer Care

Internal customer care requires employees to develop appropriate attitudes and behaviours in relation to colleagues. This involves caring about them as people; co-operating with them in the delivery of quality service; and communicating with them frankly and honestly in order to facilitate this process (see Table 2.1).

Table 2.1. Developing Internal Customers Attitudes and behaviours

a) Caring About Them

In what way can *caring about them* contribute to quality service?

- Making people feel good helps them to work well

What type of behaviour will indicate a *caring about them* attitude?

- Treating them with courtesy and consideration
- Responding reasonably to their requests and demands
- Showing interest in what they do and accepting a sense of shared responsibility, i.e. avoiding blame and helping out when problems occur
- Showing you are aware of how what you do directly affects them in their work

b) Co-operating With Them

In what way can co-operating with colleagues contribute to quality service?

- Co-operative colleagues are likely to go out of their way to help
- Co-operation can get things done more quickly
- Things will not get left undone when a colleague is away or ill

What types of behaviour will indicate a 'co-operating' attitude towards your colleagues?

- Working with colleagues, and not against them to get the job done as quickly and as effectively as possible
- Being pro-active; doing what needs to be done without having to be asked
- Accepting responsibility outside your own sphere, i.e. stepping into other people's shoes when necessary

c) Communicating with Colleagues

In what way can communicating effectively with colleagues contribute to quality service?

- Information reaching those who need it
- A better understanding of customer requirements
- Quicker actions/reactions

What type of behaviour will be needed to communicate effectively with colleagues?

- Keeping a constant check on the needs of colleagues
- Keeping them up-to-date with one's own work requirements, and taking responsibility for informing them (i.e. don't wait to be asked)
- Sharing ideas, and encouraging feedback (including criticism)
- Transferring information accurately and speedily to the people who need to know it

Service quality of internal services have an impact on the quality of external services.

(Bailey, 1992)

Once customers have been identified, to achieve customer satisfaction, organisations need to tailor-make the services they have to deliver according to the needs of the customers.

2.4. SERVICES

No one can say he or she has not had any experience over services. In general, in our everyday life we deliver and receive services. Services are an important part of our life.

David Birch (1987), quoted by Parasuraman, Berry and Zeithaml (1990) writes:

It used to be that we were good at growing things. We still are, but with virtually no people involved. Agricultural employment has gone from well over half of all jobs to about 2 per cent of them. It used to be that we were good at making things. We still are, but with very few people involved...Today, only 9 per cent of American workers actually labour in factories. Yet, we have created millions of jobs....It's not surprising that what these people are doing instead of making things is providing services.

2.4.1. Definition of Services

According to Lovelock (1984) "...the deeds, actions and efforts performed by either person or a machine but which exists at one point in time and cannot be stored for later use. Services are usually complex in that they composed of different parts, some of which may or may not be employed for reasons which cannot be decided in advance,

with the consequence that measuring services in their entirety can, only be achieved with great difficulty”.

Walsh (1991) points out that services are largely produced by individuals for other individuals and the identity of the specific individuals involved in the service relationship matters, while the relationship between producer and user in the case of material goods is essentially anonymous. The nature of the exchange in a service relationship will often be highly personal, involving people as individuals. According to Walsh (1991), “It matters little to me who made the clothes or chocolate bar I buy: it matters a great deal who cares when I am ill or who educates my children”.

The recent extension of the BS5750/ISO9000 quality to services standard (ISO9004-2, 1991, p. 2) has provided a useful working definition of a service industry, the one to which the standard might apply. This document defines a service as:

The results generated by activities at the interface between the supplier and the customer and by supplier internal activities, to meet customer needs.

1. The supplier or customer may be represented at the interface by personnel or equipment.
2. Customer activities at the interface may be essential to the delivery of a service.

3. Delivery or use of tangible goods may form part of the service.
4. A service may be linked with the manufacture and supply of a tangible product.

The service delivery process may be highly mechanised, such as a directly dialled telephone call or highly personalised, such as medical or psychological services. Similarly, the degree of involvement with a product might vary along a continuum, with high product involvement at one end (services such as car repair and maintenance) and low product involvement at the other (services such as psychotherapy and counselling).

The BSI document also lists the types of service industry to which the standard might apply, a list that contains such diverse examples as waste management, opticians, banking, architects, photographers and schools.

2.4.2. Emergence of Services

Services emerged as a part of the natural progression in which economic dominance changes first from agriculture to manufacturing and then to services.

Rathmell (1974) noted that, as a consequence of people having more discretionary income and more discretionary time, consumers use their surplus resources to acquire services and to acquire expertise. Cowell (1984) similarly stated that increasing in

income are spent on travel, recreation, education and health, in preference to an additional car, for example, and that some functions, otherwise performed by the household, are sought from professional or specialised services.

According to Dotchin and Oakland (1994), the importance given to services, both by academics and in business, has changed greatly in recent times. From being merely a term for 'miscellaneous' as it was used by the nineteenth-century economists in classification (Albrecht and Zempe, 1985), it is now widely recognised that service is significant in several ways:

1. By 1989 service organisations employed 69 per cent of the UK working population, and this proportion is increasing (Annual Abstract of Statistics, HMSO, London, 1991).
2. Deming (Deming, 1986) estimated that 44 per cent of employment in manufacturing companies is of people providing services. Functions like marketing, finance, and purchasing provide supporting services to the production function and to customers. How well these services are performed affects the goods being produced and perceptions about the firm.
3. Service is also a major element in achieving competitive advantage. Peters (1988) points out that customers even those buying hard goods are concerned with far more than just the technical specification. In the long term, perceptions of care and responsiveness are more important than the tangible components of products.

2.4.3. Growing Needs For Services

The needs for services will be an ever growing phenomena. Bareham (1989) explained the continuing growth of services by examination of fundamental factors which have come to influence the buying process:

1. Cultural changes, as evident in the wide concern with health, fitness and environmental safety, have created new markets for both goods and services.
2. Demographic changes, in particular the ageing population of most western countries, have also created specific demand; for example holidays specialising in the needs of retired people, nursing care, residential care and retirement accommodation.
3. Lifestyle changes, including flexible work patterns and changing expectations about leisure, had led to demand for personal services, time-saving services, and services which provide particular experiences and cater for special interests.
4. As service organisations increase in scale, they are able to use promotion to increase demand for their offerings further.

2.4.4. Service Characteristics

In order to be able to distinguish services to that of goods there is a need to characterise services. Service can be characterised on:

1. Intangibility

The consumer cannot assess the intangible aspect of service before the event and hence consumers often must use the reputation of a service firm and its representatives to judge the service. Zeithaml (1981) observed that services cannot be evaluated in advance of use. Unlike goods, they do not have many 'search properties'. The consumer must rely on experience of the service itself, 'experience properties'.

2. Perishability

Service cannot be stocked in readiness for use for example, a medical consultation, hair cut, eye examination, cannot be produced in advance of requirement. Lipsky (1980) pointed out that service providers often work precisely the opposite way round: they do not store stocks of the product in order to meet fluctuations in demand, but store the consumer, in queues or waiting lists, so as to ensure that the providers' time is not wasted.

3. Simultaneity

The consumer has to be present before services can take place. Whether users face famine or feast for the availability of services will depend upon the number who wants them at any time. The difficulty is that people will tend to demand services at the same time, an increase in demand will serve to reduce the quality of service as providers try to provide more on the same budget. For example, when restaurants serve mass dinners (Lipsky, 1980, Hirshman, 1983).

4. Heterogeneity

Differences exist in the outputs of firms producing the same service, and within the same firm, and the same employee on different occasions.

What that can be expected from the results of these characteristics of services is that standards of quality of services are difficult to state and maintain. In some cases are not only physically but also mentally intangible, because they are difficult to grasp and understand. It may even be that it is difficult to know whether or not one has actually received the service at all. The evidence that a service, is delivered, may not be known in many personal or protective services (Dotchin and Oakland, 1994).

However difficult, organisations must satisfy customers which means delivering service quality.

2.5. SERVICE QUALITY

Service quality relates to customer satisfaction. According to Stebbing (1990), delivering service quality offers more scope for achieving and maintaining a company's competitive advantage. In pragmatic terms this means providing a service which is satisfactory to the customer at a price commensurate with that satisfaction (i.e. value for money), in the most cost effective and efficient manner. In other words, maximising profitability and efficiency in a competitive market place. In the public services like the health care, public utilities and the like should not be seen as profit-making organisations but nevertheless the service offered by them should satisfy the customer. Although, in many instances, such service organisations are not operating in a competitive environment which means that the public sector is very different from the private sector and have its own distinctive features, the customer will expect satisfaction and efficiency of service all the same.

2.6. THE DISTINCTIVE NATURE OF PUBLIC SERVICES

Public sector services are very distinct in nature as compared to the private sector services. It calls for an understanding of the unique characteristics of public sector services before quality public services can be delivered to the public.

One important distinctive feature of the public sector services is collectivity. The public domain can be described as the organisation of collective purpose, the area in

which collective values are pursued. Collective action expressing collective purpose is necessary condition for society, and indeed for the operation of the market-place. In the execution of collective action, decisions made must be in the public's interest. Only in the public domain can collective values be established. Collective values are arrived at through debate and discussion in the public arena. Interests have to be balanced. Particular values are expressed. The balancing of interests and the search for collective values beyond the particular values is a task distinctive to the public domain. In the search of collective values, the public sector needs to look at the interests and rights of different sectors of society. Every social and economic interest wants to see expenditure increased in favour of its own cause. Government departments operate within a political system, which requires governments to act as arbiters in the allocation of resources between competing interests in society.

Collective actions take place when providing services like planning services, police services and road services. As an example, in constructing roads, the parties involved are the future road users, the environmentalists, the landowners and the policy-makers. These parties are interested parties and are involved in making collective decisions on matters pertaining to the road construction.

Another distinctive feature of the public sector services that needs to be considered is public sector market and marketing. In considering the market, in market competition it is not meaningful to think of the competitive stance of the public sector except in certain fields. Government cannot opt out of a product or a market merely because the environment seems unfavourable. It may well have to opt in because of

market failure. In the provision of services by the private sector there is always bound to be market failure. The market forces of supply and demand in a perfect market competition do not occur at times. In reality, producers do their best to ensure that such perfect market does not exist. In fact, the whole purpose of business strategy is to ensure that the world of 'perfect competition' does not exist. Under imperfect competition, the consumers will be disadvantaged, having to pay a high price for service delivered.

As an example, if all services which are currently public, including education, health services, personal social services, refuse collection, etc., were put in the market, individuals will have to pay for these services. The corollary is that those services that were unprofitable would not be provided. If customers were either unwilling or unable to pay, then no company or organisation would provide them.

Therefore, there are dangers if, consciously or unconsciously, management in the public domain adopts models drawn from outside organisations. That is not to say that management in the public domain cannot learn from management in the private sector, or vice versa. Specific management ideas can be transferable. What is not transferable is the model of management - its purpose, conditions and tasks. The major differences between management of public services and the private sector discussed above is shown in Table 2.2 (Smith and Stanyer, 1976; Johan Olsen, 1987; Dimaggio and Powell, 1988; Willcocks and Harrow, 1992; Stewart and Walsh, 1992; Flynn, 1992; Sarji, 1994; John Stewart and Stewart Ranson, 1994).

Table 2.2. Major Differences between Management of Public Services and the Private Sector

PUBLIC SERVICES	PRIVATE SECTOR
Statutory and parliamentary regulation; codes of conduct	Board of directors; company planning frameworks
Needs of national economic management	Marketplace signals, e.g. business lending rate
Relative openness of government and decision-making; stress on representatives	Relative secrecy; stress on business confidentiality
Attentive publics; wide stakeholder base; impact of subsidiary regulatory bodies	Primary focus on shareholders and management
Multiple values and goals: <ul style="list-style-type: none"> • Service • Public interest • Equity • Professionalism • Consumer participation • Complex trade-offs 	Relatively restricted
Primary resource base from public taxes	Primary resource base from operational returns and borrowing
Extensive accountability	Accountability restricted
Responsiveness to political masters and short political time-horizons	No real national/local politician overlay; less artificial time constraints
Primary social goals, e.g. safe streets, health, no user charge	Primary profit goals
Complex and debated performance indicators	Mainly quantitative financial measures
More ill-defined policy directives; complexity of policy implementation	Relatively less ambiguous policy

(Willcocks and Harrow, 1992)

We can conclude that we need to consider the distinctive nature of public services in making decisions on public services. The distinctive model of the public sector produced by Stewart and Ranson (1994) can be used to guide management in the public domain in the process of making decisions about public services which includes making

decisions on delivering quality services to the public. Stewart and Ranson (1994) illustrated the differences in conditions as in Table 2.3.

Table 2.3. A Distinctive Model of the Public Sector

Public Sector Model	Private sector model
Collective choice in the polity	Individual choice in the market
Need for resources	Demand and price
Openness for public action	Closure for private action
The equity of need	The equity of the market
The search for justice	The search for market satisfaction
Citizenship	Customer sovereignty
Collective action as the instrument of the polity	Competition as the instrument of the market
Voice as the condition	Exit as the stimulus

(Stewart and Ranson, 1988)

2.7. DELIVERING QUALITY PUBLIC SERVICES

A thorough understanding of quality, customer, services, service quality and public services can contribute towards delivering quality public services. Taking into account the concept of Total Quality Management can further extend this. According to the Department of Trade and Industry, United Kingdom (1993), “The quality of your products or services and the quality image of your organisation, can only really be judged by your customers. Achieving quality is therefore about continuously satisfying customer’s needs. Satisfying your customers cost-effectively requires everyone in the business to play their part. *Total Quality Management* is the process which seeks to achieve this”.

The statement by the Department of Trade and Industry, United Kingdom (1993) mentioned above indicates that service quality can be achieved through the application of Total Quality Management (TQM). The Malaysian Government shows a lot of enthusiasm in the application of TQM in the Public Service.

According to the Prime Minister (1989), "The quest for quality and hence excellence should be recognised as a non-static process in that it is never ending. Excellence should be viewed as an ongoing process for continuous improvement. Therefore the new paradigm of a customer oriented Civil Service should be supported by the reorientation of work culture based upon the concepts of excellence and continuous process of improvement".

Under the new paradigm, the Prime Minister has introduced the concept of quality, which requires the Public Service to provide quality services through continuous improvement. The key words here are *quality* and *continuous improvement*. Therefore, how can the Public Service provide quality service and at the same time continue to improve the quality of its services. According to the Chief Secretary to the Government of Malaysia (1994), "The Civil Service has moved from the conventional and one-dimensional role as rule setters and regulators to that of facilitator and pacesetter in national development".

The new role has therefore redefined the boundaries of operations of the Public Service and created the environment for changes in attitudes and behaviour of Public Servants. The key component in these efforts under the new role is the focus

on quality and productivity in order to improve service delivery. In this regard, *Total Quality Management* (TQM) has been adopted as an approach to mobilise all available organisational resources to meet customer requirements.

TQM as a management philosophy upholds the principle of participatory management that promotes employee participation while emphasising the importance of customer satisfaction and continuous improvement. Accordingly, values like costs, timeliness, meeting targets, innovativeness and responsiveness to customer needs become integral to the quality culture.

Related to what that has been said by the Chief Secretary to the Government of Malaysia, Janz and Harel (1994) point out that TQM was introduced in an attempt to change management paradigms in order to face the fierce market competition. Some of the paradigm changes suggested are in Table 2.4.

Table 2.4. Paradigm Changes from Traditional Values to TQM Values

Traditional values	TQM values
Management directs, plans and controls daily operations	Management support front-line performance teams who run daily operations
'Rugged individualism' breeds healthy competition and high performance	Well-trained and supported teams always outperform star individual performers
Management's job is to solve operational problems	Management ensures performance teams have the skills, tools, information and support to solve operational problems
Organisational performance is the cumulative effect of individual performance	Organisational performance depends on its systems, processes and structure

(Janz and Harel, 1994)

Due to the Government's emphasis on applying TQM in delivering quality public services, a sound understanding of TQM is necessary in order to be able to apply this quality improvement approach. The important aspects of TQM, on what are its components and how it can be implemented into the Public Service, is discussed below.

2.7.1. The Implementation of TQM in the Public Sector

Redman, Mathews, Wilkinson and Snape (1995) point out that there are many quality 'sceptics' who question whether quality management can be successfully introduced in the public sector. According to Gaster (1992), "...the latest political or senior officer fad: lip service must be paid in strategic (i.e. public) places but implementation at the practical level can be minimised until the next fad arrives". Quality management in the public sector is thus often also seen as simply a fashionable management practice (Davies, 1993).

Some authors have gone further and have raised questions about whether it is possible to take a 'true quality approach' in the public sector because of 'red tape' and subservience to 'national dictat' (Pickard, 1992). Others have suggested that quality management and the public sector are contradictions in terms: How in the world do we get bureaucrats to strive for 'continuous improvements'? They invented the 'status quo' (Sensenbrenner, 1991). Some writers call for the distinctive systems of quality management for public services and warn of the

problems to be encountered in the uncritical adoption of private sector practices (Dale, 1994; Swiss, 1992; Walsh, 1990).

Swiss (1992) argues that TQM is ill suited to the government environment. The use of TQM in government has several major problems. Some of these problems are, insufficient modification for services, insensitivity to the problems of defining governmental customers, inappropriate emphasis on inputs and processes, and demands for top-level intensity that can rarely be met by the governmental culture.

Swiss (1992) went on to say that TQM was originally designed for routine processes such as manufacturing, yet most government agencies produce services rather than products. TQM remains much more difficult to apply to services because services are more labour intensive and they are often produced and consumed simultaneously.

Another problem with TQM raised by Swiss (1992) is on the issue of customers. TQM's most important principle is to delight the customer but in the public service who is the customer. Government organisations have obligations to more than their immediate clients.

2.7.1.1. Varied Customers

Rago (1994) rebuts the allegations made by Swiss (1992) against TQM. He points out that the Texas Department of Mental Health and Mental Retardation

(TDMHMR) service system has not only Swiss's array of customers but also the apparent contradictions regarding their individual expectations. TDMHMR has defined three distinct types of customers. There are the clients; the external customers include the Texas State legislature, advocacy groups and accreditation bodies; and the internal customers who are defined as employees who rely on the work of other employees in order to perform their job. Once the department's customers are identified, thinking in terms of their expectations becomes a very productive approach to the delivery of a service or product. In continuing the argument along this line, Moorage and Murgatroyc(1994) say that they take the point made by Swiss (1992) but they see it as overdrawn for two reasons. First, while government may not be able to satisfy the demands of all external customer groups for the reasons Swiss (1992) gives, the principle of identifying customer needs and explicitly meeting some of them cannot be contested. Second, such qualifications as exist regarding 'external' customers in the public sector, do not deflect from the validity of the TQM concept of 'internal' customer and the supplier-customer chains which exist within all public or private sector organisations.

2.7.1.2. No Uniformity of Output

On Swiss's view (1992) on uniformity of output made difficult in services, Moorage and Murgatroyc (1994) argue that in manufacturing, TQM has been a vehicle for reducing the variation in production processes to achieve consistency of quality product, a product orientation of 'doing the same thing right every time'.

However, doing the same thing right every time is not the prime need in the service industry, where to do the same thing correct each time would hardly be fitting for the varied needs of individual customers. Services in their view, essentially have a concern - whether they are in the commercial or public sector - to do the right things for the particular customer.

Carr and Litman (1990) point out that everything in life varies. The phone bill is different from month to month or crime rates go up and down. There are two types of variation. Abnormal variations occur when performance suddenly shoots much higher or lower than average. You cannot predict abnormal variation, because it is due to special causes. For example, errors may have increased because a manager assigned a new and untrained employee to a critical process. Other special causes may be a flu epidemic that keeps employees away from work, a sudden surge in demand or the one-time breakdown of equipment. If the problem appears only once or very rarely, then it probably has a special cause.

Moorage and Murgatroyd (1992) in citing Juran, say that, normal variation is the routine fluctuation of performance. Normal variation occurs because of common causes. These may be the level of training of all employees in a process, the reliability of equipment and methods normally used, or simply minor random events. When everyone has the same problem or makes the same error in working in a process, then look for common causes. Special causes account for only about 15 per cent of variation in a process, and common causes for 85 per cent. The majority of quality problems are due to common causes like poor management

rather than poor performance by the worker and this management controllable defects account for over 80 per cent of all quality problems.

In relation to this, Nord (1988) says that man-made systems are inherently unstable. Bringing a system into stability is one of the fundamental managerial activities in the Deming Theory on Variability. When you remove a special cause of abnormal variation, you are fixing the process. This does not mean the process is any better. When you fix a flat tyre on your car, you do not have a better car. It simply means that the car will function normally again. If you remove or reduce a common cause of normal variation, you improve the process. The normal operations of the process will be better (Carr & Litman, 1994).

The comments indicate that the Public Sector can provide a favourable environment for implementing TQM. It has been observed that in the United Kingdom, TQM had in fact official policy standing in the early 1990s with the National Health Service, the largest single employer in Europe. The NHS does not have the money to meet the demand of a growing population of senior citizens and rising expectations. For all these reasons, quality and TQM have taken a prominent place in the health discussions agendas of the UK. In Malaysia, government departments and statutory bodies are adopting the TQM approach. It has been discovered to be a simple but revolutionary way of performing work. Through TQM, the Public Service of Malaysia has been able to identify the unproductive practices. Also with TQM, they develop a flow chart and measure performance variation at each step. The aim is to develop standard operating procedures for each element in the

production process that reduces variation and errors made at each step. Obviously, for this TQM approach to be successful, heads of departments must facilitate an almost ruthless analysis of the current levels of performance of their respective departments.

Some Malaysian Public Service organisations have applied the TQM concepts successfully. One of them the Sultana Aminah Hospital, Johore Bahru (SAH) which won 2 Awards in 1992. SAH won the Public Service Director General's Award for Quality and the Award for Quality Filing System. Another organisation, the Federal Land Development Authority (FELDA) was awarded the Chief Secretary to the Government Quality Award in 1993. FELDA was established on 1 July 1956 and is responsible for the development of agricultural land in the rural areas. In carrying out its responsibilities, FELDA implemented the 7 principles of TQM outlined in the Public Service Administrative Circular 1/1992 on 'Guidelines on the Implementation of TQM in the Public Service'. The 7 principles are, the support of top management, strategic planning, meeting customer's needs, training and recognition, teamwork, performance measurement and quality practice.

2.8. CONCLUSION

An understanding of quality, customer, services, service quality and public service is called for if an organisation wants to deliver quality public services. The Total Quality Management approach can help deliver quality services to the public but without knowing the level of quality that is required by the public the approach is

not of much help and the objective of delivering quality services will not be achieved. Therefore the amount of quality of services delivered to the public has to be measured in order to know whether the organisation is providing adequate quality services. Measuring service quality is discussed in Chapter 3.

CHAPTER 3

MEASURING SERVICE QUALITY

The preceding chapter mentions about delivering quality services. An organisation must know whether or not it is delivering quality services. In order to do so, it needs to measure the level of quality of services delivered. Parasuraman, Zeithaml and Berry (1985) quoted Gronroos (1982), “When a service provider knows how [the service] will be evaluated by the consumer, we will be able to suggest how to influence these evaluations in a desired direction”.

In view of the importance of measuring service quality in relation to providing quality services, this chapter begins with the definition of measures and measurements followed by a discussion on the needs and the difficulties faced in measuring service quality. These form a base for the discussions on the selection of the right technique of measuring service quality. The discussions identified SERVQUAL as one of the effective tools of measuring service quality. To determine whether it could be an acceptable technique, further discussions, spanning from understanding customers’ perceptions and expectations, to the causes of the service quality gaps and to ways of closing the gaps were conducted.

3.1. DEFINITION OF MEASURES AND MEASUREMENTS

According to the Concise Oxford Dictionary (1993), measure means “the degree, extent or amount of a thing” and measurement means: “1. The act or an instance of measuring; 2. An amount determined by measuring; 3. Detailed dimensions”. Reaves (1992) stated, “when you measure something, there are two concepts involved: the thing you are measuring and the measurement you produce”.

In applying measurement over service quality, Øvretveit (1993) says, “Measurement makes comparison possible with similar things elsewhere, or through time. Count measures are based on judging whether an event falls within a particular category (e.g. counting errors or complaints). Rating measures are ways in which people can express their judgement of the amount of a specified something by rating the amount on a scale e.g. ‘On a scale of one to ten, I would rate the politeness of the receptionist as six’. Therefore, the purpose of measuring the quality of a service is to see if the quality is better or worse than it was, or is better or worse compared to another service”.

Øvretveit (1993) continues, “Another principle of service quality measurement is that measures are related to standards. Either a service designs a measure and specifies a level on the measure as the basic or target standard (e.g. answering the phone within ten seconds), or the service clarifies the standard that people expect or it wishes to aim for and then decides the measure”. Thus, service quality has to be quantified. It cannot simply be addressed as excellent quality, good quality, poor quality or worst quality. Through quantification, areas requiring improvements will be highlighted. This concludes that service quality has to be measured objectively.

3.2. THE NEED FOR MEASURING SERVICE QUALITY

Sarji (1994) suggests that the Public Service must become more customer-oriented. However to be customer-oriented, they must first of all have a clear measurable picture of how their customers perceive quality. The service they provide would be deemed to be of quality, only when it exceeds or meets the value-expectations of their customers. The public service must recognise that they operate in an era where the customer is paramount. He further suggests that there are three key ingredients to the quality process namely: (1) leadership, (2) employee participation at all levels and (3) the measurement of progress.

According to Dale and Cooper (1992), "Satisfying customer expectations and understanding as well as anticipating their needs is perhaps the only measure of organisational success". They further stated, "Organisations need to identify elements and characteristics of their product/service which the customer will find attractive, and to translate customers' quality and other requirements into internal needs, ensuring that these then permeate all levels in the organisational hierarchy".

Carr and Litman (1990) quote, "If customers are not satisfied with products or services, they won't buy them. No matter how good your products and services are, they cannot have total quality unless they meet your customers' needs and expectations".

Meeting customers' needs in order to ensure success, has to be both - meeting internal customers' needs and meeting external customers needs. Call them clients,

stakeholders, users, beneficiaries, or John Q. Public - the government has 'customers' just as private enterprise does. At the most fundamental level, that user will be an internal customer. At the ultimate level, the final product or service user is an external customer (Gronroos, 1982; Carr and Litman, 1990; Dale and Cooper, 1992; and Sarji, 1994). These customers of the public service can be an individual, a community or even the whole country.

The Chief Secretary to the Government of Malaysia at the National Conference on 'Organisational Transformation and Managing Change' on 15 April 1993 says, "One of the absolutes of quality is that you cannot manage what you cannot measure. Measurement tells you where you are and where you are going. I would like to quote Lord Kelvin: When you can measure what you are speaking about, and express it in numbers, you know something about it, but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind. It may be the beginning of knowledge but you have scarcely, in your thoughts, advanced to the stage of science".

This means that any organisation responsible for services must continually measure its effectiveness if it intends to provide high quality service. Measurement is a key management activity. Measuring provides information necessary for effective decision making, for monitoring performance and for effectively allocating resources. To promote continuous improvement, measuring quality must be a continuous activity. Measurement is a central part of any modern service's quality programme. Many services rightly emphasise the importance of customer satisfaction, but fail to equip employees and managers with measures and other

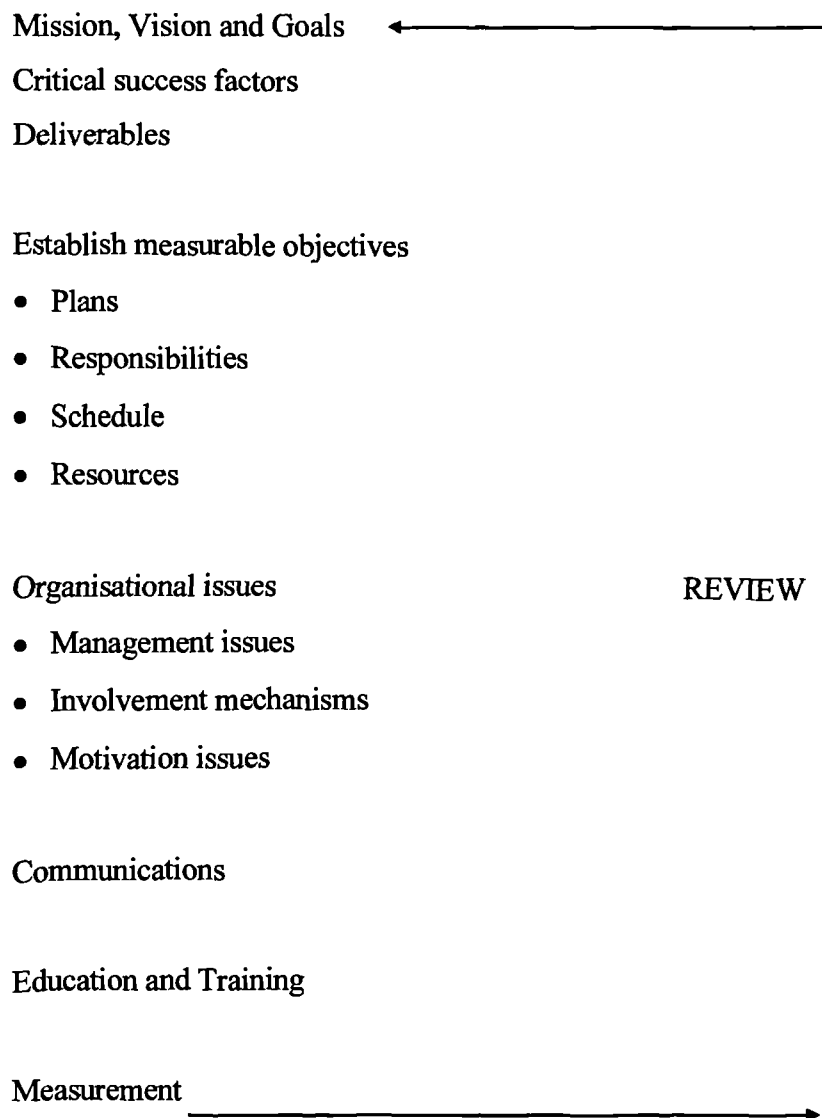
quality tools to progress service quality beyond a certain standard. Also, most organisations today are focusing measurements on short-term financial performance, on productivity and efficiency and not on long term customer satisfaction and value (Brown, Churchill and Peter, 1993; Øvretveit, 1993; Zumbuhl and Mayo, 1994; Webster and Hung, 1994).

Establishing measures and using them properly should be the first and most important step after awareness raising and customer-relations training. Indicators should be selected to best represent the attributes that link to customer requirements, customer satisfaction and competitive performance as well as to operational effectiveness and efficiency. A system of indicators thus represents a clear and objective basis for aligning all activities of the company toward well-defined goals and for tracking progress toward the goals. This step has to be taken together with other changes if a service is to make and sustain real improvements to quality (Porter, 1985; Day and Wensley, 1988; Parasuraman, Zeithaml and Berry, 1991; Rigotti and Pitt, 1992; United States Department of Commerce, 1992; Kaplan and Norton, 1992).

Apart from recognising the need to measure service quality, the measurement has to take into consideration whether it is a technical or a functional measurement. Anderson (1995) says that technical quality refers to the quality of the service product, whereas functional quality refers to the way in which the service product is delivered. As the literature has suggested (Lanning and O'Connor, 1990; Omachonu, 1990; Babakus and Mangold, 1991; Babakus and Mangold, 1992) customers tend to rely on functional quality attributes, rather than technical, when evaluating service quality. In many domains, the customer is unable to evaluate technical quality owing to a lack of

expertise. Therefore, some have said that functional quality is actually more important to the customer than technical quality (Gronroos, 1984; Lanning, 1990). Bell, McBride and Wilson (1994) too acknowledged the needs for measuring service quality. They suggest that a quality strategy involving measurements can deliver measurable improvements. Figure 3.1 shows that measurement underpins all aspect of the improvement process.

Figure 3.1. Planning for Total Quality



(Bell, McBride & Wilson, 1994)

One of the approaches used to measure service quality illustrated by Davis (1994) which was used by the Home and Buildings Group of Honeywell Inc. were customer surveys and employee interviews. They revealed considerable dissatisfaction with service quality both outside and inside the company. The problem was that no one was taking responsibility for providing overall support for customers. Long delays,

multiple points of contact and the tendency to bounce customers from one service person to another were quite common. Performance was not measured from the external customer's point of view. This discovery confirms the importance of a valid measurement system for improving customer satisfaction and the measurement was able to measure its services to its world wide customer base that was flexible enough to be adjusted for local conditions.

The discussion suggests that customer satisfaction be related to knowing what the customer wants. In order to know what customers want, the quality of services delivered to the customers have to be measured. Measuring service quality can be an uphill task.

3.3. THE DIFFICULTY OF MEASURING SERVICE QUALITY

We can rightly say that everyone recognises the importance of measuring service quality but the catch here is that service quality is difficult to measure. Dickens (1994) points out that there are no clear definitions of service quality, and no definitive techniques for its measurement. As a result the development and evaluation of quality service systems is extremely variable throughout service. Efforts in defining and measuring quality have come largely from the goods sector but this knowledge about goods quality, however, is insufficient to understand service quality. This adds to the difficulty of measuring service quality.

Unlike goods quality, which can be measured objectively by such indicators as durability and number of defects (Crosby 1979; Garvin 1983; Parasuraman, Zeithaml and Berry, 1985), service quality is an abstract and elusive construct because of three features unique to services: intangibility, heterogeneity, and separability of production and consumption (Lipsky, 1980; Parasuraman, Zeithaml and Berry, 1981; Hirsham, 1983; Dotchin and Oakland, 1994).

Services are basically intangible. They are performances and experiences rather than objects. Precise manufacturing specifications concerning uniform quality can rarely be set. Walsh (1991) commented that services are fundamentally different from manufactured goods and public services even more. In assessing the quality of goods and services, producer and consumer will have different abilities and rights in the assessment of the quality of those goods and services. In comparison, the management of service quality is much more difficult than controlling the quality of manufactured products.

Walsh (1991) further noted that it is not so much that quality of service varies but that the bases on which quality is judged differ and change. What was a perfectly acceptable service in the past may be no longer so as expectations rise. What is an acceptable level of service for one person may not be so for another. For these reasons the assessment of quality or at least the attainment of agreement on quality is likely to be difficult. Moreover, when what is being sold is purely a performance, the criteria customers use to evaluate it may be complex and difficult to capture precisely.

Services are heterogeneous. Their performance often varies from producer to producer, from customer to customer and from day to day. People themselves are key variable in the production of the service - quality depends on other people getting the service at the same time. It also depends on how the customer takes part in 'producing' the service: participation is essential to the success of some services such as education and many health therapies. All services need reliable information from consumers to assess each person's needs: physical objects stand still while they are measured and do not misunderstand questions. In many services, providers need particular skills to help the consumer to articulate their needs, and measurement methods have to be varied accordingly to the individual, making standardisation of measures difficult.

Production and consumption of many services are inseparable. Quality in services often occurs during service delivery, usually in an interaction between the customer and the provider, rather than being engineered at the manufacturing plant and delivered intact to the customer. Unlike goods producers, service providers do not have the benefit of a factory serving as a buffer between production and consumption. Service customers are often in the service factory, observing and evaluating the production process as they experience the service. Most services cannot be counted, measured, inventoried, tested, and verified in advance of sale to ensure quality delivery. Furthermore, the performance of services- especially those with a high labour content- often differs among employees, among customers, and from day to day (Parasuraman, Zeithaml and Berry, 1990; Walsh, 1991; Øvretveit, 1993).

In measuring service quality, the service type too can create difficulties in measuring service quality. This does not apply in the case of mutual knowledge where both producer and consumer could easily evaluate the quality of a good or service. For example, in the collection of refuse by the Local Authority, the service users know generally what to expect of the service and the service providers know what they should provide. Another example, in providing parks and playgrounds, both the users and providers know what that is required (Walsh, 1991; Faucett and Kleiner, 1994).

In other cases, many customers do not know what they need. Some services involve professional or technical assessment of customer's needs; they may involve a process which calls for professionals to be judging which interventions to use and to be continually adjusting what they do - using their professional and technical knowledge. One example is housing development that can affect the environment. Customers may not like the laws enforced on them but if the Government follows the customers' wants, it can be harmful to the customers themselves or to the public at large. This aspect of service is difficult for customers and even for professionals to evaluate.

Carr and Litman (1990) quoted "You have no doubt had the experience of internal or external customers asking for a product or service that is partly or totally wrong for their needs. You have to talk with these customers to help them better define what you are to deliver; often you are more of an expert on the subject than they are. But ultimately the customer validates your mutual decision on what is best". What is apparent is that clients of professional services face a particular challenge in assessing quality levels. The professional services are complex which makes their

performance difficult to judge. In other words, assessing the quality of a professional service can be problematic because different professionals and different customers have different views regarding what constitutes quality. No simple indexes or surveys are available to tell how well a lawyer defended a client or how good was the advice of a management consultant (Kotler and Bloom, 1984; Dingwall and Fenn, 1987; Hite and Fraser, 1988; Brown and Swartz, 1989; Carley, 1989; Freeman and Dart, 1993).

From what we have discussed above, the level of difficulty for the evaluation of services is based on three types of attributes that customers use to evaluate services: search attributes, experience attributes and credence attributes. Search attributes refer to those attributes that a consumer can evaluate prior to purchase and include such things as price, colour and style. The more search attributes associated with a product or service, the easier it is to evaluate. Experience attributes refer to those attributes that can only be evaluated after purchase and include things like taste and dependability. Consumers tend to rely heavily on experience attributes in the evaluation of services. Finally, credence attributes refers to those attributes that are difficult to evaluate even after a service is purchased and consumed. For instance, a consumer that is not schooled in accounting and taxation might find it difficult to assess the quality of a tax preparation service. This is a problem because consumers will normally only realise when they have poor service quality (McGhee, 1987; Brown and Swartz, 1989; Higgins and Ferguson, 1991; Bojanic, 1992; Bayou, 1993).

In another situation, it is difficult to measure service quality where a consumer is more easily able to assess the quality of a service than the producers themselves. For example, services for children at risk where risk is defined in terms of child abuse and

neglect, services focus more on the needs of the child. To determine the child's needs it is likely to involve a range of professionals in addition to the social worker, including teachers, psychologists, psychiatrists, paediatricians, GPs, health visitors and the police. The customer may have an unsatisfactory experience of the actual outcome, while individual services may feel that they have done a perfectly good job. The service is not the output of each individual or service taken separately but the total effect, which may well be less than the sum of its parts. It will be difficult to determine responsibilities for quality failures, even though the customer knows that failure had occurred (Stinchombe and Heimer, 1985; David and Atoll, 1989; Carr and Litman, 1990; Dickens, 1994).

One other situation that makes measuring service quality difficult is when there is mutual ignorance of producers and customers on service quality. It may arise because the results of a service will only come about in the long term or because it is very new or simply because it is difficult to be clear about what is an acceptable result. Many services in the public sector have the characteristic that it is difficult for either producer or consumer to judge quality, and perhaps even whether the service has been produced at all. The nature of what is intended to be produced in the case of community development work, or much social work and education is necessarily imprecise because it is about the generalities of life not the particulars and because results may only become apparent in the very long term.

Even though the discussion above indicate that service quality is difficult to measure, but due to the importance of measuring service quality, a number of approaches has

been introduced to meet this requirement. Therefore given the right approach, service quality can be measured.

3.4. MEASUREMENT OF SERVICE QUALITY

Despite of the difficulty in measuring service quality, there has been much work carried out concerning the measurement of service quality. Many academics, educators and practitioners have attempted to identify service quality determinants, develop service measurement systems and devise models for practical application and implementation. The measurement of service quality raises a multiplicity of issues, which attract considerable debate. Some of the topical questions still under discussion include: what are the different levels of customer expectations; what impact does service quality has on customer satisfaction; and are we measuring the right things (Gilmore and Carson, 1992). Therefore, in summary, can service quality be measured.

In Øvretveit's (1993) opinion, everything can be measured, for example, if customers say that 'politeness' is important to them it is because they are affected by it and can make judgements about how polite staff are. All they need is a rating scale to help them articulate their judgements. The only problem is that different customers will be judging different things, hence it is important to help customers to be specific so that more reliable comparisons of their judgements can be made. With the right assistance people can easily express their judgements in a way which is useful to a service wishing to make improvements. Many assume that measurement is only about 'objective measures' such as waiting times, temperature,

or number of appointments, and that a subjective preference rating is not a measure. It is curious how service providers often wish to use indirect or objective measures, even when it is cheaper and more valid to measure through customer ratings. In many areas it is not possible or cost-effective to develop objective measures, and more important, to establish some form of quantification of the subject of concern.

In a manufacturing context Dickens (1994) is of the opinion that, the quality of the product can be made the subject of tolerance and production criteria that can be inspected, measured and subjected to the rigorous statistical analysis of techniques such as statistical process control. In many instances these specifications are set by the customer, the purchaser, who determines the requisite standard of quality expected in the supplied goods. A similar situation holds in service industries, where the customer sets the specifications, not in terms of tolerance and standards, but in terms of expectancies.

The suggestions suggested that the principle of measuring service quality involve the identification of determinants of service quality and getting customers to rate these determinants. There have been attempts to define the determinants of service quality as well as to devise measurement tools that could objectively assess the expectancies and satisfaction of service users (Parasuraman, Zeithaml and Berry, 1985; Dickens, 1994). Some of the techniques for measuring service quality which does to some extent take into account the principles established earlier on is mentioned below.

3.5. TECHNIQUES FOR MEASURING QUALITY

In measuring service quality, it is identified that the determining factor of service quality is the customer's say. The most appropriate way of knowing how the customers value services delivered to them is to ask them. The customers have to be approached in such a manner whereby the information obtained from them can be analysed and form a conclusion of the kind of services that the organisation has been delivering to the customer. In addition, that information can be used to find ways and means of improving the quality of services delivered. Therefore sound techniques that can extract customer's feedback have to be used.

3.5.1. Approaches for Measuring Quality

A paper presented in the Scottish Quality Conference (1992), with the theme, 'Towards Quality Management in the Public Sector' mentioned about techniques of measuring quality (see Table 3.1.). The techniques are, 1) the external quality audit; 2) the market testing techniques; 3) the performance indicators; and 4) the internal quality assessment techniques. As an example of how some of these techniques are applied, three of the techniques, Quality Auditing; Service Level Agreement under the Internal Quality Assessment Techniques; and Performance Indicators, are discussed below.

Table 3.1. Approaches for Measuring Quality

1. External quality audit

- i). BS5750 and ISO9000
- ii). Definitions of quality
- iii). Procedures manuals
- iv). Compliance testing

2. Market testing techniques

- i). Assessing the right level and quality of service
 - a) market research
 - b) alternative providers
 - c) political and professional judgement
- ii). Specifying the contract requirements
 - a) client group scope and coverage
 - b) quality standard
 - c) price
- iii). Complete a task or maintain a standard
- iv). Contract compliance monitoring
- v). Feedback and review

3. Performance Indicators

- i). Where market comparisons inappropriate
- ii). Demonstrates success
- iii). Input/Output/Outcomes
- iv). Cost related
- v). Motivation and morale
- vi). Market research

4. Internal Quality Assessment Techniques

- i). Service level agreements
- ii). Voluntary competition

3.5.1.1. Quality Auditing

In an organisation, quality auditing is normally under the responsibility of the Quality Assurance Department. The department has to undertake internal and external audits. Stebbing (1990) and Dew (1994) are of the opinion that once a quality management system has been established and implemented, the only possible way any business can verify the effectiveness of the system is to carry out regular internal audits.

Audit can be defined as a planned and documented independent activity performed in accordance with written procedures and check-lists to be verified by investigation, examination and evaluation of objective evidence, that applicable elements of a quality system have been developed in accordance with specified requirements (Stebbing, 1990). Audit is also defined as a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the objectives (ISO 8402).

The audit objectives in the case of internal quality audit are:

- determine the implementation and effectiveness of one's own quality system;
- determine conformance or non-conformance of quality system elements to specified customer requirements;
- provide a basis for improvement of a quality system;
- meet regulatory requirements; and

- achieve second or third party registration.

The external audit objectives are:

- evaluate a potential supplier with a view to establishing a contractual relationship;
and
- verify that a supplier's quality system continues to meet specified requirements and is being effectively implemented.

The area to be audited should be defined by management, based on what management wants to learn. Working like a photographer, the auditor enters the work area to take 'snapshots' of the work processes to see whether actual performance matches expectations. A well-defined audit will ask the auditor to examine how one specific practice is being conducted across a large part of an organisation or it will instruct the auditor to examine several specific practices in one unit of the organisation. In either case, there is a clear definition of mission for the auditor. In defining the audit's mission, the manager should place the highest emphasis on obtaining verification that the most vital work is being performed properly.

3.5.1.2. Service Level Agreement

On the development of the Service Level Agreement (SLA), according to Pratt (1994), within any professional's sphere of work there are a number of mechanisms and systems which enable the individual to find solutions which best fit the business they are looking at. Often the approach is an amalgam of ideas that have been honed and refined to match problems as they emerge. What has happened over time is that the very detailed, somewhat rigid and narrow procedures originally devised have come to be replaced by a more flexible and user friendly process that meets the needs of today's market. This technique is now made simpler and easier to update. In the application of SLAs, Kirvan (1995) points out that SLAs define the expectations a user places on a service provider. They also define what vendors expect of users. Both users and vendors can negotiate the type of services to be provided.

Hiles (1994) notes that a service level agreement (SLA) is an agreement between the provider of a service and its customers, which quantifies the minimum quality of service that meets the business need. All of the words are significant:

- It is an agreement - that is, it is negotiated and involves a growing understanding of the needs and constraints on each side, probably resulting in compromise.
- It quantifies the level of service - that is, metrics are designed which both parties to the SLA agree represent the quality of the service as delivered.

- Delivered quality is the minimum acceptable. Higher quality usually costs more money. Anything above the minimum may be excess and therefore result in unnecessary cost. But the quality delivered has to be acceptable to the customer.

These SLA principles are being applied to any service. It fits into total quality management, quality improvement programmes, BS5750 and ISO 9000 as an intrinsic part of the process. The last decade produced a shift from internal services to external supply. There was an implicit acceptance that the quality of internal services, while high, might not have been relevant to the actual needs of the customer. One huge benefit to this shift has been to motivate service providers to examine the service packages they offer to their customers and to prompt the tailoring of service packages to individual customer's needs. While a SLA should result in delivery of service of a quality appropriate to the business need, it should prevent unnecessary and expensive over-provision of quality. Hiles (1994) cited Witchell of the UK Department of Trade and Industry, "The key benefit in introducing SLA was to clarify precisely what the customers' needs were and which elements were most important. As government service functions have to face increasing external competition, SLAs help in focusing on the customer and in honing professionalism".

The major advantage in SLAs is to provide an objective indication of whether we were providing an acceptable level of service and if not to help identify what needed to be done both procedurally and cost-wise to bring the service up to an acceptable level. But, in practice, public bodies may not have business targets that can be stated so clearly and may be subject to the wind of political change. Commercial organisations have to respond sharply to volatile market conditions - interest rate changes, recession

and boom, fashion and maybe legislative requirements. It has been a common mistake to define a text for the SLA, have the parties sign and then believe that SLA is in place. For the service provider, this means that standard terms and conditions are going to become increasingly irrelevant when those changes take place. Therefore reasons for SLAs failing include poor measurements, inadequate definitions and cumbersome SLA documentation (Hiles, 1994).

3.5.1.3. Performance Indicators

In Malaysia, performance indicators were first applied to the Public Service in 1993. The Chief Secretary to the Government of Malaysia, Ahmad Sarji Hamid (1993) says, “We need to have a performance-driven civil service. In using performance indicators, quantitative indicators are used in measuring workload, production, transactions and records. Qualitative indicators are used to measure timeliness, stoppage or out of service conditions. Quality of service indicators includes measures of complaints, customer satisfaction levels, and responsiveness rates. Efficiency indicators measure relative transaction or production costs. Financial indicators can include collection, etc.”.

In the UK, Pollitt (1990) points out that the first major public service Performance Indicator (PI) scheme was that for the NHS. It was launched in September 1983, with about 140 indicators per district health authority. From 1985 this became an annual event and both the reliability of the data and the method of presentation steadily improved. Meanwhile Performance Indicators sprang up everywhere - the civil

service, local government, the universities, the police and the courts. Not to have a set of indicators became the exception among the UK public services of the late 1980s.

Most indicators in most systems are still proxies for the two of the 'three Es (economy and efficiency). The third 'E' (effectiveness) is seldom captured. What efficiency means, termed by the Treasury and used by most government departments is, the relationship of the output of an activity or organisation to the associated inputs. The most commonly used measures of efficiency are labour productivity and unit cost. In comparison to the terms economy and effectiveness, economy means the extent to which the cost of inputs is minimised. In practice, this is usually measured in terms of money saved by switching to cheaper inputs and effectiveness means the extent to which output contributes to final objectives (Smith and Mayston, 1987). In line with Pollitt's (1990) argument, Smith and Mayston (1987) say that in the National Health Service, the Department of Health and Social Security has started to publish performance indicators for individual hospitals and authorities. One of the principal objectives of publishing these indicators is to point to areas of apparent inefficiency, as a first step towards eliminating that inefficiency.

Numerous problems can limit the effectiveness of the use of performance indicators (Smith and Mayston, 1987). According to Pollitt (1990), among service deliverers - doctors, nurses, teachers, social workers etc., they are frequently still seen as an imposition from above, as dangerously oversimplified and as functioning primarily to provide senior management with a crude rationale for input minimisation. Indeed on occasion service deliverers have reacted with vigorous and sophisticated criticism of management-inspired Performance Indicators.

Pollitt (1990) went further to say that there are well-recognised reasons why the development of indicators of effectiveness and quality has lagged behind those of economy and efficiency. The pre-existing data systems, known as data-driven systems, on which most first generation PI sets were founded did not encompass much if any information about effectiveness. That absence itself came about for at least two good reasons. First, collecting effectiveness data necessarily requires a measurement of impacts, and that in turn means going outside the organisation and trying to identify what those impacts are. Such expeditions are expensive and methodologically complex in a way that the accumulation of output data - lessons delivered, surgical procedures performed, etc. is not. Second, for judgements about effectiveness to be made the impacts needed to be compared with the services' original objectives. But in a number of cases these objectives had never been clearly defined.

The examples on the application of several techniques for measuring quality given above do not meet the requirement of measuring service quality. Hence, a technique to overcome the shortfalls of those techniques that focus primarily on efficiency measures has to be introduced. The new technique should focus on measuring service quality.

In creating an organisation-owned customer satisfaction survey to obtain customer feedback on services delivered, the people conducting such surveys tend to produce questionnaires that measure areas of services that are convenient to them. Thus, only a technique that can overcome this shortfall should be applied. In support of this issue, according to Donnelly, Wisniewski, Dalrymple and Curry (1995), the obvious approach - asking the customer - can be fraught with difficulties. A major problem is

the customer satisfaction surveys - an increasing, and expensive, phenomenon in the public sector - are prone to focus on customer perceptions of service delivery: what the customers think of the quality of service delivered. These surveys rarely provide the customer with any opportunity of articulating their expectations of service quality. This may be particularly important if such customer feedback is to be useful to policy makers and service managers.

Customers typically assess service quality by comparing the service they have actually experienced (the perceived service quality) with the service they desire or expect (that expected service quality). Without adequate information about both expectations and perceptions, the feedback from customer surveys is downright dangerous. But there are other potential problems with conventional customer satisfaction surveys. Unless considerable care and professionalism is applied, such surveys may lie open to the charges of bias in their construction, their wording, or their sampling frame. Such surveys also often reflect those service characteristics or features regarded as important by service managers and these may or may not coincide with the features that the customer views as important. Again, such surveys often take on gargantuan proportions because they seek to collect customer opinions on every possible aspect of service provision with little thought given to subsequent analysis and use of data collected.

Often constructed to respond to a crisis or emergency, such as an imminent review by the relevant service committee, these surveys are rarely embedded in the management monitoring processes or in the decision-making structures which would be able to take appropriate actions based on their findings. As such, customer satisfaction surveys are

often little more rituals to convince key stakeholders that efforts are being taken to be 'close to customer' and to improve service quality based on customer feedback. Such surveys can disguise fundamental problems in service provision that need to be addressed as a matter of urgency (Bowers, Swan, Koehler, 1994; Dickens, 1994; Pitt, Watson, Kavan, 1994; Watson, Pitt, Kappelman, Kavan, 1997; Van Dyke, Keppelman, Prybutok, 1997). Thus, among other things, organisations do not have to create their own customer satisfaction surveys that can be subjected to bias; organisations can use measurements which can be applied across different type of services; and organisations can measure the third 'E' – effectiveness, if the SERVQUAL technique of measuring service quality is applied.

3.6. THE SERVQUAL TECHNIQUE OF MEASURING SERVICE QUALITY

Babakus and Mangold (1992) indicated that research suggests that service organisations share various commonalities in the service delivery process both within and across industries. Consequently, identifying techniques that enhance service quality perceptions in one industry may enable researchers to develop generalisations applicable to other industries as well (Parasuraman, Zeithaml and Berry, 1985, 1986). The development and scientific examination of such generalisations, however requires the use of standard measurements instruments that are applicable across services studied (Heiss, 1974; Price and Mueller, 1986). Parasuraman, Zeithaml and Berry (1985) developed such a measurement tool SERVQUAL, to be used in a variety of service industries.

The SERVQUAL technique of measuring service quality involves measuring customer's perceptions and expectations. According to Gilmore and Carson (1992), "Improvements to service quality depend largely in being able to measure service quality. Perhaps the best known instrument for measuring service quality is the SERVQUAL scale developed by Parasuraman, Zeithaml and Berry (1988), who define quality as the difference between what a service company should offer and what it actually offers".

Rigotti and Pitt (1992) point out that the development of the SERVQUAL instrument offered service marketers perhaps for the first time, an apparently reliable and valid device for the measurement of service quality. The rigorous development of the SERVQUAL instrument has led to its acceptance as a research tool in both academic and commercial applications.

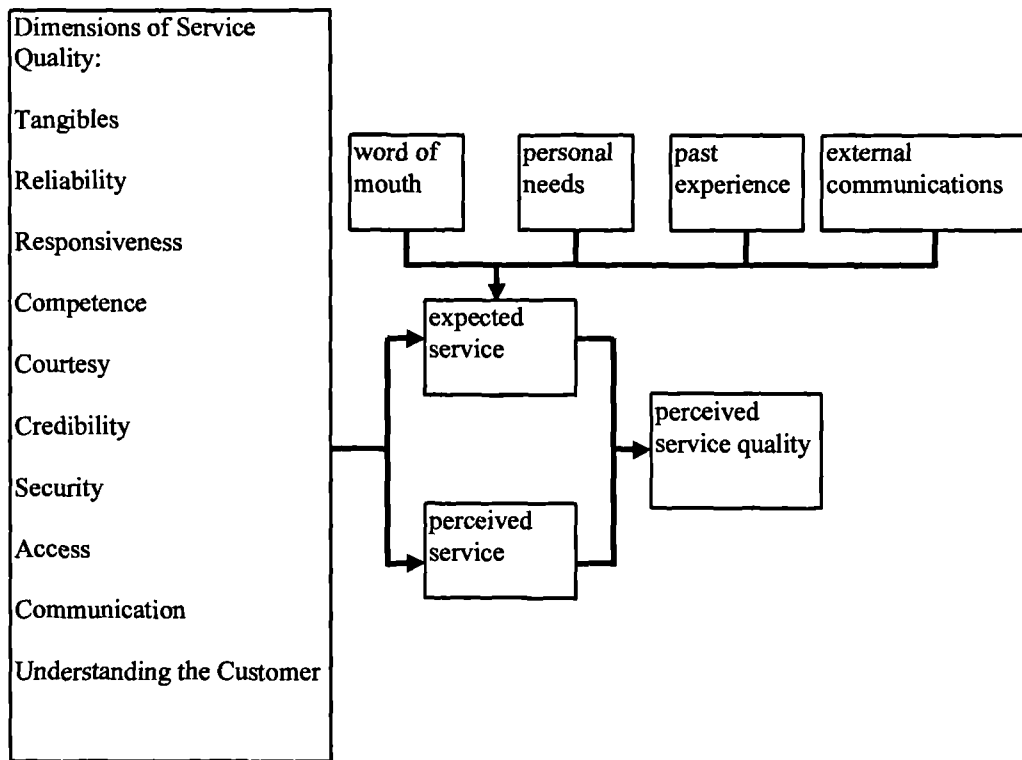
3.7. THE DEVELOPMENT OF SERVQUAL

The SERVQUAL scale was developed with the purpose of providing an instrument for measuring service quality that would apply across a broad range of services with minor modifications in the scale (Babakus and Mangold, 1992). In the initial stage of developing the technique, during investigation, five different service sectors, retail; banking; credit card; securities brokerage; product repair and maintenance; and long-distance telephone were chosen to represent a cross-section of industries which vary along key dimensions used to categorise services (Lovelock 1980,1983). For example, retail banking and securities brokerage services are more 'high contact services' than

the other two types. The nature and results of the service act are more tangible for product repair and maintenance services than for the other three types. In terms of service delivery, discrete transactions characterise credit card services and product repair and maintenance services to a greater extent than the other two types of services.

Parasuraman, Zeithaml & Berry (1990), using the investigation's findings was able to define service quality as the discrepancy between customers' expectations and perceptions; suggest key factors - word-of-mouth communications, personal needs, past experience and extended communications that influence customers' expectations; and identify ten general dimensions that represent the evaluative criteria customers use to assess service quality (See figure 3.2).

Figure 3.2. Customer Assessment of Service Quality



(Berry, Parasuraman, Zeithaml, 1990)

The definitions of the general dimensions on tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer are shown in Table 3.2.

Table 3.2. Dimensions

1. Tangibles

Appearance of physical facilities, equipment, personnel, and communication materials.

Examples of specific questions raised by customers:

- Are the bank's facilities attractive?
- Is my stockbroker dressed appropriately?
- Is my credit card statement easy to understand?
- Do the tools used by the repairperson look modern?

2. Reliability

Ability to perform the promised service dependably and accurately.

Examples of specific questions raised by customers:

- When a loan officer says she will call back in 15 minutes, does she do so?
- Does the stockbroker follow my exact instructions to buy or sell?
- Is my credit card statement free of error?
- Is my washing machine repaired right the first time?

3. Responsiveness

Willingness to help customers and provide prompt service.

Examples of specific questions raised by customers:

- When there is a problem with my bank statement, does the bank resolve the problem quickly?
- Is the stockbroker willing to answer my questions?
- Are charges for returned merchandise credited to my account promptly?
- Is the repair firm willing to give me a specific time when the repairperson will show up?

4. Competence

Possession of the required skills and knowledge to perform the service.

Examples of specific questions raised by customers:

- Is the bank teller able to process my transactions without fumbling around?
- Does my brokerage firm have the research capabilities to accurately track market developments?
- When I call my credit card company, is the person at the other end able to answer my questions?
- Does the repairperson appear to know what he is doing?

5. Courtesy

Politeness, respect, consideration and friendliness of contact personnel.

Examples of specific questions raised by customers:

- Does the bank teller have a pleasant demeanour?
- Does my broker refrain from acting busy or being rude when I ask questions?
- Are the telephone operators in the credit card company consistently polite when answering my calls?
- Does the repairperson take off his muddy shoes before stepping on my carpet?

6. Credibility

Trustworthiness, believability, honesty of the service provider.

Examples of specific questions raised by customers:

- Does the bank has a good reputation?
- Does my broker refrain from pressuring me to buy?
- Are the interest rates/fees charged by my credit card company consistent with the service provided?
- Does the repair firm guarantee its services?

Table 3.2. Cont.

7. Security

Freedom from danger, risk or doubt.

Examples of specific questions raised by customers:

- Is it safe for me to use the bank's automatic teller machine?
- Does my brokerage firm know where my stock certificate is?
- Is my credit card safe from unauthorised use?
- Can I be confident that the repair job was done properly?

8. Access

Approachability and ease of contact.

Examples of specific questions raised by customers:

- How easy is it for me to talk to senior bank officials when I have a problem?
- Is it easy to get through to my broker over the telephone?
- Does the credit card company have a 24-hour, toll-free telephone number?
- Is the repair service facility conveniently located?

9. Communication

Keeping customers informed in language they can understand and listening to them.

Examples of specific questions raised by customers:

- Can the loan officer explain clearly the various charges related to the mortgage loan?
- Does my broker avoid using technical jargon?
- When I call my credit card company, are they willing to listen to me?
- Does the repair firm call when they are unable to keep a scheduled repair appointment?

10. Understanding the Customer

Making the effort to know customers of their needs.

Examples of specific questions raised by customers:

- Does someone in my bank recognise me as a regular customer?
- Does my broker try to determine what my specific financial objectives are?
- Is the credit limit set by my credit card company consistent with what I can afford (i.e., neither too high nor too low)?
- Is the repair firm willing to be flexible enough to accommodate my schedule?

(Parasuraman, Zeithaml and Berry, 1990)

Parasuraman, Zeithaml & Berry (1990) proceeded with a quantitative research to develop an instrument for measuring customers' perceptions of service quality. They developed 97 items capturing the 10 dimensions of service quality. These items were in pairs - one to measure expectations about the organisation in general within the service category being investigated and the other to measure perceptions about the particular organisation whose service quality was being assessed. The 97-item

instrument was refined through a series of repeated data-collection and analysis steps to eliminate items that failed to discriminate well among respondents with differing quality perceptions about the organisations.

Data was gathered for the initial refinement of the 97 - item instrument from a quota sample of 200 customers. The questionnaire data was converted into perception - minus - expectation scores for the various items to obtain the difference scores. The difference scores were analysed using several statistical analyses. These analyses resulted in the elimination of roughly two-thirds of the original items and the consolidation of several overlapping quality dimensions. To verify the reliability and validity of the condensed scale, the difference scores concept was administered to four independent samples of approximately 190 customers each. Analysis of data from the four samples led to additional refinement of the instrument and confirmed its reliability and validity. The final instrument consists of 22 items, spanning the five dimensions of service quality of tangibles, reliability, responsiveness, assurance and empathy. These dimensions are shown in Table 3.3. (Parasuraman, Zeithaml and Berry, 1990). The founders of SERVQUAL claimed that these five dimensions were obtained through thorough research. Thus evidence has to be obtained to determine the effectiveness of the dimensions in measuring service quality. This issue will be discussed further in the next chapter.

Table 3.3. Reduced Number of Dimensions

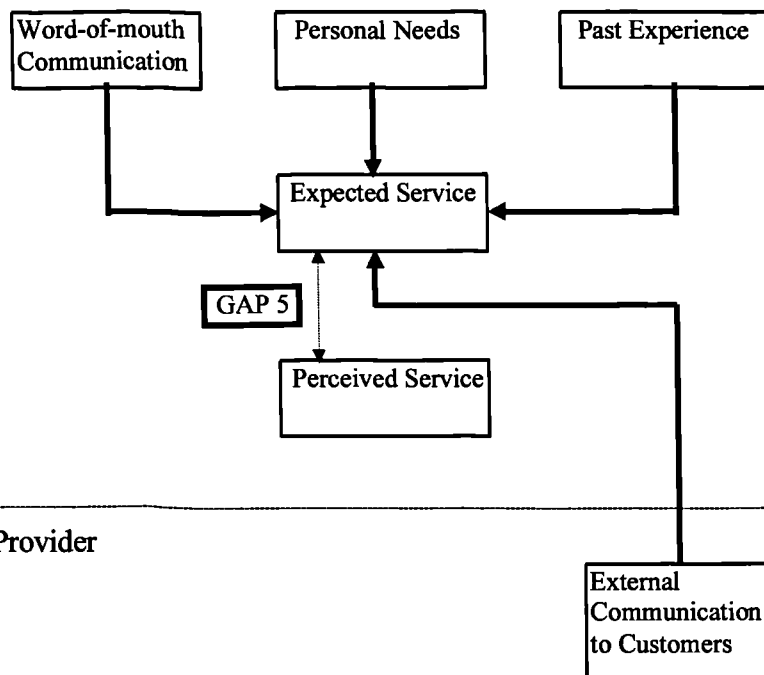
1. Tangibles
Appearance of physical facilities, equipment, personnel and communication materials.
2. Reliability
Ability to perform the promised service dependably and accurately.
3. Responsiveness
Willingness to help customers and provide prompt service.
4. Assurance
Knowledge and courtesy of employees and their ability to convey trust and confidence.
5. Empathy
Caring, individualised attention the firm provides its customers.

(Parasuraman, Zeithaml and Berry, 1990)

Parasuraman, Zeithaml and Berry (1990) said that, “The most important insight obtained from the research is a set of key discrepancies or gaps exists regarding executive perceptions of service quality and the tasks associated with service delivery to consumers. Each of the four service-provider gaps contributes to Gap 5. Gap 5 represents the potential discrepancy between the *expected* and *perceived* service from the customer’s standpoint” (See Figure 3.3).

Figure 3.3. Gap 5: Between Customers' Expectations and Perceived Service

Customer



(Parasuraman, Zeithaml & Berry, 1990)

These four internal service gaps have a profound effect on the service quality gap (Gap 5) which represents the potential discrepancy between the expected and perceived service. In summary, the writings of Sasser, Olsen and Wyckoff (1978); and Lehtinen and Lehtinen (1982), and the extensive focus group interviews conducted by Berry, Parasuraman and Zeithaml (1985) unambiguously support the notion that service quality, as perceived by consumers, stems from a comparison of what they feel service firms should offer (i.e., from their expectations) with their perceptions of the performance of firms providing the services. In the application of the SERVQUAL technique of measuring service quality, it requires a thorough understanding of the meaning of customers' perceptions and expectations of services.

3.8. CUSTOMERS' PERCEPTIONS AND EXPECTATIONS

Customer expectations have been investigated in a number of research settings (Winer, 1985). According to Oliver (1981), "It is generally agreed that expectations are consumer-defined probabilities of the occurrence of positive and negative events if the consumer engages in some behaviour". Miller (1977) called this standard the expected standard, defined it as an objective calculation of probability of performance. Swan and Trawick (1980) and Prakash (1984) termed this as standard predictive expectations, defined as estimates of anticipated performance level.

A normative standard of expectations has been proposed by a variety of researchers. Miller (1977) proposed ideal expectations, defined as the 'wished for' level of performance. Swan and Trawick (1980) proffered a standard they termed desired expectations, defined as the level at which the customer wanted the product to perform. Prakash (1984) formulated normative expectations, i.e. how a brand should perform in order for the consumer to be completely satisfied. Kahneman and Miller (1986) claim that each stimulus (e.g., a service encounter) is 'interpreted in a rich context of remembered and construed representations of what it could have been'. According to Audrey Gilmore and David Carson (1992), customer expectations may be defined as the 'desires or wants of consumers, i.e. what they feel a service provider should offer rather than would offer'.

The expectations construct has been viewed as playing a key role in customer evaluation of service quality (Gronroos, 1982; Lehtinen and Lehtinen 1982; Berry, Parasuraman and Zeithaml, 1985, 1988; Brown and Swartz 1989). Expectations are

viewed as desires or wants of consumers, i.e., what they feel a service provider should offer rather than would offer (Parasuraman, Zeithaml, Berry, 1988).

Based on their research, apart from expectations, Parasuraman, Zeithaml and Berry (1985) has introduced the SERVQUAL approach to assess and understand customers' perception as well as identifying the deficiencies that exist within companies that contribute to poor service quality perception by customers. From this research, they developed a conceptual model linking customer-perceived quality deficiencies to within-company deficiencies or gaps. To gain insights about executives' views on what constitutes quality of service, they conducted a series of in-depth, face-to-face interviews. The individuals interviewed came from marketing, operations, customer relations, and senior management - areas in which executives should have a keen interest in service quality. Most of the responses revealed common themes that cut across company and industry boundaries. These themes, which offer critical clues for achieving effective service quality control, can be casted in the form of four key discrepancies or gaps pertaining to executive perceptions of service quality and the tasks associated with service delivery to customers.

It is mentioned in Section 3.7 that the four internal service gaps do have an effect on the service quality gap. How these service gaps affect the service quality gap is discussed in detail below.

3.9. INTERNAL SERVICE GAPS CAUSE SERVICE QUALITY GAP

In providing services to the public, service quality can be affected if anyone of the four internal service gaps exist.

3.9.1. Consumers' expectations - Management perceptions gap (GAP 1)

Many of the executive perceptions about what consumers expect in a quality service were congruent with the consumer expectations. However, discrepancies between executive perceptions and consumer expectations existed. In essence, service firm executives may not always understand what features connote high quality to consumers in advance, what features a service must have in order to meet consumer needs, and what levels of performance on those features are needed to deliver high quality service. This insight is consistent with previous research in services, which suggests that service marketers may not always understand what consumers expect in a service (Langeard et al. 1981; Parasuraman and Zeithaml, 1982).

Therefore when there is an inaccurate understanding of what customers expect and what really matters to them it is likely to result in service-delivery performance that is perceived by customers as falling short of their expectations (Gap 5).

3.9.2. Management's Perceptions-Service Quality Specifications Gap (GAP 2)

Gap 2 is created when managers know what customers expect from them but they are not able to provide. This can be due to resource constraints, market conditions and/or management indifference which may result in a discrepancy between management perceptions of consumer expectations and the actual specifications established for a service. This discrepancy is predicted to affect quality perceptions of consumers.

Although some of these assumptions may be valid in some situations but the real reason for the gap occurring may be the absence of management's full commitment to service quality. Parasuraman, Zeithaml and Berry (1990) quoted Gavin (1983), who after completing an extensive field study on goods quality observed that "the seriousness management attached to quality problems varies. It's one thing to say you believe in defect-free products, but quite another to take time out from a busy schedule to act on that belief and stay informed".

3.9.3. Service Quality Specifications - Service Delivery Gap (GAP 3)

In the third situation, even with service standards, Gap 3 can still appear due to a number of constraints such as poorly qualified employees, inadequate internal systems to support contact personnel and insufficient capacity to serve. To be effective, service standards must not only reflect customers' expectations but also be backed by adequate and appropriate resources (people, systems and technology). When the level

of service-delivery performance falls short of the standards (Gap 3), it falls short of what customers expect as well (Gap 5).

3.9.4. Service Delivery- External Communications Gap (GAP 4)

Media advertising and other communications by an organisation can affect consumer expectations. Promising more than can be delivered will raise initial expectations but lower perceptions of quality when the promises are not fulfilled. In short, external communications can affect not only consumer expectations about a service but also consumer perceptions of the delivered service. The discrepancies between the level of service delivered and the external communications about it (Gap 4) adversely affect customers' assessment of service quality (Gap 5). In other words, Gap 4 occurs when there are exaggerated promises or when organisations fail to communicate to customers aspects of the service intended to serve them well.

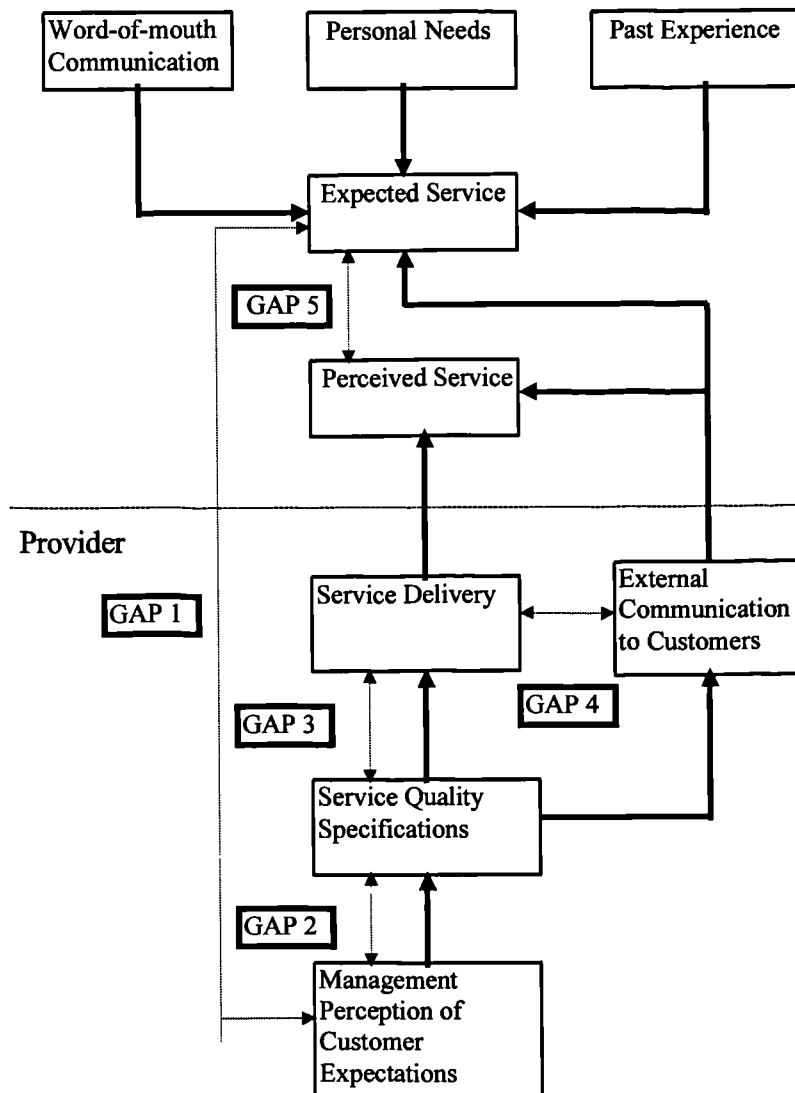
3.10. A SERVICE QUALITY MODEL

The various gaps discussed are the key ingredients in a recipe for gaining a good understanding of service quality and its determinants. These ingredients can be combined to portray the provider's and customer's sides of the service quality equation and the linkage between the two (see Figure 3.4). This conceptual model (Parasuraman, Zeithaml and Berry, 1990) conveys a clear message to managers wishing to improve quality of service: the key to closing Gap 5 is to close Gaps 1

through 4 and keep them closed. If one or more of Gaps 1 through 4 exist, customers perceive service quality shortfalls.

Figure 3.4. Conceptual Model of Service Quality

Customer



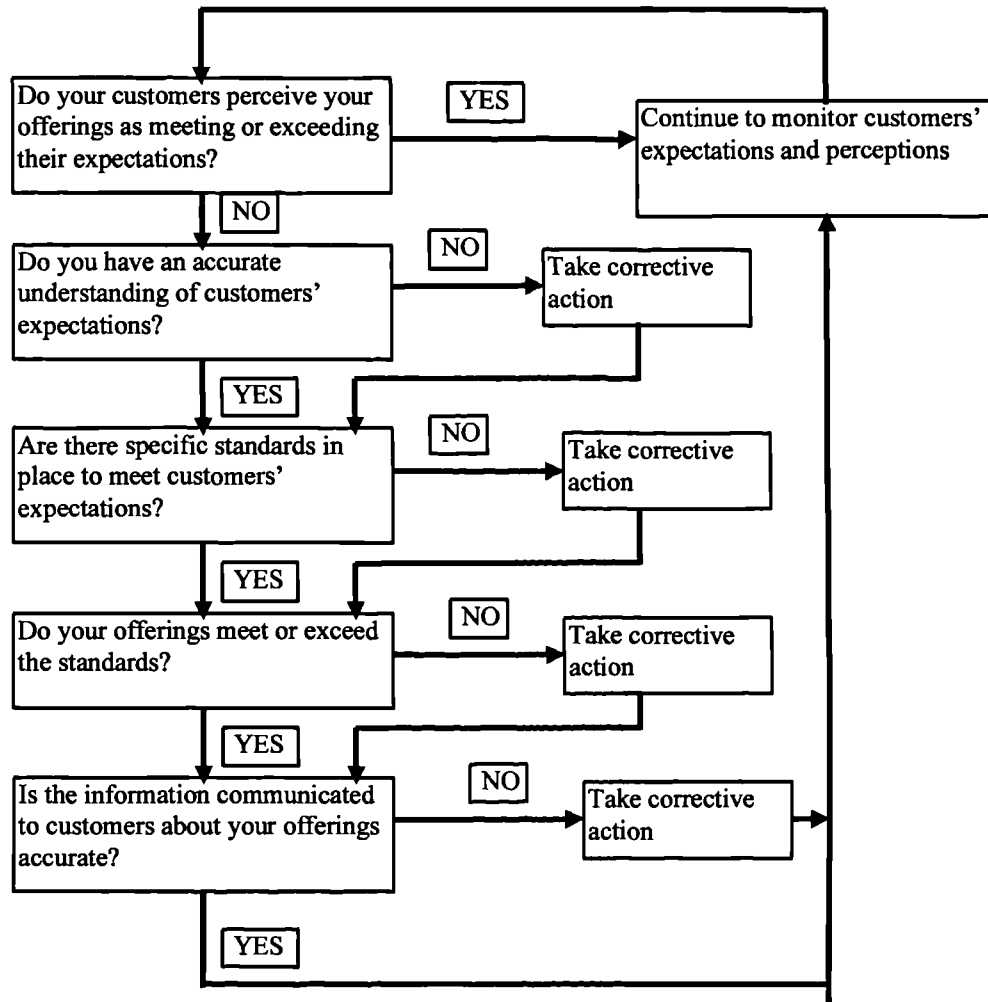
(Parasuraman, Zeithaml and Berry, 1990)

The conceptual model also implies a logical process which companies can employ to measure and improve quality of service. The processes are diagrammed in Figure 3.5. The sequence of questions in the five boxes on the left side of figure 3.5 corresponds to the 5 gaps embedded in the conceptual model in Figure 3.4. Specifically, the process begins with gaining an understanding of the nature and extent of Gap 5 and then successively searching for evidence of Gaps 1 through 4, taking corrective action wherever necessary.

3.11. CLOSING THE GAPS

In order for an organisation to be able to close Gap 5, the four internal service gaps within the organisation have to be closed. To be able to close the internal service gaps, the organisation must know what causes the gaps and how to close them.

Figure 3.5. Process Model for Continuous Measurement and Improvement of Service Quality

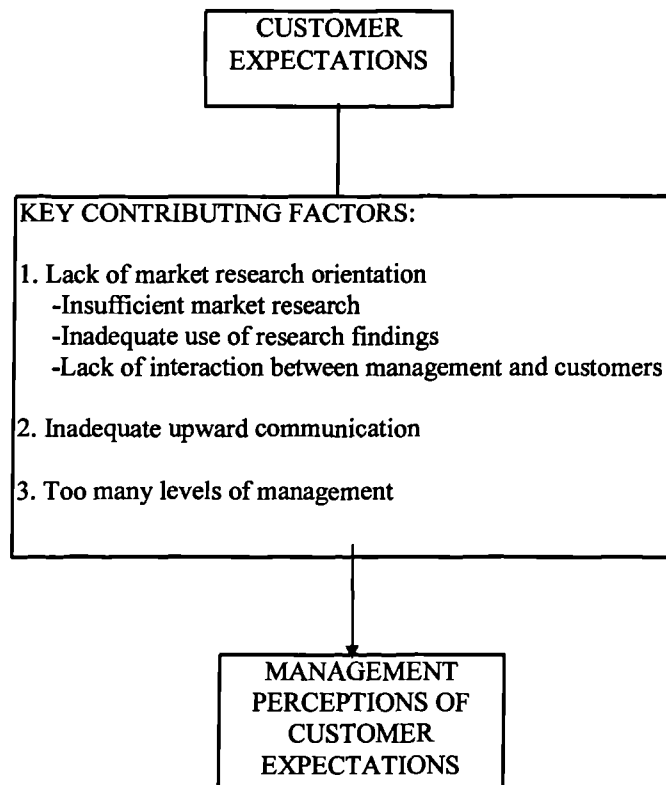


(Parasuraman, Zeithaml and Berry, 1990)

3.11.1. Closing Service Quality Gap 1

According to Parasuraman, Zeithaml and Berry (1990), there are three conceptual factors contributing to Gap 1 (see figure 3.6).

Figure 3.6. Key Factors Contributing to Gap 1



(Parasuraman, Zeithaml & Berry, 1990)

These three conceptual factors contributing to Gap 1 are defined in Table 3.4.

Addressing the issues in the table can close gap 1.

Table 3.4. Conceptual Factors Pertaining to Gap 1

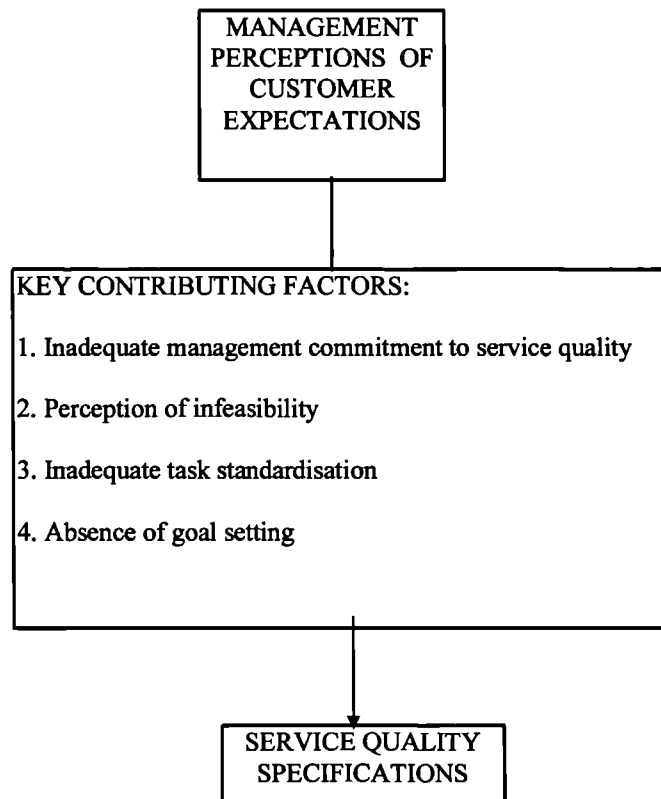
Factor and Definition	Specific Illustrative Issues
Market Research Orientation Extent to which managers make an effort to understand customers' needs and expectations through formal and informal information-gathering activities.	<ul style="list-style-type: none"> • Is research conducted regularly to generate information about what customers want? • Does the market research a company conducts focus on quality of service delivered by it? • Do managers understand and utilise the research findings? • Do managers mingle with customers to learn what is on their minds?
Upward Communication Extent to which top management seeks, stimulates, and facilitates the flow of information from employees at lower levels.	<ul style="list-style-type: none"> • Do managers encourage suggestions from customer contact personnel concerning quality of service? • Are there formal or informal opportunities for customer contact personnel to communicate with management? • How frequently do managers have face to face contact with customer contact personnel?
Levels of Management Number of managerial levels between the topmost and bottom most positions.	<ul style="list-style-type: none"> • Do too many managerial levels separate top managers from those responsible for dealing with and serving customers?

(Parasuraman, Zeithaml and Berry, 1990)

3.11.2. Closing Service Quality Gap 2

Parasuraman, Zeithaml and Berry (1990) indicate that Gap 2 can be eliminated by overcoming the four key factors (see figure 3.7).

Figure 3.7. Key Factors Contributing to Gap 2



(Parasuraman, Zeithaml & Berry, 1990)

These FOUR conceptual factors contributing to Gap 2 are defined in Table 3.5.

Table 3.5. Conceptual Factors Pertaining to Gap 2

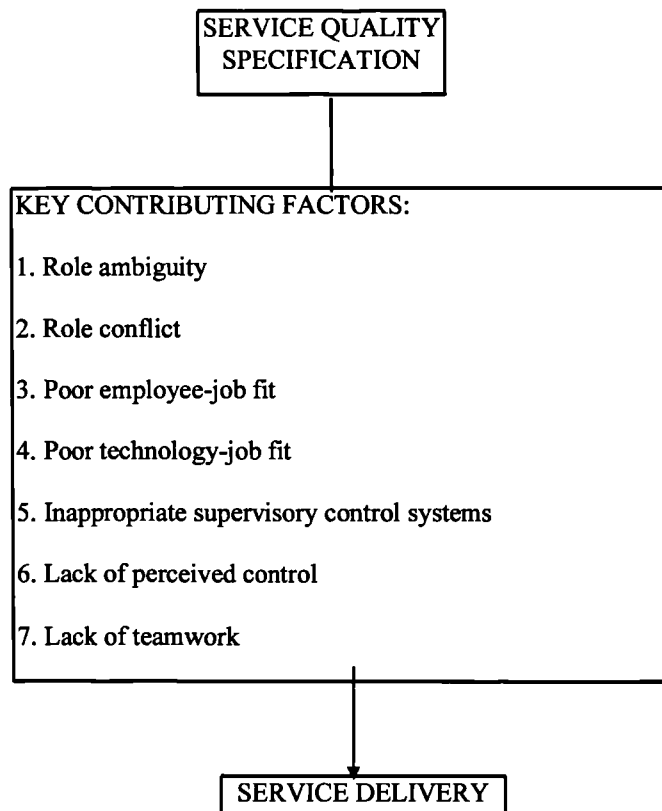
Factor and Definition	Specific Illustrative Issues
Management commitment to service quality Extent to which management views service quality as a key strategic goal	<ul style="list-style-type: none"> • Are resources committed to departments to improve service quality? • Do internal programmes exist for improving the quality of service to customers? • Are managers who improve the quality of service to customers more likely to be rewarded than other managers? • Are upper and middle managers committed to providing quality service to their customers?
Perception of Feasibility Extent to which managers believe that customer expectations can be met	<ul style="list-style-type: none"> • Does the company have the necessary capabilities to meet customer requirements for service? • Can customer expectations be met without hindering financial performance? • Do existing operations systems enable customer expectations to be met? • Are resources and personnel available to deliver the level of service that customers demand? • Does management change existing policies and procedures to meet the needs of customers?
Task standardisation Extent to which hard and soft technology are used to standardise service tasks	<ul style="list-style-type: none"> • Is automation used to achieve consistency in serving customers? • Are programmes in place to improve operating procedures so that consistent service is provided?
Goal-setting Extent to which service quality goals are based on customer standards and expectations rather than company standards	<ul style="list-style-type: none"> • Is there a formal process for setting quality of service goals for employees? • Does the company have clear goals about what it wants to accomplish? • Does the company measure its performance in meeting its service goals? • Are service quality goals based on customer-oriented standards rather than company-oriented standards?

(Parasuraman, Zeithaml and Berry, 1990)

3.11.3. Closing Service Quality Gap 3

There are seven key conceptual factors that contribute to Gap 3 (see figure 3.8). These factors are defined in Table 3.6.

Figure 3.8. Key Factors Contributing to Gap 3



(Parasuraman, Zeithaml and Berry, 1990)

Table 3.6. Conceptual Factors Pertaining to Gap 3

Factor and Definition	Specific Illustrative Issues
<p>Role Ambiguity Extent to which employees are uncertain about what managers or supervisors expect from them and to satisfy those expectations</p>	<ul style="list-style-type: none"> • Does management provide accurate information to employees concerning job instruction, company policy and procedures, and performance assessment? • Do employees understand the products and services offered by the company? • Are employees able to keep up with changes that affect their jobs? • Are employees trained to interact effectively with customers? • How often does management communicate company goals and expectations to employees? • Do employees understand what managers expect from them and how to satisfy those expectations?
<p>Role conflict Extent to which employees perceive that they cannot satisfy all the demands of all the individuals (internal and external customers) they must serve</p>	<ul style="list-style-type: none"> • Do customers and managers have the same expectations of employees? • How often do customers-contact employees have to depend on other support services employees to provide quality service to customers? • Do employees have more work to do than they have time to do it? • Does the number of demands in employees' jobs make it difficult to effectively serve customers? • Do too many customers want services at the same time? • Do employees cross-sell services to customers in situations where it is inappropriate?
<p>Employee-Job Fit The match between the skill of employees and their jobs</p>	<ul style="list-style-type: none"> • Do employees believe that they are able to perform their jobs well? • Does the company hire people who are qualified to do their jobs? • Does management devote sufficient time and resources to the hiring and selection of employees?
<p>Technology-Job Fit The appropriateness of the tools and technology that employees use to perform their jobs</p>	<ul style="list-style-type: none"> • Are employees given the tools and equipment needed to perform their jobs well? • How often does equipment fail to operate?
<p>Supervisory Control Systems The appropriateness of the evaluation and reward systems in the company</p>	<ul style="list-style-type: none"> • Do employees know what aspects of their jobs will be stressed most in performance evaluations? • Are employees evaluated on how well they interact with customers? • Are employees who do the best job serving customers more likely to be rewarded than other employees? • Do employees who make a special effort to serve customers receive increased financial rewards, career advancement, and/or

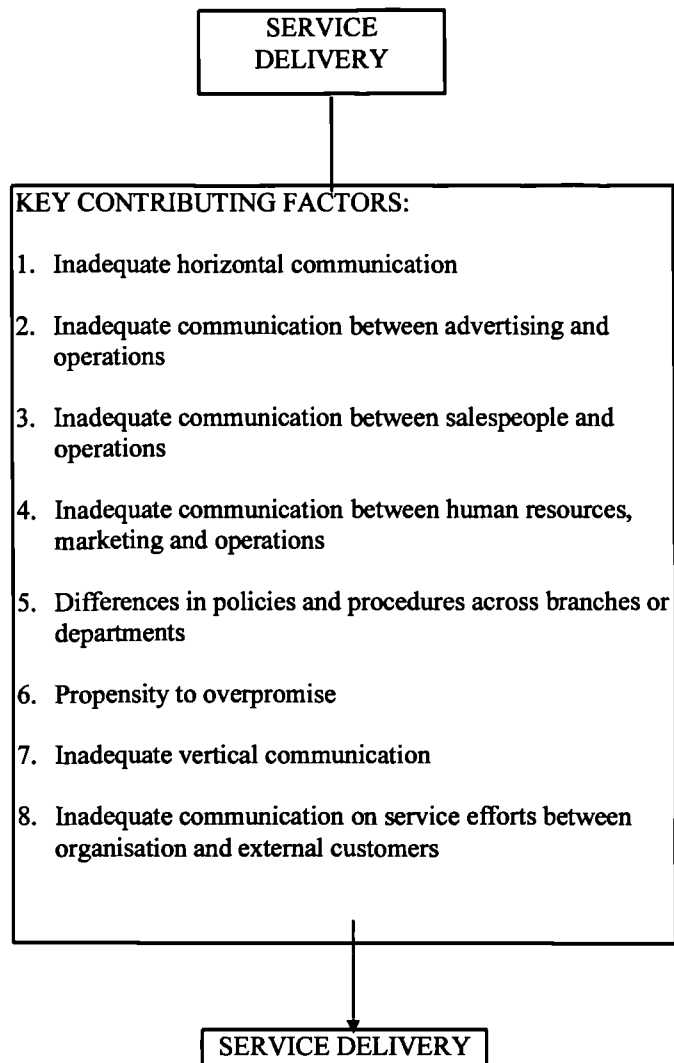
	recognition? <ul style="list-style-type: none"> Do employees feel appreciated for their contributions?
Perceived Control Extent to which employees perceive that they can act flexibly rather than by rote in problem situations encountered in providing services	<ul style="list-style-type: none"> Do employees spend time in their jobs trying to resolve problems over which they have little control? Are employees given the freedom to make individual decisions to satisfy customers' needs? Are employees encouraged to learn new ways to better serve their customers? Are employees required to get approval from another department before delivering service to customers?
Teamwork Extent to which employees and managers pull together for a common goal	<ul style="list-style-type: none"> Do employees and managers contribute to a team effort in servicing customers? Do support services employees provide good service to customer-contact personnel? Are employees personally involved and committed to the company? Do customer-contact employees cooperate more than they compete with other employees in the company? Are employees encouraged to work together to provide quality service to customers?

(Parasuraman, Zeithaml and Berry, 1990)

3.11.4. Closing Service Quality Gap 4

The key conceptual factors contributing to Gap 4 are shown in Figure 3.9. The factors are defined in Table 3.7. Hence Gap 4 can be closed by addressing the issues illustrated in the table.

Figure 3.9. Key Factors Contributing to Gap 4



(Parasuraman, Zeithaml and Berry, 1990)

Table 3.7. Conceptual Factors Pertaining to Gap 4

Factor and Definition	Specific Illustrative Issues
Horizontal Communication Extent to which communication occurs both within and between different departments of a company	<ul style="list-style-type: none"> • Do customer contact personnel have input in advertising planning and execution? • Are customer-contact personnel aware of external communications to customers before they occur? • Does the salesforce interact with customer contact personnel to discuss the level of service that can be delivered to customers? • Are the policies and procedures for serving customers consistent across departments and branches?
Propensity to overpromise Extent to which a company's external communications do not accurately reflect what customers receive in the service encounter	<ul style="list-style-type: none"> • Is there increasing pressure inside the company to generate new business? • Do competitors overpromise to gain new customers?
Vertical Communication Extent to which communication occurs between the organisation and the external customer	<ul style="list-style-type: none"> • Are customers aware of the service efforts made by the organisation to deliver quality service?

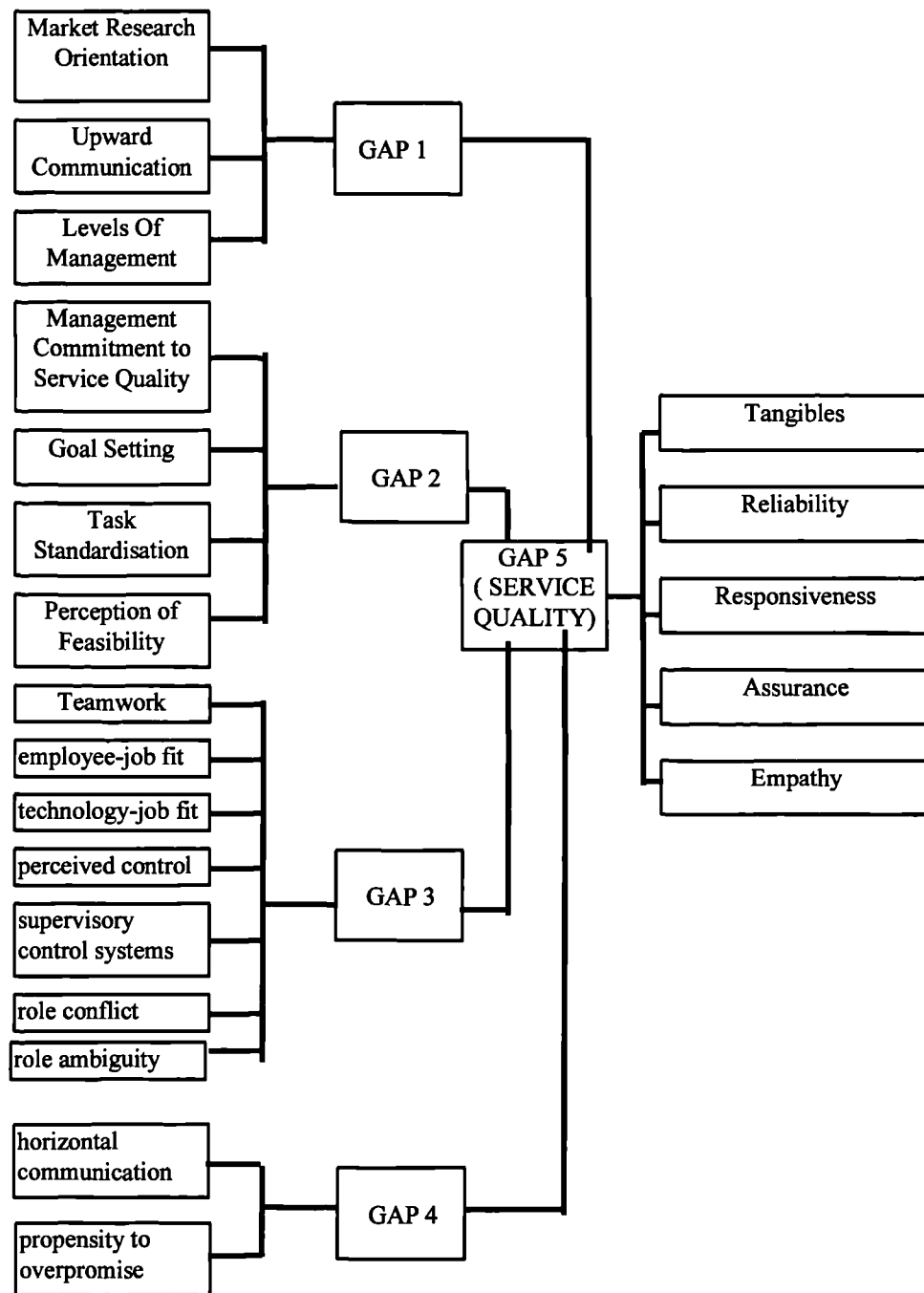
(Parasuraman, Zeithaml and Berry, 1990)

3.12. INTEGRATING THE GAPS

The internal service quality gaps can be closed individually but this approach will not be effective enough in closing Gap 5. Therefore, these four gaps have to be integrated and from its integration we can identify which of the four gaps is (are) most critical in explaining service quality variation. The integration of the gap is illustrated in the Extended Gap Model of Service Quality produced by Parasuraman, Zeithaml and Berry (1990). Under this model, organisations can use SERVQUAL to capture customers' perceptions and the measures of Gaps 1 through 4 for employees' and managers' perceptions. Looking at the model, the first three gaps must be closed in sequence, one after another. Customers' expectations must be understood (Gap 1) before managers can set appropriate standards (Gap 2) and employees must be trained, motivated, compensated and informed to close Gap 3. Gap 4 however, can be closed

before working on the others by managing customers' expectations - bringing expectations in line with actual delivery by lowering expectations rather than improving service delivery.

Figure 3.10. Extended Model of Service Quality



(Berry, Parasuraman & Zeithaml, 1988)

3.13. CONCLUSION

A number of writers say that quality has to be measured. It is only by measuring service quality the service providers will be able to tell whether they are providing quality services to the customers. However even though it seems very necessary to measure service quality, it is a very difficult task to carry out. Service quality in contrast to products, is an abstract because of its features of intangibility, heterogeneity and separability of production and consumption. Despite of these difficulties, a number of approaches to measure service quality have been introduced, for example quality auditing, service level agreement, performance indicators as well as SERVQUAL.

The SERVQUAL technique of measuring service quality was first introduced by Parasuraman, Zeithaml and Berry (1985). The technique involves measuring customer's perceptions and expectations. The research on SERVQUAL was conducted in the private sector environment but according to the founders of the approach, it is also applicable in the public sector (Parasuraman, Zeithaml and Berry, 1990). Apart from that, this concept has been seen to be applied successfully in some public sector services. According to Donnelly, Wisniewski, Dalrymple and Curry (1995), SERVQUAL can be applied successfully in Local Government. At the same time, this instrument has been applied successfully in the National Health Service in the United Kingdom. Other areas of application, which can be applied, to the public sector is education. Therefore in the next chapter, a few cases over the successful application of the SERVQUAL instrument, with most in the private sector and some in the public sector are discussed.

CHAPTER 4

THE APPLICATION OF THE SERVQUAL TECHNIQUE IN MEASURING SERVICE QUALITY

The Accounts Commission (1994) recognises that the gaps between customer's perceptions and expectations have to be closed to improve service quality. According to the Accounts Commission (1994), "raising the level of customer satisfaction is about narrowing gaps - between what users want and what providers think they want. Narrowing those gaps requires that service providers understand what users want, agree which of those wants can be met and what standard, communicate that intention to users, and then ensure that the service consistently meets those agreed standards".

The Chief Secretary to the Government of Malaysia (1993) too notes that quality can only be delivered if the organisation knows to what extent the level of quality of service is perceived to be delivered to the customer by the organisation. According to him, "The civil service must become more customer-oriented. To be customer oriented, we must first of all have a clear measurable picture of how a customer perceive quality. The service we provide would be deemed to be of quality, only when it exceeds or meets the value-expectations of our customers".

The above suggestions indicate that there is a need to measure expectations and perceptions of service quality. In other words, there is a need to know what customers

want and what providers think they want so that the level of quality of services delivered can be known which then allows for further action.

The discussions presented in Chapter 3 show that SERVQUAL has been successfully administered to measure service quality. It indicates that this approach of measuring service quality can be adopted. Brown, Churchill and Peter (1993) say that SERVQUAL has served as a basis for measuring the quality of the service offered by a hospital (Babakus and Mangold 1989); a CPA firm (Bojanic, 1991); physicians (Brown and Schwartz, 1989); a dental school patient clinic, business school placement centre, tyre store, and acute care hospital (Carman, 1990); public recreation programs (Crompton and Mackay 1989); estate brokers (Johnson, Dotson and Dunlop, 1988) and a number of other new areas.

The original SERVQUAL instrument is made up of two standard sets of statements. There is one set of statements for measuring customers' expectations (see Table 4.2) and another set of statements for measuring customers' perceptions (see Table 4.3). These statements are general statements that can be modified to fit appropriate cases under study. The SERVQUAL statements (in both the expectations and perceptions sections) are grouped into the five dimensions as shown in Table 4.1.

Table 4.1. Statements pertaining to the Dimensions

Dimension	Statements Pertaining to the Dimension
Tangibles	Statements 1-4
Reliability	Statements 5-9
Responsiveness	Statements 10-13
Assurance	Statements 14-17
Empathy	Statements 18-22

(Parasuraman, Zeithaml and Berry, 1990)

The expectations and perceptions are measured on a Likert scale with the score ranging from 1 to 7. The scale moves on from 1, for strongly disagree to 7, for strongly agree. After the customers have entered their scores for the 22 statements, the outcome of the perception score minus the expectation score will show the width of the service gap. If the equation is negative, it indicates that there is a service quality gap and if it is positive, there is surplus in service quality (Parasuraman, Zeithaml and Berry, 1990).

Table 4.2. Expectations

1. Excellent ___ companies will have modern-looking equipment.
2. The physical facilities at excellent ___ companies will be visually appealing.
3. Employees at excellent ___ companies will be neat appearing.
4. Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent ___ company.
5. When excellent ___ companies promise to do something by a certain time, they will do so.
6. When a customer has a problem, excellent ___ companies will show a sincere interest in solving it.
7. Excellent ___ companies will perform the service right the first time.
8. Excellent ___ companies will provide their services at the time they promise to do so.
9. Excellent ___ companies will insist on error-free records.
10. Employees in excellent ___ companies will tell customers exactly when services will be performed.
11. Employees in excellent ___ companies will give prompt service to customers.
12. Employees in excellent ___ companies will always be willing to help customers.
13. Employees in excellent ___ companies will never be too busy to respond to customers' requests.
14. The behaviour of employees in excellent ___ companies will instil confidence in customers.
15. Customers of excellent ___ companies will feel safe in their transactions.
16. Employees in excellent ___ companies will be consistently courteous with customers.
17. Employees in excellent ___ companies will have the knowledge to answer customers' questions.
18. Excellent ___ companies will give customers individual attention.
19. Excellent ___ companies will have operating hours convenient to all their customers.
20. Excellent ___ companies will have employees who give customers personal attention.
21. Excellent ___ companies will have the customers' best interest at heart.
22. The employees of excellent ___ companies will understand the specific needs of their customers.

(Parasuraman, Zeithaml and Berry, 1990)

Table 4.3. Perceptions

1. XYZ has modern-looking equipment.
2. XYZ Co.'s physical facilities are visually appealing.
3. XYZ Co.'s employees are neat appearing.
4. Materials associated with the service (such as pamphlets or statements) are visually appealing at XYZ Company.
5. When XYZ Co. promises to do something by a certain time, it does so.
6. When you have a problem, XYZ Co. shows a sincere interest in solving it.
7. XYZ Co. performs the service right the first time.
8. XYZ Co. provides its services at the time it promises to do so.
9. XYZ Co. insists on error-free records.
10. Employees in XYZ Co. tell you exactly when services will be performed.
11. Employees in XYZ Co. give you prompt service.
12. Employees in XYZ Co. are always willing to help you.
13. Employees in XYZ Co. are never too busy to respond to your requests.
14. The behaviour in XYZ Co. instils confidence in you.
15. You feel safe in your transactions with XYZ Co.
16. Employees in XYZ Co. are consistently courteous with you.
17. Employees in XYZ Co. have the knowledge to answer your questions.
18. XYZ Co. gives you individual attention.
19. XYZ Co. has operating hours convenient to all its customers.
20. XYZ Co. has employees who give you personal attention.
21. XYZ Co. has your best interest at heart.
22. Employees of XYZ Co. understand your specific needs.

(Parasuraman, Zeithaml and Berry, 1990)

In order to appreciate how SERVQUAL can be applied to different service areas and how it can be manipulated to obtain the required information, some of its applications in different areas and under different situations are discussed in detail below.

4.1. MEASURING SERVICE QUALITY OF EDUCATIONAL SERVICES

It is important for those involved in education know the level of quality services being provided by the educators. The information that can be obtained from customers receiving the education services can be used to make decisions on service quality in education. For this purpose, the SERVQUAL instrument of measuring service quality has been applied.

4.1.1. Measuring Service Quality in Business Schools

The services in business schools are represented as services to society and business in that society. More focus leads to service being defined as the provision of teaching, research and consulting. The customers of business schools not only receive the product or service they ostensibly pay for - a degree or professional development course - they are also at the receiving end of kept or broken promises, friendly or unfriendly systems, helpful and unhelpful staff, and physical facilities which may be wonderful or dreadful. In order to be able to determine the level of services they are getting, we need to introduce a service quality management tool to evaluate the service received.

In the application of the SERVQUAL instrument, a suitably modified version of the SERVQUAL instrument was issued to full-time and part-time MBA students as well as to participants on a three-week executive development programme at a business school. Respondents were also required to rate the overall quality of service on a four-point scale [poor, adequate, good, excellent]. Questionnaires regarding management's perceptions of customer expectations were also issued to academic staff and senior administration personnel.

Summarised results of the SERVQUAL study are shown in Table 4.4 in the form of means and standard deviations for expectations, perceptions and the gap (Gap 5) between expectations and perceptions. The overall mean gap is small (0.75) but positive - the graduate business school concerned is not living up to its client's expectations. The discrepancy could increase to almost 2.5 scale units to -1 scale units within one standard deviation. Examination of dimensions is perhaps more insightful, particularly when done by programme category. The largest gap is that of reliability, with assurance (the least well defined in the factor analysis) recording the lowest gap value.

It was observed that the gaps for students are consistently larger than executives. Two explanations may be offered for this. Firstly, the executives programmes are far more expensive per unit of time spent at the school than MBA programmes, and staff and the school may consciously or unconsciously provide better facilities and care to these clients. Secondly, time spent at (or exposed to) the institution may play an important role - the longer the individual was in contact with the school, the higher the expectations became, or possibly, more experience of actual service levels was gained.

Table 4.4. SERVQUAL Means and Standard Deviations

	All	MBA	Executive
EXPECTATION			
Tangibles	5.2	5.6	5.4
	1.2	1.2	1.1
Reliability	6.4	6.4	6.3
	0.8	0.8	0.8
Responsiveness	5.8	5.6	5.9
	1.0	1.1	1.0
Assurance	5.8	5.7	5.9
	1.1	1.3	1.0
Empathy	5.1	5.0	5.0
	1.3	1.3	1.3
PERCEPTION			
Tangibles	4.6	3.8	5.2
	1.5	1.5	1.2
Reliability	5.1	4.1	5.8
	1.4	1.4	0.9
Responsiveness	5.4	4.5	6.0
	1.4	1.4	0.9
Assurance	5.6	5.7	6.1
	1.2	1.3	0.9
Empathy	4.8	4.2	5.2
	1.3	1.3	1.2
SERVICE QUALITY GAP			
Tangibles	0.6	1.8	0.2
	1.9	2.1	1.5
Reliability	1.3	2.3	0.5
	1.6	1.6	1.1
Responsiveness	0.4	1.1	-0.1
	1.5	1.7	1.1
Assurance	0.2	0	-0.2
	1.5	1.7	1.2
Empathy	0.3	0.8	-0.2
	1.7	1.7	1.4

(Rigotti & Pitt, 1992)

In this study, customers indicate that their expectations are not being met. There is a service quality gap. The customers are not getting the quality of service they expect and that the cause of this is obviously not that management does not understand what they want, management might not be setting standards that match these expectations. Alternatively, these standards may be in place, but what gets delivered does not match those specifications. Perhaps expectations might be affected by the external

communications (advertising, brochures, publicity) of the school, which do not match what actually gets delivered (Kubr, 1987; Cashin, 1990; Rigotti and Pitt, 1992).

4.1.2. Measuring Service Quality in Students Services Office

This study was undertaken to evaluate the effectiveness of a TQM programme in the Office of Students Services (OSS), University of Houston College of Business Administration (Anderson , 1995).

The management wanted to measure student perceptions of service quality, both before and after the implementation of the TQM laboratory to determine if there were any measurable differences. They administered the SERVQUAL instrument during Autumn 1993 prior to the implementation of the TQM laboratory and during the Spring 1994 Semester directly after the laboratory went into operation. While the original survey contained 22 statements, the OSS survey was shortened to 16 statements since several statements were not applicable to the nature of the services offered by this particular service organisation.

In the administration of the SERVQUAL instrument, all service gaps were negative, indicating perceptions fell short of expectations. Tangibles exhibit the smallest gap between student expectations and perceptions (-0.09). In contrast, reliability has the largest gap (-0.71). In the Spring semester of 1994 the SERVQUAL was replicated to assess any changes in student perceptions of service quality since the

implementation of the TQM laboratory. In this follow-up survey, all service gaps by attribute are negative, indicating that perceptions fell short of expectations. However, the largest and smallest gaps changed from the 1993 survey. Here, the largest negative gap occurs from empathy (-2.34). The smallest negative gaps occur for reliability (-0.27) and responsiveness (-0.29).

In the mean responses to the relative levels of importance of the five service quality attributes, reliability is the most important dimension, closely followed by responsiveness. While the largest negative gap occurs for empathy, the attribute is ranked second to last in importance. Thus, while at first glance, empathy may appear to be a serious problem, it is not as important to students as reliability or responsiveness. As such funds should not be diverted from reliability or responsiveness in order to improve empathy. Through such analysis the OSS can get the most return in terms of perceived service quality from the investments in quality improvement efforts.

4.1.3. Measuring Service Quality in Educational Institutions

Service quality evaluations were made by overseas students studying at 10 Western Australia educational institutions in 1990. It used the SERVQUAL questionnaire to determine students' service expectations and their perceptions of the actual service delivered by their respective institutions. The sample was a stratified random one such that equal numbers of students were drawn from both high school and tertiary

institutions. The finding showed that negative scores were obtained for each of the ‘gaps’ indicating that, in all cases, overseas students expected more of their educational service experience than they actually perceived themselves receiving at their respective institutions. Service quality was a greater problem in areas of reliability and tangibles, with the responsiveness attribute of services quality being least problematic for overseas students. The standard deviation scores were fairly consistent for all five attributes and suggested a wide range of opinion on service quality among the overseas students surveyed (See Table 4.11).

Table 4.5. Mean Scores

Service Quality Dimension	Mean	Standard Deviation
Tangibles	-1.53	1.35
Reliability	-1.93	1.45
Empathy	-0.95	1.65
Assurance	-1.09	1.30
Responsiveness	-0.21	1.56

(Soutar, McNeil & Lim, 1994)

This study of overseas students’ perceptions of service in 10 Western Australian educational institutions showed that the five dimensions of service quality have validity in this context. The study also showed that overall, the institutions examined were neither meeting nor exceeding the expectations of these students in their service performance (as perceived by the students themselves). It would seem that more attention needs to be focused on the notion of total service quality when designing the educational environment for overseas students in Western Australia.

The power of negative word-of-mouth cannot be underestimated as 52 per cent of respondents suggested that word-of-mouth was extremely or very important in their selection of an overseas educational institution. This supports claims made by Bateson (1989), that word of mouth is most important of high risk purchasers of which an overseas educational institution is one. Disgruntled students who receive less than they expected in their overall educational service experience would not be good emissaries for future Australian educational promotions (Crosby, 1979; Heskett, 1986; Soutar, McNeil and Lim, 1994).

4.1.4. Measuring Service Quality in Academic Libraries

The traditional orientation of measuring the quality of an academic library in quantitative terms of its collection and use no longer offers attainable goals. At the same time, it does not adequately address the community's demands for information. Therefore, the SERVQUAL approach is adopted. The SERVQUAL instrument, modified for use in library service settings, provides an outcome measure for managers to gauge their activities (Edwards and Browne, 1994; Nitecki, 1996).

4.2. MEASURING SERVICE QUALITY IN THE HEALTH SECTOR

In the health sector, a customer experiences both technical and functional quality of services. Technical quality is defined primarily on the basis of the technical

accuracy of the diagnoses and procedures. Traditionally health care researches emphasised technical quality of health-care alone (Berwick, 1989; Donabedian, 1985; Cochman, 1983; Palmer, 1985; Thomas & Penchansky, 1984). Recent investigations recognised the multiple dimensions of health care quality include interpersonal factors. The recent studies (Brook & Kosecoff, 1988; Davies & Ware, 1988; Hays & Ware, 1986; Ware & Hays, 1988; Ware & Berwick, 1990) testify to this fact.

Various techniques for measuring technical quality are currently in use in health-care organisations. This information is not generally available to the consumers. Knowledge on technical quality of health-care services remains within the preview of health care professionals and administrators. Functional quality is usually the primary determinant of patient's quality perceptions (Lewis, 1983; Bopp, 1990; Babakus and Mangold; 1992). Therefore, SERVQUAL is applicable here.

4.2.1. Measuring Service Quality in The Hospital Services

Studies in the health-care sector carried out by Babakus and Mangold (1989) have shown that patients put less emphasis on attributes which are difficult to assess and rely more on search and experience attributes to judge the service offering. Also, the quality of the service outcome is measured by the health status of the patient under consideration after the service has been delivered and by his overall satisfaction with the treatment. Frequency of buyer-seller interaction may be one of

the factors explaining this more transaction-specific orientation in defining quality for health-care services (hospitals). The experience a patient has with a certain hospital is often limited to a single visit or stay, as opposed to for example; banking services where most buyer-seller interactions take place on a regular basis. There is growing evidence to suggest that this perceived quality is the single most important variable influencing consumer's value perceptions. Patients may have a clear idea of desirable levels of service attributes, but that actual service performance becomes difficult to assess either because of the time lapse or the unique nature of the service experience. Other factors may also play a considerable role:

- the complexity of the human body in addition to differences in demographic, socio-economic and psychological backgrounds make a comparison across patients and even across time almost impossible; each case should be handled on an individual basis;
- patients have not enough expert knowledge to evaluate the outcome of a specific health-care service. Therefore, they rely more on experience and search qualities provided during the service delivery process. In most cases, these experiences are limited to a particular situation (Babakus and Mangold, 1989; Babakus and Mangold, 1992).

In determining the dimensions which can be used to measure service quality in the public health, Ware and Snyder (1975) identified four main dimensions based on 20 attitudinal indices: physician conduct, availability of care, access mechanisms, and

continuity and convenience of care. During the 1980s, more and more emphasis was put on one particular concept: access (McCusker, 1984). The dimensions found in the health-care literature clearly overlap with the dimensions identified by SERVQUAL. Still, the above conceptualisation of quality and satisfaction in the health-care sector together with various inputs received from persons occupied in this sector were very useful in generating additional quality related measures or items other than the ones already included in the SERVQUAL-instrument (See Table 4.6).

The developers of SERVQUAL allow for the adaptation of dimensions. SERVQUAL can be adapted to fit the characteristics or specific research needs of a particular organisation (Parasuraman, Zeithaml and Berry, 1988). In the study, the overall item of the SERVQUAL instrument was partially adapted to take into account both the suggestions found in the health-care literature and some recommendations by the local hospital staff. Except for the reliability dimension, the items included capture the main dimensions identified by SERVQUAL. The reliability dimension was considered as not of great importance in the context of a hospital because of two main reasons. First, a relatively large number of patients were admitted to the hospital in an emergency case (approximately 41 per cent of the sample). Second, patients have not enough expert knowledge to judge the necessity and appropriate timing of a particular surgery. Therefore only two items related to the reliability dimension were retained. All items included in the questionnaire were positively worded to avoid misreading as in the hospital study discussed by Carman (1990).

Table 4.6. Item List

Tangibles

- D1 The meals are tasty
- D2 The meals are adapted to my health status
- D3 There is enough comfort in my room
- D4 My room is maintained well
- D5 The atmosphere on the ward I stay is pleasant
- D6 I stay in a quiet surrounding
- D7 The medical machinery in this hospital is up-to-date
- D8 It is easy to find my way in the hospital
- D9 There are enough recreational facilities in the hospital
- D10 The hospital staff is clean and well groomed
- D11 There are enough parking facilities for visitors

Reliability

- D12 A diagnosis is only made after careful examination
- D13 The nursing staff is skilful in performing their tasks

Responsiveness

- D14 I don't have to wait long to see my doctor
- D15 It is easy for me to obtain medical care if I have a problem
- D16 On the occasion of my admission to the hospital I received good assistance
- D17 I received enough information about my illness and its treatment
- D18 I was clearly informed about the action I should take to guard against the same illness in the future
- D19 The nursing staff makes time free to talk with me if I want to
- D20 I can participate in the decision about my medical treatment

Assurance

- D21 Medical care is performed carefully
- D22 The hospital staff is always honest and genuine
- D23 The hospital staff respects my feelings
- D24 The nursing staff is always friendly and cheerful

Empathy

- D25 I can easily get religious assistance if I want to
- D26 The hospital staff respects my own value system
- D27 I have enough privacy in my room
- D28 The visiting hours suits me

(Babakus & Mangold, 1992)

The remaining items were factor analysed. Finally, six factors were retained. The factors are:

1. Tangibles

This factor refers to the meals served in the hospital and the atmosphere on the ward.

2. Medical responsiveness

The ability to provide instant medical care and to respond appropriately to the patient's needs.

3. Assurance I

The ability of the hospital staff to inspire trust and confidence during normal daily activities.

4. Assurance II

The ability of the hospital to make the patient feel comfortable at the time of admission to the hospital.

5. Nursing staff

The appearance and skills of the nursing staff in the hospital.

6. Personal beliefs and values

The ability to respect the personal beliefs and values of each individual patient.

The dimensions obtained in this study comprising of Tangibles, Medical Responsiveness, Assurance I, Assurance II, Nursing Staff and Personal Beliefs and Values partially represent the dimensions identified by Parasuraman, Zeithaml and Berry (1985) which are Tangibles, Empathy, Assurance, Responsiveness and Reliability (Babakus and Mangold, 1992).

SERVQUAL was applied over a cross-sectional sample of 700 people in several medical practices located in 43 cities and townships in Western North Carolina. The instrument reveals that the overall quality mean for the whole sample is -0.301, indicating that subjects in general, judge health care as low quality. As for the individual dimensions of quality, the mean scores of the five dimensions for the whole sample are, 0.069 for Tangibles, -0.631 for Reliability, -0.233 for Responsiveness, -0.338 for Assurance and -0.281 for Empathy. So, all quality dimensions do not meet respondents' expectations with the exception of Tangibles. This study provides an additional support to the call of many previous researchers that patients give much consideration to the inter-personal skills of health care practitioners, and draw attention to the low quality associated with the reliability, responsiveness, assurance and empathy of health care providers. While patients appreciate the technical knowledge of their doctors and staff, the psycho-social factors affecting the medical encounter are important to them as well (Soliman, 1992).

4.2.2. Measuring Service Quality of Medical Clinic Services

The SERVQUAL instrument of measuring service quality was applied to measure service quality of services provided by a clinic. A sample size of 159 responses was obtained from the customers of the clinic. The findings of the survey showed that the total scale reliability as measured by Cronbach alpha for the 22-item scale is 0.89. This compares favourably with the reliability measured (of between 0.87 and 0.90) for the scale in the non-medical settings reported by Parasuraman, Zeithaml and Berry (1988). The assignment of individual items to factors in the medical care sample data does not match the pattern reported in the SERVQUAL literature but there are similarities. Six factors were generated for the medical care sample rather than five for the initial SERVQUAL scale, with none of the factors being identical. However, the structure of the dimensions of perceived service quality for this research share some common elements with the original SERVQUAL research, but there are differences in term assignment. The strongest finding is that the total reliability and sub-scale reliabilities measured for the adapted scale in this medical care sample and the reliability values reported in the original development of SERVQUAL are of similar nature and magnitude (Headley and Miller, 1993).

4.2.3. Measuring Service Quality of Health Care in Teaching Hospital

In the study on a teaching hospital, the essential steps in the qualitative methodology were to conduct focus group interviews in a hospital setting,

categorise the content of the interviews in terms of both the generic quality dimensions as well as any additional dimensions that emerged. The quality dimensions found include the 10 generic quality dimensions as well as two additional elements. The frequency of patients determining the sources of satisfaction related to the 10 dimensions of the service quality are, Tangibles 44, Communication 33, Competence 32, Access 23, Courtesy 18, Understanding or Knowing the customer 19, Responsiveness 14, Reliability 11, Security 7, Credibility 3 and Other Items 23 (Bowers, Swan and Koehler, 1994).

4.2.4. Measuring Service Quality at a University Health Clinic

The SERVQUAL instrument was administered at the University of Houston Health Centre to access the quality of service provided by the clinic. This clinic provides services to university students and staff. Included in its services are general health examinations, vaccinations, emergency care, pharmaceuticals, gynaecological, dermatological, orthopaedic and psychiatric consultation. The questionnaire containing 15 pairs of statements represents the five dimensions of service quality was distributed to the users of these services. The usable questionnaire obtained was 431.

It was discovered that students do not have high expectations of tangible items. They are more concerned with responsiveness, reliability and assurance. Specifically waiting time is an important indicator of responsiveness. The findings

help the organisation decide on allocation of limited resources. The measurement was seen to be important in evaluating the effectiveness of the health centre's strategic planning process with regard to quality improvement initiatives. The SERVQUAL questionnaire results demonstrate areas in which the health centre is close to meeting patient expectations. Through this measurement, the effectiveness of TQM investments can be monitored over time, with resources being shifted to those that most heavily influence patient perceptions of service quality. The centre plans to administer the SERVQUAL on a yearly basis (Anderson, 1995).

4.2.5. Measuring Service Quality of Health Care in NHS Hospitals

The SERVQUAL instrument was applied to measure patient's expectations before admission and to record their perceptions after discharge from hospital. This is the first time the internationally used market research technique has been used in the U.K. The questionnaire was distributed to 300 patients chosen from the West Midlands hospitals. The questionnaire contained expectations and perceptions sections consisting of 22 items. The format is similar to Parasuraman, Zeithaml and Berry's (1988) but the instrument was modified to suit the hospital environment. The questionnaire too contained a section for patients to indicate their service dimensional importance on the five service dimensions of the services delivered to them.

The response rate was 58 per cent with 174 patients responding to the questionnaire. The findings of the survey show that one of the most valuable elements of the SERVQUAL analysis is the ability to determine the relative importance of the five dimensions in influencing patient's quality perceptions. In this survey, reliability comes first, empathy is second and it is followed by responsiveness. The tangibles dimension is considered the least important. In analysing performance, the dimension on reliability shows the highest gap with empathy second. All the five dimensions have negative SERVQUAL scores and none of the outcome exceeded expectations. By examining these various gap scores, the NHS hospitals can assess overall quality of services as perceived by patients and also identify the key dimensions on which to focus quality improvement efforts. The SERVQUAL instrument should be used to evaluate results annually, to design continuous quality improvement throughout NHS hospitals and to compare service quality changes between NHS hospitals (Youssef, Nel and Bovaird, 1996).

In summary, the SERVQUAL instrument investigated here has proved to be equally reliable in the medical service settings. These research efforts also suggest a different dimensional substructure for the service quality construct in medical services setting. Although the structure found is not entirely consistent with the dimensional structure outlined by the scale developers, there are definite similarities. This would suggest that basing quality measurement efforts on SERVQUAL is appropriate for the medical services field, but that practitioners should watch closely for unique situations that call for adaptation. Some comfort

comes in knowing that this measurement framework is flexible enough to accommodate unique needs and circumstances (Headley and Miller, 1993).

Therefore, the studies on health care confirmed that SERVQUAL, a standard instrument for measuring functional service quality is reliable and valid in the hospital environment. SERVQUAL provides hospital administrators with a tool for the measurement of functional quality in their own organisations. Deficient scores on one or more SERVQUAL dimensions will normally signal the existence of a deeper underlying problem in the organisation. For example, assume that SERVQUAL indicates that patients do not perceive hospital employees as being willing to help. The lower score on this aspect of quality may be symptomatic of deeper problems that centre in the organisation's ability to hire and retain high quality employees, to evaluate and reward superior performance or to provide adequate training.

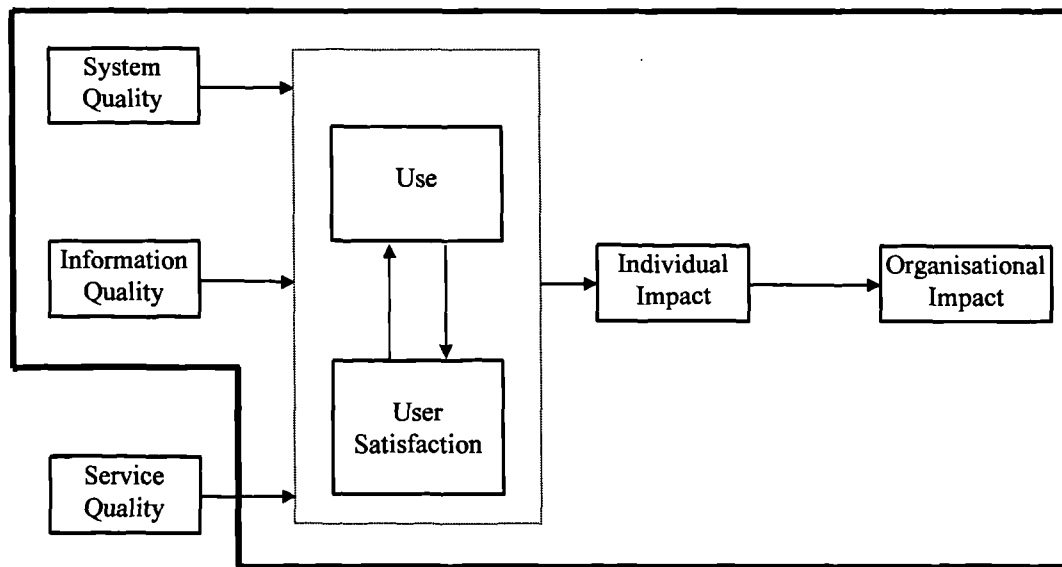
One of SERVQUAL's major contributions to the health care industry will be its ability to identify symptoms and provide a starting point for the examination of underlying problems that inhibit the provision of quality services. The measurement of patient expectations as well as perceptions provides a valuable dimension of insight into the process by which the quality of health care service is evaluated. It should be pointed out that SERVQUAL is designed to measure functional quality only. For the long run success of a health care organisation, both functional and technical quality has to be managed effectively (Babakus and

Mangold, 1989; Babakus and Mangold, 1992; Bowers, Swan and Koehler, 1994; Soliman, 1992).

4.3. MEASURING SERVICE QUALITY IN INFORMATION SYSTEMS

Pitt, Watson and Kavan (1994) suggest that service quality affects user satisfaction (see Figure 4.1). Mignen and Conrath (1990) say that there is a substantial literature that suggests it is important to measure user satisfaction with the information services function (USISF). USISF is the most critical element in determining the success or failure of a computer system. A system can be effective but, if it is not perceived to be satisfactory; if we do not know how a user perceives the computer-based services; and if we do not have a basis for changing this perception or improving the system, the system will be under-utilised (Powers and Dickens, 1973; Gutex, 1978; Good, Power and Chen, 1981; Good, Power and Chen, 1981; Doll and Ahmed 1983; Bailey and Pearson, 1983; Rushinek and Rushinek, 1986). Thus its potential benefits cannot be fully realised.

Figure 4.1. Augmented Information Systems Success Model



(Pitt, Watson & Kavan, 1994)

This study carried out by Pitt, Watson and Kavan 1994 involves the longitudinal use of SERVQUAL. Service quality was measured twice, at a precisely one year interval within the British national office of a major international accounting and information management consulting firm. The standard SERVQUAL questionnaires were administered with minor appropriate changes as suggested by Pitt (1994) to internal computer users. Respondents were the internal clients of the information systems department throughout the organisation. The firm took several actions as a result of the study. The second administration of the SERVQUAL, a year later, was intended to track whether these actions had improved service quality. Results show that the gap has been reduced in the service dimensions of reliability, responsiveness and assurance. In both studies, respondents were asked to assign weights to the dimensions, using a 100 per cent constant - sum scale for allocating importance across the five dimensions.

In using the SERVQUAL technique of measuring the information systems service quality, Pitt, Watson and Kavan (1994) assessed the validity of SERVQUAL for measuring the service quality of information systems departments. Their research, conducted in the United States, United Kingdom, and South Africa, supports the use of SERVQUAL in the information systems domain. They report that practitioners find SERVQUAL a useful tool for assessing service quality and determining actions for raising service quality. In particular, some managers considered SERVQUAL was suitable for continued monitoring of information systems service quality.

Another study on measuring USISF using the SERVQUAL instrument of measuring service quality was carried out by Kettinger and Lee (1994). In applying the SERVQUAL instrument, the instrument was slightly modified to apply to the IS setting. No additions or deletions of items were made to the instrument. The revised items are similar in term to existing SERVQUAL items. Minor wordings adjustments were made in a few items to clarify them in the IS context. The IS version of the SERVQUAL was pre-tested through a series of interviews with IS professionals and graduate students. After careful examination of the results of pre-testing, additional wording adjustments were made in the instruction section to help respondents differentiate between the expectation and perception sections of the questionnaire. The study represents an important starting point in the development of valid and reliable measures of IS service quality. It contributes to the USISF literature by introducing a new measure that provides both IS researchers and practitioners with more specific information concerning services quality's effect on USISF. In particular, it suggests that IS service providers should obtain measures

of services dimensions as services reliability and service empathy, which are not completely measured in the traditional USISF measure. In practice, the importance of these dimensions points to the need for stronger management emphasis on service dependability and a demonstration of personalised interest when interacting with ISF customers.

Consistent with previous SERVQUAL studies in other areas, the results show IS service reliability is the most important factor among the SERVQUAL dimensions in determining overall user satisfaction. At the same time, the evidence presented demonstrates that the longitudinal use of SERVQUAL can be successfully used in an IS department to improved the quality of its service. The outcome of the study provided valuable information for information systems managers. Managers found the results informative and used them as a foundation for making decisions to improve the quality of service provided.

4.4. MEASURING SERVICE QUALITY IN TRAVEL AND TOURISM

The research by Fick and Ritchie (1991) was undertaken to strengthen understanding of the service quality construct through the application of a specific instrument, SERVQUAL to selected set of travel and tourism services.

The study was undertaken to examine the issue of service quality measurement in tourism through the application of the SERVQUAL instrument to a range of

tourism-related services. Specifically, the instrument was applied in four travel and tourism service segments: airline, hotel, restaurant, and ski area services. The data for these applications of the scale were gathered from 200 respondents in each of the categories examined. To qualify for the survey, respondents had to be 21 years of age or older and a current or recent user of the services being tested. A recent user was defined as being one who had participated in a service transaction in the service category within the previous three months. The data were collected at various vocational, continuing education, and academic institutions. Owing to the range of students attending these institutions, a relatively diverse sample was obtained.

The results derived from application of the SERVQUAL measure of service quality to the selected set of four service segments traditionally defined as belonging to the tourism industry are illustrated in Tables 4.7 to 4.10. The tables contain mean expectation and perception of performance scores for the airline, hotel, restaurant, and ski service segments (Fick and Ritchie, 1991).

Table 4.7. Mean Expectation and Perception Scores of Airline Services

Dimension	Mean Score	Standard Deviation	N
Expectation			
Tangibles	6.39	0.58	197
Reliability	6.46	0.48	200
Responsiveness*	5.79	0.85	191
Assurance	6.44	0.50	194
Empathy*	5.76	0.87	199
Combined scale	6.18	0.43	185
Perception			
Tangibles	5.90	0.87	198
Reliability	5.21	1.16	197
Responsiveness*	5.07	1.28	197
Assurance*	5.53	1.10	197
Empathy*	4.95	1.14	199
Combined scale	5.35	0.92	186

(Fick & Ritchie, 1991)

Table 4.8. Mean Expectation and Perception Scores of Hotel Services

Dimension	Mean Score	Std. Dev.	N
Expectation			
Tangibles	6.15	0.69	198
Reliability	6.43	0.56	200
Responsiveness*	5.76	0.80	200
Assurance	6.38	0.50	198
Empathy*	5.71	0.83	200
Combined scale	6.11	0.45	196
Perception			
Tangibles	5.49	1.09	198
Reliability	5.26	1.03	200
Responsiveness*	5.01	1.29	200
Assurance*	5.36	1.10	196
Empathy*	5.05	1.20	199
Combined scale	5.24	1.03	193

(Fick & Ritchie, 1991)

Table 4.9. Mean Expectation and Perception Scores of Restaurant Services

Dimension	Mean Score	Std. Dev.	N
Expectation			
Tangibles	6.03	0.69	195
Reliability	6.18	0.63	200
Responsiveness*	5.47	1.17	198
Assurance	6.33	0.50	197
Empathy*	5.42	0.92	200
Combined scale	5.91	0.53	193
Perception			
Tangibles	5.69	1.01	198
Reliability	5.17	1.10	195
Responsiveness*	4.74	1.37	198
Assurance*	5.43	1.10	197
Empathy*	4.91	1.23	198
Combined scale	5.22	0.99	187

(Fick & Ritchie, 1991)

Table 4.10. Mean Expectation and Perception Scores of Ski Area Services

Dimension	Mean Score	Std. Dev.	N
Expectation			
Tangibles	5.84	0.76	200
Reliability	6.11	0.55	196
Responsiveness*	5.67	0.89	199
Assurance	6.31	0.48	195
Empathy*	5.28	0.90	198
Combined scale	5.87	0.50	188
Perception			
Tangibles	5.41	1.02	199
Reliability	5.11	0.75	199
Responsiveness*	4.79	1.09	199
Assurance*	5.36	0.79	200
Empathy*	4.66	0.93	200
Combined scale	5.08	0.73	197

(Fick & Ritchie, 1991)

*Negatively worded.

It is possible to draw a number of conclusions from these tables.

4.4.1. Within Individual Service Categories

For each of the individual services, the two most important expectations concerning service were:

Airlines:	Hotels:	Restaurants:	Ski areas:
Reliability (6.46)	Reliability (6.43)	Assurance (6.33)	Assurance (6.31)
Assurance (6.44)	Assurance (6.38)	Reliability (6.18)	Reliability (6.11)

Expectations scores with regard to Reliability are significantly higher than for the other dimensions. This could suggest that a service operator should focus a significant thrust of customers service efforts on providing services with a high degree of Reliability. When the managerial situation involves limited resources, this determination of various consumer expectation levels can assist in determining an appropriate allocation of customer service efforts.

The same types of comparisons between dimensions can be made with perceptions scores as well. For example, perceptions of ski area performance were significantly higher for Tangibles at 5.41 than for Reliability 5.11. This indicates that perceived service levels are low in the area of Reliability. An examination of whether service levels in this area are actually lower than for other dimensions, can be very valuable.

With respect to perception of performance, the most highly rated dimensions of service were:

Airlines:	Hotels:	Restaurants:	Ski areas:
Tangibles (5.90)	Tangibles (5.49)	Tangibles (5.69)	Tangibles (5.41)
Assurance (5.53)	Assurance (5.53)	Assurance (5.43)	Assurance (5.16)

4.4.2. Across Service Categories

It is also possible to compare across different service categories within common dimensions. For example, expectations of airlines' Reliability are significantly higher than for those restaurants. It demonstrates that the SERVQUAL instrument has the ability to facilitate multi service segment comparisons to the benefit of organisations in those segments.

4.4.3. Examination of a Specific Sector

While it is interesting to make comparisons across dimensions and between service categories, and much useful information can result from such comparisons, the power of the SERVQUAL tool is perhaps greatest in situations involving comparisons of one firm with another within a common service segment. In this regard, information as to which organisation is perceived to provide better service is

available, along with the potential to identify specific areas of excellence or weakness (Fick and Ritchie, 1991).

In conclusion, the results of this effort demonstrates the usefulness of the SERVQUAL approach. The results indicate that the scale can provide an improved understanding of service quality with regard to selected tourism services. For example:

- The scale indicated the relative importance of consumer expectations with respect to the different dimensions of service quality across various sections of tourism.
- The scale allows comparisons of the various dimensions of service quality across different tourism sectors.
- The scale provides insights concerning the nature and extent of service quality differences across firms with the same sector of tourism (e.g. airlines).

But there are a number of other issues that need to be addressed before we can conclude that the service quality model and associated resources are adequate to the task. The relative importance of each of the dimensions in contributing to overall quality of a service has not been adequately addressed, and the number of dimensions included in the present version of the SERVQUAL scale seems too limiting. A re-examination and operationalisation of the original 10 dimensions,

considering other service industry sector might provide a more comprehensive and functional approach.

In addition, use of a strictly structured measure of service quality is judged to be inadequate. While useful for monitoring the comparative purposes, the structured SERVQUAL scale should be complemented and supported by qualitative data concerning the most important aspects of expectation and performance for every service category of interest.

Despite these concerns, it is important to emphasise that SERVQUAL has made an important and valuable contribution to the area of perceived service quality measurements. While the problems and limitations of the instrument do not invalidate its usefulness, care must be taken in the interpretation of results derived from its present formulation.

4.5. MEASURING SERVICE QUALITY IN THE SMALL BUSINESS SECTOR

In the small business sector, accounting firms, legal firms or audit firms require a high degree of interaction between client and professional. During the interaction, customers are able to gauge the level of quality services they are getting. This level of service quality delivered by the service providers has to be measured in order to tell how well the business firms are performing.

4.5.1. Measuring Service Quality in Accounting Firms

In the study by Freeman and Dart (1993), additional modifications to the SERVQUAL instrument were made in order to make the items applicable to the accounting industry. This procedure is consistent with the recommendations of Parasuraman, Zeithaml and Berry (1985).

Three of the five factors identified by Parasuraman, Zeithaml and Berry (1985) reappeared in the research - Tangibles, Assurance, and Empathy. A fourth factor labelled 'Timeliness' is made up of a combination of items from the Responsiveness and Reliability scales. The term Timeliness was adopted since all items refer to the promptness of the accounting service. The emergence of such a dimension is consistent with the business owners' concern for meeting tax and audit deadlines.

The analysis suggests that the Tangibles dimension has relatively poor psychometric properties and based on its correlation with overall quality, may play a small part in a business owner's assessment of the quality of accounting services. This findings may be related to the fact that many accounting services are undertaken at the client's place of business or perhaps that accountants tend to 'over perform' on tangible factors such as office and computer facilities (Barnes and LaFrancois, 1987). The remaining two dimensions, Empathy and Assurance, proved fairly consistent with Parasuraman, Zeithaml and Berry (1985) in conceptualisation. These new items referred to confidentiality and building a trusting relationship -

both of which are completely consistent with the meaning of Assurance. The fact that these dimensions have been proven important for consumer services are now appearing in a study relating to businesses services, suggests that they are enduring properties of service quality.

It can be concluded from the study that the SERVQUAL dimensions can be used to measure financial and accounting services.

4.5.2. Measuring Service Quality in Credit Unions

According to Chidester (1995), 'Excellent', 'Fantastic', 'Fair' or 'Sloppy' are words members might use to describe the quality of the service they received from their credit union. But one person's 'good' might be another's 'fantastic'. SERVQUAL conforms to the requirement of a tailored survey that allows each person to use the same scale to evaluate service. This is particularly important to the growing number of credit unions that are focusing on service quality as a strategic advantage.

Repeating the SERVQUAL survey at 6 or 12-month intervals, they can track changing expectations and member evaluation of the credit union's service quality. These follow-up surveys can show whether the quality improvement efforts put in place as a result of the first baseline survey are working (Chidester, 1995).

4.5.3. Measuring Service Quality in Real Estate Services

Brokers may feel that, since their industry is unique, concepts of service quality developed in other settings generally do not apply (Nelson and Nelson, 1995). However, as Schmenner (1986) points out, “Service managers who continue to claim that their operations are unique may be left in the dust by those who see their operations as more generic”. Lovelock (1983) identifies several classification strategies that reveal similarities among various service providers. This brokerage operations can be similarly classified to other services such as legal services, health care and architectural design. This research addresses the issue of adapting a generic service quality measurement instrument, called SERVQUAL, for specific use in real estate brokerage operations.

In the survey carried out by Nelson and Nelson, 1995, subtle rephrasing of the SERVQUAL items made them more appropriate to a real estate brokerage context. In this study, the success in applying a modified generic service quality instrument provides evidence that real estate brokerage, contrary to the opinion expressed by some of the other researchers in this field, is not necessarily unique in terms of perceived service quality. This same conclusion, reached independently by McDaniel and Louargand (1994), using a direct application of SERVQUAL, lends additional credence to the belief that the real estate brokerage industry can and should take advantage of the extensive body of knowledge available in other service industries.

The generic SERVQUAL instrument may be directly applicable to real estate brokerage. The recommendations for real estate-specific modifications (e.g. one of the new dimensions, professionalism, contains real estate brokerage specific items) provide additional practical usefulness in revealing industry-specific clues as to the elements of service quality that comprise individual strengths and weaknesses (Nelson and Nelson, 1995).

Johnson, Dotson and Dunlop (1988) applied the SERVQUAL model to residential real estate brokerage services in a sample in North Carolina. They found that the real estate business is somehow different from other service businesses because it is 'prescriptively customised' and that as a result consumers have a different rank order of importance of the determinants of service quality. Johnson, Dotson and Dunlop (1988) also found that service quality is being delivered in areas of reliability, home buyer empathy and product characteristics (not a SERVQUAL factor), but not in areas of assurance, responsiveness and tangibles.

Another study on the application of SERVQUAL in real estate services was carried out by McDonald and Louargand (1994). McDonald and Louargand (1994) report on their study of the determinants of service quality in the real estate brokerage business conducted on a sample of home buyers and real estate agents in the metropolitan Boston area. Service providers in this field often argue that their business is somehow different from other service businesses and so the determinants of quality are different.

McDonald and Louargand (1994) say that in their survey, the survey findings show that consumers responded with the traditional ranking found in the service quality literature with reliability first, followed by assurance, responsiveness, empathy and tangibles as measured by mean scores from their ordinal rankings. The service quality literature traditionally finds that reliability is first, tangibles is last and the other three are in the middle. So, contrary to the results of Johnson, Dotson and Dunlop (1988), they find that the determinants of service quality in their sample as exactly the same as they are in other industries, and that they come in the same ranking order of importance. They conclude that real estate is no different from other service industries on the basis of this sample.

4.6. MEASURING SERVICE QUALITY IN OTHER PUBLIC SERVICES

It was shown earlier on that there have been successful studies carried out using the SERVQUAL scale in the public sector. The studies were on health and education services (Babakus and Mangold, 1992; Walbridge and Delene, 1993; Headley and Miller, 1993; Soliman, 1992; Candlin and Day, 1993; Speller and Wilkinson, 1994). The instrument has been successfully applied on other public services. The services are the armed forces services and the local authority services.

4.6.1. Measuring Service Quality in the Armed Forces Services

In the Air Force, as pointed out by Zumbahl and Mayo (1994), the operations of the Civil Engineering Department at Air Force bases include Facility Operations and Maintenance, commonly called O & M. These operations support the efficiency and productivity of the Air Force units and their aircraft. The base Civil Engineers support their customers in two basic types of projects, planned routine maintenance and emergency repairs. In the Air Force, as in any industry, maintaining quality service and satisfying the needs of customers is the only measure of success. In order to poll customers from all four customer groups and at all levels of job completion in a comprehensive manner, the Civil Engineering organisation at Misawa Air Force Base in Japan distributed a survey to its customers.

The analyses of the questionnaires show that the four customer groups responded similarly on the Expectations and Perceptions of O & M services in all aspects of the survey. All four groups understood the questions in the same way. The groups had variances in expectations and perceptions, but they all had a similar view of how service has been performed.

The SERVQUAL questionnaire served to identify areas where improvement can be made. It also highlighted areas where unnecessary or excessive resources were being wasted. If the questionnaire were distributed at regular intervals, it would allow an organisation to measure its service quality and to compare the results with past practices with similar organisations. It can allow organisations to share

techniques for success, while tailoring a customer service programme to the needs of their own working environment. The long range value of this data gathering technique is to develop follow-up data to enable the organisation to quantify its level of success in meeting the customer needs.

The study shows SERVQUAL can be applied to internal customers. At the same time, the work reported here can help to improve the quality of government service, using management methods developed for use in the private sector. It can serve as a model for quality measurement programmes in the field of facility management. This procedure has application as a tool for continuous improvement (Zumbehl and Mayo, 1994).

4.6.2. Measuring Service Quality in Local Authority Services

In adding to the pool of knowledge on measuring service quality of services provided by the public sector, Dalrymple, Donnelly, Wisniewski and Curry (1995) carried out a research on local government. In local government, the customer may be an individual; a local community or interest group; one or more elected members; a government department or minister or society as a whole. The purchaser of a local government service may also be the provider since the local authority both purchases and provides many services. In the private sector, it is usually apparent to the provider and customer that a service has been provided. Consequently, the customer or recipient of the service can make informed

judgements about the quality of service provided. Research shows that this is also possible in the public service sector.

In the study on public library services, 368 responses were received from people using 15 static and 2 mobile libraries. The SERVQUAL dimensions introduced by Parasuraman, Zeithaml and Berry (1988) were arrived at using Factor Analysis on the responses to the survey statements. A replication of this analysis on the Public Library data yielded five dimensions broadly consistent with those reported by Parasuraman, Zeithaml and Berry (1988). The individual statement scores provided valuable information to service managers in forming future service development proposals. In another study on the Home Help Service, a service providing domiciliary personal social services through the medium of Home Help, 124 responses was obtained from the client group restricted to two administrative areas in one city in Scotland and consisted of the elderly, the chronic sick and people with learning difficulties. Out of the 150 samples, 124 usable responses were obtained. The results so far indicate that the SERVQUAL model has considerable validity in local government environments.

The development of the SERVQUAL approach in this field opens up potential policy related opportunities at national level. Such an instrument could assist the activities of the central government inspectorates that are increasingly being required to monitor the effectiveness of the delivery of statutory services to citizens. At the local level, the instrument can be used to monitor and assess the quality of its service provision. It could also be used to benchmark over time, between services

and between authorities. At a tactical level, the diagnostic ability of the model could assist managers in targeting resources to provide an appropriate service to different client groups. It could therefore be used to segment the markets for services and develop service strategies and therefore service operations implementation to meet the perhaps different needs of discrete client groups. The measuring instrument too has the potential to underpin the identification and formulation of critical success factors for use in a TQM approach to local government services.

4.7. SUMMARY ON THE APPLICATION OF SERVQUAL

We can conclude that the SERVQUAL instrument has been successfully applied in the health sector, in the information system services, in the travel and tourism industry, in small business firms, in students services office, in real estate services, in the armed forces, in credit facilities organisations and in education. This indicates that the instrument can be applied to different types of services in different types of service organisations including the public service.

Hence SERVQUAL has been applied successfully in several sectors in the public sector. In the health sector, SERVQUAL is able to provide hospital administrators with a tool for measuring functional quality. The measurements obtained can be used to identify problems that form barriers in providing quality health care services. In measuring the information systems service quality, it was reported that

the instrument forms a very useful tool for assessing service quality and determining actions for raising service quality. In addition, SERVQUAL was considered suitable for continued monitoring of information systems service quality. In the education sector, the SERVQUAL instrument was also used in the Students' Services Office to measure the level of success over the implementation of the TQM approach in that organisation. The study on the business school shows that there are service quality gaps and these help to identify the areas of shortfalls on services delivered. In addition, this instrument was applied to observe the perceptions and expectations over services delivered to the overseas students in 10 Western Australia educational institution.

Despite of its successful application, this instrument has not escape criticisms. Criticisms on SERVQUAL are discussed in the section below.

4.8. CRITIQUE ON SERVQUAL

The instrument has been widely applied successfully to different sectors of the service industry. Despite its wide usage and wide coverage, this approach has been subjected to criticisms. A substantial amount of literature argues against this approach. The arguments will be discussed under the sections on (1) Statistical Issues; (2) SERVPERF versus SERVQUAL; and (3) the Dimensionality of SERVQUAL.

4.8.1. The Statistical Issues

The difficulties with the SERVQUAL instrument identified in this literature can be grouped into 2 main categories: (1) conceptual and (2) empirical, although, the boundary between them blurs because they are closely inter-related.

The conceptual problems centre around, (1) the use of two separate instruments, one for each of the two constructs (i.e. perceptions and expectations) to operationalise a third conceptually distinct construct (i.e. perceived service quality); (2) the ambiguity of the expectations construct; and (3) the suitability of using a single instrument to measure service quality across different industries.

At the same time the SERVQUAL approach is plagued by empirical problems. Empirical problems derived from the conceptual difficulties. Most notable is the use of difference scores which results in, (1) low reliability which means that the coefficient alpha of the difference scores of the instrument is lower than 0.70 (Nunnally, 1978; Pitt, Watson and Kavan, 1995); (2) unstable dimensionality meaning that the five-factor dimensions of the SERVQUAL instrument are not final. The dimensional factors can either be three, five, seven or more, depending on the industry involved in the measurement (Pitt, Watson and Kavan, 1995); and (3) poor convergent validity. Convergent validity involves the extent to which a measure correlates highly with other measures designed to measure the same construct and therefore a weak correlation indicates poor convergent validity (Van Dyke, Kappelman and Prybutok, 1997). These problems are further elaborated.

The reliability of the difference scores are dependent on the reliability of the component scores and the correlation between them. The formula for calculating the reliability of difference scores (Johns, 1981) shows that as the correlation of the component scores increases, the reliability of the difference scores decreases. Hence, for low reliability, the difference score measures often demonstrate poor reliability primarily because any positive correlation between the component scores attenuates the reliability of the resulting difference score. As the reliability of either component scores decreases or the correlation between the component scores increases, the reliability of the difference scores itself decreases (Brown, Churchill and Peter, 1993). An example was provided where the reliability of the difference scores formed by subtracting one component from another with an average reliability of 0.70 and a correlation of 0.40 is only 0.50 (Johns, 1981).

Here we can summarised that when two responses are taken from the same respondent and then subtracted to form a measure of a third construct (as with SERVQUAL), only rarely will the difference score components not be positively correlated. In other words, the response for the first measure (the perception measure as in SERVQUAL) given by the respondent will be related to the second response for the second measure (the expectation measure as in SERVQUAL) (Brown, Churchill and Peter, 1993). The respondent cannot respond independently towards the two measures.

Secondly, in looking at the dimensionality aspect of SERVQUAL, it was found that the dimensionality of service quality data captured using the SERVQUAL

instrument appears to depend on the type of services under investigation (Strong and Taylor, 1994). Research findings suggest that the proposed five dimensions of SERVQUAL is not confirmed (Lam, 1995).

Finally, it is the issue of convergent validity. Convergent validity pertains to the extent to which scale items are assumed to represent a construct. In the SERVQUAL instrument of measuring service quality, their scale items should be able to represent the five dimensional factors of SERVQUAL. The reliability of a scale as measured by coefficient alpha reflects the degree of cohesiveness among the scale items in relation to the five dimensions and is therefore an indicator of the degree of convergent validity. A more stringent test of convergent validity is whether scale items expected to load together under the SERVQUAL dimensions in a factor analysis actually do so (Parasuraman, Zeithaml and Berry, 1991). In this case, from the research studies carried out by Carman (1990) and Babakus and Boller (1991) evidences show that the factor-loading patterns are weak because several SERVQUAL items had low loadings on the dimensions they were supposed to represent suggesting poor convergent validity.

4.8.2. SERVPERF versus SERVQUAL

Carman (1990) is one of the first to address issues relative to the SERVQUAL scale and the disconfirmation paradigm used to conceptualise perceived service quality. The term 'disconfirmation paradigm' used by Carman (1990) means 'the

perceptions construct minus the expectations construct to produce the service quality construct'. Carman (1990) questioned the validity of the use of Expectations in the determination of service quality. He indicates that there is no necessity to administer the Expectations item.

Empirical findings from research carried out by Bolton and Drew (1991) show that customers' attitudes are strongly affected by current performance ratings and only to a lesser extent by disconfirmation. The effects of disconfirmation are relatively transitory and that customer's perceptions of current performance seem to have the greatest impact on customer satisfaction and attitude. The finding was further supported by the findings from research carried out by Cronin and Taylor (1992). They extend the investigation of the appropriate conceptualisation and operationalisation of the service quality construct and they examined the efficacy of performance-based versus disconfirmation-based measures of service quality over four non-professional service industries. The empirical evidence shows that performance-based measures of service quality outperformed disconfirmation-based measures (Carman, 1990; Bolton and Drew, 1991; Cronin and Taylor, 1992). The superiority of this measure as suggested by Carman (1990); Bolton and Drew (1991); and Cronin and Taylor (1992) is further illustrated in the discussions later in the chapter.

Cronin and Taylor (1992) also suggest that the service literature has left confusion as to the relationship between consumer satisfaction and service quality. This distinction is important to managers and researchers alike because service providers

need to know whether their objective should be to have consumers who are 'satisfied' with their performance or to deliver the maximum level of 'perceived service quality'. This calls into question the use of the disconfirmation framework (Performances – Expectations) as the primary measure of service quality because disconfirmation appears only to mediate, not define consumers' perception of service quality. This finding suggests using only performance perceptions as a measure of service quality. Hence, Cronin and Taylor (1992) introduced SERVPERF. The SERVPERF instrument measures the actual performance or perceived performance of the service providers in providing services. The instrument uses only one set of items for the measurement of service quality rather than two as used in the SERVQUAL instrument.

Babakus and Boller (1992) favour the SERVPERF approach. They show some drawbacks in the application of the SERVQUAL technique. They attempted to replicate the development of the SERVQUAL scale within the utility industry and concluded that conceptualising and operationalising service quality as a five-dimension construct cannot be supported. They suggested that the SERVQUAL scale appears to be essentially uni-dimensional and that the Expectations item causes variance restriction.

Variance restriction occurs when one of the component scores used to calculate the difference score is consistently higher than the other component. This is typically the case when one of the variables is a 'motherhood' variable for which more is always better. There is ample evidence that when people respond to 'what is

desirable' in comparison to 'what there is now' they seldom rate the former lower than the latter. Such is the case with SERVQUAL. As an example, looking at scale items suggested by Babakus and Mangold (1992), the Expectations item E1 is 'Hospitals should have up-to-date equipment and the Perceptions item P1 is 'XYZ has up-to-date equipment', respondents tend to rate the Expectations higher than the Perceptions. The expected level of service is almost always higher than the perceived level of actual service (Brown, Churchill and Peter, 1993).

Teas (1993) too has been critical over the use of the SERVQUAL instrument for measuring service quality. Teas (1994) points out that there is considerable variance in respondents' interpretations of the actual question being asked. A considerable amount of the variance in service quality expectations data is a result of different interpretations of the question being answered rather than the result of respondent attitudes and perceptions. A relatively large number of respondents interpreted the expectations question to involve a question about attribute importance. For these respondents, the use of the service quality framework (Perceptions-Expectations) is inappropriate. A considerable number of respondents interpreted the expectations measures to involve questions about 'forecasted' or predicted performance levels. Hence, with respect to the disconfirmed expectations component of consumer satisfaction models the perceived quality framework (Perceptions-Expectations) lacks discriminant validity. Given this confusion, it may be useful to consider modifying the perceived service quality framework. One potential modification is to eliminate the expectations measure and to rely on the 'perceptions' component alone (i.e. SERVPERF).

Strong and Taylor (1994) say that emerging literature and empirical evidence do not support the gap model advocated by Parasuraman, Zeithaml and Berry (1990) for service quality measurement. In their argument, Cronin and Taylor (1994) suggest that the performance-based measures of service quality captured by SERVPERF scale can provide managers with a summed overall service quality score that can be plotted relative to time and specific consumer sub-groups. As such, the SERVPERF scale provides a useful tool for measuring overall service quality attitudes by service managers. Cronin and Taylor (1994) remain unconvinced that including consumer expectations in measuring service quality is a position managers should support.

McAlexander, Kaldenberg and Koenig (1994) and Lam (1995) too in their empirical analyses raise questions about the usefulness of expectation scores in SERVQUAL. The studies suggest that quality perceptions can be predicted accurately using only the performance scale. It is a more efficient way to measure service quality in comparison with the SERVQUAL scale. It reduces to half the number of items that must be measured. Van Dyke, Kappelman and Prybutok (1997) too support what has been suggested by Cronin and Taylor (1994).

Brand, Cronin and Taylor (1996) extended the work of Carman, (1990); Bolton and Drew (1991); Peter, Churchill and Brown, (1992); Babakus and Boller (1992); Babakus and Mangold (1992); Oliver (1993); Patterson and Johnson (1993); Headley and Miller (1993); Brown, Churchill and Peter (1993); Teas (1993); Strong and Taylor (1994); and Cronin and Taylor (1994). In their research, the main

aspect of interest is the efficacy of using the disconfirmation paradigm to measure service quality in the recreational services setting. This issue is investigated by comparing the full disconfirmation application (SERVQUAL) with a performance-only scale (SERVPERF). The models were, (1) Unweighted SERVQUAL; (2) Importance-weighted SERVQUAL; (3) the Unweighted performance subscale of the SERVQUAL scale (termed as SERVPERF); and (4) Importance-weighted SERVPERF. The results of their study indicated that the unweighted performance-only measure (SERVPERF) is more efficient than the other three competing models. It is able to reduce by 50 per cent the number of items that must be measured (44 items to 22 items). The analysis of the structural models also supports the theoretical superiority of the SERVPERF scale. These factors support the use of a performance-based measure of service quality.

Findings from the studies by Parasuraman, Zeithaml and Berry, (1991) involving independent customer samples of five nationally known companies strongly suggest that some criticisms of SERVQUAL can be rebutted. The perceptions ratings alone may not lead to the same (or correct) practical implications as the perception-expectations difference scores. For instance, consider the following mean perceptions and SERVQUAL scores obtained by an insurance company for the five service quality dimensions:

Dimension	Perception Score	SERVQUAL Score
Tangibles	5.3	0.0
Reliability	4.8	-1.6
Responsiveness	5.1	-1.3
Assurance	5.4	-1.0
Empathy	5.1	-1.0

The perceptions rating suggest placing equal emphasis on improving responsiveness and empathy when, in fact, the company has a bigger problem with responsiveness as the SERVQUAL score reveal. This company would also focus more attention on improving its tangibles than on enhancing assurance as it relied solely on the perceptions scores. Clearly, this would be a major mistake as indicated by the SERVQUAL scores for tangibles and assurance. Parasuraman, Zeithaml and Berry (1994) suggest that the SERVQUAL instrument provides richer information as compared to the SERVPERF instrument and SERVQUAL instrument has a greater diagnostic value for managers.

Take another example put forward by Berry and Parasuraman (1997). If the computer manufacturer measures only customer perceptions, its management would find it difficult to invest its resources for service improvement. In this case, the inclusion of expectations data show that improving service reliability should take priority over improving tangibles even though reliability and tangibles have identical perception scores. A situation might arise if without expectations data, the service quality is acceptable because all perception scores are more than the average point.

Parasuraman, Zeithaml and Berry (1993) also disagree with the criticisms put forward by Brown, Churchill and Peter (1993). Critique of Brown, Churchill and Peter (1993) is generally about correlation of components of difference-score. The expectations component of SERVQUAL is a general measure and pertains to customers' normative standards. The perceptions component, on the other hand,

pertains to customers' perception of a given company's service within the sector. As such, there is no conceptual reason for a customer's general evaluation standards to be correlated with their company specific measurements.

Parasuraman, Zeithaml and Berry (1993) gave an example, 'If customer A has a higher SERVQUAL expectation score for the appearance of departmental stores than does customer B, it does not necessarily follow that customer A would also rate XYZ department store's appearance higher than would customer B'. Any observed correlation between the SERVQUAL expectations and perceptions may be merely an artefact of both measures appearing on the same instrument. Such a correlation is not likely to be high, as evidenced by the moderate value in Brown, Churchill and Peter's (1993) study.

Next, Parasuraman, Zeithaml and Berry (1993) clarify that the two problems pertaining to the discriminant validity of difference-score formulation of SERVQUAL uncovered by Brown, Churchill and Peter's (1993) cannot be supported. The first problem is that a difference score measures discriminant validity may be inflated if the measure has low reliability. Because the reliability of the SERVQUAL formulation has been shown to be consistently high, this problem is unlikely to surface in studies using the difference-score formulation of SERVQUAL. The second problem is that a difference-score measure would necessarily lack discriminant validity because it will be correlated with its two components. It is not acceptable by inferring poor discriminant validity for the difference-score formulation of SERVQUAL on the basis of its correlation with its

components. This is inconsistent with the definition of discriminant validity (Parasuraman, Zeithaml and Berry, 1993). Discriminant validity is evident if items underlying a dimension load as discrete anticipated factors. This indicates the dimensions are then measuring different concepts (Ketinger and Lee, 1997). The reproduction of the five-factor model using the 22-item SERVQUAL instrument indicate discriminant validity (Parasuraman, Zeithaml and Berry, 1985, 1988).

Parasuraman, Zeithaml and Berry (1994) disagree with the suggestions from Cronin and Taylor (1992); Teas (1993); and Cronin and Taylor (1994). Arguing in favour of the performance-based measures of Service Quality (SERVPERF), Cronin and Taylor (1994) suggest, “Practitioners often measure the determinants of overall satisfaction/perceived quality by having customers simply assess the performance of the organisation’s business processes” but Parasuraman, Zeithaml and Berry (1994) say even though it is widely used, this performance-based measure is not superior to the disconfirmation measure. The disconfirmation measure is able to provide richer information. It is further illustrated later in the chapter.

In support for the need to include Expectations items in measuring service quality, Skelcher (1992) says that most market research tend to focus on satisfaction with existing services and not identifying customer needs. Michie and Kidd (1994) acknowledge the need for assessing expectations. Surveys are seen as merely rituals and satisfaction may be more related to service quality if expectations are measured. Wisniewski and Donnelly (1996) added that an article in the Financial Times (29 June 1995) indicates that spending on market research in the United

Kingdom in 1994 exceeded half a billion Pound Sterling. Some 13 Percent of this total related to spending on market research by Public Sector organisations. The problem with these customer satisfaction surveys is that they tend to focus on customer perceptions of service delivery. Customers were not given the opportunity to tell what they expect from the service.

Measuring expectations and perceptions separately also allows managers to better understand the dynamics of customers' assessments of service quality over time. For example, if SERVQUAL scores for certain items have declined significantly from one period to another, managers can assess whether this is due to higher expectations, lower perceptions, or both. This information is not available when perceptions relative to expectations are measured on the same scale.

Another advantage of measuring expectations and perceptions separately is that the gathered data can serve equally well the dual objectives of accurately diagnosing service shortfalls and explaining the variance in related variables. Difference scores can be used for the former while perceptions scores alone can be used for the latter (although, as already mentioned, the available empirical evidence does reveal expectations to the presumed superiority of perceptions scores in explaining variance).

Kettinger and Lee (1997) in their support, say that service quality measurements that incorporate customer expectations provide richer information than those that focus on perceptions only. Information approach gather in this way has greater

diagnostic value. The instrument too can provide managers with deeper insights concerning the dimensions of service quality.

SERVQUAL scores could be superior in terms of pinpointing areas of deficiency within an organisation. Moreover, examining only performance ratings can lead to different actions than examining those ratings relative to customer expectations. For example, an organisation might mistakenly focus more attention on tangibles than on assurance if it relied solely on the performance scores. Also, managers are more interested in accurately identifying service shortfalls rather than the explanation on variance in an overall measure of perceived service (Parasuraman, Zeithaml and Berry, 1994).

In support of Parasuraman, Zeithaml and Berry's (1994) argument, Pitt, Watson and Kavan (1997) suggest that the marginal empirical benefit of a perceptual-based (SERVPERF) service quality measure does not justify the loss of managerial diagnostic capabilities found in a gap measure and according to Kettinger and Lee (1997), the predictive power of the adapted SERVPERF instrument is superior to the adapted SERVQUAL instrument. This predictive power refers to the extent to which scores of one construct are empirically related to scores of other conceptually-related constructs (Kappelman, 1995; Parasuraman, Zeithaml and Berry, 1991). In carrying out regression analyses, the overall service quality rating was regressed separately on both difference scores and perception-only scores. The analyses show that the perception-only scores (under the SERVPERF instrument) produced higher r-squared values (ranging from 0.72 to 0.81) compared to the SERVQUAL difference scores (ranging from 0.51 to 0.71) (Van Dyke, Kappelman and Prybutok, 1997). For other comparative criteria, such

as reliability; convergent; and discriminant validity, they show that the adapted SERVPERF provides either weak or no substantial improvement over SERVQUAL. Hence, the marginal benefit derived from the SERVPERF instrument is not substantial as compared to the benefits derived from SERVQUAL. This finding is consistent with empirical evidence from marketing (Cronin and Taylor, 1992; Teas, 1993) where they have not conclusively established that SERVPERF is superior in terms of convergent or discriminant validity.

4.8.3. The Dimensionality of SERVQUAL

Another often mentioned conceptual problem with SERVQUAL concerns the applicability of a single instrument for measuring service quality across different industries. Carman (1990) questioned how generic are the SERVQUAL dimensions and how sufficient are the dimensions in establishing perceived service quality. In his attempt to replicate the SERVQUAL instrument in the professional service setting, Carman (1990) discovers that the dimensions of Tangibility, Reliability and Security appear in all the cases he investigated. Carman (1990) cautions that Parasuraman, Zeithaml and Berry's (1991) combination of Understanding and Access dimensions into Empathy is not supported by the data. Carman (1990) interprets this finding as indications that when one of the dimensions of service quality is particularly important to customers they are likely to split the important dimension into subdivisions. Thus, Carman (1990) identifies the possibility that the SERVQUAL scale may not exhibit the purported five-factor

structure across all service industry settings. The SERVQUAL scale's generalisability as an operational measure is questioned. Walbridge and Delene (1993), using the empirical research by Haywood-Farmer and Stuart (1988), show that the SERVQUAL instrument was inadequate for measuring professional service quality since the core service element of professional services was not included. The instrument was modified to include constructs for assessing core service, service customisation and the knowledge of the professional.

A number of studies carried out show that it is not possible for SERVQUAL to have standard dimensions that can be applied across every services (Carman, 1990; Bresinger and Lambert, 1990; Finn and Lamb, 1991; Vandamme and Leunis, 1993; Kettinger and Lee, 1994; Bowers, Swan and Koehler, 1994; Akan, 1995; Pitt, Watson and Kavan, 1995; Lam, 1995). Van Dyke, Kappelman and Prybutok, (1997) reported that a study of SERVQUAL across four different industries found it necessary to add as many as 13 additional items to the instrument to adequately capture the service quality construct in various settings.

The results of several studies have demonstrated that the five dimensions claimed for the SERVQUAL instrument are unstable. In other words, these dimensions are not final in determining Service Quality (Van Dyke, Kappelman and Prybutok, 1997). Øvretveit (1993) says that the method does not put weights to the relative importance of different dimensions. It is likely that customers of different services value some dimensions more than others, for example, health patients might value 'capability' more highly than fast-food customers. At the same time, different

ethnic groups and cultures are likely to value different dimensions of service. Service performance varies at different times of the day or week: a measure of averages is misleading because it may mask serious problems at certain times, such as at peak demand.

However, Babakus and Boller (1992), despite of their disagreement with SERVQUAL, recognise the development and use of standardised measurement scales that enable researchers to compare results of studies across industries. Cronin and Taylor (1994) too support the development of a generalizable multidimensional scale but instead of SERVQUAL, Cronin and Taylor (1994) favours applying the SERVPERF model in measuring service quality. Cronin and Taylor (1994) carried out a study designed to test the stability of the factor structure of the SERVPERF scale across multiple service industries. A total of four hundred and twenty-four interviews were collected for the study. The sample was of consumers who have knowledge of the organisations in each of four service industries under investigation. The four service industries selected were the professional health care services; recreation (amusement park) services; transport (airline) services; and telecommunications (long-distance telephone) services.

The results of the research shows that SERVPERF suffer from similar limitations found in the SERVQUAL scale. That is, the SERVPERF scale does not exhibit a five-factor structure in the industries investigated in the current research in a generalizable fashion. Given the importance of the service quality construct in the service industry, the development of a generalizable multi-dimensional scale still

appears an important research question yet to be answered (Cronin and Taylor, 1994).

4.9. CONCLUSION

The discussions above show that recent research suggest that the dimensional structure suggested by Parasuraman, Zeithaml and Berry (1985, 1988) may vary depending on the service under study (Carman, 1990) and that a shorter scale is equally useful (Babakus and Mangold, 1992). Research into SERVQUAL also suggest that the dimensions are a good starting point for scale construction, but the pre-measurement and post-measurement approach could be replaced with a post-encounter-only measurement effort with good results. Here, a distinct effort to measure expectations and perceptions of outcome has been found to be less useful than measuring perceptions after the service experience (Carman, 1990; Babakus and Boller, 1991; Cronin and Taylor, 1992). These investigations on SERVQUAL suggest either that significant adaptations are made on SERVQUAL or SERVQUAL is replaced with SERVPERF (Headley and Miller, 1993).

Parasuraman, Zeithaml and Berry (1994) point out that the articles by Cronin and Taylor (1993) and Teas (1993) raise important issues about the specification and measurement of service quality. Parasuraman, Zeithaml and Berry (1994) argue that though the current approach can be refined, abandoning it altogether in favour of the

alternate approaches proffered by Cronin and Taylor (1993) as well as Teas (1993) does not seem warranted. The collective conceptual and empirical evidence casts doubt on the alleged severity of the concerns about the SERVQUAL approach and on the claimed superiority of the SERVPERF approach. The defence put up by Parasuraman, Zeithaml and Berry (1994) plus the support by Pitt, Watson and Kavan (1995, 1997) and Kettinger and Lee (1997) justifies the continual usage of the SERVQUAL approach of measuring service quality.

These researchers are able to show the importance of having a diagnostic instrument of measuring service quality. The diagnostic nature of the instrument shows its superiority over the SERVPERF. In terms of reliability, the SERVPERF instrument cannot be proved to be of a higher level as compared to SERVQUAL. Research on the standard five-dimensional scale shows that the SERVPERF suffer from similar limitations found in the SERVQUAL. The SERVPERF scale does not exhibit a five-factor structure in the industries investigated in the research in a generalizable fashion (Cronin and Taylor, 1994). Substantial literature supports this findings (Babakus and Boller, 1992; Cronin and Taylor, 1993; Van Dyke, Kappelman and Prybutok, 1997). In SERVQUAL, adhering to the original five dimensional scales to measure service quality has been supported by a vast amount of literature as shown in the earlier part of this chapter. The literature calls for modifications of the statements to suit the specific area of research. This process of customisation is allowable as indicated by the founders of SERVQUAL (Parasuraman, Zeithaml and Berry, 1990) but critics suggest that total customisation should be made for every different service and there should not be a general instrument

that can be used to measure service quality for all types of services. The argument behind it is that service quality of different services is affected by different factors and it is not appropriate to assume that all services are affected by the same factors. This suggestion can be taken into consideration if it can be assured that the people conducting the study will measure service quality not subjecting to biases. In this case, Donnelly, Wisniewski, Dalrymple and Curry (1995) point out that unless considerable care and professionalism is applied, such surveys may lie open to the charges of bias in their construction, their wording, or their sampling frame. Such surveys also often reflect those service characteristics or features regarded as important by service managers and these may or may not coincide with the features that the customer views as important.

At the same time, there is a need to make comparisons between one organisation to another within the public service sector. Take for example, the NHS hospitals, standard measures allows for, understanding quality; conducting market research probably on yearly basis; to audit quality by comparing different hospitals; setting standards for all hospitals; and measuring performance of all hospitals (Youssef, Nel and Bovaird, 1996). Take another example, if quality awards are to be awarded among government departments or if the government wants to identify government departments that are not delivering quality services up to the mark, standard measures measuring the same element that provide the quality of services have to be used. At the same time, managers do not have the time, resources or even knowledge to undergo rigorous research exercise to check on the five dimension scales over their reliability every time they have to conduct a survey to determine service quality of their organisations.

According to Lam (1996), “Lack of understanding of the tools has also prevented top management from appreciating their benefits. The final barrier was that some of the quality improvement tools were too complicated. Managers without specialised quantitative training found it difficult to understand the language of the sophisticated quality improvement tools. Some managers also commented that quality experts had difficulties in explaining statistical reasoning and concepts in terms that business managers could understand”. This statement can be summarised that a standard and simple measuring instrument like SERVQUAL is what management wants.

Therefore, the 5 dimensional scales under SERVQUAL, even though heavily criticised, but since its positivity outweighs its negativity, can be used to measure service quality. Meanwhile, further researches on SERVQUAL to determine a set of generalised dimensions applicable in all services have to be carried out. The instrument, as seen in its application over different services show that the 22-items under either one of the five dimensions, where necessary, can be modified to suit the study.

We can conclude that SERVQUAL can be an effective instrument in measuring service quality of services in the service industry.

CHAPTER 5

RESEARCH METHODOLOGY FOR THE APPLICATION OF THE SERVQUAL INSTRUMENT

In the last chapter, we discussed on the successful application of the SERVQUAL instrument in several service sectors and concluded that the instrument can be used to measure service quality in the public service. Therefore, to measure service quality of public services in Malaysia, the appropriate research methods and research strategies for applying the SERVQUAL instrument have to be identified.

5.1. THE PURPOSE OF RESEARCH

Bennett (1991) points out that research is concerned with solving problems; with investigating the relationships that exist in the world around us; with building or establishing a body of knowledge that some might refer to as a 'science'. Whilst many people would not regard the body of management knowledge as constituting a science, the investigation of managerial issues, problems and interests can take on a scientific aura, depending on the methods of research used. According to Reaves (1992), the most important way in which research is different from other ways of answering questions is that it is systematic.

Phillips and Pugh (1994) suggest that research goes beyond description and requires analysis. It looks for explanations, relationships, comparisons, predictions, generalisations and theories. These are the 'why' questions which require good intelligence gathering just as decision-making and policy formulation do. The information is used for the purpose of developing understanding - by comparison, by relating to other factors, by theorising and testing the theories.

In order to be able to fully exploit a research, the appropriate research strategies have to be applied. Yin (1994) points out that, research strategies can be in the form of experiments, surveys, histories and the analysis of the archival information. Each strategy has their advantages and disadvantages.

Each strategy can be used for either the exploratory, descriptive or explanatory purpose of research. The selection of strategies for research depends on three conditions. The conditions are, (a) the type of research question posed; (b) the extent of control an investigator has over actual behavioural events; and (c) the degree of focus on contemporary as opposed to historical events. Table 5.1 displays the three conditions and show how each is related to the five major research strategies.

Table 5.1. Relevant Situations for Different Research Strategies

Strategy	Form of research question	Requires control over behavioural events?	Focuses on contemporary events
Experiment	how, why	yes	yes
Survey	who, what, where, how many, how much	no	yes
Archival analysis	who, what, where, how many, how much	no	yes/no
History	how, why	no	no
Case study	how, why	no	yes

[Source from COSMOS Corporation (Yin, 1994)]

The type of research question relates to the purpose of the research study whether it should be exploratory, descriptive or explanatory. As an example, if research questions focus mainly on ‘what’ questions, either of two possibilities arises. First, some type of ‘what’ questions are exploratory, such as this one: ‘What are the ways of making schools effective?’ This type of question is a justifiable rationale for conducting an exploratory study, the goal being to develop pertinent hypotheses and propositions for further inquiry. However as an exploratory study, any of the five research strategies can be used. The second type of ‘what’ question is actually a form of a ‘how many’ or ‘how much’ line of inquiry - for example, ‘What have been the outcomes from a particular managerial reorganisation?’ Identifying such outcomes is more likely to favour survey or archival strategies than others (Yin, 1994).

Following the identification of the right research strategy, when carrying out a research, the right research methodology has to be applied. Robson (1994) notes that methodology is a collection of postulates, rules and guidelines that provide a standard proven process to follow.

In selecting the research methods, according to Easterby-Smith, Thorpe and Lowe (1991), there is a long-standing debate in the social sciences about the most appropriate philosophical position from which methods should be derived.

5.2. THE PHILOSOPHICAL PARADIGM

The two philosophical positions, within the philosophical paradigm, at the two extremes are positivism and phenomenology. There has been a trend away from positivism towards phenomenology over the last few years. There are many researchers, especially in the management field, who adopt a pragmatic view by deliberately combining methods drawn from both traditions. In positivism, the key idea of positivism is that the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition (Easterby-Smith, Thorpe and Lowe, 1991).

The new paradigm that has arisen in reaction to the application of positivism to the social sciences, stems from the view that the world and 'reality' are not objective

and exterior but they are socially constructed and given meaning by people (Husserl, 1946). The starting point is the idea that reality is socially constructed rather than objectively determined. Hence the task of the social scientist should not be to gather facts and measure how often certain patterns occur, but to appreciate the different constructions and meanings that people place upon their experience. One should therefore try to understand and explain why people have different experiences, rather than search for external causes and fundamental laws to explain their behaviour. Human action arises from the sense that people make of different situations, rather than as direct response from external stimuli (Easterby-Smith, Thorpe and Lowe, 1991).

5.2.1. Combining the Two Paradigms

Although the distinction between the two paradigms may be very clear at the philosophical level, when it comes to the use of quantitative or qualitative methods and to the issues of research design the distinction breaks down (Burrell and Morgan, 1979; Bulmer, 1988; Punch, 1986). Increasingly, attempts were made to mix methods to some extent, because it provides more perspectives on the phenomena being investigated.

In using the quantitative methods under the positivism paradigm, the main strengths are that, they can provide wide coverage of the range of situations; they can be fast and economical; and particularly when statistics are aggregated from large samples,

they may be of considerable relevance to policy decisions. On the other hand, these methods tend to be rather inflexible and artificial. They are not very effective in understanding processes or the significance that people attach to actions. At the same time, they are not very helpful in generating theories and because they focus on 'what is', or 'what has been recently', they make it hard for the policy-maker to infer what changes and actions should take place in the future. Most of the data gathered will not be relevant to real decisions although it may be used to support the covert goals of decision-makers (Legge, 1984; Easterby-Smith, Thorpe and Lowe, 1991).

The qualitative methods under the phenomenological paradigm have strengths in their ability to look at change processes over time, to understand people's meanings, to adjust to new issues and ideas as they emerge and to contribute to the evolution of new theories. They also provide a way of gathering data that is seen as natural rather than artificial. Its weaknesses are, data collection can take up a great deal of time and resources and the analysis and interpretation of data may be very difficult. Qualitative studies often feel very untidy because it is harder to control their pace, progress and end-points. There is also the problem that many people may give low credibility to studies based on a phenomenological approach.

Whether it is quantitative or qualitative, the methodological approach one should adopt is the one that is best for a particular circumstance. Ideal cases of experimental, survey or ethnographic studies are moderately rare and are not necessarily the best way of tackling a research question. In practice, research is not

one which follows styles, but one which tries to answer questions by the most appropriate means. They accept that the most appropriate means may well be an ad hoc combination of methods designed to maximise generalisability and inclusiveness within the available resources and circumstances (Sapsford and Evans, 1979; Feilding and Feilding, 1986). The most appropriate method has come to be one that attempts to combine the ‘best’ of both survey and ethnographic research approaches - an ‘ethno-survey’ orientation. Consequently, the position has become an amalgamation of two philosophies (Dainty, 1991). In this case, Bryman (1988) suggests that quantitative and qualitative approaches are not mutually exclusive. Whilst recognising that there are areas of similarity between the two approaches, there are key dimensions which mark their differences. These areas of differences are shown in Table 5.2.

Table 5.2. Quantitative and Qualitative Research

Dimension	Quantitative	Qualitative
Role of qualitative research	preparatory	means to exploration of actors’ interpretation
Relationship between researcher and subject	distant	close
Researcher’s stance in relation to subject	outsider	insider
Relationship between theory/concepts and research	confirmation	emergent
Research strategy	structured	unstructured
Scope of findings	nomothetic	ideographic
Image of social reality	static and external to actor	processual and socially constructed by actor
Nature of data	hard, reliable	rich, deep

(Bryman, 1988)

5.2.2. Selection of Research Method

The literature suggests that the best method of research is to combine the research approaches under the two paradigms. Some of the methods that can be administered are the historical approach, the case study, the survey and the experiment. In this research on service quality, the research questions posed in Chapter 1 shows that this type of research questions relates to the exploratory type of research (Yin, 1994). Yin (1994) suggests that to obtain answers for this type of research questions, the survey approach should be adopted.

5.3. THE SURVEY APPROACH

Reaves (1992) says that a survey is a set of standard questions asked of a sample of people, whose answers are collected and combined to represent the answers of an entire population. Easterby-Smith, Thorpe and Lowe (1991) say that, a survey is to obtain information from or about, a defined set of people, or 'population'. This population might be defined to include all the people in one country or all managers who attended a particular course. Common surveys include public opinions polls, election polls and marketing surveys. A survey is a good way to find out about a large number of people.

This survey approach is the most widely adopted method in the social sciences and management research. Surveys are usually cheaper, quicker and broader in coverage than most scientific experiments can hope to be. But on the other hand,

they often lack the control and in-depth study of the experiment. They also lack the richness and depth of meaning which can be generated from a case-study approach. Surveys are based on a very simple principle - if we wish to know what people think about certain things we must ask them. Relying mainly on the techniques of the face-to-face interview, by telephone or by mail survey, the survey can provide useful information on many problems or issues faced by managers in organisations. Which approach is the best will be determined by the information that has to be obtained, the type of population or sample involved, the time limit available, availability of trained personnel who carries out the surveys and other numerous factors (Dillman, 1987; Bennett, 1991).

5.3.1. The Face-To-Face Interview

According to Reaves (1992), a face-to-face interview consists of one person asking another person questions and recording the respondent's answers. When the interviewer is asking a standard set of fixed questions, the interview is also a survey. Interview methods vary generally along a continuum, depending on how much freedom the interviewer has in asking questions. These interviews can be unstructured and free ranging, a general discussion, picking up points and issues as they emerge and pursuing them in some depth; or they can be structured around questions and issues determined in advance, based on theoretical principles, pre-conceived ideas, or prior (exploratory) investigation (Bennett, 1991; Reaves, 1992).

The main strength of the face-to-face interview is its ability to cover complex issues. The face-to-face interview allows the maximum degree of probing. Two types of probes are used. Clarifying probes (such as 'Can you explain what you mean by....?') help the interviewer to understand exactly what the respondent is saying. Exploratory probes ensure that the respondent gives as full an answer as possible (e.g. 'are there any reasons why...?') These probes should be conducted systematically. Hence, a semi-structured face-to-face interview, which is more systematic, will allow for a greater degree of probing as compared to an unstructured approach (Burgess, 1982; Schmitt and Klimoski, 1991).

Dillman (1987) observed that there are some major drawbacks over this approach. Firstly, the response to face-to-face interview has declined over the years owing to an increasing number of refusals, resistance and the difficulty in locating respondents. Call-backs are required to reach the occupants of sampled households.

Secondly, the problem of finding competent interviewers. Interviewers must be trained to solve most of their own problems. Interviewers sometimes take considerable liberty in interpreting questions to the respondents. Furthermore, specific words may unconsciously be emphasised and others under-emphasised. The monotony of repeating the same questions again and again may lead to involuntary omission of key words and phrases without the interviewer's awareness. Deliberate subversion is an even greater concern in interviewing. Most researchers who depend extensively on face-to-face interviews can recount horror stories of interviewers completing the interview forms in their hotel rooms rather than tracking down respondents. This problem can be

addressed by contacting those who have been said to respond to the survey for confirmation.

Interviewing is an arduous and highly skilled activity in which experience plays a very important role. Thus the securing, training and supervision of interviewers is demanding and costly (Dillman, 1987).

Thirdly, the problem of time limits. In some studies the time required for collecting data is crucial. Some event may occur in the midst of data collection. Another reason may be that sponsors of the research require their data in the shortest possible time. Time required for implementing face-to-face interviews varies greatly. The factors of sample size, geographic dispersion and effort required to recruit and train interviewers influence the time taken to carry out the interviews (Schmitt and Klimoski, 1991).

Despite of the drawbacks, the face-to-face interview technique is a very useful survey technique if the researcher is in a situation that demands its usage. On the other hand, other techniques like the telephone and mail survey can be applied if they are better suited.

5.3.2. Alternatives to the Face-To-Face Interview Technique

Reaves (1992) suggests that surveys conducted using telephone interviews rather than

the face-to-face interview are cheaper to conduct and it is easier to get a respondent to agree to talk on the telephone than to let a stranger into the house. In addition, there is less interviewer bias, because many characteristics of the respondent are hidden (for instance, age, race and appearance). The mail survey method offers certain advantages over the telephone and face-to-face methods. Respondents, who are not at home when interviewers call, either in person or by phone, usually pick up their mail. If they are away for an extended period of time, arrangements are usually made for forwarding their mail. Failing that, the mail will be there when the respondent returns. The mail questionnaire has a high probability of reaching the respondent where other methods fail.

The telephone survey has its advantages as well. Its main advantage is that call-backs can be made repeatedly until the respondent is located with very little cost. Calls to homes and offices alike, widely separated by distance, can be precisely timed to catch respondents who are there only a short period each day, with no thought to the geographical distance that separates them.

5.3.3. Comparing the Three Methods

The three methods, as shown in Table 5.3, are compared to look at their advantages and disadvantages so as to be able to pick up the most suitable method to meet the research objectives.

Table 5.3. Comparing Survey Methods

Areas for Comparison	Survey Approaches		
	Face-to-Face Interview	Telephone Interview	Mail Questionnaire
Ability to Make Judgements when refusal occurs	Highly able	Slightly able	Not able
Communications Issues	More versatile. Rely on respondent's senses and observe respondent's reactions to use as feedback to keep interview going smoothly.	Quality of information decrease with lengthy telephone interviews. Respondents tend to tire after 20 minutes. Respondents must concentrate on each successive word or phrase and remember it.	Respondent in complete control and can read at own speed. Disadvantage, interviewer not able to clarify misunderstood questions and questions need to be less open-ended. Even with structured questionnaires respondents responding to the questions might not be paying too much attention.
Willingness to Respond	Able to obtain response on open-ended questions.	Able to obtain response on open-ended questions.	Low response on open-ended questions unless respondents benefit from the outcome or the topics are interesting to respondents.
Questionnaire Construction	Construction can be loose as explanations can be made.	Some careful construction is required as quite difficult to explain ambiguities over the telephone.	Requires careful construction. Absence of interviewer feedback creates need for clear and unambiguous questions. A flaw in construction can invite rejection.
Response Contamination	Low	Contamination can be high. The respondents answering questions might not be the target respondent.	Possibility of contamination is highest. Questionnaire completed might not be by the target respondent.

(Falthsiek & Carroll, 1971; Burgess, 1982; Dillman, 1987; Schmitt & Klimoski, 1991)

5.3.4. Combining the Three Techniques

Thus, a particular survey can make use of one or two or even all methods to collect information. Each method has its strengths and weaknesses and each should be used to accomplish what it does best. To get the best out of surveys, it is good to consider two kinds of survey system, that is either the survey involves using more than one method to collect different information from the same individuals or using more than one method to collect the same information from different individuals. For example, the face-to-face interview technique can be used for approaching the non-respondents of the mail survey to get them to respond. The most persuasive reason for developing such a data collection system is that it provides an opportunity to use each survey method for the things it does best and replace it by another method in areas of known weaknesses.

5.4. SELECTION OF SURVEY TECHNIQUES

The selection of the most appropriate survey techniques for data collection in the research is very much dependent on the construction of the SERVQUAL instrument itself which has to measure service quality. Therefore, in meeting the research objectives of measuring service quality which involves the application of the SERVQUAL technique that make use of statements that are highly structured and not open ended, suggested that the quantitative approach should be applied.

At the same time, according to Reaves (1992), quantitative methods involve measuring quantities of things, usually numerical quantities. The quantitative approach to research does not deny or ignore personal experiences. It merely insists that these experiences be quantified, measured in some scale before they can be scientifically studied.

Also, in using the quantitative approach, in determining quality, it involves conformance to agreed and fully understood requirements (Crosby, 1979). Crosby (1979) believes that quality is not comparative, and there is no such thing as high quality, low quality or quality in terms of goodness, feel, excellence, luxury, etc. A product or service either conforms to requirements or it does not. In other words quality is an attribute (a characteristic which, by comparison to a standard or reference point, is judged to be correct or incorrect). The requirements are all the actions required to produce a product or deliver a service that meets the customer's expectations and that it is management's responsibility to ensure that adequate requirements are created and specified within the organisation.

Hence due to the way the SERVQUAL instrument has been constructed, the questionnaire technique is the most suitable technique to be used. The interview technique can be used as a supplementary technique to the questionnaire technique if the needs arise. These two techniques have been applied to the five areas under the research study.

5.5. THE SURVEY SUBJECT AREAS

In Chapter 1 it is shown that there are 24 Ministries that provide public services. The research study is narrowed down to one Ministry that is the Ministry of Public Works. The first study involves measuring the service quality gaps of services provided to the internal customers between the three branches previously under the Service and Establishment Division, Ministry of Public Works. In this environment, one branch can be the customer of another branch and that particular customer branch can in turn become a supplier to the previous supplier branch. The activities of these branches are all inter-related as originally they were functioning under one division that was dropped under the organisation restructuring exercise. The study is further extended to measure service quality of services provided by the three branches to the other divisions and branches under the Ministry of Public Works.

The main reason these three branches were selected was because they perform a very important support function over the running of the organisation's activities in meeting its organisational objectives. These branches provide direct services to the internal customers of other divisions and branches that receive services from them. Through these direct contacts, the internal customers are able to enjoy the benefits of personnel services provided by the branches.

In the third case, another functional area of concern which also has a very important role of supporting the organisational processes of providing public services to the general public, termed as the external customers, is the Computer Centre under the Public

Works Department, Ministry of Public Works. It is a known fact that computer centres which deals with matters related to the management of information that supports the organisation is considered a very important support sector in the organisation. Therefore, the SERVQUAL instrument is also applied to this sector in order to measure its service quality gap on services provided to the rest of the divisions and branches.

The instrument, in the fourth case, is further applied to measure the road services provided by the organisation. Out of the numerous services provided by this organisation, the study on the road services service quality is chosen for the mere reason that the road services forms the core service provided by this organisation. The name of the organisation, Public Works Department (PWD) under the Ministry of Public Works is synonymous with ROADS. Finally, in the fifth case, the instrument is also applied to measure the service quality gap of services provided by the organisation to the occupiers of the government residential quarters.

5.5.1. Survey Subject Area I:

Delivering Services Between Branches under the Service Division

The Service Branch, the Establishment Branch and the Promotion & Disciplinary Branch (SEPDB) were under the Service and Establishment Division, Ministry of Public Works. The SEPDB is responsible for the upkeep of a highly trained, dedicated and committed workforce that runs the organisation. In order to fulfil its objectives, its

activities involve from the beginning of the career cycle with the recruitment of employees and ends with their retirement.

The ***Service Branch*** is responsible for handling recruitment, confirmation of employees' job position, conducting induction courses for new employees, courses for job promotions, processing of applications for external courses, employee transfers, employee placements, management of the employee database and a varied other service activities. The Service Branch is required to notify the Promotion & Disciplinary branch and the Establishment Branch on the movements of the employees like transfers and retirements. The two branches can then carry out the necessary action, for example job promotion exercises replacing retired employees or employees who left the organisation.

The ***Establishment Branch*** is responsible for developing and implementing strategies for the human resource needs of the Ministry. The study of the human resource needs of the various divisions and branches is carried out through set programmes as well as on an ad-hoc basis. The Establishment Branch will conduct its study for each divisions and departments in the Ministry and recommend the right number of employees required for a particular division or branch for efficiency and effectiveness in carrying out their job. The ad-hoc study is done when there are additional requests from other divisions or branches and also when divisions and branches undergo reorganisations. Next, the findings of the study would be sent to the Service Branch and the Promotion & Disciplinary Branch who will act on the recommendations to carry out the promotion exercise, the recruitment exercise or even transfers if there is a need.

Apart from carrying out the ‘carrot’ activities, the *Promotion & Disciplinary Branch* is also responsible for the ‘stick’ activities. The branch also exercise disciplinary actions on employees who violate the Public Service General Order on Discipline of Public Employees. Disciplinary actions amounting to dismissal will be notified to the Service Branch for employee replacement. Another activity under the responsibility of this branch is managing the employees performance appraisal system. The performance appraisal reports from all the divisions and branches under the Ministry would be analysed and the results sent to the Salary Progression Board who will award the performance-related pay to the eligible employees.

5.5.2. Survey Subject Area II:

Delivering Services by SEPDB to Other Divisions and Branches

As indicated earlier, each and every employee of the Ministry of Public Works has to deal with the SEPDB. These could be personal (in relation to work) or departmental. An employee will be in contact with the SEPDB from their very first day of work right through to the end of their career with the Ministry of Public Works. The SEPDB is responsible for all service matters.

5.5.3. Survey Subject Area III:

Delivering Services by the Computer Centre to Other Divisions and Branches

The Computer Centre's main objective is to increase productivity of work of employees under the Ministry of Public Works through the application of the Information Technology. The strategies to meet this objective are that: firstly, the Information Technology strategies are bound to the organisational strategies; secondly, the Information Technology is developed efficiently and effectively; and thirdly, the users are transformed into competent users. The activities carried out to support the strategies are as follows:

1. Research into the needs of information and operations of the organisation and help into the research of individual divisions and branches over their specific needs.
2. Managing the organisation's information systems pertaining to data entry, data usage and data protection of the database.
3. Managing the organisation's local area network and the wide area network which includes managing the telecommunication's hardware and software.
4. End-user support.

We have mentioned earlier that the computer centre plays a very important role in supporting the information needs of the organisation. According to Peppard (1994), the information system is an internal service function. Its primary function is to assist other units of the organisation to function in a more effective and efficient manner.

Watson and Pitt (1994) added that information systems have an important service function. It needs to look beyond systems building as its major contribution to organisational productivity. Information systems departments can increase customer productivity in a number of ways: providing services dependably and accurately; giving service promptly and willingly; employing knowledgeable, approachable, and able service personnel; having the equipment appropriate for customers' needs; and providing individual attention. Too often, the information system specialist is anxious to implement a highly technical solution to a client's problem without having a thorough understanding of the problem. Usually this results in a dissatisfied customer. The information system specialist will usually have extensive knowledge concerning the technical aspects of a data storage and retrieval. However, the employees within a given functional unit are usually intimately acquainted with the operation of the area and the information needs of the area.

Only with co-operation between these two groups will it be possible to design an information system that best meets the needs.

5.5.4. Survey Subject Area IV:

Delivering Road Services

As mentioned earlier, one of the objectives of this research is to obtain measurements of the service quality gap of services. In this case, the research is carried out to obtain the measurements of the service quality gaps over services delivered to external customers. An area of high interest over the delivery of quality services is on the delivery of road services to road-users who are the external customers of the organisation. This area of service delivery has created so much interest among the disgruntled road-users. The Ministry of Public Works in recognition of this, requested an additional allocation of Malaysian Ringgit 740 Million (185 Million Pounds) under the Seventh Malaysia Plan for remedial and rehabilitation works and maintenance of non-toll federal roads particularly at 'danger zones'. Malaysian Ringgit 220 Million would be used to carry out remedial works on the 132 spots that had been identified as dangerous along the East-West Highway. Another Malaysian Ringgit 30 Million would be spent on upgrading and widening the Tapah-Cameron Highlands Road. The allocation will also cover maintenance and upgrading works of the Federal Route 1 (from Johor Baru to Jitra) and Federal Route 2 (from Port Klang to Kota Baru) (New Straits Times, Thursday, 11 January, 1996).

There is also a growing need for more and better roads due to the progressive economic growth over the last two decades which has led to a gradual increase in the level of motorization in Malaysia. Over this period, the number of vehicles on

the road has increased six-fold as more and more Malaysians rely on the road as the chief mode of transport. The total number of vehicles registered with the Road Transport Department in Malaysia increased at an average rate of 7.4 per cent per annum between 1977 and 1992 (Those figures do not represent the actual number of vehicles currently on the road in Malaysia. This is because information regarding vehicles taken off the road and re-registration of vehicles is incomplete) (See Table 5.2) (Malaysian Roads: General Information, 1994).

Another reason why road-users are concerned over quality of road services is probably due to the organisation's introduction of the Client's Charter on roads services in 1993 (Roads Branch Annual Report, 1994). Under the Roads Services Client's Charter, firstly, the organisation promises that all quality road projects will be designed and constructed on time. Secondly, the organisation promises the road-users that they are able to use the roads safely and comfortably due to:

1. The provision of adequate sign boards and warning equipment to warn road-users of roadwork being carried out;
2. Action taken not later than 3 days on complaints received on potholes that can endanger motorists using that stretch of road;
3. Action taken not later than 12 hours on complaints received on road obstructions like fallen trees;

4. Action taken not later than 24 hours on road obstructions caused by landslips that endangers the road-users;
5. Making announcements of road closures in emergency situations cause by disasters such as flood in the media within 24 hours from the time the report was received;
6. Making announcements of scheduled road closures in the media at least 3 days before closure.

Another area of interest over road services is on reducing road traffic accidents (See Table 5.4). The Client's Charter is in line with the objective of the government to reduce the number of road accidents rate by 30 per cent in the year 2000 (taking 1989 as the base year) and therefore the organisation is taking comprehensive and systematic steps in order to achieve the target. Two comprehensive approaches are:

- Accident Prevention (Proactive Measure) - To incorporate road safety auditing for all the existing and new roads in the country during design, construction and maintenance stages.
- Accident Reduction (Reactive Measure) - Improvement of hazardous locations along the existing roads, research and study programmes on hazardous locations, road surface, geometric standards and traffic control devices are currently being carried out (Malaysia Roads: General Information, 1994).

Traditionally, the Highway Planning Unit (HPU) conducts traffic surveys with the assistance of the state Public Works Departments, District Engineers and Local Authorities. The types of surveys conducted are (1) Bi-Annual Traffic Census Survey to obtain survey information of vehicle classification (6 types) by hour and direction; (2) Permanent Traffic Census to obtain survey information on vehicle classification (3 types) by hour and direction; and (3) Ad Hoc Traffic Survey to obtain survey information for a specific study (Malaysian Roads: General Information, 1994). The traffic data are recorded and analysed for the planning of new roads, maintenance of existing roads and the design of highways and traffic control devices which will be implemented by the Roads Branch, Public Works Department.

The Roads Branch is the largest branch in the Public Works Department under the Ministry of Public Works. The Roads Branch objectives are, to provide roads and bridges for the needs of national development; for supervision of construction and maintenance of roads and bridges in rural areas to provide means of communication to developing areas; and to ensure national roads and bridges are maintained, repaired and upgraded to a standard of safe usage. In order to achieve its objectives, the Roads Branch is divided into 8 units namely, the Administration Unit, Maintenance Unit, Project Management Unit, Road Design Unit, Bridge Unit, Contract and Quantity Surveying Unit, Development Unit and East-West Highway Unit (Roads Branch Annual Report, 1994).

Table 5.4. Motor Vehicle Registration and Road Accident Data 1977 - 1992

Year	Population	No. Of Registered Vehicles	Vehicles involved in Accidents
1977	10,716,642	1,621,271	86,688
1978	10,944,500	1,829,958	91,122
1979	11,188,630	1,989,391	94,788
1980	11,442,086	2,357,386	99,485
1981	14,128,354	2,901,182	107,552
1982	14,506,389	3,246,790	126,474
1983	14,886,759	3,594,943	139,006
1984	15,437,683	3,941,036	140,012
1985	15,866,592	4,243,142	142,653
1986	16,278,001	4,458,735	137,175
1987	16,527,973	4,595,434	131,609
1988	16,921,300	4,783,506	124,922
1989	17,376,800	5,071,786	127,279
1990	17,812,000	5,462,792	146,747
1991	18,178,100	5,887,176	162,823
1992	18,606,000	6,263,383	193,421

(Malaysian Roads: General Information, 1994)

5.5.5. Survey Subject Area V:

Providing Government Residential Quarters Services

This is another area where the organisation is the supplier of services to their external customers - the occupants of the government residential quarters. Every public servant is entitled to occupy a government residential quarters but since they are in limited numbers, the quarters are allocated on a 'first register, first occupy' basis. These

residential units are built and maintained by the Public Works Department, Ministry of Public Works.

In order to be able to measure service quality under the different areas, the original SERVQUAL instrument has to be modified (Parasuraman, Zeithaml and Berry, 1988).

5.6. MODIFYING THE SERVQUAL INSTRUMENT

The original SERVQUAL instrument is made up of two standard sets of statements. The SERVQUAL statements, in both the expectations (see Table 4.2, Chapter 4) and perceptions (see Table 4.3, Chapter 4) sections are grouped into the five dimensions as shown in Table 4.1 in Chapter 4. Hence the modification of the SERVQUAL questionnaire will be made on the 22 point statements for both sets of items on Expectations and Perceptions. In addition to the SERVQUAL instrument, the questionnaire is designed to capture other relevant data in connection with the SERVQUAL instrument such as the employment status of the respondents.

5.6.1. The Modified SERVQUAL Questionnaire for Measuring Service Quality Delivered between the Three Branches under the Former Service and Establishment Division, Ministry of Public Works

The questionnaire is divided into 5 parts. Part I requires the respondents to state their employment status, age and their provider of services. Part II is the adapted SERVQUAL questionnaire on expectations and Part IV is the modified SERVQUAL questionnaire on perceptions for measuring service quality delivered between the three branches. Part III requires the respondents to respond to five questions related to the service quality dimensions by giving marks which totals to 100 according to their perception of importance on the dimensions. Secondly, they are required to indicate the ranks in relation to the importance of the dimensions. Part V is included to gauge the perception of the respondents on the SERVQUAL instrument itself.

The wording ‘Companies’ in the questionnaire under Part II and Part IV has been changed to ‘Branches’. Statement 5, ‘When excellent ____ companies promise to do something by a certain time, they will do so’ is eliminated as it is duplicated by statement 8. Item 15 ‘Customers of excellent ____ companies will feel safe in their transactions’ is eliminated since it is not suitable for this study. The other changes made to the instrument are shown in Table 5.5. The changes made to the statements on Perceptions are identical to the Expectations statements. The modified instrument is shown in Appendix E1.

Table 5.5. Modified Expectation Statements (Questionnaire I)

Expectation Statement	Original Wordings	Modified Wordings
1	Excellent ___ companies will have modern-looking equipment	Excellent Branches will have pleasant-looking office environment
2	The physical facilities at excellent ___ companies will be visually appealing	The physical facilities at excellent Branches will be adequate
4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent ___ company	Materials associated with the service (such as pamphlets or statements) will be available in excellent Branches

5.6.2. The Modified SERVQUAL Questionnaire for Measuring Service Quality Delivered by the Service Branch, the Establishment Branch or the Promotion & Disciplinary Branch under the Former Service and Establishment Division, Ministry of Public Works to All employees of other Divisions and Branches under the Ministry of Public Works

This second questionnaire is identical to the first questionnaire. Like the first questionnaire, this questionnaire is divided into 5 parts. The changes to the statements for both Expectations and Perceptions are similar to changes in the first questionnaire. The modified instrument is shown in Appendix E2.

5.6.3. The Modified SERVQUAL Questionnaire for Measuring Service Quality Over Services Delivered by the Computer Centre, Public Works Department, Ministry of Public Works

The structure of this questionnaire is similar to the first and second questionnaires. The method of evaluating expectations and perceptions is consistent with that outlined in the original SERVQUAL instrument. Pitt, Watson and Kavan (1994) assessed the validity of SERVQUAL for measuring the service quality of information systems departments which functionally is equivalent to the Computer Centre and their research supports the use of SERVQUAL in the information systems domain.

In constructing the modified SERVQUAL questionnaire, the standard SERVQUAL questionnaire was administered with minor changes to suit the type of information required. In designing the expectations questionnaire, 'Excellent ____ Companies' is changed to 'Excellent Computer Centres'. The word 'employees' has been maintained. The word 'customer' has been substituted with the word 'computer user' so as to give a clearer picture who are the ones meant to be the customers of the Computer Centre.

Statement 5 is eliminated, as it is a duplication of statement 8. Statement 9 is also eliminated, as the item has no relevance here. For statement 14, the word 'behaviour' is replaced with 'competency'. Competency will be the more appropriate attitude here in instilling confidence on the computer users. Item 15

‘Customers of excellent ____ companies will feel safe in their transactions’ is eliminated due to its irrelevance in this study.

Other changes made on the SERVQUAL statements are shown in Table 5.6 below.

Under the section on Perceptions, the changes made are identical to that of the Expectations section. The modified instrument is shown in Appendix E3.

Table 5.6. Modified Expectation Statements (Questionnaire III)

Expectation Statement	Original Wordings	Modified Wordings
1	Excellent ____ companies will have modern-looking equipment	Excellent Computer Centres will have up-to-date computer equipment
2	The physical facilities at excellent ____ companies will be visually appealing	The computer facilities at excellent Computer Centres will be impressive looking
4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent ____ company	Materials associated with the service (such as pamphlets or statements explaining about computer hardware and software available, the services available, operating times and contact persons) will be available in excellent Computer Centres.

5.6.4. The Modified SERVQUAL Questionnaire for Measuring Service Quality of Roads Services Delivered by the Public Works Department, Ministry of Public Works

Structure wise, this questionnaire imitates the other three questionnaires. In designing the expectations questionnaire, ‘Excellent ____ Companies’ is changed to ‘Excellent Public Works Departments’. The word ‘employees’ has been

maintained. The word ‘customer’ has been substituted with the word ‘road user’ so as to give a clearer picture who are the ones meant to be the customers of the Public Works Department. Statement 5 has been eliminated since it is duplicated by statement 8. Other changes made are shown in Table 5.7 below. The modified SERVQUAL instrument is shown in Appendix E4.

Table 5.7. Modified Expectation Statements (Questionnaire IV)

Expectation Statement	Original Wordings	Modified Wordings
1	Excellent ___ companies will have modern-looking equipment	Excellent Public Works Departments will have well constructed and well maintained roads
2	The physical facilities at excellent ___ companies will be visually appealing	The physical facilities will be provided by excellent Public Works Departments
3	Employees at excellent ___ companies will be neat appearing	Excellent Public Works Departments will have environmentally pleasant roads
4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent ___ company	Materials associated with the service (such as pamphlets or statements on road conditions, whom to contact on road matters, etc.) will be available in an excellent Public Works Department
14	The behaviour of employees in excellent ___ companies will instil confidence in customers	The competency of employees in excellent Public Works Departments will instil confidence in the road users
15	Customers of excellent ___ companies will feel safe in their transactions	The road users of excellent Public Works Departments will feel safe in using the roads
16	Employees in excellent ___ companies will be consistently courteous with customers	Employees in excellent Public Works Departments will be consistently courteous when receiving reports and complaints from the road users

5.6.5. The Adapted SERVQUAL Questionnaire for Measuring Service Quality on Government Quarters Delivered by the Public Works Department

This fifth questionnaire maintains the questionnaire structure of the other four questionnaires. In the Expectations section, ‘Excellent ___ Companies’ is changed to ‘Excellent Public Works Departments’. The word ‘employees’ has been maintained and the word ‘customer’ has been substituted with the word ‘occupier’. Statement 5 has been eliminated since it is duplicated by statement 8. Other changes made are shown in Table 5.8 below and the modified instrument is shown in Appendix E4.

Table 5.8. Modified Expectation Statements (Questionnaire V)

Expectation Statement	Original Wordings	Modified Wordings
1	Excellent ___ companies will have modern-looking equipment	Excellent Public Works Departments will have well constructed and well maintained quarters
2	The physical facilities at excellent ___ companies will be visually appealing	The physical facilities (paintwork, plasterwork, etc.) will be provided by excellent Public Works Departments
4	Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent ___ company	Materials associated with the service (such as pamphlets or statements on repairs, maintenance, etc.) will be available in an excellent Public Works Department
7	Excellent ___ companies will perform the service right the first time	Excellent Public Works Departments will perform the service (repairs, etc.) right the first time
14	The behaviour of employees in excellent ___ companies will instil confidence in customers	The competency of employees in excellent Public Works Departments will instil confidence in the occupiers
19	Excellent ___ companies will have operating hours convenient to all their customers	Excellent Public Works Departments will have operating hours (repairs, etc.) convenient to all its occupiers

The next operation that has to be carried out, before the actual survey, is the pilot study on the questionnaires.

5.7. THE PILOT STUDY

This pilot study was performed to identify the questionnaire shortcomings. Under this pilot study, respondents were tested on whether they understand how to answer the questionnaires and whether they know what is required of them when they fill up the questionnaire. In the first survey subject area which is the study on the service quality gap as perceived by the internal customers of services delivered between the three branches, the first package of the pilot study was conducted by distributing the questionnaire to a group of 10 respondents. The respondents were selected at random from the three branches.

The survey was conducted during office hours and the questionnaire was delivered by hand (desk-dropped) to the selected respondents (package 1). The respondents were requested to fill up the questionnaire for collection at the end of the day. At collection time, the respondents were asked to comment on the questionnaire. All the respondents sought an explanation for the term 'customer'. Apart from that, 8 out of 10 respondents wanted the researcher to explain to them what are 'physical facilities'. The respondents were told that 'physical facilities' include office equipment, waiting room, discussion room, reception counter, etc. In response to the researcher's explanation, the respondents expressed their views that appearance

is not important. What is important is whether the facilities are available or adequate. Hence, acting on the comments received from the respondents, Statement 2 has been changed to ‘The physical facilities (office equipment, waiting room, discussion room, reception counter, etc.) at excellent branches should be available or adequate’.

Another statement that received adverse comments from the respondents was Statement 13 ‘The behaviour of employees in excellent branches will instil confidence in other branches dealing with them’. They said that behaviour has got nothing to do with instilling confidence in dealing with the branch. They suggested that ability of the employee is important. Therefore the revised statement has been spelt out as follows ‘The work competency of employees in excellent branches will instil confidence in other branches dealing with them’.

Other than these two comments, the respondents said that they were able to understand the questionnaire and know that they have to respond on perceptions of services delivered to them and on their expectations on the services. The respondents were requested to fill up the questionnaire for the second time. The revised questionnaire was distributed the next day to another set of 10 respondents. Five of the respondents were requested to return their questionnaires at the end of the day (package 2) while the rest were allowed to keep the questionnaire for a week (package 3). Like the first package for the pilot study, the questionnaires were hand-delivered and hand-collected. Both the respondents in package 2 and package 3 were asked to comment on the questionnaire. They gave a favourable comment

indicating that they understood what is required of them in filling up the questionnaire. The respondents were also asked to comment on the time taken for them to complete the questionnaire. Two respondents in the second package said that it took them 15 minutes to fill up the forms. The rest took between 20 to 30 minutes. In the third package, 3 respondents said that they took 20 minutes to fill in the questionnaire while the other 2 said that they took 30 minutes. On the average the time taken for the second and third package was 25 minutes.

The questionnaire for the second survey subject area (Package 4) was distributed concurrently with Package I to 30 respondents who were randomly selected. The questionnaires were delivered by hand and later in the day collected by hand. In comparison to Package I, identical comments were received from the respondents of Package IV. They too have problems in interpreting 'customer' and 'physical facilities'. In addition, these respondents wanted Statement 8 to include the word 'requested'. Hence, the wordings of Statement 8 were changed to '....records of requested services systematically and error free'.

Another set of the revised questionnaire was sent out to 60 respondents. They were selected at random (Package 5). The questionnaires were desk-dropped with 40 of the respondents requested to return the questionnaires through the internal mail. The rest of the questionnaires were collected by hand from the respondents. The time period given for the respondents to respond was one week. After that time, 30 responses were received through the internal mail. As for the 20 hand-distributed and hand-collected questionnaires, every respondent responded. There were no

adverse comments on the questionnaires. These 20 respondents on the average took 20 minutes to fill up the questionnaires.

During this same one-week period, 20 respondents were selected for the telephone interview (Package 6) and were contacted during office hours. No problem was encountered in establishing contact with the respondents and the response rate was 100 per cent. The telephone survey took more than 20 minutes of each of the respondent's time. The respondents commented that they find it very difficult to respond to Part III, the part on giving weights after listening to the questions related to the service quality dimensions. The interviewer had to repeat the dimensional questions over and over again before the respondents can actually give their weights in order to reach a total of 100. The situation was equally bad when they were required to give rankings for the different dimensions. Another problem faced by the respondents is that they are not able to respond immediately after a statement is read out. Time and time again, they require the interviewer to repeat the agreement-disagreement scale, telling them to choose 1 if they strongly disagree and to choose 7 if they strongly agree.

For the third survey subject area on services provided by the Computer Centre, using the revised questionnaire, 20 questionnaire were hand delivered (Package 7). 10 respondents were required to return their questionnaire through the internal mail and the rest were told that the questionnaires will be collected in a week's time. 8 out of the 10 questionnaires were returned by the internal mail. The response rate for the hand-collected questionnaire was 100 per cent. The respondents were asked

to comment on the questionnaire. Positive responses were received indicating that they understood how to fill-up the questionnaire.

The fourth survey subject area is on the roads services. 20 respondents were selected (Package 8). The questionnaires were hand-delivered and the respondents were given a week to respond.

The respondents asked for an explanation what is included under 'physical facilities' in connection with road services. On referring to the Roads Services Client's Charter, 'physical facilities can be referred to road facilities such as road signs, warning signs, lay-bys, rest areas, etc. Hence, statement 2 should read as, 'The physical facilities (road signs, warning signs, crash barriers, lay-bys, rest areas, etc.) of excellent Public Works Departments will be available'. Another problem statement encountered by the respondents is on Statement 6. An interpretation of 'problem' related to road services is required. Again, the Client's Charter was referred to. The researcher then interpreted that 'problems' over road services are blocked roads or potholes causing inconveniences to the road users. Therefore Statement 6 should be changed to, 'When the road users have a problem (blocked roads, potholes, etc.), excellent Public Works Departments will show a sincere interest in solving it'.

Other comments received were on Statements Statement 7, 10, 11, 13 and 15. The statements were changed accordingly. Statement 7 is replaced with 'Excellent Public Works Departments will perform the service (constructing roads, repairing

roads, filling-in potholes, etc.) right the first time’. Statement 10 is replaced with ‘Employees in excellent Public Works Departments will tell the road users exactly when services (start of road construction, end of road construction, etc.) will be performed’. Statement 11 is replaced with ‘Employees in excellent Public Works Departments will give prompt service (removing boulders, removing fallen trees, etc.) to the road users’. Statement 13 is replaced with ‘Employees in excellent Public Works Department will respond to the road users’ requests (road repairs, etc.). Statement 15 is replaced with ‘The road users of excellent Public Works Departments will feel safe in using the roads (constructed with safety features such as no dangerous bends, no blind spots, adequate warning signs, etc.)’.

For the fifth pilot study, 20 respondents were selected at random (Package 9). The questionnaires were hand delivered and after one week, hand-collected. The response rate was 80 per cent with 4 non-respondents. Another set of 20 questionnaires was pushed into the mailboxes of the selected respondents (Package 10). A self-addressed and stamped envelope was attached to each of the questionnaire. Sixteen respondents responded through the ordinary mail giving a response rate of 80 per cent. The response rate was equal to that of Package 9.

After making observations from the pilot study that involves the application of the modified SERVQUAL instrument, the instrument has been fine-tuned to meet the research objectives. This better-modified instrument was then applied to the various subject areas on the selected respondents. A number of sampling techniques has been applied to select these respondents.

5.8. SAMPLING

A sample is the smaller group of examples chosen from the population that is actually measured. Sampling techniques are procedures for deciding which examples of a population will be in the sample (Owen and Jones, 1990; Reaves, 1992). According to Dillman (1987), “These statistical techniques are used in large-scale survey research for the sake of economy”.

5.8.1. The Selection of Sampling Techniques

The selection of the sampling techniques depends on the particular subject matter of the survey subject areas of the research.

5.8.1.1. Employee Survey on the Three Branches Delivering Inter-Branch Services

For this survey no sampling was made as employees from the whole population of the three branches was selected for the survey. Easterby-Smith, Thorpe and Lowe (1991) suggest that when the population is small (perhaps less than 500) it is customary to send the questionnaire to all members. This 100 per cent sample is known as a ‘census’. The questionnaires were distributed to 69 employees by hand. The respondents were requested to return the questionnaires by internal mail. The questionnaires were given serial numbers that can be used to detect the non-respondent.

5.8.1.2. Employee Survey on the Three Branches Delivering Services to Other Divisions and Branches

The samples for the survey were collected using the simple random sampling method. The random sampling approach can be applied as the divisions and branches were able to provide the list of names of their employees. The way the samples are taken is on the basis of the number of employees in the division/branch. The higher the number in a division/branch, the larger is the sample size. Following that, the samples are then chosen using random numbers over the population of each area.

This approach is used to get the right feedback as different work teams service different areas. If there is too much concentration of samples over a particular unit, the study will be biased in the sense that the results from the larger sampled area will dominate the overall survey results (Owen and Jones, 1990). To reflect the overall population, a sample size of 450 was considered adequate. This sample size represents 10 per cent of the total number of employees employed at headquarters. The questionnaires were delivered through the internal mail. Respondents were requested to return their questionnaires within two weeks through the internal mail.

5.8.1.3. Employee Survey on the Computer Centre Delivering Services to Other Divisions and Branches

A different approach of obtaining respondents was used here. In this situation, only the management knows who are the computer users of their divisions/branches. Hence the management were asked to help in distributing the questionnaires to the computer users. Fifteen divisions and branches were selected and a fixed number of 10 questionnaires in each division were distributed by hand to the management. The management was requested to inform the respondents to respond within 2 weeks by returning the questionnaires to the management for the collection of the researcher. The management was asked to use their discretion in selecting the computer users at random if they have more than 10 users. The overall number of work-related computer users throughout the 15 divisions and branches is about 600 thus 150 samples which represents 25 per cent of the population would be an adequate figure to give a reflective view of the population.

5.8.1.4. Customer Survey on Road Services

The samples for the survey on the road users using public roads were collected using the simple random sampling method. Firstly, we picked at random 5 government departments from the directory on government organisations in Kuala Lumpur and 5 private companies from the directory on private institutions also in Kuala Lumpur. Secondly, we selected a random sample of road users within those organisations. Again in this situation, the co-operation of the management of the organisations was called for.

The management was requested to distribute the questionnaire to their employees randomly. All the questionnaires were accompanied with a self-addressed and stamped envelope. Altogether 500 questionnaires were distributed by hand to the various selected organisations.

5.8.1.5. Customer Survey on Government Residential Quarters Services

The survey is carried out on the occupants of government residential quarters who are public employees themselves. The selection of respondents is by the simple random sampling approach. This approach is possible as there is a complete list of the population of government residential quarters from which the samples can be selected. The way the samples are taken is on the basis of the number of occupant within an area. The higher the number, the larger the sample size. Altogether, 240 samples were selected from a population of 1,200 quarters. The questionnaires each with a self-addressed and stamped envelope were pushed into the mailboxes of the occupants. The occupants were requested to respond within two weeks.

5.9. STATISTICAL PACKAGE

The quantitative analysis will be carried out using a computer package. The package that is chosen for the statistical analysis is Microsoft Excel 5.0. Spreadsheets have expanded in power and ease-of-use. The Microsoft Basic Excel

comes with 81 statistical functions and 59 mathematical functions. The statistical functions that Basic Excel provides include descriptive statistics such as means, standard deviations and rank statistics. In addition to that, the Analysis Toolpak is an add-in that is bundled with Excel which is able to perform statistical functions such as analysis of variance, correlation and covariance matrices, multiple linear regression, random sampling, t-tests, Z-test and etc. (Berk and Carey, 1995). The availability of the required statistical functions of Excel, shows that Excel can be used for analysing the data obtained from the surveys.

5.10. CONCLUSION

In this chapter, we discussed on the selection of the most appropriate research methods. It was concluded from the discussion that the survey approach should be adopted. The techniques to be used for data gathering under this approach are the questionnaire and interview technique. In order to discover some of the shortfalls in the application of the SERVQUAL instrument through the questionnaire and interview technique, a pilot study was conducted. After the pilot study, the instrument was then modified to suit the area under study and sampling techniques were identified in order to apply the instrument to the samples within the particular study area. The surveys were then carried out from the 15 December 1996 until 14 January 1996, with January the 15th. January as the cut off point for receiving the survey responses. The outcomes of the survey are discussed in detail in Chapter 6.

CHAPTER 6

DATA ANALYSIS FOR THE APPLICATION OF THE SERVQUAL INSTRUMENT

The survey method was applied to the 5 survey subject areas. In these five surveys, the first survey was on internal customers from the same department. The second and third surveys were on external customers on departments within the same organisation. The fourth and fifth surveys were extended to include external customers of the organisation. The application of the surveys plus the tabulation and analysis of data is discussed at great length in this chapter.

6.1. DATA ANALYSIS ON SURVEY SUBJECT AREA I -

Employee Survey on the Three Branches Delivering Inter-Branch Services

In the survey, out of the 69 questionnaires distributed, 62 were returned. The response rate of the survey was 90 per cent (see Appendix F1). However, the mail survey approach should not be given the full credit for producing a high response rate as the mail survey was assisted by the interview approach which was applied as a follow up to the mail survey. Under the former approach, the number of responses obtained was 42, which was only 60 per cent. Using the serial numbers imprinted on the questionnaires that were tied up with the name-list of the

respondents, the non-respondents were tracked down and the interview approach was applied. This approach was able to produce an additional response of 20, which brought the response rate up to 90 per cent. The rest of the non-respondents were either unwilling to participate or could not be located after several attempts made to obtain their responses. The high response rate obtained from the survey was due to the use of the effective follow-up system.

In looking at the entries made by the respondents for the service quality expectations on the 7 point Likert scale of 1 to 7 for the 20 statements, the scores obtained for most of the 20 items are concentrated on the 6th. and 7th. scale (see Table 6.1).

Table 6.1. Likert Scale Entries for Expectations

E	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	29	33	19	30	49	30	50	53	45	60	40	29	33	53	50	13	14	14	33	38
6	20	19	23	26	13	32	12	9	16	2	15	26	24	9	11	31	24	25	24	21
5	13	10	20	6					1		7	7	5		1	18	20	16	5	1
4																	4	7		2

These scores were further analysed according to items but grouped into their respective dimensional groupings to produce the means and standard deviations of each of the five dimensions. Statement 1 to Statement 4 represent Tangibles, Statements 5 to Statements 8 represent Reliability, Statement 9 to Statement 12 represent Responsiveness, Statement 13 to Statement 15 on Assurance and finally,

Statement 16 to Statement 20 represent Empathy. The means and standard deviations of the dimensions are shown in Table 6.2. The respondents have a very high expectation of a reliable service. This means that the service users were very dependent on reliable services provided to them by the service providers. The level of service reliability is very important because further actions would be taken following the services rendered to them by the service providers. For example, if the Service Branch gives the wrong number of vacant promotional posts, the promotion exercise carried out based on the information obtained from the service supplier would result in more people being promoted compared to the availability of vacant posts. Apart from that, the standard deviation too is the lowest compared to the rest of the dimensions meaning that the opinion on expectations from the respondents on reliability is more or less the same and consistent.

We can say that 95 per cent of the respondents gave their score within the range of 6.56 to 7, which shows a very low spread of scores. The customers want good services to be provided so that they can carry out their work well and provide quality services to their customers. In this case, generally everyone has high expectations over reliability.

Assurance is highly expected by the respondents and the standard again indicates that respondents were very consistent in giving their scores for assurance, which means that there is not much variability. The analysis on responsiveness produced about the same results as assurance. Here, the service receivers are very concerned about the source they obtain the services from and at the same time, the services

received have to be prompt so that they will be able to provide services to other service users promptly as well. Significantly different results were obtained from analysing tangibles and empathy. In comparison to reliability, responsiveness, assurance and empathy, the expectations on tangibles are much lower at 6.25 but spread is low at a standard deviation of 0.19.

These figures indicate that respondents do not expect much after the renovations of the office space have been carried out and new equipment have been installed. The low spread shows that they have about the same opinion on tangibles. These results are in contrast to empathy. The expectations on empathy is high but the standard deviation is also high. This indicates that respondents have very different views of expectation on empathy. The deduction that can be made here is that there are those that have very high expectations on empathy as they have been with the department long and therefore they know each other very well. In this case, it is obvious that everyone will expect a very high personalised service from people whom they know very well. On the other extreme, there are those who do not expect a high personalised service. It can be due to them not having a close work relationship with the service suppliers.

The second part of the analysis looked at the entries made by the respondents on perceptions. The table shows a varied range of entries (see Table 6.3).

Table 6.2. Means and Standard Deviations for the Dimensions on Expectations

DIMENSION	MEAN	STD. DEVIATION
Tangibles	6.25	0.19
Reliability	6.73	0.17
Responsiveness	6.64	0.26
Assurance	6.7	0.22
Empathy	6.6	0.38

Table 6.3. Likert Scale Entries for Perceptions

P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	15	7	18		2					1	1		6	3	4		10	5		3
6	27	22	23	13	1	11	7	10	4	14	12	14	15	20	10	26	25	18	14	27
5	20	33	19	31	24	32	38	35	28	33	28	34	24	23	29	33	27	30	27	29
4			2	16	30	19	11	16	27	13	17	13	17	13	14	2		9	19	3
3				2	4		6	1	3	1	4	1		3	5	1			2	
2					1															

In looking at the mean scores of the dimensions in Table 6.4, the tangibles aspect of the service delivered is perceived to be high by the respondents which is in contrast to reliability. The standard deviation for tangibles indicates that the entries under the statements for it have a much higher spread compared to the other dimensions, meaning that opinions on perception on tangibles differs quite a great deal among the respondents. The analysis shows that 95 per cent of the scores for tangibles lie between 4.6 and 6.56.

The reason for this could be that some respondents appreciate the renovations that has been carried out on the office space where at the same time, new office equipment and office furniture were obtained. Therefore perception on tangibles is high. On the other hand, there are those who see that the works carried out and the equipment and furniture supplied are still inadequate. A much better renovation work should have been carried out and better equipment should have been supplied.

The perception on empathy is reasonably high with the standard deviation showing that expectancies on empathy differ quite substantially. Again like tangibles, there are some respondents who say that they are getting excellent personal services. This is due to the fact that since all the employees come from the same division, there is a close work relationship between the employees and therefore they provide highly personalised services to each other. Even so on the other hand, there are those who say that they are not getting enough personalised services.

The third highest mean score for perception is on assurance which is reasonably high and in addition to that, the standard deviation shows that there is little variation of opinion on perception over assurance. The results indicate that there is a trust between the consumers and the suppliers. The suppliers are confident of the work competency of the service providers. At the same time, the standard deviation shows that the consumers of the services are of the same opinion on the level of services delivered to them. Reliability and responsiveness have mean scores that are also reasonably high showing that personal contacts between suppliers and consumers have an impact on dependability and the promptness of services

delivered. The results showing the positive attitude of the employees is further supported by the low data spread indicating that opinions given on this matter do not vary much.

Table 6.4. Means and Standard Deviations for the Dimensions on Perceptions

DIMENSION	MEAN	STD. DEVIATION
Tangibles	5.58	0.49
Reliability	4.73	0.21
Responsiveness	4.84	0.22
Assurance	5.06	0.14
Empathy	5.35	0.32

The third stage of the analysis involved looking at the gap scores. For each of the 62 responses, the entry for each of the perception statements, from P1 to P20 was deducted from each of the entry of the expectation statements from E1 to E20 to give a gap score of S1 to S20. The gap scores obtained is shown in Table 6.5.

Table 6.5. The Gap Scores

s	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2	6	1	9														6	5		1
1	8	4	7								3	4	3	1		7	10	9	3	1
0	20	27	30	16	9	14	8	8	8	8	15	15	15	12	12	32	30	24	13	22
-1	29	19	17	23	5	18	14	12	12	16	11	17	24	21	16	18	16	15	20	25
-2	6	18	6	21	26	29	33	36	26	31	24	27	22	20	25	12	6	11	18	17
-3				8	26	8	8	13	21	13	14	6	5	12	13			4	14	3
-4				1	3		6		2	1	2			3	3				1	

In looking at Table 6.5, it is observed that there are scores above the zero scale which means that there are some positive scores, indicating that some respondents perceived service quality delivered over certain areas is very much higher than what they expected out of the service. The gap scores show that there are some areas of the services provided that are perceived to be better than what is expected of them. For example, for empathy, some respondents might expect a low personalised service but what they perceived were very much better than what they expected.

The service quality gaps of the 5 dimensions obtained were then compared to each other and ranked. The ranking of the service quality gaps from the widest to the narrowest is shown in Table 6.6. These service quality gaps can be used as indicators to show the areas experiencing shortfalls in the delivery of quality of services provided by the employees of the three branches between themselves.

Table 6.6. The Service Quality Gap Scores for the Five Dimensions

DIMENSION	GAP SCORE
Reliability	-2.6
Assurance	-1.6
Responsiveness	-1.3
Tangibles	-0.7
Empathy	-0.7
Average Gap Score	-1.38

The analysis on tangibles shows that the gap score is low. It indicates that the tangible aspect of service quality does not affect the overall delivery of quality services. The low gap is justified due to the recent major office renovation carried out in the branches. This survey was carried out just after two months of office renovation. The other dimension that shows a low gap is on the empathy dimension. This survey is carried out on internal customers of the organisation where the employees know one another well. Therefore, everyone tends to give services to each other more on a personal basis. But, even though there is a personal touch in delivering services, it does not mean the services are good. It is identified that the dimension for reliability suffers from a high service quality gap of -2.6. The next highest gap is for assurance, at -1.6 followed by responsiveness at -1.3.

The question is, is it worthwhile to undertake remedial actions in order to close all the gaps or just some of the gaps? Hence, before action is taken to mobilise the normally limited resources available to close the gaps, it is advisable to determine which are the gaps considered by the customers to be of core importance in delivering quality services to them. This indicates the significance of having weighted gap score that is achievable by analysing the weights given by the respondents on the five dimensions. Weights were obtained by requesting the respondents to give weights to the five dimensions in accordance to how they feel about the importance of a particular dimension regarding the quality of services provided to them. The weights must total 100. As an example, if they think reliability is very important, 50 points might be given to it and if empathy is seen to be of least important, 5 points might be given to it. At the end of the calculation, they must all add up to 100 points. The decision-maker can then prioritise action over the dimensions that are of high concern. The weighted service quality gap dimensions are shown in descending order according to the size of the service quality gap score in Table 6.7.

Table 6.7. The Weighted Service Quality Gap Scores of the Five Dimensions

DIMENSION	GAP SCORE
Reliability	-38.7
Assurance	-32.9
Responsiveness	-29.7
Tangibles	-13.2
Empathy	-13.0

The SERVQUAL questionnaire requires respondents to indicate which of the five dimensions is considered as the most important, the second most important and the least important. This entry can be used to check on the weights given by the respondents in relation to their importance on the service quality dimensions, to ensure that the amount of weights given ties in with the selection of importance on the dimensions. The rankings given by the respondents are shown in Table 6.8.

These rankings are able to show that customers are very concerned about Reliability during their transactions of services. They are not too bothered about Empathy and Tangibles. Empathy is given a low priority as it is something which the customers feel are already inherent in the services delivered by their own internal suppliers whom they have close personal relationships by virtue of being work colleagues. The Tangibles aspect is considered important but not too important when it is being compared to the other more important areas for delivering quality services.

Table 6.8. Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	SECOND MOST IMPORTANT	LEAST IMPORTANT
Tangibles	7	7	23
Reliability	23	25	0
Responsiveness	17	16	1
Assurance	8	11	1
Empathy	7	3	37

Since we have this information on the rankings, these rankings information should be exploited to confirm the respondents' choice of the most important dimension affecting service quality. Further analysis on the rankings can be made by giving weights to the categories for 'most important' and 'second most important' dimensions. This is shown in Table 6.9.

The figures in the fifth column on total is able to confirm that reliability with the highest score of 71 is the most important dimension that has to be given the most attention when dealing with service quality. Responsiveness comes second with 50 and assurance comes third with 27.

Table 6.9. Weighted Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	MOST IMPORTANT (1) X 2	SECOND MOST IMPORTANT (2)	TOTAL (1)+(2)
Tangibles	7	14	7	21
Reliability	23	46	25	71
Responsiveness	17	34	16	50
Assurance	8	16	11	27
Empathy	7	14	3	17

At the same time, from the scores obtained from the application of the instrument, a reliability test to calculate its reliability coefficient (alpha), to see whether this instrument can be a reliable instrument for the research study was carried out. Cronbach (1951) describes this as 'demonstrating whether the test designer was

correct in expecting a certain collection of items to yield interpretable statements about individual differences'. Therefore the cohesiveness of the dimensions needed to be assessed and this was done by measuring the ratio of the variance of the sub-test scores to item scores. This indicates what proportion of the variance is due to common factors among the sub-tests (Saleh and Ryan, 1991). Therefore, the reliability test of the SERVQUAL instrument was carried out using the Cronbach alpha (Cronbach, 1951) to confirm the reliability of the five service quality attributes on Survey Subject Area I which is on the services delivered internally between the three branches. The results are shown below.

Service Quality Dimensions (Expectations - Perceptions)

Service Quality Dimensions	Alpha
Tangibles	0.60
Reliability	0.89
Responsiveness	0.71
Assurance	0.76
Empathy	0.47
	0.69

The reliability alpha coefficients (Cronbach, 1951) calculated (see Appendix F6) for SERVQUAL shown above for the gap scores, ranges from 0.47 to 0.89. Within the individual dimensions, high alphas are obtained for Reliability, Responsiveness and Assurance. These Cronbach-Alpha coefficients exceed the rule-of-thumb value of

0.70 proposed by Nunally (1978) for basic research. The Tangibles and Empathy dimensions and slightly weaker. This may be an indication that the adaptation of the original SERVQUAL instrument does not yet capture all the relevant service quality dimensions in the related public service. Apart from the two low figures, the alphas are generally high and therefore are well in line with those of the original SERVQUAL instrument. These findings show that the instrument can be reliably applied for this research study.

6.2. DATA ANALYSIS ON SURVEY SUBJECT AREA II -

Employee Survey on the Services Delivered by

The Three Branches to other Divisions and Branches

In the second survey, at the initial stage, the questionnaires were distributed by internal mail. Out of the 410 questionnaires distributed only 150 questionnaires were returned. The response rate of the survey was only 36 per cent. The mail survey approach had to be followed up by the interview approach in order to be able to secure a much higher response rate. Identical to the tactics used in the first survey in tracking down the non-respondents, the serial numbers imprinted on the questionnaires, which were tied up with the name-list of the respondents, were used. But a non-response rate of 64 per cent which represents 260 non-responses seems too high to initiate the interview approach immediately. Therefore, prior to the interview, all the non-respondents were reminded through telephone calls made to them during office hours to return the questionnaires. Through this initiative,

additional responses of 55 were obtained which then totalled up to 205 (see Appendix F2).

The next step that was taken following the not too encouraging result was to interview the respondents. One hundred respondents were selected for the interview but only 87 responded. The interview was very structured as it was based on the structure of the questionnaire. The statements in the questionnaires were read to the respondents with the respondents giving their responses. Therefore the outcomes from this interview are not different to the outcomes from the mail survey. The rest of the non-respondents were either unwilling or could not be located after several efforts have been made to obtain their responses. The overall number of responses received was 292, which are 71 per cent. The first part of the analysis looked at the entries made by the respondents with Table 6.10 showing the frequency of the entries made over the 7 point Likert scale.

Looking further into the analysis on the expectation scores of service quality as shown in Table 6.11, the results show a completely different response to that of Area I. The Reliability dimension is shown to have the highest mean score of 6.5 and a standard deviation of 0.2 which means that the spread of the scores is small with 95 per cent of the scores lying between mean scores of 6.1 and 6.9, inclusive. These results show the consistency of opinion on the level of expectation expected from the services provided by the employees from the former Service Division. Empathy had the lowest score of 5.9 but with the largest standard deviation of 0.6. It indicates that some respondents do not expect very much from the empathy side

of the service in comparison with the others. In other words they have that pre-conceived idea that they should not expect too much from a public service especially in obtaining personalised services.

Table 6.10. Likert Scale Entries for Expectations

E	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	149	174	145	138	194	132	210	198	181	223	235	52	228	202	94	99	34	43	74	74
6	85	88	97	83	73	100	70	87	96	49	38	69	56	67	73	80	88	87	96	94
5	37	29	36	18	24	49	12	6	15	19	19	19	8	3	25	51	20	47	5	23
4	20	1	14	2	1	7		1		1		48				29	40	40	7	
3						4						1				4		20		
2	1											2				2	2	1		
1						1										10	8	25		

The second part of the analysis looked at the entries made by the respondents on perceptions (see Table 6.12).

Table 6.11. Means and Standard Deviations for the Dimensions on Expectations

DIMENSION	MEAN	STD. DEVIATION
Tangibles	6.4	0.2
Reliability	6.5	0.2
Responsiveness	6.5	0.3
Assurance	6.7	0.1
Empathy	5.9	0.6

Table 6.12. Likert Scale Entries for Perceptions

P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	27	43	50	6	3	0	8	9	0	1	0	1	4	5	2	0	4	0	9	11
6	83	82	130	54	45	36	14	22	18	31	49	44	47	35	48	49	47	30	83	87
5	103	70	70	86	72	92	91	88	96	77	82	96	97	108	104	101	135	81	106	110
4	57	26	42	93	124	99	83	97	107	102	105	119	66	92	87	93	88	128	85	59
3	22	20	0	40	39	63	88	56	49	61	33	31	68	28	47	47	18	39	8	21
2				9	8	1	7	18	9	20	23	1	10	24	4	2	0	12	1	2
1				4	1	1	1	2	13									2		2

Table 6.13 shows the range of customers' views. The third stage of the analysis involved looking at the gap scores. The gap scores obtained is shown in Table 6.14. Those above the zero scale indicate that expectations are much higher than perception. These positive gap results could be used to prove that people do not all the time rate at the maximum point as stated under the criticisms made against SERVQUAL (refer to Critique on SERVQUAL, Chapter 4).

Table 6.13. Means and Standard Deviations for the Dimensions on Perceptions

DIMENSION	MEAN	STD. DEVIATION
Tangibles	5.2	0.5
Reliability	4.3	0.1
Responsiveness	4.3	0.2
Assurance	4.4	0.1
Empathy	4.7	0.3

The service quality gaps of the 5 dimensions obtained were then compared to each other and ranked. The ranking of the service quality gaps from the widest to the narrowest is shown in Table 6.15. These service quality gaps can be used as indicators to show the areas experiencing shortfalls in the delivery of quality of services provided by the employees of the three branches to the other employees who are their customers.

Table 6.14. The Gap Scores

s	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
4																	1	11		
3																11	9	12		
2	5	3	3									26				2	2	10	1	
1	20	4	42	7	7	11	1			2	4	13		1		5	42	18	8	3
0	174	190	179	115	110	123	112	118	104	109	114	130	112	109	113	170	125	159	132	143
-1	88	113	128	75	72	91	20	58	49	42	51	46	64	67	92	84	85	78	114	123
-2	75	66	54	87	99	60	122	90	123	110	99	102	116	110	101	69	83	76	91	82
-3	43	16	3	98	71	110	90	64	77	74	83	78	42	65	57	66	54	42	61	28
-4	3	17		14	41	14	60	63	40	49	31	13	64	29	46		8	1	1	27
-5				12	9		3	16	15	23	27	1	11	28		1		1	1	3
-6	1	1	1		1		1													

Table 6.15. The Service Quality Gap Scores for the Five Dimensions

DIMENSION	GAP SCORE
Reliability	-2.4435
Assurance	-2.4429
Responsiveness	-2.4118
Empathy	-1.3562
Tangibles	-1.3408
Average Gap Score	-1.99904

The service quality gaps show that customers' expectations were not met at all in any one of the dimensions especially under Reliability. The results indicate that the dimensions with the most significant gaps are reliability, followed by assurance and then responsiveness. The high expectations and low perceptions of these dimensions show that services over these areas have not been able to meet the needs of the customers. Again, like in the previous survey subject area, it is the question of which of the service quality gap should be closed. This is shown in Table 6.16.

Table 6.16. The Weighted Service Quality Gap Scores of the Five Dimensions

DIMENSION	GAP SCORE
Assurance	-60
Reliability	-58.7
Responsiveness	-56.5
Empathy	-21.2
Tangibles	-17.1
Average Weighted Gap Score	-213.5

A check over the weights given by the respondents in relation to their importance on the service quality dimensions is made possible by requesting the respondents to attach rankings to the dimensions. The rankings given by the respondents are shown in Table 6.17.

Table 6.17. Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	SECOND MOST IMPORTANT	LEAST IMPORTANT
Tangibles	6	5	172
Reliability	130	53	9
Responsiveness	72	125	3
Assurance	68	86	19
Empathy	15	22	88

The 130 respondents chose Reliability as the most important dimension in delivering quality services. Under the category of Second Most Important, Responsiveness obtained the highest score of 125. These rankings are able to show that customers are very concerned about Reliability during their transactions of services. Tangibles is considered important but not too important when it is being compared to the other more important areas for delivering quality services.

Further analysis on the rankings can be made by giving weights to the ranking points. This is shown in Table 6.18.

Table 6.18. Weighted Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	MOST IMPORTANT (1) X 2	SECOND MOST IMPORTANT (2)	TOTAL (1)+(2)
Tangibles	6	12	5	17
Reliability	130	260	53	313
Responsiveness	72	144	125	269
Assurance	68	136	86	222
Empathy	15	30	22	52

Again, Reliability gets the highest score of 313. Responsiveness comes second with 269 and Assurance comes third with 222.

6.3. COMPARING THE RESULTS OF SURVEY SUBJECT AREA I & II

In comparing the results between Area I and Area II, as illustrated in Table 6.19, the Expectations for Area II is lower than Area I. The assumption that could be derived from these results is that the respondents in Area II who are the receivers of services from employees in Area I (the Service Branches) have been dealing with the department for quite sometime and know the type of services they can expect from the division and thus they dare not put high expectation of the services that will be delivered to them. This means, they are relating to the kind of current level of services they are getting and will not project expectations that are beyond the expected services to the type of services they are getting.

Like the mean expectation score, the mean perception score for Area II is also less than that of Area I. The results indicate that the respondents who are receiving services from the employees of the Service Division feel that the level of quality services provided to them is just slightly above average. The assumption that can be made here is that the employees in the three branches are providing higher quality services among themselves as the factor of knowing each other personally has an effect of how they respond to others in providing their services.

This analysis can be further confirmed if we look at the results of the gap scores for both cases. Area II has a gap score of -1.99 whereas Area I has a gap score of -1.38. The assumption that can be made here is that the three branches are not providing quality services as good as they are receiving quality services among themselves. What we can say here is that it does not mean if internal quality services are high, the external service provided to external customers too will be high.

6.19. Comparing Results between Survey Subject Area I and II

EXPECTATIONS				
	MEAN		STD. DEVIATION	
DIMENSION	I	II	I	II
Tangibles	6.25	6.40	0.19	0.20
Reliability	6.73	6.50	0.17	0.20
Responsiveness	6.64	6.50	0.26	0.30
Assurance	6.70	6.70	0.22	0.10
Empathy	6.60	5.90	0.38	0.60
Average Mean Score	6.58	6.4		
PERCEPTIONS				
	MEAN		STD. DEVIATION	
DIMENSION	I	II	I	II
Tangibles	5.58	5.20	0.49	0.50
Reliability	4.73	4.30	0.21	0.10
Responsiveness	4.84	4.30	0.22	0.20
Assurance	5.06	4.40	0.14	0.10
Empathy	5.35	4.70	0.32	0.30
Average Mean Score	5.11	4.58		
GAP SCORES				
	GAP SCORE			
DIMENSION	I		II	
Tangibles	-2.6		-2.44	
Reliability	-1.6		-2.44	
Responsiveness	-1.3		-2.41	
Assurance	-0.7		-1.35	
Empathy	-0.7		-1.34	
Average Gap Score	-1.38		-1.99	

6.4. DATA ANALYSIS ON SURVEY SUBJECT AREA III -

Employee Survey on the Services Delivered by the Computer Centre

The survey was conducted by distributing a fixed number of 10 questionnaires to each of the 15 main divisions and branches. In total, 150 questionnaires were distributed to the heads of department or their administrative officers for distribution to their staff who were fully involved with computers in their departments. After two weeks, the questionnaires were collected from the various divisions and branches. On collection, it was discovered that the success rate of the survey was 70 per cent. There were 105 responses from the sample size of 150 (see Appendix F3).

In the survey on expectations, similar to the other two surveys, the respondents were required to enter their expectations score on the 7 point Likert scale of 1 to 7 for the 20 statements. The expectation scores are shown in Table 6.20.

Table 6.20. Likert Scale Entries for Expectations

E	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	55	47	44	62	72	53	84	83	82	80	87	64	86	86	77	47	48	31	66	67
6	36	37	47	36	29	35	16	20	22	23	13	24	18	17	26	44	38	45	35	33
5	12	19	12	5	3	9	5	2	1	2	5	8	1	2	2	10	13	19	2	5
4	2	2	2		1	6						9				4	6	9	2	
3						2												1		

The results from the analysis show that respondents have high expectation of services delivered by the Computer Centre. In looking at the individual scores assurance has the highest mean score. These results show contrasting results when compared to Area I and Area II. Area I and Area II uphold the tradition of awarding the highest expectation score to reliability where as for this study, assurance emerged on the top spot. This shows that, in computer services, respondents have high expectations for services delivered by knowledgeable employees who can deliver convincing services to the service users. Its importance is further supported by its low standard deviation. This low figure indicates that the respondents have been consistent in expressing their expectations over assurance on services provided by the Computer Centre.

In second place is responsiveness. Respondents expect services to be given swiftly so that it causes minimal disruption in carrying out their task using the computers. The standard deviation shows that there is not much spread for the scores, which indicates consistency of responses made by the respondents. Third placing goes to reliability where the scores are still considered consistent when compared to assurance and responsiveness.

Tangibles too has high scores. It is believed that since Computer Centres deal with a large amount of tangibles, the tangibles dimension should have the top spot rather than, in this case the fourth spot. But as proven, this is not the case because respondents are more interested with services that the employees of the Computer Centre provide to the respondents on the respondents' site. In other words the

employees of the Computer Centre have to bring in the services with them and pass it to the customers on the customer's own turf. In this situation, the customer is not too bothered about the office condition of the Computer Centre. The respondents too have quite a high expectation over empathy. The services provided by the employees of the Computer Centre involve a large amount of lip-service especially in advisory and training. Therefore it is obvious that personal services are viewed as very important and respondents have high expectations on this dimension. In looking at the standard deviation, it shows slightly more variation for this dimension when compared to the other dimensions.

Table 6.21. Means and Standard Deviations for the Dimensions on Expectations

DIMENSION	MEAN	STD. DEVIATION
Tangibles	6.33	0.1
Reliability	6.6	0.24
Responsiveness	6.66	0.2
Assurance	6.77	0.05
Empathy	6.31	0.28

The second part of the analysis looked at the entries made by the respondents on perceptions. These different ranges of entries are shown in Table 6.22.

The varied ranges of the entries indicate that customers viewed perceptions according to how they experience the services. There are some who perceived the services delivered as services of outstanding quality but on the other hand there are

some who perceived the services delivered as non quality services. What is important is that there is a consistent pattern of service quality perception among the customers. Most of the customers perceived service quality between and including the sixth and fourth point. These scores are further analysed to produce their perception mean score and standard deviation. The means and standard deviations for the five dimensions are shown in Table 6.23.

Table 6.22. Likert Scale Entries for Perceptions

P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
7	8	11	13	2				2				1	1	3	1		4		2	7
6	29	31	51	13	19	16	10	13	5	8	18	24	23	23	15	26	22	23	34	33
5	33	33	26	25	31	27	38	31	38	39	37	35	36	38	45	25	35	28	27	26
4	29	23	16	40	42	41	16	32	38	33	28	36	23	31	24	40	33	26	38	29
3	7	8		22	12	22	39	22	13	18	15	10	21	3	19	12	12	15	4	8
2				2	2		3	4	2	8	8		2	8	2	2		3	1	1
1				2					2	10								1		2

In analysing the means and standard deviation of the dimensions, it was discovered that reliability has the lowest perception mean score of 4.35 and a standard deviation of 0.16. The spread is not too wide showing that 99 per cent of the entries are within the scores of 3.87 and 4.83. The next lowest score is under responsiveness with a perception mean score of 4.37. Although the score is low but the standard deviation of 0.31 is high. It indicates that there are quite a large number of varied opinions on perception. The answer to this might be that the employees from the Computer Centre have not been consistent in responding to requests for services from the service users.

Another assumption that can be made is that the respondents were not told about the seriousness of their computer problems and how much time it will take to solve their problems. Computer services provided by the Computer Centre are normally heterogeneous with different customers requesting different services. If the customers are not informed about the services they are getting, which they have no expertise on it, they are bound to perceive the services provided to them as services of low quality.

As regard to assurance, most respondents perceived assurance in more or less in the same perspective. We can rightly say that 99 per cent of the scores fall in between 4.37 and 4.91, inclusive. The next lowest is tangible. The standard deviation is tremendously high and the assumption that can be made for this is that most respondents do not know how to make judgements on computer equipment. On empathy, the high score indicates that the respondents are happy with the personal services given to them by the employees of the Computer Centre. This is further confirmed by the low standard deviation showing that most of the respondents' perceptions over empathy are about equal.

Table 6.23. Means and Standard Deviations for the Dimensions on Perceptions

DIMENSION	MEAN	STD. DEVIATION
Tangibles	5.04	0.56
Reliability	4.35	0.16
Responsiveness	4.37	0.31
Assurance	4.64	0.09
Empathy	5.8	0.2

The third stage of the analysis involves looking at the gap scores. The gap scores obtained are shown in Table 6.24.

There are some positive scores even as high as 5 which means that some respondents perceived that the quality of services delivered over certain areas is very much higher than what they expected out of the service. For each of the 105 responses, the statements of each of the dimensions, has been summed up and divided by the number of statements under each of the dimensions. These gap scores are shown in Table 6.25.

Table 6.24. The Gap Scores

s	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
5	1		1				1				1	1	1	1			1	1	1	1
4																				
3				2																
2	6	1	9									1					6	2		1
1	6	9	15			1						3		2		2	11	1	4	1
0	68	68	68	51	49	53	44	47	42	46	47	48	48	45	48	57	54	59	51	59
-1	24	33	47	20	27	30	13	16	14	16	22	22	25	31	22	28	32	37	39	39
-2	27	22	15	24	31	26	42	37	39	38	37	38	40	37	41	33	25	34	24	26
-3	24	12	4	37	31	35	18	21	31	26	23	24	13	23	21	27	21	14	30	13
-4		4		12	9	4	31	24	12	15	12	6	21	3	17		6			8
-5				3	2		1	4	3	8	8		2	8		2		1	1	2
-6									8									1		1

Table 6.25. The Service Quality Gap Scores for the Five Dimensions

DIMENSION	GAP SCORE
Responsiveness	-2.25
Reliability	-2.21
Assurance	-2.1
Empathy	-1.52
Tangibles	-1.27
Average Gap Score	-1.87

Although it was seen earlier on that assurance has the highest expectation mean score, followed by responsiveness and reliability, after carrying out the process of perception - minus - expectation, to determine the service quality gap, it was discovered that the dimension that has the highest service quality gap score is

responsiveness. This considerable gap on responsiveness shows that the department lacks in providing prompt service to the customers. There are several possibilities that can cause the gap. It might be due to inadequate workforce, lack of training of employees, lack of equipment, poor management or lack of employee motivation.

The next highest gap is the reliability gap. Like responsiveness, this gap is also considered large which have a significant effect on the delivery of quality services. Reliability involves matters like producing error free work, able to complete work on time, able to fulfil promises and etc. As the employees are not able to deliver a substantial amount of reliable services, it will have a drastic effect on delivering quality services that can meet customers expectations.

Apart from responsiveness and reliability, assurance too has a large service quality gap. Customers have to be absolutely confident over the services they received as the work they produce depends on the services provided by the Computer Centre. It is very important when providing services the employees have the knowledge what is expected of them, if not like the two previous dimensions, it will only widen the service quality gap over services delivered to their customers.

The only dimensions that are less threatening to the widening of the service quality gap are empathy and tangibles. The cause for the tangibles gap can be due to the provision of inadequate equipment and the cause for empathy can be due to shortage of staff or lack of employee motivation.

The next step is to attach weights to the gap. In this way, the dimensions in the order of importance over its impact on quality services on particular services will surface and decisions for actions to be taken on closing the service quality gaps can easily be made. The weights are shown in Table 6.26.

Table 6.26. The Weighted Service Quality Gap Scores of the Five Dimensions

DIMENSION	GAP SCORE
Reliability	-53.1
Responsiveness	-51.4
Assurance	-46.2
Empathy	-25.1
Tangibles	-15.4

A check over the weights given by the respondents in relation to their importance on the service quality dimensions is made possible by requesting the respondents to attach rankings to the dimensions. The rankings given by the respondents are shown in Table 6.27.

Table 6.27. Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	SECOND MOST IMPORTANT	LEAST IMPORTANT
Tangibles	1	2	68
Reliability	49	25	1
Responsiveness	25	42	2
Assurance	24	30	4
Empathy	7	7	31

Forty-nine respondents chose reliability as the most important dimension in delivering quality services and under the category of Second Most Important, responsiveness obtained the highest score of 42. Extending from this rankings, one other way of making sure that the right decision will be taken for closing the gap is by giving weights to the rankings. For the Most Important Category a weight of 2 is given and the Second Most Important Category is given a weight of 1. The 'weighted' rankings is shown in Table 6.28.

Table 6.28. Weighted Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	MOST IMPORTANT (1) X 2	SECOND MOST IMPORTANT (2)	TOTAL (1)+(2)
Tangibles	1	2	2	4
Reliability	49	98	25	123
Responsiveness	25	50	42	92
Assurance	24	48	30	78
Empathy	7	14	7	21

Again, Reliability gets the highest score of 123. Responsiveness comes second with 92 followed by Assurance with the score of 78. The scores indicate the areas of concern for action to be taken to improve the quality of services delivered to the customers.

6.5. DATA ANALYSIS ON SURVEY SUBJECT AREA IV -

Survey On Road Services

The fourth survey was carried out on the Survey Subject Area IV which is concerned with the road services delivered by the Public Works Department, Ministry of Public Works. The Simple Random Sampling technique was adopted in order to provide reliable data obtained from the extremely huge population distribution of road users.

A selection of government departments and private organisations were identified for the survey. The heads of departments or their administrative officers assisted in carrying out the survey. Discussions were held with either the head or the administrative officer of each selected department and for permission to carry out the roads services survey. Questionnaires were distributed with the departments' help to the respondents who were randomly selected according to the departmental name-list.

Among departments approached were a state hospital, a few State Registration Departments, a few district offices, a local authority, a few schools, a computer consultancy firm, a few surveying firms and banks. Altogether, 400 questionnaires were distributed. Attached to each questionnaire is a self-addressed and stamped envelope.

The respondents were requested to return the questionnaires through the post within 2 weeks. After the third week from the date of issue of the questionnaires, only 195 were returned. The returns represented a return rate of 49 per cent which is less than half of the number of questionnaires distributed. This low figure was increased after proceeding with the interview approach. Permissions of a few heads of departments were obtained to interview 125 respondents. Hence, in total, the number of responses obtained for the selected sample of 525 was 320. The response rate rose up from 49 per cent to 61 per cent (See Appendix F4).

The first part of the analysis looked at the entries made by the respondents for the service quality expectations on the 7 point Likert scale of 1 to 7 for the 21 statements. Table 6.29 shows the frequency of the entries made over the 7 point Likert scale with entries stretching from the 7 point scale right up to the 1 point scale. The above entries are further analysed to determine the mean score of each of the 5 dimensions (see Table 6.30).

It was thought of initially that the respondents would consider tangibles as their highest expectation. The assumption was made due to the fact that road services are physical services. The analysis produced somewhat different result with reliability taking the top placing with the highest expectation mean score. What can be assumed from this result is that the respondents consider reliability like an 'after sales service'. After the road has been constructed, the convenience of using the road has to be considered and this can be the reason for emphasising on reliability. It is considered very important that the road authorities respond to the road users problems and able to keep to their promise. Respondents too indicate that they have high expectations over responsiveness. It is considered very important that the road authorities respond promptly to any road problems to minimise disruptions in using the roads. Assurance is another aspect which respondents have high expectations of it. Road users need to feel safe when using the roads. Only empathy falls below the 6-point scale indicating that the road users do not expect much personal services to be granted to them. They are more concern with the condition of the roads.

Table 6.29. Likert Scale Entries for Expectations

E	7	6	5	4	3	2	1
1	210	81	19	6		4	
2	229	68	20			3	
3	197	60	60	3			
4	168	87	31	30	3		
5	228	88	4				
6	196	78	30	11	5		
7	209	94	12			5	
8	164	116	31	9			
9	191	80	38	5	6		
10	249	61	6	4			
11	182	89	31	10	5		
12	118	121	60	5	5	5	6
13	199	67	34	20			
14	230	49	20	12	4	5	
15	173	107	28	7	5		
16	192	75	35	18			
17	21	64	107	64	16	25	23
18	145	103	29	22	13	4	4
19	39	52	72	41	45	45	
20	138	110	46	20	6		
21	157	89	61	10		3	

In looking at the standard deviations of the dimensions, they too support the findings discussed above. Tangibles shows a low spread signalling that the respondents do not differ much over their expectations on tangibles. Reliability like tangibles has a low spread. Assurance has the lowest standard deviation of 0.05 showing that the respondents are much in agreement over their expectations on assurance. In contrast, responsiveness has a high standard deviation. Here, 95 per cent of the entries lie within 5.71 to 6.99 showing a very large spread of scores. The assumption that can be made here is that, some respondents do not expect the authorities to be responsive over their needs. It is through experience that makes it hard for them to have high expectations on road services. Empathy has a very high standard deviation of 0.95. Respondents have mixed feelings over empathy as some respondents see it as necessary whereas some see it as not necessary at all, since all they want is a good road.

Table 6.30. Means and Standard Deviations for the Dimensions on Expectations

DIMENSION	MEAN	STD. DEVIATION
Tangibles	6.44	0.17
Reliability	6.5	0.15
Responsiveness	6.35	0.32
Assurance	6.4	0.05
Empathy	5.41	0.95

The second part of the analysis looked at the entries made by the respondents on perceptions (see Table 6.31). The varied range of entries show that the respondents have a wide ranging view of the services provided to them but there is a pattern of convergence of the perceptions perceived by the customers towards the 3 points to 5 points range, indicating consistencies in perception of service quality over the roads services provided by the Public Works Department, Ministry of Public Works.

Table 6.31. Likert Scale Entries for Perceptions

P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
7	5	8	11	6	39	17	9	3	8	13	6		36	64	22	20	3	20	1	13	23
6	40	58	63	31	49	71	54	75	23	39	51	56	77	47	86	50	30	82	15	82	54
5	93	93	102	92	56	60	77	51	75	97	114	85	78	111	77	106	47	67	64	57	80
4	124	120	91	80	61	73	74	130	82	82	65	100	68	58	84	97	117	78	86	63	79
3	41	26	31	36	48	54	52	49	79	58	54	37	34	19	36	29	32	31	57	60	45
2	6	15	19	53	46	27	39	3	44	25	21	21	12	21	9	6	54	24	50	45	30
1	11		3	22	21	18	15	9	9	6	9	21	15		6	12	37	18	47		9

The convergence factor can be further illustrated by analysing the means and standard deviations of the different dimensions. In comparing the means, Assurance shows the highest mean of 4.79. Most of the respondents tend to agree that they feel quite confident in using the road services. This is indicated by the low standard deviation of 0.19 which shows little spread in the scores given for assurance. The next highest is tangibles, with a mean score of 4.33. It is an above average perception showing that the level of quality of the road services provided on aspects of tangibles is acceptable to the respondents. But the standard deviation is rather high at 0.32. The assumption that can be made here is that, the road users use different stretches of roads and their perception was influenced by their experience over the road services delivered to them. The next lowest after tangibles is reliability, with a mean score of 4.25. The services provided are perceived as fairly reliable and the standard deviation too shows that the responses given by the respondents are fairly consistent.

Responsiveness, at a mean score of 4.16, shows that the respondents perceived this dimension at a much lower level as compared to assurance, tangibles and reliability. The standard deviation of 0.22 shows some spread in the responses made by the respondents. In analysing the mean and standard deviation, it is identified that 99 per cent of the scores entered by the respondents are found in between the range of 3.5 to 4.82, inclusive. Empathy has the lowest perception mean score of 4.04 but with the highest standard deviation of 0.52. The assumption that can be made for this very high standard deviation is due to the nature of service. Road users are more concerned with the physical condition of the roads therefore when they get the

minimal personal services, they see it as already adequate and gave a high score for empathy. But some respondents consider this basic or minimal personal services as inadequate and therefore gave a low score for it. The means and standard deviations of the dimensions are shown in Table 6.32.

Table 6.32. Means and Standard Deviations for the Dimensions on Perceptions

DIMENSION	MEAN	STD. DEVIATION
Tangibles	4.33	0.32
Reliability	4.25	0.12
Responsiveness	4.16	0.22
Assurance	4.79	0.19
Empathy	4.04	0.52

The third stage of the analysis involved looking at the gap scores. The gap scores obtained are shown in Table 6.33. There are some positive scores.

Table 6.33. The Gap Scores

s	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
5											2	2		5			1				3
4							5					5						4	5		
3		3				5						2		6	8		11	1	10		
2	4		3	1								4		5	6	3	8	10	10	6	3
1			13	7	14	12	1	3			7	16	12		4	1	23	12	22	8	4
0	43	42	61	55	51	48	51	67	51	33	50	39	74	79	61	70	106	82	114	88	89
-1	51	58	59	62	41	78	51	59	42	56	65	74	96	72	72	80	81	79	59	67	31
-2	98	111	79	68	64	60	65	89	74	90	97	89	59	79	85	65	42	38	50	40	91
-3	79	65	68	39	55	32	51	56	66	74	54	37	37	44	55	70	13	39	19	54	40
-4	27	28	16	42	38	42	47	33	48	41	28	24	21	8	13	14	19	24	16	26	33
-5	10	13	19	28	39	26	36	5	34	20	8	17	7	22	10	7	14	20	14	31	17
-6	8		2	18	18	17	13	8	5	6	9	11	14		6	10	2	11	1		9

The service quality gaps of the 5 dimensions obtained were then compared to each other and ranked. The ranking of the service quality gaps from the widest to the narrowest is shown in Table 6.34. These service quality gaps can be used as indicators to show the areas experiencing shortfalls in the delivery of quality of services provided by the Public Works Department, Ministry of Public Works to the road users.

From the table, it can be seen that reliability has the highest service quality gap followed by tangibles and responsiveness. The reliability, tangibles and responsiveness dimensions show significant service quality gap that can have a drastic effect on the overall delivery of quality road services. Assurance and empathy do not have that kind of drastic impact on service quality but still when

combined with the rest of the dimensions, does contribute considerably to the overall service quality gap of the road services. This analysis indicates that, up to this stage, reliability should be given the first priority if the organisation wants to carry out any quality improvement programmes. Only after reliability will tangibles and responsiveness be considered for any quality improvement programmes.

Table 6.34. The Service Quality Gap Scores for the Five Dimensions

DIMENSION	GAP SCORE
Reliability	-2.19
Responsiveness	-2.11
Tangibles	-2.05
Assurance	-1.59
Empathy	-1.35

Next, the degree of importance of the dimensions is analysed by attaching weights to the gap scores. The analysis shows that Tangibles has the highest weight. It is followed by Reliability. Empathy takes the last position with -17.5. The weighted service quality gap dimensions are shown in Table 6.35. The dimensions are in descending order according to the size of the service quality gap scores.

Table 6.35. The Weighted Service Quality Gap Scores of the Five Dimensions

DIMENSION	GAP SCORE
Tangibles	-60.5
Reliability	-45.5
Responsiveness	-42.8
Assurance	-23.9
Empathy	-17.5
Average Weighted Gap Score	-38.04

A check over the weights given by the respondents in relation to their importance on the service quality dimensions is made possible by requesting the respondents to attach rankings to the dimensions. The rankings given by the respondents are shown in Table 6.36.

Table 6.36. Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	SECOND MOST IMPORTANT	LEAST IMPORTANT
Tangibles	266	13	10
Reliability	19	122	9
Responsiveness	23	129	22
Assurance	9	36	33
Empathy	3	17	246

There are 266 respondents who chose Tangibles as the most important dimension in delivering quality services and under the category of Second Most Important,

Responsiveness obtained the highest score of 129. These rankings show that customers see Tangibles as the most important service quality area that has to be given priority if quality services are to be delivered.

Further analysis on the rankings can be made by giving weights to the rankings. This is shown in Table 6.37.

Table 6.37. Weighted Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	MOST IMPORTANT (1) X 2	SECOND MOST IMPORTANT (2)	TOTAL (1)+(2)
Tangibles	266	532	13	545
Reliability	19	38	122	160
Responsiveness	23	46	129	175
Assurance	9	18	36	54
Empathy	3	6	17	23

Tangibles gets the highest score. The scores are close for Responsiveness and Reliability showing that both dimensions are of about equal importance in ascertaining the delivery of quality service.

6.6. DATA ANALYSIS ON SURVEY SUBJECT AREA V -

Survey On Government Residential Quarters Services

The fifth survey was carried out on the Survey Subject Area V which is concerned with the government residential quarters services delivered by the Public Works Department, Ministry of Public Works. The Simple Random Sampling technique was adopted. This approach was applicable as the households can be selected randomly within a particular residential area using their addresses. Three hundred questionnaires were distributed to the selected household from a housing stock of 1200. Attached to each questionnaire is a self-addressed and stamped envelope. The respondents were requested to return the questionnaires through the post within 2 weeks. After the second week from the date of issuance of the questionnaires, 130 were returned. After the third week, another 32 questionnaires were received. The total number of questionnaires received was 162 which gives a response rate of 54 per cent. This response rate is considered representative enough of the population as the sampling size taken is 25 per cent of the population distribution (see Appendix F5).

Table 6.38 shows the frequency of the entries made over the 7 point Likert scale and the table shows that the entries stretches from the 7 point scale right up to the 1 point scale. The scores are highly concentrated on the 7 and 6 point scales. These varying range of entries show that some customers have high expectations of the services provided while others have low expectations.

Table 6.38. Likert Scale Entries for Expectations

E	7	6	5	4	3	2	1
1	135	22	3	1		4	1
2	131	27	4				
3	57	68	30	6		1	
4	81	62	15	4	3		
5	115	45	2				
6	80	65	15	2	5		
7	111	44	5	2		5	
8	110	45	7				
9	127	28	7		6		
10	130	28	3	1			
11	135	23	13	1	5		
12	90	63	9		5	5	
13	100	56	5	1			
14	138	22	2		4	5	
15	111	38	13		5		
16	69	60	31	1		1	
17	39	55	48	6	4	7	
18	69	52	31	7	3		3
19	40	52	15	18	11	15	
20	88	49	15	7	3		11
21	91	54	14	3		3	

The means and standard deviations for the dimensions on expectations is shown in Table 6.39. The expectations score is highest in responsiveness as customers expect the service providers to respond quickly to their requests for example if there is a roof leak, a pipe leak or a broken window. The next highest expectation score is reliability. In this case, the customers expect good work to be carried out as the level of work carried out can affect their quality of life living in government residential quarters. At the same time, they expect to be assured that the work will be competently carried out. Even on the tangible aspect, the customers gave a high perception score of 6.5. This high score is obvious because the services provided are related to physical works on the quarters and therefore the service users are very concerned with the physical services provided by the service providers. Empathy is the least perceived dimension with a score of 5.88 showing that the customers do

not expect highly personalised services or are not too concerned about personalised services.

Table 6.39. Means and Standard Deviations for the Dimensions on Expectations

DIMENSION	MEAN	STD. DEVIATION
Tangibles	6.5	0.35
Reliability	6.58	0.14
Responsiveness	6.67	0.12
Assurance	6.55	0.27
Empathy	5.88	0.59

The second part of the analysis looked at the entries made by the respondents on perceptions. The varied entries can be seen in Table 6.40. The varying range of entries show that the respondents have a wide ranging view of the services provided to them but there is a pattern of convergence of the perceptions perceived by the customers towards the 3 points to 5 points range, indicating consistencies in perception of service quality over the residential quarters services provided by the Public Works Department, Ministry of Public Works. The assumption that can be made for this pattern of convergence is that the services delivered are at the average level. The service providers are not providing excellent services nor are they providing very poor services.

Table 6.40. Likert Scale Entries for Perceptions

P	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
7		3	14	1	7	3	3	5	8	2	2	1	11	18	10	15	7	13		11	6
6	16	16	40	20	28	34	21	27	22	37	38	40	51	67	48	55	46	56	24	52	50
5	56	51	66	48	59	48	75	73	66	52	66	62	53	53	60	63	56	56	49	67	48
4	56	61	31	46	39	51	26	36	37	45	30	35	40	17	31	21	23	28	26	5	34
3	33	21	10	28	24	17	19	15	16	13	25	10	3	3	11	6	14	5	19	15	7
2		4	1	13	2	6	15	6	9	13	1	11	3	4	1	2	10	2	20	10	12
1	1			6	3	3	3		4			3	1		1		6	2	24	2	5

The convergence factor can be further illustrated by analysing the means and standard deviations of the different dimensions shown in Table 6.41. These perception means, except for assurance, which is above the 5-point scale, are constant throughout all the dimensions, indicating that the level of service quality is perceived to be of about equal amount for all the dimensions.

Table 6.41. Means and Standard Deviations for the Dimensions on Perceptions

DIMENSION	MEAN	STD. DEVIATION
Tangibles	4.49	0.42
Reliability	4.57	0.12
Responsiveness	4.63	0.09
Assurance	5.21	0.17
Empathy	4.49	0.54

The third stage of the analysis involved looking at the gap scores. The gap scores obtained are shown in Table 6.42.

Table 6.42. The Gap Scores

s	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
5																	1		1		
4	1		1															1	2		
3																		1	3		
2				3	2			1			1				1	1	3	6	1	5	1
1	1		9		2	6	2	1			3	4	4	1	6	9	9	12	6	5	6
0	5	7	41	14	10	22	13	15	18	15	20	22	24	24	21	46	50	49	37	36	33
-1	19	23	55	37	45	33	33	41	25	30	35	42	57	69	47	56	51	44	51	52	43
-2	55	59	40	41	50	61	62	66	62	55	53	50	52	47	55	37	37	35	29	38	37
-3	52	54	10	40	32	19	17	22	33	38	30	24	20	14	25	11	4	8	20	4	22
-4	28	16	2	17	19	15	18	11	14	11	20	7	2	2	7		2	6	6	10	5
-5	1	3	1	6	1	4	14	6	8	12	1	10	2	4						8	10
-6				5	3	2	2		2			2	1				2	2	6	2	5

The service quality gaps of the 5 dimensions, shown in Table 6.43, were then compared to each other and ranked. The ranking of the service quality gaps from the widest to the narrowest is shown in Table 6.42. These service quality gaps can be used as indicators to show the areas experiencing shortfalls in delivering quality services provided by the Public Works Department, Ministry of Public Works to the occupants.

Table 6.43. The Service Quality Gap Scores for the Five Dimensions

DIMENSION	GAP SCORE
Responsiveness	-2.05
Reliability	-2.02
Tangibles	-2.01
Assurance	-1.34
Empathy	-1.03
Average Gap Score	-1.68

The weighted service quality gap dimensions are shown in Table 6.44. The dimensions are in descending order according to the size of the service quality gap scores.

Table 6.44. The Weighted Service Quality Gap Scores of the Five Dimensions

DIMENSION	GAP SCORE
Tangibles	-56
Reliability	-50.4
Responsiveness	-42.1
Assurance	-23.4
Empathy	-12.1
Average Weighted Gap Score	-36.82

A check over the weights given by the respondents in relation to their importance on the service quality dimensions is made possible by requesting the respondents to

attach rankings to the dimensions. The rankings given by the respondents are shown in Table 6.45.

Table 6.45. Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	SECOND MOST IMPORTANT	LEAST IMPORTANT
Tangibles	123	9	7
Reliability	21	71	7
Responsiveness	14	46	8
Assurance	2	26	4
Empathy	2	10	136

There are 123 respondents who chose Tangibles as the most important dimension in delivering quality services and under the category of Second Most Important, Reliability obtained the highest score of 71. These rankings show that customers see Tangibles as the most important service quality area that has to be given priority if quality services are to be delivered.

Further analysis on the rankings can be made by giving weights to the rankings. This is shown in Table 6.46.

Table 6.46. Weighted Rankings Given to Dimensions in Terms of Importance

DIMENSIONS	MOST IMPORTANT	MOST IMPORTANT (1) X 2	SECOND MOST IMPORTANT (2)	TOTAL (1)+(2)
Tangibles	123	246	9	255
Reliability	21	42	71	113
Responsiveness	14	28	46	74
Assurance	2	4	26	30
Empathy	2	4	10	14

Again, tangibles gets the highest score of 255. The outcome of this finding has not produced any surprises as it is expected that tangibles will be the main area of concern in the delivery of these type of services.

6.7. COMPARISONS BETWEEN THE FIVE SURVEY SUBJECT AREAS

Comparisons on service quality can be made between the five survey subject areas.

For easy reference, the five survey subject areas will be referred to as follows:

- Survey Subject Area I - Service Branches
- Survey Subject Area II - Divisions/Branches
- Survey Subject Area III - Computer Centre
- Survey Subject Area IV - Road Services
- Survey Subject Area V - Building Services

6.7.1. Expectations Mean Comparison between the Survey Subject Areas

The analysis of the expectations means is made by comparing the means of the survey subject areas according to their dimensions. The expectations means for all the dimensions for the five survey subject areas is shown in Table 6.47 and the expectations standard deviations is shown in Table 6.48.

In tangibles, the divisions/branches (Area II) has the lowest expectations means of 6.25 with an expectations standard deviation of 0.19. Several assumptions can be made here. The service branches has the lowest expectation mean as the respondents have a limited expectation compared to the rest as their offices have just been renovated. They now have better offices and do not have any more high expectations on tangibles. The situation would have been different if the renovation had not been carried out. The other divisions/branches, even though they are measuring the quality of services provided by the three branches, have a higher expectation of the tangibles. It is because the renovations carried out are merely internal renovations and do not provide better facilities for the other customers, for example, better waiting area, etc.

In comparing the expectation mean score on tangibles for the road services and building services, which have a mean score of 6.44 and 6.5 respectively, it is obvious that these areas have high expectation scores. They are in the business of providing material services and therefore, the tangible aspect is seen to be a very important aspect of delivering quality road services. In comparing the standard

deviations of the different survey areas, there are no drastic differences between the areas except for the building services which has a standard deviation of 0.35.

Assumption that can be made is that tenants do not have high expectations in building services. The quarters are not theirs and therefore the tangible aspect of the building services does not matter to them. On the other hand, there are those who are very concerned about tangibles and have high expectations of the services delivered with regard to tangibles.

For the second dimension on reliability, the expectations means for the survey subject areas do not differ much from each other with the score differences between one another of only 0.5 and that the expectation means scores not less than 6.5. This shows that all service sectors, ranging from the highly labour intensive services delivered by the three branches to those of largely physical and material services like the road and building services have high expectations on reliability. This indicates that in whichever service sector the customers are involved with, they expect reliable service.

In Responsiveness, the lowest score is 6.35 for road services (area IV). This indicates that the road users have a much lower expectation as compared to the other areas. Thus the road users do expect a very high quality of service for responsiveness and only that, in comparison with the other dimensions, it is slightly lower than they are. What that can be assumed from this low figure is that the road authorities have not really responded quickly to the road users' needs. So with this

kind of experience, they will not allow themselves to have high expectations which they felt that they would never get. In contrast to the road users, the tenants of the quarters have a high expectation mean of 6.67. This is not surprising as repair works, like repairing the bathroom, replacing doors or window and etc., have to be carried out quickly to avoid any inconveniences.

In considering Assurance, the third survey subject area, the Computer Centre, has the highest Expectations Means score of 6.77. Assurance is concerned with the knowledgeable employees delivering quality services to the computer users. Their knowledge, skills and expertise are the most important aspects of their services to the customers who depend on the Computer Centre's expertise to solve their computer problems. The consistency for the need for assurance is further supported by the low standard deviation of 0.05. The empathy expectation mean is lower for Area II. In looking at empathy, for road services and building services, the users and occupants are not too bothered about personal and individual services. This can be further supported by looking at the expectations standards deviation of both the areas. The road services have an expectations standards deviation of 0.95 and the building services have an expectations standards deviation of 0.59. The large spread indicates that there are those who see empathy as very important and there are those who see empathy as not important.

Table 6.47. Expectations Mean Comparison between the Survey Subject Areas

DIMENSION	AREA I	AREA II	AREA III	AREA IV	AREA V
Tangibles	6.25	6.4	6.33	6.44	6.5
Reliability	6.73	6.5	6.6	6.5	6.58
Responsiveness	6.64	6.5	6.66	6.35	6.67
Assurance	6.7	6.7	6.77	6.4	6.55
Empathy	6.6	5.9	6.31	5.41	5.88

Table 6.48. Expectations Standard Deviation Comparison between the Five Survey Subject Areas

DIMENSION	AREA I	AREA II	AREA III	AREA IV	AREA V
Tangibles	0.19	0.2	0.1	0.17	0.35
Reliability	0.17	0.2	0.24	0.15	0.14
Responsiveness	0.26	0.3	0.2	0.32	0.12
Assurance	0.22	0.1	0.05	0.05	0.27
Empathy	0.38	0.6	0.28	0.95	0.59

6.7.2. Perceptions Mean Comparison between the Survey Subject Areas

The perceptions means and perceptions standard deviations for the different dimensions over the five survey subject areas can be seen in Table 6.49 and Table 6.50. Under tangibles, the road services have the lowest mean of 4.33. It indicates that service quality for road services is perceived as low. But looking at the perceptions standard deviation, the score is 0.32 indicates that there is a spread of

opinion on roads services. This can be caused by road users having different perceptions over different road stretches. But still, the overall perception score is 4.33 which is a low score. The same can be said about the quarters services which has a mean of 4.49 and a perceptions standard deviation of 0.42.

The assumption that can be made here is that there is a possibility of inconsistent level of services provided to the household. There is also the possibility that they are not able to differentiate between basic services and good services and therefore, the basic services provided to them is considered as adequate and they will give average scores for that kind of services. For example, if a roof leak is repaired, they will not be able to tell how good the services are provided. On the other hand there are those who know that they are getting only basic services and therefore gave a low score for that kind of basic service.

The perception mean for reliability is consistent for all areas and their scores are all less than five, indicating that the customers perceived that there is a slack in delivering reliable services.

Respondents of the road services perceived responsiveness on a mean score of only 4.16 and a standard deviation of 0.22. This indicates that the road users have a very low perception of responsiveness. Respondents of the other divisions/branches too show that they have a low perception, with a mean score of 4.3, on responsiveness. In looking at Assurance, respondents to the other divisions/branches and the Computer Centre perceived assurance at a mean score of 4.4 and 4.6 respectively.

Compared to the other areas, these are low scores. These low scores is supported by the consistencies of the opinions of the customers. The other divisions/branches produced a standard deviation of 0.1 and the Computer Centre produced a standard deviation of 0.09. Lastly on empathy, empathy is perceived highly in the three branches and the Computer Centre. This is indicated by the fact that customers have little problem getting personal and individual attention from the service suppliers.

Table 6.49. Perceptions Mean Comparison between the Survey Subject Areas

DIMENSION	AREA I	AREA II	AREA III	AREA IV	AREA V
Tangibles	5.58	5.2	5.04	4.33	4.49
Reliability	4.73	4.3	4.35	4.25	4.57
Responsiveness	4.84	4.3	4.37	4.16	4.63
Assurance	5.06	4.4	4.64	4.79	5.21
Empathy	5.35	4.7	5.8	4.04	4.49

The assumption that can be made on why empathy is highly perceived in the three branches is because the employees have personal contacts with each other and knowing somebody personally can help them obtain the extra personal service. For the Computer Centre too, respondents show a high perception on empathy. There is no other reason that can be given for this except that the employees of the Computer Centre do genuinely provide services with care and personal attention towards the customers.

Table 6.50. Perceptions Standard Deviation Comparison Between The Five Survey Subject Areas

DIMENSION	AREA I	AREA II	AREA III	AREA IV	AREA V
Tangibles	0.49	0.16	0.56	0.32	0.42
Reliability	0.21	0.22	0.16	0.12	0.12
Responsiveness	0.22	0.31	0.31	0.22	0.09
Assurance	0.14	0.1	0.09	0.19	0.17
Empathy	0.32	0.62	0.2	0.52	0.54

6.7.3. Gap Comparison between the Five Survey Subject Areas

As can be seen in Table 6.51, all the dimensions in all the areas have service quality gaps. The gap scores for all the survey subject areas are high for reliability. This indicates that reliability can affect service quality in all types of services.

In looking at the tangibles, it has a profound effect only in the road services and building services. This result is expected as these type of services are more of material services. Responsiveness too, except for the three branches, which might be due to the personal relationships between the employees, suffers from a shortfall in service quality. The service quality gap is more than 2 points. Again, the results show that responsiveness too is universally the common area for service quality shortfalls which can affect all types of services.

As for assurance, it is still lacking by more than the 2-point scale for the other divisions/branches and the Computer Centre. This can be due to the fact that customers have to be very confident of the services that they are getting.

There is a hierarchy of services provided to the customers. The services are provided from the internal customers who are the customers between the three branches which then radiate to the second layer of internal customers who are the customers from the other divisions and branches who are the customers of the three branches, who then radiate their services to the external customers who are the road users and the government residential quarters occupants. Therefore, service quality improvements must be considered in total and not in isolation, which can then help reduce the service quality gaps, in all the areas related to one another.

Table 6.51. Gap Comparison between the Five Survey Subject Areas

DIMENSION	AREA I	AREA II	AREA III	AREA IV	AREA V
Tangibles	-0.70	-1.34	-1.27	-2.05	-2.00
Reliability	-2.60	-2.44	-2.21	-2.19	-2.02
Responsiveness	-1.30	-2.41	-2.25	-2.10	-2.05
Assurance	-1.60	-2.44	-2.10	-1.60	-1.34
Empathy	-0.70	-1.35	-1.52	-1.30	-1.03

6.8. CONCLUSION

The results from the analysis show that there are service quality gaps for all the five survey subject areas. At the same time, a reliability test on the instrument was also carried out and the results of the test indicated that the instrument is reliable. The research has to be extended to identify the causes of the service quality gaps. Parasuraman, Zeithaml and Berry (1990) suggested that service quality gaps could be affected by the existence of either one or more of the internal services gaps. Therefore, the causes of service quality gaps are discussed in detail in Chapter 7.

CHAPTER 7

THE EFFECTS OF THE INTERNAL SERVICE GAPS ON

THE SERVICE QUALITY GAPS

Earlier on, the results from the data analysis show that there are service quality gaps over services delivered by the organisation. What causes these gaps and how can these gaps be closed in order to improve the delivery of quality services to the public? The scope of this research has to be further extended in order to be able to obtain answers to these questions. The approach that can be used can be based on the service quality conceptual model introduced by Parasuraman Zeithaml and Berry (1990).

According to Parasuraman, Zeithaml and Berry (1990), “Our findings from exploratory qualitative research with senior executives were instrumental in our development of the service-quality gap model. The findings revealed four key internal shortfalls or gaps that could contribute to poor quality of service as perceived by customers”. Issues regarding these four internal service gaps have been discussed in detail in Chapter 3.

Since it is shown that there is a link between the four internal gaps, Gap 1 to Gap 4 to the service quality gap, Gap 5, this extended research study needs to identify the internal gaps that has an effect on Gap 5. In order to do so, three phases of research was carried out for this part of the research study. The first phase involved

interviewing the employees of both the management group and the support group. The second phase involved the analysis of employees' ratings obtained from the performance appraisal reports which is used to support the first phase of the research. The third phase involved a mail survey using the questionnaire for measuring internal service gaps suggested by Parasuraman, Zeithaml and Berry (1990). The combination of the results from these three phases of research will help to show whether there are actual service delivery shortfalls as well as to help identify the causes of the service quality gaps (Gap 5).

At the end of this part of the research study, if it is discovered that there are more than one internal service gaps contributing to the service quality gap, the scope of the research study will only focus on one of the gaps which is considered as the most important gap that needs to be closed.

7.1. THE THREE PHASES OF THE RESEARCH STUDY

It has been mentioned earlier on in the chapter that the techniques selected for the data collection are the interview technique, the historical data collection technique and the mail questionnaire technique respectively for the three phases of research. The selection criteria were based on the discussion on selections of research methods under Chapter 5 for the most appropriate research methods that can meet the research objectives. Bryman (1988) suggests that the decision over whether to use a quantitative or qualitative approach should be based on 'technical' issues

regarding the suitability of a particular method in relation to a particular research problem.

7.2. THE FIRST PHASE OF THE RESEARCH STUDY

The first phase of this research study looks at the level of quality of services the employees received from the service providers. This phase of the research requires an in-depth study of the situation. Hence the face-to-face survey approach will be adopted.

The interview to be carried out for this research is highly structured so as to get the benefits of standardisation while allowing the respondents to give a thorough consideration of the questions asked before answering them. If necessary, the respondents will be asked to provide additional responses that can enrich the study. The respondents will also be encouraged to give as much details as possible for this in-depth study. Therefore, although the interview is highly structured, there are leeway incorporated in the approach where additional questions can be posed to fully exploit the situation in order to gain as much information as possible. The interview structure is shown in Table 7.1.

Table 7.1. The Interview Structure

1. Ask the respondent 'Is your department providing quality services and are the employees producing quality and productive work?'
2. If the respondent answers YES, ask the respondent,
3. 'To what extent does your department delivery quality services and the employees producing quality and productive work?'
4. After the respondent answers to what extent, say for example he answers 'LIMITED EXTENT',
5. Ask the respondents 'Why does the department deliver quality services and the employees produce quality and productive work up to a limited extent?'
6. If the answer to Question 1 is NO, ask the respondent,
7. 'Why is the department no delivering quality services and the employees not producing quality and productive work?'

7.2.1. Sampling

The respondents selected are from the divisions, units and branches, which comes directly under the Ministry of Public Works. In terms of the number of workforce, the Administration Division has 101 employees and the Finance and Accounting Division has 123 employees. As for the Development Division, it has 32 employees. The Highway Planning Unit has 37 employees, the Audit Unit has 11 employees and the Service Branch, Establishment Branch and Promotion and Disciplinary Branch altogether have 69 employees. The Computer Centre has 25

employees. From this number of workforce, one hundred respondents were selected for the interview.

Fifty per cent of the respondents were from the professional and management group which is referred to as Group 1 and the rest were from the management support group, referred to as Group 2. The senior managers, the middle managers and the junior managers represented the professional and management group. Under the management and professional group all were selected as respondents for the interview. For the support group, respondents were randomly selected by using the simple random sampling technique based on each of the department's name list. In this case, respondents from the original SERVQUAL survey are not automatically selected.

7.2.2. The Survey Responses

The survey was conducted based on the checklist for the interview mentioned earlier on in the chapter. The survey was conducted over a period of ten days beginning from first February till tenth February 1996. The response rate obtained from this face-to-face interview technique was 83 per cent. Only 39 respondents out of the targeted respondents of 50 in Group One, the Professional and Management group, were available for the interview. Some of the respondents were attending courses and some were on holiday during the interview period. In the second group, only 44 out of the randomly selected sample of 50 were available

for the interview. Again, some were on holiday and some were attending courses at the time the interview was carried out. The time taken for each interview on the average was between 15 minutes to half an hour. The responses received from the interview are shown in appendix G1C and Appendix G1D and the summary on the responses is shown in Appendix G1A and Appendix G1B.

7.2.3. The Data Analysis

The details of the data obtained from the interview has been summarised and shown in Appendix G1A and Appendix G1B. The data analysis on the data obtained from the interview on respondents in Group 1, shows the employees' response on the level of quality of services provided by their department. These responses extracted from the summary are illustrated in Table 7.2.

Table 7.2. Response Rate on Extent of Service Quality Delivered

Level of Service Quality Delivered	No. Of Respondents		
	Group 1	Group 2	Total
None at all			
Limited Extent	9	12	21
Certain Extent	25	29	54
Large Extent	5	3	8
TOTAL	39	44	83

Table 7.2 shows that not even one of the employees say that the department does not deliver quality and productive services. The employees either say that the department deliver quality and productive services up to a limited extent, up to a certain extent or up to a large extent.

The highest number of responses of the level of quality services delivered is on certain extent, with 54 responses (65 per cent). Second largest responses is on limited extent which is 21 responses (25.3 per cent) and finally, the third largest is on large extent which is 8 responses (9.6 per cent). These findings indicate that the departments are delivering quality services on a scale that is slightly above average.

A number of reasons were given by the respondents on why departments are not delivering quality service up to a substantial extent. The reasons have been extracted from the negative responses given by the respondents shown in Appendix G1A and G1B and summarised in Table 7.3.

Table 7.3. The Factors Affecting Quality and Productivity of Services

Factor affecting quality and productivity	Group 1	Group 2	Group 1 & 2
Negative responses related to performance appraisal	34	31	65
Negative responses related to reward system	25	33	58
Negative responses related to quality programmes	15	18	33
Poor management	3	7	10
Shortage of staff	6	2	8
No training	6	2	8
Poor leadership	2	2	4
Lack of equipment	2	2	4
Managers involved with personal work during office hours		3	3

7.2.4. Responses on the Delivery of Quality Services from the Management and Professional Group (Group 1)

Analysis on the responses shown in Appendix G1A and G1B for Group 1 on reasons for producing or not producing quality work shows that 9 respondents say that the New Remuneration Rate (NRS) motivates employees. In 1992 the government launched the NRS, a new administrative system to improve the working condition of the public employees. Under the NRS, the government introduced a number of job improvement facilities and a number of quality of life improvement facilities. The government has introduced the extended unpaid maternity leave for 3 months, the paternity leave for three days for fathers, the

computer loan, club membership loan, hospital benefits for the parents of serving employees and the double or treble pay increment depending on individual performance. The government too from time to time gives out bonuses to the public employees.

The NRS brought along the new performance appraisal system and in order to assist the employees to perform better, the government introduced the service excellence award. The award is tied up to employee performance. Under this award whoever performs well will be rewarded with multiple pay progressions. Even so, as shown in Table 7.3 under Group 1, there are 34 negative responses related to performance appraisal, which is one of the main components of the New Remuneration System (NRS). These negative responses are further illustrated in Table 7.4.

Table 7.4. Negative Responses Related to Performance Appraisal - Group 1

Negative Statements	No. Of Responses	Percentage
Performance appraisal is defective	7	20.5
Performance appraisal can have a negative effect on rewards system	5	14.7
Employees who are not highly productive but gets rewarded	5	14.7
Appraisers compete to give high marks to their staff. The marks are not reflective of their performance	4	11.7
Appraisers give marks above 80 for average performance. Affects the credibility of the performance appraisal system.	2	5.9
Appraisers not trained to appraised	2	5.9
Appraisers uses rotation system to give rewards	1	2.9
Inaccurate evaluation caused by use of incident book	2	5.9
Unfairness and favouritism	3	8.9
Subjective evaluation	3	8.9
TOTAL	34	100

Looking at Table 7.4, 7 respondents say that the performance appraisal is defective. It is said to be defective in the sense that it is not able to achieve its objectives for staff motivation and staff development. Defective performance appraisal can have a negative effect on the reward system is indicated by 5 respondents. Reward systems can be jeopardised if defective performance appraisal systems are implemented. Under a flawed appraisal system, the wrong people get rewarded. Those not rewarded even though they are excellent performers, get demotivated. Five respondents who were not satisfied with the appraisal system say that, there are those who are not highly productive but are receiving high marks in their performance evaluations.

The appraisers normally want the easy way out. It is much easier and faster to just give high marks to the appraisees without really having to study the actual level of performance and allocate the right marks for it. At the same time, giving high marks avoids discontentment among the employees. Sometimes, in this situation, the worst thing that can happen are that the less productive employees get rewarded rather than the highly productive employees.

Four respondents say that performance appraisal ratings are also affected by appraisers competing to give high marks. These marks are not reflective of the staff's performance. They wanted to make sure their staff could compete for the rewards. In the employees' eyes, they are seen to exercise care for the employees' well being. In this way there will not be any friction between the appraisers and

appraisees but the appraisees on receiving high marks will not be able to tell what are their weaknesses to enable them to improve their performance.

There are 2 respondents who say that the performance appraisal system is also affected by appraisers giving high marks of above 80 per cent for average performers. Normally in this situation, without any guiding instrument for the appraisers to use, the best way of evaluating staff who are mediocre workers is to give high marks so as to be on the safe side and not creating any conflicts between appraisers and appraisees. If low marks are given, it is going against the norm and the employees will get dissatisfied and upset over the evaluation.

There are other causes affecting the credibility of performance appraisals indicated by the respondents. Appraisers are not trained to appraise (2 respondents). The appraisers who are not trained to appraise will not be able to tell when they should give a rating of 6 or a rating of 7. This action will cause the evaluation to be highly inaccurate. There are managers who use the rotation system (using turns) to give rewards to employees, thus affecting their evaluation on the employees (1 respondent). Since they have to give high marks to the employees whose turn have arrived but are not providing excellent performance, the marks given in relation to the performance evaluation is not reflective of the employee's performance. Thus, it will be very difficult to show the weak areas of performance to the employees to allow them to improve further.

Another negative response on performance appraisal obtained from 2 respondents is on the inaccurate evaluation caused by using the Incident Book (Record book on employees' daily activities). In using the Incident Book, sometimes some good deeds or mistakes are omitted. This makes the appraisal inaccurate. In applying performance appraisals, there is also the element of unfairness and favouritism (3 respondents). They are practised by appraisers who are personally close to employees. Finally, even though evaluations are made according to the set work targets, subjectivity does occur.

The other element shown under Table 7.3 that affects quality and productivity is on the negative responses related to the reward system. The negative responses are shown in Table 7.5 below.

Table 7.5. Negative Responses Related to Reward System from Group 1

Negative Statements	No. Of Responses	Percentage
Defective performance appraisal have a negative effect on rewards system which demotivates rather than motivates employees	9	36
The service excellence award awarded under the performance related pay system is too few, because of the quota, to actually motivate employees	5	20
Reward system destroys teamwork. Employees should have team rewards rather than individual rewards	3	12
Excellent performers after exhausting his awards will not be motivated anymore to perform well	5	20
With small number of rewards and with flatter organisation affecting promotions, employees will be demotivated	3	12
TOTAL	25	100

Table 7.5 shows that 9 respondents say that the defective performance appraisal system has affected the reward system. The reward system affected by the flawed appraisal system has not been able to motivate staff to perform better. It has been a demotivator rather than a motivator.

The reward system itself, without being attached to the performance appraisal system, is also a demotivator rather than a motivator. Five respondents say that the service excellence award, a reward attached to performance under the performance related pay system is too little to reward all the excellent performers because of quotas. In comparison to the private sector, the employers in the private sector have all kinds of rewards and perks that can motivate their employees. Their main concern is the bottom line - profit. The more the employees can contribute to this bottom line the more rewards they can get. In this situation, the rewards and recognition systems in the public service are considered too rigid. Most employees, as shown by their ratings, feel that they deserve to be rewarded but because of the quota (5 per cent of the total number of employees in the organisation), only a few get to enjoy the rewards.

Most of the time those who gets rewarded, their ratings are only marginally higher than their competitors, which can be due to the extra-lenient ratings given by their raters. Three respondents say that the reward system destroys teamwork and they should have team rewards rather than individual rewards to motivate the employees. Five respondents say that, in the long run, this reward system becomes a short-term system. When the excellent performers achieve their rewards at the maximum level

after two years, it is difficult to sustain their motivation. The reward system is also affected, according to 3 respondents, when the flatter organisational structures were introduced where there are now fewer posts for promotions. In this situation, the employees become demotivated.

The third element shown under Table 7.3 that affects quality and productivity is on the negative responses related to the quality programmes. The break-down of negative responses are shown in Table 7.6 below.

Table 7.6. Negative Responses Related to Quality Programmes from Group 1

Negative Statements	No. Of Responses	Percentage
Employees do not understand the quality concepts	4	26.6
Employees were not told how to apply the quality concept to their work	3	20
Quality Day under the Quality Programmes not exploited to drive in quality culture into the employees	3	20
Quality slogans has no meaning	1	6.6
QCC only used for competition	2	13.3
The current quality awards are to high level for employees to appreciate	2	13.3
TOTAL	15	99.8

Four respondents say that employees who do not understand quality concepts can affect the quality of services delivered to the customers. Three respondents say that employees were not told how to apply the quality concept to their work. These employees were not told that they have customers they have to serve. Since they are not told about producing work for customers they carry out they daily duties thinking that this is the best that they can produce and the best to them has to be

acceptable by all. Three respondents say that the Quality Day, under the government quality programme, was not exploited to drive in the quality culture into the employees. These respondents say that the day goes to waste, as the employees were not tested on the concepts of quality and how they can relate the concept to their daily work.

The other area affecting the delivery of quality services indicated by the respondents is that quality slogans have no meaning (1 respondent). Quality slogans are more in general terms rather than being specific on how the employees can use the quality concept in their work.

Another area of wastage, as quoted by 2 respondents is the implementation of the Quality Control Circle (QCC). The QCCs now are competition-driven which defeats the original purpose of implementing QCCs for gaining small but continuous improvement. The quality awards like the Prime Minister's award are too big for employees to appreciate. These awards are big awards that require massive quality contributions. The employees are keener on having small quality awards that is more meaningful to them (2 respondents).

The other factors shown under Table 7.3 that affect quality and productivity of services are poor leadership (2 respondents), poor management (3 respondents), shortage of staff (6 respondents), lack of equipment (2 respondents) and not getting enough training (6 respondents).

7.2.5. Responses on the Delivery of Quality Services from the Support Group (Group 2)

In Analysing the responses for Group 2, as indicated by Table 7.3, there are 31 respondents who responded negatively towards the performance appraisal system. Only 9 respondents under Group 1 and 4 respondents under Group 2 have praises for the New Remuneration Rate (NRS) which is said to motivate employees. The government introduced the service excellence award under the NRS to motivate employees but according to a number of employees, the performance appraisal system is defective. Defective performance appraisal can have a negative effect on the reward system. Other factors affecting service quality and productivity due to performance appraisal, as viewed by the employees in the support group is illustrated in Table 7.7.

Table 7.7 shows that 4 respondents say that marks are inconsistently given by different appraisers. These respondents explained that their colleagues in different areas and under different supervisors have either higher or lower marks than them. They know that some of their colleagues in different locations, who are not high performers, are getting higher marks. Their opinion tie in with the opinion of another 4 employees who say that, with the same level of performance, they do not get the same marks and this will affect their chances of obtaining the service excellence award. These 8 responses which make up 26 per cent are grouped in 'Performance appraisal can have a negative effect on rewards systems which affects motivation' as shown in Table 7.7. Two respondents say that there are those who

are not highly productive are receiving high marks in their performance evaluations and getting rewarded for that.

Table 7.7. Negative Responses Related to Performance Appraisal - Group 2

Negative Statements	No. Of Responses	Percentage
Performance appraisal can have a negative effect on rewards system which affects motivation	8	26
Employees who are not highly productive but gets rewarded	2	6.5
Appraisers compete to give high marks to their staff. The marks are not reflective of their performance	5	16
Appraisers give marks above 80 for average performance. Affects the performance of employees	1	3.2
Appraisers not trained to appraised	2	6.5
Inaccurate evaluation caused by use of incident book	1	3.2
Unfairness and favouritism	3	9.6
Subjective evaluation	3	9.6
Multiple objectives of performance appraisal not exploited	1	3.2
Performance appraisal interviews are too short to obtain feedback to improve performance	1	3.2
Wasteful exercise as the appraisers are not concerned with other details of the appraisals. Only concern with appraisal marks	2	6.5
Performance appraisal does not affect staff at maximum pay and can demotivate them	2	6.5
TOTAL	31	100

Five respondents say that performance appraisal ratings are also affected by appraisers competing to give high marks and these marks are not reflective of their staff performance. They want to create a harmonious office environment at the expense of inaccurately assessing their staff. Through such practices, it would be difficult to get the staff to improve their performance. One respondent says that performance appraisals can be affected by appraisers giving high marks of above 80

per cent for average performance. It shows that they are already good and do not have to improve their performance.

Another factor affecting performance appraisals mentioned by the respondents is, appraisers are not trained to appraise their employees (2 respondents). These respondents say that in carrying out performance appraisals it seems to be a very easy process but when proper consideration has to be given over the actual performance of the candidate, the evaluation will become more difficult. Therefore, without proper training on its usage, the appraisers will not know how to go about appraising their employees where the outcome of the appraisal will be dubious. Another respondent says that inaccurate evaluation is caused by the use of the incident book (1 respondent). Under the supervisors there are several employees. It cannot be expected of the supervisors to remember all the actions of the employees to enter them in the incident book. It is a very tedious process and supervisors will not take into consideration all of the employees' actions. This will then lead to inaccurate evaluation of the employees.

Three respondents say that workers are unfairly evaluated when supervisors practice favouritism. Supervisors are seen to be giving high marks to those who have personal relationships with them. Subjective evaluation (3 respondents) is another area stated by the respondents that affects employees. Although there are work targets, but in practice there is still an element of subjectivity in evaluating employees. One respondent says that the performance appraisal system is also affected when its multiple objectives are not fully exploited. One respondent says

that the time period of the performance appraisal interviews are too short for workers to get feedback on their performance. Two other respondents say that the performance appraisal is a wasteful exercise. The appraisers are not concerned with the other details in the appraisal report. All that they are concerned with are the marks that can be extracted from the report to be used to determine the salary progression or for promotional exercise if there is one. Two respondents say that performance appraisal does not matter to staff at maximum pay. There is no motivation for them to improve their performance.

In comparing between the responses obtained from Group 1 and Group 2, similar to Group 1, in Group 2, the other element shown under Table 7.4 which affects quality and productivity is the negative responses related to the reward system. The negative responses are shown in Table 7.8 below.

Table 7.8. Negative Responses Related to Reward System from Group 2

Negative Statements	No. Of Responses	Percentage
Defective performance appraisal have a negative effect on rewards system which demotivates rather than motivates employees	11	33.3
The service excellence award awarded under the performance related pay system is too few, because of the quota, to actually motivate employees .	11	33.3
Reward system destroys teamwork. Employees should have team rewards rather than individual rewards	4	12.1
Excellent performers after exhausting his awards will not be motivated anymore to perform well	2	6.0
With small number of rewards and with flatter organisation affecting promotions, employees will be demotivated	5	15.1
TOTAL	33	99.8

In looking at the table above eleven respondents say that the defective performance appraisal system has a negative effect on the reward system by not being able to motivate employees to improve their performance. On its own too, the reward system does affect employee motivation. Eleven respondents say that the service excellence award, a reward attached to performance under the performance related pay system is too small to reward all the excellent performers because of the quota.

Most employees feel that they deserved to be rewarded for their performance. Most of the time those who gets rewarded, their ratings are marginally higher than their competitors. *It does not mean that they are not as good as the winners but because their appraisers adopt the miser attitude in giving them the marks, they lose out to the other employees.* Four respondents say that the reward system destroys teamwork and they should have team rewards rather than individual rewards to motivate the employees. Two respondents say that the excellent performers, who

obtain their rewards at the maximum level after two years, will lose their motivational drive to perform well. The reward system is also affected due to the organisation becoming flatter with less post for promotions. With not many rewards and no promotions will demotivate the employees, say 5 respondents. The third element shown under Table 7.3 is the negative responses related to the quality programmes. The negative responses are shown in Table 7.9.

Employees not understanding the quality concept as indicated by 4 respondents also affect the delivery of quality services. Seven respondents say that employees were not told how to apply the quality concept to their work and 1 respondent say that the Quality Day, under the government quality programme, was not exploited to drive in the quality culture into the employees. The other areas affecting the delivery of quality services by the respondents are, quality slogans has no meaning (1 respondent), QCC only used for competition and an absolute waste of time programme (1 respondent) and the quality awards like the Prime Minister's award are too big for employees to appreciate (1 respondent). What the employees want is small awards to reward them for their quality efforts.

Table 7.9. Negative Responses Related to Quality Programmes from Group 2

Negative Statements	No. Of Responses	Percentage
Employees do not understand the quality concepts and do not care about the concept	4	22.2
Employees were not told how to apply the quality concept to their work	7	38.9
Quality Day under the Quality Programmes not exploited to drive in quality culture into the employees	1	5.5
Quality slogans has no meaning	1	5.5
QCC only used for competition	1	5.5
The current quality awards are to high level for employees to be able to receive the awards and be rewarded for quality work	1	5.5
Lack of management commitment on quality programmes	3	16.5
TOTAL	18	99.6

Lack of management commitment too affects service quality (3 respondents). In lack of management commitment, what the respondents say is that the managers themselves are not too bothered about producing quality services and there are lots of followers of these managers, among the employees.

The other areas affecting the quality and productivity of services are poor leadership (2 respondents), poor management (e.g. poor guidance, supervision and coaching) (7 respondents), shortage of staff (2 respondents), lack of equipment (2 respondents), not getting training (2 respondents), managers doing personal work during office hours (3 respondents).

Table 7.3 shows the total number of factors affecting quality and productivity. The highest negative responses is attributed to the performance appraisal system followed by the rewards system and the quality programmes. In comparing

responses obtained from Group 1 and Group 2, we discovered that the negative responses from Group 1 can be summarised into 5 different negative statements while the negative responses from Group 2 can be summarised into 12 different negative statements. The findings indicate that employees in the support group have more varied negative responses on the Performance Appraisal System. On the whole, both groups have shown their dissatisfaction over the implementation of the Performance Appraisal System. The next step is to confirm or disconfirm some of the negative responses received from the respondents.

7.3. THE SECOND PHASE OF THE RESEARCH STUDY

The purpose of carrying out this second phase of research study is to confirm or disconfirm the negative responses obtained during the interview. Under the second phase, employee ratings were extracted from the performance appraisal reports of the employees. Performance appraisal reports are in the form of forms that the appraisees have to fill some part of it and then submit it to the appraisers. The appraisers will then appraise the appraisees by giving marks according to their performance on the appraisal forms. On completion of the appraisals, each form now forms the report on employee's performance. The total mark forms the employee's rating, which represents the overall employee's performance.

7.3.1. Historical Data

The employees' ratings were extracted from their reports from 1990 to 1992. These reports were obtained from the Promotion and Disciplinary Branch, Ministry of Works. This branch is the secretariat for all matters related to performance appraisal reports. Reports for every employee in this ministry, throughout the country is sent to this branch. The ratings, which are considered as data that can be analysed, were tabulated and transferred into the Microsoft Excel worksheet. The number of employee ratings to be use in the analysis depends on the availability of the performance appraisal reports of the employees.

Reports were obtained from the professional and management group, which comprise of civil engineers, mechanical engineers, electrical engineers, quantity surveyors and architects. At the same time reports were obtained from, the first support group which comprise of mostly technical assistants; the second support group which comprise of mostly technicians and clerical; and the third support group which comprise of manual workers. The number of reports available for analysis is shown in Table 7.10.

Table 7.10. Number of Reports Available For Data Analysis

	Professional & Management	Support 1	Support 2	Support 3
1990	1391	804	3274	100
1991	1465	833	3466	100
1992	825	851	3336	1064

7.3.2. Data Analysis

The survey was applied and the data has been analysed. The summary of the analysis is shown in Appendix G2A. Table G2A-1 in Appendix G2A, shows the overall performance evaluation ratings for the professional and management group and the support group from the first support group to the third support group. Except for the third support group, the average marks for all the other groups are not less than 80 per cent. In general, more than 80 per cent of the employees are getting marks above 80 per cent.

The result of this analysis can be used to confirm what some of the respondents say about most marks given at more than 80 per cent. There are two ways of looking at it. Either the employees are all performing very well or employees are always given high marks no matter how they perform. In looking at the performance evaluation reports of this organisation from 1991 to 1992 they show average ratings of 80 per cent and above. The ratings indicate that the organisation is already

providing quality services up to a substantial extent and the service quality gap should be very minimal. But this is not the case as the ratings are not reflective of the actual performance of the organisation. This is proof that appraisers are fond of awarding high marks to their staff that does not reflect their true performance.

To make matters worse, the Public Service Department of Malaysia has determined employees whose performance are evaluated at 80 per cent and above, are qualified for the service excellence award and can be rewarded with the vertical salary progression which is double the yearly basic salary increment. Looking at how appraisers appraise their employees, putting 80 per cent as the limit for the award is meaningless as most appraisers normally award ratings of around 80 per cent for the average workers. The Public Service Department has to set guidelines on how to determine marks to be allocated to the employees. Without the guide, practically everybody is performing excellently and everybody will have to be awarded with the service excellence award. The Public Service Union, CUEPACS, questioned the Public Service Department why were the quotas set at 2 per cent for extremely excellent performance and 3 per cent for excellent performance.

According to the Public Service Department, in their study there are only 5 per cent employees who are excellent. These discrepancies of allocating marks can demotivate staff. At the same time, how can the supervisors show the workers the areas for improvements if the workers were already evaluated at the excellent level. In other words, how can we improve workers performance if they have met the

Public Service Department's criteria for excellence. Hence these findings confirms the comments that appraisers tend to give high marks to the workers.

In carrying out the same type of analysis but this time applying it to employees of the same profession or employees belonging to the same group, it is discovered that, there are also differences in marks given between one locality to another. In Table G2A-2, in analysing the marks for the professional and management group, the highest top mark in one locality in the year 1990 is 99.30 and the lowest top mark in another locality is 87.50. In 1991 the highest is 99.10 and the lowest is 93 and for 1992, the highest is 99.05 and the lowest is 94. In looking at another group of professionals and managers, for the year 1990, the highest top mark is 98.30 and the lowest top mark is 89.80. For 1991 the highest top mark is 98.30 and the lowest top mark is 87.10. If we look at the other tables, Table G2A-3, Table G2A-4 and Table G2A-5, the pattern is the same.

This analysis indicates that even within the same professions but under different locality with different appraisers the excellent performers are differently rated, the same goes with the worst performers. These differences in marks can have a negative impact on the rewards system as the wrong people might be rewarded, as some appraisers are more lenient in their ratings compared to others. When this happens, the extremely excellent performers are the losers and the less excellent performers emerged as the winners. Again, the results from the analysis are able to support some of the opinions given by the respondents during the interview. On the

whole the rating analysis was able to strengthen the results obtained from the interview.

7.3.3. Matching the Results from the Analysis with the Factors Causing Gap 3

The results obtained from both the analyses above can now help to identify which are the gaps causing the service quality gap (Gap 5). Referring to Table 7.2 on the elements affecting quality and productivity, the elements as specified by the respondents are, (1) negative responses related to performance appraisal (2) negative responses related to reward system; (3) negative responses related to quality programmes; (4) poor management; (5) shortage of staff; (6) no training; (7) poor leadership; (8) lack of equipment; (9) managers involved with personal work during office hours; and (10) managers lack of commitment towards quality. Then looking back into the beginning of this chapter, on the factors related to internal service gaps, the factors uncovered from the interview is then matched with the factors affecting all the internal service gaps.

It shows that most of the elements from the interview matches with the most of the factors from the third internal service gap, Gap 3. Which are, (1) role ambiguity; (2) role conflict; (3) poor employee-job fit; (4) poor technology job fit; (5) inappropriate supervisory control systems; (6) lack of perceived control; and (7) lack of teamwork.

If we look back at Chapter 3 (see Table 3.7) on the explanation on the meaning of the seven elements which cause the service performance gap (Gap 3), the explanation does indicate that there is a match between what that has been found during the analysis of the data obtained from the survey to most of the seven elements of the service performance gap (Gap 3).

Therefore, in reference to the meaning of these elements, as explained in Chapter 3, we can say that the negative responses related to performance appraisal can be matched with inappropriate supervisory control systems and the negative responses related to reward system can also be matched with inappropriate supervisory control systems. Also, negative responses related to quality programmes can be matched with lack of teamwork and poor management. Poor leadership can be matched with role ambiguity, role conflict, poor employee-job fit and poor technology job fit. At the same time, the other elements, shortage of staff, lack of equipment, and no training can be matched with role conflict. Finally, managers involved with *personal work during office hours* can be matched with role ambiguity.

At the same time, in the interview, there are two elements under the negative responses related to quality programmes, which matches the factors outside Gap 3. The first element, employees do not understand the quality concepts matches with the Gap 2 factor of inadequate commitment to service quality. The second element, employees were not told how to apply the quality concepts to their work, matches with the Gap 2 factor of inadequate task standardisation and absence of goal setting for quality services.

Gap 2 is the discrepancy between managers' perceptions of customers' expectations and the actual specifications they establish for service delivery. In other words, managers know what customers expect and they should use this knowledge to set service quality standards for the organisation. In cases where managers do not exploit their knowledge, probably due to lack of resources or more importantly due to lack of commitment towards quality and inadequate task standardisation, it may account for Gap 2.

Therefore, the elements affecting quality obtained from the interview indicate that, employees who are unable and/or unwilling to perform the service at the desired level create Gap 3 and managers who know what is expected of the service but do not meet that expectation create Gap 2. About 75 per cent of the respondents indicate that Gap 5 – the service quality gap is caused by Gap 3 while the rest indicate that the service quality gap is caused by Gap 2. In this situation, to ensure that the organisation can deliver quality services, both Gaps 2 and 3 have to be closed but more importantly, basing on the number of responses received, Gap 3 should be closed first. To be certain that Gap 3 does exist, a survey is carried out.

7.4. THE THIRD PHASE OF THE RESEARCH STUDY

The specific antecedents and questionnaire statements are shown in Table 7.11 (Parasuraman, Zeithaml and Berry, 1990; Pitt, Foreman and Bromfield, 1994).

Table 7.11. Specific Antecedents and Questionnaire Statements

Antecedents of Gap 3	Corresponding Statements
Teamwork	Statements 1-5
Employee-job-fit	Statements 6-7
Technology-job-fit	Statement 8
Perceived control	Statements 9-12
Supervisory control systems	Statements 13-15
Role conflict	Statements 16-19
Role ambiguity	Statements 20-24

(Parasuraman, Zeithaml & Berry, 1990)

According to Parasuraman, Zeithaml and Berry (1990), in determining scores for the antecedents of Gap 3, the average score for each antecedent (on a scale of 1 to 7 on which the higher the score the more favourable the current status of the antecedent) can be computed through the following three steps: (1) for negatively worded statements pertaining to the antecedent, reverse the ratings given by the respondents (i.e., score 7 as 1, 6 as 2, etc.); (2) for each respondent, the total score of the statements comprising the antecedent is divided by the number of statements; and (3) add the scores obtained in step 2 across all respondents and divide the total by the number of respondents. The standard statements are shown in Table 7.12.

7.4.1. The Research Approach

This pilot study was performed to achieve the objective of identifying the shortcomings of the questionnaires. Under this pilot study, respondents were tested

on whether they understand how to answer the questionnaires and whether they know what was required of them when they filled up the questionnaires. Before the questionnaires were distributed, the word 'company' in the standard statement was changed to 'organisation'. The word 'customer' is maintained but in the questionnaire that was distributed to the employees, the term 'customer' was explained as to what it meant to them. It was explained that 'customers' refer to their colleagues or other employees in the same unit or the same department that receives services from them. Also, 'customers' could mean employees outside their departments as well as the public outside their organisation that receive services from them.

Table 7.12. The Standard Statements

1. I feel that I am part of a team in my company
2. Everyone in my company contributes to a team effort in servicing customers.
3. I feel a sense of responsibility to help my fellow employees do their jobs well.
4. My fellow employees and I co-operate more often than we compete.
5. I feel that I am an important member of this company.
6. I feel comfortable in my job in the sense that I am able to perform the job well.
7. My company hires people who are qualified to do their jobs.
8. My company gives me the tools and equipment that I need to perform my job well.
9. I spend a lot of time in my job trying to resolve problems over which I have little control.(-)
10. I have the freedom in my job to truly satisfy my customers' needs.
11. I sometimes feel a lack of control over my job because too many customers demand service at the same time. (-)
12. One of my frustrations on the job is that I sometimes have to depend on other employees in serving my customers. (-)
13. My supervisor's appraisal of my job performance includes how well I interact with customers.
14. In my company, making a special effort to serve customers well does not result in more pay or recognition. (-)
15. In our company, employees who do the best job serving their customers are more likely to be rewarded than other employees.
16. The amount of paperwork in my job makes it hard for me to effectively serve my customers. (-)
17. the company places so much emphasis on selling to customers that it is difficult to serve customers properly. (-)
18. <i>What my customers want me to do and what management wants me to do are usually the same thing.</i>
19. My company and I have the same ideas about how my job should be performed.
20. I receive sufficient amount of information from management concerning what I am supposed to do in my job.
21. I often feel that I do not understand the services offered by my company. (-)
22. I am able to keep up with changes in my company that affect my job.
23. I feel that I have not been well trained by my company in how to interact effectively with customers. (-)
24. I am not sure which aspects of my job my supervisor will stress most in evaluating my performance. (-)

(Parasuraman, Zeithaml & Berry, 1990)

In the first survey subject area which is the study on the service performance gap as perceived by employees of the three service branches (Service Branch; Establishment Branch; and Promotion and Disciplinary Branch), the first package of the pilot study was conducted by distributing the questionnaires to a group of 10 respondents selected at random from the three branches. The survey was conducted during office hours and the questionnaire was delivered by hand (desk-dropped) to the selected respondents (package 1). The respondents were requested to fill up the questionnaire for collection at the end of the day. At collection time, the respondents were asked to comment on the questionnaire. Adverse comments were received for Statements 9, 11, 12, 14, 16, 17, 21, 23 and 24. The questionnaire for the second survey subject area (Package 2) was distributed to 30 respondents from the other divisions and branches simultaneously with Package I who were randomly selected. The questionnaires were delivered by hand and later in the day collected by hand.

In comparison to Package I, identical comments were received from the respondents of Package II. The negative statements are not acceptable to the respondents. In general, the respondents commented that it affected their flow in responding to the statements when they came across a negative statement after reading through several positive statements. Some of them commented that they get confused over the negative statements and tend to mistakenly treat the statements as positive statements. The comments given by the respondents are well justified. Hence, the affected statements were modified as in Table 7.13. These modified statements which are included in the questionnaire is shown in Appendix G3.

Table 7.13. The Modified Service Performance Questionnaire

1. I feel that I am part of a team in my organisation
2. Everyone in my organisation contributes to a team effort in servicing customers.
3. I feel a sense of responsibility to help my fellow employees do their jobs well.
4. My fellow employees and I co-operate more often than we compete.
5. I feel that I am an important member of this organisation.
6. I feel comfortable in my job in the sense that I am able to perform the job well.
7. My organisation hires people who are qualified to do their jobs.
8. My organisation gives me the tools and equipment that I need to perform my job well.
9. I don't spend time in my job trying to resolve problems over which I have little control.
10. I have the freedom in my job to truly satisfy my customers' needs.
11. I have control over my job even though too many customers demand service at the same time.
12. I do not have to depend on other employees in serving my customers.
13. My supervisor's appraisal of my job performance includes how well I deliver my services to my customers.
14. In our organisation, making a special effort to serve customers well does result in more pay or recognition.
15. In our organisation, employees who do the best job serving their customers are more likely to be rewarded than other employees.
16. The amount of paperwork involved is unnecessary in my job to effectively serve my customers.
17. the organisation places so much emphasis on selling to customers that it is difficult to serve customers properly. (-) -----DELETED-----
18. <i>What my customers want me to do and what management wants me to do are usually the same thing.</i>
19. My organisation and I have the same ideas about how my job should be performed.
20. I receive sufficient amount of information from management concerning what I am supposed to do in my job.
21. I do feel that I do not understand the services offered by my organisation.
22. I am able to keep up with changes in my organisation that affect my job.
23. I feel that I have not been well trained by my organisation in how to provide services effectively to my customers.
24. I know which aspects of my job my supervisor will stress most in evaluating my performance.

For the employee survey on service performance gap in the three branches (Survey Subject Area I), no sampling was made as all the 69 employees from the population of the Service Branch, Establishment Branch and Promotion and Disciplinary Branch were selected for the survey. The questionnaires were distributed to the employees by hand. The respondents were requested to return the questionnaires by internal mail. The questionnaires were given serial numbers that can be used to detect who are the respondents. For the employee survey on service performance gap for the other divisions and branches (Survey Subject Area II) the questionnaires were distributed to the same respondents selected in the original survey on measuring service quality. The questionnaires were delivered through the internal mail. Respondents were requested to return their questionnaires within two weeks through the internal mail.

7.4.2. Data Analysis

The antecedents to Gap 3 are shown in Table 7.11. Teamwork is represented by Statement 1 to Statement 5. The scores for these statements are averaged. The average score for the 62 out of the 69 employees who responded were used to obtain the mean for Teamwork. The same approach was applied to the other elements. For the second element, Employee-Job-Fit, Statement 6 and Statement 7 are taken into account to obtain the mean. Technology-Job-Fit is represented by Statement 8. Statement 9 to Statement 12 represent Perceived Control and Statement 13 to Statement 15 represent Supervisory Control System. Role Conflict is represented by Statement 16 to 18 with Role Ambiguity represented by Statement

19 to Statement 23. In analysing the data obtained on these statements from the survey on the Survey Subject Area I (A) and Survey Subject Area II (A) it was discovered that both areas have substantial service performance gaps. The tabulated data is shown in Appendix G4A and G4B respectively.

7.4.2.1. Service Performance Gap for Survey Subject Area I

The service performance gaps obtained from the survey of 62 respondents from the Survey Subject Area I (see Chapter 6) on service performance ranges from 4.9 to 5.7. The gaps are illustrated in Table 7.14.

Table 7.14. The Service Performance Gaps for Survey Subject Area I

TEAMWORK	EMPLOYEE-JOB-FIT	TECHNOLOGY-JOB-FIT	PERCEIVED CONTROL SYSTEMS	SUPERVISORY CONTROL SYSTEMS	ROLE CONFLICT	ROLE AMBIGUITY
4.9	5.7	5.6	5.2	4.9	5.4	5.5

The service performance elements that have the highest gaps of 4.9 are Teamwork and Supervisory Control Systems. The lowest gap is Employee-Job-Fit and the second lowest is Technology-Job-Fit. In this survey, since the employees are evaluating their own organisation, there should be a relationship between how they

evaluate their organisation and how they evaluate their colleagues under the service quality survey. Logically the relationship should be that, if there are gaps in the service performance of their organisation, there should also be service quality gaps over services delivered by the organisation. In carrying out a relationship test between service performance gaps and service quality gaps, the findings from the test show that there are negative relationships between the gaps (See Appendix G4A). The relationships are illustrated in Table 7.15.

Table 7.15. Relationship between Service Performance Gaps and Service Delivery Gaps for Survey Subject Area I

	TEAM- WORK	EMPLOYEE- JOB-FIT	TECHNOLOGY -JOB-FIT	PERCEIVED CONTROL SYSTEMS	SUPERVISORY CONTROL SYSTEMS	ROLE CON- FLICT	ROLE AMBIGUITY
Coeff.	0.2281	0.5619	0.1953	0.8054	0.4673	0.5619	0.7017
Of							
Determ.							
Coeff.	0.4776	0.7496	0.4419	0.8974	0.6836	0.7496	0.8377
Of							
Corr.							

The coefficient of correlation values for the seven elements show strong relationships existing between the service performance gaps and service quality gaps (See Appendix G4A). The strength of relationship is highest in Perceived Control Systems. The coefficient of correlation values are further tested using the Correlation Table (Table VII of Fisher and Yates: Statistical Tables for Biology,

Agricultural and Medical Research, Longmans) to make sure these correlation are not resulted from unrelated variables. In looking through the table, at the 5 per cent level of significance, with a sample size of 62, the value of the correlation should not be less than 0.25. If at the 1 per cent level of significance, the values of the correlation coefficient should not be less than 0.3248. This check shows that the values of r are sufficiently large to be significant at the 1 per cent level of significance.

7.4.2.2. Service Performance Gap for Survey Subject Area II

The mean service performance gaps for the different elements obtained from the survey of the 292 respondents ranges from 5.01 to 5.67. Similar to the approach used for the Survey Subject Area I, the gaps are calculated by taking an average score for all the 292 respondents. The gaps are illustrated in Table 7.16.

Table 7.16. The Service Performance Gaps for Survey Subject Area II

TEAM- WORK	EMPLOYEE- JOB-FIT	TECHNOLOGY- JOB-FIT	PERCEIVED CONTROL	SUPERVISORY CONTROL SYSTEM	ROLE CONFLICT	ROLE AMBIGUITY
5.55	5.88	5.67	5.03	5.01	5.49	5.69

The service performance element which has the highest gap of 5.01 is Supervisory Control Systems. The lowest gap is Employee-Job-Fit at 5.88. In this survey, since the employees are not evaluating their own division or branch, there cannot be a relationship study between how they evaluate their organisation and how they evaluate their colleagues under the service quality survey. The results of this survey suggest that internal customer survey should be carried out to test the relationship between service performance gap and service quality gap. The three phases of the research are able to show firstly, there are service quality shortfalls and secondly, the factors that cause the service quality gap (Gap 5).

7.5. SUMMARY ON THE THREE PHASES OF RESEARCH

In the first phase of the research, the responses obtained from the interviews are able to identify areas affecting quality of service delivered by the department. The second phase of the research, on the ratings given to employees obtained from the performance appraisal reports, further support the responses given by the employees in the survey under the first phase of the research study. The findings indicate that the most prominent gap that affects service quality is the Service Performance Gap (Gap 3). To confirm that Gap 3 is the main cause of the Service Quality Gap, the third phase of the research was carried out.

The results of the study show that there are gaps for both the surveys carried out for the study. The most prominent gaps were coming from factors like the supervisory

control system, perceived control system, role conflict and teamwork. A relationship test was conducted for the first survey and the test shows there is a strong negative correlation between the gap scores of the Service Quality Gap (Gap 5) and the Service Performance Gap (Gap 3). The three phases of the research are able to prove that employees will be unable and unwilling to provide quality services in certain working conditions that are not conducive to them. The study also shows that employees form a very important resource of the organisation for delivering quality services as their unwillingness and inability to produce quality work can affect quality services.

The study shows that to improve service quality, people have to be considered as an important element of the organisation. Good management techniques have to be applied to the organisation and the management has to provide strong leadership. Due to some poor management approaches, like the flawed performance appraisal system and flawed reward system, being carried out in the public service, the outcome of the service has not met the aspiration of the Chief Secretary to the Government of Malaysia. According to the Chief Secretary to the Government of Malaysia in his keynote address at the Asia Pacific Quality Control Organisation Conference (APQCO) on 8 August 1994, "Quality programmes initiate new ways of thinking about work and new ways of organising the activities of employees. Out of all the internal players that an organisation has to pay attention to, employees pose the greatest challenge. To be able to satisfy customer needs, the organisation has to harness the support of its employees. Employees are the people who often

come into personal contact with customers on a daily basis especially in service organisations. This can present both a challenge as well as an opportunity for increasing customer satisfaction. Grand promises and announced policies of guaranteeing customer satisfaction is of no use if the very people who are responsible for serving the customer do not share that promise” (Sarji, 1994).

Hence human factor is very important to an organisation. *Recognition* is the key to shifting from an organisational structure that rewards the wrong things to one that taps into people’s inner *motivation*. Eventually it will be able to influence employee behaviour in the direction supportive of a quality culture. In addition, employee support can be obtained by encouraging employee participation and involvement in quality improvement efforts and problem solving. When people work in teams, a mental synergy starts occurring, and ideas rapidly bounce off one another. When knowledge comes together, people can pick up on what others say and add their insights and as a result, they get ideas and solutions that people work in isolation would never come up with on their own.

The key to service quality is whether or not the employees feel committed enough to the organisation to extend personal effort. If they feel that they are a respected member of the organisation and they understand as well as share the organisational vision and goals and they are involved in the continuous improvement of the organisation, they will bring that extra effort to their work. It is clear that top management has to provide the leadership in quality management.

Parasuraman, Berry and Zeithaml (1990) are convinced that, even when guidelines exist for performing services well and treating customers correctly, high-quality service performance is not a certainty. A service performance gap (Gap 3) is likely to occur due to a number of constraints (e.g. poorly qualified employees, inadequate internal systems to support contact employees, insufficient capacity to serve). To be effective, service standards must not only reflect customers' expectations but also be backed up by adequate and appropriate resources (people, systems, technology). Standards must be enforced to be effective - that is, employees must be *measured* and *compensated* on the basis of performance along those standards.

7.6. CONCLUSION

It has been discussed earlier in the chapter that service quality can be affected by the four internal service gaps ranging from Gap 1 to Gap 4. The results obtained from the three phases of the research study show that the main gap that is seen to affect service quality is Gap 3, the service performance gap. Therefore, these area of poor management, according to the results from the research under phase one, show that the elements that affect quality and productivity as indicated by the respondents of the interview are the performance appraisal system and the reward system. Again, in the third phase of the research, supervisory control system emerged as the factor with the highest gap affecting the internal service performance gap under Gap 3. Since they are identified as one of the main areas that affects service quality, hence an in-depth study has to be carried out to see how

does performance appraisals affect performance which have an effect on delivering quality services.

CHAPTER 8

THE EFFECTS OF PERFORMANCE MANAGEMENT ON SERVICE QUALITY

In the last chapter, the findings obtained from the study show that the service quality gap (Gap 5) are caused by the Internal Service Gap 2 and the Internal Service Gap 3. Between the two internal service gaps, Gap 3 is the primary cause of Gap 5. There are seven factors that can cause Gap 3 which will inevitably cause Gap 5 (Parasuraman, Zeithaml and Berry, 1990). The results of the study show that the large gaps are from factors like the supervisory control system and perceived control system. The study shows that these systems relate to the performance appraisal system and the reward system whereby the poor implementation of the two systems affect service quality.

The key to narrowing the Service Quality Gap (Gap 5) is to narrow down the Internal Service Gap 3. In narrowing Gap 3, action should be focused on the Performance Appraisal System. The previous study shows that the flawed performance system affects service quality and the problem will recur if the system is not reviewed. Therefore, this chapter needs to discuss firstly, the Performance Appraisal Systems' position in the management arena; secondly, how it can contribute in managing an organisation; thirdly, what are the problems that might arise when they are implemented; and finally, if there are problems with the system, how can the system be improved or can the system be discarded without

jeopardising the management of the organisation. This study is carried out so that the findings can help guide us take the right action in dealing with performance appraisal so as not to allow it to have a negative effect on service quality.

In order to achieve our research objectives, this research study is carried out by looking at firstly, the importance of human resources and secondly, the need for better management of human resources. The study then went on to look at the use of the performance appraisal system to manage the human resources, followed by looking at the link between Human Resource Management (HRM) and Quality which has been said to affect performance adversely. The discussion on performance appraisal continues with looking at the suggestions made by the proponents of performance appraisal and proponents of TQM with regard to issues on the performance appraisal system.

8.1. HUMAN RESOURCES

A substantial amount of literature has indicated that employees have been considered as the most important resource for delivering quality services (Wright and Rudolph, 1994). The Chief Secretary to the Government of Malaysia (1994) says, "Employees are the most important resource which enables organisations to meet its objectives. These employees can deliver quality and productive services, thus creating organisations of excellence". Hence, employees who are mismanaged can cause problems to an organisation. In view of this, it is this human aspect of

the organisation that most attention has to be given in order to ensure organisational success.

8.1.1. The Importance of Human Resources

Human resources provide the much needed infrastructure an organisation relies upon to face market challenges (Plug, 1994). It is people not technology, who transform an organisation (Thornburg, 1994). Manufacturing organisations have realised that their models of manufacturing have failed to keep up with major shifts in world-wide economic and market conditions. The major reason for these shortcomings lies not with the technology itself but with the choices made about the associated work organisation (Wall, Jackson and Davids, 1992; Parker, Mullarkey and Jackson, 1994). In other words, the key to the success of initiatives in AMT (Gerwin and Kolodny, 1992), JIT (Schonberger, 1986) and TQM (Deming, 1986; Crosby, 1979; Juran, 1989) is likely to lie in an organisation's orientation towards its human resources.

Since human resources forms an important source for an organisation to meet its organisational objectives, this resources have to be managed effectively.

8.1.2. The Management of Human Resources

The management of human resources in the workplace is a matter of central concern to all managers and not only to human resource management professionals. What needs to be adequately addressed is the more efficient use of people. The push for efficiency - particularly with regard to the use of labour at all levels - is widely seen as one of the few remaining means whereby organisations can hold on to or regain the competitive edge (Molender and Winterton, 1994; Arneson and Morrison, 1994).

This efficient use of resources relates to high performance. A superior performance is ultimately based on the people in an organisation. The right management principles, systems, and procedures play an essential role, but the capabilities that create a competitive advantage come from people - their skill, discipline, motivation, ability to solve problems, and capacity for learning. Developing their potential is at the heart of high-performance (Hayes, Wheelwright and Clark, 1988).

The discussions above show that human resources are very important and that this resource has to be effectively managed. A systematic approach has to be used to manage human resources. Literature on human resources shows that the widely used approaches to manage human resources is *Personnel Management* and *Human Resource Management*.

8.2. PERSONNEL MANAGEMENT AND HUMAN RESOURCE MANAGEMENT

The human management approaches of Personnel Management (PM) and Human Resource Management (HRM) have been used to manage human resources in organisations. These approaches are able to address the humanistic needs of the employees in order to enable them to perform well in an organisation. Morgan (1986) says that employees are people with complex needs that must be satisfied if they are to lead full and healthy lives and to perform effectively in the workplace. Particular attention was focused on the idea of making employees feel more useful and important by giving them meaningful jobs and by giving as much autonomy, responsibility and recognition as possible as a means of getting them involved in their work. All these can be done through PM and HRM.

Personnel Management (PM) and Human Resource Management (HRM) is essentially about the management of people which relates to the management of performance for improving organisational effectiveness (Armstrong, 1994; Torrington, 1995; Storey, 1995). The key activities of personnel management as carried out by both line managers and personnel professionals are shown in Table 8.1. Detail discussions on PM and HRM is shown in Appendix H.

Table 8.1. Key Activities of Personnel Management

1. Organisation
<ul style="list-style-type: none">• Organisation design• Job design• Organisational effectiveness
2. Employee resourcing
<ul style="list-style-type: none">• Human resource planning• Recruitment and selection
3. Performance management
4. Employee development
<ul style="list-style-type: none">• Development and training• Management development• Career management
5. Reward management
<ul style="list-style-type: none">• Job evaluation• Pay• Pay-for-performance• Employee benefits
6. Employee relations
<ul style="list-style-type: none">• Industrial relations• Employee involvement and participation• Communications
7. Health, safety and employee services
<ul style="list-style-type: none">• Health and safety• Employee services
8. Employment and personnel administration
<ul style="list-style-type: none">• Employment practices and procedures• Personnel information systems

(Armstrong, 1994)

8.3. MANAGEMENT OF PERFORMANCE

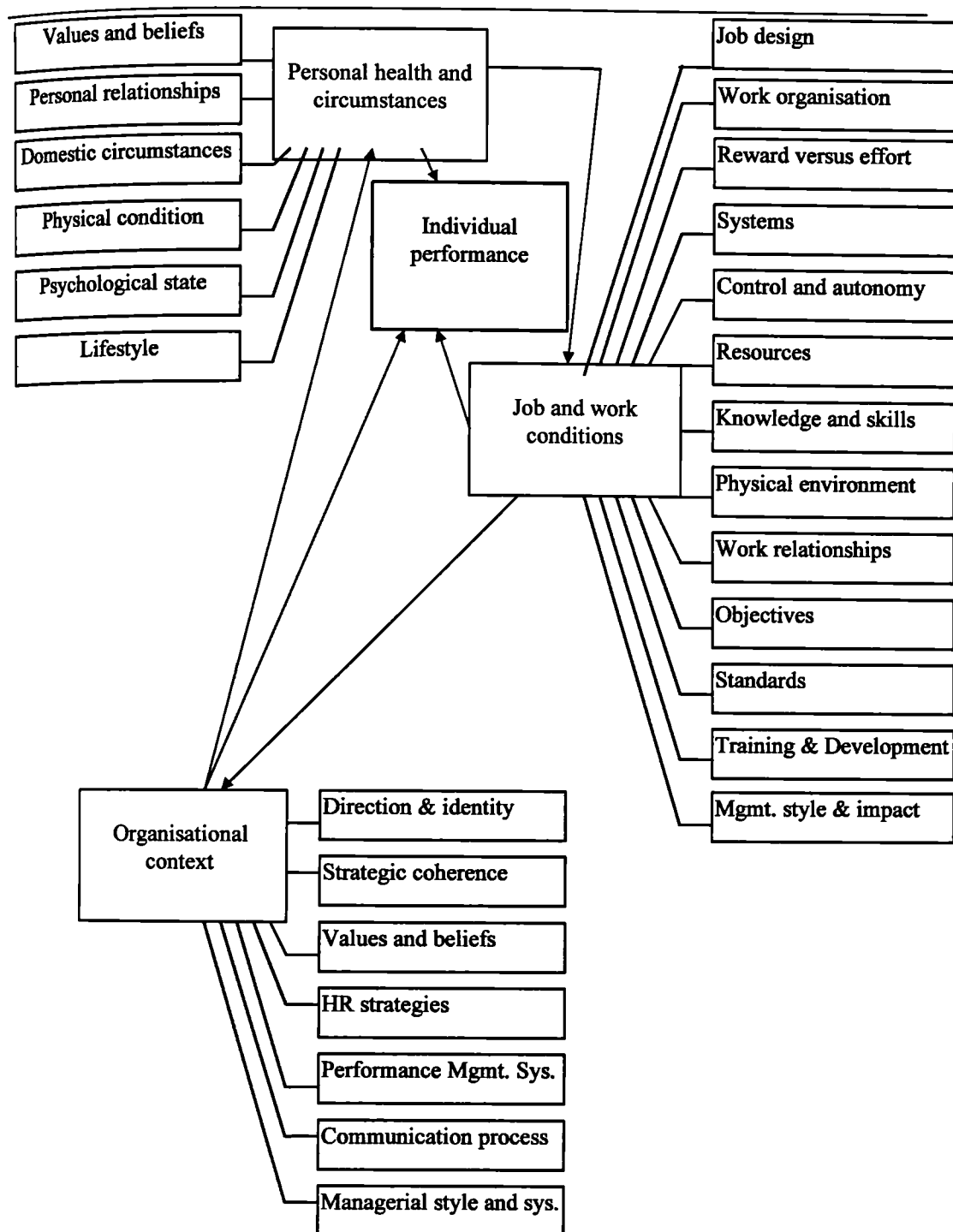
In the management of performance, factors affecting performance have to be well managed in order to improve employee performance. The factors affecting performance are illustrated in Figure 8.1. Detail discussions on factors affecting performance is shown in Appendix H.

These factors affecting performance has to be systematically managed and this calls for the use of performance management. *Performance management* is the systematic approach of managing performance.

8.4. THE PERFORMANCE MANAGEMENT SYSTEM

Performance management is the integrated process of object-setting, appraisal and pay determination which supports the achievement of the organisation's business strategies. At an individual level it will result in action plans related to performance improvement, career development and training (Rogers, 1990; Williams, 1991; IPM, 1992; Wright, 1992).

Figure 8.1. Factors Affecting Individual Performance



(Flanagan & Henry, 1994)

Organisations are taking an increasingly broad view of how the performance management system encompasses or touches on the way people are managed. The *IPM Handbook on Performance Management* (1991) shows a model including the following headings under the description 'performance management':

- strategy and objectives
- performance measurement
- appraisal
- skills training
- coaching and counselling
- performance related pay
- succession management

The definitions on performance management indicate that performance management covers all aspects of human resource management but for many, Performance Management Systems (PMS) is synonymous with appraisal or with performance related pay or both (Fletcher and Williams, 1993; IRS Employment Trends 556; Torrington and Hall, 1995). Therefore what is central in performance management is *performance appraisal*.

8.5. PERFORMANCE APPRAISAL

Performance Appraisal is a technique for measuring employee's performance in an organisation. On the development of performance appraisal, according to Nevling (1992), with the advent of F. W. Taylor's teachings, written in 1909 but not published in a book until 1947, the performance evaluation process was off on a major growth path. Taylor's model codifies management process into four principles:

- Analyse jobs for best method of accomplishing them.
- Scientifically select and train the best person for the job.
- Pay on incentive basis - tie salary to production.
- Manager: planning, preparation and inspection, Worker: carries out manager's directions.

Henry Fayol further developed these teachings. From these principles, the scientific management model was developed. Owing to these teachings the perceived need for the current philosophy of performance appraisals was developed.

Proponents of performance appraisals say that performance appraisals play a vital role in managing human resources. Murray (1994) quoted, "You may hate them,

but if you fail to do them, you're probably not getting the most from your staff. Use the evaluations to emphasise your expectations and to let employees know whether they're measuring up. If they're doing well, they'll appreciate the 'official' recognition, and if they can improve, it's only fair to tell them how. Such feedback increases their productivity and reduces turnover".

The comment suggests that performance appraisals have to be implemented in organisations as they serve several purposes in the management of human resources.

8.5.1. The Purposes of Introducing Performance Appraisal

Performance appraisal is regarded as one of the most valuable human resource tools (see Table 8.5) (Thomas and Bretz, 1994). Gill (1977) and Long (1986) have identified the main purposes of performance appraisal in two studies carried out in the UK. From the study, it is clearly evident almost all organisations view their performance appraisal systems as being centrally concerned with identifying the training and development needs of employees, reviewing their past performance and improving their current performance.

It has been identified that it can be a vital component in recruiting and hiring employees, where it is used to validate selection tests, and in staffing, where transfer, layoff, termination or promotion decisions are made on the basis of appraisal results. In compensation administration, performance appraisal forms the

basis for the administration of merit pay systems (Thomas and Bretz, 1994). Most important, performance appraisal can be used as a motivational tool for communicating performance expectations to employees and providing them with feedback (Beaumont, 1993). Robertson, Smith and Cooper (1992) maintain that in motivational terms, one of the most important aspects of appraisal sessions is to set (in collaboration with the person concerned) appropriate goals for achievement. It was noted that goal-setting is one of the most effective ways of increasing performance. Another use of appraisal interviews in motivation is to strengthen the belief in a link between performance and reward (Industrial Relation Services, May 1994). Finally, performance appraisal is indispensable in training and development activities to assess potential and identify training needs (Bowles and Coates, 1993).

Anderson (1992) noted that the purpose of having performance appraisals can be classified into a number of ways. One of the best known classifications was produced many years ago by McGregor (1960) who groups them in three ways:

- **Administrative** - providing an orderly way of determining promotions, transfers and salary increases.
- **Informative** - supplying data to management on the performance of subordinates and to individual on his or her strengths and weaknesses.
- **Motivational** - creating a learning experience that motivates staff to develop themselves and improve their performance.

Table 8.5. Important Uses for Performance Appraisal (rank order)

1. Improving work performance
2. Administering merit pay
3. Advising employees of work expectations
4. Counselling employees
5. Making promotion decisions
6. Motivating employees
7. Assessing employee potential
8. Identifying training needs
9. Better working relationships
10. Helping employees set career goals
11. Assigning work more efficiently
12. Making transfer decisions
13. Making decisions about layoffs and termination
14. Assisting in long-range planning
15. Validating hiring procedures
16. Justifying other managerial actions

(Thomas and Bretz, 1994)

McGregor's groupings are useful in drawing attention not only to the variety of purposes but also to different organisational philosophies towards performance appraisal. Cummings and Schwab (1973) adopt a different perspective. They

contend that organisations typically view appraisal as having two broad purposes: an evaluative function and a development function.

a) The Evaluative Function

The evaluative function of performance appraisal is in reviewing past performance in the light of what has been achieved: actual performance is assessed in relation to what is seen as desired performance. This function corresponds closely to McGregor's administrative category. Data are generated and used as basis for making decisions on promotions, transfers and salary increases.

b) The Development Function

For the development function of appraisal, concentration is on improving the performance of people by identifying areas for improvement, setting performance targets for the future and agreeing plans for follow-up action. This aspect also involves developing the capacity of people through formulating plans to develop their skills and careers; helping individuals to reconcile their job and career aspirations with opportunities available in the organisation.

Anderson (1992) states that assuming appraisals are properly carried out, appraisees benefit in terms of, greater clarity of the results/standards expected of them;

accurate and constructive feedback on past performance; greater knowledge of strengths and weaknesses; the development of plans to improve on performance by building on strengths and minimising as far as possible weaknesses; an opportunity to communicate upwards views and feelings about the job and the utilisation of the appraisee's skills in the job; a clearer view of the context of the job by learning about the manager's objectives and priorities for the section/department/division; and discussion of career prospects.

Anderson (1992) went further to say that appraisers can benefit if they carry out appraisals in a thorough and conscientious manner. Some of the benefits are, the opportunity to measure and identify trends in performance of staff; better understanding of staff, their fears, anxieties, hopes and aspirations; the opportunity of clarifying the appraiser's own objectives and priorities, with a view to giving staff a better view of how their contribution fits in with the work of others; enhanced motivation of staff, by focusing attention on them as individuals; developing staff performance; and identifying opportunities for rotating or changing the duties of staff.

It is important to recognise that the organisation as a whole and not just individuals, benefits from a carefully implemented performance appraisal scheme. Benefits that accrue to the organisation include improved communications; generally enhanced motivation of staff; the greater harmonisation of objectives; and improved corporate performance.

The purposes of having performance appraisals in the public service of Malaysia is similar in purpose as to what that has been described in the literature discussed above. In Malaysia, the new performance appraisal system was introduced under the New Remuneration System (NRS). This is one of the new administrative approaches introduced by the Government to better administer about 880,000 public sector employees. The main purpose of introducing the NRS, says Sarji (1995) is to motivate Malaysia's public servants to work hard and reward those who give quality service to the public. Under the new scheme, the work of the public servants is assessed twice a year by their immediate supervisors. The recommendations that flow from this decide their progress and material benefits. It introduced a new concept of varied salary movement based on annual performance appraisal.

The New Remuneration Rate System (NRS), which includes the Excellent Service Awards was introduced on 1st. January 1993. The Chief Secretary to the Government of Malaysia in his speech, touching on the NRS, during the convention on 'Re-inventing Government - A New Vision for Government Transforming the Public Sector' on 3 August 1993 says, "Under the NRS, we have created a new set of dynamics through the use of competitions, the measurement of results and the creation of real consequences for success. Under the Excellent Service Awards, employees whose performance appraisal merit them what is described as diagonal salary progression and vertical salary progression will receive bonuses".

The discussions above show that the purposes of introducing performance appraisal is for improving workers performance which can then help improve organisational performance. Despite of its positive purposes, the performance appraisal system is heavily criticised. According to Blanchard (1994), "Every organisation claims that its people are its most important resource. And yet, when I ask people how they like the way their performance is evaluated and how they like the way the review system is run, everybody laughs. No one has anything good to say about the appraisal system".

The comment by Blanchard (1994) plus the critics on performance appraisals goes to show that performance appraisals have not been well implemented which can then create problems. Some of the problems created over the improper implementation of performance appraisal are discussed below.

In Malaysia, the Chief Secretary to the Government of Malaysia (1995) has voiced out his optimism over the creation of a better workforce with the introduction of this new performance appraisal system but the Congress of Unions of Employees in the Public and Civil Service (CUEPACS) is exercising pessimism over this new system. CUEPACS said that under the implementation of the performance appraisal system, the performance evaluations made do not reflect the true performance achievements of the employees (Berita Harian, 15 September 1993).

Over this issue, The New Straits Times (1994) reported that many public servants have written to them to express their frustrations over the New Remuneration

System (NRS). Far from promoting efficiency in the Public Service, it has been condemned by public service unions as a potentially negative force. The unions want the Government to revamp the NRS or abolish it. The main source of their frustration is the very basis of the system - the annual performance appraisal of the work of public servants. They claim the assessment is a highly subjective exercise and too open to biases.

The Secretary General of CUEPACS said that the system looked excellent in theory but did not work. The Secretary General of the Malayan Nurses Union said that the situation is becoming so crazy. Everyone is pushing everyone and bosses are becoming free with their threats. The Deputy Secretary General of the National Union of Teaching Profession said that there has never been a day that passed without the union receiving a complaint from members. It is obvious that the NRS is the single most demotivating factor in the teaching profession. The Secretary General of the National Joint Council of Science and Technology described it as a window decoration which looks beautiful when looked at from the outside. The Government should revamp or introduce a new system if it wants a change in the public service. As long as the NRS is there, public servants will continue to feel disheartened and dissatisfied (New Straits Times, 12 June 1994).

However, the Director General of the Public Service Department said that the complaints on the NRS were merely teething problems and the lack of understanding among the public servants. The problems could be overcome with

time and experience as there were no glaring weaknesses in the system (New Straits Times, 13 June 1994).

Again in 1995, CUEPACS voiced out their discontentment over the system but the Chief Secretary to the government of Malaysia says that there is no intention of changing the system. The Public Service has not received any directives from the Government to change the system (Berita Harian, 22 July 1995). Later on, the Prime Minister of Malaysia said that the Government will review the system to find out if there are any weaknesses in the system before taking further action on it (Berita Harian, 23 July 1995).

A former permanent secretary to one of the ministries, in analysing the situation suggests, "What is required is a review and reform of the whole public service for it to really improve to match our aspirations and expectations for Vision 2020. In the meantime, what can we do to improve the public service? The first priority would be to review the new remuneration scheme (NRS) and to improve it where necessary. The NRS has to be kept, but it has to be refined to improve the morale and efficiency in the whole public service. Only then the public service will support the NRS strongly and be happy about it. So my appeal to the powers-that-be is to improve the NRS and make it be more acceptable to the whole public service" (Navaratnam, 1996).

The call for reviewing performance appraisals indicates that there are problems with performance appraisals.

8.6. PROBLEMS WITH PERFORMANCE APPRAISALS

According to Rogers, Miller and Worklan (1994), in a survey carried out by the Development Dimensions International (DDI) and the Society for Human Resource Management (SHRM) on more than 1,100 people representing 79 U.S. companies, it was discovered that the overall satisfaction with performance management was low - 2.94 on a five-point scale.

Deming (1986) in his book *Out of the Crisis*, provided 14 management principles as requirements to remain competitive in providing goods and services. At the same time, Deming (1986) also listed seven 'deadly diseases' in management practices. The annual performance appraisal, as it is currently implemented by most organisations, is denounced as one of the seven deadly diseases afflicting management.

In the United States of America, on a national level, Vice President Gore has labelled the federal government's performance appraisal process a meaningless exercise. Many for-profit companies have reached the same conclusion. Who likes the idea of being evaluated on his or her honesty, integrity, teamwork, compassion, co-operation, objectivity, dependability, adaptability, people skills, quality of work, quantity of work or communication skills? It is not possible to train a manager to effectively evaluate an employee's performance based on subjective characteristics. Yet organisations spend a lot of money insisting it is possible (Markowich, 1994).

Antonioni (1994) argues that the dissatisfaction with performance appraisal systems has reached a critical stage. In a recent survey of 297 managers from Midwest companies in the United States of America, 32 per cent rated their performance appraisals as 'very ineffective'. While only 4 per cent reported that performance appraisals were 'effective to a large extent'. Another survey of 181 Midwest manufacturing and service organisations revealed that 11 per cent have stopped using annual appraisals, with another 25 per cent plan to discontinue them within the next two years.

Looking further into the problems caused by performance appraisals, Meon (1989) reported that in a 1985 report George S. Odiorne said, "Twenty-five years ago, Douglas McGregor, an MIT professor, wrote a very famous article that was published in the Harvard Business Review called 'An Uneasy Look at Performance Appraisal.' A lot of the problems that he wrote about then are still with us today. We really haven't improved very much since then".

The discussions above show that performance appraisal is a management tool that can be used to improve job performance but instead when implemented can cause problems to the organisation which implements it. Some of the reasons why there are problems when performance appraisals are implemented are due to, (1) the conflicting purposes of implementing performance appraisal (Meyer, Kay and French, 1965; Porter, Lawler and Hackman, 1975; Beer, 1985; Fletcher and Williams, 1985; Feldman, 1985; Mohrman, Resnick-West and Lawler, 1989; Meon, 1989; Nemeth and Stawe, 1989; Wayne and Ferris, 1990; Beaumont, 1993;

Torrington and Hall, 1995); (2) problems in training for performance appraisal (Ilgen and Feldman, 1984; Bernardin and Beatty, 1984; Mohrman, Lawler and Resnick-West, 1989; Beaumont, 1993; Thomas and Bretz, 1994; Roberts, 1994); (3) problems with performance appraisal interviews (Kenett, Waldman and Graves, 1994); (4) problems on the devotion of time to performance appraisal (Bowles and Coates, 1993; Kenett, Waldman and Graves, 1994; Thomas and Bretz, 1994); (5) problems on the accuracy of measuring actual performance (Longenecker, Sims and Gioia, 1978; Graber, Breisch and Breisch, 1992; Beaumont, 1993; Bowles and Coates, 1993; Markowich, 1994); (6) problems of conflicting purposes when implementing performance appraisals together with quality programmes (Peters and O'Connor, 1980; Walton, 1986; Deming, 1986; Scholtes, 1987; Graen and Scandura, 1987; Waldman and Spangler, 1989; Moss, 1989; Juran, 1989; Meon, 1989; Dobbins, Cardy and Carson, 1991; Nevling, 1992; Carter, 1994; Boudreaux, 1994; Eckes, 1994; Kenett, Waldman and Graves, 1994; Thomas and Bretz, 1994; Carter, 1994); and (8) problems like the halo or horns effect, initial impression and recency effect, as well as central tendency rater bias (Lowe, 1986; McBey, 1994; Gibbons and Kleiner, 1994).

These reasons affecting performance appraisals are discussed in detail in Appendix H. Literature on performance appraisals acknowledged that proper implementation of performance appraisal in organisations can have a positive effect on job performance but in practice, as shown in our discussions above, this is never the case. Therefore, in view of its importance in relation to improving job performance, which can lead to quality services, the performance appraisal system

has to be reviewed to meet the organisational objectives. There are some suggestions on improving performance appraisals.

8.7. SUGGESTIONS ON PERFORMANCE APPRAISALS

There have been numerous suggestions on either how to improve the performance appraisal system so as to enable it to meet its objectives or to completely do away with performance appraisals. According to Boudreaux (1994), Edward Lawler in his 'Speaking My Mind' article, argues that, although there are problems with how performance appraisals usually are administered, there are still good reasons for using them. The problem, he says, is that most appraisal systems do not motivate employees and instead, create conflict. This particularly occurs when appraisals are tied up to merit pay and when they are based on forced ranking. He concludes that this justifies abandoning the traditional approach to performance appraisal, but this does not justify replacing it with nothing.

In support of this argument, Carson, Cardy and Dobbins (1991), Graber, Breisch and Breisch (1992) and Antonioni (1994) say that discontinuing performance appraisals alone will not solve the problem. Rather, the process can be made effective and successful if it is designed to meet the needs of three stakeholders - the organisation as a whole, work groups, and the individual.

On the other hand, Meon (1989) quoted Del Nelson, Director of the Pacer Share Civil Service Demonstration Project to Eliminate Performance Appraisals, who points out the administrative cost savings by eliminating performance appraisals, “It will free all the resources of all the people who make the appraisals, justify the appraisals, log the appraisals, get demotivated by the appraisals, compare the appraisals, study the appraisals, justify the appraisals, log the appraisals, get demotivated by the appraisals, write regulations on the appraisal systems, maintain the regulations on the appraisal system, develop a procedure to appeal the appraisal, appeal the appraisal, adjudicate the appeals of the appraisals, develop new appraisal systems (the life span of most seems to be three to five years, maximum), print the appeal forms, stock and issue the appraisal forms, review the appraisals, approve the reviewed appraisals, type the appraisals.... It will allow workers to concentrate on work that results in real ‘value-added service/product’ to the organisation’s customers”.

There are also some other suggestions on how to improve performance appraisals. Performance can be affected by the systems in the organisation rather than individual abilities. Carson, Cardy and Dobbins (1991) suggest that sensible appraisal of employee performance is dependent on three assumptions. First, employees must differ significantly in their contribution to the organisation. Secondly, the source or cause of this differential performance must be at least partially due to the individual employees. Causes of performance attributed to individuals are ability and motivation; these are distinguished from causes of performance outside individual control, such as equipment quality, dependency on

group output and non-equivalent work flows. Third, raters must be able and willing to distinguish these two sources of performance variation and to base ratings only on performance within individual control.

Deming (1986) argues firstly, that individual employees do not differ significantly in their work performance; secondly, variation in performance is due predominantly to factors outside individual control; and thirdly, he believes that raters are incapable of distinguishing between person-caused as opposed to system-caused variation in performance.

Dobbins and Russell (1986) say that there is a tendency to attribute poor performance to the employee even when it was produced by external factors.

Norman and Zawacki (1991) observe that most traditional performance appraisal systems assume that individual employee performance is the proper unit of analysis. In reality, jobs vary on a continuum from complete independence to total integration within a team or group. Individual performance appraisal must be adopted to evaluate only those aspects of individual performance that are directly attributable to the employee and design group appraisal methods for situations where the productive process is more integrated.

Another suggestion put forward by Randall, Packard and Slater (1984) is that, the uses of appraisal can be divided into three broad categories, and that an appraisal system should attempt to satisfy only one of these. The categories they suggest are:

reward reviews, potential reviews and performance reviews. Given that there is a choice about the way the appraisal system will be used, they believe that the greatest advantages will be gained by the use of performance reviews. Such reviews include appraisal of past performance, meeting of objectives, identification of training needs, problems preventing better performance and so on.

It was suggested by Anderson (1992) and Murray (1994) that in using performance appraisals, a great deal of problems can be reduced if the simple and basic rule of applying performance appraisal is observed. The simple, but fundamentally important issue of talking through with the key parties involved, and helping them to clarify the benefits they can reasonably expect to derive from performance appraisal is one of the essential foundations upon which a system of performance appraisal can be built. This process, if carried out effectively, is likely to assist in resolving the possible conflicts among appraisal objectives to which reference has previously been made and in gaining the commitment of all parties to performance appraisal (Anderson, 1992; Murray, 1994).

The search for ways to improve the effectiveness of the process of employee appraisal includes training the individuals responsible for carrying out appraisals. Smith (1990) identified three types of training programmes, as shown in Table 8.8.

Table 8.8. Appraisal Training Programmes

1 Rater error training The aim here is to reduce rating errors by exposing raters to examples of common errors such as leniency, halo, central tendency, etc. As they become familiar with these sources of errors, they are encouraged to avoid them.
2 Performance dimension training The aim here is to familiarise raters with the dimensions along which performance is appraised. This is done by providing descriptions of job qualifications, reviewing existing rating scales or having them participate in the development of such scales.
3. Performance standards training The aim here is to try and get the raters to share common perceptions of performance standards. This is done by presenting samples of job performance to those undergoing the training, together with the ratings assigned to the performance by trained experts.

(Smith, 1990)

Appraisal training shows managers how their behaviour and attitudes affect the review session. In this way, there will be more consistent results from the appraisal process (Sahl, 1994).

Eckes (1994) points out that some TQM proponents would like to see performance appraisals abolished. The arguments earlier on indicate that TQM cannot be implemented along side performance appraisals in managing an organisation. In reality performance appraisals are necessary and should not be abolished. In view of this, there were suggestions in which performance appraisals can be used positively which can cater for the TQM approach of organisational management. The suggestions were Customer-supplier Appraisals, Process Appraisals and Performance Planning.

i). The Customer-Supplier Appraisal

According to Eckes (1994), the central point of TQM is customer focus. Customers constantly conduct appraisals. More organisations are now obtaining performance evaluations through customer satisfaction surveys. Thus, as more companies are recognising their internal and external customers, it is logical that the appraisal function should take into account how well employees satisfy the customer's requirements. Some large organisations changed its appraisal system to allow for substantial customer input into performance appraisals.

ii). The Process Appraisal

Eckes (1994) notes that most organisations focus on outputs to the detriment of the processes that create those outputs. For instance, what is the first thing most people do when they have a headache? They take an aspirin. While it is natural to want to eliminate the pain, taking a pain reliever deals only with the symptom and not on the problem. In the long run, it is more beneficial to concentrate on the process components that produced the headache.

The emphasis of traditional performance appraisals is on the output. Some organisations, however, are moving in the direction of conducting process appraisals as opposed to performance appraisals. Process appraisal places emphasis on the success factors that produce superior performance. Whatever the key success

factors are, it is the manager's and employees' responsibility to engage in the right process behaviours.

Process appraisals are also advisable because process behaviours tend to be more within the employee's control. For example, the output of sales volume might be affected by many outside factors, such as economic conditions. If a key success factor is technical knowledge, however, the employee can work to improve this factor regardless of economic conditions.

The traditional performance appraisal system emphasis is on measuring and rewarding/punishing individuals in an infrequent, formal manner; attention to system improvement or employee development tends to be minimal. In contrast, process performance appraisal directs attention toward group-level performance and improvements to the work system. As such, process performance appraisal becomes compatible with a TQM-oriented organisational culture which puts greater emphasis on group or team performance and rewards, as opposed to the traditional performance appraisal emphasis on individual performance and individual rewards (Kenett, Waldman and Graves, 1994).

Traditional appraisal is also oriented towards ratings of personal or behavioural traits associated with performance. Conversely, process appraisal emphasises measures of continuous improvement and the extent to which internal and external customers are being satisfied.

In a process appraisal system, individuals are classified as either performing according to expectations, as defined by what is expected to be achieved within the particular work system or below/beyond what is expected with the current work system.

An evaluation of 'in the system' would be the predominant score in a process performance appraisal system. As stated previously, the rationale for such a simplified rating system is that: (a) system factors are a major influence on an individual's performance; (b) managers should not be expected accurately to delineate how much of an individual's performance is due to system factors versus personal factors; and (c) performance appraisal energy should be directed away from individual appraisal and more towards process improvement and team appraisal and development.

Performance appraisal in process appraisal systems becomes a teamwork exercise in identifying and resolving chronic performance problems affecting the entire work system. Once the causes of such problems are determined, the mean performance level of all members can be enhanced (Waldman, 1993).

iii). Performance Planning

Graber, Breisch and Breisch (1992) produced a different set of performance design. Division, department and individual goals must be determined by customers' needs.

Performance planning for individuals begins with setting clear goals and metrics for the entire organisation based on customers' needs. These must then be translated into goals and metrics for all sub-groups and processes within the organisation. *Each individual should identify his or her internal customers and document their needs in relation to organisational goals. Only then can individuals set priorities, goals and metrics that fully support the organisation and its customers.*

Using activities and results means that employees are being evaluated on elements they truly control. Furthermore, the appraisal form becomes a useful diagnostic and coaching tool that can help determine where an employee might have gone wrong. Finally, the steps required to reach long-term results, from organisational focus to cultural change, can be addressed by measuring significant activities.

Performance Planning and review processes based on these design characteristics will provide many benefits:

- Employees will learn about organisational plans and goals. Further, they will feel more positive about their contributions; they will gain a better understanding of the value they bring to the organisation.
- Employees will get an opportunity to participate in setting personal, department, and division goals. Participation in this process leads to greater commitment and accomplishment.

- Employees can help evaluate the variety of activities they perform relative to the organisation's needs. Priorities can be set to ensure that critical activities get the attention they require.

The importance of customer evaluations in the performance review process cannot be overstated. Allow customer satisfaction surveys to play a role in performance evaluations. Internal customers can and should be asked whether others in the company support their efforts to meet department and organisation goals.

8.8. CONCLUSION

We can conclude from the discussions above that organisational success is very much dependent on its human resources but with the condition these human resources have to be well managed. It has been identified that human resources can be managed through the personnel management and human resource management approaches. Under these approaches, there is the performance management system which have components that can address issues on employee performance. One of the components which has been considered as the heart of performance management is performance appraisal.

The performance appraisal system is a widely used system of managing performance but this approach has been widely criticised. It has been said that the approach has not been able to meet its main objective of improving employee

performance. In the earlier study, it was shown that performance appraisal is one of the main contributors to Gap 3 which then causes Gap 5. The reason for this, as shown by the study on performance appraisal in this chapter is that when implemented in an organisation, the instrument faces a number of problems which results in affecting job performance and ultimately affecting service quality. According to the proponents of TQM, it is said to be in conflict with TQM which is an approach to improving quality that has been widely introduced in public service organisations. Since the study shows that service quality is affected by performance appraisal, the study has to be further extended to firstly, confirm on what that has been said about performance appraisal and secondly, find out how this barrier to service quality can be overcome to make sure quality services can be delivered to the public. Therefore, this extended research study is discussed in Chapter 9.

CHAPTER 9

PRESENTATION AND ANALYSIS OF THE FINDINGS ON PERFORMANCE MANAGEMENT AND TOTAL QUALITY MANAGEMENT (TQM)

The results obtained from the study in Chapter 7 show that the delivery of quality public services can be affected by a flawed performance appraisal system. These findings are further supported by the findings obtained from conducting a survey using the standard questionnaire for measuring internal service performance gap (Gap 3) suggested by Parasuraman, Zeithaml and Berry (1990). Due to these findings, the research was further extended into Chapter 8 to discuss on the literature related to performance appraisals. The main objective for these discussions was to find out how performance appraisals affect organisations, especially on organisations' quality efforts. It can be concluded from the discussions that performance appraisals, when improperly used, can affect job performance which then affect service quality.

Hence we need to find out on which aspects of the performance appraisals that have been improperly implemented that can affect performance and service quality efforts, especially on TQM. It is very important at this stage to be able to identify these aspects of performance appraisals, as they will help to decide on how to deal with the performance appraisal system. The ultimate aim of carrying out this extended research, specifically on the Malaysian Public Service, is to identify these

barriers to service quality, which are related to performance appraisals and to draw conclusions on performance appraisals from the findings.

9.1. THE RESEARCH APPROACH

Chapter 5 describes the methodological approaches that can be adopted to obtain information. It gives quite a substantial description on the quantitative and qualitative approach of data collection. Both the approaches, as the descriptions show, have their advantages and disadvantages. In looking at the two approaches, we come to a conclusion that, in this respect, the quantitative approach should be adopted. Therefore, the mail survey approach is suggested here. In contrast to the interview approach that was carried out in Chapter 7, which concentrates on a few questions but with an in-depth exploration of the issue under study, the survey approach to be carried out here is done not to the extent of the in-depthness of the interview approach but is constructed with varied questions spanning across 8 sections. The vast amount of the different types of data to be collected justifies the usage of the survey technique under the quantitative method. If the interview technique is used, it will be a very lengthy process which will take up a lot of time and if the telephone approach is used, the respondents will lose interest on the survey after the first 20 minutes of conversation (Schmitt and Klimoski, 1986).

The survey is concentrated on the divisions, units and branches that come directly under the Ministry of Public Works. The sampling technique applied is the

stratified simple random sampling technique. At the start, for each department, an identification process to determine who are appraisers and who are only appraisees was carried out. The employees were then divided into two groups.

The first group comprises of appraisers and the second group comprises of appraisees. In order to be sure that the data will be representative for both groups, sampling was done within the different groups. For the first group, there are only a handful of appraisers. Hence, no selection of samples was carried out and all the appraisers in all the departments were selected as respondents. We have to take note that for the first group, the appraisers are also appraisees with their supervisors appraising them but the appraisees in the second group are purely appraisees without any responsibilities to appraise other employees. The selection of respondents is illustrated in Table 9.1.

Table 9.1. Selection of Respondents

DEPT NO.	DEPARTMENT	NO. OF STAFF	GROUP 1 (Appraisers)	GROUP 2 (Appraisees)	TOTAL	PERCENTAGE FROM POPULATION
9	Administration Division	101	20	40	60	59.4
3	Finance and Accounting Division	123	20	55	75	61.0
14	Development and Implementation Division	32	10	10	20	62.5
12	Highway Planning Unit	37	7	17	24	64.9
13	Internal Audit Unit	11	3	8	11	100
22	Service Branch; Establishment Branch; and Promotion and Disciplinary Branch	69	10	30	40	58.0
	TOTAL	373	70	160	230	61.7

In the Administration Division, for the first group 20 employees were selected and for the second group 40 employees were randomly selected. This gives a ratio of Group 1 to Group 2 as 1 : 2. The total selection of 60 respondents for this division represents 59.4 per cent of the employee population of the division.

The same approach was carried out for the Finance and Accounting Division. The employees selected for Group 1 were 20 and for Group 2, who were randomly selected, were 55. This selection too gives a ratio of about 1 : 2. The overall number of samples represents about 61 per cent of the Finance and Accounting

Division employee population. The third division, the Development and Implementation Division, in term of its organisational structure, it is top-heavy. In order for the sample selection of the survey to be just about representing 60 per cent of the employee population, the selection of respondents made for Group 1 is 10 and for Group 2 is also 10, which gives a ratio of 1 : 1. Under the Highway Planning Unit, 7 employees were selected for Group 1 and 17 randomly selected for Group 2. Again, like the sample for the first two departments, it gives a ratio of about 1 : 2.

The Audit Unit is a small unit staffed with only 11 employees. Therefore all the 11 employees were selected for the survey. Group 1 then comprises of 3 employees and Group 2 comprises of 8 employees. For the three branches, there are altogether 69 employees. According to its organisational structure, this is a bottom-heavy department. In this case, all the 10 employees in Group 1 were selected and to make the samples represent about 60 per cent of the population of the three branches, 30 employees were selected randomly for Group 2. The sampling ratio of Group 1 to Group 2 is 1 : 3.

Before the actual survey was conducted, a pilot study was carried out. The questionnaire constructed for the pilot study to probe into the various aspects related to performance appraisals as well as TQM was divided into 8 parts. In the first part, the respondents were required to furnish details about themselves such as their job designation, age and their views on performance appraisals. The second part was included to examine general attitudes towards performance appraisals. The third

part was used to probe into the respondents' experience of their most recent appraisal interview conducted by their supervisors. The fourth part was included to obtain background information on performance appraisal. Appraisers who carried out appraisal interviews on staff who reported to them were required to give their views under Part 5. Part 6 was on the performance appraisal briefing programmes attended by the respondents as appraisees and Part 7 was about the performance appraisal training programme attended by respondents as appraisers. The effects of performance appraisals on TQM and the organisation's effort to implement TQM were investigated in Part 8.

In the application of this questionnaire in the pilot study, twelve employees, two from each department, were selected. They were requested to respond to the questionnaires that were collected after 2 days from the date of delivery. During collection time the respondents were individually asked to comment on the questionnaire. About 60 per cent of the respondents commented that there should be a space for the respondents to give their general comments about the new performance appraisal system.

Other comments received from the respondents were that question no. 5 in Part 3 did not have enough selection of answers for respondents to make their selection. Another selection 'the same amount of time was spent for discussing on strengths, weaknesses and ways of improving your performance' should be included. The same should be done for question 6. The respondents also gave their comments on questions 7, 8 and 9 under Part 8. It was said that these questions are not relevant at

all. Question 7 is on 'Is it important for you to achieve your yearly work targets?'; question 8 is on 'Is it very important for you to produce high quality work?'; and question 9 is on 'Can you achieve your yearly work targets and at the same time produce quality work?'.

The comments received were highly appreciated but none of the comments were considered in amending the questionnaire. On the comment about having spaces for general comments, it was a very constructive comment and in actual fact, spaces for the general comments should have been included in the questionnaire. But the main reason for its elimination from the questionnaire is because of the fear of getting less response due to the excessive numbers of unstructured questions in the questionnaire.

In Chapter 5, it was mentioned that the potential for using open-ended questions is more limited than with face-to-face interview or telephone interviews since their presence reduces response rates (Falthsik and Carroll, 1971), which can affect the reliability and validity of the data collected. In order to overcome this handicap the questions in the questionnaire are constructed rigorously to include all aspects of the study on performance appraisal that is required.

The comments for extra answers required for Question 5 and Question 6 under Part 3, has also not been considered. The intention of constructing the questions as such is because a controlled situation is required here. It is felt that in any performance appraisal interview, there is bound to be interviews with most time spent on certain

matters and least time spent on either matters. As an example, in Question 5 Part 3, the question is, 'Which of the following was most time spent in discussing' and the selection of answers allowed for were 'Your weaknesses', 'Your Strengths' and 'Ways of improving your performance'.

If we allow another selection, 'The same amount of time was spent for discussing on strengths, weaknesses and ways of improving your performance', as required by the respondents in the pilot study, respondents will tend to select this answer. But in actual fact there can never be a situation where the interviewer will be able to spend equal time in all aspects. Hence, the construction of this question limits the choice for respondents to be able to select the most convenient answer without really thinking about the actual amount of time spent on each of the matters.

The comments received to eliminate Question 7, 8 and 9 in Part 8 has not been accepted. The intention of including these questions is to look at employees' commitments on quality issues. There can be no doubt that the questions look simple and not probing but the data is relevant in looking at quality issues in relation to performance appraisal, for example, there are questions asking about whether employees have access to the same office facilities.

If they do have access to the same facilities, their performance variation is not attributable directly to the office system failure but more on personal failure that can also indirectly be related to system failure of poor management systems.

The questionnaire then, without any amendments made to it is used for the actual survey. A copy of this questionnaire has not been attached as an appendix but quick references are presented in separate parts in this chapter. This questionnaire was distributed to 230 respondents. This figure represents 61.7 per cent of employees in the departments under the Ministry of Public Works. It was distributed through the internal mail. The respondents were requested to return the questionnaire within two weeks through their administrative officers for collection.

9.2. THE SURVEY RESPONSES

The response received from the survey is shown in Table 9.2. The overall number of responses received from the survey is 157 out of the 230 questionnaires distributed. The response rate in terms of percentage is 65 per cent.

This rate of response is considered high because the samples selected forms 60 per cent of the population. Hence the data collected from the survey is representative of the population. The results of the survey are shown in Appendix I1.

Table 9.2. The Survey Responses

DEPT NO.	DEPARTMENT	NO. OF STAFF	TOTAL NO. OF QUEST. DIST.	QUEST. DIST. FOR GROUP 1	NO. OF RESPONSE RECEIVED FOR GROUP 1 (APPRAISERS)	QUEST. DIST. FOR GROUP 2	NO. OF RESPONSE RECEIVED FOR GROUP 2 (APPRAISEES)
9	Administration Division	101	60	20	18	40	30
3	Finance and Accounting Division	123	75	22	21	53	26
14	Development and Implementation Division	32	20	10	9	10	3
12	Highway Planning Unit	37	24	7	7	17	11
13	Internal Audit Unit	11	11	3	3	8	2
22	Service Branch; Establishment Branch; and Promotion and Disciplinary Branch	69	40	10	5	30	22
	TOTAL	373	230	72	63	158	94

9.3. DATA ANALYSIS

In the guide on performance appraisals, issued by the Public Service Department of Malaysia, it is listed that performance appraisals are carried out to determine:

- the yearly salary increments. It is used to determine whether the salary should be increased: (a) diagonally which amounts to three standard yearly salary

increments; (b) vertically which amounts to two standard yearly increments; (c) horizontally which is the standard yearly salary increments; or (d) static increments, which amounts to no yearly salary increments at all;

- whether a person is qualified for promotion;
- whether a person is qualified for special transfers;
- whether a person is qualified to receive service awards or ceremonial awards;
- plan for training needs;
- employees' placement in areas most suitable for their potentials, abilities and self development; and
- counselling for the under-performers and the unmotivated in order to improve employee performance and motivation.

To see whether the opinions of the respondents tie-up with the list under the guide in performance appraisal, during the survey, the respondents were requested to give their opinion on why performance appraisals are carried out.

9.3.1. Opinions on Why Performance Appraisals Are Carried Out

One of the inputs required from the respondents in the first part of the questionnaire is on their views on why performance appraisals are needed. Some of the respondents gave more than one statement. Their opinions are listed in Table 9.3. In describing the outcome of the survey, 23.5 per cent of the total number of statements made by the respondents say that performance appraisals are used to determine rewards and salary increments.

There are 9 statements that say that the performance appraisals are used to control staff, in the sense that the performance appraisal can help make sure staff follow office rules and regulations. What they meant is that performance appraisal can be used to deter staff from breaking office regulations and office discipline. The highest number of statements made by the respondents, showing a response rate of 35.3 per cent is on improving job performance. This figure shows that more than a third of the respondents do know the core importance of implementing performance appraisals.

Table 9.3. Opinions on Why Performance Appraisals Are Carried Out

Opinion	No. of Responses	Percentage
Determine rewards and salary increments	32	23.5
Transfers	1	0.7
Counselling	5	3.6
Form of control to make sure regulations followed	9	6.6
Improve job performance	48	35.3
Just to measure performance	20	14.7
Measure whether objectives have been met	8	5.8
Measure whether set work targets have been met	7	5.1
Promotions	6	4.4
TOTAL	136	99.7

In analysing the pattern of responses given by the respondents on the purposes of having performance appraisals, there are indications that most of the employees know specifically why performance appraisals are carried out. The respondents were able to state either one or more statements which ties up with the Public Service Department of Malaysia's guide on the purpose of implementing performance appraisals.

As indicated above, 35.3 per cent of the respondents say that performance appraisals are used to measure performance which can then help improve performance. At the same time about 23.5 per cent of the respondents say that

performance appraisal can help measure performance which can help determine the kind of rewards that can be awarded to the employees in connection with how they perform. This result is quite surprising as it was expected that a much higher response should have been obtained on this issue of linking performance with rewards. There is a possibility that the respondents do not see the link between rewards and performance improvements. About 4.4 per cent of the respondents attached performance appraisals to promotions. The reason for this low percentage of statements on promotion may be due to the new organisational structure that has been made flatter with fewer posts for promotions. Another important usage of performance appraisal is for counselling purposes but very few respondents indicate it.

Up to this point, the analysis shows that the employees know that performance appraisals are carried out for certain purposes but none of the respondents says that performance appraisals can be used to identify training needs. None of the respondents too says that performance appraisals can be used to identify individual abilities and competencies for placement of these employees for self-developmental purposes. Looking at the results of the survey of Part 6 of the questionnaire on Performance Appraisal Briefing Programmes for Appraisees, in Statement F1, 107 respondents out of 139 respondents have been told what are the objectives for conducting performance appraisal. At the same time, in Statement F2, more than 50 per cent of the respondents have been briefed on the use of the new performance appraisal system but yet the responses show that there is a lack of emphasis on training and development purposes in carrying out performance appraisals.

The findings show that the benefits of carrying out performance appraisals (see Anderson, 1992) will not be obtained if the communication of its benefits are not passed on to the employees.

In looking at the survey on Part 7 on Performance Appraisal Training Programme for Appraisers, the findings are able to show that the problem with training on performance appraisals is that most of the training tends to occur only at the initial development of the appraisal system (see Thomas and Bertz, 1994) and without acquiring the required expertise (Robert, 1994). The findings is further strengthened by looking at the analysis of data from statements C26 and C27 in Part 3 showing that there is lack of emphasis on training and development. *Sixty two per cent of the respondents say that training and development requirements to improve performance were not discussed during the interview.* Hence the analysis shows that the approach in implementing the performance appraisal is of the judgmental type rather than the developmental type.

9.3.2. General Attitudes towards Performance Appraisal

The next part of the survey, Part 2, involves looking at the general attitudes of employees on performance appraisals. Respondents were requested to respond on a 7 point Likert scale which ranges from a continuum of 1 for strongly disagree to 7 for strongly agree. The number of responses received is shown in Table 9.4 and the

numbers are referred to as B1 to B6 which means they are under Part 2 of the questionnaire which statements numbered from 1 to 6.

Under Statement B1, 68 per cent agree that performance appraisals can help develop better understanding between employees and supervisors. In Statement B2, 85 per cent of the respondents agree that performance appraisals make a strong contribution to the organisation by encouraging employees to perform more productively. Only 13.5 per cent disagree. Under Statement B3, 61 per cent of the total number of respondents agree that the yearly salary increments should be based on performance appraisal while 35 per cent disagree. In Statement B4, 57 per cent agree that the yearly increments obtained from performance appraisal can motivate staff to perform better but 36 per cent disagree.

Table 9.4. Responses to Statements B1 to B6, Part 2

No.	Statement	Selection						
		Strongly disagree					Strongly agree	
		1	2	3	4	5	6	7
B1	Performance appraisal helps to develop a better understanding between you and your supervisor	10	18	8	14	26	70	10
B2	Performance appraisal makes a strong contribution to the organisation by encouraging people to perform more productively in their jobs.	6	10	5	3	34	89	9
B3	The yearly salary increments, whether diagonal, vertical, horizontal or static increments, should be based on the marks obtained from performance appraisals.	14	28	13	4	17	62	16
B4	The yearly salary increments, whether diagonal, vertical, horizontal or static increments, based on the marks obtained from performance appraisals can motivate staff to perform better.	18	22	16	9	28	53	8
B5	The yearly salary increments, whether diagonal, vertical, horizontal or static increments, based on the marks obtained from performance appraisals received by staff have been fairly awarded.	15	56	30	8	18	24	5
B6	On the whole, the performance appraisal system with the performance related yearly salary increment awards under the New Remuneration Rate System (SSB) has been implemented satisfactorily.	14	60	33	9	13	25	2

Up to this point, in analysing the responses, the pattern shows that employees show a positive attitude towards performance appraisal. This is especially true by the responses shown under Statement B1 and Statement B2. In Statement B1, 106 out of 156 responses, which is 67.9 per cent agree that performance appraisals help to develop understanding between staff and supervisor. In Statement B2, the 'agree'

responses are much higher, with 136 out of 156, showing a response rate of 87.2 per cent on the statement on 'performance appraisal makes a strong contribution to the organisation by encouraging people to perform more productively in their jobs'. There is still support for performance appraisal even though not overwhelmingly in Statement B3 and Statement B4. In Statement B3, 61 per cent support that salary increments should be based on performance appraisal and 57 per cent support that the pay increments can motivate employees. The findings so far show that in theory, performance appraisal does get support from the employees.

The analysis shows that performance appraisal with the pay increment tied to it are accepted by the employees as the instrument which can help motivate them to perform well. But in analysing Statement B5, 29 per cent of the total number of respondents agree that the yearly salary increments received by staff have been fairly awarded but 65 per cent of them disagree. Under Statement B6, 25.5 per cent of the total number of respondents agree that on the whole, the yearly salary increments award system has been carried out successfully but 68.5 per cent disagree. These findings strengthened the findings by Eckes (1994), Moss (1989) and Kenett, Waldman and Graves (1994). The analysis shows in general that the respondents do agree in principle that rewards through salary progressions should be based on performance appraisal. In addition, they agree that the rewards given by way of the salary increments can motivate employees to improve performance. But under statement B5, a majority of them acknowledge that the salary increments have been unfairly rewarded. At the same time most of them indicate that they are dissatisfied with the overall implementation of the system.

This analysis indicates that the system in theory looks very promising and employees are convinced that it can motivate them but when it is implemented, they get dissatisfied seeing other employees who are poor performers getting rewarded. They feel dissatisfied when they feel that they deserve to get the awards but other undeserving employees are able to beat them to it. These findings confirm the findings on the problem of the accuracy of measuring actual performance mentioned by Longenecker, Sims and Gioia (1978) and Graber, Breisch and Breisch (1992). However, there is a need to take note on the results obtained in Table 9.4 which might be subjected to acquiescence bias due to the way the questions were constructed.

9.3.3. Interviews

The third part of the survey involves looking at the most recent appraisal interview.

The responses received from the survey are shown in Table 9.5 to Table 9.9.

Table 9.5. Responses to Statements C1 to C8, Part 3

No.	Statement	Selection				
		1	2	3	4	5
C1	Was your performance appraisal report given to you before the appraisal interview?	Yes	No			
		72	83			
C2	How much notice were you given before you had to attend the appraisal interview with your supervisor?	no notice at all	1 day or less	2-3 days	4-7 days	More than 1 week
		33	15	16	6	4
C3	If the appraisal report was not given to you before the interview, was the report shown to you during the interview?	Yes	No			
		48	33			
C4	How long did your appraisal interview lasted?	Under 25 min.	25-40 min.	40 min. to 1 hour	Over 1 hour	
		97	43	5		
C5	Which of the following was most time spent in discussing	Your strengths	Your weaknesses	Ways of improving performance		
		6	30	102		
C6	Which of the following was least time spent in discussing	Your strengths	Your weaknesses	Ways of improving performance		
		49	40	43		
C7	Did you make any preparations for your appraisal interview	Yes	No			
		37	110			
C8	If you did undertake preparations, please indicate how much time approximately you spent preparing for the interview.	Less than half hour	Half hour to one hour	1 hour to 2 hours	Over 2 hours	
		33	15	4		

Under C1, 53.5 per cent of respondents say that their performance appraisal reports were not given to them before the interview. This figure shows a high proportion of employees who were deprived from making a proper preparation for the appraisal interview and making a proper representation later on during the interview. Those that were given the reports just before the interview represent 44.5 per cent. About 20 per cent of respondents were given a day or less to look at the forms and 21.5 per cent of them were allowed between 2 to 3 days to look at the forms. Only 8 per cent had the opportunity of going through the form for between 4 to 7 days and 5.5 per cent were allowed more than a week to do so.

The analysis indicates that most of the employees, about 64.5 per cent of them, do not get the chance or had only less than a day to go through the forms before the interviews are held. This lack of opportunity to prepare for the interviews is further shown by the responses received for Statement C7. There were 110 respondents who say that they do not prepare for the interview at all. Only 25 per cent of them say that they do so. Even then, most of them (63.5 per cent) took only less than half an hour to prepare for the interview. About 28.8 per cent of them took more than half an hour but less than an hour and only 7.7 per cent took more than an hour but less than 2 hours to prepare for the interview.

Table 9.6. Responses to Statements C9 to C12, Part 3

No.	Statement	Selection				
		1	2	3	4	5
C9	How do you feel during the appraisal interview?	Uneasy to a substantial extent	Uneasy to some extent	Relax to some extent	Relax to a substantial extent	
		5	10	100	31	
C10	If the answer to Question 9 is UNEASY, can you tell us why?					
C11	What was discussed during the interview?	Primarily on your job performance	On both your job performance, and on your personality, but with more emphasis on your job performance	On both your job performance, and on your personality, but with more emphasis on your personality	On both your job performance and on your personality equally	Primarily on your personality
		67	45	15	8	
C12	Were you able to put forward and discuss your ideas and feelings at the interview?	Hardly at all	To a modest extent	To a reasonable extent	To a substantial extent	
		10	37	90	8	

In looking at Statement C5, the responses received show that the interviews were conducted in the right manner as 102 out of 138 respondents (73.9 per cent) say that the most time was spent in discussing on ways of improving job performance. But, the interview system in allowing for proper representation has been undermined as under Statement C3, only 48 respondents out of 81 who were not initially given the performance appraisal reports before the interviews, were allowed to look at their appraisal forms during the interview. These analyses show that the employees were not given the chance to prepare for the interview. It is against the principle of transparency in performance appraisal as announced by the Chief Secretary to the Government of Malaysia (1993).

Under Statement C4, 66.9 per cent of respondents say that their interview lasted less than 25 minutes. About 29.6 per cent say that the interview lasted between 25 to 40 minutes and 3.4 per cent had their interview between 40 minutes to an hour. This short period of time spent for interviews are further confirmed by the interviewers themselves. In Statement E3, Part 5, 31 per cent say that they spent less than 25 minutes for the interview. About 55.4 per cent interviewers say that they spent 25 to 40 minutes and only 12.5 per cent say that they spent 40 minutes to 1 hour for the interviews. In tying up these responses with those under Statement C13 which indicates that 10.6 per cent of interviewees had up to 50-70 per cent of the discussion time during the interview and another 50.3 per cent had up to 30-50 per cent, the analysis shows that in general employees have only about 10 to 15 minutes of the whole interview time to say what they want to say.

The limited time given for the interviewees to respond during interviews are further confirmed by the interviewers themselves. Under E4, Part 5, 42.6 per cent of the interviewers say that interviewees contribute between 50-70 per cent of the discussion time during the interviews. Another 42.6 per cent of the interviewer say that appraisees contribute between 30-50 per cent of the discussion time during the interviews. Only 14.8 per cent of the interviewers say that interviewees contribute less than 30 per cent of the discussion time during the interviews. Within this limited time span, 62 per cent of the respondents indicate that they were allowed to put forward and discuss ideas to a reasonable extent, 25.5 per cent were allowed to a modest extent and 6.9 per cent hardly had any chance at all to put forward their ideas and feelings.

As shown by the responses received for Statement C14, the poorly executed interview approaches can also cause dissatisfaction among the interviewees. Only 12 respondents feel extremely satisfied with the interview. Forty-three respondents feel satisfied but 73 respondents responded by saying that they did not feel anything after the interview. This is followed by 20 employees who say that they were dissatisfied with the interview and one respondent says that he was very dissatisfied with the interview.

Table 9.7. Responses to Statements C13 to C18, Part 3

No.	Statement	Selection				
		1	2	3	4	5
C13	Please estimate, approximately, the percentage of time you contributed to the discussion at the interview.	Over 70 %	50-70 %	30-50 %	Less than 30 %	
		2	15	53	71	
C14	At the end of the interview did you feel:	Extremely satisfied	Satisfied	Do not feel anything	Dissatisfied	Extremely dissatisfied
		12	43	73	20	1
C15	At the end of the interview did you feel:	Encouraged	Slightly encouraged	Discouraged	Do not feel anything	
		30	31	53	35	
C16	How do you feel about the assessment made by your supervisor?	Extremely fair	Reasonably fair	Unfair	Very unfair	
		15	67	63	3	
C17	Do you think there are external factors, for example, the close relationship between the supervisor and the appraisee that can affect the performance appraisal?	Hardly at all	To a modest extent	To a reasonable extent	To a substantial extent	
		32	59	37	22	
C18	At the end of the interview do you know what are your strengths and weaknesses?	Hardly at all	To a slight extent	To some extent	To a substantial extent	To a great extent
		22	78	47	6	

Furthermore, only 41 per cent feel encouraged to perform better after the interview while 59 per cent of them did not feel any difference or were discouraged by the interview. Under C9 only 10.3 per cent of the respondents indicate that they feel uneasy during the interview. To most of the respondents this annual appraisal interviews have been a routine activity encountered by them year after year.

The responses received under C11 indicate that the right dimensional areas were measured on in carrying out the performance appraisals. Fifty per cent of respondents indicate that the discussions were primarily on job performance while another 33 per cent of them say that the discussion was on job performance and on personality but with emphasis on job performance. There was no discussion carried out just on personalities.

In Statement C18, 14.4 per cent of the respondents say that they hardly know their strengths and weaknesses after the interview. Another 51 per cent say that they are able to know their strengths and weaknesses only to a slight extent and another 30.7 per cent of respondents say that they are able to know their strengths and weaknesses to some extent. This analysis indicates that the interviews have not been carried out in the right manner as even after the interview, most of the employees are not able to tell what are their strengths and weaknesses.

Table 9.8. Responses to Statements C19 to C27, Part 3

No.	Statement	Selection				
		1	2	3	4	5
C19	Has the interview any effect on your performance?	No effect at all	Improve performance to a slight extent	Improve performance to some extent	Improve performance to large extent	I do not know
		51	66	14	22	
C20	What do you think of the interview?	of no importance	of moderate importance	of reasonable importance	of substantial importance	
		22	27	83	20	
C21	How do you see your appraiser in telling you about your performance?	Not honest	slightly honest	very honest	I do not know	
		8	66	38	40	
C22	Do you have your yearly work targets	Yes	No			
		147	2			
C23	Do you and you supervisor discussed to set your yearly works targets?	Yes	No			
		117	30			
C24	If Yes, do you agree with the yearly works targets set by you and your supervisor?	To a substantial extent	To some extent	To a limited extent	No at all	
		18	101			

The responses received for Statement C19 show another negative feature of the interviews carried out. About 33.3 per cent of the respondents say that the interviews have hardly improve their performance at all. Another 43.1 per cent say that the interviews only improve their performance to a slight extent and 9 per cent say that the interviews improve their performance to some extent. Only 14 per cent of the respondents say that the interviews do have a substantial impact on performance.

Even though the respondents are not satisfied with the interviews but, they say that interviews are important in performance appraisals. Only 14.4 per cent say that interviews are not important. The rest of the respondents which make up 85.6 per cent say either that the interviews, are of modest importance; are of reasonable importance; or are of substantial importance. The findings obtained from the data analysis is able to confirm on what that have been said by Kenett, Waldman and Graves (1994).

In looking at C21 on how the respondents felt about the honesty of their appraisers, even though 38 of them think that they are honest to a substantial extent, 40 of them say that they could not tell whether the appraisers are being honest with them or not and 66 responded by saying that the appraisers are honest only to some extent. This is an important area uncovered by the analysis in showing that performance appraisals can be flawed if appraisees think that appraisers are not being honest with the appraisees during the interviews.

Table 9.9. Responses to Statements C25 to C27, Part 3

No.	Statement	Selection				
		1	2	3	4	5
		Very much more	More	Equal	Less	Very much less
C25	Do you feel that you have been allocated more or less work under the agreed annual work targets as compared to your colleagues?	2	34	109		
		Yes	No			
C26	Were your training and development requirements to improve your performance discussed during the interview?	58	94			
		Yes	No			
C27	If YES, were you sent for training or courses discussed in the interview?	32	26			

The statements from C22 to C25 are on the set work targets. In general, employees have their own set work targets. These set work targets are normally determined through having discussions between the employee and the supervisor. About 79.6 per cent of the respondents say that their set work targets were determined by discussing with their supervisors.

Eighteen respondents indicate that they agree to a substantial extent on the set work targets. Fifty-one of them agree to some extent and 49 of them agree to a limited extent. Only one respondent totally disagrees with the set work targets.

Seventy five per cent feel that the amount of work allocated to them under the set work targets are of equal amount as compared to the rest of their colleagues. But

the problem that arises in this area is that different appraisers give different marks even though the appraisees have completed their work targets. This discrepancy is shown by the responses received under Statement E8, Part 5. In this situation, 55.9 per cent of appraisers say that they do not give the maximum marks if employees complete all of their tasks under the set yearly work targets.

These findings, like the findings from Statement B1 to B6, show that employees are affected by the lack of accuracy of measuring performance. The lack of accuracy can also be tied up due to some common problems affecting performance appraisal, like, according to Lowe (1986) and McBey (1994), the halo effect, the pitch-fork effect, central tendency, the recency error, length of service bias, the loose rater, the tight rater and the competitive rater.

The overall opinion that can be formed out of the analysis on the interviews carried out is that, most of the respondents show dissatisfaction or are not too bothered about the interview. In Statement C14, 49.3 per cent respondents say they do not feel anything after the interview and 13.5 per cent say they were dissatisfied.

In another statement, Statement C15, 35.5 per cent responded by saying that they felt discouraged rather than encouraged to perform after the interview. Another 23.4 per cent indicate that they do not feel anything. Only 40.9 per cent say that they were encouraged to perform after the interview session. In conclusion on interviews, the interviews in general are poorly executed.

9.3.4. Background Information of Performance Appraisal

The fourth part of the survey forms the next part of the data to be analysed. The choice of answers selected for Statements D1 to D12, Part 4 on Background to Performance Appraisals is shown in Table 9.10 to Table 9.12.

Under Statement D1, employees who rarely discuss or never discuss their work performance show the highest percentage rate of 45.2 per cent as compared to 30.9 per cent for those who quite often discuss the work performance and 21.9 per cent for those who very often discuss their work performance. These findings show that work performance is not constantly monitored and the monitoring is often left to the mid-year performance review and the annual performance review.

Apart from discovering about the poor supervision provided by supervisors it is also discovered that the style of management is highest for the autocratic style of management. Fifty-nine respondents say that their supervisors make decisions without seeking the views of the employees. Fifty-eight respondents say that their supervisors make decisions after staff consultation and only 38 make decisions alongside employees.

Table 9.10. Responses to Statements D1 to D4, Part 4

No.	Statement	Selection				
		1	2	3	4	5
D1	How often do you and your supervisor discuss your work performance apart from the discussion in the appraisal interview?	Very often 34	Quite often 48	Rarely 49	Never 21	Do not need to 3
D2	Please indicate the category which most closely describes the managerial style of your supervisor.	Makes decisions on his or her own usually, without seeking views of staff 59	Makes decisions on his or her own usually, after consulting with staff 58	Likes to involve staff in decision making 30	None of these 8	
D3	Please indicate how frequently your supervisor coaches you (i.e. provides you with on-the-job guidance and instruction) to help you develop your performance.	Very frequent (more than once per week) 25	Fairly often (once or twice in 2 weeks) 68	Occasionally 47	Never 14	
D4	The coaching provided by your supervisor is:	Adequate 8	Reasonably adequate 74	Barely adequate 55	Inadequate 16	

On the coaching aspect, 16.2 per cent of respondents say that they receive very frequent coaching or guidance. About 44.1 per cent say that they receive coaching fairly often. Another 30.5 per cent of them say that they get coached occasionally and 9 per cent admit that they never get any coaching. In looking at D4, only 5.2 per cent of respondents say that the coaching provided is adequate. About 48.3 per cent say that the coaching provided is reasonably adequate, 35.9 per cent say that the coaching is barely adequate and 10.5 per cent say that the coaching given is inadequate. The analysis shows that although the amount of time given for coaching seems high but the coaching itself is said to be inadequate. This can either mean that the quality of coaching is poor, the employees lack training or there is a possibility that the supervisors themselves need training.

Table 9.11. Responses to Statements D5 to D9, Part 4

No.	Statement	Selection				
		1	2	3	4	5
D5	What do you think of the pay increment that you received as compared to how you perform?	Inade- quate	Barely adeq- uate	Reas- onably adeq- uate	Adeq- uate	
		3	100	25	25	
D6	What do you think of your marks given by your supervisor?	Not accur- te	Accua- -te to some extent	Accua- -te to a subst- antial extent		
		107	40	8		
D7	What do you think of the level of pay increment awarded to public employees in relation to their performance?	Inade- quate	Barely adeq- uate	Reas- onably adequ- ate	Very adeq- uate	
		102	38	10	5	
D8	How do you feel if you know other employees whom you think do not deserve to get higher pay increments but are getting them?	Do not feel anyth- ing	Demo- tivated to a limite d extent	Demo- tivated to some extent	Demo- tivated to a substa ntial extent	
		42	75	32	6	
D9	Are you able to meet your set yearly work targets at the end of the year?	Comp- letely	To a subst- antial extent	To some extent	To a limite d extent	
		83	40	32		

Under Statement D5, 65 per cent of respondents say that they do not receive the right pay increment when compared to how they perform. This is the case of employees whose performance are evaluated at a scale of 95 per cent and above who are qualified to receive the diagonal yearly salary increments which amount to 3 times the standard yearly salary increments but did not received them. Because of the quota system which allows only 2 per cent of the employees under this category to get the multiple pay increments, those that are qualified but do not fall into the 2 per cent quota, as their marks are marginally less, do not get the increments. The same goes for those who achieved marks of 90 per cent and above but below 95 per cent. These employees are qualified to receive double pay increments but because of the 3 per cent quota set by the government, not everyone who is qualified will receive the multiple salary increments. The inclusion of this quota system can have a demotivating effect on employees who have performed well but were not rewarded accordingly. On the other hand, a great deal of monetary resources is required if the government is to reward everyone who qualifies for the award.

Under Statement D6, 94.8 per cent of the respondents feel that the performance appraisals have not been fairly carried out as some employees have been given high marks which they do not deserve to get. Apart from that, under Statement D7, 97.9 per cent of the respondents say that most employees have not been rewarded according to what they deserve to get in relation to their performance. What this means is that the employees feel that the Government is not paying the public employees enough as compared to their level of service performance given to the government. Because of these factors, 48.3 per cent of the respondents feel

discouraged to a limited extent to perform well. About 20.6 per cent feel discouraged to some extent to perform well and 3.9 per cent feel discouraged to a substantial extent to perform well.

Table 9.12. Responses to Statements D10 to D12, Part 4

No.	Statement	Selection				
		1	2	3	4	5
D10	What do you think of the assessment made on the amount of work completed by you according to the set work targets?	Accu- rate to a subst- antial extent	Accu- rate to some extent	Not at all accur- te		
		69	72	13		
D11	Do you have to carry out work that is not agreed upon in the set work targets?	To a subst- antial extent	To some extent	To a limite d extent	Not at all	
		11	57	67	16	
D12	Does your supervisor take into account work that has been carried out by you, but it has not been stated in the agreed works targets, in assessing your performance?	To a subst- antial extent	To some extent	Not at all	I do not know	
		31	31	15	74	

In looking at the yearly set work targets, 53.5 per cent say that they are able to meet their targets wholly, 25.8 per cent are able to meet substantially and 20.6 per cent say they are able to meet the target to some extent. In tying up on how accurate the amount of work completed were assessed, 44.5 respondents feel that the supervisor is accurate to a substantial extent but 46.5 per cent feel that the assessment is

accurate only to some extent. Another 8.4 per cent of respondents say that the assessment is accurate to only a limited extent.

Further complication is created when employees have to carry out work not agreed upon in the yearly set work targets. About 7 per cent of the employees had to carry out work outside the set work targets to a substantial extent, 36.8 per cent had to carry out work outside the set work targets to some extent, 43.2 per cent carry out work outside the set work targets to a limited extent and only 10.3 per cent do not have to carry out any extra work outside the set work targets.

The increased workload outside the set work targets increased the inaccuracy of assessing the work completed by the employees. This is proven by the responses given by the respondents under Statement D12. About 4.6 per cent of the respondents do not know whether the supervisor will account for the extra work they have carried out. At the same time only 20.5 per cent think that, only to some extent, the work done is taken into account. Another 10 per cent of respondents say that the work done are not accounted for at all in their job assessment.

The data analysis to part 4 is followed by the data analysis to Part 5, which is on the interviewers.

9.3.5. Interviewers

The statements with their responses for Statement E1 to E8, Part 5 on Interviewers is shown in Table 9.13 and Table 9.14. On the average, most of the interviewers interview about 5 to 6 interviewees. The highest number of interviewees that an interviewer has to interview is 13 and the lowest number is 1. The amount of time taken for the interviewers in preparing for a typical interview ranges from less than half an hour to one hour. About 29.3 per cent of the interviewers take less than half an hour and 41.4 per cent of the interviewers take half an hour to one hour.

These figures show that the interviewers do make preparations before conducting the interviews. Only 3.5 per cent of interviewers admitted that they do not carry out any preparations before an interview.

Under Statement E5, only 17.9 per cent of the interviewers say that the interviewees are not at ease during the interview where as many as 62.5 per cent say that the interviewees are at ease during interviews. About 19.6 per cent of the interviewers admit that they do not know whether the interviewees are at ease or otherwise. These figures are combined with E6, which shows that the 46.4 per cent of the interviewers say that the interviewees are not fearful at all during the interview and only 33.9 per cent say the interviewees are either slightly fearful or substantially fearful during the interview. Twenty-five per cent of the interviewers say that they cannot tell whether the interviewees are feeling fearful or not. Although these figures, only 17.9 per cent of the interviewers say that the interviewees felt uneasy

during the interviews and only 33.9 per cent of the interviewers say that the interviewees are either slightly fearful or substantially fearful, seems small but its effect on interviews is very high. These figures show that a substantial number of interviews have been carried out ineffectively as the interviewees are in a poor position to speak their minds out during the interviews.

Table 9.13. Responses to Statements E1 to E8, Part 5

No.	Statement	Selection				
		1	2	3	4	5
E1	Please indicate the number of staff you interviewed on.					
E2	How much time do you normally spend preparing for a typical appraisal interview with a member of your staff?	Less than half hour	Half-hour - 1 hour	1-2 hours	Over 2 hours	No preparations at all
		17	24	10	5	2
E3	How long, on average, are the appraisal interviews you conduct with members of your staff?	Under 25 minutes	25-40 minutes	40 minutes - 1 hour	Over 1 hour	
		18	31	7		
E4	On average, for what percentage of the time does the appraisee contribute to the discussion?	Over 70 %	50 - 70 %	30 - 50 %	Less than 30 %	
			23	23	8	
E5	In your view, how do the appraisees feel during the appraisal interview?	Uneasy to a substantial extent	Uneasy to some extent	Relax to some extent	Relax to a substantial extent	
		3	7	35	11	
E6	In your opinion how do the appraisees feel in speaking their minds out?	Fearful	Slightly fearful	Not fearful at all	I do not know	
		3	16	26	14	
E7	What do you think of the appraisal interview?	Waste of time to a substantial extent	Waste of time to some extent	Waste of time to a limited extent	Not wasting time at all	
		4	13	42		

Table 9.14. Responses to Statement E8, Part 5

No.	Statement	Selection				
		1	2	3	4	5
E8	What marks do you give if your staff complete all of their tasks under the set yearly works targets?	Full marks	Less than full marks			
		26	33			

The next two parts of the survey are on the Performance Appraisal Briefing Programme for Appraisees under Part 6 and on the Performance Appraisal Training Programme for Appraisers under Part 7.

9.3.6. Performance Appraisal Briefing for Appraisees

The responses to Statements F1 and F2, Part 6, are shown in Table 9.15. The selections of answers to the statements are either a 'yes' or a 'no'. A 'yes' answer is indicated by 1 and a 'no' answer is indicated by 2.

Table 9.15. Responses to Statements F1 to F2, Part 6

No.	Statement	Selection	
		1 YES	2 NO
F1	Have you been told what are the objectives for conducting performance appraisals	107	32
F2	Have you attended a formal performance appraisal briefing programme that briefs you on the new performance appraisal scheme?	73	66

Although there are 77 per cent of those appraisees who had been told of the objectives of having performance appraisal and 52.5 per cent of appraisees who have attended formal performance appraisal briefings, they still did not put their emphasis on performance improvement, training and personal development. Similar to the responses of the appraisees, even though the appraisers, with 85.3 per cent of them had attended formal briefings on performance appraisal, they too did not emphasise training and development. With this kind of negative outcome, what can be said is that there is a possibility that the management is not too concerned about understanding the objectives of performance appraisal. Management is taking the attitude that performance appraisal is carried out to obtain marks, only for reasons of promotions and pay increments. The management has not embodied the true spirit of implementing performance appraisal.

The findings derived from this data analysis confirmed what that have been said by Torrington and Hall (1995), Fletcher and Williams (1985), Mohrman, Resnick-

West and Lawler (1989), Meyer, Kay and French (1965), Meon (1989) and Porter, Lawler and Hackman (1975) on the conflicting purposes of implementing performance appraisal.

9.3.7. Performance Appraisal Briefing for Appraisers

Similar to Part 6, the selection of answers to the statements in Part 7 shown in Table 9.16 are either a 'yes' or a 'no'. A 'yes' answer is indicated by 1 and a 'no' answer is indicated by 2.

Table 9.16. Responses to Statements G1 to G3, Part 7

No.	Statement	Selection	
		1 YES	2 NO
G1	Have you attended a performance appraisal training programme?	17	44
G2	Have you attended a performance appraisal briefing programme that briefs you on the new performance appraisal scheme?	52	9

9.3.8. The Implementation of TQM

It was mentioned earlier on in Chapter 8 that performance appraisal can undermine the implementation of quality programmes in organisations whereby the system discourages quality improvements. Therefore, in order to confirm or disconfirm these findings, the survey on quality, TQM and the impact of performance appraisals on TQM was carried out simultaneously with the survey on performance appraisal which was included in the 8th part of the survey which is on the Implementation of TQM. The responses to Statement H5 to H23, Part 8 on The Implementation of TQM is shown in Table 9.18 and the responses received is shown in Table 9.20 to Table 9.23.

In the first question, the respondents were requested to give their opinion of the term 'QUALITY'. There are 113 out of 157 respondents which make up 72 per cent who responded with their opinion on quality. Altogether there are 125 statements given and these statements have been summarised in Table 9.17.

In analysing the statements, it can be seen that 42 out of the 125 statements, making up 33.6 per cent, conform to the common quality definitions of providing services to customers, meeting customer's needs and conforming to standards. Apart from that another 29 statements (23.2 per cent) define quality as, accurate or no mistakes; reduce costs, time or labour; work acceptability; excellent work; and excellent output. These statements too are frequently used to describe quality. Statements like on time; meet set work targets; work systems improvements; works processes

improvements; maximum quality effort; and high quality work which makes up 43.2 per cent of the statements have some quality ingredients in them and therefore can be part of the normal quality definitions.

Table 9.17. The Meaning of Quality

Meaning of Quality	No. of Statement	Percentage Rate
Conforming to standards	3	2.4
Meet customer requirements	19	15.2
Customer satisfaction	8	6.4
Meet individual or organisational objectives	6	4.8
Customers first	2	1.6
Provide services to customers	4	3.2
Culture of excellence	1	.8
On time	14	11.2
Meet set work targets	3	2.4
Accurate or no mistakes	11	8.8
Reduce costs, time or labour	5	4.0
Work acceptable by everyone	2	1.6
Excellent output, excellent work, producing the best	11	8.8
Work systems improvement	1	0.8
Work process improvement	3	2.4
Maximum quality, produce quality goods, produce quality services, maximum quality effort or high quality work	32	25.6
	125	100.0

Under H2, respondents were asked whether they practice the concept of quality in doing their job. There are 109 of the respondents who say they do. They were then asked in what way they practice the concept of quality in doing their work. The responses received from the respondents are summarised in Table 9.16.

In analysing the statements, only 13 out of the 125 statements cited by the respondents show that their work is linked to customers. The rest of the statements like accurate; no mistakes; no wastage; work with care; produce work in time; follow office procedures, rules and regulations; meet individual and organisational objectives; responsible; meet requirements; meet standards; and carry out work according to plans, which can be a part of producing quality work, are more or less statements describing how the respondents carry out their work in order to produce good work which they feel can produce quality work.

In other words, these other statements are not out of the way statements as these statements have some bearing on producing quality work but there is no direct impact on producing quality work.

In the earlier part, it was analysed that the respondents understand the meaning of quality but when the statements on how they apply the concept of quality were analysed, the analysis shows that the respondents are not sure of how quality concepts should be applied in carrying out their work. These findings tie up with the findings under Chapter 7.

Table 9.18. Producing Quality Work under the Quality Concept

Quality Work	No. of Statement	Percentage Rate
Accurate, no mistakes	14	11.2
No wastage	2	1.6
Customer care	3	2.4
Work with care	5	4.0
In time	7	5.6
Follow Client's Charter	4	3.2
Follow procedures, rules and regulations	10	8.0
Produce good work, work at best	8	6.4
Meet individual or organisational objectives	6	4.8
High quality work	14	11.2
Responsible	4	3.2
Meet requirements, meet standards	9	7.2
Carry out work according to plan	3	2.4
Excellent output	2	1.6
Meet customer needs	10	8.0
Improve job weaknesses	2	1.6
Meet work targets	3	2.4
Deliver quality services	5	4.0
Quality work attitude	3	2.4
Teamwork	4	3.2
Systematic work	7	5.6
	125	100.0

In Chapter 7 some of the respondents responded by saying that employees were executing their public duties according to what they have to do and not as to what other employees (customers) need. The requirement of carrying out work to meet customer's needs and not for their own sake has been mentioned before by the Prime Minister of Malaysia in 1984 but even to this date, from the findings of the survey, the public employees have not fully applied this approach. Looking at the positive side of this analysis, even though there is not much consideration about customers in their statements, the respondents still feel that they are applying the quality concepts in their work. The positive indication comes from 69.4 per cent of the respondents who say that they practice quality in doing their work.

The employees' positive attitude towards producing quality work is further supported by the responses given under Statement H8. About 68.2 per cent of respondents said that it is very important to them to produce quality work. At the same time, under statement H9, 84.4 per cent of the respondents said that they are able to achieve their yearly work targets and at the same time produce quality work.

The analysis indicates that the employees want to get involved with quality because most of them feel that the quality work produced by them is taken into account in their performance evaluation. Under Statement H6, 50 per cent of the respondents say that a substantial extent of the quality of work carried out is taken into account in their performance evaluations. Another 15.5 per cent of the respondents say that the quality of work carried out is taken into account to some extent in their performance evaluations. Only 33.8 per cent say that they are not sure whether

quality of work is taken into account in their performance evaluation. This is an area where the appraisers have to clarify to the employees on how quality of work is taken into account in performance appraisals.

The overall analysis here shows that even though the employees feel that they are producing quality work but their other responses show that they still lack the understanding on how the quality concepts should be applied to their work. This proves that there are some shortfalls in the implementation of the quality programmes introduced by the Government. The next area of analysis is on the meaning of Total Quality Management. The respondents were asked to define Total Quality Management. The responses received from the respondents are shown in Table 9.17.

In the survey, only 62 respondents gave their opinion on the meaning of TQM. From the 62 respondents 80 statements were obtained from them. Only 11.25 per cent of the statements mentioned about work processes improvements and only 6.25 per cent of the statements mentioned about management participation. The other two important ingredients to TQM, systems improvements and human resource improvements have not been mentioned at all. Even so, looking on the positive side, there are signs showing that some employees do understand the concept of TQM.

Table 9.19. The Meaning of Total Quality Management

Meaning of TQM	No. of Statement	Percentage Rate
Quality of work processes	9	11.25
Top management participation	5	6.25
Quality information	1	1.25
Continuous improvement	5	6.25
Quality work	10	12.5
Producing the best	5	6.25
Positive attitude	2	2.5
Teamwork	9	11.25
Customer care	3	3.75
Excellent service to customers	10	12.5
Responsible	3	3.75
Total change	3	3.75
Customer oriented	6	7.5
Meeting customer's needs	3	3.75
Meeting individual, organisational objectives	2	2.5
Cultural Change	4	5.0
TOTAL	80	100.00

The analysis shows that 6.25 per cent of the statements mentioned continuous improvements which is the most basic definition of TQM. Apart from that 23.75 per cent of the statements are about meeting customer's needs. 5 per cent of the

statements are on cultural change and 3.75 per cent on total change. Another 11.25 per cent of the statements are on teamwork.

The overall analysis shows that out of the 39.5 per cent respondents that gave their opinion on their understanding of TQM, about 50 per cent of that percentage have a clear idea on the meaning of TQM. What these figures indicate is that only about 30 employees in the survey understand the true concept of TQM. The rest of the respondents, either have partial ideas or no idea at all on TQM.

This lack of understanding on TQM can be due to lack of exposure, especially due to lack of training or lack of management concern on this concept as what that has been indicated by the responses received under Statement H5. Only 14.8 per cent of respondents say that they have attended courses on TQM.

These findings show that the implementation of TQM in the Public Service in Malaysia is still in the infant stage even though it was introduced in 1992. This goes to show that the Government's effort to make use of the TQM approach in delivering quality public services has not been fully exploited by the Public Sector.

Table 9.20. Responses to Statements H5 to H23, Part 8

No.	Statement	Selection				
		1	2	3	4	5
H5	Have you attended any courses on TQM?	Yes	No			
		22	126			
H6	Do you think the quality of work carried out by you is taken into account when your supervisor carries out his performance appraisal on you?	To a substantial extent	To some extent	Not at all	I do not know	
		74	20	4	50	
H7	Is it very important for you to achieve you yearly works targets?	To a substantial extent	To some extent	To a limited extent	Not at all	
		71	75	2		
H8	What kind of work do you produce?	High quality work	Average quality work	low quality work	Work of no quality	
		101	45	2		
H9	Can you achieve you yearly works targets and at the same time produce quality work?	To a substantial extent	To some extent	To a limited extent	I do not know	
		125	15		8	
H10	What do you think of the NRS?	Increase performance to a substantial extent	Increase performance to some extent	No difference	Decrease performance to some extent	Decrease performance of substantial extent
		32	32	59	21	

In looking at the effects of competition, under Statement H10, the respondents were asked to respond whether the New Remuneration System, with the performance related pay attached to the performance appraisal system, which encourages competition among employees by rewarding those who perform well, helps to improve performance. Only 22.2 per cent of the respondents say that the New Remuneration System (NRS) which encourages competition among employees by rewarding those who perform well, does to a substantial extent helps to improve performance. Another 22.2 per cent say that the New Remuneration System does to some extent help to improve performance. About 41 per cent of the respondents say that there is no difference at all on the employees performance with the introduction of competition under the NRS and about 14.6 per cent of the respondents even feel that with the introduction of competition, performance decreases to some extent rather than increases.

The effect of competition, which does create individualism to a certain extent, has been expressed by about 32.7 per cent of the respondents. Another 23.3 per cent of them feel that it creates individualistic attitudes to some extent and 12.3 per cent of them feel that it creates individualism to a substantial extent. Only 29.5 per cent of the respondents feel that the competition has no effect at all on creating the individualistic attitude.

Table 9.21. Responses to Statements H5 to H23, Part 8

No.	Statement	Selection				
		1	2	3	4	5
H11	What do you think of the NRS?	No difference	Encourage healthy competition to some extent	Encourage healthy competition to a substantial extent	Encourage unhealthy competition and individualism to some extent	Encourage unhealthy competition and individualism to a substantial extent
		43	51	34	18	
H12	What do you think of the NRS?	Encourage team-working to a substantial extent	Encourage team-working to some extent	Discourage team-working to some extent	Discourage team-working to a substantial extent	
		79	46	8	10	
H13	How do you prefer to be rewarded?	Team reward	Team and individual reward	Individual reward		
		102	28	16		
H14	What do you think of your office working environment?	Very pleasant	Pleasant	Neutral	Unpleasant	Very Unpleasant
		24	60	29	33	2

The analysis shows that 70.5 per cent of the respondents say that it does create individualistic attitude and this attitude can affect teamwork as proven by the responses received for Statement H12. On this matter, about 19.7 per cent of them agree to a substantial extent, 28.6 per cent of the respondents agree to some extent and 25.2 per cent of the respondents agree to a limited extent. Only 26.5 per cent of the respondents feel that the NRS which encourages competition among employees by rewarding those who seems to perform well will not have a negative effect on the employees in working as a team. These findings, on performance appraisal destroying teamwork, confirms what that has been said by Eckes (1994), Carter (1994), Deming(1986) and other proponents of TQM.

Preference for teamwork is further shown by the responses given by the respondents under Statement H13. In rewarding employees in order to motivate them, 69.4 per cent of the respondents say it is better to reward teams rather than individuals. Nineteen per cent of the respondents say it is slightly better to reward teams rather than individuals. Only 2 per cent of the respondents say that the situation will be worse off if teams are rewarded instead of individuals.

Table 9.22. Responses to Statements H5 to H23, Part 8

No.	Statement	Selection				
		1	2	3	4	5
H15	Do you think your supervisor takes into consideration of your working conditions when he makes his performance appraisal on you?	To a substantial extent	To some extent	Not at all	I do not know	
		64	36	43		
H16	What do you think of the department's work processes?	Very good	Good	Neutral	Bad	Very bad
		4	68	35	31	6
H17	What do you think of the department's machinery/office equipment?	Adequate	Slightly adequate	Neutral	Slightly inadequate	Inadequate
		14	85	27	18	2
H18	Do you think your supervisor takes into consideration of the department's work methods, work processes and availability of equipment when he makes his performance appraisal on you?	To a substantial extent	To some extent	Not at all	I do not know	
		43	64	23	10	
H19	Do you feel your colleagues are getting better coaching than you to carry out their job?	Yes	No			
		51	96			
H20	Do you feel you are getting better coaching than your colleagues to carry out your job?	Yes	No			
		36	111			
H21	Do you feel your colleagues are getting better facilities and office equipment than you to carry out their job?	Yes	No			
		12	136			

Another area covered by the survey on TQM is on working conditions. Quality and productivity can be affected by work variations. Hence, the outcome of the survey can be used to analyse whether the employees are affected by the effects of work variations which can come from special causes or common causes. In looking at Statement H14, 56.8 per cent of the respondents say that their working environment encourage them to perform well. Another 19.6 per cent say that the working environment does not encourage or discourage them to perform well. Only 23.1 per cent say that their working environment discouraged them to perform well. This low figure of discouragement shows that the working environment enjoyed by the respondents is fairly stable and does not cause any work environment variations.

Table 9.23. Responses to Statements H5 to H23, Part 8

No.	Statement	Selection				
		1	2	3	4	5
H22	Do you feel you are getting better facilities and office equipment than your colleagues to carry out your job?	Yes	No			
		12	134			
H23	Have you ever carry out projects that can only be completed through team-working?	Yes	No			
		123	20			

Furthermore, most of the respondents are confident that the appraisers will take into account of their working conditions when they carry out their performance evaluations. It is shown that 44.8 per cent of the respondents feel that the appraisers does to a substantial extent take into account of the working conditions and 25.2 per

cent of the respondents feel that the appraisers does to some extent consider working conditions when they evaluate the employees.

There is also no evidence of work process variations. 50 per cent of the employees are encouraged to perform well under the present work processes. Another 24.3 per cent of the respondents do not feel encouraged or discouraged by the present work processes. Only 25.7 per cent disagree that the present work processes does discourage employees to perform well. The low figure of 25.7 per cent is not substantial enough to create work process variations which can affect performance.

The analysis of the outcome of the survey also show that there is no variations on the use of office equipment and machinery. Under Statement H17, it shows that the availability of office equipment does encourage 9.6 per cent of the respondents to perform well and does slightly encourage 58.2 per cent of the employees to perform well. 18.5 per cent of them do not feel encouraged or discouraged. Only 13.7 per cent of the respondents say they are discouraged to perform well. Again this low figure of 13.7 per cent show that there is no variations created in the use of the office equipment by the employees.

Under Statement H19, 25 per cent of the respondents say that their colleagues get better coaching than them and under Statement H20, 24.4 per cent of the respondents say they get better coaching from their colleagues. This is another area that shows no variation in terms of some employees getting more coaching than others from their supervisors. The responses obtained from the survey shows that

the employees are getting equal amount of coaching and supervision from their supervisors.

Another area that shows no variation is on employees getting departmental facilities. Under Statement H21, only 8.1 per cent of respondents say that their colleagues are getting better facilities. Under Statement H22, only 8.9 per cent of the respondents say that they are getting better facilities compared to their colleagues. This shows that the employees are getting an equal amount of facilities and therefore there is no job variation affected by facilities.

These findings show that the shortfall in service quality is not attributable to the variations of the working environment. It has been identified that employees were able to enjoy the same working condition compared to their colleagues. Therefore these findings are able to confirm that there is no variation in the system on the working environment and the work processes. It shows that it is not the system factor that affects performance. Therefore the quality shortfall comes from the human factor rather than the process factor. But if we re-examine the situation again, this human factor is affected by the system that the organisation had to adhere to, in this case the performance appraisal system. Looking from this angle, it does show that the argument put up by the proponents of TQM, especially Deming (1986) can be accepted in the sense that systems can affect service performance. The performance appraisal system is a system imposed by the management on the individuals in order to rate their performance. If the system is flawed, it is definite that the employees' performance will be affected. It can be

concluded under these findings that the system of organisation plays a very important role in modelling performance and the literature on quality and performance appraisal discussed in Chapter 8 has been right in saying that quality can be affected by the improper implementation of performance appraisal.

9.4. CONCLUSION

Performance Appraisals can be a very useful tool for managing human resources but the findings from the research study show that it is not possible to implement the system properly without encountering problems. From the research study, we are able to highlight these problematic areas which confirmed the literature on problems of implementing performance appraisals discussed in Chapter 8. One of the problems identified is the inability of appraisers in giving accurate ratings on employees' performance. The inability can be attributed to lack of experience, lack of training or lack of interest in carrying out performance evaluations. Another problem is due to the interviews that were poorly conducted. One other problem is due to lack of management commitment where currently, the performance appraisal system is only used as a tool for determining pay increments and from time to time for promotions. The management is not concern about making use of the tool for employees' personal, work or career development.

These problems arising from the improper implementation of performance appraisal indicate that performance appraisal can have an adverse effect on performance.

Poor performance relates to poor quality of service. Therefore the findings from the research study indicate that the performance appraisal system does affect quality and the TQM approach of managing quality. When the performance appraisal system is improperly implemented, the system will affect the quality efforts of the public service. Now, it is the question of what can be done about it in order to make sure that the Government's quality efforts is not jeopardised. Therefore the future of the performance appraisal system has to be determined. We have to consider whether the system should be eliminated or new approaches should be introduced in order to be able to overcome its negative effects on service quality. A number of suggestions put forward by both proponents of TQM and proponents of performance appraisals have been discussed in Chapter 8. These approaches need to be tested to help meet the ultimate aim of overcoming barriers to service quality and to ensure service quality can be delivered to the public.

CHAPTER 10

CONCLUSIONS

This research study was carried out to look at issues on service quality in the Public Service Sector of Malaysia. The Government's service quality efforts had its early beginnings in the 1980s with the launching of the Excellent Work Culture Campaign. These quality efforts went into full swing in the 1990s with the introduction of numerous quality programmes to improve quality of public services. The 1990s too saw the emergence of the new system of managing the Public Service which comprise of a workforce of 880,000 public employees. This new system is the New Remuneration System (NRS). This NRS system which comprise among others, the new performance appraisal system and the performance-related-pay system for rewarding high performers, was introduced to address matters related to welfare and performance improvements of the public employees.

Despite of the Government's continuous efforts to improve service quality by introducing numerous quality programmes in the public service, the general public is saying that the public service is not providing quality services. From time to time the public voiced out their dissatisfaction by complaining to the Public Complaints Bureau or the newspapers. In response to such complaints, the public service managers say that the public service quality programmes have been well received by the public employees. The positive acceptance of service quality programmes by the public employees means that these employees will strive for service

excellence and will be able to provide quality public services. The public complaints can be brushed-off as one-off complaints which are not reflective of the overall performance of the public service in providing services to the public.

Under this contradictory situation, with one party saying that quality services are not being delivered and another party denying it, the research was carried out to find out the actual position of the public service sector in delivering quality services to the public. Therefore, the primary objective for this research is to be able to tell whether the public service is really providing quality services to the public. In order to meet this objective, the research study had to meet several other research objectives. Some of the main research objectives are, firstly, we need to find ways of measuring public service quality; secondly, using the right service quality measuring instrument, we need to measure the level of quality of public services delivered to the public; and thirdly, after discovering that there are some shortfalls in the provision of service quality to the public, we had to find out what are the barriers to service quality.

In trying to meet our research objective of finding the right instrument to measure service quality, we studied several approaches of measuring service quality. One approach is through administering customer satisfaction surveys. Service providers simply have to ask their customers what do they think of the services experienced by them. This valuable information obtained can be used to find ways and means of improving the services delivered to the public. The problem with this simplistic approach is that the surveys are open to biases in their construction, their wording

or their sampling frame. The survey may only take into consideration elements of quality services that the service providers see as important but the customers see it as otherwise. There can also be the case where data collected is so massive making the study very complex and loses its appeal to help obtain information on service quality.

Apart from the conventional customer survey techniques, in our search for the most suitable technique to determine the level of quality of services, we came across techniques such as quality auditing, service level agreements and performance indicators. These techniques have been thoroughly discussed in Chapter 3. The discussions indicate that these instruments cannot measure service quality.

While continuing our search for a suitable technique, we came across the SERVQUAL technique of measuring service quality. Discussion on this technique is presented in Chapter 3. Briefly, the SERVQUAL instrument has 22-item statements under the expectation measurement and another 22-item statements under the perception measurement. Therefore, the important aspect of SERVQUAL is that it measures customers' perceptions and expectations. Service quality, which is the discrepancy between perceptions and expectations, is obtained through perception scores minus expectation scores.

The 22-item statements are allocated under the 5 dimensions comprising of Tangibles, Empathy, Assurance, Reliability and Responsiveness. These standard dimensions help standardise service quality measurements throughout the public

service sector. With this standardisation, the problems mentioned above on the inconsistency of quality measures under the conventional instrument can be eliminated. Further discussions on the instrument, as illustrated in Chapter 4, show that the instrument can be successfully applied to various types of services whether in the public sector or the private sector.

However, although it has been shown that the instrument can be successfully applied, critics of this instrument suggest that this is an unreliable instrument. SERVQUAL faces conceptual and empirical problems. The conceptual problems arise from the use of two separate constructs that is the perceptions and expectations constructs. These two constructs are used to obtain the third construct (perceived service quality). The problem also arises from the use of a standard instrument to measure service quality across different industries. Research findings suggest that SERVQUAL dimensions can be different from its original five dimensions.

For the empirical problem, the derivation of the third construct which is the difference scores result in low reliability, unstable dimensionality and poor convergent validity. The difference scores measures often demonstrate poor reliability because any positive correlation between the components scores attenuates the reliability of the resulting difference scores. Apart from poor reliability, the instrument has weak convergent validity.

At the same time, critics point out that the use of the differences scores causes confusion over customer's satisfaction and service quality. The disconfirmation

measure that produces the difference scores measures 'the maximum level of perceived service quality' and not 'the satisfied level of obtaining services'. An organisation would prefer to just meet the needs of the customers so that they are satisfied with the services delivered to them. In this way, resources are not wasted by providing above-board services that are not required by the customers. Customers do not necessarily buy the highest quality service but convenience, price or availability may enhance satisfaction.

Critics too suggest that the SERVQUAL instrument be replaced with SERVPERF which is considered as more reliable. The SERVPERF instrument measures the actual performance of the service providers in providing services. The instrument uses only one set of items for the measurement of service quality as compared to two used by SERVQUAL. In other words, the SERVQUAL instrument is modified by eliminating the expectations measure and only uses the perceptions measure. In this way, it is able to reduce by 50 per cent the number of items that must be measured. The critics, as discussed under Section 4.8 in Chapter 4, suggest that SERVPERF is superior to SERVQUAL.

The proponents of SERVQUAL argue that the perceptions ratings alone may not lead to the same (or correct) practical implications as the perception-expectations difference scores. The perceptions only measurement suggests placing equal emphasis on improving service quality on the five service quality dimensions. In this situation, managers would find it difficult to invest resources for service improvement. Therefore, with the inclusion of expectations customers are given the

opportunity to tell what they expect from the service. In this way, this service quality measurement that incorporate customer expectations provide richer information than those that focus only on perceptions. It has a greater diagnostic value by providing managers with deeper insights concerning the dimensions of service quality.

This approach also allows managers to better understand the dynamics of customers' assessments of service quality over time. In this case, if SERVQUAL scores for certain items have declined significantly from one period to another, managers can assess whether this is due to higher expectations, lower perceptions or both. This information is not available with perceptions only measurements. Another advantage is that the gathered data can meet the dual objectives of accurately diagnosing service shortfalls and explaining the variance in related variables. Difference scores can be used for the former while perceptions scores can be used for the latter.

These discussions indicate that the proclaimed marginal empirical benefit of a perceptual-based (SERVPERF) service quality measure does not justify the loss of managerial diagnostic capabilities found in a gap measure (SERVQUAL). Even though the predictive power of the SERVPERF instrument is superior to the SERVQUAL instrument but other comparative criteria, such as reliability; and convergent and discriminant validity, show that the SERVPERF provides no substantial improvement over SERVQUAL.

In looking at the conceptual problem with SERVQUAL, the often-mentioned problem concerns the applicability of a single instrument for measuring service quality across different industries. A number of studies carried out show that it is not possible for SERVQUAL to have standard dimensions that can be applied across every service. In this case even SERVPERF too suffers from similar limitations. The SERVPERF scale does not exhibit a five-factor structure in a generalizable fashion.

However, due to the importance of the service quality construct in the service industry, the development of a generalizable multi-dimensional scale appears to be an important area for research. This is in view of studies that recognise the needs for standardised measurement scales that can enable researchers or managers to compare results across industries. Under this circumstances, in future, the five service dimensions should be reviewed to produce a new set of standard service dimensions that can better capture information on service quality but for this research the original five service quality dimensions under SERVQUAL is used.

We can conclude from the discussions above that since SERVQUAL, which has been successfully applied in a number of different services; being a reliable instrument; has a very powerful diagnostic capability; and have standard dimensions applicable across different services, is superior to SERVPERF, the instrument should be selected for measuring service quality in this research study.

The selection of the SERVQUAL instrument to measure service quality helps us meet our second main objective. This quality measurement instrument was

deliberately applied to the internal and external customers. It has been a common belief that quality internal services results in quality external services. Therefore in this case, the measurements will be able to show the implications of quality internal services on the quality of external services. The internal services measured were the services delivered by the Service Branch, Establishment Branch and Promotion and Disciplinary Branch which provide support services to the Ministry in terms of personnel services. The other internal service measured was on the services delivered by the Computer Centre; Public Works Department that is also a support service. As for the external services, there are the road services and the Government residential quarters services.

10.1. THE RESEARCH APPROACH

The SERVQUAL approach is administered in these service areas using the quantitative research method. It has been described in Chapter 5 that this method is the most appropriate method when using SERVQUAL. Under this method, again as described in Chapter 5, the most suitable research strategy for data collection is by conducting a survey. The survey approaches that have been considered are the mail questionnaire and the face-to-face interview.

One major problem encountered during the application of the instrument was on language understanding. SERVQUAL was introduced in English. The national language of Malaysia is 'Bahasa Malaysia' and the medium of instruction for

primary, secondary and tertiary education is 'Bahasa Malaysia'. Public employees generally interact among themselves as well as the general public in 'Bahasa Malaysia'. If the questionnaire that incorporates SERVQUAL is distributed in English, the respondents will not be able to understand the questionnaire. Even before the pilot study was conducted, employees were picked at random to gauge their understanding of the questionnaire. We found out that they were not able to respond to the questionnaire correctly irrespective of whichever ethnic group they come from as in general they have poor understanding of the questionnaire which was written in English.

Therefore, based on their responses, the questionnaires were translated into 'Bahasa Malaysia'. We then approached a few people who are proficient in both languages to obtain their opinion on the translation so as to make sure the translation does not stray away from the original meaning under SERVQUAL. These draft questionnaires were then used in the pilot study which was a very useful exercise as described in Chapter 6. Feedback obtained from the respondents of the draft questionnaire in the pilot study help produced the final copy of the questionnaire. In carrying out the survey exercise, the questionnaires were desk-dropped. This technique of questionnaire distribution falls under the mail questionnaire category of data collection.

When conducting the survey, to ensure that the response obtained is of reasonable size, the non-respondents of the mail survey were tracked down and the face-to-face interview was applied. Chapter 6 detailed the responses on the survey which

showed that responses received were fairly high. This high success rate of response is attributed to the well-constructed questionnaire and the support given by the Ministry's management.

The findings obtained from the survey show that the internal services delivered by the Service Branch, Establishment Branch and Promotion and Disciplinary Branch has an average gap score of -1.99. The other internal services delivered by the Computer Centre have an average gap score of -1.87. As for the external services, the average gap score on the road services is -1.86 and -1.68 for the Government residential quarters services. These findings are able to confirm the quality theory that poor internal quality services results in poor external quality services. Another important aspect of these findings is that we are able to prove that the public service is not providing quality services to the public. The findings show that the overall service gaps obtained from all the services measured are around two points below the 7 point Likert scale. This means that there is justification for the public to complain on the quality of services delivered to them by the public service.

At the same time, the research findings are able to confirm the suggestions on the need for standardised measurement scales to enable researchers and managers compare results across services. With the results obtain from the study shown in Chapter 6, we were able to make comparisons on the provision of public service quality across the five survey subject areas. Apart from that, the discussions under Section 6.7 in Chapter 6 illustrated that comparisons can also be made on the Expectations Scores across dimensions within the same service as well as across

different services. Similarly, comparisons can also be made for the Perceptions Scores and Difference Scores from within the service or across different services. Hence, these findings confirm the support for SERVQUAL which says that service quality measurements that incorporate expectations provide richer information than those that focus on perceptions only (SERVPERF). The SERVQUAL instrument has greater diagnostic value that provides researchers and managers with deeper insights of the service quality dimensions. In other words, the inclusion of the Expectations Scores provides two extra sets of information (the Expectations Scores itself as well as the Difference Scores) that can help decision-makers make the right judgement and formulation for further action on Public Service Quality. This indicates that SERVQUAL is superior to SERVPERF.

At the same time, since we have discovered that there are gaps in the services delivered, meaning to say that there are service quality shortfalls, we need to extend the research to search for the cause of the service quality gap. We say in Chapter 5 that the service quality gap (Gap 5) may be caused by one or more of the four internal service gaps (Parasuraman, Zeithaml and Berry, 1990). In the search for the cause of the service quality gap, we carried out interviews on employees of the organisation. Some of the factors indicated by the respondents affecting service quality are due to the improper implementation of the performance appraisal system and reward system, poor management, lack of training, shortage of staff, poor leadership and lack of equipment. The detail responses are shown in Chapter 7.

The responses match with most of the factors which cause the third internal service gap (Gap 3) comprising of role ambiguity, role conflict, poor employee-job fit, poor technology-job fit, inappropriate supervisory control systems, lack of perceived control and lack of teamwork which were identified by Parasuraman, Zeithaml and Berry (1990). At the same time, these responses match with two of the factors that cause the second internal service gap (Gap 2). The two factors are inadequate task standardisation and absence of goal setting for quality services (Parasuraman, Zeithaml and Berry, 1990). Hence the findings show that the service quality gap is caused by the internal service gaps comprising of Gap 2 and Gap 3 with 75 per cent of the respondents indicating that the cause for Gap 5 comes from Gap 3. Therefore, the elimination of Gap 3 should be given prior consideration.

Another survey using the questionnaire to measure Gap 3 (Parasuraman, Zeithaml and Berry, 1990) confirmed the findings obtained from the interview as to the cause of the service quality gap. Hence Gap 3, caused by the shortfalls in service quality due to employees being unwilling or unable to provide quality services is the main cause of Gap 5. Under Gap 3, the findings show that the main contributor for the service quality gap is the improper implementation of the performance appraisal system.

Literature on performance appraisal, discussed in Chapter 8, shows that the improper implementation of the performance appraisal system will make the system unable to meet its objectives of motivating and improving employees' performance. In order to confirm that a flawed performance appraisal system can have a negative

effect on service quality, a study to this effect was carried out. The survey was conducted by distributing questionnaires to the employees of the ministry. The rate of response for the survey was 65 per cent. Hence, the findings from the survey shown in Chapter 9 confirmed that the new performance appraisal system under the New Remuneration System (NRS) has not met the aspirations of the Chief Secretary to the Government of Malaysia. It has not provided new ways of measuring performance that can help improve quality of public services.

It was further discussed in Chapter 8 how performance appraisal can undermine quality efforts carried out under the TQM approach. TQM is supposed to help improve service quality but it can be crippled by the flawed performance appraisal system. The results of the analysis shown in Chapter 9 indicate that the performance appraisal system does affect the delivery of quality services. It indicates that the performance appraisal system can undermine the Government's quality efforts in introducing TQM. The situation has to be remedied. The remedial work can be done in the sense that TQM practices have to be made compatible to the Human Resource Management (HRM) practices especially on the performance appraisal (Waldman and Kenett, 1990; Guest, 1992; Herbig, Palumbo and O'Hara, 1994; Hill and Wilkinson, 1995; Simmons, Shadur and Preston, 1995; Blackburn and Rosen, 1995).

10.2. RECOMMENDATIONS

The implication of the research study on the Malaysian Public Service Sector is that the sector has been exposed as not providing satisfactory quality services to the public. The research study also revealed that the two main causes for service quality shortfalls are firstly, the lack of commitment to quality, which comes under Gap 2; and secondly, the poor implementation of the performance appraisal system, which is under Gap 3. The Malaysian Public Service Sector should make use of this discovery to improve the quality of services delivered to the public. The sector, equipped with the findings from this research study, should first of all review the New Remuneration System (NRS) especially on the Performance Appraisal System. It is recommended that the performance appraisal system should be reconstructed. Individual performance appraisals should be continued but this time, not for its judgmental purposes. The rewards to be awarded to the employees will not be tied to their individual performance. The individual performance will be used to identify the individual's training needs, the individual's achievements of his individual objectives to help support the organisational objectives and other developmental purposes that can help improve the individual's performance.

Team appraisals should be carried out in place of individual appraisals for reward purposes in order to be able to motivate the employees to improve their performance and to work as a team rather than compete unhealthily for the individual rewards. It is proposed that this research should be extended to study into the feasibility of introducing individual performance appraisal for

developmental purposes and at the same time introduces team appraisals for motivational purposes. The study should be conducted under the service quality setting, with the intention of improving quality public services. Meeting customers' expectations should be part of the consideration for introducing the new appraisal approaches. Possibly SERVQUAL can be tested to appraise teams for motivational purposes. The use of SERVQUAL instrument for measuring service quality can be a two-prong approach in the sense that the customers expectations can be identified which can then help improve the quality of services delivered to the public and at the same time to use the measurements obtained from the implementation of the SERVQUAL instrument to determine team performance which can then be used to reward teams accordingly.

Following the remedial work as suggested above, on the New Remuneration System especially on the Performance Appraisal System, it is suggested that the developmental approach should be used and rewards should be made to teams. The next step to improve service quality in the Malaysian Public Service is to extend the application of the SERVQUAL approach to other government organisations. An extensive service quality measurement project should be carried out using the SERVQUAL technique of measuring service quality. The scores obtained from SERVQUAL will serve as an indicator to show which organisations fail to provide quality services. The right kind of resources can be allocated to these problematic organisations. This exercise should be carried out on a yearly basis. In this way, organisations cannot be complacent over their present level of quality services they are providing. These organisations need to put in extra efforts from time to time to

improve service quality. This is also in-line with the TQM concept of continuous improvement. Should these organisations not improve over time, the indicator will show that they are lacking behind other organisations in providing quality services. This system of measuring service quality will bring about a very healthy competition among government organisations in delivering quality services to the public.

10.3. FUTURE RESEARCH

It is suggested that further research study to this research should be carried out over several areas. Firstly, the original five standard dimensions of SERVQUAL should be subjected to a rigorous study to obtain a set of indisputable standard dimensions that can be applied across services in the public service sector. Secondly, a research should be carried out to test the recommendations mentioned above on the reconstruction of the performance appraisal system. This research is required to verify whether the suggestions are feasible for application. Finally, research should be carried out to uncover what should be the appropriate quality programmes that should be implemented in the public service so that the lack of commitment towards service quality can be eliminated.

We are hopeful, with the implementation of the above suggestions as well as with these further research extensions, the public service sector will be able to provide quality public services to the ever-hungry-for-quality-services public.

SURVEY SUBJECT AREA I

APPENDIX E1

The Adapted SERVQUAL Questionnaire for Measuring Service Quality Delivered Between the Three Branches under the Former Service and Establishment Division, Ministry of Public Works

Expectations

1. Excellent branches will have pleasant-looking office environment.
2. The physical facilities at excellent branches will be visually appealing.
3. Employees at excellent branches will be neat appearing.
4. Materials associated with the service (such as pamphlets or statements) will be available in an excellent branch.
5. When a branch has a problem, excellent branch employees will show a sincere interest in solving it.
6. Excellent branch employees will perform the service right the first time.
7. Excellent branch employees will provide their services at the time they promise to do so.
8. Employees in excellent branches will keep records of services systematically and error free.
9. Employees in excellent branches will tell other branches exactly when services will be performed.
10. Employees in excellent branches will give prompt service to other branches.
11. Employees in excellent branches will always be willing to help other branches.
12. Employees in excellent branch will never be too busy to respond to other branches' requests.
13. The behaviour of employees in excellent branches will instil confidence in other branches.
14. Employees in excellent branches will be consistently courteous with the other branches.
15. Employees in excellent branch will have the knowledge to answer other branches' questions.
16. Excellent branch employees will give other branches individual attention.
17. Excellent branches will have convenient operating hours.
18. Excellent branch employees will give personal attention to the employees of the other branches.
19. Excellent branches will have the employees of the other branches best interest at heart.
20. The employees of excellent branch will understand the specific needs of other branches.

Perceptions

1. The unit's physical facilities are visually appealing.
2. The branch has pleasant-looking office environment.
3. The branch employees are neat appearing.
4. Materials associated with the service (such as pamphlets or statements) are available at the branch.
5. When you have a problem, the branch employees shows a sincere interest in solving it.
6. The branch employees perform the service right the first time.
7. The branch employees provide the services at the time they promise to do so.
8. The branch employees keep records of services systematically and error free.
9. The branch employees tell you exactly when services will be performed.
10. The branch employees give you prompt service.
11. The branch employees is always willing to help you.
12. The branch employees are never too busy to respond to your requests.
13. The behaviour of the branch employees instils confidence in you.
14. The branch employees are consistently courteous with you.
15. The branch employees have the knowledge to answer your questions.
16. The branch employees gives you individual attention.
17. The branch has operating hours convenient to you.
18. The branch employees gives you personal attention.
19. The branch employees have your best interest at heart.
20. The branch employees understands your specific needs.

**The Adapted SERVQUAL Questionnaire for Measuring Service Quality
Delivered by the Service Branch, the Establishment Branch or the
Promotion & Disciplinary Branch under the Former Service and
Establishment Division, Ministry of Public Works to All employees of
other Divisions and Branches under the Ministry of Public Works**

Expectations

1. Excellent branches will have pleasant-looking office environment.
2. The physical facilities at excellent branches will be visually appealing.
3. Employees at excellent branches will be neat appearing.
4. Materials associated with the service (such as pamphlets or statements) will be available in an excellent branch.
5. When a division/branch has a problem, excellent branch employees will show a sincere interest in solving it.
6. Excellent branch employees will perform the service right the first time.
7. Excellent branch employees will provide their services at the time they promise to do so.
8. Employees in excellent branches will keep records of services systematically and error free.
9. Employees in excellent branches will tell other divisions/branches exactly when services will be performed.
10. Employees in excellent branches will give prompt service to other divisions/branches.
11. Employees in excellent branches will always be willing to help other divisions/branches.
12. Employees in excellent branch will never be too busy to respond to other divisions/branches' requests.
13. The behaviour of employees in excellent branches will instil confidence in other divisions/branches.
14. Employees in excellent branches will be consistently courteous with the other divisions/branches.
15. Employees in excellent branch will have the knowledge to answer other divisions'/branches' questions.
16. Excellent branch employees will give other division/branches individual attention.
17. Excellent branches will have convenient operating hours.
18. Excellent branch employees will give personal attention to the employees of the other divisions/branches.
19. Excellent branches will have the employees of the other division/branches best interest at heart.
20. The employees of excellent branch will understand the specific needs of other divisions/branches.

Perceptions

1. The branch has pleasant-looking office environment.
2. The branch's physical facilities are visually appealing.
3. The branch employees are neat appearing.
4. Materials associated with the service (such as pamphlets or statements) are available at the branch.
5. When you have a problem, the branch employees shows a sincere interest in solving it.
6. The branch employees perform the service right the first time.
7. The branch employees provide the services at the time they promise to do so.
8. The branch employees keep records of services systematically and error free.
9. The branch employees tell you exactly when services will be performed.
10. The branch employees give you prompt service.
11. The branch employees is always willing to help you.
12. The branch employees are never too busy to respond to your requests.
13. The behaviour of the branch employees instils confidence in you.
14. The branch employees are consistently courteous with you.
15. The branch employees have the knowledge to answer your questions.
16. The branch employees gives you individual attention.
17. The branch has operating hours convenient to you.
18. The branch employees gives you personal attention.
19. The branch employees have your best interest at heart.
20. The branch employees understands your specific needs.

**The Adapted SERVQUAL Questionnaire for Measuring Service Quality
Over Services Delivered by the Computer Centre, Public Works
Department, Ministry of Public Works**

Expectations

1. Excellent Computer Centres will have up-to-date computer equipment.
2. The physical facilities at excellent Computer Centres will be impressive looking.
3. Employees at excellent Computer Centres will be neat appearing.
4. Materials associated with the service (such as pamphlets or statements explaining about the computer hardwar and software available, the services available, operating times and contact persons) will be available in excellent Computer Centres.
5. When a customer has a problem, excellent Computer Centres will show a sincere interest in solving it.
6. Excellent Computer Centres will perform the service right the first time.
7. Excellent Computer Centres will provide their services at the time they promise to do so.
8. Employees in excellent Computer Centres will keep records on services, fault reports and complaints systematically and free from error.
9. Employees in excellent Computer Centres will tell customers exactly when (time and date) services will be performed.
10. Employees in excellent Computer Centres will give prompt service to customers.
11. Employees in excellent Computer Centres will always be willing to help customers.
12. Employees in excellent Computer Centres will never be too busy to respond to customers' requests.
13. The competency of employees in excellent Computer Centres will instil confidence in customers.
14. Employees in excellent Computer Centres will be consistently courteous with customers.
15. Employees in excellent Computer Centres will have the knowledge to answer customers' questions.
16. Excellent Computer Centres will give customers individual attention.
17. Excellent Computer Centres will have operating hours convenient to all their customers.
18. Excellent Computer Centres will have employees who give customers personal attention.
19. Excellent Computer Centres will have the customers best interest at heart.
20. The employees of excellent Computer Centres will understand the specific needs of their customers.

Perceptions

1. The Computer Centre has up-to-date computer equipment.
2. The Computer Centre's physical facilities are impressive looking.
3. The Computer Centre's employees are neat appearing.
4. Materials associated with the service (such as pamphlets or statements explaining about the computer hardware and software available, the services available, operating times and contact persons) are available at the Computer Centre.
5. When you have a problem, the Computer Centre shows a sincere interest in solving it.
6. The Computer Centre performs the service right the first time.
7. The Computer Centre provides its services at the time it promises to do so.
8. The Computer Centre will keep records on services, faults and complaints systematically and free from error.
9. Employees in the Computer Centre tell you exactly when services will be performed.
10. Employees in the Computer Centre give you prompt service.
11. Employees in the Computer Centre are always willing to help you.
12. Employees in the Computer Centre are never too busy to respond to your requests.
13. The competency of employees in the Computer Centre instils confidence in you.
14. Employees in the Computer Centre are consistently courteous with you.
15. Employees in the Computer Centre have the knowledge to answer your questions.
16. The Computer Centre gives you individual attention.
17. The Computer Centre have operating hours convenient to all computer users.
18. The Computer Centre have employees who give you personal attention.
19. The Computer Centre will have your best interest at heart.
20. Employees of the Computer Centre understand your specific needs.

**The Adapted SERVQUAL Questionnaire for Measuring Service Quality of
Roads Services Delivered by the Public Works Department, Ministry of Public
Works**

Expectations

1. Excellent Public Works Departments will have well constructed and well maintained roads.
2. The physical facilities will be provided by excellent Public Works Departments.
3. Excellent Public Works Departments will build pleasant looking and environmentally friendly roads.
4. Materials associated with the service (such as pamphlets or statements on road conditions, whom to contact on road matters, etc.) will be available in an excellent Public Works Department.
5. When the road users have a problem, excellent Public Works Departments will show a sincere interest in solving it.
6. Excellent Public Works Departments will perform the service right the first time.
7. Excellent Public Works Departments will provide their services at the time they promise to do so.
8. Excellent Public Works Departments will keep records regarding road matters (road maintenance, complaints, etc.) systematically and error free.
9. Excellent Public Works Departments will tell the road users exactly when services will be performed.
10. Excellent Public Works Departments will give prompt service to the road users.
11. Excellent Public Works Departments will always be willing to help the road users who require their services.
12. Excellent Public Works Departments will always have the time and never be too busy to respond to the road users'.
13. The competency of employees of excellent Public Works Departments in building and maintaining roads will instil confidence in the road users using the roads.
14. The road users of excellent Public Works Departments will feel safe in using the roads.
15. Employees in excellent Public Works Departments will be consistently courteous when receiving reports and complaints from the road users.
16. Employees in excellent Public Works Departments will have the knowledge to answer road users questions on road matters.
17. Employees in excellent Public Works Departments will provide individual services to the road users.
18. Excellent Public Works Departments will have operating hours convenient to the road users.
19. Employees of Excellent Public Works Departments will provide personal services to the road users.
20. Excellent Public Works Departments will have the road users best interest at heart.
21. Excellent Public Works Departments will understand the specific needs of the road users.

Perceptions

1. The Public Works Department has well constructed and well maintained roads.
2. The Public Works Department provides physical facilities.
3. The Public Works Department builds pleasant looking and environmentally friendly roads.
4. Materials associated with the service (such as pamphlets or statements on road conditions, whom to contact on road matters, etc.) are available at the Public Works Department.
5. When road users have a problem the Public Works Department shows a sincere interest in solving it.
6. The Public Works Department performs the service right the first time.
7. The Public Works Department provides its services at the time it promises to do so.
8. The Public Works Department keeps records regarding road matter (road maintenance, complaints, etc.) systematically and error free.
9. The Public Works Department tells the road users exactly when services will be performed.
10. The Public Works Department gives the road users prompt service.
11. Employees in the Public Works Department is always willing to help road users.
12. The Public Works Department has the time to respond to the road users' needs.
13. The competency of the employees of the Public Works Department in building and maintaining roads instils confidence in the road users using the roads.
14. The road users feel safe in using the roads.
15. Employees in Public Works Department are consistently courteous when receiving reports or complaints from the road users.
16. Employees in the Public Works Department have the knowledge to answer the road users' questions.
17. Employees in the Public Works Department provide individual services to the road users.
18. The Public Works Department have operating hours convenient to all its road users.
19. Employees of the Public Works Department provide personal services to the road users.
20. The Public Works Department has the road users' best interest at heart.
21. The Employees of Public Works Department understand the specific needs of the road users.

**The Adapted SERVQUAL Questionnaire for Measuring Service
Quality on Government Quarters Delivered by the Public Works
Department, Ministry of Public Works**

Expectations

1. Excellent Public Works Departments will have well constructed and well maintained quarters.
2. The physical facilities will be provided by excellent Public Works Departments.
3. Employees of excellent Public Works Departments will be properly attired when carrying out their work.
4. Materials associated with the service (such as booklets on services provided, whom to contact or notices on repairs, maintenance, etc.) will be available in an excellent Public Works Department.
5. When an occupier has a problem excellent Public Works Departments will show a sincere interest in solving it.
6. Excellent Public Works Departments will perform the service right the first time.
7. Excellent Public Works Departments will provide their services at the time they promise to do so.
8. Excellent Public Works Departments will keep records (maintenance, complaints, etc.) systematically and error free.
9. Excellent Public Works Departments will tell the occupiers exactly when services will be performed.
10. Excellent Public Works Departments will give prompt service to the occupiers.
11. Excellent Public Works Departments will always be willing to help the occupiers who require their services.
12. Excellent Public Works Departments will always have the time and never be too busy to respond to the occupiers' requests.
13. The competency of employees of excellent Public Works Departments in building and maintaining quarters will instil confidence in the occupiers occupying them.
14. The occupiers of excellent Public Works Departments will feel safe in using the quarters.
15. Employees in excellent Public Works Departments will be consistently courteous when receiving requests and complaints from the occupiers.
16. Employees in excellent Public Works Departments will have the knowledge to answer occupiers' questions.
17. Employees in excellent Public Works Departments will provide individual services to the occupiers.
18. Excellent Public Works Departments will have operating hours convenient to the occupiers.
19. Employees of Excellent Public Works Departments will provide personal services to the occupiers.
20. Excellent Public Works Departments will have the occupiers best interest at heart.
21. Excellent Public Works Departments will understand the specific needs of the occupiers.

Perceptions

1. The Public Works Department has well constructed and well maintained quarters.
2. The Public Works Department provides the physical facilities.
3. The employees of the Public Works Department are properly attired when carrying out their work.
4. Materials associated with the service (such as booklets on services provided, whom to contact, notices on repairs, maintenance, etc.) are available at the Public Works Department.
5. When occupiers have a problem the Public Works Department shows a sincere interest in solving it.
6. The Public Works Department performs the service right the first time.
7. The Public Works Department provides its services at the time it promises to do so.
8. The Public Works Department keeps records regarding quarters services (maintenance, complaints, etc.) systematically and error free.
9. The Public Works Department tells the occupiers exactly when services will be performed.
10. The Public Works Department gives the occupiers prompt service.
11. Employees in the Public Works Department are always willing to help occupiers.
12. The Public Works Department has the time to respond to the occupiers' needs.
13. The competency of the employees of the Public Works Department in building and maintaining quarters instils confidence in the occupiers occupying them.
14. The occupiers feel safe in using the quarters.
15. Employees in Public Works Department are consistently courteous when receiving requests or complaints from the occupiers.
16. Employees in the Public Works Department have the knowledge to answer the occupiers' questions.
17. Employees in the Public Works Department provide individual services to the occupiers.
18. The Public Works Department have operating hours convenient to all its occupiers.
19. Employees of the Public Works Department provide personal services to the occupiers.
20. The Public Works Department has the occupiers' best interest at heart.
21. The Employees of Public Works Department understand the specific needs of the occupiers.

Inter - Branch Service Quality Gap

[illegible]

APPENDIX F2

Service Branch, Establishment Branch and Promotion and Disciplinary Branch Service Quality Gap

SERVICE BRANCH: ESTABLISHMENT BRANCH: PROMOTION AND DISCIPLINARY BRANCH SERVICE QUALITY GAP (GAP 5)									
NO	1	2	3	4	5	6	7	8	9
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1
33	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1
41	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	1	1	1	1
43	1	1	1	1	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	1	1
47	1	1	1	1	1	1	1	1	1
48	1	1	1	1	1	1	1	1	1
49	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1
51	1	1	1	1	1	1	1	1	1
52	1	1	1	1	1	1	1	1	1
53	1	1	1	1	1	1	1	1	1
54	1	1	1	1	1	1	1	1	1
55	1	1	1	1	1	1	1	1	1
56	1	1	1	1	1	1	1	1	1
57	1	1	1	1	1	1	1	1	1
58	1	1	1	1	1	1	1	1	1
59	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1
61	1	1	1	1	1	1	1	1	1
62	1	1	1	1	1	1	1	1	1
63	1	1	1	1	1	1	1	1	1
64	1	1	1	1	1	1	1	1	1
65	1	1	1	1	1	1	1	1	1
66	1	1	1	1	1	1	1	1	1
67	1	1	1	1	1	1	1	1	1
68	1	1	1	1	1	1	1	1	1
69	1	1	1	1	1	1	1	1	1
70	1	1	1	1	1	1	1	1	1
71	1	1	1	1	1	1	1	1	1
72	1	1	1	1	1	1	1	1	1
73	1	1	1	1	1	1	1	1	1
74	1	1	1	1	1	1	1	1	1
75	1	1	1	1	1	1	1	1	1
76	1	1	1	1	1	1	1	1	1
77	1	1	1	1	1	1	1	1	1
78	1	1	1	1	1	1	1	1	1
79	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1
81	1	1	1	1	1	1	1	1	1
82	1	1	1	1	1	1	1	1	1
83	1	1	1	1	1	1	1	1	1
84	1	1	1	1	1	1	1	1	1
85	1	1	1	1	1	1	1	1	1
86	1	1	1	1	1	1	1	1	1
87	1	1	1	1	1	1	1	1	1
88	1	1	1	1	1	1	1	1	1
89	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1
91	1	1	1	1	1	1	1	1	1
92	1	1	1	1	1	1	1	1	1
93	1	1	1	1	1	1	1	1	1
94	1	1	1	1	1	1	1	1	1
95	1	1	1	1	1	1	1	1	1
96	1	1	1	1	1	1	1	1	1
97	1	1	1	1	1	1	1	1	1
98	1	1	1	1	1	1	1	1	1
99	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1

SERVICE BRANCH; ESTABLISHMENT BRANCH; PROMOTION AND DISCIPLINARY BRANCH SERVICE QUALITY GAP (GAP 5)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
DO	OS	SE	AS	ET	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32	B33	B34	B35	B36	B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50	B51	B52	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B63	B64	B65	B66	B67	B68	B69	B70	B71	B72	B73	B74	B75	B76	B77	B78	B79	B80	B81	B82	B83	B84	B85	B86	B87	B88	B89	B90	B91	B92	B93	B94	B95	B96	B97	B98	B99	B100	B101	B102	B103	B104	B105	B106	B107	B108	B109	B110	B111	B112	B113	B114	B115	B116	B117	B118	B119	B120	B121	B122	B123	B124	B125	B126	B127	B128	B129	B130	B131	B132	B133	B134	B135	B136	B137	B138	B139	B140	B141	B142	B143	B144	B145	B146	B147	B148	B149	B150	B151	B152	B153	B154	B155	B156	B157	B158	B159	B160	B161	B162	B163	B164	B165	B166	B167	B168	B169	B170	B171	B172	B173	B174	B175	B176	B177	B178	B179	B180	B181	B182	B183	B184	B185	B186	B187	B188	B189	B190	B191	B192	B193	B194	B195	B196	B197	B198	B199	B200	B201	B202	B203	B204	B205	B206	B207	B208	B209	B210	B211	B212	B213	B214	B215	B216	B217	B218	B219	B220	B221	B222	B223	B224	B225	B226	B227	B228	B229	B230	B231	B232	B233	B234	B235	B236	B237	B238	B239	B240	B241	B242	B243	B244	B245	B246	B247	B248	B249	B250	B251	B252	B253	B254	B255	B256	B257	B258	B259	B260	B261	B262	B263	B264	B265	B266	B267	B268	B269	B270	B271	B272	B273	B274	B275	B276	B277	B278	B279	B280	B281	B282	B283	B284	B285	B286	B287	B288	B289	B290	B291	B292	B293	B294	B295	B296	B297	B298	B299	B300	B301	B302	B303	B304	B305	B306	B307	B308	B309	B310	B311	B312	B313	B314	B315	B316	B317	B318	B319	B320	B321	B322	B323	B324	B325	B326	B327	B328	B329	B330	B331	B332	B333	B334	B335	B336	B337	B338	B339	B340	B341	B342	B343	B344	B345	B346	B347	B348	B349	B350	B351	B352	B353	B354	B355	B356	B357	B358	B359	B360	B361	B362	B363	B364	B365	B366	B367	B368	B369	B370	B371	B372	B373	B374	B375	B376	B377	B378	B379	B380	B381	B382	B383	B384	B385	B386	B387	B388	B389	B390	B391	B392	B393	B394	B395	B396	B397	B398	B399	B400	B401	B402	B403	B404	B405	B406	B407	B408	B409	B410	B411	B412	B413	B414	B415	B416	B417	B418	B419	B420	B421	B422	B423	B424	B425	B426	B427	B428	B429	B430	B431	B432	B433	B434	B435	B436	B437	B438	B439	B440	B441	B442	B443	B444	B445	B446	B447	B448	B449	B450	B451	B452	B453	B454	B455	B456	B457	B458	B459	B460	B461	B462	B463	B464	B465	B466	B467	B468	B469	B470	B471	B472	B473	B474	B475	B476	B477	B478	B479	B480	B481	B482	B483	B484	B485	B486	B487	B488	B489	B490	B491	B492	B493	B494	B495	B496	B497	B498	B499	B500	B501	B502	B503	B504	B505	B506	B507	B508	B509	B510	B511	B512	B513	B514	B515	B516	B517	B518	B519	B520	B521	B522	B523	B524	B525	B526	B527	B528	B529	B530	B531	B532	B533	B534	B535	B536	B537	B538	B539	B540	B541	B542	B543	B544	B545	B546	B547	B548	B549	B550	B551	B552	B553	B554	B555	B556	B557	B558	B559	B560	B561	B562	B563	B564	B565	B566	B567	B568	B569	B570	B571	B572	B573	B574	B575	B576	B577	B578	B579	B580	B581	B582	B583	B584	B585	B586	B587	B588	B589	B590	B591	B592	B593	B594	B595	B596	B597	B598	B599	B600	B601	B602	B603	B604	B605	B606	B607	B608	B609	B610	B611	B612	B613	B614	B615	B616	B617	B618	B619	B620	B621	B622	B623	B624	B625	B626	B627	B628	B629	B630	B631	B632	B633	B634	B635	B636	B637	B638	B639	B640	B641	B642	B643	B644	B645	B646	B647	B648	B649	B650	B651	B652	B653	B654	B655	B656	B657	B658	B659	B660	B661	B662	B663	B664	B665	B666	B667	B668	B669	B670	B671	B672	B673	B674	B675	B676	B677	B678	B679	B680	B681	B682	B683	B684	B685	B686	B687	B688	B689	B690	B691	B692	B693	B694	B695	B696	B697	B698	B699	B700	B701	B702	B703	B704	B705	B706	B707	B708	B709	B710	B711	B712	B713	B714	B715	B716	B717	B718	B719	B720	B721	B722	B723	B724	B725	B726	B727	B728	B729	B730	B731	B732	B733	B734	B735	B736	B737	B738	B739	B740	B741	B742	B743	B744	B745	B746	B747	B748	B749	B750	B751	B752	B753	B754	B755	B756	B757	B758	B759	B760	B761	B762	B763	B764	B765	B766	B767	B768	B769	B770	B771	B772	B773	B774	B775	B776	B777	B778	B779	B780	B781	B782	B783	B784	B785	B786	B787	B788	B789	B790	B791	B792	B793	B794	B795	B796	B797	B798	B799	B800	B801	B802	B803	B804	B805	B806	B807	B808	B809	B810	B811	B812	B813	B814	B815	B816	B817	B818	B819	B820	B821	B822	B823	B824	B825	B826	B827	B828	B829	B830	B831	B832	B833	B834	B835	B836	B837	B838	B839	B840	B841	B842	B843	B844	B845	B846	B847	B848	B849	B850	B851	B852	B853	B854	B855	B856	B857	B858	B859	B860	B861	B862	B863	B864	B865	B866	B867	B868	B869	B870	B871	B872	B873	B874	B875	B876	B877	B878	B879	B880	B881	B882	B883	B884	B885	B886	B887	B888	B889	B890	B891	B892	B893	B894	B895	B896	B897	B898	B899	B900	B901	B902	B903	B904	B905	B906	B907	B908	B909	B910	B911	B912	B913	B914	B915	B916	B917	B918	B919	B920	B921	B922	B923	B924	B925	B926	B927	B928	B929	B930	B931	B932	B933	B934	B935	B936	B937	B938	B939	B940	B941	B942	B943	B944	B945	B946	B947	B948	B949	B950	B951	B952	B953	B954	B955	B956	B957	B958	B959	B960	B961	B962	B963	B964	B965	B966	B967	B968	B969	B970	B971	B972	B973	B974	B975	B976	B977	B978	B979	B980	B981	B982	B983	B984	B985	B986	B987	B988	B989	B990	B991	B992	B993	B994	B995	B996	B997	B998	B999	B1000

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[illegible]

Service Quality Gap on Services Provided by the Computer Centre

SERVICE QUALITY GAP (GAP) ON SERVICES PROVIDED BY THE COMPUTER CENTRE, PUBLIC WORKS DEPARTMENT, MINISTRY OF PUBLIC WORKS									
NO	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1
33	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1
41	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	1	1	1	1
43	1	1	1	1	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	1	1
47	1	1	1	1	1	1	1	1	1
48	1	1	1	1	1	1	1	1	1
49	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1
51	1	1	1	1	1	1	1	1	1
52	1	1	1	1	1	1	1	1	1
53	1	1	1	1	1	1	1	1	1
54	1	1	1	1	1	1	1	1	1
55	1	1	1	1	1	1	1	1	1
56	1	1	1	1	1	1	1	1	1
57	1	1	1	1	1	1	1	1	1
58	1	1	1	1	1	1	1	1	1
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60	1	1	1	1	1	1	1	1	1
61	1	1	1	1	1	1	1	1	1
62	1	1	1	1	1	1	1	1	1
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64	1	1	1	1	1	1	1	1	1
65	1	1	1	1	1	1	1	1	1
66	1	1	1	1	1	1	1	1	1
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68	1	1	1	1	1	1	1	1	1
69	1	1	1	1	1	1	1	1	1
70	1	1	1	1	1	1	1	1	1
71	1	1	1	1	1	1	1	1	1
72	1	1	1	1	1	1	1	1	1
73	1	1	1	1	1	1	1	1	1
74	1	1	1	1	1	1	1	1	1
75	1	1	1	1	1	1	1	1	1
76	1	1	1	1	1	1	1	1	1
77	1	1	1	1	1	1	1	1	1
78	1	1	1	1	1	1	1	1	1
79	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1
81	1	1	1	1	1	1	1	1	1
82	1	1	1	1	1	1	1	1	1
83	1	1	1	1	1	1	1	1	1
84	1	1	1	1	1	1	1	1	1
85	1	1	1	1	1	1	1	1	1
86	1	1	1	1	1	1	1	1	1
87	1	1	1	1	1	1	1	1	1
88	1	1	1	1	1	1	1	1	1
89	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1
91	1	1	1	1	1	1	1	1	1
92	1	1	1	1	1	1	1	1	1
93	1	1	1	1	1	1	1	1	1
94	1	1	1	1	1	1	1	1	1
95	1	1	1	1	1	1	1	1	1
96	1	1	1	1	1	1	1	1	1
97	1	1	1	1	1	1	1	1	1
98	1	1	1	1	1	1	1	1	1
99	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1

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Service Quality Gap on Roads Services Provided by the Public Works

SERVICE QUALITY GAP (GAP 6) ON ROAD SERVICES PROVIDED BY THE PUBLIC WORKS DEPARTMENT, MINISTRY OF PUBLIC WORKS									
NO	AV	VI	VI	VI	VI	VI	VI	VI	VI
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14
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SERVICE QUALITY GAP (GAP 5) ON ROAD SERVICES PROVIDED BY THE PUBLIC WORKS DEPARTMENT, MINISTRY OF PUBLIC WORKS

NO	AV	TV	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36	V37	V38	V39	V40	V41	V42	V43	V44	V45	V46	V47	V48	V49	V50	V51	V52	V53	V54	V55	V56	V57	V58	V59	V60	V61	V62	V63	V64	V65	V66	V67	V68	V69	V70	V71	V72	V73	V74	V75	V76	V77	V78	V79	V80	V81	V82	V83	V84	V85	V86	V87	V88	V89	V90	V91	V92	V93	V94	V95	V96	V97	V98	V99	V100	V101	V102	V103	V104	V105	V106	V107	V108	V109	V110	V111	V112	V113	V114	V115	V116	V117	V118	V119	V120	V121	V122	V123	V124	V125	V126	V127	V128	V129	V130	V131	V132	V133	V134	V135	V136	V137	V138	V139	V140	V141	V142	V143	V144	V145	V146	V147	V148	V149	V150	V151	V152	V153	V154	V155	V156	V157	V158	V159	V160	V161	V162	V163	V164	V165	V166	V167	V168	V169	V170	V171	V172	V173	V174	V175	V176	V177	V178	V179	V180	V181	V182	V183	V184	V185	V186	V187	V188	V189	V190	V191	V192	V193	V194	V195	V196	V197	V198	V199	V200	V201	V202	V203	V204	V205	V206	V207	V208	V209	V210	V211	V212	V213	V214	V215	V216	V217	V218	V219	V220	V221	V222	V223	V224	V225	V226	V227	V228	V229	V230	V231	V232	V233	V234	V235	V236	V237	V238	V239	V240	V241	V242	V243	V244	V245	V246	V247	V248	V249	V250	V251	V252	V253	V254	V255	V256	V257	V258	V259	V260	V261	V262	V263	V264	V265	V266	V267	V268	V269	V270	V271	V272	V273	V274	V275	V276	V277	V278	V279	V280	V281	V282	V283	V284	V285	V286	V287	V288	V289	V290	V291	V292	V293	V294	V295	V296	V297	V298	V299	V300	V301	V302	V303	V304	V305	V306	V307	V308	V309	V310	V311	V312	V313	V314	V315	V316	V317	V318	V319	V320	V321	V322	V323	V324	V325	V326	V327	V328	V329	V330	V331	V332	V333	V334	V335	V336	V337	V338	V339	V340	V341	V342	V343	V344	V345	V346	V347	V348	V349	V350	V351	V352	V353	V354	V355	V356	V357	V358	V359	V360	V361	V362	V363	V364	V365	V366	V367	V368	V369	V370	V371	V372	V373	V374	V375	V376	V377	V378	V379	V380	V381	V382	V383	V384	V385	V386	V387	V388	V389	V390	V391	V392	V393	V394	V395	V396	V397	V398	V399	V400	V401	V402	V403	V404	V405	V406	V407	V408	V409	V410	V411	V412	V413	V414	V415	V416	V417	V418	V419	V420	V421	V422	V423	V424	V425	V426	V427	V428	V429	V430	V431	V432	V433	V434	V435	V436	V437	V438	V439	V440	V441	V442	V443	V444	V445	V446	V447	V448	V449	V450	V451	V452	V453	V454	V455	V456	V457	V458	V459	V460	V461	V462	V463	V464	V465	V466	V467	V468	V469	V470	V471	V472	V473	V474	V475	V476	V477	V478	V479	V480	V481	V482	V483	V484	V485	V486	V487	V488	V489	V490	V491	V492	V493	V494	V495	V496	V497	V498	V499	V500	V501	V502	V503	V504	V505	V506	V507	V508	V509	V510	V511	V512	V513	V514	V515	V516	V517	V518	V519	V520	V521	V522	V523	V524	V525	V526	V527	V528	V529	V530	V531	V532	V533	V534	V535	V536	V537	V538	V539	V540	V541	V542	V543	V544	V545	V546	V547	V548	V549	V550	V551	V552	V553	V554	V555	V556	V557	V558	V559	V560	V561	V562	V563	V564	V565	V566	V567	V568	V569	V570	V571	V572	V573	V574	V575	V576	V577	V578	V579	V580	V581	V582	V583	V584	V585	V586	V587	V588	V589	V590	V591	V592	V593	V594	V595	V596	V597	V598	V599	V600	V601	V602	V603	V604	V605	V606	V607	V608	V609	V610	V611	V612	V613	V614	V615	V616	V617	V618	V619	V620	V621	V622	V623	V624	V625	V626	V627	V628	V629	V630	V631	V632	V633	V634	V635	V636	V637	V638	V639	V640	V641	V642	V643	V644	V645	V646	V647	V648	V649	V650	V651	V652	V653	V654	V655	V656	V657	V658	V659	V660	V661	V662	V663	V664	V665	V666	V667	V668	V669	V670	V671	V672	V673	V674	V675	V676	V677	V678	V679	V680	V681	V682	V683	V684	V685	V686	V687	V688	V689	V690	V691	V692	V693	V694	V695	V696	V697	V698	V699	V700	V701	V702	V703	V704	V705	V706	V707	V708	V709	V710	V711	V712	V713	V714	V715	V716	V717	V718	V719	V720	V721	V722	V723	V724	V725	V726	V727	V728	V729	V730	V731	V732	V733	V734	V735	V736	V737	V738	V739	V740	V741	V742	V743	V744	V745	V746	V747	V748	V749	V750	V751	V752	V753	V754	V755	V756	V757	V758	V759	V760	V761	V762	V763	V764	V765	V766	V767	V768	V769	V770	V771	V772	V773	V774	V775	V776	V777	V778	V779	V780	V781	V782	V783	V784	V785	V786	V787	V788	V789	V790	V791	V792	V793	V794	V795	V796	V797	V798	V799	V800	V801	V802	V803	V804	V805	V806	V807	V808	V809	V810	V811	V812	V813	V814	V815	V816	V817	V818	V819	V820	V821	V822	V823	V824	V825	V826	V827	V828	V829	V830	V831	V832	V833	V834	V835	V836	V837	V838	V839	V840	V841	V842	V843	V844	V845	V846	V847	V848	V849	V850	V851	V852	V853	V854	V855	V856	V857	V858	V859	V860	V861	V862	V863	V864	V865	V866	V867	V868	V869	V870	V871	V872	V873	V874	V875	V876	V877	V878	V879	V880	V881	V882	V883	V884	V885	V886	V887	V888	V889	V890	V891	V892	V893	V894	V895	V896	V897	V898	V899	V900	V901	V902	V903	V904	V905	V906	V907	V908	V909	V910	V911	V912	V913	V914	V915	V916	V917	V918	V919	V920	V921	V922	V923	V924	V925	V926	V927	V928	V929	V930	V931	V932	V933	V934	V935	V936	V937	V938	V939	V940	V941	V942	V943	V944	V945	V946	V947	V948	V949	V950	V951	V952	V953	V954	V955	V956	V957	V958	V959	V960	V961	V962	V963	V964	V965	V966	V967	V968	V969	V970	V971	V972	V973	V974	V975	V976	V977	V978	V979	V980	V981	V982	V983	V984	V985	V986	V987	V988	V989	V990	V991	V992	V993	V994	V995	V996	V997	V998	V999	V1000	V1001	V1002	V1003	V1004	V1005	V1006	V1007	V1008	V1009	V1010	V1011	V1012	V1013	V1014	V1015	V1016	V1017	V1018	V1019	V1020	V1021	V1022	V1023	V1024	V1025	V1026	V1027	V1028	V1029	V1030	V1031	V1032	V1033	V1034	V1035	V1036	V1037	V1038	V1039	V1040	V1041	V1042	V1043	V1044	V1045	V1046	V1047	V1048	V1049	V1050	V1051	V1052	V1053	V1054	V1055	V1056	V1057	V1058	V1059	V1060	V1061	V1062	V1063	V1064	V1065	V1066	V1067	V1068	V1069	V1070	V1071	V1072	V1073	V1074	V1075	V1076	V1077	V1078	V1079	V1080	V1081	V1082	V1083	V1084	V1085	V1086	V1087	V1088	V1089	V1090	V1091	V1092	V1093	V1094	V1095	V1096	V1097	V1098	V1099	V1100	V1101	V1102	V1103	V1104	V1105	V1106	V1107	V1108	V1109	V1110	V1111	V1112	V1113	V1114	V1115	V1116	V1117	V1118	V1119	V1120	V1121	V1122	V1123	V1124	V1125	V1126	V1127	V1128	V1129	V1130	V1131	V1132	V1133	V1134	V1135	V1136	V1137	V1138	V1139	V1140	V1141	V1142	V1143	V1144	V1145	V1146	V1147	V1148	V1149	V1150	V1151	V1152	V1153	V1154	V1155	V1156	V1157	V1158	V1159	V1160	V1161	V1162	V1163	V1164	V1165	V1166	V1167	V1168	V1169	V1170	V1171	V1172	V1173	V1174	V1175	V1176	V1177	V1178	V1179	V1180	V1181	V1182	V1183	V1184	V1185	V1186	V1187	V1188	V1189	V1190	V1191	V1192	V1193	V1194	V1195	V1196	V1197	V1198	V1199	V1200	V1201	V1202	V1203	V1204	V1205	V1206	V1207	V1208	V1209	V1210	V1211	V1212	V1213	V1214	V1215	V1216	V1217	V1218	V1219	V1220	V1221	V1222	V1223	V1224	V1225	V1226	V1227	V1228	V1229	V1230	V1231	V1232	V1233	V1234	V1235	V1236	V1237	V1238	V1239	V1240	V1241	V1242	V1243	V1244	V1245	V1246	V1247	V1248	V1249	V1250	V1251	V1252	V1253	V1254	V1255	V1256	V1257	V1258	V1259	V1260	V1261	V1262	V1263	V1264	V1265	V1266	V1267	V1268	V1269	V1270	V1271	V1272	V1273	V1274	V1275	V1276	V1277	V1278	V1279	V1280	V1281	V1282	V1283	V1284	V1285	V1286	V1287	V1288	V1289	V1290	V1291	V1292	V1293	V1294	V1295	V1296	V1297	V1298	V1299	V1300	V1301	V1302	V1303	V1304	V1305	V1306	V1307	V1308	V1309	V1310	V1311	V1312	V1313	V1314	V1315	V1316	V1317	V1318	V1319	V1320	V1321	V1322	V1323	V1324	V1325	V1326	V1327	V1328	V1329	V1330	V1331	V1332	V1333	V1334	V1335	V1336	V1337	V1338	V1339	V1340	V1341	V1342	V1343	V1344	V1345	V1346	V1347	V1348	V1349	V1350	V1351	V1352	V1353	V1354	V1355	V1356	V1357	V1358	V1359	V1360	V1361	V1362	V1363	V1364	V1365	V1366	V1367	V1368	V1369	V1370	V1371	V1372	V1373	V1374	V1375	V1376	V1377	V1378	V1379	V1380	V1381	V1382	V1383	V1384	V1385	V1386	V1387	V1388	V1389	V1390	V1391	V1392	V1393	V1394	V1395	V1396	V1397	V1398	V1399	V1400	V1401	V1402	V1403	V1404	V1405	V1406	V1407	V1408	V1409	V1410	V1411	V1412	V1413	V1414	V1415	V1416	V1417	V1418	V1419	V1420	V1421	V1422	V1423	V1424	V1425	V1426	V1427	V1428	V1429	V1430	V1431	V1432	V1433	V1434	V1435	V1436	V1437	V1438	V1439	V1440	V1441	V1442	V1443	V1444	V1445	V1446	V1447	V1448	V1449	V1450	V1451	V1452	V1453	V1454	V1455	V1456	V1457	V1458	V1459	V1460	V1461	V1462	V1463	V1464	V1465	V1466	V1467	V1468	V1469	V1470	V1471	V1472	V1473	V1474	V1475	V1476	V1477	V1478	V1479	V1480	V1481	V1482	V1483	V1484	V1485	V1486
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SERVICAL SCORE										SERVICAL SCORE (Case 6)										UNWEIGHTED DIMENSION DATA										WEIGHTED DIMENSION DATA									
Perception Score - Expectation Score										Perception Score - Expectation Score										TAXONOMIES										TAXONOMIES									
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
2.13	-2.01	-1.78	-2.28	-2.46	-2.06	-2.37	-1.8	-2.44	-2.37	-1.81	-1.72	-1.81	-1.61	-1.66	-1.76	-0.88	-1.81	-0.83	-1.71	-1.81	-2.06	-1.19	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	-1.35	
2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08
0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148	0.148
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

APPENDIX F5

Service Quality Gap on Government Residential Quarters Services

SERVICE QUALITY GAP (GAP 5) ON GOVERNMENT RESIDENTIAL QUARTERS SERVICES PROVIDED BY THE PUBLIC WORKS DEPT., MINISTRY OF PUBLIC WORKS									
MO	A	AT	G	ET	ET	ET	ET	ET	ET
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31	31	31
32	32	32	32	32	32	32	32	32	32
33	33	33	33	33	33	33	33	33	33
34	34	34	34	34	34	34	34	34	34
35	35	35	35	35	35	35	35	35	35
36	36	36	36	36	36	36	36	36	36
37	37	37	37	37	37	37	37	37	37
38	38	38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40	40	40
41	41	41	41	41	41	41	41	41	41
42	42	42	42	42	42	42	42	42	42
43	43	43	43	43	43	43	43	43	43
44	44	44	44	44	44	44	44	44	44
45	45	45	45	45	45	45	45	45	45
46	46	46	46	46	46	46	46	46	46
47	47	47	47	47	47	47	47	47	47
48	48	48	48	48	48	48	48	48	48
49	49	49	49	49	49	49	49	49	49
50	50	50	50	50	50	50	50	50	50
51	51	51	51	51	51	51	51	51	51
52	52	52	52	52	52	52	52	52	52
53	53	53	53	53	53	53	53	53	53
54	54	54	54	54	54	54	54	54	54
55	55	55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57	57	57
58	58	58	58	58	58	58	58	58	58
59	59	59	59	59	59	59	59	59	59
60	60	60	60	60	60	60	60	60	60
61	61	61	61	61	61	61	61	61	61
62	62	62	62	62	62	62	62	62	62
63	63	63	63	63	63	63	63	63	63
64	64	64	64	64	64	64	64	64	64
65	65	65	65	65	65	65	65	65	65
66	66	66	66	66	66	66	66	66	66
67	67	67	67	67	67	67	67	67	67
68	68	68	68	68	68	68	68	68	68
69	69	69	69	69	69	69	69	69	69
70	70	70	70	70	70	70	70	70	70
71	71	71	71	71	71	71	71	71	71
72	72	72	72	72	72	72	72	72	72
73	73	73	73	73	73	73	73	73	73
74	74	74	74	74	74	74	74	74	74
75	75	75	75	75	75	75	75	75	75
76	76	76	76	76	76	76	76	76	76
77	77	77	77	77	77	77	77	77	77
78	78	78	78	78	78	78	78	78	78
79	79	79	79	79	79	79	79	79	79
80	80	80	80	80	80	80	80	80	80
81	81	81	81	81	81	81	81	81	81
82	82	82	82	82	82	82	82	82	82
83	83	83	83	83	83	83	83	83	83
84	84	84	84	84	84	84	84	84	84
85	85	85	85	85	85	85	85	85	85
86	86	86	86	86	86	86	86	86	86
87	87	87	87	87	87	87	87	87	87
88	88	88	88	88	88	88	88	88	88
89	89	89	89	89	89	89	89	89	89
90	90	90	90	90	90	90	90	90	90
91	91	91	91	91	91	91	91	91	91
92	92	92	92	92	92	92	92	92	92
93	93	93	93	93	93	93	93	93	93
94	94	94	94	94	94	94	94	94	94
95	95	95	95	95	95	95	95	95	95
96	96	96	96	96	96	96	96	96	96
97	97	97	97	97	97	97	97	97	97
98	98	98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100	100	100

SERVICE QUALITY GAP (GAP 5) ON GOVERNMENT RESIDENTIAL QUARTERS SERVICES PROVIDED BY THE PUBLIC WORKS DEPT., MINISTRY OF PUBLIC WORKS

NO	A	Q	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41	E42	E43	E44	E45	E46	E47	E48	E49	E50	E51	E52	E53	E54	E55	E56	E57	E58	E59	E60	E61	E62	E63	E64	E65	E66	E67	E68	E69	E70	E71	E72	E73	E74	E75	E76	E77	E78	E79	E80	E81	E82	E83	E84	E85	E86	E87	E88	E89	E90	E91	E92	E93	E94	E95	E96	E97	E98	E99	E100	E101	E102	E103	E104	E105	E106	E107	E108	E109	E110	E111	E112	E113	E114	E115	E116	E117	E118	E119	E120	E121	E122	E123	E124	E125	E126	E127	E128	E129	E130	E131	E132	E133	E134	E135	E136	E137	E138	E139	E140	E141	E142	E143	E144	E145	E146	E147	E148	E149	E150	E151	E152	E153	E154	E155	E156	E157	E158	E159	E160	E161	E162	E163	E164	E165	E166	E167	E168	E169	E170	E171	E172	E173	E174	E175	E176	E177	E178	E179	E180	E181	E182	E183	E184	E185	E186	E187	E188	E189	E190	E191	E192	E193	E194	E195	E196	E197	E198	E199	E200	E201	E202	E203	E204	E205	E206	E207	E208	E209	E210	E211	E212	E213	E214	E215	E216	E217	E218	E219	E220	E221	E222	E223	E224	E225	E226	E227	E228	E229	E230	E231	E232	E233	E234	E235	E236	E237	E238	E239	E240	E241	E242	E243	E244	E245	E246	E247	E248	E249	E250	E251	E252	E253	E254	E255	E256	E257	E258	E259	E260	E261	E262	E263	E264	E265	E266	E267	E268	E269	E270	E271	E272	E273	E274	E275	E276	E277	E278	E279	E280	E281	E282	E283	E284	E285	E286	E287	E288	E289	E290	E291	E292	E293	E294	E295	E296	E297	E298	E299	E300	E301	E302	E303	E304	E305	E306	E307	E308	E309	E310	E311	E312	E313	E314	E315	E316	E317	E318	E319	E320	E321	E322	E323	E324	E325	E326	E327	E328	E329	E330	E331	E332	E333	E334	E335	E336	E337	E338	E339	E340	E341	E342	E343	E344	E345	E346	E347	E348	E349	E350	E351	E352	E353	E354	E355	E356	E357	E358	E359	E360	E361	E362	E363	E364	E365	E366	E367	E368	E369	E370	E371	E372	E373	E374	E375	E376	E377	E378	E379	E380	E381	E382	E383	E384	E385	E386	E387	E388	E389	E390	E391	E392	E393	E394	E395	E396	E397	E398	E399	E400	E401	E402	E403	E404	E405	E406	E407	E408	E409	E410	E411	E412	E413	E414	E415	E416	E417	E418	E419	E420	E421	E422	E423	E424	E425	E426	E427	E428	E429	E430	E431	E432	E433	E434	E435	E436	E437	E438	E439	E440	E441	E442	E443	E444	E445	E446	E447	E448	E449	E450	E451	E452	E453	E454	E455	E456	E457	E458	E459	E460	E461	E462	E463	E464	E465	E466	E467	E468	E469	E470	E471	E472	E473	E474	E475	E476	E477	E478	E479	E480	E481	E482	E483	E484	E485	E486	E487	E488	E489	E490	E491	E492	E493	E494	E495	E496	E497	E498	E499	E500	E501	E502	E503	E504	E505	E506	E507	E508	E509	E510	E511	E512	E513	E514	E515	E516	E517	E518	E519	E520	E521	E522	E523	E524	E525	E526	E527	E528	E529	E530	E531	E532	E533	E534	E535	E536	E537	E538	E539	E540	E541	E542	E543	E544	E545	E546	E547	E548	E549	E550	E551	E552	E553	E554	E555	E556	E557	E558	E559	E560	E561	E562	E563	E564	E565	E566	E567	E568	E569	E570	E571	E572	E573	E574	E575	E576	E577	E578	E579	E580	E581	E582	E583	E584	E585	E586	E587	E588	E589	E590	E591	E592	E593	E594	E595	E596	E597	E598	E599	E600	E601	E602	E603	E604	E605	E606	E607	E608	E609	E610	E611	E612	E613	E614	E615	E616	E617	E618	E619	E620	E621	E622	E623	E624	E625	E626	E627	E628	E629	E630	E631	E632	E633	E634	E635	E636	E637	E638	E639	E640	E641	E642	E643	E644	E645	E646	E647	E648	E649	E650	E651	E652	E653	E654	E655	E656	E657	E658	E659	E660	E661	E662	E663	E664	E665	E666	E667	E668	E669	E670	E671	E672	E673	E674	E675	E676	E677	E678	E679	E680	E681	E682	E683	E684	E685	E686	E687	E688	E689	E690	E691	E692	E693	E694	E695	E696	E697	E698	E699	E700	E701	E702	E703	E704	E705	E706	E707	E708	E709	E710	E711	E712	E713	E714	E715	E716	E717	E718	E719	E720	E721	E722	E723	E724	E725	E726	E727	E728	E729	E730	E731	E732	E733	E734	E735	E736	E737	E738	E739	E740	E741	E742	E743	E744	E745	E746	E747	E748	E749	E750	E751	E752	E753	E754	E755	E756	E757	E758	E759	E760	E761	E762	E763	E764	E765	E766	E767	E768	E769	E770	E771	E772	E773	E774	E775	E776	E777	E778	E779	E780	E781	E782	E783	E784	E785	E786	E787	E788	E789	E790	E791	E792	E793	E794	E795	E796	E797	E798	E799	E800	E801	E802	E803	E804	E805	E806	E807	E808	E809	E810	E811	E812	E813	E814	E815	E816	E817	E818	E819	E820	E821	E822	E823	E824	E825	E826	E827	E828	E829	E830	E831	E832	E833	E834	E835	E836	E837	E838	E839	E840	E841	E842	E843	E844	E845	E846	E847	E848	E849	E850	E851	E852	E853	E854	E855	E856	E857	E858	E859	E860	E861	E862	E863	E864	E865	E866	E867	E868	E869	E870	E871	E872	E873	E874	E875	E876	E877	E878	E879	E880	E881	E882	E883	E884	E885	E886	E887	E888	E889	E890	E891	E892	E893	E894	E895	E896	E897	E898	E899	E900	E901	E902	E903	E904	E905	E906	E907	E908	E909	E910	E911	E912	E913	E914	E915	E916	E917	E918	E919	E920	E921	E922	E923	E924	E925	E926	E927	E928	E929	E930	E931	E932	E933	E934	E935	E936	E937	E938	E939	E940	E941	E942	E943	E944	E945	E946	E947	E948	E949	E950	E951	E952	E953	E954	E955	E956	E957	E958	E959	E960	E961	E962	E963	E964	E965	E966	E967	E968	E969	E970	E971	E972	E973	E974	E975	E976	E977	E978	E979	E980	E981	E982	E983	E984	E985	E986	E987	E988	E989	E990	E991	E992	E993	E994	E995	E996	E997	E998	E999	E1000	E1001	E1002	E1003	E1004	E1005	E1006	E1007	E1008	E1009	E1010	E1011	E1012	E1013	E1014	E1015	E1016	E1017	E1018	E1019	E1020	E1021	E1022	E1023	E1024	E1025	E1026	E1027	E1028	E1029	E1030	E1031	E1032	E1033	E1034	E1035	E1036	E1037	E1038	E1039	E1040	E1041	E1042	E1043	E1044	E1045	E1046	E1047	E1048	E1049	E1050	E1051	E1052	E1053	E1054	E1055	E1056	E1057	E1058	E1059	E1060	E1061	E1062	E1063	E1064	E1065	E1066	E1067	E1068	E1069	E1070	E1071	E1072	E1073	E1074	E1075	E1076	E1077	E1078	E1079	E1080	E1081	E1082	E1083	E1084	E1085	E1086	E1087	E1088	E1089	E1090	E1091	E1092	E1093	E1094	E1095	E1096	E1097	E1098	E1099	E1100	E1101	E1102	E1103	E1104	E1105	E1106	E1107	E1108	E1109	E1110	E1111	E1112	E1113	E1114	E1115	E1116	E1117	E1118	E1119	E1120	E1121	E1122	E1123	E1124	E1125	E1126	E1127	E1128	E1129	E1130	E1131	E1132	E1133	E1134	E1135	E1136	E1137	E1138	E1139	E1140	E1141	E1142	E1143	E1144	E1145	E1146	E1147	E1148	E1149	E1150	E1151	E1152	E1153	E1154	E1155	E1156	E1157	E1158	E1159	E1160	E1161	E1162	E1163	E1164	E1165	E1166	E1167	E1168	E1169	E1170	E1171	E1172	E1173	E1174	E1175	E1176	E1177	E1178	E1179	E1180	E1181	E1182	E1183	E1184	E1185	E1186	E1187	E1188	E1189	E1190	E1191	E1192	E1193	E1194	E1195	E1196	E1197	E1198	E1199	E1200	E1201	E1202	E1203	E1204	E1205	E1206	E1207	E1208	E1209	E1210	E1211	E1212	E1213	E1214	E1215	E1216	E1217	E1218	E1219	E1220	E1221	E1222	E1223	E1224	E1225	E1226	E1227	E1228	E1229	E1230	E1231	E1232	E1233	E1234	E1235	E1236	E1237	E1238	E1239	E1240	E1241	E1242	E1243	E1244	E1245	E1246	E1247	E1248	E1249	E1250	E1251	E1252	E1253	E1254	E1255	E1256	E1257	E1258	E1259	E1260	E1261	E1262	E1263	E1264	E1265	E1266	E1267	E1268	E1269	E1270	E1271	E1272	E1273	E1274	E1275	E1276	E1277	E1278	E1279	E1280	E1281	E1282	E1283	E1284	E1285	E1286	E1287	E1288	E1289	E1290	E1291	E1292	E1293	E1294	E1295	E1296	E1297	E1298	E1299	E1300	E1301	E1302	E1303	E1304	E1305	E1306	E1307	E1308	E1309	E1310	E1311	E1312	E1313	E1314	E1315	E1316	E1317	E1318	E1319	E1320	E1321	E1322	E1323	E1324	E1325	E1326	E1327	E1328	E1329	E1330	E1331	E1332	E1333	E1334	E1335	E1336	E1337	E1338	E1339	E1340	E1341	E1342	E1343	E1344	E1345	E1346	E1347	E1348	E1349	E1350	E1351	E1352	E1353	E1354	E1355	E1356	E1357	E1358	E1359	E1360	E1361	E1362	E1363	E1364	E1365	E1366	E1367	E1368	E1369	E1370	E1371	E1372	E1373	E1374	E1375	E1376	E1377	E1378	E1379	E1380	E1381	E1382	E1383	E1384	E1385	E1386	E1387	E1388	E1389	E1390	E1391	E1392	E1393	E1394	E1395	E1396	E1397	E1398	E1399	E1400	E1401	E1402	E1403	E1404	E1405	E1406	E1407	E1408	E1409	E1410	E1411	E1412	E1413	E1414	E1415	E1416	E1417	E1418	E1419	E1420	E1421	E1422	E1423	E1424	E1425	E1426	E1427	E1428	E1429	E1430	E1431	E1432	E1433	E1434	E1435	E1436	E1437	E1438	E1439	E1440	E1441	E1442	E1443	E1444	E1445	E1446	E1447	E1448	E1449	E1450	E1451	E1452	E1453	E1454	E1455	E1456	E1457	E1458	E1459	E1460	E1461	E1462	E1463	E1464	E1465	E1466	E1467	E1468	E1469	E1470	E1471	E1472	E1473	E1474	E1475	E1476	E1477	E1478	E1479	E1480	E1481	E1482	E1483	E1484	E1485
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Reliability Test on SERVQUAL Instrument used in Survey Subject Area I

1 of 2

Appendix G1A

Table G1A-1. Summary on Responses to Interview on Service Performance and Service Quality Extracted from the Tabulated Responses in Appendix G1C - Professional and Management Group (Group 1)

No.	Position	Does Department Deliver Quality Service	Reason
1.	Senior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Staff do not understand concept of customer requirement. 2 Staff not shown how to provide quality services. 3 Quality Day not exploited. 4 Staff not sent for courses. 5 Lack of rewards. 6 QCC only for competition. 7 Quality awards are large scale awards, need small scale awards.
2.	Senior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Unequal distribution of staff. 2 Staff overloaded with work. 3 Less productive staff gets higher marks than productive staff. 4 Less productive staff gets awards.
3.	Senior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Performance evaluation do not consider quality work. 2 Staff not bothered about producing quality work. 3 The rating trend is, do not rate staff at the right level of performance, always rate higher. 4 Appraisers do not give marks lower than 80 per cent to average performers. 5 Rate high to enable staff compete for PRP.
4.	Senior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Managers do not tell staff how to apply quality to their work. 2 Quality Day not fully exploited. 3 Quality programmes not explained to staff. 4 Quality slogans have no meaning. 5 Not enough incentives to motivate staff. 6 Too few service excellence award to reward all excellent performers. 7 Need to extend award to include team performance
5.	Middle Manager	Limited Extent	<ol style="list-style-type: none"> 1 Poor leadership. 2 Poor management. 3 Top management practice favouritism. 4 Favouritism causes senior managers to be dissatisfied with organisation. 5 Managers in lower rung followed attitude of senior managers. 6 Senior managers receiving the service excellence award. 7 Senior managers taking unnecessary disciplinary action. 8 Not recognising staff contribution through active involvement in departmental social activities.

6.	Middle Manager	Certain Extent	<ol style="list-style-type: none"> 1 Too detailed assessment giving accurate rating causes dissatisfaction among staff, their marks tend to be lower than others. 2 Senior managers do not appreciate detailed assessment. 3 Staff given high marks to eliminate hostility.
7.	Middle Manager	Certain Extent	<ol style="list-style-type: none"> 1 Performance improve due to launch of 'Excellent Work Culture'. 2 Performance improve due to introduction of the NRS with facilities to improve well being of employees. 3 The service excellence award introduced under the NRS did not improve performance. 4 The service excellence award is too few to motivate staff. 5 The ability to motivate staff is made worse by having flatter organisations.
8.	Middle Manager	Certain Extent	<ol style="list-style-type: none"> 1 Lack good leadership. 2 Lack effective management. 3 Not asked to attend performance appraisal. 4 Dissatisfied with management.
9.	Middle Manager	Certain Extent	<ol style="list-style-type: none"> 1 Not enough staff. 2 Poor reward system - not able to motivate staff. 3 Have to give high marks to staff to enable them to compete for service excellence award. 4 Short term reward system. Maximum number of award per staff is twice. No more motivation after awarded twice. 5 Flatter organisation, makes motivation worse off as no prospect for promotion.
10.	Middle Manager	Certain Extent	<ol style="list-style-type: none"> 1 Given facilities like computer loan, improve computer literacy and improve performance. 2 Staff shortage. 3 Over-loaded with work. 4 Not enough computer equipment. 5 Not enough funds to meet training needs.
11.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 NRS introduced excellent facilities. 2 NRS introduced PRP scheme which motivates staff. 3 Quality programmes introduced did not improve quality. Lack of management commitment towards quality.
12.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 No management encouragement on staff to produce quality work. 2 Government introduced quality programmes but managers not committed. 3 Quality Day not exploited. 4 Staff do not understand quality. 5 QCC introduced for competitions and not to develop ideas from staff.
13.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Conflict between completing work under the set works targets and producing quality work. 2 Defective reward system. 3 Many employees feel they deserve to be rewarded but were restricted by quota. 4 Performance appraisal take too much time, difficult to assess quality work, much easy to eliminate assessing quality work when assessing performance.

14.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Lack of capital resources to acquire equipment and send staff for training. 2 Staff over-loaded with work.
15.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Defective performance appraisal system. 2 Inflexible reward system. 3 Individual rewards undermine teamwork.
16.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Ineffective reward system, demotivates excellent performers, only a few excellent performers out of many excellent performers get the award. 2 Not deserving staff getting rewarded, demotivate deserving staff. 3 Appraisal report not fully exploited, only use for pay increase and promotion.
17.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Ineffective managers. 2 Managers did not practice fairness. 3 Only middle managers and above enjoy most of departmental benefits. Junior managers and below not allowed to attend good courses.
18.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Most programmes introduced by government improve performance. 2 The performance appraisal system and the performance related pay system are flawed, forms barrier to quality work, creates hostility and destroys team-working.
19.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 The service excellence award is too few. 2 Ridiculous to say only 2 per cent are excellent performers and use 2 per cent quota. 3 Employees not fairly evaluated, wrong people getting rewards.
20.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 NRS has many perks for well-being of employees, motivates employees. 2 Reward system has negative effect on motivation. 3 Use team awards and not individual awards. 4 Appraisers not trained to appraise, some give high marks other give low marks for same level of performance.
21.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Giving high marks not reflective of performance, allow staff to compete for service excellence award. 2 Rotation system for staff to get rewards.
22.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Subjective evaluation even with set work targets.
23.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Lack of management commitment on quality. 2 Staff follow managers in not being committed.
24.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Defective performance appraisal system and performance related pay system. 2 No formal training on performance appraisal. 3 Incorrect marks given to the staff.
25.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Managers did not explain how to use quality concept in their work. 2 Staff not allowed to go for good courses.

26.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Quota for service excellence award is too small to motivate employees. 2 Reward demotivates excellent employees who obtained the reward twice (maximum), no more rewards to motivate them.
27.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Appraisers like to give high marks to make sure staff gets service excellence award. 2 Marks not reflective of performance. 3 Average workers getting 80 per cent and above.
28.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Staff do not understand quality. 2 Management only provide big time quality programmes which staff do not appreciate.
29.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 No opportunity to attend training. 2 Managers not committed to quality. 3 Defective reward system.
30.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Lack of resources. 2 Lack of awards.
31.	Junior Manager	Limited Extent	<ol style="list-style-type: none"> 1 Unfair ratings. 2 Defective reward system. 3 Against TQM concept of team-working.
32.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Staff already on maximum pay are demotivated, cannot get rewarded for excellent performance. 2 Difficult to be promoted because of limited posts due to flatter organisation.
33.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Incident book demotivate staff, staff feel managers do not trust them.
34.	Middle Manager	Large Extent	<ol style="list-style-type: none"> 1 NRS improves performance. 2 The PRP system motivates staff to compete for excellence.
35.	Middle Manager	Large Extent	<ol style="list-style-type: none"> 1 Incentives under the NRS motivates staff.
36.	Junior Manager	Large Extent	<ol style="list-style-type: none"> 1 NRS provides healthy competition. 2 Performance appraisal does not motivate staff due to subjective evaluation, incident book help overcome the subjective evaluation, motivates staff.
37.	Junior Manager	Large Extent	<ol style="list-style-type: none"> 1 Quality programmes create awareness in quality. 2 Stress on Information technology improves performance. 3 NRS improves performance.
38.	Junior Manager	Large Extent	<ol style="list-style-type: none"> 1 High economic growth.
39.	Junior Manager	Certain Extent	<ol style="list-style-type: none"> 1 Incident book is tedious to use, tendency to exclude or forget some entries, evaluation will be incorrect, can demotivate.

Appendix G1B

Table G1B-1. Summary on Responses to Interview on Service Performance and Service Quality Extracted from the Tabulated Responses in Appendix G1D - Support Group (Group 2)

No.	Does Department Deliver Quality Service	Reason
1.	Limited Extent	1 Staff not shown how to apply quality concept to work. 2 Quality slogans do not tell staff how to do work. 3 Managers not bothered to explain quality circulars.
2.	Limited Extent	1 Too few service excellence award under the 2 and 3 per cent quota. 2 Staff felt it is too competitive and opt out of race for excellence. 3 Undeserving staff getting rewarded, demotivating deserving staff. 4 QCC is waste of time. Small staff ideas not wanted and not implemented, QCC used for competitions only.
3.	Certain Extent	1 Work over-load 2 Managers did not improve work over-load situation. 3 Work over-loaded staff demoralised, not getting rewarded.
4.	Certain Extent	1 Performance appraisal system demotivate staff to perform well.
5.	Certain Extent	1 Difficult to tell when staff produce quality work, tendency not to include in performance evaluation, discourage staff to produce quality work.
6.	Certain Extent	1 No guide from managers on how to produce quality work.
7.	Certain Extent	1 service excellence award too few to reward all excellent staff, demotivate them.
8.	Certain Extent	1 The service excellence award is not enough to motivate staff.
9.	Certain Extent	1 Individual rewards affect teamwork.
10.	Limited Extent	1 Poor leadership. 2 Managers has poor managerial skills. 3 Managers do personal work, staff tend to follow. 4 Managers practice favouritism.
11.	Certain Extent	1 No recognition given for being actively involved in departmental social activities.
12.	Certain Extent	1 Inconsistent ratings, same level of performance, different marks given.
13.	Certain Extent	1 Too few rewards to motivate staff. 2 Flatter organisation, reduce promotions, demotivate staff.

14.	Certain Extent	1 Ineffective managers. 2 Poor leadership. 3 Not much guidance, coaching and supervision.
15.	Limited Extent	1 Flawed reward system. 2 Staff get award twice (maximum) loses motivation to maintain excellent performance. 3 Flatter organisation, less promotions, demotivates further.
16.	Certain Extent	1 Not enough staff. 2 Cannot attend courses.
17.	Limited Extent	1 Bad managers. 2 Do not encourage staff to produce quality work. 3 Managers do personal work during office hours, set bad example, staff demoralised to perform well.
18.	Certain Extent	1 Rewards too few, most staff rated highly and deserve to get the service excellence award, but did not get it, demotivated to perform better.
19.	Certain Extent	1 Performance appraisal system affects teamwork, lack of teamwork affects performance.
20.	Limited Extent	1 Too few rewards, only a limited not of excellent performers get rewarded. 2 Performance appraisal interview only 10 minutes.
21.	Certain Extent	1 Performance appraisal report not used for other purposes except pay rise and promotion.
22.	Certain Extent	1 Not good managers. 2 Not enough supervision, guidance and coaching. 3 Managers refuse to sent staff for training.
23.	Certain Extent	1 The NRS is a barrier to quality work. 2 Staff on maximum salary demotivated, cannot get pay rise even when awarded the service excellence award. 3 Staff getting award twice (maximum) gets demotivated after that.
24.	Limited Extent	1 Appraisers practice favouritism. 2 Staff close or from same locality gets favourable rating. 3 Service excellence award given to wrong people.
25.	Limited Extent	1 Subjective evaluation, ratings not accurate. 2 Appraisers not trained to do proper evaluation. 3 Staff with same level of performance, given different marks.
26.	Certain Extent	1 Departments compete to give high marks to staff. 2 Difficult for staff with same performance but given low marks to compete for service excellence award. 3 Inaccurate ratings. 4 Average workers given 80 per cent and above. 5 Marks not reflective of performance, cannot help improve staff performance. 6 No guidance to determine marks to be given.

27. Limited Extent	<ol style="list-style-type: none"> 1 Performance appraisal with set works targets is said to be able to measure performance objectively, but it is not able to do so. 2 Performance appraisal still subjected to subjective evaluation. 3 Flawed performance appraisal system cannot measure performance accurately and cannot improve performance.
28. Certain Extent	<ol style="list-style-type: none"> 1 Staff told about customer's requirements during Quality Day, but not told how to apply the work to meet customer's requirements. 2 Managers never explain concept of quality and how it relates to the staff's work. 3 Staff still don't understand the real meaning of quality.
29. Certain Extent	<ol style="list-style-type: none"> 1 Managers do not know how to appraise staff. 2 Marks inconsistent between appraisers although performance is equal. 3 Not able to compete for service excellence award as rating is lower than other staff under different appraisers.
30. Certain Extent	<ol style="list-style-type: none"> 1 Staff do not fully understand the meaning of quality. 2 Managers did not brief quality programmes launched by government to staff. 3 Managers not concern about quality, more involved with personal work.
31. Certain Extent	<ol style="list-style-type: none"> 1 Quota of 2 per cent for excellent performance is ridiculous, there are more than 2 per cent excellent performers in the public service. 2 Service excellence award not enough to motivate, need more forms of rewards. 3 Staff should get rewarded only in year of excellence, the service excellence award giving continuous reward until he retires is wrong.
32. Certain Extent	<ol style="list-style-type: none"> 1 Appraisers like to give high marks, want their staff to get the service excellence award. 2 Do not provide correct rating for the performance improvement.
33. Certain Extent	<ol style="list-style-type: none"> 1 Staff do not understand the concept of quality. 2 Managers not committed on quality. 3 Staff only hear about quality on Quality Day.
34. Certain Extent	<ol style="list-style-type: none"> 1 Should not set quota for the rewards, too few to motivate the staff. 2 There are more than 2 per cent excellent performers. 3 Public Service Department did not set standards for giving marks in evaluations. 4 Staff not encouraged to get involved with quality programmes. 5 Quality awards, like the Prime Minister's award too big for staff, staff need small scale quality awards to award them for quality work.
35. Certain Extent	<ol style="list-style-type: none"> 1 Reward too few, cannot motivate staff to produce quality work, therefore need more staff to compensate for motivational failure.
36. Certain Extent	<ol style="list-style-type: none"> 1 The performance appraisal system affects teamwork. 2 Staff work for individual interest rather than team interest.

37.	Limited Extent	1 In private sector, perform better gets better rewards, but in public sector, too few rewards, worse, perform well others get rewarded. 2 No motivation for staff on maximum salary scale.
38.	Large Extent	1 The NRS give rewards for excellent performance, not there before. 2 Motivated staff to perform well year after year.
39.	Large Extent	1 Before NRS, no incentive to perform well, better now. 2 Quality programmes create awareness on quality.
40.	Large Extent	1 The performance related pay system provides healthy competition among staff, improve performance.
41.	Certain Extent	1 Staff feels that the service excellence award is too difficult to get it, so be average worker, provide average quality work.
42.	Certain Extent	1 Do not understand meaning of quality in relation to work. 2 Managers never explain about quality circulars.
43.	Limited Extent	1 The NRS has done more harm than good, staff work as a team, but only one team member gets rewarded, very demotivating.

Appendix G1C. Responses to Interview on Service Performance and Service Quality

No: 1

Group: 1

Position: Senior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

The staff do not fully understand the concept of customer requirements in delivering quality services. It has always been the case that, according to the employees, they are doing their job as what is expected of them without any consideration to others who will be receiving the services produced by them. Sometimes what they produced does not meet the requirements of the service receivers. Reworking and redoing are often required but they often create misunderstanding and conflict between the service providers and receivers.

The quality service concepts have not been fully explained to the employees. If we look around us, there are numerous quality and productivity programmes but why is that the employees are not practising this concept. The employees are not sent for quality courses. The quality concept has been driven or planted into the employees in the general terms. They have not been shown specifically how they can provide quality services in their work. Year after year we have our Quality Day. Employees understand what is quality but they do not know how to apply this concept to their work. We have quality slogans but the slogans are general statements on how to deliver quality services. Employees will appreciate more of the quality concept if they are showed how to deliver quality services. We have numerous administrative circulars such as the quality counter services and the quality telephone services but they are not being practised. The people involved are not being sent for courses. Those who attended courses, when their performance are not monitored, loses their enthusiasm in delivering quality services.

The other aspect of poor delivery of quality among the employees is due to the issue of recognition. What have employees to gain if they provide productive and quality services. We do not have enough motivational tools to motivate our staff to perform well. We cannot depend on the newly introduced service excellence award which is rewarded through the performance related pay scheme. Only 2 per cent can obtain a diagonal salary progression and another 3 per cent the vertical salary progression.

What other rewards are available to the employees? There are the Prime Minister's Quality Award, the Director General of Public Service Quality Award, the Director of Manpower Unit award and the Innovation award. These awards are large scale awards where it has to be more of a competition rather than a day to day departmental quality improvement activities to get them. There are also the competitions on the Quality Control Circles. In order to be labelled as excellent departments, most QCC in the departments will create problems, find solutions to the problems and decorate them for presentation at competitions. The QCC has not been used as how it should be used, that is, for obtaining little ideas from staff to improve services continuously.

No: 2

Group: 1

Position: Senior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The concept of quality services has been introduced officially by the Prime Minister in 1989 and ever since then, as you can see we have actually progress to some extent in providing quality services to the public. People might not believe that we are progressing in providing quality and productive services as they see that complaints on services are on the rise rather than fall. It is not because of the employees not providing quality services to the public but the demand for quality services from them is on the increase. It is now a matter of catching up with the needs of the public. On the problem of catching up with the needs of the public, we must not blame the employees. It is not the fault of the employees for not being able or for not willing to provide quality services. The blame should be on the management and it is the management's duty to find the ways and means to do the catching up. One of the areas which we need to address is on burden of work. There are departments which are overburdened with work. The workload is too much to be handled

by the inadequate number of staff. But some departments have more than enough staff. It is this unequal distribution of staff that management has to address before the employees can provide quality services.

The other aspect of management that the managers have to concern themselves with is on the assessment of employee performance. It is acceptable that these overburdened-with-work staff are rated highly in assessing their performance but there are staff who are not overburdened with work, who are not highly productive and worst still, not producing quality services too, received high marks in their performance evaluations. Sometimes, in this situation, the worst thing that can happen is that the less productive employees get rewarded rather than the highly productive employees. We can see that the performance appraisal system and the rewards system of distributing awards according to employee performance are flawed. They have not been able to deliver their theoretical goodness and both the systems demotivate rather than motivate staff to perform better. Therefore it is the manager's job to look into the defects of the performance evaluation system and come up with solutions so that it does not affect our employees performance. We have been too dependent with the Public Service Department who comes up with their suppose to be brilliant ideas and we then implement them. It is about time we tell them what is the situation like in our organisation and how should we solve the problem. What ever it takes, the managers who are paid to manage must manage their staff well by removing any problems affecting them so as to enable them to have a free and fresh mind to work hard and produce quality and productive work.

No: 3

Group: 1

Position: Senior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

In my capacity as senior manager, I have always practice the concept of delivering quality services. The most important thing is to tell the employees what is expected of them in delivering quality services. Only if they understand what kind of quality service they have to deliver will enable them to do so. But we cannot penalise our employees for not delivering quality services. In my opinion most performance evaluations are carried out without considering the delivery of quality services. It is not measurable and therefore not able to be shown in facts and figures what that an employee has achieved in delivering quality services. Therefore to the employees it does not matter whether they provide quality services or not. Only if we can make sure that they provide quality services and include that in the evaluation of their performance, can we then motivate them to deliver quality services.

In considering the delivery of quality services in performance evaluation, we have to be careful in how we rate our employees. We cannot out-rightly penalise our employees who do not deliver quality services. We are always in a state of dilemma when we assess the performance of our staff. We dare not rate our staff at the right level of assessment in relation to their performance as these employees will be dissatisfied, disappointed and demotivated with our assessment. From my experience, I notice that in general, appraisers will never give marks lower than 80 per cent to the average performers. They set a trend that even average performers are rated at more than 80 per cent. To my mind, 80 per cent and above should only be given to the excellent performers. But we have to go along with this trend if not we will be labelled as uncaring and inconsiderate managers by our own staff who compare their ratings with their other colleagues in other departments. Whether you like it or not you have to be a management-cheat in order to enable your staff to be able to compete for the rewards under the performance related pay scheme.

No: 4

Group: 1

Position: Senior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

There is still a lack of emphasis on delivering quality services. Management still lags in telling employees how quality services can be delivered. They have to be told about giving services with a smile, about not making mistakes repeatedly and about satisfying their customers. Events like Quality Day has not been fully exploited to drive the understanding of the quality concepts into the employees. Apart from having the compulsory mass gathering, most other activities on Quality Day were only attended optionally. In actual fact, on Quality Day, staff should be sent for compulsory briefings on quality conducted by quality experts to ensure that they understand the concept of quality.

Another setback to quality is that although a number of quality circulars have been distributed, there is no insistence that the employees read, understand and apply the concept.

Without really understanding what quality means, the introduction of quality slogans is of no meaning and has no impact on delivering quality services.

If we really want the employees to adhere to quality and provide quality services, we have to have enough perks and incentives to reward them. Can we just keep patting them on their back every time they produce quality work. Do we just carry on sending out commendation letters. These incentives in the long run will not motivate the employees. There have to be some solid rewards given to them. The rewards attached to performance under the performance related pay system is out of the question. The rewards is too few to go round to reward all the excellent performers. Even bonuses are out of the question as only those people who get the awards get the bonuses. What about leaves? It is also out of the question as only those who get the service excellence award under the performance related pay (PRP) scheme get a week's leave.

I believe the reward system should be extended to have other forms of rewards apart from the service excellence award. I hope the government will consider rewarding teams rather than just rewarding individuals. I always believe that everyone has an important contribution towards the department's achievements. The performance of the department depends on the performance of each and every one of the employee under that department and if the department performs excellently, everyone should be rewarded. In my opinion, team rewards improves team performance and help eliminate jealousy and dissatisfaction among colleagues who fall off in the run to obtain rewards under the present system.

No: 5

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

I do not question the present leadership or the present top management. But I feel the impact of poor quality of services delivered by the employees is due to the poor leadership and poor management of the previous top management. The previous top management practised favouritism. This practice has a trickling down effect right down to the lower staff. Certain senior managers are favoured over other senior managers. These senior managers then have their favourite middle managers who then have their favourite junior managers. The favoured senior managers are considered as the excellent performers of the organisation and they are seen to be the people responsible for the organisational achievements. The top management do not realise that each and every one in the organisation are important members of the organisation and the organisation can only function well if these employees can work as a team. During this era of management, the organisation is under a tense situation. The dissatisfied senior managers are demotivated to produce productive and quality services. When this happened, the managers in the lower rung followed the attitude of the senior managers. This kind of negative attitude moved down the line to the lower staff.

Another issue on demotivation is that I think it is inappropriate for senior managers to be in the run for the service excellence award under the performance related pay system. These are monetary rewards and their motivation do not depend on this kind of rewards. Because of them, a few places under the 5 per cent quota has been lessened for the lower staff who are the ones the senior managers should motivate.

Another area of dissatisfaction with the senior management which again turns employees into mediocre workers is when the managers like to take unnecessary disciplinary actions even though after employees make amends.

The other aspect of demotivation is when employees who get very actively involved with social activities within the organisation, but were not given the due recognition in their performance evaluation. Even though under the new performance appraisal form a few marks are given for social participation, the weights given is not enough and not correctly distributed. The performance evaluation is to evaluate the performance of the individual who contributes towards the organisation, why should they be given any marks if they are involved with activities outside the organisation and not affecting the well being of the organisation. Management should realise that these social participation within the organisation help develop teamwork and help create leadership qualities among the employees which in my opinion can help the organisation deliver quality services.

I think it will take some time for the employees in this organisation to gear up themselves to provide quality and productive services after a long period of hibernation.

No: 6

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

At one time my staff were unproductive and there was an air of hostility in my department. I have been very concerned about assessing the performance of my staff to the extent that I have been very detailed in assessing their performance. This approach was very good in the sense that I was able to assess their performance correctly. To be very detail took up a lot of my time but at the end of the day the employees are dissatisfied with my evaluation. On top of that, the top management do not appreciate for being very concerned with the evaluation. We cannot blame the top management for not recognising our effort to be very detailed with the performance assessments. How can they tell we have spent so much time concentrating on the evaluations in wanting to produce the most appropriate assessments in relation to the employees performance. The employees are dissatisfied with the assessment. When they compare the marks of what they received to that of their colleagues in other departments, they discovered that their marks were far below the marks of their colleagues. Of course this will demotivate them and this causes them to be hostile.

Until such time when the Government can come up with a better way of evaluating performance whereby all appraisers observe a certain standard of evaluation for awarding marks, then it is much better to be care free when carrying out the performance assessments of the staff. Give marks which are acceptable to them even though it is not reflective of their true performance.

It is much more important to maintain a harmonious relationship between the supervisor and the employees in the department.

No: 7

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The performance of the public service employees has improved to some extent as compared to the 1980s era. In 1989 the Prime Minister launched the concept of the 'Excellent Work Culture' which requires the public employees to be very concerned with quality and productivity when providing public services. From that period onwards, quite a number of quality programmes were introduced from time to time to keep on reminding the public employees so as not to sleep on it. In 1992, the New Remuneration System (NRS) was launched. The government is very concerned with the well-being of the public employees. Under the NRS, a number of facilities to help the employees were introduced. The quality programmes and the new facilities help to improve the performance of the public employees. In order to assist the employees to perform better, the government introduced the service excellence award. The award is tied up to employee performance. Under this award whoever performs well will be rewarded with multiple pay progressions. The government means well but this is the area under the whole massive NRS programme of the government which is still lacking in its effectiveness in getting the employees to give their best.

The true concept of motivation has not been understood by the top public managers. From my observation, the rewards under the service excellence award is inadequate to motivate the employees. Therefore, if the managers and the staff in the public sector perform well and are able to provide productive and quality services, what kind of rewards can we give them. The approach to motivation has been made worse by reducing the number of layers in the various schemes of services which flattens the organisation structure or lessen the levels of hierarchy in the organisation. This type of organisational structure will only work in the private sector.

The employers in the private sector have all kinds of rewards and perks that can motivate their employees. Their main concern is the bottom line - profit. The more the employees can contribute to this bottom line the more rewards they get out of it. In comparison to the public sector, there is not much perks and rewards to go round. We can see around us that most of the hard workers are not rewarded for their hard work. It is wrong for the public sector to implement the concept of flatter organisation. If we calculate what we have to spent if we maintain the original organisational structure, there is not much savings as compared to this present position. The gain that we can achieve with the original position is tremendously high. With more job positions in the organisation structure means there will be more chances for promotions and this can highly motivate the managers to perform extremely well. There will be a feeling of satisfaction when they get promoted and they will be new brooms. As the saying goes - new brooms sweep clean.

No: 8

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

We can only provide quality and productive services if we are well cared for by the organisation. This organisation lacks effective management and good leadership. I have not been asked to attend a performance appraisal interview for a couple of years now. I have not been able to present myself in the interviews and discuss my performance. Since I am a middle manager who is disgruntled with management, how can I deliver productive and quality services and at the same time encourage my staff to do the same.

No: 9

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The government is doing a wonderful job to improve the image of the public service. The programmes introduced by the government are all excellent programmes to help improve employee performance. But in my opinion, there are certain areas of its programmes that has to be improved on. Apart from improving the programmes we need to improve the attitude of the Public Service Department as well. They have to be more open and should always be willing to look into problems faced by the other departments. Take for example in my department, we do not have enough employees to do the job well. In this situation, we will not be able to deliver quality and productive services. The number of staff which I requested for during the restructuring of organisations in 1993 was not accepted. To me, the study on the allocation of staff carried out by them was poorly done. We know our department better than them but it turned out that they are the ones who told us what is enough in our department. I have been asking them for some additional staff but so far I have not been successful.

On top of the poor allocation of staff, the reward system to motivate these staff is flawed. If we have a limited number of staff and can motivate them to perform well in their job, we can still provide quality and productive services. But with a flawed reward system we are not able to do so. The reward system is based on the staff performance appraisals. I have got to give high marks to them during every performance just to enable them to compete with their colleagues for the rewards on performance. At the same time the reward is a short-sighted reward. An employee can get rewarded twice if he is an excellent performer. If he gets his award this year and then gets another award next year, that's about it. There are no other rewards that can motivate him as he has already exhausted his motivational reward. If he then thinks about promotion, he will have to wait a very long time before one comes by. With the introduction of the flatter organisation, the chances of being promoted in the near future for him is very slim or to be honest, non at all.

No: 10

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The government has done a good job by introducing the facilities on computer loan and this has increased the level of computer literacy among the public employees. Because of this, more staff are using the office computer to help them do their work. As more and more of them are using computers, we are over-burdened with the work of providing support facilities to the users. We are also not getting enough computer equipment to meet the needs of our customers.

Due to the increase in burden of work for the limited number of staff that we have, we are not able to supply productive and quality services. I think you must have heard from employees from other departments complaining about our department in how slow we respond to their needs. Further difficulties arise as we have been allocated with limited resources to send our small number of staff for training. I think, even in small numbers, if they are allowed to acquire the knowledge pertaining to their job, they will be able to provide better services.

No: 11

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

Under the NRS, the government has introduced quite a number of facilities to facilitate the employees to work better. Before this, we do not get such job enhancement and life enrichment facilities like extended maternity leave, computer loan and better medical facilities. At the same time, the government introduced the performance related pay scheme to motivate the public employees. This is a good scheme as if we perform well we will be rewarded and if we do not perform well, we will be penalised. Since the cake is there, whereas before that, we do not have such motivational awards, we should grasp the opportunity to obtain the rewards.

Apart from the introduction of these facilities, the government in order to promote quality has introduced numerous quality programmes like Quality Day and Quality Control Circles. Along side these programmes, a number of other administrative circulars on quality have been issued. But, these quality initiatives have not created an awareness on quality among the employees. Rather than blaming the employees, I think it is due to lack of management commitment towards quality that is undermining the quality programmes.

No: 12

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

Employees do not produce quality and productive services as there is no pushing factor to push employees to produce quality work. In my opinion, the fault lies with the managers. The government has introduced a substantial amount of quality programmes to improve quality but what have the managers done to make the programmes work in enabling staff to produce quality work. Managers are not carrying out the quality programmes with their heart and soul. Take for example the quality programmes like the Quality Day. It is a waste of time in carrying out the programme. You can go round the department and ask the staff what do they gain from the programme. Have their understanding on quality increase? Have they accepted the quality concept and put it close at heart and take it into account whenever they do their job?

Take another programme, the introduction of Quality Control Circle Competitions. These competitions do not meet the objectives of introducing Quality Control Circles. Most of the quality events that were introduced, say Quality Day, by tomorrow, after such a lengthy and expensive preparation, everybody forgets about it. You can ask the employees what is quality and all sorts of answers can be expected from them.

No: 13

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

It is difficult for employees to provide quality services as the management system itself does not permit them to do so. There is always the conflict of meeting the yearly works targets and providing quality services. Given the choice, work targets will always emerge the winner, as they are tied up to the employees' rewards. His productive performance is easily measured as compared to his service quality performance. The other defect on management is on rewards. The rewards and recognition systems is considered too rigid. Most employees feel that they deserved to be rewarded for their performance and their ratings say so. But because of the quotas set for those who can be rewarded, only a few get to enjoy the rewards. Most of the time those who get rewarded, their ratings are marginally higher than their competitors, which can be due to the extralimnet ratings given by their raters. The ratings can also be affected by the half year reviews carried out. Adjustments can be made if targets cannot be reached by the end of the year which means that, the employee can still achieve full marks for meeting his targets after making the proper adjustments.

Performance appraisals take too much of our time. It will be too taxing if we have to account for work quality and work productivity in assessing our employees. It is easy to assess work productivity but it is not easy to assess work quality. After all, what is there to be achieved at the end of the day. It is only to determine who gets the rewards and nothing else.

No: 14

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

It is the lack of resources that affects the department's ability to deliver quality and productive services. We are not able to provide quality services due to the lack of capital resources which we need to acquire new equipment. This lack of capital resources too affects our training needs which are required in order for us to have the necessary skills and knowledge to enable us to provide better services to the other departments. Hence, our staff lacks the skills and are over-burdened with work to provide quality services to our customers.

No: 15

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

We can provide quality work but we have to first of all correct our management approaches. The Public Service Department has introduced a number of good rules and regulations like the new rules on disciplinary action or the public employees' work ethics which help guide employees to perform well. But there are some areas of the rules and regulations introduced by the Public Service Department that are defective. The best example is the New Remuneration System. The Public Service Department said that they only took 9 months to carry out their study on it and then implement it. Because of the haste, I think they have not done a very good job out of it especially in areas on performance appraisal and the performance related pay.

If we look at the reward system, the reward system is inflexible. The reward system caters for excellent individual performers only. Whatever that is achieved in the department does not come from one person only. Therefore rewarding individuals is undermining team-working within the department. Lack of teamwork causes poor quality services to be delivered.

No: 16

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The performance appraisal system does not encourage employees to deliver quality and productive services. The rewards given out under the performance related pay scheme can help motivate employees to perform well but the problem is only a few excellent performers from a large pool of excellent performers can obtain the reward. Even then, according to the employees, some recipients of the rewards do not deserve to be rewarded at all. Hence, these employees get frustrated with the performance appraisal and reward systems which then leads to poor job performance.

In my experience, the performance appraisal report has never been used for any other purpose except for obtaining marks to determine pay progressions or for promotions. The report has never been used to analyse the areas of weaknesses of the employees and then finding solutions to improve the employees performance. There is an immense amount of information in the performance appraisal report which can be acted upon to improve employees performance.

No: 17

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

I think we are not able to deliver quality services because the managers themselves are the barrier to it. The senior managers do not practice fairness in the department. It has always been the case that managers above the rank of junior managers get to enjoy all the benefits of public service leaving nothing for the enjoyment of the junior managers and below. I will give you an example.

I have attended a number of performance appraisal interviews and have indicated the kind of courses which I wanted to attend but have never been given the chance to do so. I have tried to do the same for my staff,

recommending them to go for certain courses but again non of them get to go for the selected courses. It is always the case that only the middle managers and senior managers get to go for good courses and we are left with the unwanted courses. How can the junior managers provide quality and productive services for the department if they are not allowed to go for courses to improve themselves. We too need the knowledge and experience. The knowledge and experience will not be lost as we are a long way off from retirement. The middle managers and senior managers forget that we are the next line of successors to succeed them when they retire or if ever they get promoted to a higher position.

No: 18

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

Most of the programmes to improve the public service are excellent programmes. Quality services can be definitely be delivered if these programmes are followed through. Although on the whole the programmes introduced by the government are excellent programmes, but the one area which the Public Service Department has to be very concerned with is on the new performance appraisal system and the performance related pay. At this moment the Public Service Department has been very defensive over the system. They still say that the system is good and given time, the problems will just fall off. They still say that the system works even though the public service unions are complaining about it. If they do a proper study and look carefully at the reward system, the service excellence awards can be a barrier to productivity and quality. At present, it creates hostility among the employees and the creation of this hostile environment affects team-working which then affects quality and productivity of work.

In the long run, this reward system becomes a short term motivational tool for rewarding employees. After all the excellent performers achieve their rewards at the maximum level after two years, how do we sustain their motivation. This will have an effect on quality and productivity. Therefore, rather than being defensive about it, the Public Service Department should concern itself by making a study whether the service excellence award does improve performance. They should come up with the statistics and with hard facts and figures to prove to the public service unions that the service excellence award does work and does improve performance. Only then the public service unions and the public employees can get to trust the system and use the system to improve their performance.

No: 19

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

The service excellence award has been introduced to motivate the public employees to perform well but if the Public Service Department do not reorganise, revamp or redo it, the present service excellence award is not able to meet its main objective of motivating employees to perform well. The problem with the service excellence award is that it is not too little but it is too few. There are lots of employees who are eligible for the award. Our public service is a highly regarded service but since we do not have the bottom-line like the private sector to show how good we are, the Public Service Department tend to form the opinion that only 2 per cent of us in the public service are excellent performers. The rest of us, including most of the senior officers and staff in the Public Service Department are average, unmotivated, uninitiated, and uncaring lot. The other problem the Public Service Department has to look into is on fairness. Employees have not been fairly evaluated and because of this, the rewards for excellence has been falling into the wrong hands. If the very basic element of management, providing motivation, is affected, how can we make sure our employees deliver quality and productive services.

No: 20

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

I fully support the NRS introduced by the government. There are so many perks in it that it shows that the government cares about the well-being of its employees. The government really wants to motivate its employees to provide quality and productive work. In so doing, they have introduced the performance related pay scheme.

To my mind the public employees have all this while been dedicated lot of people. When the service excellence award was introduced, it affects the system of dedication already in existence in the public service. The employees have open their eyes to the juicy rewards that will be offered to them in return for excellent performance. The employees starts to use all kinds of tactics to obtain the reward. The previous system of working is put into jeopardy. Those clambering for the rewards becomes individualistic. Those who are appalled with the system becomes reclusive. They do not perform as excellently as before. Therefore, we have to be careful in how we select our reward programmes that can motivate our employees.

What I would like to suggest here is that we should have team awards rather than individual awards. Team awards help to strengthen team-working. Employees will be all too willing to help each other to build up their empire of excellence. We should now consider team-appraisal rather than individual appraisal as what we are practising at this moment.

The difficulty that arises with these individual appraisals is that, the appraisers were not trained to appraise their employees. Marks given are not reflective of the true performance of the employees. These appraisers should be trained, when they should give a grading of 5 or when they should give a grading of 6. Without this kind of guidance, they will allocate marks according to their whims and fancies. For the same level of performance, without proper guidance, those who are of the lenient type will give very high marks and those of the miser type will give low marks. When these employees compete for the rewards for excellent performance, the employees under the miser will lose out even though their level of performance is equal to that of the other employees.

No: 21

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

I have noticed that some departments in order to show that they have excellent workers will go to the extent of giving high marks to their employees. This is to make sure their employees will end up receiving the service excellence award. That is not as bad as some departments which use the rotation system to make sure everyone in the department gets the reward. Therefore it is no point on my part to work extremely hard to produce good evaluations of my staff. Just like the others if I can, I will give them high marks. Because supervisors compete on giving high marks to their staff, there is no incentives on the part of the employees to perform well and to deliver productive and quality work.

No: 22

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

It has been a number of years now that the new performance appraisal system has been implemented. The system talks about eliminating subjectivity and partiality but these elements are still there. The appraisal system has not reach a stage of being objective and impartial even though it was said that with the introduction of the set works targets, performance can be evaluated objectively. If this area of appraisal is still subjected to subjective evaluation what more can we say for the other areas which measures personal traits or the staff-supervisor relationship. Honestly, this can affect staff performance.

No: 23

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

In my opinion, we have not yet been able to produce quality work to a substantial extent due to the lack of management commitment towards quality. The government has introduced a substantial amount of quality programmes. If the managers are fully committed to the concept of quality, they can pick and choose to implement the quality programmes. Therefore, if managers are not committed to quality the staff will follow their footsteps. This lack of commitment to quality can be proven if we observe how our staff carry out their work. The staff do not understand the concept of customer requirements in delivering quality services. The employees do what they think is best without any consideration to others who will be receiving the

services produced by them. At times, what they produced does not meet the requirements of the service receivers.

No: 24

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

The Public Service Department has been over zealous over improving the public service. They launch a massive system, the NRS, where some parts of the system is defective. To be specific, it is the new performance appraisal system and the performance related system that are defective. The system has been implemented for quite a number of years now but there are still quite a number of appraisers who have not attended any formal training on performance appraisal. The Public Service Department has put the cart before the horse. They should have trained the appraisers first before launching the system. When I and my colleagues talk about performance appraisal, we all agree that we lack the skill in appraising our staff. It is quite difficult for me to decide whether I should give a grading of 6 or should give a grading of 7 over a particular area of performance. If I end up giving sixes rather than sevens, the employee will lose out in the competition for the performance related pay reward. We need to have universal standards on how we should grade our staff. Incorrect evaluations of staff will create dissatisfaction which can result in poor performance.

No: 25

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

We still cannot provide quality services as the good intentions of the government in introducing the quality programmes has not been fully exploited. The quality service concepts have not been fully explained to the employees. The employees are not sent for quality courses to understand the programmes which have been introduced. The quality concept has only been made known in the general terms. The employees have not been shown specifically how they can apply the quality concepts in their work.

We have our Quality Day and we have our quality slogans but the slogans are general statements on how to deliver quality services. Employees will appreciate more if we are able to show them how to deliver quality services. Therefore, the top managers have to make sure that the senior managers is committed to quality. The senior managers have to make sure the middle managers are committed to quality. The middle managers have to make sure the junior managers are committed to quality. Finally, the middle managers have to make sure the lower staff are committed to quality.

To get the employees to be committed on quality, the top management should stress on training. All employees should be given the opportunity to attend training. Without training, it will be difficult for the employees to produce quality work. One minor issue that we need to overcome under training is that everybody should be given the chance to attend highly regarded and highly motivated courses. At present, much of the training budget is taken up by the middle managers and the senior managers. The junior managers and the lower staff are usually left with the left-overs of unwanted courses. This management practice has definitely to be changed if employee work performance is to be improved.

No: 26

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The motivational reward quota of 5 per cent is too small to motivate employees to perform well. The Public Service Department should consider that whoever meets the grade for the award for service excellence, should be rewarded. In order for the rewards not to be too taxing on the government's expenditure, the form of rewards can be changed.

The present awards of giving pay increments is not right. The individual performs very well in one year and gets the reward for the rest of his career life in the public sector. Even if he does not maintain his

performance, there's nothing that we can do about it. There is no reason why the recipient of the award should keep up with his excellent performance year after year if there is no more incentives.

Employees should be rewarded for excellent performance only in that particular year of excellence. In this way, it will motivate these individuals to perform well year after year. This kind of reward too do not create hostility within the department. All the employees will perform well to obtain the reward. Since there is a much bigger cake to go round, more employees will be able to enjoy the rewards. If they lose out this year, they can compete in the next year. There is more fun and more excitement if this kind of rewards are given to them. The rewards can be in the form of bonuses or holidays.

No: 27

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

Most of us when we evaluate our staff, we have a tendency of giving high marks to them. This is to make sure that our staff stands a chance of receiving the service excellence award and at the same time we are also following the normal way of allocating marks to the public sector employees. If you are observant enough, you will notice that most of the employees are given marks in the range of 80s and 90s. Because supervisors give high marks to their staff, there is no incentives on the part of the employees to perform well and to deliver productive and quality work.

No: 28

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The main problem why employees are not delivering quality services is because they do not know how to do it. They do not understand what is the relationship that exist among themselves in the department. The concept of quality has not been explained to them. Top management have not been doing its duty to keep on banging in the concept of quality into the employees. In carrying out our everyday duties, apart from the Quality Day to make the employees aware of quality, there are no other small scale quality programmes that can be used to create awareness on quality.

Most of the programmes around us are the big time quality programmes of the Prime Minister's awards and all kind of other awards. There must be other departmental quality programmes on a much smaller scale for the staff to appreciate. Much smaller awards towards quality should be made available to reward the small ideas given by the staff rather than wait for big ideas. The management prefers to wait for big ideas so that they can put forward the big ideas to compete with other big ideas in order to obtain the big awards.

No: 29

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

There are a number of reasons why I think that the department is not able to provide quality services to a substantial extent. Firstly, most of the employees are not given the opportunity to attend courses related to their work. I have done my own investigation on training and I noticed that very few of the staff is sent for training. I also noticed that some of the staff were required to use the computer but they are not sent for training. It is sad to see that they have to crawl slowly on their own, with some help from their colleagues, to acquire the skills required to perform their job. If they were sent for training they can master the required skills quickly and will be able to provide quality work.

Not only the lower staff, even we the junior managers, unlike the middle managers and senior managers, seldom get the chance to go for good courses. This low chance of attending courses can affect our abilities for producing quality work. This form of discrimination can have a demoralising effect on the junior managers. The top managers fail to see that the training given to us in our capacity as junior managers, plus the experience we gain along the way, will not be lost which can be put to good use now and also when we get promoted to the ranks of the middle managers and senior managers.

Secondly, not many managers are committed to quality. Most of them do not implement the quality programmes introduced by the government.

Thirdly, the employees motivation is affected by the reward system under the NRS. If we look at the reward system, there is no basis for introducing the 2, 3, 90, 5 per cent quota on pay progressions on the employees. As you know, 2 per cent is for the triple pay increment, 3 per cent is for the double pay increment, 90 per cent is for the normal increment and 5 per cent is for no increment. Do you think is it logical that excellent service, quality service and productive service is provided by only 2 per cent of the public service population of 880,000. Only 17,600 employees is providing excellent and high quality services to the public. The Public Service Department has to be more realistic in determining the percentages of the quota for rewarding the public employees. If we stick to that 17,600 figure for providing excellent service, our public service will be the worst service in the world.

No: 30

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

The lack of resources is the main factor that can affect quality and productive services. How much can we push our staff to perform well? How much can we push staff to perform beyond their normal capabilities? What can we use to push our staff to perform well and always give their best? It is the lack of resources that affects the department's ability to deliver quality and productive services. We are not able to provide quality services due to the lack of capital resources to acquire new equipment which can be used to provide quality services. Therefore, without anything that can motivate staff to perform well, we have to pump in more resources to provide quality services.

No: 31

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a limited extent

Causes:

I don't think we will be able to provide productive and quality services under the prevailing reward system. The public sector has introduced Total Quality Management. All public employees have to use this approach in managing their department. On reading the circular on TQM, it emphasises teamwork and continuous improvements in teams. The present reward system which rewards individuals and at the same time depends on unfairly distributed performance appraisal marks will destroy teamwork. On the one hand we are required to use TQM but on the other hand we are using management approaches which destroys the application of TQM in our organisation.

No: 32

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

Employees are demotivated with the New Remuneration Rate system. If you look at the salary matrix, before long the employees will reach their maximum pay increment. Even then there are some employees who have reached that stage. How can you motivate these people to perform well. At the same time, the government, in introducing flatter organisations took away lots of posts which in actual fact can be used to promote staff who are good but have reach their maximum salary level. Have the Public Service Department ever thought of how to motivate these employees to perform well. This ineffective system shows that it is not a better system as compared to the old system.

No: 33

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

Employees with excellent performance should be rewarded only in that particular year of excellence. In this way, it will motivate these individuals to perform well year after year. Employees should not be given rewards which they can enjoy even when they have stopped performing well.

The other aspect of performance appraisal which the Public Service Department is recommending to be implemented is the use of incident book. Again, the use of incident book will demotivate rather than motivate staff to perform well. We have been exposed to quite a number of management approaches like TQM and the emphasis on empowerment. Our staff should be empowered to do their job. They are also empowered to come up with ideas on how to improve our organisation. But if we introduce the incident book, what we are saying to our staff is that, 'I don't trust you'. We will record all their movements and then we will assess their performance according to what that has been recorded in the incident book. By recommending the use of the incident book, it is evident that the Public Service Department is twisting and turning to get out of the hot soup of introducing a flawed performance appraisal system. If they cannot find a solution to it, use team awards first. I am sure everybody will be happy about it. When the Public Service Department has found a solution to overcome the problems on the performance appraisal system, we can then go back to use it. At the moment, we do not want to hang on something which can affect the performance of our staff.

No: 34

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a large extent

Causes:

In 1992 the government launched the NRS. The NRS is introduced to improve the working condition of the public employees. The government recognised that their employees are their most valued asset. Therefore, under the NRS, the government has introduced a number of job improvement facilities and a number of quality of life improvement facilities. The government has introduced the extended unpaid maternity leave for 3 months, the paternity leave of 3 days for fathers, the computer loan, club membership loan, hospital benefits for the parents of serving employees and the pay increment which came with the launching of the NRS. The government too from time to time gives out bonuses to the public employees.

Despite of all these benefits introduced by the government, the unions are still not satisfied with the implementation of the new performance appraisal system and the performance related pay system. The unions say that their members are demotivated to perform well. Under the performance related pay system when employees perform excellently, they will be rewarded with the service excellence award. They will be given bonuses and extra leaves. Therefore everyone wants to do their best to get that extra bit of reward. The approach under this system of motivating employees to work hard shows that there is nothing wrong with the system except that it can be improved further by increasing the number of people who can receive it rather than just stick to the 2 per cent quota.

No: 35

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a large extent

Causes:

Before the New Remuneration Rate was introduced, there was no incentives for employees to perform well. We have not been able to motivate the employees. The only tools of motivation that we have at that time is the service excellence award with a very small reward tied to it. A good performer will get a commendation letter, an appreciation clock and a week's leave. Now under the service excellence award, we can reward excellent performers with multiple pay increments, bonuses and a week's leave. The reward is very attractive and can motivate staff to perform well and they will be competing against each other on who can perform better so as to be eligible to receive the rewards. When everybody strive to produce the best, the department benefits. Therefore as compared to before, employees have now something to look forward to and will work hard for it.

No: 36

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a large extent

Causes:

The New Remuneration Rate system which provides competition is good in the sense that it will energise the employees to work hard and excel in their work. They can then compete to obtain the rewards available under the performance related pay scheme.

Under NRS the public service union, CUEPACS says that the performance appraisal is affecting workers. Workers are becoming demoralised and will not perform well. One of the main area of grief is on the unfairness of assessing employees and the assessment is subjective. The Public Service Department is quick to react and come up with a solution that can overcome these problems. The Public Service Department has recommended that appraisers use the incident book in appraising their staff. This is a good approach of eliminating subjective evaluation. The supervisors are able to keep track of their staff performance throughout the year. The information obtained throughout the year on the staff can then be used by the supervisors to make accurate assessments of their staff. With accurate ratings it is much easier for the supervisors to pin point areas of staff performance that have to be improved upon. At the same time, the employees will feel confident with the assessments made on them as the assessments will be carried out fairly and objectively. Their motivation to provide quality work will be maintained.

No: 37

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a large extent

Causes:

The stress on quality thorough the varied quality programmes has created an awareness on quality. Everyone understands quality. Now, the public servants breath quality, talk quality and work quality. Apart form that, the government is also stressing on information technology. The government has set up a number of public service networks which the public can make use of. At the same time, all government departments are supplied with computers and the public employees are encouraged to use the computers to help improve their job performance. Another important programme that the government has introduced to encourage the public employees to perform well is the New Remuneration Rate. Except for some minor problems to it which is solvable, the introduction of this programme is a major leap for the government in improving the performance of the public service and improving the image of the public service. We will move away from what the public label as the lazy and sluggish public employees to the hard working and dynamic public employees.

No: 38

Group: 1

Position: Junior Manager

Does the department deliver quality and productive services: To a large extent

Causes:

If we look at the country's economic progress, we have a growth rate of 8 per cent. We have a positive balance of payment. It shows that the public sector are providing quality services. We are the regulators of the private sector. Therefore, we are providing quality services to the private sector who then provides quality products and services globally. This is the concrete proof that we can show the public that public service now is no more like the public service in yester-years. We are now a progressive service and able to produce quality and productive work. About complaints, its human nature. Human can never be satisfied with anything. In the private sector too their customers do complaint if they are not satisfied with their service but since they are not telling anyone about the complaints they are getting, it looks like the are performing very well. The public service is made transparent and therefore everybody gets to hear about the public's complaints on public services.

No: 39

Group: 1

Position: Middle Manager

Does the department deliver quality and productive services: To a certain extent

Causes:

We cannot deny the truth about what the public service union, CUEPACS says about performance appraisal. The public service union represents the employees of the public service and therefore there are in a better position to know about employee grievances. At this moment, the Public Service Department do not want to listen to CUEPACS. They say that it is a problem that will solve itself in time to come. Instead, the Public Service Department has recommended that appraisers use the incident book in appraising their staff.

This is a good approach of eliminating subjective evaluation. The appraiser is able to keep a full year record of his staff performance. The data compiled throughout the year can then be used by the appraisers to make accurate assessments of their staff. The staff will appreciate this kind of approach as the appraisers will come up with their true rating. With true ratings it is much easier for the supervisors to point out to the

employees which areas of their performance they have to tighten up in order to improve their performance in the coming year. But the Public Service Department must remember that supervisors do not have only one staff to manage. Even if it is 5 staff, the use of the incident book will be very tedious enough.

Most of the supervisor's office time will go into preparing the entries of the incident book. In getting the staff to produce quality work, they themselves will not have enough time to produce quality work. What if the supervisors have 20 or 30 staff to manage. Therefore the use of incident book is not practical. If there are those who can use it and there are those who cannot, the Public Service Department might as well scrap the idea. There is no uniformity of appraising staff.

The Public Service Department has to come up with some other smarter ideas to help develop staff to enable them to produce quality and productive work.

Appendix G1D. Responses to Interview on Service Performance and Service Quality from Respondents Under Group 2 - The Support Group

No	Does the department deliver quality and productive services	Causes
1.	Limited Extent	<p>I think we all understand what is the meaning of quality but we were not shown how we can apply this quality concept in our work. We have quality slogans but the slogans do not tell us what we should do in order to be able to deliver quality services. We will appreciate more of the quality concept if we are showed how to use it.</p> <p>We have the administrative circular on quality distributed to us from time to time. The circulars will spell out the quality programmes which departments have to implement but the managers never brief us on the quality circulars. I notice that the managers themselves are not concerned about implementing the quality concepts. If they are not bothered about it why should we the lower staff be bothered about it.</p>
2.	Limited Extent	<p>People will give their best to the department if what they give is recognised in return. But with only 2 per cent of the employees that can obtain a diagonal salary progression and another 3 per cent for the vertical salary progression they are not too bothered to give their best. They know that it is too competitive to get the reward which only a few will get it. Even then there can be foul-play in awarding the rewards. If we look around us, it is not difficult to tell who deserves to get and who doesn't deserve to get. Here is where employees get demoralised when those who do not deserve to get the rewards can still get them. Performance will be affected for those who deserves to get but did not get them.</p> <p>The other negative effect on quality is over the formation of the Quality Control Circles (QCC). The formation of QCC is an absolute waste of time. Staff have come up with good ideas but these ideas were not implemented. The managers want big ideas which can be presented in the QCC competitions. I think this defeats the purpose of having QCC. The management attitude of this kind will discourage staff to come up with ideas to improve quality work. I would like to suggest that rewards should be given to employees who produce ideas even very small ideas, but when implemented, does help to improve productivity and quality of work.</p>
3.	Certain Extent	<p>There are employees who are overburdened with work. The workload is too much for the limited number of staff but the managers have done nothing to improve the situation. It is not possible for this limited number of staff to produce quality work. These workers are further demoralised when they are not considered for the service excellence award.</p>
4.	Certain Extent	<p>The performance appraisal system has been implemented for a number of years now and we can see that sometimes the less productive employees get rewarded rather than the highly productive employees. I think there is something wrong with the performance appraisal and reward systems. The system demotivates rather than motivates. In this kind of working environment who wants to work hard or produce quality work.</p>

5. Certain Extent

I think it is quite difficult for the supervisors to know when we are producing quality work. It is much easier if we stick to the set works targets and just complete it. The supervisors will then carry out his assessment according to how much work we have completed. Only if the supervisors can make sure that they include quality work in their assessments will we produce quality work.
6. Certain Extent

The managers have not provided us with the proper guidance of how to provide quality work. There no leadership by example. I think they do not provide quality work themselves and because of that how can we provide quality work.

We also notice that managers do not use the quality programmes to obtain the maximum benefits for the department. Take for example, Quality Day. We can see that for the past few years it has been well organised with its beautiful ceremonies but there is not much dissemination of knowledge on quality during the day. Quality Day has to be brain-washing day to implant the quality culture into the employees.
7. Certain Extent

People can provide all kinds of services. They can provide poor quality services, they can provide moderately poor quality service or they can provide extremely high quality services. How do we make them provide the extremely high quality services? We have to have lots of jam, sugar and honey to make them work hard. But as what we can see, there is not much of the jam, sugar and honey to go round for each and everyone of the top performers. Therefore, there is no point in being hard working if you will not be rewarded for it. What I want to say is that the service excellence award is not good enough to motivate employees to perform.
8. Certain Extent

The public Service Department, If they really want the workers to provide excellent service, they have to have enough perks and incentives to reward them. The managers cannot all the time provide lip service in praising the excellent workers. There have to be a lot more rewards apart from the service excellence award in order to motivate employees.
9. Certain Extent

Individual rewards can affect teamwork. The Public Service Department should consider rewarding teams rather than just rewarding individuals. Each and everyone of us has an important contribution towards the department's achievements. Take for example, our cleaners. If they do not clean our toilets and do not clean our offices, the place will be in a state of mess and no one can work in this kind of environment. Even the top managers, the think tank of the organisation, with their bright ideas and strategic plans will not be able to do their work. Therefore, the performance of the department depends on the performance of each and every one of the employee in that department and if the department performs excellently, everyone should be rewarded. Team rewards improves team performance and strengthens teamwork.
10. Limited Extent

I think the poor quality of service delivered by the employees is due to the poor leadership and poor managerial skills of the managers. What we the lower staff notice is that most of the managers like to go about doing their personal work during office hours. These managers are not setting good example to the lower staff. In this kind of environment where nobody cares about producing quality and productive work, non of such kind of work will be produced.

Another situation which impairs the provision of quality work by the staff is when top managers practised favouritism. Certain senior managers are

favoured over other senior managers. These senior managers then have their favourite middle managers. The favoured senior managers are considered the excellent performers of the organisation by the top management. They are seen to be the people responsible for the organisational achievements. The top management fails to realise that each and every one in the organisation is an important member of the organisation and the organisation can only function well if these employees can work as a team. The dissatisfied senior managers are demotivated to produce productive and quality services. When this happened, the managers in the lower rung followed the attitude of the senior managers. This kind of negative attitude moved down the line to us, the lower staff.

11. Certain Extent

In my opinion, it is very inconsiderate of the managers to not giving the proper recognition in their evaluations for employees who are very actively involved with social activities within the organisation. Even though under the new performance appraisal form a few marks are given for social participation, the weights given is not enough and not correctly distributed. The performance evaluation is to evaluate the performance of the individual who contributes towards the organisation, why should they be given any marks if they are involved with activities outside the organisation and not affecting the well being of the organisation. Management should realise that the participation in the social activities within the organisation help develop teamwork and help create leadership qualities among the employees which can help the organisation deliver quality services. The Public Service Department should look into this matter and drawn up a new set of rules on how the employees who are active in social activities should be rewarded.

12. Certain Extent

The performance appraisal on employee performance have been carried out for quite a number of years now but what we notice is that the marks given is inconsistent. We would like to dispute the rating system in the sense that how come our best performer gets marks lower than the excellent performers of the other departments. There is still inconsistencies in evaluating employees. The Public Service Department says that these problems can now be overcome with the introduction of the objective evaluation using the set work targets but why does certain departments have employees with higher marks than us. Don't tell us that they are much more superior than us in performing their work. This discrepancy can cost our chances of obtaining the service excellence awards. I think the Public Service Department must set a uniform standard for evaluating staff in order to be fair and consistent. If this situation repeats itself year after year we will not only be demotivated but we will be hostile towards the managers.

13. Certain Extent

In the private sector the more the employees can contribute to the bottom line the more rewards they get out of it. In comparison to the public sector, there is not much perks and rewards to go round and the situation is made worse with the introduction of flatter organisations. Previously, with more job positions in the organisation structure means there will be more chances for promotions and this can highly motivate the employees to perform well. But now we only have the miserable service excellence award to motivate 880,000 public sector employees.

14. Certain Extent

We cannot provide quality work in our organisation. This organisation lacks effective management and good leadership. Very few managers show good leadership qualities and good managerial skills in carrying out their duties. We do not get much guidance, coaching and supervision from the managers.

15. Limited Extent Quality work cannot be continually produced due to the flawed reward system. An employee can get rewarded twice if he is an excellent performer. If he gets his award in a particular year and then gets another award in the following year, there will be no more rewards for him. So there are no other rewards that can motivate him. If he thinks about promotion, thanks to the flatter organisation. He will have to wait a very long time before he gets one. With the introduction of the flatter organisation, the chances of being promoted in the near future for him is very slim or probably no chance at all. Therefore, how can we motivate the excellent performers to keep on performing well after there are no more awards to motivate them?
16. Certain Extent We cannot provide quality services because we do not have enough workers. Further difficulties arise as we have been allocated with limited resources for training. Since there are not enough staff and we are not able to attend courses, how can we produce quality work?
17. Limited Extent Employees do not produce quality and productive services as there is no pushing factor to push employees to do so. The department has sub-standard managers. They do not provide enough coaching and they do not provide enough supervision. They spent lots of office time doing their personal work.
18. Certain Extent I feel that our rewards and recognition systems is too rigid. Most of us feel that we deserved to be rewarded for our excellent performance and our ratings say so. But because of the quota, only a few gets to enjoy the rewards. Most of the time those who gets rewarded, their ratings are marginally higher but this does not mean that they are better. It is only because they have a lenient appraiser as compared to others whose appraisers are more strict with their assessments.
19. Certain Extent The service excellence award can affect teamwork as the reward system only rewards excellent individual performers. In actual fact, whatever that is achieved by the department does not come from one person only. It all comes from teamwork. Therefore rewarding individuals only can undermining teamwork. Lack of teamwork causes poor quality services to be delivered.
20. Limited Extent The performance appraisal system does not encourage employees to deliver quality and productive services. The rewards given out under the performance related pay scheme only rewards a few excellent performers from a large pool of excellent performers. Hence, these employees get frustrated with the performance appraisal and reward systems which then leads to poor job performance.

Another area which I can see that the performance appraisal system does not encourage employees to improve their performance is on the performance appraisal interviews. The interview lasted for only 10 minutes. My other colleagues too were given this amount of time. How much can we discuss during the 10 minute interview. You know how the appraisal report is like. There are so many areas in there that we need to look into before we can actually improve our performance. It really defeats the purpose of having a thick appraisal form with lots of information in it but not much of the information in there is discussed. The Public Service Department must do something about this. They have to tell the appraisers how much time should be spent on appraisal interviews.

21. Certain Extent
- I have been filling up this appraisal form for so many years now. In the past few years I was given the opportunity to look at my report before the interview. There were quite a number of areas which I wished to discuss with my appraiser but never get to do it during the time of the interview as the interview time was too short. This kind of approach on performance appraisal will not help me improve my performance and what I can see that is happening in all these years is that the performance appraisal report has never been used for any other purpose except for obtaining marks to determine pay progressions or for promotions. The report has never been used to analyse the areas of weaknesses of the employees and then finding solutions to improve the employees performance. This kind of attitude towards performance shows poor management. These managers are the ones who spoil the good intentions of performance appraisal in improving performance.
22. Certain Extent
- We are not producing quality work because we don't have good managers. We cannot produce quality work if we do not get enough supervision and guidance from our supervisors. On top of that, the supervisors do not want to send us for training which can help us improve our performance.
23. Certain Extent
- The New Remuneration Rate can be a barrier towards work productivity and quality. On the matrix salary scale I and some of my colleagues have reached the maximum on the salary scale. In this situation, there is nothing to push us to improve our performance. Even if we get the service excellence award, there is no salary scale to progress to. Everyone of us in this situation wants to perform well but, when we compare ourselves with the others, if they perform well they will get something out of it whereas if we perform well we do not get anything out of it.
- To look forward to promotions is out of the question. There is not much promotional posts we can be promoted to. The top management should do something about this. We have voiced out our grievances for quite sometime now but nothing happens. Sometimes we wonder how can we produce quality work if people who come up with rules and regulations are not producing quality work themselves. They are not able to see simple mistakes like this but even then we don't mind if the error is corrected.
- Another thing, still on the issue of rewarding excellent performers and motivation, again the public service department should look at how do we sustain the motivation of the excellent employees who have obtained the service excellence award twice which is already the maximum. This is a very important issue that the top management has to address as it will have an effect on work quality and productivity.
24. Limited Extent
- We have not been fairly evaluated. The appraisers practice favouritism. Those employees who are close to the supervisors or those who come from the same locality as the supervisors gets favourable rating. These employees are our colleagues and we know their standard of performance. There are some who are much better performer than them but unfortunately since they are not close to the supervisors, the get less favourable ratings.
- Due to the discrepancies in the performance evaluation, the rewards for excellence has been given to the wrong people. The practice of favouritism has a negative impact on the other employees. To them there is no point in becoming excellent performers as they know at the end of the day it is the supervisor's favourite who will be getting all the high scores.

25. Limited Extent

I think if the supervisors cannot actually tell us what is wrong with us, how can we improve our performance. I have attended lots of performance appraisal interviews and even now with the measurement of objectivity of the amount of work done, they cannot tell me why they give me a 5 rather than a 6 or why they give me a 6 rather than a 7.

It must be that the appraisers were not trained to appraise their employees. Marks given are not reflective of the true performance of the employees. These appraisers should be trained when they should give a grading of 5 or when they should give a grading of 6. Without a uniform standards on allocating marks, they will not be sure of themselves what they should give.

If we look at a few examples around us on employees who produce the same level of performance, some get very high marks as compared to others. It will be very difficult for the employees with the lesser marks but with the same level of performance to compete for the rewards for excellent performance.

26. Certain Extent

The problem with this performance appraisal system is that it is now becoming a competition between departments. Managers do not want to disappoint their staff and at the same time managers want to show that their department has a number of excellent performers. Because of these factors, they tend to give high marks to the employees. I have been looking at the marks for several years now. The amount of marks given are on the average 80 per cent and for the suppose to be excellent performers, the marks are not less than 90 per cent. The 80 per cent appraisal marks means that we are providing excellent service but the problem is, Is it true that we are providing excellent service? The marks are therefore not reflective of the performance of the department. How can we improve our performance if the marks given to us are not really reflective of our performance.

When this happens, another problem that arises is that, everybody now thinks that they are the top performers of the organisation and therefore they should be rewarded for it. The integrity of the Public Service Department is questioned here. Why do they make 80 per cent as the mark for excellence when they very well know that the average marks given to employees are around 80 per cent.

Therefore, 80 per cent is no more considered as excellent. Even knowing that 80 per cent and above are average marks given to employees, they then set the rules that employees who achieved those marks are qualified to receive the horizontal pay increase.

To overcome their incompetence on this issue, they put a brake with the 3 per cent quota of employees who can receive the horizontal pay progression. Why don't they set guidelines in the first place on how to give marks to the employees as to what marks constitute average performance and what marks represent excellent performance.

They have to do something about this as it has been 5 years now since the new performance appraisal system was launched.

27. Limited Extent

Even today after 5 years of using it, there are still employees not satisfied with it. The Public Service Union has made known to the Public service Department about the problems that are still in existence with the performance appraisal system. The Public Service Department says that the new system can eliminate subjectivity and partiality but these elements still exist. The appraisal system has not reach a stage of being objective and impartial even though it was said that with the introduction of the set works targets, performance can be evaluated objectively. If this area of appraisal is still subjected to subjective evaluation what more will it be for the other

areas which measures personal traits or the staff-supervisor relationship.

If the performance appraisal system is flawed, how can it measure the true performance of the employees. Without the true performance measurements, how can we be sure that we are rewarding the right people with the service excellence award. In the end work productivity and quality is affected.

28. Certain Extent

We have been to general talks about quality and productivity. We were told that in providing quality services we have to satisfy our customers. But we do not fully understand the concept of customer requirements in delivering quality services. We were not told how to deliver quality services in our work. Our managers never take the initiative to explain to use the concept of quality and how we can apply that concept to our work. We were not told about who are our customers and what are our customers' requirements.

I think we have not really grasp the meaning of quality as we do not know how to apply the concept in our work.

29. Certain Extent

I think our managers do not know how to appraise their staff. We know that we perform better than or as good as our colleagues in other units or departments. But when we compare our assessment marks, ours were much lower than theirs. Why don't these managers use a set of uniform standards on how they should assess their staff. If they are not able to do so, what is the point of having performance appraisals. When we compete for the service excellence award we will lose out and it shows as if we were the moderately excellent performers and they the extremely excellent performers. Of course this will demotivate us to perform better and probably we will perform less.

30. Certain Extent

To tell you the truth, we do not fully understand the meaning of quality and how to provide quality services. The government has launched quite a number of quality programmes but we have not been briefed on these programmes. The managers do not take the initiatives to explain to us what we have to do under the quality programmes in order to produce quality work. I am ashamed to see that the managers themselves are not concern about quality. What more, they are very much involved in carrying out their own personal activities rather than doing the office work during office hours.

31. Certain Extent

I feel that the government should not set the 2 per cent quota for rewarding excellent performers. The percentage rate of 2 per cent should be increased as it is ridiculous to say that there only 2 per cent of the public servants are excellent performers. The Public Service Department will deny this fact but this is what the figure implies. To improve performance, the Public Service Department has to increase this miserable 2 per cent quota or provide some other forms of rewards to supplement this ineffective service excellence award.

In order for the rewards not to be too taxing on the government's public spending, the nature of rewards can be changed. The present awards of giving pay increments will be too taxing if the quota is increased. The excellent performer performs very well in one year and gets the reward until he retires form the public sector. While he is in service, even if he does not maintain his excellent performance, he still enjoys the rewards and because of this there is no reason why he should keep up with his excellent performance year after year if there is no more incentives.

Employees should be rewarded for excellent performance only in that particular year of excellence. In this way, it will motivate them to perform well year after year. Since there is a much bigger cake to go round, more employees will be able to enjoy the rewards. If they lose out this year, they can compete in the next year. The rewards can be in the form of bonuses or holidays.

32. Certain Extent

We use to discuss this among ourselves and discovered that there are some managers in some departments who like to give top marks to their staff. They want to make sure that their candidate stands a better chance of obtaining the service excellence award. The managers do it with the good intention of creating a harmonious environment in his department but at the expense of not coming up with the true rating of their staff.

When the marks given is not representative of the performance of the staff it will be very difficult to get them to improve their performance as the managers were not able to show the employees the poor areas of their performance. At the end of the day, these employees will not improve their performance.

33. Certain Extent

The main reason why we are not delivering quality services is because we do not understand the concept of quality and the managers have not explained to us how we can apply this concept in carrying out our work. The managers are taking the matter lightly and it does not form a major and continuous activity in the department. Therefore, we only hear about quality on Quality Day and wait for the next one before we can hear the word again.

34. Certain Extent

The public service department should not set the pay progression quotas. There is no basis for introducing the 2, 3, 90, 5 per cent quota on pay progressions on the employees. The 2 per cent is for the triple pay increment, 3 per cent is for the double pay increment, 90 per cent is for the normal increment and 5 per cent is for no increment.

They say that according to their study only 2 per cent of the public sector employees can be called extremely excellent performers. I think their study is not right. Just take a look around us in our departments and our organisation and we can see that there are quite a big bunch of extremely excellent performers. The setting of the quotas has a demoralising effect as it cannot cater for the actual number of top performers.

The Public Service Department should set standards on how to evaluate employees, that is, on how should the marks be allocated and then use the marks to determine who are the employees qualified to receive the service excellence award.

Another area where employees can be encouraged to perform well is to implement the quality programmes. We have to make sure that employees understand about quality. We can start off with having activities that can create awareness on quality on Quality Day.

Apart from getting involved with the big time quality programmes of the Prime Minister's awards and all kind of other awards, we must have other departmental quality programmes on a much smaller scale for the staff to appreciate. Much smaller awards towards quality should be made available to reward the small ideas given by the staff rather than wait for big ideas to compete for the bigger awards.

35. Certain Extent
- There have been a lot of noise on the reward system. Since people say it cannot motivate people to perform well, what we can do to encourage the employees to provide quality work is to provide more resources for the department. Without anything to motivate staff to provide quality and productive work, they become average workers. They become the 8 to 4 office workers or the 4 times a day tea-break office worker.
- We can give the department 2 alternatives for improving performance. They can either provide better incentives to motivate people or provide more resources.
36. Certain Extent
- I find it hard to work as a team now as compared to before the performance appraisal system with the performance related pay attached to it was introduced. Possibly if we reward teams rather than rewarding individuals will strengthen teamwork. Everyone will work together for a common interest rather than now everyone is working for their individual interest.
37. Certain Extent
- Why should employees produce quality work if they are not rewarded for it. We cannot ask employees to work hard for the sake of the organisation. The theory of motivation has already showed us that humans have to be motivated before we can get the best out of them. When we compare with our colleagues in the private sector, they too do not work just for the sake of the organisation. The better they perform they higher are their rewards. Therefore, the employee in the public sector will perform well if we can have enough rewards to motivate them. At this moment we only have the chicken feed in the from of the service excellence award.
- Another area which we need to consider is on the demotivating factor caused by the salary matrix scale under the New Remuneration Rate system. For some long serving employees, they have reached their maximum pay increment under the matrix salary scale. How can you motivate these people to perform well. At the same time, with the introduction of flatter organisations these people who are good but have reach their maximum salary level cannot be promoted. The question now is how to motivate these employees so that they will be willing to produce quality work.
38. Large Extent
- Before the New Remuneration Rate was launched in 1992, the public service do not have any programmes which can motivate the employees to perform well. It is different now. When we perform well we were able to get the fruits of our hard labour. There should now be no reason for any worker to be a mediocre worker. But, employees with excellent performance should be rewarded only in that particular year of excellence. In this way, it will motivate these individuals to perform well year after year. Employees should not be given rewards which they can enjoy even when they have stopped performing well.
39. Large Extent
- Before the New Remuneration Rate was introduced, there was no incentives for employees to perform well. Employees have now something to look forward to and therefore there is a tendency for them to perform well.
- At the same time, the stress on quality thorough the varied quality programmes has created an awareness on quality. Everyone understands quality. Now, the public servants breath quality, talk quality and work quality. The introduction of these quality programmes will help shape public employees into becoming excellent performers.

40. Large Extent The New Remuneration Rate with the performance related pay provides healthy competition among the employees. When there is a healthy competition, employees will try to outdo each other and in the process out of outdoing each other produce productive and quality work.
41. Certain Extent I think the employees in the department do produce some quality work but not to a substantial amount. Most of us consider ourselves as mediocre workers and this mediocrity means we produce quality work on an average basis, not too good but not too bad either. We see that there is no point in producing excellent work as we have nothing to gain out of it. The service excellence award is too far fetched. Only those who are the very cream of performers will be able to obtain the award. To us the service excellence award, with the bonuses and the multiple pay increases that comes with it will never come by our way. So, we just work as one needs to work in order to keep ones job and at the end of every month gets our pay which then helps us obtain our necessities.
42. Certain Extent On the whole, I do not think the department is providing quality services because we the employees in the department who are providing the services do not really understand the concept of quality. The term quality is quite remote or quite alien to us. Basically we know what the word quality means but whatever comes with the circular on quality, we are not too bothered about it. Most of the circulars are long-winded. Our managers never bother to explain it to us, nobody forces or encourages us to read it and we don't have the time to read and understand it. Never ever read the quality circulars in the afternoon. You will fall asleep. They are thick and boring. We only understand the concept of quality through word of mouth or some short seminars or during the opening ceremony of our Quality Day. We have yet to understand on how to use the quality concept in our work in order to be able to produce quality and productive work, as what is being said by the boring circulars.
43. Limited Extent The NRS has not help employees produce quality work. The NRS has done more bad than good. Imagine if you work as a team in a unit where all the team members work equally hard to ensure the smooth flow in the production of quality and productive work in that unit but, only one of the unit members of the team gets the service excellence award. How does that make the others in the team feel. We will not be happy about it. There can never be one person alone who can run the show all by himself. So, why should that particular team member get the reward. Such incidents can be very demotivating. So, it is better not to work hard and not get disappointed at the end of every year.
44. Limited Extent We do not approve of the Public Service recommendation of introducing the incident book. How can we perform well if we feel that the supervisors do not trust us and watch our every move. The Public Service Department has all its think tank but they are coming up with some very ridiculous ideas of managing the staff. Can the supervisor observe fairness when he has his incident book. A supervisor has several staff under him. Can he make sure he includes all the incidents coming from all the staff? He might forget to include some incidents of some of the staff and this again will make his assessment on staff performance unbalanced.
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Appendix G2A

Table G2A-1. Overall Performance Evaluation Ratings - Analysis I, Analysis III, Analysis V, Analysis VI, Analysis VII, Analysis IX, Analysis XI, Analysis XII, Analysis XIII and Analysis XIV

STATUS	ANALYSIS	PA90	PA91	PA92
Professional and Management Group (CE) - Analysis I (JACOUNT1)	Average	88.19	88.21	87.83
	Std Deviation	6.90	8.85	7.97
	Minimum	73.70	67.00	64.30
	Maximum	99.20	98.40	98.50
	No. Of Ratings			
	Above 80 % (A)	832	893	805
	No. Of Staff (B)	881	933	825
	Percentage (A/B)	94.4	95.6	97.6
Professional and Management Group (OE) - Analysis III (JUJMJE1) CE/KED	Average	89.44	89.36	
	Std Deviation	5.24	5.43	
	Minimum	68.20	56.30	
	Maximum	98.30	98.30	
	No. Of Ratings			
	Above 80 % (A)	481	506	
	No. Of Staff (B)	510	532	
	Percentage (A/B)	94.3	95.1	
Second Support Group (TA) - Analysis V (PAUMES1)	Average	88.40	89.98	89.38
	Std Deviation	6.843	6.975	6.906
	Minimum	55.20	45.70	48.70
	Maximum	100.00	100.00	100.00
	No. Of Ratings			
	Above 80 % (A)	716	758	757
	No. Of Staff (B)	804	833	851
	Percentage (A/B)	89.1	91.0	89.0
Third Support Group (CT) - Analysis VI (JTAWAMS1)	Average	85.27	87.68	86.45
	Std Deviation	8.35	7.62	8.49
	Minimum	47.40	36.50	41.30
	Maximum	100.00	100.00	100.00
	No. Of Ratings			
	Above 80 % (A)	1267	1392	1350
	No. Of Staff (B)	1649	1638	1704
	Percentage (A/B)	76.8	85.0	79.2
Third Support Group (OT) - Analysis VII (JTUMESS1)	Average	86.55	88.06	87.30
	Std Deviation	7.73	6.88	7.66
	Minimum	51.10	56.40	45.90
	Maximum	100.00	100.00	100.00
	No. Of Ratings			
	Above 80 % (A)	508	581	546
	No. Of Staff (B)	608	672	660
	Percentage (A/B)	83.6	86.5	82.7
Third Support Group (PP) - Analysis IX (PP1)	Average	86.35	87.60	89.21
	Std Deviation	8.10	8.09	7.73
	Minimum	55.60	52.10	49.60
	Maximum	100.00	100.00	100.00
	No. Of Ratings			
	Above 80 % (A)	348	406	229
	No. Of Staff (B)	438	484	257
	Percentage (A/B)	79.5	83.9	89.1

STATUS	ANALYSIS	PA90	PA91	PA92
Third	Average	86.72	88.93	87.63
Support	Std Deviation	8.73	7.05	7.70
Group (KER) -	Minimum	32.54	57.14	37.60
Analysis XI	Maximum	100.00	100.00	99.20
(KSPSPB1)	No. Of Ratings			
	Above 80 % (A)	463	605	593
	No. Of Staff (B)	579	672	715
	Percentage (A/B)	80.0	90.0	82.9
Fourth	Average			82.21
Support	Std Deviation			10.71
Group (JTR) -	Minimum			46.70
Analysis XII	Maximum			100.00
(BEBAS1)	No. Of Ratings			
	Above 80 % (A)			96
	No. Of Staff (B)			142
	Percentage (A/B)			67.6
Fourth	Average	83.12	86.48	85.96
Support	Std Deviation	9.00	9.31	9.14
Group (PJL) -	Minimum	57.90	53.40	51.90
Analysis XIII	Maximum	98.50	100.00	99.20
(PMPKPJ1)	No. Of Ratings			
	Above 80 % (A)	65	83	86
	No. Of Staff (B)	100	100	113
	Percentage (A/B)	65.0	83.0	76.1
Fourth	Average			76.99
Support	Std Deviation			11.13
Group (TOOL) -	Minimum			41.70
Analysis XIV	Maximum			100.00
(TUKANG1)	No. Of Ratings			
	Above 80 % (A)			368
	No. Of Staff (B)			809
	Percentage (A/B)			45.5

Appendix G2B

Table G2B-1. Performance Evaluation Ratings - Professional and Management Group (CE) - Analysis II (JACOUNT2)

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CBA	Average	91.98	90.56	88.90
	Std Deviation	5.66	5.89	6.48
	Minimum	82.00	74.80	66.80
	Maximum	97.80	97.00	96.00
CJ	Average	90.45	90.96	91.83
	Std Deviation	4.55	4.82	4.77
	Minimum	77.90	77.50	75.30
	Maximum	96.00	98.00	99.00
UPJ	Average	96.43	93.15	91.17
	Std Deviation	3.19	3.86	3.81
	Minimum	93.00	87.90	84.60
	Maximum	99.30	99.10	96.90
TURN	Average	94.03	90.06	89.76
	Std Deviation	1.54	6.40	5.49
	Minimum	93.00	77.80	78.30
	Maximum	95.80	97.30	97.30
TERE	Average	89.82	90.22	90.78
	Std Deviation	5.68	4.99	5.60
	Minimum	79.00	80.90	80.00
	Maximum	97.00	98.00	98.70
PP	Average	89.88	88.13	90.76
	Std Deviation	4.14	8.69	5.93
	Minimum	83.00	62.70	75.00
	Maximum	93.70	97.00	98.00
PERL	Average	89.00	92.21	90.08
	Std Deviation	4.23	3.64	4.65
	Minimum	85.00	86.70	83.20
	Maximum	93.00	99.00	96.30
PAH	Average	91.80	89.39	90.93
	Std Deviation	4.04	5.69	5.40
	Minimum	87.00	77.20	79.00
	Maximum	95.80	97.60	98.00
PER	Average	88.99	91.35	89.86
	Std Deviation	6.66	4.47	4.74
	Minimum	82.00	82.00	78.50
	Maximum	97.00	98.00	97.80
NS	Average	92.35	94.64	93.09
	Std Deviation	4.54	3.32	2.98
	Minimum	86.90	89.00	90.00
	Maximum	98.00	99.00	99.00
MEL	Average	88.20	86.37	87.91
	Std Deviation	4.87	6.97	4.89
	Minimum	82.20	66.80	79.60
	Maximum	93.70	95.00	96.90
LABU	Average	91.10	91.72	90.12
	Std Deviation	4.10	4.01	5.62
	Minimum	88.20	87.00	83.20
	Maximum	94.00	96.00	96.00

WORK PLACE	ANALYSIS	PA90	PA91	PA92
KPKR	Average	91.71	92.38	93.04
	Std Deviation	3.68	3.43	3.85
	Minimum	87.70	84.50	80.00
	Maximum	97.00	97.60	99.00
KL	Average	92.88	89.37	92.62
	Std Deviation	3.66	7.43	5.18
	Minimum	86.00	72.60	73.90
	Maximum	95.90	98.00	99.00
KETE	Average	80.43	87.91	85.42
	Std Deviation	10.43	5.16	4.93
	Minimum	65.00	77.30	77.20
	Maximum	88.00	95.00	95.60
KESE	Average	87.50	89.67	89.78
	Std Deviation		3.84	6.42
	Minimum	87.50	83.30	76.30
	Maximum	87.50	93.00	95.00
KEL	Average	87.93	88.34	88.89
	Std Deviation	4.82	8.07	5.73
	Minimum	82.90	63.00	72.70
	Maximum	94.00	98.00	94.00
KEJO	Average	86.25	88.31	89.19
	Std Deviation	1.77	7.20	6.31
	Minimum	85.00	67.40	75.70
	Maximum	87.50	96.90	97.00
KED	Average	88.07	89.33	85.80
	Std Deviation	3.78	6.38	4.35
	Minimum	82.20	68.50	76.20
	Maximum	93.40	96.80	94.00
JOH	Average	87.15	89.86	88.29
	Std Deviation	10.49	5.46	7.81
	Minimum	72.50	76.30	67.90
	Maximum	95.40	97.00	97.00
IKRAM	Average	94.35	93.51	92.61
	Std Deviation	3.28	3.38	3.98
	Minimum	88.50	78.40	82.00
	Maximum	97.30	97.60	99.00
FELDA	Average	89.25	90.06	92.44
	Std Deviation	5.64	7.13	3.90
	Minimum	83.60	73.80	86.50
	Maximum	97.00	99.00	99.00
DARA	Average	93.30	91.06	92.19
	Std Deviation		4.56	4.30
	Minimum	5.73	4.20	5.13
	Maximum	96.80	97.00	99.05
SKP	Average	90.23	92.26	91.19
	Std Deviation	5.73	4.20	5.13
	Minimum	78.70	82.50	79.00
	Maximum	96.80	97.00	99.00
CPK	Average	89.83	88.88	89.16
	Std Deviation	5.80	8.72	8.93
	Minimum	84.50	68.60	67.20
	Maximum	96.00	96.00	98.00
CKT	Average	94.45	91.53	90.10
	Std Deviation		4.34	4.76
	Minimum	94.45	83.90	82.90
	Maximum	94.45	95.80	96.00

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CKP	Average	90.30	87.61	92.15
	Std Deviation		6.40	3.96
	Minimum	90.30	73.90	84.70
	Maximum	90.30	96.40	99.05
KDN	Average	81.27	88.57	90.10
	Std Deviation	11.75	6.14	6.98
	Minimum	58.00	74.80	65.20
	Maximum	92.30	97.20	98.10

Table G2C-1. Performance Evaluation Ratings - Professional and Management Group (OE) - Analysis IV (JUJMJE A2)

WORK PLACE	ANALYSIS	PA90	PA91
CBA	Average	88.03	90.54
	Std Deviation	6.32	5.66
	Minimum	68.80	68.90
	Maximum	94.70	97.60
CE	Average	88.98	91.36
	Std Deviation	6.48	4.54
	Minimum	74.00	78.50
	Maximum	96.2	97.10
CKDN	Average	89.58	91.73
	Std Deviation	4.81	1.91
	Minimum	78.70	86.70
	Maximum	95.80	93.80
CKP	Average	84.92	93.40
	Std Deviation	5.34	2.79
	Minimum	77.30	89.40
	Maximum	91.10	97.50
CKT	Average	88.30	87.87
	Std Deviation	5.42	4.86
	Minimum	75.40	80.00
	Maximum	93.00	94.80
CKUB	Average	91.43	91.40
	Std Deviation	4.86	4.96
	Minimum	68.50	66.30
	Maximum	97.90	96.90
CM	Average	89.73	89.14
	Std Deviation	5.58	5.74
	Minimum	78.60	69.60
	Maximum	97.10	98.3
CPK	Average	91.19	90.33
	Std Deviation	4.80	3.87
	Minimum	77.70	81.20
	Maximum	96.60	94.70
DARA	Average	92.58	89.24
	Std Deviation	2.12	6.94
	Minimum	89.00	76.90
	Maximum	94.40	93.50
IKRAM	Average	92.43	90.03
	Std Deviation	5.61	3.82
	Minimum	86.30	86.00
	Maximum	97.30	93.60
JOH	Average	88.61	88.62
	Std Deviation	5.82	5.08
	Minimum	75.60	75.60
	Maximum	97.50	93.70
KED	Average	86.86	84.73
	Std Deviation	5.40	4.85
	Minimum	78.50	75.60
	Maximum	95.10	91.60

WORK PLACE	ANALYSIS	PA90	PA91
KEJO	Average	90.30	80.07
	Std Deviation	1.54	20.61
	Minimum	89.00	56.30
	Maximum	92.00	93.00
KEL	Average	89.59	88.52
	Std Deviation	4.18	3.57
	Minimum	80.40	84.30
	Maximum	95.60	94.60
KETE	Average	85.27	85.80
	Std Deviation	3.94	1.68
	Minimum	82.70	83.90
	Maximum	89.80	87.10
KL	Average	89.41	89.05
	Std Deviation	5.75	5.49
	Minimum	68.20	68.90
	Maximum	98.00	96.90
KPKR	Average	90.97	92.73
	Std Deviation	5.25	2.44
	Minimum	79.20	88.50
	Maximum	97.60	95.30
LAB	Average	89.88	86.58
	Std Deviation	6.01	4.31
	Minimum	82.20	82.50
	Maximum	96.60	90.30
MEL	Average	88.42	91.84
	Std Deviation	3.38	3.32
	Minimum	86.00	87.40
	Maximum	94.20	96.40
NS	Average	94.20	92.56
	Std Deviation	3.15	2.40
	Minimum	88.70	89.40
	Maximum	97.60	96.60
PAH	Average	90.26	85.99
	Std Deviation	4.79	7.41
	Minimum	78.80	70.30
	Maximum	96.10	93.00
PER	Average	91.24	89.33
	Std Deviation	4.54	3.45
	Minimum	82.20	82.90
	Maximum	96.60	94.50
PERL	Average	92.13	91.25
	Std Deviation	1.97	5.34
	Minimum	90.30	84.10
	Maximum	94.70	95.90
PP	Average	87.54	90.06
	Std Deviation	6.17	2.88
	Minimum	80.50	85.70
	Maximum	93.40	93.40
SEL	Average	89.47	89.33
	Std Deviation	4.01	4.30
	Minimum	79.90	81.70
	Maximum	96.60	97.30
TER	Average	89.75	89.41
	Std Deviation	3.55	3.66
	Minimum	84.80	82.00
	Maximum	97.30	95.90

WORK PLACE	ANALYSIS	PA90	PA91
TURN	Average	88.89	87.80
	Std Deviation	5.20	6.69
	Minimum	71.50	59.20
	Maximum	98.30	95.10
WP	Average	92.59	91.78
	Std Deviation	2.31	3.49
	Minimum	89.40	85.10
	Maximum	97.60	96.60

Appendix G2D

Table G2D-1. Performance Evaluation Ratings - Second Support Group (CT) - Analysis VII (JTAWAM2)

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CBA	Average	88.95	90.65	93.23
	Std Deviation	8.76	9.15	5.44
	Minimum	69.00	64.70	78.20
	Maximum	100.00	99.20	98.50
CJ	Average	89.20	92.33	91.05
	Std Deviation	6.56	5.25	8.54
	Minimum	68.00	73.70	51.10
	Maximum	100.00	100.00	100.00
CKDN	Average	93.98	93.19	92.38
	Std Deviation	2.82	7.32	4.56
	Minimum	90.20	73.70	88.00
	Maximum	97.70	100.00	100.00
CKP	Average	86.23	88.44	90.00
	Std Deviation	4.93	6.07	7.05
	Minimum	76.70	79.70	78.90
	Maximum	91.30	99.20	100.00
CKP/JOH	Average	81.91	86.41	87.39
	Std Deviation	10.61	7.45	9.29
	Minimum	50.00	69.90	69.90
	Maximum	94.70	96.20	97.00
CKP/KED	Average	86.38	85.32	85.79
	Std Deviation	7.80	9.01	4.54
	Minimum	70.70	63.50	72.90
	Maximum	99.20	97.00	97.00
CKP/PAH	Average	82.13	84.99	80.89
	Std Deviation	8.29	8.11	8.82
	Minimum	66.20	67.70	67.70
	Maximum	96.00	94.00	94.00
CKP/PER	Average	82.81	87.46	83.56
	Std Deviation	7.85	5.35	9.05
	Minimum	65.10	77.40	63.50
	Maximum	98.50	97.00	94.00
CKP/PP	Average	75.83	86.83	85.20
	Std Deviation	9.98	3.85	5.90
	Minimum	54.90	78.60	73.80
	Maximum	98.50	97.00	94.00
CKP/SEL	Average	77.92	84.33	82.53
	Std Deviation	6.26	5.52	8.62
	Minimum	67.50	77.40	65.10
	Maximum	85.70	95.20	96.80
CKP/TER	Average	82.02	82.81	83.14
	Std Deviation	6.19	12.02	7.40
	Minimum	69.90	54.00	69.90
	Maximum	95.20	96.00	92.50
CKT	Average	87.66	92.37	91.88
	Std Deviation	9.81	5.82	5.74
	Minimum	70.70	83.50	82.50
	Maximum	99.20	99.20	96.20

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CKT/JOH	Average	81.41	80.20	82.10
	Std Deviation	8.16	7.38	8.43
	Minimum	70.60	65.40	64.70
	Maximum	93.20	91.70	93.20
CKT/KED	Average	76.97	78.53	75.95
	Std Deviation	13.00	10.25	8.52
	Minimum	58.90	64.70	66.90
	Maximum	96.80	96.20	94.00
CKT/KEL	Average	88.08	92.23	91.56
	Std Deviation	3.85	3.48	7.49
	Minimum	77.40	86.50	72.20
	Maximum	92.10	97.00	99.20
CKT/KL	Average	85.94	82.27	88.46
	Std Deviation	11.32	13.56	10.33
	Minimum	51.90	46.00	57.90
	Maximum	98.40	97.70	99.20
CKT/MEL	Average	85.96	91.84	88.76
	Std Deviation	4.37	2.51	7.78
	Minimum	78.20	88.00	69.90
	Maximum	97.00	97.70	98.50
CKT/NS	Average	83.41	84.09	81.46
	Std Deviation	5.63	6.74	7.83
	Minimum	73.70	71.40	71.40
	Maximum	91.00	93.20	95.50
CKT/PAH	Average	87.80	88.43	88.67
	Std Deviation	4.47	5.45	4.88
	Minimum	79.70	77.40	80.50
	Maximum	94.00	97.70	96.20
CKT/PER	Average	85.45	85.28	85.48
	Std Deviation	7.00	9.38	9.72
	Minimum	69.10	64.30	65.40
	Maximum	100.00	100.00	100.00
CKT/SEL	Average	81.39	87.26	86.73
	Std Deviation	8.98	7.29	5.30
	Minimum	71.40	74.40	78.90
	Maximum	98.50	96.20	94.70
CPK	Average	87.85	86.97	89.83
	Std Deviation	4.51	7.42	5.32
	Minimum	80.50	75.20	79.00
	Maximum	97.70	96.20	98.50
CSKP	Average	88.58	90.46	91.62
	Std Deviation	7.70	7.60	6.86
	Minimum	68.30	65.10	69.20
	Maximum	100.00	100.00	100.00
DARA	Average	89.65	90.58	89.66
	Std Deviation	3.79	5.43	5.66
	Minimum	80.50	78.20	69.90
	Maximum	96.20	98.50	98.50
FELD	Average	83.68	87.15	76.87
	Std Deviation	7.25	7.85	10.15
	Minimum	63.90	69.70	57.10
	Maximum	96.20	97.00	92.50
IKRAM	Average	90.71	90.37	90.30
	Std Deviation	5.47	5.13	5.04
	Minimum	75.90	77.40	78.20
	Maximum	100.00	98.50	99.20

WORK PLACE	ANALYSIS	PA90	PA91	PA92
JBA/JOH	Average	85.58	86.08	86.08
	Std Deviation	6.99	6.47	7.60
	Minimum	73.80	70.70	71.40
	Maximum	96.10	94.70	97.00
JOH	Average	85.93	89.55	87.09
	Std Deviation	6.73	5.42	5.71
	Minimum	61.90	75.40	63.10
	Maximum	97.70	99.20	96.20
KEDA	Average	80.88	82.09	82.99
	Std Deviation	10.10	8.51	8.56
	Minimum	63.10	65.90	69.90
	Maximum	97.70	94.70	95.50
KEDAH	Average	88.74	87.90	88.23
	Std Deviation	7.44	7.03	6.10
	Minimum	65.10	62.40	71.40
	Maximum	100.00	99.20	98.50
KEJORA	Average	87.85	92.23	91.80
	Std Deviation	9.28	7.54	4.30
	Minimum	60.90	65.40	82.00
	Maximum	97.00	99.20	97.70
KEL	Average	84.83	87.08	86.65
	Std Deviation	7.94	7.52	8.52
	Minimum	63.10	60.10	66.70
	Maximum	96.20	99.20	99.20
KES	Average	81.60	86.93	88.10
	Std Deviation	6.85	5.64	4.49
	Minimum	69.90	75.20	78.60
	Maximum	98.50	99.20	96.20
KET	Average	79.53	87.64	85.13
	Std Deviation	8.55	5.92	5.35
	Minimum	64.70	77.80	75.20
	Maximum	100.00	98.50	97.70
KL	Average	86.73	90.58	89.50
	Std Deviation	7.64	5.12	6.61
	Minimum	65.90	70.70	63.20
	Maximum	98.50	99.20	100.00
KPKR	Average	92.66	89.43	89.57
	Std Deviation	4.95	9.11	4.88
	Minimum	84.20	71.40	80.70
	Maximum	99.20	98.50	98.40
LAB	Average	88.70	92.00	93.24
	Std Deviation	5.12	6.76	2.66
	Minimum	78.60	79.70	89.20
	Maximum	94.40	100.00	97.60
MEL	Average	83.71	87.46	85.85
	Std Deviation	9.30	5.92	7.36
	Minimum	58.30	74.40	72.90
	Maximum	99.20	97.60	97.70
NS	Average	82.49	85.63	80.36
	Std Deviation	9.92	6.81	9.52
	Minimum	47.40	69.80	57.90
	Maximum	97.70	97.70	98.50
PAH	Average	84.42	86.90	85.04
	Std Deviation	9.33	7.36	8.11
	Minimum	51.10	63.20	63.20
	Maximum	97.70	98.50	97.70

WORK PLACE	ANALYSIS	PA90	PA91	PA92
PER	Average	84.93	88.01	85.11
	Std Deviation	8.82	6.76	9.48
	Minimum	51.90	68.40	51.90
	Maximum	100.00	100.00	100.00
PERDA	Average	89.95	88.44	91.64
	Std Deviation	13.78	5.77	4.76
	Minimum	57.90	76.70	84.20
	Maximum	98.40	96.20	97.00
PERL	Average	79.94	82.35	86.89
	Std Deviation	6.43	6.99	6.93
	Minimum	70.70	69.90	71.40
	Maximum	94.40	93.30	99.20
PP	Average	80.38	85.48	83.75
	Std Deviation	8.47	9.56	10.42
	Minimum	56.40	36.50	41.30
	Maximum	95.20	97.70	97.70
SEL	Average	83.38	86.16	85.47
	Std Deviation	7.64	6.68	8.23
	Minimum	64.70	71.40	60.30
	Maximum	97.60	100.00	99.20
TER	Average	84.86	85.69	79.79
	Std Deviation	6.86	7.97	8.75
	Minimum	63.50	59.50	59.50
	Maximum	98.40	98.40	96.20
UPJ	Average	93.58	92.00	88.82
	Std Deviation	6.17	4.30	4.05
	Minimum	85.00	87.20	84.00
	Maximum	98.50	97.70	93.20
WP	Average	84.91	85.16	85.29
	Std Deviation	6.43	7.20	9.63
	Minimum	67.50	67.70	57.90
	Maximum	98.50	97.60	99.20

Appendix G2E

**Table G2E-1. Performance Evaluation Ratings - Second Support Group (OT)
- Analysis IV**

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CB	Average	88.19	88.21	87.83
	Std Deviation	6.90	8.85	7.97
	Minimum	73.70	67.00	64.30
	Maximum	99.20	98.40	98.50
CE	Average	85.31	86.21	86.88
	Std Deviation	12.15	11.60	10.75
	Minimum	72.20	71.40	69.90
	Maximum	97.70	100.00	98.50
CE/JOH	Average	81.81	88.98	85.56
	Std Deviation	8.15	6.12	5.81
	Minimum	63.90	66.20	74.60
	Maximum	95.20	96.20	93.20
CE/KED	Average	89.86	90.29	88.30
	Std Deviation	8.21	3.01	4.93
	Minimum	62.40	86.50	79.00
	Maximum	97.00	96.20	96.00
CE/KEL	Average	80.97	85.86	78.15
	Std Deviation	5.67	4.68	6.01
	Minimum	69.20	79.70	59.40
	Maximum	89.50	96.00	85.90
CE/MEL	Average	88.08	89.09	82.48
	Std Deviation	3.27	4.72	6.99
	Minimum	84.10	82.70	71.40
	Maximum	91.00	93.20	92.10
CE/NS	Average	85.28	88.73	85.35
	Std Deviation	7.64	5.97	6.91
	Minimum	63.10	72.90	72.20
	Maximum	94.00	97.70	95.50
CE/PAH	Average	90.52	85.87	84.82
	Std Deviation	4.97	8.10	8.34
	Minimum	82.70	63.90	63.90
	Maximum	98.50	96.20	96.20
CE/PER	Average	82.37	86.36	86.89
	Std Deviation	8.87	5.98	5.82
	Minimum	52.40	73.80	71.40
	Maximum	91.00	97.00	97.00
CE/PP	Average	85.78	84.13	82.78
	Std Deviation	4.27	4.09	5.52
	Minimum	78.60	76.70	71.40
	Maximum	92.90	92.10	91.00
CE/SEL	Average	85.43	90.87	90.59
	Std Deviation	3.72	4.52	4.55
	Minimum	73.80	77.40	81.20
	Maximum	92.28	99.20	97.60
CE/TER	Average	82.15	85.45	76.08
	Std Deviation	9.54	6.73	4.21
	Minimum	57.90	73.70	69.00
	Maximum	94.00	94.40	87.30

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CJ	Average	89.43	91.03	83.13
	Std Deviation	8.01	4.09	8.76
	Minimum	73.00	86.50	73.70
	Maximum	100.00	97.00	96.20
CKDN	Average	89.67	90.74	95.68
	Std Deviation	6.66	7.53	2.65
	Minimum	72.20	78.20	89.50
	Maximum	97.70	99.20	98.50
CKP	Average	85.18	85.20	85.73
	Std Deviation	4.45	2.56	7.28
	Minimum	76.70	81.70	72.20
	Maximum	89.50	88.00	94.70
CKT	Average	85.20	91.03	85.56
	Std Deviation	13.45	5.53	11.24
	Minimum	58.70	82.00	63.90
	Maximum	98.40	97.60	98.40
CKT/JOH	Average	84.97	81.35	80.26
	Std Deviation	10.26	7.14	5.72
	Minimum	71.40	72.20	75.20
	Maximum	92.50	87.20	87.20
CKT/KED	Average	82.49	82.76	78.83
	Std Deviation	14.44	7.26	8.16
	Minimum	61.70	74.40	66.20
	Maximum	96.00	91.00	89.50
CKT/KEL	Average	87.45	88.41	88.11
	Std Deviation	2.74	3.58	2.62
	Minimum	85.00	84.20	85.00
	Maximum	93.60	94.00	92.90
CKT/KL	Average	81.81	85.78	83.61
	Std Deviation	6.09	7.82	5.77
	Minimum	72.20	72.20	75.90
	Maximum	94.00	97.70	94.70
CKT/MEL	Average	92.98	85.60	88.73
	Std Deviation	1.71	11.95	4.88
	Minimum	91.70	72.90	82.70
	Maximum	95.50	97.00	94.00
CKT/NS	Average	82.70	81.95	74.47
	Std Deviation	5.34	5.55	8.68
	Minimum	75.90	74.40	66.20
	Maximum	88.00	86.50	83.50
CKT/PAH	Average	85.74	86.33	87.20
	Std Deviation	15.27	10.55	5.72
	Minimum	51.10	64.70	72.20
	Maximum	97.70	98.50	93.20
CKT/PER	Average	86.94	89.11	88.93
	Std Deviation	4.96	5.39	5.38
	Minimum	79.40	76.70	79.70
	Maximum	97.60	96.20	98.50
CKT/SEL	Average	87.00	87.30	87.97
	Std Deviation	6.45	7.10	6.03
	Minimum	78.90	73.70	78.90
	Maximum	94.70	92.50	95.50
CKUB	Average	90.76	92.11	92.55
	Std Deviation	4.62	3.93	3.91
	Minimum	77.00	81.00	76.20
	Maximum	99.20	99.20	99.20

WORK PLACE	ANALYSIS	PA90	PA91	PA92
CM	Average	84.23	87.41	88.19
	Std Deviation	12.03	4.56	6.39
	Minimum	57.10	81.20	72.20
	Maximum	97.00	96.00	94.40
CPK	Average	93.84	85.40	91.00
	Std Deviation	5.26	7.46	5.35
	Minimum	82.00	74.10	76.50
	Maximum	100.00	97.70	97.70
DARA	Average	92.18	96.09	92.68
	Std Deviation	3.51	1.75	4.40
	Minimum	86.50	92.50	84.20
	Maximum	97.00	98.40	97.70
FELDA	Average	84.30	79.88	79.88
	Std Deviation	2.26	3.70	3.78
	Minimum	81.50	77.00	74.40
	Maximum	87.30	86.50	84.20
JOHOR	Average	86.42	83.30	87.32
	Std Deviation	5.81	19.73	7.97
	Minimum	77.80	9.20	72.20
	Maximum	96.80	98.50	97.60
KED	Average	90.99	93.90	89.47
	Std Deviation	5.65	3.46	5.34
	Minimum	82.00	87.30	81.20
	Maximum	97.00	98.50	96.20
KEJ	Average	86.33	88.63	91.86
	Std Deviation	7.09	6.78	8.61
	Minimum	75.20	78.60	76.20
	Maximum	96.80	98.50	98.50
KEL	Average	85.84	89.20	89.20
	Std Deviation	3.14	3.02	8.46
	Minimum	81.00	85.70	69.90
	Maximum	90.20	94.00	97.70
KES	Average	88.88	89.32	88.98
	Std Deviation	3.65	2.45	3.07
	Minimum	83.50	86.50	86.50
	Maximum	92.50	92.50	94.00
KET	Average	79.08	81.20	83.64
	Std Deviation	8.37	4.56	5.04
	Minimum	68.40	75.90	78.20
	Maximum	88.10	89.50	94.00
KL	Average	88.33	89.64	90.84
	Std Deviation	8.55	6.13	3.08
	Minimum	68.40	82.70	87.30
	Maximum	96.20	98.50	96.00
LAB	Average	89.94	88.52	88.90
	Std Deviation	5.25	6.05	6.34
	Minimum	84.20	79.70	81.20
	Maximum	95.50	94.00	95.20
MEL	Average	81.57	85.58	87.38
	Std Deviation	4.99	3.69	6.48
	Minimum	75.40	79.70	76.20
	Maximum	89.20	88.70	96.20
NS	Average	90.38	92.70	91.03
	Std Deviation	7.68	4.88	4.28
	Minimum	77.80	84.20	84.20
	Maximum	97.00	97.70	98.40

WORK PLACE	ANALYSIS	PA90	PA91	PA92
PAH	Average	85.98	88.68	87.16
	Std Deviation	3.88	4.44	6.81
	Minimum	82.00	78.60	69.90
	Maximum	94.00	94.70	94.00
PER	Average	85.91	86.90	85.52
	Std Deviation	7.54	7.11	5.79
	Minimum	75.20	74.40	74.60
	Maximum	95.50	95.50	96.20
PERL	Average	89.23	91.46	93.72
	Std Deviation	7.82	7.87	7.48
	Minimum	79.70	75.20	78.90
	Maximum	100.00	99.20	98.50
PP	Average	78.53	85.18	82.35
	Std Deviation	6.94	9.66	14.20
	Minimum	63.00	63.90	45.90
	Maximum	87.30	96.80	97.00
SEL	Average	90.42	89.94	91.11
	Std Deviation	3.36	4.48	4.15
	Minimum	84.20	81.00	82.70
	Maximum	96.20	96.00	96.80
TER	Average	85.46	82.25	78.79
	Std Deviation	7.30	7.66	6.42
	Minimum	71.40	70.70	71.40
	Maximum	97.60	99.20	91.00
WP	Average	89.69	93.61	92.37
	Std Deviation	7.86	6.19	5.40
	Minimum	71.40	72.20	81.20
	Maximum	98.50	100.00	100.00

Appendix G2F

Table G2F-1. Performance Evaluation Ratings - Professional and Management Group (CE) - Analysis 1 (JACOUNT1)

	NO.	CODE	WORK PLACE	PA90	PA91	PA92
	1	JA14	CBA	86.00	87.00	92.70
	2	JA132	CBA	86.90	84.60	
	3	JA17	CBA	97.00	92.00	98.00
	4	JA67	CBA			95.40
	5	JA174	CBA	83.80	92.00	94.00
	6	JA182	CBA	95.40	96.00	
	7	JA183	CBA		89.40	93.90
	8	JA188	CBA	88.70	87.70	
	9	JA265	CBA	95.00	87.50	87.00
	10	JA57	CBA	93.30	92.00	92.80
	11	JA577	CBA	95.00	88.90	93.30
	12	JA62	CBA	93.70	92.70	88.80
	13	JA627	CBA	85.70	87.90	85.60
	14	JA63	CBA	87.00		86.30
	15	JA66	CBA	93.40	89.00	92.80
	16	JAK38	CBA	96.00	87.40	92.60
	17	JAK61	CBA	92.60	92.00	93.00
	18	JAK7	CBA	89.00	89.60	92.00
	19	JAK71	CBA	93.30	96.00	92.00
	20	JAK87	CBA	77.60	93.50	93.30
	21	JAK89	CBA	88.70	86.70	
	22	JAK127	CBA	74.80	66.80	84.50
	23	JAG49	CBA	96.00	94.70	92.80
	24	JAG58	CBA	94.90	92.30	90.00
	25	JAG65	CBA	94.40	74.60	88.50
	26	JAF3	CBA	95.30	93.30	82.00
	27	JA4	CJ	94.60	95.60	94.00
	28	JA8	CJ	82.20	82.90	89.30
	29	JA1	CJ	94.00	95.00	
	30	JA28	CJ	95.40	93.00	97.00
	31	JA33	CJ	98.00	88.60	92.00
	32	JA34	CJ	92.50	96.60	94.20
	33	JA41	CJ	96.00	95.40	94.00
	34	JA65	CJ	92.00	96.90	93.50
	35	JA111	CJ	93.30	97.40	94.90
	36	JA115	CJ		76.90	82.00
	37	JA131	CJ	88.60	96.00	86.00
	38	JA179	CJ	94.60	98.60	88.20
	39	JA192	CJ	85.30	83.40	95.80
	40	JA195	CJ	93.00	89.90	92.00
	41	JA199	CJ	92.50	96.00	93.80
	42	JA24	CJ	94.00	92.50	94.30
	43	JA217	CJ	85.80	90.00	93.00
	44	JA232	CJ	89.00	96.00	90.00

**The Questionnaire for Measuring the Service Performance Gap in the Ministry
of Public Works, Malaysia**

Thank you very much for your participation in this survey on measuring the service performance gap in your organisation. This measurement is carried out in relation to the study of quality of services delivered by your organisation. This questionnaire is divided into 2 parts.

The first part requires you to tell us about yourself and for the second part you will be guided by the directions given on how to respond to the statements.

PART 1

- The branch/division you are with: _____
- How long have you been with this branch/division?: _____
- How long have you been employed in the public sector?: _____
- Your position: _____
- Your salary grade: _____
- Your age: _____

PART 2

Directions:

Listed below are a number of statements intended to measure your perceptions about your branch/division and its operations. In some of the statements we use the term 'customer'. What we mean by 'customer' here is either your colleagues that you deliver your services to. The meaning of customer does not stop here. Customers also include employees outside your department. Apart from that, if you are dealing with the general public outside your organisation, they too comes under the meaning of customers. In other words, a customer here means anyone who receives services from you.

Please indicate the extent to which you disagree or agree with each statement by circling one of the seven numbers next to each statement. If you *strongly disagree*, circle 1. If you *strongly agree*, circle 7. If you feelings are not strong, circle one of the numbers in the middle. There are no right and wrong answers. Please tell us honestly how you feel.

		Strongly Disagree						Strongly Agree
1	I feel that I am part of a team in my organisation	1	2	3	4	5	6	7
2	Everyone in my organisation contributes to a team effort in servicing customers.	1	2	3	4	5	6	7
3	I feel a sense of responsibility to help my fellow employees do their jobs well.	1	2	3	4	5	6	7
4	My fellow employees and I cooperate more often than we compete.	1	2	3	4	5	6	7
5	I feel that I am an important member of this organisation.	1	2	3	4	5	6	7
6	I feel comfortable in my job in the sense that I am able to perform the job well.	1	2	3	4	5	6	7
7	My organisation hires people who are qualified to do their jobs.	1	2	3	4	5	6	7
8	My organisation gives me the tools and equipment that I need to perform my job well.	1	2	3	4	5	6	7
9	I spend a lot of time in my job trying to resolve problems over which I have little control.(-)	1	2	3	4	5	6	7
10	I have the freedom in my job to satisfy customers' needs.	1	2	3	4	5	6	7
11	I sometimes feel a lack of control over my job because too many customers demand service at the same time. (-)	1	2	3	4	5	6	7
12	One of my frustrations on the job is that I sometimes have to depend on other employees in serving my customers. (-)	1	2	3	4	5	6	7
13	My supervisor's appraisal of my job performance includes how well I interact with customers.	1	2	3	4	5	6	7

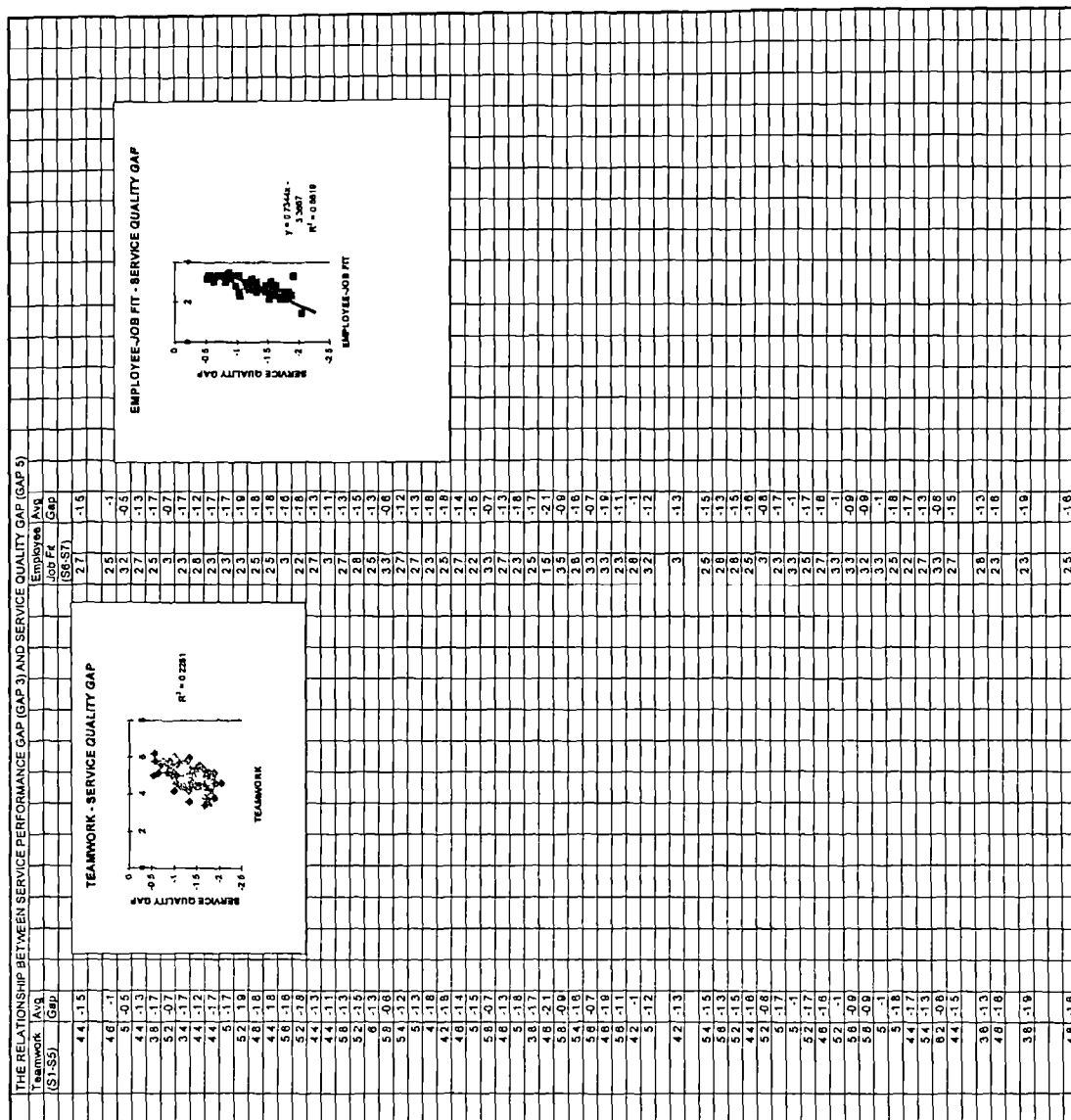
		Strongly Disagree						Strongly Agree
14	In our organisation, making a special effort to serve customers well does not result in more pay or recognition. (-)	1	2	3	4	5	6	7
15	In our organisation, employees who do the best job serving their customers are more likely to be rewarded than other employees.	1	2	3	4	5	6	7
16	The amount of paperwork in my job makes it hard for me to effectively serve my customers. (-)	1	2	3	4	5	6	7
17	What my customers want me to do and what management wants me to do are usually the same thing.	1	2	3	4	5	6	7
18	My organisation and I have the same ideas about how my job should be performed.	1	2	3	4	5	6	7
19	I receive sufficient amount of information from management concerning what I am supposed to do in my job.	1	2	3	4	5	6	7
20	I often feel that I do not understand the services offered by my organisation. (-)	1	2	3	4	5	6	7
21	I am able to keep up with changes in my organisation that affect my job.	1	2	3	4	5	6	7
22	I feel that I have not been well trained by my organisation in how to interact effectively with customers. (-)	1	2	3	4	5	6	7
23	I am not sure which aspects of my job my supervisor will stress most in evaluating my performance. (-)	1	2	3	4	5	6	7

Service Performance Gap for Survey Subject Area I

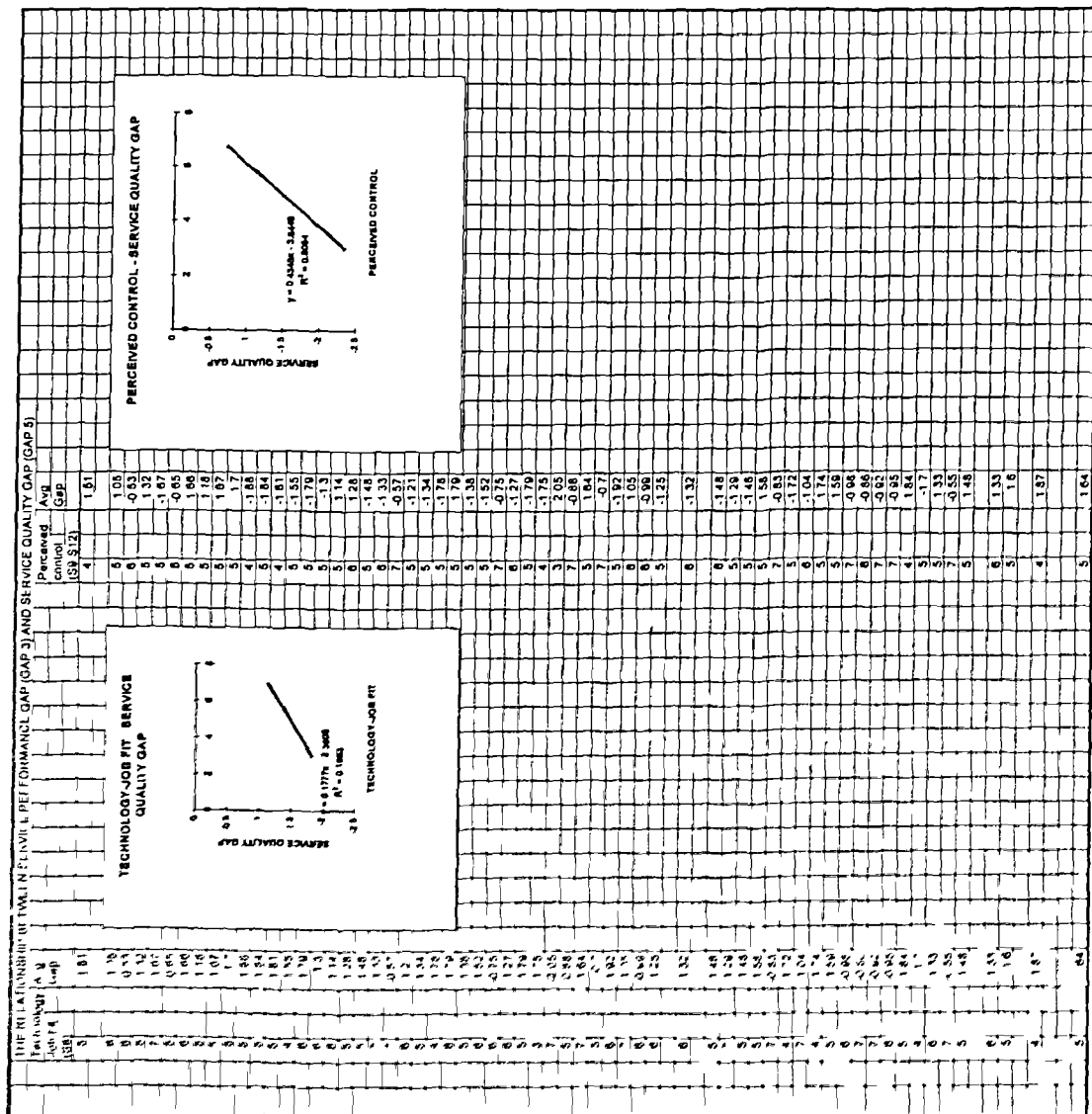
SERVICE PERFORMANCE GAP (GAP 3) FOR SERVICE BRANCH, ESTABLISHMENT BRANCH, PROMOTION AND DISCIPLINARY BRANCH

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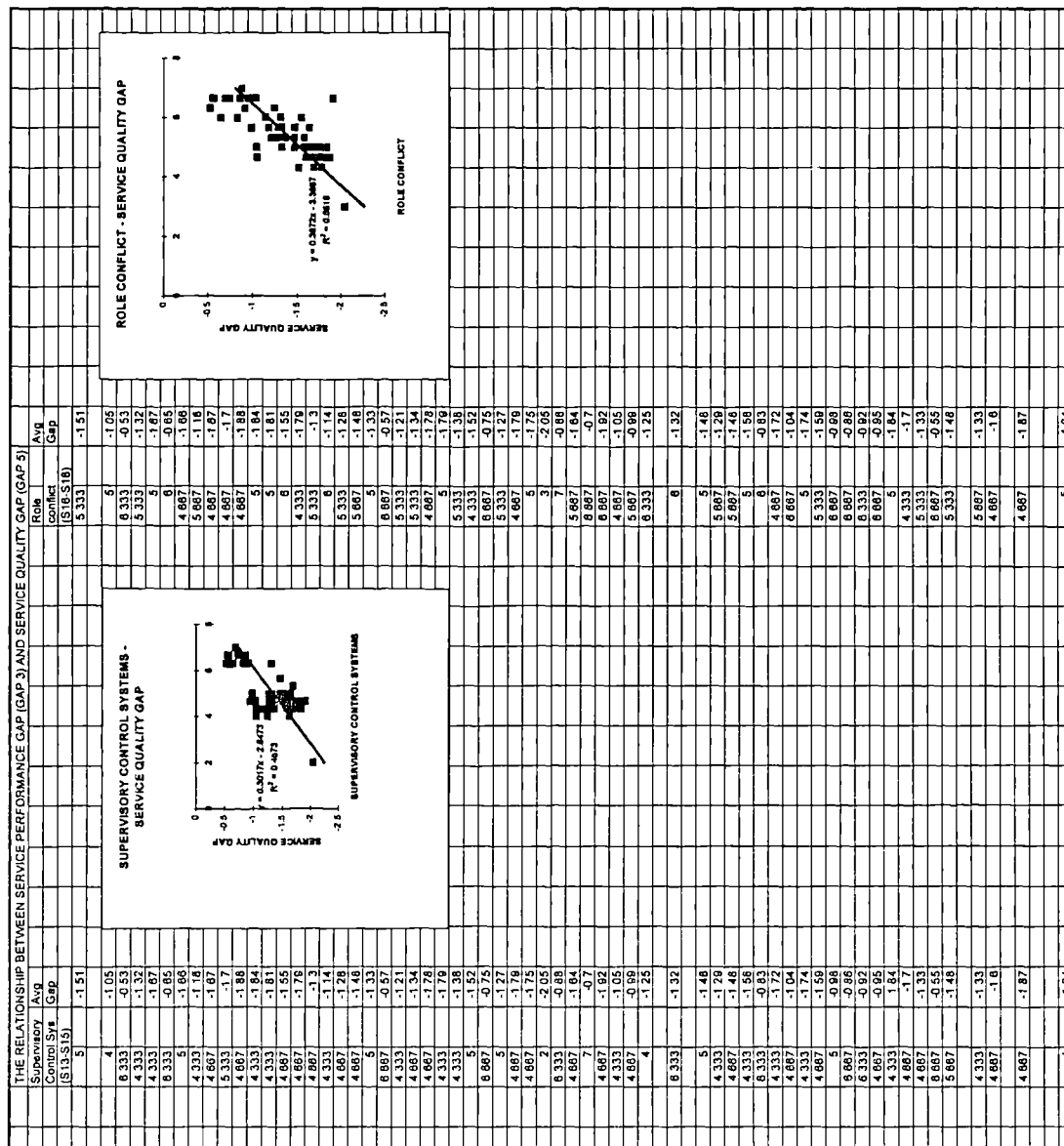
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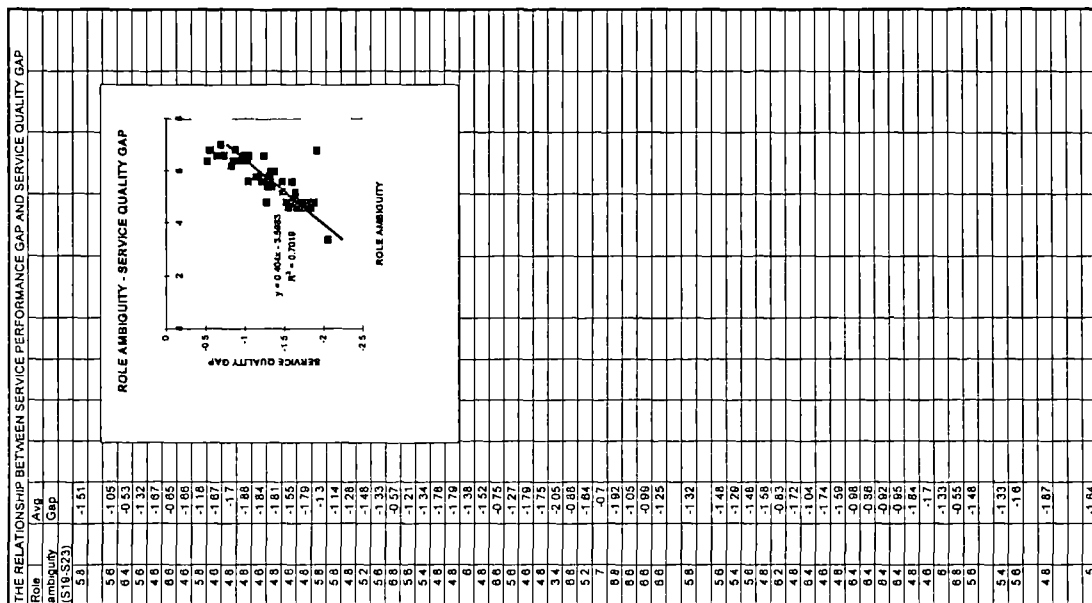


SERVICE PERFORMANCE GAP (GAP 3) FOR SERVICE BRANCH, ESTABLISHMENT BRANCH, PROMOTION AND DISCIPLINARY BRANCH



SERVICE PERFORMANCE GAP (GAP 3) FOR SERVICE BRANCH, ESTABLISHMENT BRANCH, PROMOTION AND DISCIPLINARY BRANCH





SERVICE PERFORMANCE GAP (GAP 3) FOR ALL DIVISIONS AND BRANCHES

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SERVICE PERFORMANCE GAP FOR SURVEY SUBJECT AREA II																							
GAP SCORE																							
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23
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413	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
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415	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
416	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
417	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
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421	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
422	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
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425	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
426	6	6	5	5	6	7	7	6	4	6	4	4	4	4	4	4	6	4	6	7	6	5	
427	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
428	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
429	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
430	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
431	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
432	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
433	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
434	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
435	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
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437	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
438	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
439	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
440	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
441	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
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443	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
444	7	6	7	7	7	7	7	7	7	7	6	6	6	5	5	5	5	6	7	7	4	5	
445	7	6	7	7	7	7																	

1. Definition of PM and HRM

As to how PM and HRM can be used to managed human resources, we need to look at the definitions of these two approaches. According to Torrington (1995), Personnel Management can be defined as a series of activities which: first enable working people and the business which use their skills to agree about the objectives and nature of their working relationship and secondly, ensure that the agreement is fulfilled. Only by satisfying the needs of the individual contributor will the business obtain the commitment to the organisational objectives that is needed for organisational success and only by contributing to organisational success will individuals be able to satisfy their personal employment needs.

According to Storey (1995), human resource management is defined as a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques.

2. Managing Human Resources through PM and HRM

The management of human resources through Personnel Management and Human Resource Management is carried out to achieve several organisational goals. For example, according to Beer and Spector (1985), a business enterprise has an external strategy: a chosen way of competing in the market place. It also needs an internal strategy: a strategy for how its internal resources are to be developed, deployed, motivated and controlled.

This widely held view of the need to be explicit, complementary relationship between the internal HRM strategy of individual organisations and their external product market or larger business strategy has led to the formulation of a number of typologies of product market strategies and their (desirability) associated HRM strategies and practices. For example Schuler and Jackson (1987) identified:

1. an innovation strategy designed to gain competitive advantage (i.e. develop products or services different from those of competitors);
2. a quality enhancement strategy (i.e. enhance product and / or service quality);
3. a cost reduction strategy (i.e. be a low-cost producer).

The patterns of employee role behaviour and human resource management policies held to be associated with these particular business strategies are set out in Table H1. This perspective suggests the importance of incorporating the notion of product or organisational life-cycles, which are typically held to involve the four stages of start-up, growth, maturity and decline in HRM strategy formulation.

Table H2 shows one view of how HRM priorities and strategies may change over the course of these four stages. The contents of both tables suggest that the interest in strategic HRM has largely arisen out of product market developments, although there is 'no one best way' to manage in the HRM area in that the priorities, desired employee role behaviours, policy mix and so on in the individual organisation will be highly contingent upon the related phenomena of larger business strategy.

In line with what that have been suggested by Schuler and Jackson (1987), in achieving organisational goals through the management of human resources, Guest (1989) believes that the driving force behind HRM is 'the pursuit of competitive advantage in the market-place through provision of high quality goods and services, through competitive pricing linked to high productivity and through the capacity swiftly to innovate and manage change in response to changes in the market-place or to breakthroughs in research and development'.

Guest (1989) proposed in his Theory of HRM (see Table H3) that there are four main components which can help organisations achieve organisational success. First and centrally, a set of HRM outcomes or HRM policy goals; secondly, a set of HRM policies; thirdly, the 'cement' that binds the system; and finally, a number of organisational outcomes.

Table H1. Employee Role Behaviour And HRM Policies Associated With Particular Business Strategies

Strategy	Employee role behaviour	HRM policies
1. Innovation	a high degree of creative behaviour	jobs that require close interaction and co-ordination among groups of individuals
	longer term focus	performance appraisals that are more likely to reflect longer -term and group-based achievements
	a relatively high level of co-operative, interdependent behaviour	jobs that allow employees to develop skills that can be used in other positions in the firm
		compensation systems that emphasise internal equity rather than external or market-based equity
	a moderate degree of concern for quality	pay rises that tend to be low, but that allow employees to be stockholders and have more freedom to choose the mix of components that make up their pay package
	a moderate concern for quantity	
	an equal degree of concern for process and results	broad career paths to reinforce the development of a broad range of skills
	a greater degree of risk taking	
	a high tolerance of ambiguity and unpredictability	

(Schuler and Jackson, 1987)

Table H1. contd.

Strategy	Employee role behaviour	HRM policies
2. Quality enhancement	relatively repetitive and predictable behaviours	relatively fixed and explicit job descriptions
	a more long-term or intermediate focus	high levels of employee participation in decisions relevant to immediate work conditions and the job itself
	a moderate amount of co-operative, interdependent behaviour	a mix of individual and group criteria for performance appraisal that is mostly short term and results orientated
	a high concern for quality	a relatively egalitarian treatment of employees and some guarantees of employment security
	a modest concern for quantity of output	extensive and continuous training and development of employees
	high concern for process low risk-taking activity	
	commitment to the goals of the organisation	
3. Cost reduction	relatively repetitive and predictable behaviour	relatively fixed and explicit job descriptions that allow little room for ambiguity
	a rather short-term focus	narrowly designed jobs and narrowly defined career paths that encourage specialisation expertise and efficiency
	primarily autonomous or individual activity	short-term results-orientated performance appraisals
	moderate concern for quality of output	minimal levels of employee training and development
	primary concern for results	
	low-risk taking activity	
	relatively high degree of comfort with stability	

(Schuler and Jackson, 1987)

Table H2. Critical Human Resource Activities at Different Organisational or Business Unit Stages

Human resource functions	Life cycle stages			
	Introduction	Growth	Maturity	Decline
Recruitment, selection and staffing	Attract best technical / professional talent	Recruit adequate numbers and mix of qualified workers. Management succession planning. Manage rapid internal labour market movements	Encourage sufficient turnover to minimise lay-offs and provide new openings. Encourage mobility as reorganisations shift jobs around.	Plan and implement workforce reductions and allocation.
Compensation and benefits	Meet or exceed labour market rates to attract needed talent	Meet external market but consider internal equity effects. Establish formal compensation structures	Control compensation	Tighter cost control
Employee training and development	Define future skill requirements and begin establishing career ladders	Mould effective management team through management development and organisational development	Maintain flexibility and skills of an ageing workforce	Implement retraining and career consulting services
Labour / employee relations	Set basic employee relations philosophy and organisation	Maintain labour peace and employee motivation and morale	Control labour costs and maintain labour peace. Improve productivity	Improve productivity and achieve flexibility in work rules. Negotiate job security and employment adjustment policies.

(Kochan and Barocci, 1985)

3. Managing Human Resources for Delivering Quality Services

In the discussions above, Schuler and Jackson (1987) as well as Guest (1989) suggest that one of the goals that can be achieved from managing human resources is delivering quality services. In delivering quality services, one of the main approaches currently used in quality management is Total Quality Management. This approach, according to Kenett, Waldman and Graves (1994), had a profound effect on business strategies in the 1980s and continues to enjoy prominence in the business world in the 1990s. This is because quality efforts have been forged into this systemic perspective (Moss, 1989). For organisations adopting this strategy, the promises of TQM include increased quality and efficiency, less waste, higher productivity and enhanced customer satisfaction. Efforts to achieve total quality in organisations necessitate a systems approach whereby various facets of management are co-ordinated (Kenett, Waldman and Graves, 1994).

Bowman (1994) points out that the TQM objective is to analyse processes to identify barriers to quality, satisfy internal and external beneficiaries of the work performed ('customers') and create an atmosphere of continuous improvement. If shoddy goods and services are delivered, the problem rests with management practices, which performance appraisal only serves to reinforce. TQM provides both a philosophy, as well as a set of no-nonsense methods to bring about change.

Table H3. A Theory of HRM

HRM policies	Human resource outcomes / Policy goals	Organisational outcomes
Organisation / job design	Commitment	High job performance
Management of change	Strategic integration	High problem solving change innovation
Appraisal, training & development	Flexibility / Adaptability	High cost-effectiveness
Reward systems		
Communication	Quality	Low Turnover Absence Grievances
	Leadership/Culture/Strategy	

(Guest, 1989)

In looking at the implementation of TQM alongside HRM, literature on this issue does show that TQM can be applied in organisations that practice HRM. But critics are quick to point out that a part of HRM which involves measuring performance can have a negative effect on service quality. According to the proponents of TQM, continuous improvement of processes are not achievable if *TQM* is administered side by side with *performance appraisal* in an organisation (Kenett, Waldman and Graves, 1994).

Boudreaux (1994) notes that many TQM proponents claim that performance appraisals are harmful. Traditional performance appraisals fall short from a total quality perspective. Therefore, according to Collard (1992), "We need to evaluate the performance appraisal system to ensure that performance management objectives reflect the objectives of the total quality programmes - for instance, do team-working, networking, quality standards feature in the performance management system?"

Scholtes (1992), provides the answer by emphasising that TQM requires customer-consciousness, systems-thinking, an understanding of variation, an appreciation of teamwork, a mastery of improvement methods and understanding of the process of personal motivation and learning. These very requirements of TQM are subverted by performance appraisal. TQM requires us to understand, control and improve processes for the benefit of the customer. Performance appraisal aims at controlling an individual's behaviour to the satisfaction of his or her manager.

In arguing along the same line, Moss (1989) says that the areas of TQM are so different to performance appraisals up to the extend that there is a conflict between the two management practices. One of them is for example, there is a difference between controlling processes advocated by TQM and controlling of individuals advocated by performance appraisal (Moss, 1989). These differences, which resulted from the implementation of these two approaches alongside each other, can create problems over the delivery of quality services in an organisation. Therefore this is one area of goals that has been said to be achievable through the management of human resources, as suggested by Guest (1989) that has to be looked into further. In general, in order to be able to achieve the goals from managing the human resources, basically what is required is the *management of performance*. In managing performance, we need to look at the factors affecting performance.

4. Factors Affecting Performance

Most of the factors affecting performance come from the organisation rather than the individual. In other words, these organisational factors are contributed by the work system of the organisation. An important

issue with regard to systems involves the manner in which system factors may affect variation in individual work performance.

Deming (1986) argued that system factors are highly influential in determining performance variation within an organisation. However, the system could potentially be viewed as a constant, affecting each individual within that system equally. It would then follow that any observed variation in performance must be due to person-based factors, but that work performance may be influenced by four possible categories of factors:

1. systematic system
2. random system
3. person
4. person/system interaction

However, performance variation within a system will only result from the latter three categories. Systematic system factors are those that affect individuals equally. For example, employees on a manufacturing line use the same automated process, and their performance is affected equally by that process. This category cannot explain variations in individual performance.

In contrast, random system factors affect employees differentially. The term random implies the uncontrollable, for example, individuals must deal with variations in raw materials, environmental conditions, tool wear, leadership, supervision and job design. Dobbin (1991) provided an example of a sales representative who is fortunate enough to be assigned to an especially 'hot' sale territory, as compared to other sales representatives who are not so fortunate. In a system that is not under control, random system factors can indeed, play a large role in determining variation in individual performances. For a system that is under control, variation would be decreased as would the impact of such factors on individual performance. In sum, conceptualising the system in terms of both systematic and random factors is consistent with the work of Deming (1986). For Deming (1986), systematic factors determined the mean level of performance among individuals, whereas random factors accounted for most of the variance.

It is important to note that system processes and factors exist at multiple levels within an organisation. Thus a system factor can be organisation-wide, affecting the performance of all individuals within that organisation. As an example, using the category of random systems factors, an organisation as a whole may provide an inconsistent degree of training to individual members, thus creating performance variance.

Alternatively, a system factor can emanate from a subsystem within that system and apply only to those individuals within the sub-system. An example of how variance may be increased at a sub-system level is when there is inconsistent availability of tools or other raw materials for individuals within a production department. Inconsistent leadership or supervision practices constitute another example of a source of random variation within a sub-system (i.e. group).

In focusing on the same issue of individual factors and organisational factors affecting performance, Heskett (1986) points out that the health of the enterprise is dependent on the degree in which employees share common values, and how well employees are served by the company's activities. He said company health in this respect is manifest in low employee turnover, loyalty and productivity gains. Exceptional talent, properly managed, can provide a lasting competitive advantage. But the possession of talent does not by itself guarantee a high level of achievement. A further ingredient is needed to be supplied by the individual and consists of a set of qualities of character and temperament which will enable him or her to harness and focus talent and make it productive. These include things such as drive, persistence, determination, emotional resilience, stamina and self-belief. For the individual to acquire these positive attitudes, the individual needs to be motivated.

Campbell and Pritchard (1976) noted that motivation is merely the reinforcement of a positive effort-performance-rewards-experience. Future effort and behaviour are influenced by past outcomes. Motivation itself is meaningful only as a summary factor - 'a label for the determinants of the choice to initiate effort on a certain task, the choice to expend a certain amount of effort, and the choice to persist in expending effort over a period of time' (Campbell & Pritchard, 1976).

In addressing the same issue on inculcating positive attitudes towards work for the individuals, according to Moorhead & Griffith (1989), management has to provide the links between individual objectives and organisational objectives. At the same time, these objectives have to be linked to other factors like performance measurement, rewards and motivations. If any one of these factors is poorly linked, it will contribute to sub-optimal organisational performance. A lack of clear objectives or expectations - or

objectives that are not linked directly to relevant business objectives and plans - creates problems at the outset. Managers may not be successful in enabling employees to perform effectively. Evaluation of performance as well as employee feedback may be lacking, even with a formal appraisal system. Finally, rewards and recognition may not be sufficient or effective.

Apart from making sure of the strong links between the factors and the individual and organisational objectives, these factors also need to be related to each other and support each other. Where rewards are not closely related to the objectives or expectations of performance, they lack relevance in the cycle. Feedback and measures too, need to be aligned with the objectives (even though objectives may change under fluid circumstances) and with rewards. When they work together, they provide a single, focused context for behaviour. These links and relationships are further illustrated in Figure H1.

As a result, the cycle can be powerfully positive process, resulting in continual improvement of performance. The self-reinforcing process is inherent in every quality improvement process - setting new objectives or standards, achieving them, measuring them and rewarding them.

It can be a negative cycle, when objectives are poorly defined, support and feedback are lacking and rewards are insufficient or irrelevant, successively reducing the likelihood of effective performance.

Looking at the relationship cycle in Figure H1, certain variables that influence performance are controllable by management. They are, work design (the tasks or activities to be performed, job content), organisational context (e.g. supervisory style, organisation of the work, physical working conditions, communication, hours of work, etc.) and performance objectives (presumably related to organisational objectives). All have a direct effect on the extent and nature of an individual's efforts devoted to a job.

Individual competence is also an important variable. Hard-working individuals without the necessary skills, abilities or knowledge are not likely to achieve much on their jobs. Also, effort is a prerequisite for performance, which we may define as the accomplishment of certain defined tasks or objectives. Performance is a function of both effort and abilities. Like the above variables, the competency variable is also under the control of management. Management can provide the necessary training and development programmes to increase individual skills, abilities and knowledge.

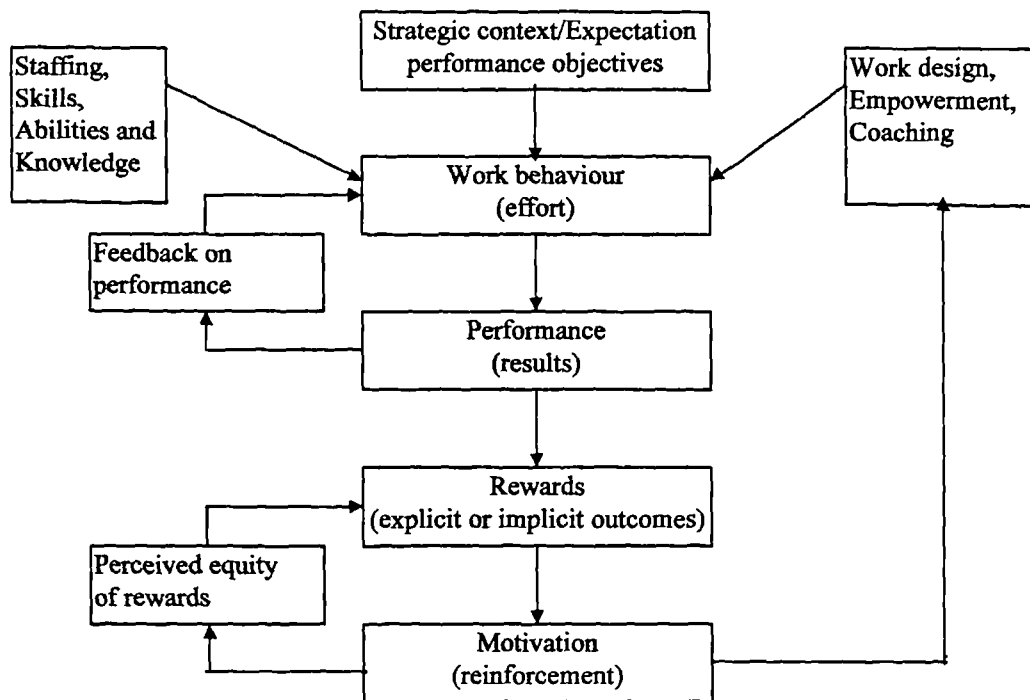
Further down the cycle, the individual's effort supported by the training and development programmes will produce results. The performance results for the organisation and individuals are outcomes-productivity for the organisation and personal rewards in the form of pay; benefits; job security; recognition from co-workers and superiors; and promotional opportunities for individual employees. Employees often measure their job satisfaction largely in terms of these rewards, which are the most tangible ones received from the job. Individuals may gain job satisfaction from a personal sense of accomplishment through work and also feedback about performance.

According to Nadler and Lawler (1971), if performance is a function of effort and competence, it is important that individuals believe that they are able to perform at the desired level. Efforts depends on:

- Positive or negative feelings about the outcomes or rewards associated with performance
- Expectancy that effort will result in accomplishment of defined tasks
- Expectancy that accomplishment will obtain or avoid certain outcomes or rewards

In the cycle, according to the 'expectancy theory' of performance and motivation, the theory says that employees' perceptions and values are important determinants of the effort they will expend (Walker, 1992). In other words, if a worker is motivated, he will perform better. He will keep on performing better and better as he keeps on going through the cycle. In order to be able to keep track on the level of worker's performance, the performance has to be evaluated. This can be done through, as mentioned earlier on, performance appraisals. This performance appraisal system can be affected by a number of problems that can hinder it from meeting its objectives. Some of the problems with performance appraisals are mentioned below.

Figure H1. A Behavioural View of Performance



(Moorhead & Griffith, 1989)

5. Problems with Performance Appraisals

Performance ratings can theoretically be used to identify training needs, management problems and candidates for promotion, job rotation and dismissals or lay-offs. The employee is supposed to get an indication of how the organisation views him or her and what can be expected in the future in terms of promotion, pay increases and job assignments. The interview should help employees and management to communicate better and enhance employees' identification with the organisation. Overall, motivation and performance should increase. But according to Deming (1986), this is not so. Deming (1986), blames performance appraisals for poor quality. He questioned that why would anyone support a process that typically:

- Does not improve performance?
- Angers and alienates many employees?
- Sometimes make organisations more prone to legal difficulties, rather than validating their approaches and actions?
- Takes a considerable amount of time and requires a lot of paperwork without providing a return on this investment?

Thomas and Bretz (1994) argue that there appears to be a growing debate about whether the consequences of the performance appraisal are truly beneficial to many organisations. A significant number of practising managers appear to be saying that performance appraisal may create more problems than it solves. Regardless of one's perspective, performance appraisal systems are likely to be a subject of concern for managers and employees alike for some time to come.

In fact, the trend in organisations appears to be toward merit or other performance-based pay plans, promising even more emphasis on the appraisal process. Despite the trend and even though a stream of appraisal research has flowed unabated for years, performance appraisal, as commonly practised, has remained a largely unsatisfactory endeavour. Performance appraisal systems often suffer from design flaws. Managers receive poor training in appraisal administration and seldom rewarded for accuracy in appraisal.

Performance appraisals, pointed out by Carter (1994), as early as the 1800s included assessment of individuals' physical and mental characteristics, personality factors, behaviours and skills. One hundred years later, performance ratings have changed little, measuring many of the same factors. In the late 1950s, the link between performance and job objectives was made as the MBO system was created. This performance appraisal has been an integral part of the organisational establishment as having strategic planning, job descriptions and numerically based goals. While its concept is intuitive and its intents are laudable, there is evidence, particularly within the context of quality management, that the results of the performance appraisal have fallen short of its goals (Moss, 1989).

Markowich (1994) in addressing the same issue, acknowledged that in the 1950s, Douglas McGregor expressed the view that subjective appraisals place the manager and employee in a lose-lose situation. Managers are asked to do the impossible - judge the personal worth of subordinates. Very few managers possess or can acquire the skill necessary to carry out this task.

The result is widespread uneasiness about and even open resistance to, appraisals and especially, to the evaluation interview (Boudreaux, 1994). In focusing on the same issue, Bowles and Coates (1993) pointed out that three-quarters of the present study report problems with performance appraisal in their own organisations, clearly suggests that the complexity of the management of performance appraisal schemes has not been grasped. According to Antonioni (1994), the analysis of the performance appraisal process has uncovered a host of problems.

The above comments suggest that there is something wrong with performance appraisal. Therefore to know what is actually wrong with performance appraisal requires us to look at what are the problems created by the implementation of performance appraisals. Some of these problems are discussed below.

(i) Conflicting Purposes of Implementing Performance Appraisal

The different purposes of appraisal systems frequently conflict. The two conflicting roles of judge and helper that the appraiser may be called upon to play depend on the purposes of the appraisal process. If a single appraisal system was intended both to improve current performance and to act as the basis for salary awards, the appraiser would be called upon to play both judge and helper at the same time. This makes it difficult for the appraiser to be impartial (Beer, 1985; Fletcher and Williams, 1985; Torrington and Hall, 1995) (Meyer, Kay and French, 1965; Porter, Lawler and Hackman, 1975; Mohrman, Resnick-West and Lawler, 1989; Meon, 1989; Beaumont, 1993). Thomas and Bretz, 1994

It is also difficult for the appraisee, who may wish to discuss job-related problems but is very cautious about what they say because of not wanting to jeopardise a possible pay rise. Appraisee will recognise the benefit of constructive discussions with their appraisers to analyse performance problems, remove barriers to performance improvement and agree plans for personal development and higher levels of performance in the future. Thus an area of conflict among the objectives of the employee occurs. Whether they need to be very open and candid in providing information, parts of which may be unfavourable, in order to receive the feedback they need for growth and development, or whether to withhold some information which they feel could lead to negative interpretations about their performance in order to obtain good extrinsic rewards (Meyer, Kay and French, 1965; Porter, Lawler and Hackman, 1975; Mohrman, Resnick-West and Lawler, 1989; Meon, 1989; Beaumont, 1993).

Problems in applying performance appraisals can also come from both managers and employees who tend to approach appraisal feedback sessions with fear and loathing (Thomas and Bretz, 1994). This matter is further illustrated in Table H4. Both appraisers and appraisees face the prospect of an appraisal interview with considerable apprehension. Managers, for instance, frequently worry about the appraisal process as potentially de-motivating staff or harming on-going working relationships, while employees are keen to avoid receiving any negative feedback about their performance (Beaumont, 1993).

In this case, those seeking favourable performance reviews can be expected to monitor their environments and scan salient cues regarding supervisor expectations, preferences and social approval in the process of rendering images. Employees will attempt to manage their reputations by substituting measures of process (effort, behaviour) for measures of outcome (results) particularly at those times when results do not support the assessment of performance (Nemeth and Stawle, 1989). Increasingly, as rewards become linked to performance, the more likely it is that performance assessment will reflect not the performance itself, but images of performance (Wayne and Ferris, 1990).

Table H4. Why Managers and Employees Dislike the Appraisal Process

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- Neither rarely has any sense of ownership. They are not involved in the design or the administration of the system; they frequently are not trained to use the system, and their reactions to the system are seldom solicited and acted upon.
 - Managers do not like to deliver negative messages to people with whom they must work, and whom they often like on a personal basis; and employees do not like to receive them. Negative messages tend to generate defensive reactions and promote hostility rather than serve as performance feedback.
 - Both managers and employees recognise that delivering a negative message will adversely affect a person's career. Managers may be aware of the permanence of the 'paper trail' that follows formal appraisal and are often hesitant to commit negative feedback to writing even when they do not like the individual.
 - There are few formal rewards for taking the appraisal process seriously and probably no informal rewards. There are many informal rewards for not delivering unpopular messages.
 - Managers hesitate to give unfavourable appraisals for fear that the appearance of unsatisfactory work by subordinates reflects badly on the manager's ability to select and develop employees. Lack of candour in employees evaluation is one way of 'hiding dirty laundry'.
-

(Thomas and Bretz, 1994)

Feldman (1985) has concluded that individuals are pursuing career advancement more and more through non-performance-based means. This careerist orientation incorporates six key beliefs:

1. merit alone is insufficient for advancement;
2. it is critical to pursue social relationships with superiors and co-workers instrumentally;
3. looking like a team player is central to career advancement;
4. in the long run an individual's career goals will be inconsistent with the interests of the organisation;
5. dishonest or unethical behaviour is sometimes necessary in order to get promotion to which one feels entitled; and
6. the belief that much of the 'real work' of many jobs cannot be tangibly assessed, nor can relative success on those jobs easily be validated.

(ii) Problems in Training for Performance Appraisal

The complexity of social processes which performance appraisal necessitates means that subtle psychological and social skills are necessary, which at best will normally require a long period of time to develop and at worst, such skills will never be achieved with a minimum level of proficiency, by a significant number of managers. The acquisition of the skill can be supported by training. But there can be problems too in training on performance appraisals (Beaumont, 1993).

In the survey conducted by Thomas and Bretz (1994), it was discovered that most organisations do conduct managerial training in how to use the performance appraisal system. For organisations that provide training, the problem with training on performance appraisals is that most of this training tends to occur at the initial development of the appraisal system. Few companies conduct ongoing training. In addition, almost all training focuses on the manager. Employees receive no training on how to use feedback and appraisal information to improve performance techniques (Ilgen & Feldman, 1984; Bernardin & Beatty, 1984; Mohrman, Lawler & Resnick-West, 1989).

(iii) Problems with Performance Appraisal Interviews

The interview focuses on negatives because supervisors view their role as evaluators who have to render a verdict. It is often spent in an offensive mode on the part of the supervisor and a defensive mode on the part

of the subordinate. Bad ratings are difficult to justify. The employee may ask for examples and will provide counter-examples. The interview can then turn into an argument. Despite policy pleas to the contrary, little time is spent on employee development or problem-solving (Kenett, Waldman and Graves, 1994).

(iv) The Problem on the Devotion of Time to Performance Appraisal

Despite the assumption that performance appraisal is valuable, relatively little time is spent on the activity (Bowles and Coates, 1993). Kenett, Waldman and Graves (1994) argue that managers often view performance appraisal as a burden, filling out the appraisal form or conducting the interview because they are forced to do so by the organisation's administrative system.

One reason why more time is not spent on appraisal is simply because managers are not commonly held accountable for how well they conduct performance appraisal on their subordinates. Basic motivational theory as well as common sense suggests that managers will devote little effort to somewhat unpleasant chore for which they are not held accountable (Thomas and Bretz; 1994).

(v) The Problem on the Accuracy of Measuring Actual Performance

In looking at the problem on the accuracy of measuring performance, the results of a research study concluded that accuracy is not the primary concern of the practising executive in appraising subordinates. Hence managerial discretion and effectiveness, not accuracy, are the real watchwords. Managers made it clear that they would not allow excessively accurate ratings to cause problems for themselves, and that they attempted to use the appraisal process to their own advantage. The astute manager recognises that politics in employee appraisal will never be entirely suppressed (Longenecker, Sims and Gioia, 1978).

Managers do not feel objective as raters. Despite such advanced scaling as behavioural anchoring, many would ask, 'what exactly is the difference between a '3' and a '4' on a 5-point scale? (Markowich, 1994). In rating, to researchers accuracy involves validity and reliability, whereas managers are more concerned with acceptability to employees (Beaumont, 1993). This tends to illustrate the belief that with the inability of organisations to measure actual performance, in such circumstances it is the management of the 'image of performance' that can become the priority (Bowles and Coates, 1993).

There are attempts to measure performance more accurately but these attempts too have their shortfalls thus affecting the accuracy in measuring performance. As an example, individual performance has also been evaluated using the Management-By-Objectives (MBO) approaches. In the search to overcome subjective appraisal, objective appraisal in the form of set objectives schemes, management by objectives approaches and performance contracts were introduced. Even with this objective approach the conflicts of objectives remain. According to Graber, Breisch and Breisch (1992), there are four critical design flaws of MBO due to, 1) MBO focuses exclusively on results; 2) MBO is typically quantitative; 3) MBO is concerned with a few aspects of the job and special projects for the year to the exclusion of ongoing responsibilities; and 4) MBO discourages setting difficult objectives that involve more work and more risk.

(vi) Problems on the Implementation of Quality Programmes

The performance appraisal system has been seen to undermine quality programmes in organisations. Performance and its measurement is infrequently oriented toward quality and/or the satisfying of customer needs and expectations. Instead, performance may be focused on other factors such as personal traits and attaining short-term financial results (Kenett, Waldman & Graves, 1994). The measures discourage quality. People will concentrate on meeting numbers; they would not take time to improve design if their goals involve quantity or deadlines. An arbitrator who is evaluated on the number of meetings he conducts will take three meetings to accomplish what could have been done in one. A purchasing agent who is evaluated on the number of contracts accomplished will not take time to learn about the losses his purchases caused (Deming, 1986).

At the same time, the system has been said to affect continuous long term improvements, foster concern on work quantity rather than quality, affect team-working, etc. Eckes (1994) like Meon (1989) argues that progress has been made in moving away from the Theory X management style, in which managers distrust and treat employees impersonally. But there is still a prevailing attitude among many managers that their role is to control, organise, direct and evaluate employees' efforts. This conflicts with the TQM philosophy that proposes that employees must be empowered to directly affect their work.

With the conflict, according to Carter (1994), continuous improvement will be discarded. Continuous improvement is everyone's job. When individual standards are developed, people will often work around the current system to complete work. This undermines the need to take time to continuously improve the current process. It fosters volume-driven rather than volume and quality-driven performance.

This does not reinforce going after the root cause in order to make a lasting improvement that will increase both productivity and quality. It also may not reduce the rework in the system needed to fix errors made in the rush to make the numbers.

Another area that can affect performance when performance appraisals are implemented, is the failure to recognise that work performance of individual is only partly attributed to the individual's performance. A big chunk on the effects of work performance comes from the system of organisation.

Therefore, the first requirement of TQM is to understand that the organisation is a system consisting of inputs, throughputs and outputs. Inputs include employees themselves. They are hired on the basis of a selection process defined by managers, and then trained, communicated with, given tools, and supervised. All of these parameters are beyond the employee's control, that it is primarily a function of these other factors, and not of the worker's own motivation which is discussed in detail below (Boudreaux, 1994).

a) Individual Performance Affected by System of Organisation

In the administration of performance appraisals there is also the problem of distinguishing systems influence and employees influence on work performance. Evidence shows that managers are not very adept at distinguishing system causes of performance from personal causes (Dobbins et al., 1991). In addition, a majority of system factors affecting an employee's performance are not under his or her control. (Deming, 1986).

Waldman (1994) notes that Human Resource Management (HRM) theory and practice have for many years focused on individual differences in the management of performance in organisations. An underlying assumption has been that individuals matter in determining the variation in work performance. Proponents of total quality management (TQM) have questioned the predominant focus on individuals and instead, have chosen to emphasise aspects of work systems as being relevant to work performance (Deming, 1986, 1993; Juran, 1989; Walton, 1986).

Therefore the problem that lies with performance appraisal is that performance appraisal approaches fail to recognise that employees are part of a work process system, and the system itself - rather than individual behaviour - significantly contributes to performance problems (Scholtes, 1987; Carter, 1994; Boudreaux, 1994).

In this sense, performance appraisals capture images that portray perceived outcomes while ignoring many outside factors and the process from which those images have evolved (Moss, 1989).

On the same issue of employees having little control over performance, Kenett, Waldman and Graves (1994) add that in performance appraisal the individual is the one held primarily responsible for performance accomplishments. One major ingredient not recognised by such a formulation is the system effect or element of opportunity. That is, to what extent do opportunity variables in the work environment affect an individual's performance? A classification of such variables adapted from Peters and O'Connor (1980) is as follows:

- material resources (such as tools, information, and machinery);
- work environment (such as temperature, noise level and work processes);
- people (such as leadership, group interactions, and communication processes).

Deming (1986) has attributed over 85 per cent of the variance in work performance to opportunity or system variables (Scholtes, 1987)(Peters and O'Connor, 1980). Indeed, research has shown that opportunity variables do carry substantial weight in determining work performance (Dobbins, Cardy and Carson, 1991). This finding is even more pronounced when one considers how opportunity variables, such as leadership, can affect performance indirectly by first impacting individual variables such as motivation (Waldman and Spangler, 1989).

An important implication for understanding work performance and its appraisal is that variables such as these can impact individuals differently (Boudreaux, 1994; Eckes, 1994). For example, in the case of leadership, some people may be subjected to performance-enhancing leadership, while others receive little help or guidance (Graen and Scandura, 1987).

According to Nevling (1992), there are five factors that are commonly cited as the difference between those that receive high scores on evaluations and those that receive low scores. The factors are, the native ability and early education of the individual; the worker's individual effort and personal contribution; the training and orientation given to the employee in preparation for the job; the variability and capability of the processes and system within which the employee works; the system of evaluation - inconsistent use of methods and formats; and bias of evaluator. Of these five factors there is only one that the employee has control over it.

The control of performance is said to depend on the systems rather than the individuals. The TQM proponents have identified that performance appraisals cannot measure performance fairly and accurately because any employee's performance is largely a function of systemic factors over which the employees has little control.

b) The Impact on Teamwork

Proponents of TQM accuse performance appraisal for destroying teamwork. Deming (1986) says that performance appraisals are detrimental to teamwork because they foster rivalry, politics and fear. Traditional evaluation of employee performance negates the TQM concept of teamwork, particularly when the organisation has a forced ranking policy in which only a certain number of people can be considered top performers.

This latter concept breeds competition and politicking in which the organisation's goals and mission are subjugated to the pursuit of individual goals (Eckes, 1994). It also fosters an environment of competition instead of co-operation. When we rank people against one another for the purpose of doling out merit raises, it negate the reality of the team effort needed for exceptional performance. When a system rewards individuals, it forces people to choose between being rewarded and being part of the team. The individual must stand out somehow among his/her peers (Carter, 1994).

Nevling (1992) says that performance appraisals ignore the fact that we work in teams or groups. No one works in isolation or a vacuum. We all depend upon the output of others to accomplish our jobs. Our performance depends on the SYSTEM. Our appraisal systems assume that everyone works independently.

(viii) Other Common Problems of Performance Appraisal

Beaumont (1993) points out that, in fact, individuals have long recognised that the realities of organisational life have frequently led to a number of problems in the process of employee appraisals. Table H5 contains a listing of some of the problems most frequently mentioned.

McBey (1994) too has identified some common problems of performance appraisals. Some of the problems mentioned are similar to those of Lowe (1986). The problems are as follows:

1. Halo or horns

These two types of interview errors occur when the evaluator ascribes either a positive (halo) or a negative (horns) attribute to an individual. A halo or horns error is often associated with extraneous factors such as appearance and gender (McBey, 1994).

2. Initial impression and recency

Initial impression error occurs when the appraised individual's early performance level is noted in the appraisal rating rather than the observed performance over the entire period of assessment. The opposite problem arises when an individual's appraisal rating reflects only his or her latest behaviours and does not consider performance demonstrated in the early or middle portion of the evaluation period (McBey, 1994). Kenett, Waldman and Graves (1994) say that, the typical infrequent appraisal (once a year) makes it difficult to process information in an attempt to assess overall performance in the appraisal period. Recent incidents may erroneously carry more weight.

Table H5. Some Common Problems with Performance Appraisal

1	The halo effect The appraiser gives a favourable rating to overall job performance essentially because the person being appraised has performed well in one particular aspect of the job which the appraiser considers all-important.
2	The pitch-fork effect This is exactly opposite of the halo effect, whereby the appraiser gives an unfavourable rating to overall job performance essentially because the appraisee has performed poorly in one particular aspect of the job which the appraiser considers all-important.
3	Central tendency The appraiser deliberately avoids using the end points of the rating scale and rates all employees as average in virtually all aspects of job performance.
4	The recency error In rating an employee's job performance over, for example, a twelve-month period, the appraiser makes disproportionate use of instances of performance which are relatively recent (i.e. close to the interview in time) to make an assessment.
5	Length of service bias The assessor assumes that an experienced employee who has been rated well in the past has absorbed and responded well to any new aspects of their job, and hence does not closely monitor their performance in this regard.
6	The loose rater In order to avoid conflict with a subordinate an appraiser does not discuss any weak areas of an individual's job performance.
7	The tight rater An appraiser has unrealistically high expectations for all subordinates which means that no-one receives an excellent or outstanding rating.
8	The competitive rater An appraiser links his/her own rating with that of their subordinates so that no-one receives a rating higher than that which they achieved.

(Lowe, 1986)

3. Central tendency

Central tendency error occurs if an evaluator classifies a disproportionate number of employees within a group of his or her subordinates as being average. The supervisor may do so for reporting ease and convenience (McBey, 1994).

4. Rater bias and Characteristics

The evaluator's personal characteristics and biases may affect the performance appraisal process. Examples of this type of error include gender bias and the tendency of people to unintentionally favour subordinates who are similar to them in education, upbringing and appearance.

Gibbons and Kleiner (1994) note that in appraising the performance of employees it is essential that the appraiser realises that he or she, as well as the employee, both have their bias, that is their angle from which they see things. Keeping this in mind the appraiser will be more apt to hear the employee's view as well as acknowledge that he or she is capable of making biased judgements and decisions in the evaluation of employees.

There are many possible biasing factors (e.g. style of dress, attributions, prior expectation, gender, degree of acquaintance, race, communication competence and past actions) which may influence a rater (Gibbons and Kleiner, 1994).

On prior expectations, Hogan (1987) states that expectations, particularly their disconfirmation, appears to be important in explaining performance ratings - so when a subordinate's actual performance disappoints a

rater's expectation about that performance, subsequent ratings will be lower than actual performance warrants; when actual performance exceeds a rater's expectations, subsequent ratings will again be lower than warranted. Note that one might expect that, when the performance is better than the rater expected the ratings would show an upward bias, but this is not the case. Rater do not like surprises and punish the source of their disconfirmation.

5. Results

Many times, employees do not perceive any link between their performance evaluations and rewards. This common problem can have damaging effects if superior performers leave the organisation for a competitor or remain and reduce the level of performance they believe equitable to the rewards received. Employees must have confidence that management will recognise and reward a job well done (McBey, 1994).

No relationships between performance and rewards according to Eckes (1994) will foster mediocrity and are destructive to the individual being reviewed. For individuals who meet or exceed performance expectations, there is a natural tendency to slack off because there is no incentive to continue their efforts or because future activity might negatively influence later reviews. Consider this: in any group, how many people would consider themselves below-average performers? The answer is few or none, yet accurate and honest performance appraisals will rate 50 per cent of those appraised below average, and below-average ratings can destroy self-esteem, negatively affect motivation and result in poorer, not better, performance.

Moss (1989) points out that when the appraisal of job-related behaviours is inconsistent with how individuals feel they did their jobs, a condition of inequity results. This inequity is problematic when an appraisal falls short of the employee's own assessment. Regardless of whether this disparity is a result of poor communication of job expectations and rewards or the use of an adequate appraisal process, it creates serious problems. Responses to this disparity are typically seen as frustration and anger leading to lower job satisfaction, poor motivation and distrust. This is usually accompanied by reduced work effort, poor quality, more resentment toward the appraiser and less commitment to the organisation.

Kenett, Waldman and Graves (1994) added that there is little linkage between performance ratings and reward or promotion decisions. Performers identified as weak may get pay increases for political or other non-performance based reasons. Performers identified as strong may already be at the top of their pay grades and hence not receive pay increases.

So far, the discussions on performance appraisal have indicated that problems can be created if the performance appraisal system has not been properly implemented. In view of this, there have been varied opinions on the fate of performance appraisal. Opinions vary from maintaining the system to the extreme opinion of abolishing the system.

Survey on Performance Management and TQM

SURVEY ON PERFORMANCE MANAGEMENT

NO.	D.	DS.	GS.	GR.	AG.	S.	TM.	EO.	EOE.	REASON FOR CARRYING OUT PERFORMANCE APPRAISAL
1	3	8	8	2	31	2	3	1	3	measuring productivity, increase productivity, improve poor performance
2	3	3	17	2	40	1	18	1	17	show performance, comparing performance between staff
3	3	6	16	2	36	1	1	2		increase productivity, give reasons for poor performance, staff creativity
4	3	3	10	2	35	2	4	1	4	performance evaluation
5	3	11	11	2	33	2	3	1	3	increase productivity, improve poor performance, performance evaluation
6	3	3	20	3	43	2	3	2		improve poor performance
7	3	3	32	3	52	1	32	2		
8	3	4	22	2	43	1	4	2		evaluate according to Client's Charter, quality and productivity
9	3	6	24	3	46	2	24	2		encourage performance, rewards purposes
10	3	15	25	3	43	2	25	2		guide to work productivity, evaluate ability and performance, comparing performance
11	3	5	17	3	42	1	14	2		encouraged to perform well, to give positive encouragement
12	3	7	23	3	46	2	3	2		
13	3	2	17	3	38	1	17	2		
14	3	4	4	3	27	2	4	2		
15	3	9	19	3	38	2	3	2		evaluate performance, improve poor performance, increase ability, for promotions
16	3	7	24	3	40	1	2	2		evaluate yearly performance
17	3	6	17	3	37	2	17	2		to encourage to increase productivity, to excel
18	3	6	25	3	49	1	6	2		
19	3	3	14	2	37	2	13	1	13	evaluate performance to achieve department objective
20	3	7	7	1	34	1	3	1	3	to evaluate on target achievement, evaluate objective performance
21	3	2	14	1	41	2	10	2	5	
22	9	10	10	3	32	2	4	2		for rewarding good performance, for healthy competition
23	9	16	16	3	38	2	12	2		identify poor performance
24	9	10	15	3	36	2	4	2		
25	9	10	14	1	37	1	14	1	1	for promotions, to evaluate achievements
26	9	12	13	1	39	1	13	2	10	to advice on performance improvements, to evaluate performance
27	9	6	9	1	34	1	3	1	1	for rewards, motivation, control of staff, performance evaluation
28	12	9	25	3	47	1	25	2		improve work quality, evaluate performance, coaching and advice
29	12	3	11	4	28	1	3	2		evaluate performance, control purposes
30	12	24	28	2	48	1	3	1	3	evaluate performance, rewards purposes, to improve departmental performance
31	12	3	23	2	45	1	3	1		
32	12	11	22	2	45	1	3	2		evaluate performance
33	12	18	38	2	52	1	15	2		for promotions, pay rise
34	22	9	9	3	31	2	8	2		evaluate performance for promotions
35	22	6	13	3	35	2	13	2		to meet objective
36	22	2	18	3	38	2	18	2		to evaluate ability
37	22	3	15	4	33	2	3	2		
38	22	5	13	3	34	2	13	2		evaluate performance, improve productivity
39	22	2	26	3	44	2	3	2		to encourage productivity, to know own weaknesses
40	22	2	13	1	38	1	13	1	2	to encourage staff to work hard, for rewards purposes
41	22	3	13	3	36	2	3	2		
42	22	3	4	3	25	2	2	2		
43	22	5	12	3	35	1	3	2		
44	22	2	15	2	35	2	15	1	2	to be able to identify job achievement to meet departmental objectives
45	22	5	15	3	38	2	3	2		to measure staff ability
46	22	2	16	4	35	1	4	2		measure performance
47	22	3	15	3	42	2	2	2		to encourage staff to work hard, to improve service quality
48	22	7	14	3	35	1	5	2		to know level of performance, increase productivity, rewarding excellent performance
49	22	4	8	3	30	1	3	2		
50	22	5	13	3	35	2	13	2		evaluate performance, encourage staff to work hard and improve productivity
51	22	1	9	1	36	1	7	2	7	
52	22	3	15	1	40	2	1	1	15	counselling, performance evaluation, for job transfers
53	22	4	19	4	42	2	3	2		
54	22	4	4	3	25	2	3	2		measure achievements, measure interest in work

SURVEY ON PERFORMANCE MANAGEMENT

NO.	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
1	6	6	6	6	5	5	2	1	1	1	3	1	2				4
2	6	6	6	5	5	5	1	1	1	1	3	1	2				3
3	1	5	1	1	1	1											
4	4	5	5	4	4	2	1	1	1	1	3	1	2				4
5	6	6	6	6	5	5	2	1	1	1	3	1	2				
6	2	2	5	2	2	2	1	1	1	1	3	1	2				
7	1	1	1	1	1	1	2	1	1	1	2	1	2				1
8	6	6	6	6	4	2	2	1	2	1	2	3	1				1
9	6	6	1	1	1	1	1	1	1	1	3	3	2				4
10	6	6	6	6	6	2	1	2	3	3	3	3	2				1
11	3	6	6	2	3	1	4	1	3	1	3	1	2				1
12	6	6	2	3	5	2	1	3	1	3	3	1	2				3
13	1	1	2	2	2	2											
14	1	6	5	4	1	1	3	1	3	3	3	1	1				1
15	7	7	1	1	1	1	1	1	1	1	3	3	2				2
16	6	6	6	6	6	2	2	2	3	3	2	2	2				1
17	6	6	6	6	6	2	1	1	1	1	3	2	2				1
18	2	2	2	2	2	1	3	1	3	3	2	2	2				1
19	4	6	3	3	3	1	1	1	1	3	3	2	2				2
20	6	5	6	2	2	2	1	4	2	2	3	2	1				2
21	2	4	6	6	2	2	2	2									
22	5	5	1	1	2	2	1	1	3								
23	2	5	2	2	2	2	1	1	1	1	2	2	2				2
24	2	5	2	2	2	2	2	2	2	1	3	2	2				1
25	6	6	3	3	3	1	3	2	3	2	3	1	2				2
26	6	6	6	2	2	2	1	1	1	1	2	3	1				1
27	6	6	6	5	4	4	2	1	1	2	2	2	2				3
28	6	5	6	2	2	2	2	1	1	3	2	2	2				1
29	6	6	2	2	2	2	1	5	1	3	2	2	2				1
30	5	6	5	2	2	2	2	2	2	2	2	2	2				3
31	5	5	2	2	2	2	1	3	2	2	2	2	2				1
32	5	2	8	5	2	1	2	1	2								1
33	6	6	6	6	6	1	1	2	3	3	3	2	1				2
34	2	6	6	6	6	2	2	1	1	3	2	1	1				1
35	3	2	1	1	1	2	2	2									
36	3	3	3	5	3	3	1	4	2	3							5
37							1	1	1	1	3						1
38	6	5	2	4	2	3	1	3	1	3	2	2	2				1
39	6	6	5	6	5	1	1	1	1	3	2	2	2				1
40	5	6	6	5	5	1	2	2	2	2	2	2	1				2
41	6	7	7	3	6	2	1	1	3	1	3	1	2				2
42	6	6	6	6	2	3	1	3	2	3	2	2	2				3
43	4	6	5	4	2	3	1	5	2	3	1	2	1				1
44	5	5	2	2	2	2	2	1	2	3	1	1	1				2
45	4	5	3	5	2	2	1	2									
46	7	6	6	6	5	3	1	1	1	3	3	1	1				3
47	6	6	2	2	3	2	2	1	1	3	3	1	1				1
48	4	5	6	6	2	4	2	1	1	3	3	2	2				1
49	5	6	6	4	5	6	1	3	2	1	3	1	1				2
50	6	6	3	3	2	2	2	2	1	2	2	3	2				1
51	5	6	6	6	2	2	2	2	2								
52	6	6	1	1	1	2	2	2									
53	6	6	6	6	6	1	1	1	1								
54	3	5	6	6	5	3	2	2	2								

SURVEY ON PERFORMANCE MANAGEMENT

NO.	C12	C13	C14	C15	C16	C17	C18	C19	C20	C21	C22	C23	C24	C25	C26	C27
1	2	3	2	2	2	2	2	3	2	3	2	1	1	2	3	2
2	4	3	1	1	1	3	2	1	4	3	1	1	2	3	2	
3																
4	1		4	3	2	2	2	1	3	4	1	1	2	3	2	
5	2	4	2	2	2	2	3	2	3	3	1	1	2	3	2	
6	3	3	3	4	2	3	2	2	4	2	1	1	2	2	2	
7	3	4	3	3	3	3	1	1	1	3	1	1	1	3	2	
8	3	4	3	2	2	4	2	2	4	1	1	1	2	3	2	
9	3	4	3	4	3	1	2	4	1	2	1	1	2	3	2	
10	3	3	2	2	2	1	3	2	3	4	1	1	2	3	2	
11	3	4	3	4	3	4	3	2	1	2	1	1	2	2	1	1
12	3	3	2	2	3	2	3	2	3	2	1	1	2	3	2	
13	2	4	3	3	3	3	2	1								
14	2	4	3	3	3	4	2	3	3	2	1	2		3	1	1
15	3	3	3	3	3	2	2	3	3	4	3	1	1	1	3	1
16	3	3	4	3	2	2	2	3	3	1	1	2	3	1	1	1
17	3	2	2	2	1	2	2	3	2	3	4	1	1	2	3	2
18	3	4	2	2	2	2	2	1	4	1	2	1	1	2	3	2
19	3	4	3	3	3	3	2	2	3	4	1	1	1	1	3	2
20	4	3	1	2	2	2	2	2	4	3	1	1	2	2	1	1
21	3	4	4	3	2	4	2	1	3	2	1	1	2	3	2	
22	2	4	5	3	3	4	1	1	2	2	1	2		3	2	
23	2	4	3	3	3	3	3	1	4	2	1	2	1	2	3	1
24	3	4	3	2	3	3	3	1	3	4	1	1	2	3	1	1
25	3	3	3	1	2	4	3	2	2	2	1	1	2	2	1	1
26	3	4	3	2	2	1	2	3	4	3	1	1	2	2	1	1
27	4	2	1	1	1	1	2	3	3	3	1	1	1	3	1	1
28	3	2	3	4	3	2	1	1	2	1	1	1	1	3	2	
29	3	4	3	4	3	2	4	2	3	2	1	1	2	3	1	1
30	3	4	4	3	3	2	2	2	2	2	1	1	2	3	2	
31	3	3	3	2	2	4	2	2	2	2	1	1	2	3	2	
32	2	3	3	4	2	1	2	4	1	4	1	1	2	3	1	1
33	2	4	3	3	1	1	3	4	3	2	1	1	2	3	1	1
34	3	2	2	1	2	4	3	3	3	2	1	1	2	3	1	1
35	2	4	3	3	3	2	1	2	2	1	2	1	1	2	3	2
36	2	4	3	3	3	1	1	4	2	4	1	1	2	3	2	
37	3	4	3	4	3	4	2	4	3	4	1	1	2	3	2	
38	3	3	3	3	3	2	2	2	1	4	1	1	2	2	1	1
39	3	3	2	3	1	4	4	2	3	2	1	1	2	2	2	
40	2	3	4	3	3	3	1	1	3	1	1	1	1	3	2	
41	3	3	4	3	3	3	3	3	4	2	1	1	2	1	1	1
42		3	3	3	2	2	2	1	2	3	2	1	1	2	2	
43	3	3	3	3	2	2	3	2	2	4	1	1	2	3	1	1
44	3	2	2	2	2	2	3	2	3	2	1	1	2	3	1	1
45																
46	3	4	1	2	1	2	2	1	3	2						
47	1	4	4	3	3	3	2	2	1	1	1	1	2	3	2	
48	3	4	3	4	3	2	3	2	3	3	1	1	2	3	2	
49	2	2	1	1	2	2	3	2	3	3	1	1	2	3	1	2
50	3	4	3	3	3	2	2	2	3	2	1	1	2	3	1	2
51							2	1	4	2	1				2	
52																
53	3	4	2	1	2	1	3	1	3	4	1	1	2	3	1	2
54																

SURVEY ON PERFORMANCE MANAGEMENT

NO	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	E1	E2	E3	E4	E5	E6	E7	E8	F1	F2	G1	G2	G3
1	1	2	1	2	3	2	2	2	1	1	3	2	10	2	2	3	3	3	3	3	1	1	2	1	
2	1	2	4	2	3	1	1	2	1	1	1	1	1	1	1	4	3	3	3	2	1	1	2	1	
3	4	1	4	4	2	1	3	3	1	3	4	6	5	4	6	5	4	2	2	1	1	2	1		
4	3	1	2	3	2	2	2	2	1	2	3	4	8	1	1	4	4	4	2	2	2	2	2		
5	1	2	1	2	3	2	2	1	1	1	3	2	13	3	2	3	3	1	3	1	1	1	2	1	
6	1	1	2	3	2	1	1	2	2	2	4														
7	4	1	2	2	2	1	1	1	2	2	4	1									2	2			
8	4	3	2	2	3	2	2	2	3	2	3	4													
9	1	3	2	2	1	1	1	3	1	1	4	4													
10	3	3	2	3	2	2	1	1	1	1	3	1	7						3	3	1	1	2	1	
11	4	2	2	2	1	2	2	1	1	2	2	4									1	2			
12	3	2	2	3	2	3	1	2	3	2	3	1													
13	2	1	3	3	2	1	1	1	1	1	3	3	4												
14	2	3	3	3	3	1	3	2	3	2	3	2													
15	1	2	2	2	3	1	3	1	1	1	2	4													
16	3	3	3	3	2	2	2	2	3	2	4	1									1	1			
17	4	1	2	2	2	1	1	2	3	2	3	4									2	2			
18	1	2	1	2	2	1	1	3	1	1	2	1									1	1			
19	1	3	1	2	4	1	1	4	2	2	3	4	6	2	1	4	4	4	3	2	1	1	2	1	
20	1	2	3	2	2	1	3	3	2	2	2	2									1	1	2	1	
21	2	2	2	2	3	3	1	2	3	2	3	4	2	1	1				4	4	3	1	1	2	1
22	3	3	4	4	1	1	1	3	2	2	3	4									1	2			
23	4	3	3	3	2	1	1	2	1	2	3	3													
24	2	2	2	2	2	1	1	2	3	3	3	4									1	2			
25	1	2	2	2	2	3	1	3	2	1	2	4									1	1	2	1	
26	2	2	1	3	2	2	4	3	2	1	2	4	1	2	2	3	3	3	3	1	1	1	2	1	
27	3	2	3	2	3	2	2	3	2	2	2	4									2	2			
28	1	2	3	2	3	1	1	2	1	1	2	2									2	2			
29	2	3	2	2	4	1	1	1	3	1	3	3													
30	3	1	3	3	2	1	1	2	1	2	2	4	4	1	1	3	3	3	3	2	1	1	2	1	
31	2	2	2	3	2	1	1	1	2	1	3	2													
32	5	3	2	2	2	1	3	3	1	1	2	4													
33	2	3	3	2	3	1	1	1	1	1	3	4													
34	2	2	2	2	3	2	2	2	2	1	1	4	4												
35	1	3	3	2	2	2	1	2	1	2	3	4									1	2			
36	3	3	2	3	2	2	2	1	3	1	3	4									1	2			
37	1	1	1	2	3	2	4	1	3	1	2	1									1	2			
38	1	1	1	2	4	1	1	2	1	1	2	1									1	2			
39	3	3	3	2	4	2	2	2	2	1	2	4									1	2			
40	3	1	4	5	2	1	1	2	1	3	4	3	4	3	2	2	3	3	3	1	1	1	1	1	
41	1	1	2	3	2	3	1	3	2	2	2	2													
42	2	1	3	4	4	1	1	2	3	1	3	4									1	1	1	1	
43	4	3	2	3	4	1	3	2	3	2	4	4									2	1	1	1	
44	2	1	4	3	2	1	1	2	1	1	2	4	2	2	2	3	3	3	3	1	1	1	1	1	
45	4	1	2	3	2	1	1	2	1	2	2	4									2	2			
46	2	1	2	2	2	1	1	4	2	2	2														
47	3	1	2	3	2	1	1	1	3	2	3	3									1	1			
48	4	2	3	3	2	1	1	2	1	1	1	2									1	2			
49	2	2	2	2	3	1	1	4	1	1	3	4									1	1			
50	1	2	2	2	4	3	3	2	2	1	3	3									1	1			
51	1	3	2	2	2	2	2	2	2	2	2										1	1	1	1	
52	4	3	3	3	3	1	1	1	2	3	3	4	2	2	1	2	3	3	3	1	1	2	1		
53	2	2	2	2	2	2	2	4	2	1	1	2	1												
54	3	3	3	4	4	1	1	1	3	2	3	4													

SURVEY ON PERFORMANCE MANAGEMENT

NO.	H1	H2	H3	H4
1	work producing output, maximum quality	1	work with care, no mistakes, in time	
2	accurate, no mistakes, acceptable by everyone	1	follow Client's Charter	
3	conforming to standards	1	work according to set procedures	quality of work process from beginning to end to meet std.
4	the best	1	carryout work at its best	
5	produce excellent output			
6				
7	high quality work, no help from supervisor	1	know my work well	
8	effective service to customer; reduce cost, time and labour	1	fast and perfect work to meet objectives	quality in all process of work
9				
10	fast work and good work	1	quality work	
11	maximum ability, high quality work	1	dedication, responsible, quality work	
12				
13	work completed on time	1	produced work as directed	
14				
15	completing work within given time frame	1	good work	fair management; consideration of quality in work
16	quality work of value			
17		1	carry out work responsibly	
18	improve work performance	1	have QCC	depending on departmental head
19	produce quality work to meet objectives	1	work well planned and with standards	
20	good quality work meeting given time frame	1	always thinking about doing quality work	having complete work processes, useful information
21				
22	good work is quality work	1	all work has to be completed	
23	meeting customer requirement of excellent standard			customer-orientated work process; continuous improvement
24		1	carry out quality work	
25	excellent output depending on environment to meet objective	1	excellent output	quality in all aspects
26				
27	meet customer requirement	1	no customer, no work, no productivity	
28				
29	producing quality work	1	systematic work, easily understood	good
30	meet standards			
31		1	no mistakes, systematic, meet objectives	achieve quality in all works
32				
33	high quality work	1	work meet requirements	
34		1	doing work with care and systematic	
35				
36	anything that has quality			the best possible
37				
38	services meeting organisational needs	1	produce work required by customer	staff responsible for team efforts to increase quality
39	produce quality products; responsible and dedicated	1	follow rules and regulations; timely	quality work, teamwork, customer care
40	work to maximum effort depending on environmental factor	1	meeting work targets	
41	meeting needs, producing quality products	1	do work without mistakes	
42				
43	meet customer requirement	1	process at high speed	excellent service to public, responsible
44	providing quality services	1	making sure work is of high quality	giving the best service to customers
45	work systems that satisfies customers	1	entertain customers	
46				
47	producing work without mistakes, creating work satisfaction	1	work to improve weaknesses identified	participation of top management
48	productive and quality work	1	meet Client's Charter	quality in all aspects of work
49	excellent work to satisfy customers	1	producing the best service	increase productivity and have positive attitude
50	reliable and timely services	1	meet customer's needs	responsible, excellent service to customers
51	meet customers needs, cost savings	1	excellent service to customers	total change, customer orientated, quality process
52	meet customers requirements	1	quality in doing work	increase productivity for customers
53	services delivered speedily to satisfy all	1	meet needs of all those involved	producing the best service
54	acceptable quality of work	1	output meeting objectives, no mistakes	meet customer's needs

SURVEY ON PERFORMANCE MANAGEMENT

NO.	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16	H17	H18	H20	H21	H22	H23
1	2	1	2	1	1	1	1	1	1	2	1	2	2	2	2	2	2	1
2	2	1	1	1	1	1	1	1	1	2	1	2	2	1	1	1	2	1
3	2	4	2	1	1	4	4	3	3	3	3	3	5	3	1	2	2	1
4	2	3	1	1	1	2	2	3	1	2	3	4	2	2	2	2	2	1
5	2	1	2	1	1	1	1	1	1	2	1	2	2	2	2	2	2	1
6																		
7	2	1	2	1	1	3	1	1	2	3	1	3	1	3	2	2	2	2
8	2	4	2	2	1	3	1	1	1	3	2	3	3	2	2	2	2	1
9																		
10	2	1	2	1	1	2	1	2	2	4	1		2	1	2	2	2	1
11	2	4	1	1	1	1	2	3	2	4		4	2	1	1	2	2	1
12																		
13	2	4	1	1	1	3	1	1	3	5	3	5	4	3	2	2	2	1
14																		
15	2	1	1	1	1	3	4	4	1	2	1	2	2	3	2	2	2	1
16	2	1	2	2	1	3	1	1	2	2	1	2	2	1	1	1	2	2
17	2	1	2	2	1	1	3	4	2	2	1	2	3	3	2	2	2	2
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19	1	1	1	1	4	3	1	1	2	1	2	1	1	2	2	2	2	1
20	1	2	1	1	1	3	4	4	1	2	1	5	2	1	1	1	2	2
21	2	4	2	2	4	3	2	2	1	4	3	4	4		2	2	2	1
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23	2	4	2	3	4	2	3	4	1	2	3	2	2	2	2	2	2	2
24	2	4	2	2	1	2	2	2	1	2	2	2	2	2	2	2	2	2
25	2	1	1	1	1	3	2	3	1	1	1	2	2	1	2	2	2	1
26	2	1	1	1	1	1	2	3	1	1	1	1	1	1	2	2	2	1
27	2	1	1	1	1	2	1	1	1	2	1	2	1		2	2	2	1
28	1	1	1	1	1	4	4	4	1	2	1	2	4	2	2	2	2	1
29	2	2	1	1	1	3	3	1	1	2	2	2	2	2	2	2	2	1
30	2	2	2	2	1	2	3	2	3	4	2	4	3	2	2	2	2	1
31	2	1	2	2	1	1			1	2	1	2	2	2	2	2	2	1
32	2	4	1	1	2	3	3			2	2	2	2	1	2	2	2	1
33	2	1	1	1	1	3	3	3	1	3	2	3	3	2	2	2	2	1
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38	2	4	1	2	1	1	2	1	1	3	1	3	3	1	2	2	2	1
39	2	1	2	2	1	2	2	1	2	1	2	1	2	1	2	2	2	1
40	1	1	1	1	1	1	3	4	1	1	3	5	1	1	1	1	2	1
41	2	2	1	1	1	2	3	2	1	2	2	4	3	3	2	2	2	2
42	2	1	2	2	1	2	4	2	1	3	2	3	3	3	2	2	2	1
43	1	1	2	2	2	3	1	1	1	3	2	3	3	1	2	2	2	1
44	1	1	1	1	1	2	3	2	2	2	2	1	2	2	1	1	2	2
45	2	3	2	2	1	3	4	3	1	4	3	4	2	3	2	1	2	2
46																		
47	2	4	1	1	1	1	3	1	1	4	3	3	1	2	1	1	2	1
48	2	2	1	1	1	3	3	4	2	1	2	2	2	2	1	2	2	1
49	1	1	1	1	1	1	2	4	1	2	1	2	2	2	1	1	2	1
50	1	1	2	1	1	2	2	1	4	1	3	2	3	2	2	2	2	1
51	2	4	1	1	1	3	2	3	4	2	2	2	2	2	2	2	2	1
52	2	4	1	1	2	4	1	1	1	2	2	2	2		1	1	1	1
53	2	2	2	2	2	2	2	3	1	2	2	2	4	2	2	2	2	1
54	2	4	3	2	1	3	1	3	1	2				2	2	2	2	1

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