

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

In this chapter a way of addressing the research questions is developed, in the form of a research methodology and method. The review of previous work in the area has highlighted in Chapter 2 with a range of contingencies and constraints that indicate how the research questions may, and may not, be effectively researched. The procedures and methods used to conduct the data collection and data analysis of the study are discussed in this chapter. The introduction of this chapter commences with a clear statement for this study. Following the introduction are a number of sections that deal with the research design, the pilot study, initial procedures undertaken prior to data collection, the reliability and validity of the data collected and the analysis undertaken.

4.2 Justification for the methodology

The aims were to evaluate the effectiveness of service delivery offered by local banking institutions in Malaysia, primarily from the perspective of customers and employees. In order to understand the environment in which the potential respondents are communicating, it is vital to consider the evaluation of both customers' and employees' characteristics, attitudes and behaviors toward

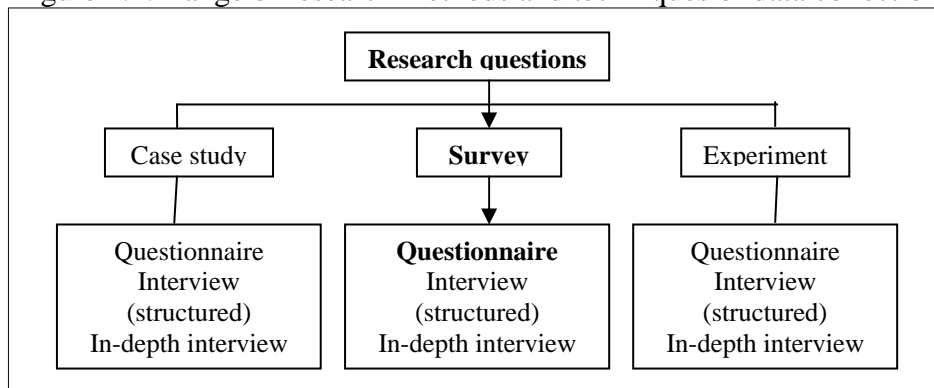
the service and the organization, in this case local bank. Modifying the execution of a certain service to accommodate the preferences of customers can be done, however, that should not be the ultimate objective to make it more effective. It is the modification of the service approaches and how the characteristics of employees affect their approach to a particular situation that are vital. In this study, it is the characteristics, approaches; attitudes and behaviors that the customer and employee strategies involve that are identified. In this section the research approach used in this study for the data collection and analysis is outlined, the perspective and paradigms that underpin the study are made transparent. A description of the pilot study, preliminary study and main survey is also provided.

4.2.1 Assortment of methodology

There is a wide-ranging collection of methodologies used in evaluating service climate and service quality, from a checklist procedure to empirical judgments. The prevailing current thinking is such that different methodologies have their own strengths and weaknesses and this can be seen in the eye of the beholder: be they the organization, management, manager, employee or client. With this in mind, many researchers have recommended a mix-method methodology; qualitative and quantitative methodologies in order to triangulate results, hence heightening the quality and credibility of the findings (Oliver, 2000; Anglin and Morrison, 2000). According to Flick (2002) triangulation is not a tool

or strategy for validation; rather it is an alternative to validation. Triangulation is undertaken to ensure an in-depth understanding of the case in question. The combination of multiple methodological practices in a single study is best understood as a strategy that contributes rigour, breadth, validity, richness and depth to any inquiry (Denzin and Lincoln, 2000). The triangulation approach is also of interest in this study because this kind of study, as suggested by Yin (2003), cannot depend on a single data collection method and is likely to use multiple sources of evidence. Triangulation also means taking a better look from several angles than looking at one matter in one way (Neuman, 2000). Thus a decision to adopt this method was undertaken in this study since the aim of this study was not only quantitative; it provided a bird's eye view of the data collected followed by the qualitative data; a narrative and detailed account of the data.

Figure 4.1: Range of research methods and techniques of data collection



Source: De Vaus (2002)

According to De Vaus (2002) as in the above Figure 4.1, quantitative survey research is occasionally portrayed as being unimaginative and stereotyped but well suited to providing certain types of factual, descriptive evidence, better known as the hard evidence. Bryman and Cramer (1990) mentioned that the role

of a researcher in quantitative research is preparatory and the relationship with the study population is distant. The strategy used in this study was very structured and the nature of the data obtained was reliable and hard. However, the quantitative approach was adopted in the phases of the data collection and analysis to strengthen the results from the open-ended to close-ended questionnaires.

On the other hand, as stated by Yin (2003), qualitative data cannot readily be changed to numerical values. The data obtained can be interpreted by categorical data analysis, by perceptual and attitudinal dimensions. Holliday (2002) believed that reality in qualitative data contains mysteries which the researcher of the study has to decipher, and can do no more than interpret it through exploration. It is the strong belief that what it is crucial in a study will eventually emerge when looking more deeply into the issue. The nature of the data obtained from the study's population was very rich and deep, even though the strategy used in the research was structured. The opportunity to locate the study in a particular setting was not a problem. Besides that, having the freedom of exploring the possible social variables and setting manageable boundaries when collecting the data quantitatively was also a plus opportunity. The early process of collecting the data led this study to be further explored for more information as the themes and focuses relating closely to the objectives of the study began to emerge.

4.2.2 Survey versus focus group

Researchers often use two tools to gather primary data: surveys and focus groups. These tools, often described in harmony, serve two widely divergent purposes. The decision of whether to use focus groups depends on the strengths and limitations of focus groups in contrast to survey as the choice of a survey must be justified (Davis and Cosenza, 1993). Survey is means to gather statistically valid quantitative data and focus group is aims of collecting in depth-qualitative data in term of perception, idea, strategy or explanation through participant's expressions. The dynamic interchange between the group members may result in more in depth and unbiased information concerning a particular topic. A potential weakness of focus groups may occur when members do not express their personal opinions and conform to a popular opinion or acquiesce to a particular group member. It is a poor choice for predicting future action in settings yet to emerge since focus group discussants will articulate their views in terms of their own present experiences and the presence and direction of the moderator may influence responses that might be different in a more natural setting.

Numbers of participants in both tools vary according to the research needs but generally in a focus group the respondents are a lot less randomly selected than in a survey. The small size of focus groups makes any estimates of quantitative proportions unreliable, even if the members of the focus group are representative of the target population. Therefore it is a poor choice for

multivariate research, where one again needs the stability of large random samples to be able to disaggregate the effects of explanatory variables through statistical techniques. Consequently, a very large sample is feasible, making the results statistically significant even when analyzing multiple variables for survey. Surveys are useful in describing the characteristics of a large population. No other method of observation can provide this general capability.

Questionnaires compared to focus groups are relatively easy and inexpensive to create, analyze and communicate the findings. It may be administered to the masses while focus groups typically elicit information from only eight to twenty four people who hopefully represent the population being investigated. It can range anywhere using mail, email or telephone from one minute to twenty minutes per participant. It may include as many questions as the researcher thinks giving considerable flexibility to the analysis and the respondents will complete. Standardized questions make measurement more precise by enforcing uniform definitions upon the participants. Standardization ensures that similar data can be collected from groups then interpreted comparatively (between-group study). Usually, high reliability is easy to obtain by presenting all subjects with a standardized incentive, observer subjectivity is greatly eliminated, however, focus group moderators have to crack the whip in order to get responses to five or so key questions. Because of the time commitment, participants are usually paid to participate.

In spite of their weaknesses, many researchers use both focus groups and surveys. Surveys may indicate areas that require further probing through focus groups. Focus groups may also be used in the creation of surveys. By discussing the area in need of investigation, focus groups can illuminate key points about the topic so that the survey is comprehensive enough. Focus groups can also clarify terminology used to describe what is being investigated. Maximizing knowledge about key concerns and effective communication with the potential focus group participants helps developers of surveys create questions that are understood in the same way by all respondents.

4.2.3 Survey method approach as the research design

This study adopted a survey method approach as the research design because the cases under study were of interest to the researcher and the institutions involved. Stake (2000) emphasized that, in order for a researcher to have a better understanding of a particular case, the study should not be undertaken primarily because the case represents other cases or because it exemplifies a particular problem, but because, in all its particularity and ordinariness, the case itself is of interest. Merriam (1998) also emphasized the importance of making a proper selection of the case, since the purpose of a study is to represent the case. The size of the sample was not restricted by the need to have a large enough population for statistical analysis. On the other hand, the

sample was of a size that provided a variety of situations where it was possible to conduct an in-depth study on the bank customers' and employees' perceptions.

In order to understand the relationship among factors of interest, minimal researcher interference would occur on site because the researcher intended to study events as they normally occur in one shot of data collection. Raynierre and Harker (1992) suggested that the respondents (customers) completed a market research questionnaire before they completed that day's transaction, known as the intercept method. After considering several factors (e.g. banks' cooperation and work environment), the researcher manipulated the information gathering by using exit interviews. In Johns and Lee-Ross (1998), this technique generally asks who, what, how many or where questions. It tends to include relatively large samples and wide fields of study, often using questionnaires or standardized interviews, or both sequentially. The survey provides a good way to summarize the status of a large group of individuals or organizations. Perry (1995) pointed out in his article that PhD research requires at least 350 respondents in a quantitative survey.

The survey method design was utilized as the primary instrument of collecting, which included the process of conducting a preliminary phase of study followed by the main survey. Early on in the process of collecting the data, a pilot study was carried out among research students in the University of Stirling. The study was basically conducted within a single dominant paradigm and a small

component of the quantitative data was drawn upon to strengthen the profoundness of the data required by the research questions.

The questionnaire is a popular way of gathering information and is easy to understand, as all respondents are presented with the same questions. It can save time in a number of ways: respondents can complete a questionnaire in their own time and a researcher can collect information from quite a number of respondents in one fell swoop. If anonymity is important, this is a way for respondents to remain anonymous. In this study, the questionnaires were administered by the researcher in order to gain a high response rate (Brown and Wake, 1991).

All research designs have their own strengths and limitations. Thus, this study selected a survey design for evaluation purposes because of the nature of the questions being asked, with reference to the research questions of this study, as mentioned earlier. Additionally, the survey reveals not static attributes but an understanding of humans as they engage in action and interaction within the contexts of situations and settings. In this study what were being evaluated were not passive characteristics but the understanding of the characteristics of bank customers and employees, as they engaged and interacted within the context and setting of the service delivery. It was through the respondents' perspectives that the researcher could understand how and what kind of interventions affected the behavior of the respondents in the process and assess their experiences. Although the study may contain rich description and analysis of the phenomenon under

study, certain limitations and concerns do exist in evaluation, which Guba and Lincoln (1994) refer to as “unusual problems of ethics”. This refers to the biases which are related to the political nature of the evaluation which affect the final product. The concern is that what the people who are involved in this study are doing, what they say, what they appear to others to be doing, and what in fact they are doing, may involve sources of considerable discrepancies that may create conflicting opinions both personally and politically. With the recommendations of the above researchers, this study was guided to adopt the research design because of its strengths.

Aside any limitations, this study would benefit the institution that finances the researcher and those in authority who gave consent for the study to be carried out. Besides this, evaluating the service delivery process did not aim to come up with findings that would cause discrepancies in the perceptions of the two groups of respondents and create disagreement; the focus was rather an evaluation to develop a better understanding of the respondents’ perceptions and to identify their characteristics, approaches, attitudes and behaviors towards the banking institutions and the features involved in the process. However, the study was limited by the temporal nature of the phenomenon being studied because, during the time-consuming process of this study, the possible content change or announcement of new initiatives by the institution or government itself did take place as a result of evolution in supply and demand of the financial environment.

This was a process that was beyond the researcher's evaluation strategy. Changes are likely to take place that might affect the conclusions drawn from this research.

It is crucial for the researcher of a study to address the knowledge claims that underpin that research. As Bryman (2004) puts it, a paradigm is a "cluster of beliefs" whereby the researcher in a particular study has the influence of what should be studied, how research should be done and how results should be interpreted. In this case, the study conceptualised quantitative research as paradigms in which the epistemological assumptions, values and methods were inconsistent with each other. The paradigm argument here arises when, for example, the researcher combines participants' perception through questionnaires.

The technique used in collecting the data in this study intended to strengthen it and the overlapping results from the findings from the perspective of those wishing to learn. Thus, although one might argue that some methods are more suitable than others in conducting piece of evaluative research as in this study, no one would argue that a single method is the royal road to ultimate knowledge (Lincoln and Guba, 2000). The chosen method that might help fills the gaps that existed in the study with anticipation. Other than the pilot study, the data acquired through the quantitative method was mostly used to inform the design of the main study self-administered questionnaire.

4.3 Unit of analysis

There are many reasons for researchers to undertake research; including gaining access to more diverse research facilities and participants in research, or acquiring reputation, academic advancement, or commercial benefits from an enhanced international reputation (Science Daily, 2007). The effects of social science research on economic welfare in general and total factor productivity in particular are largely indirect (Smith, 1998), who affirmed that firstly the research itself often includes evaluations of policies. Secondly, it is often hard to attribute changes in economic and social policies that increase or diminish welfare to specific research findings by social scientists. Any assessment of the benefits of social science research should take account of these problems. Benefits from social science research can be measured at different levels of aggregation. As a minimum, relevant assessments can be carried out for individual social scientists, academic departments or research teams, institutions, disciplines, subdisciplines and all social science research.

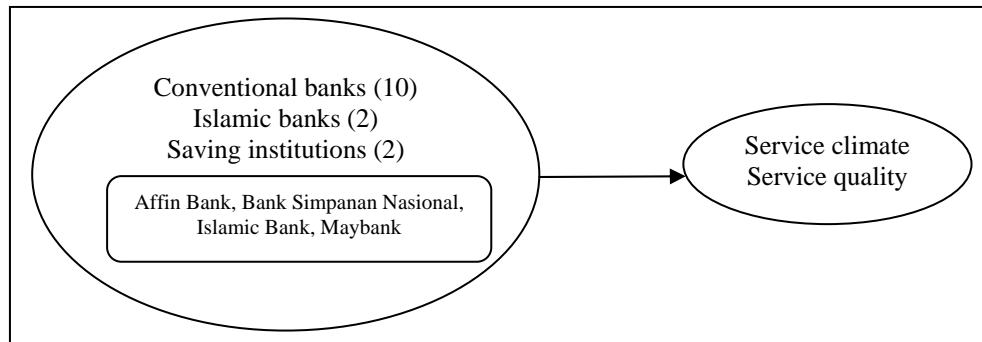
In order to examine consumer and employee behavior patterns, it is usual to describe the distribution of different groups across organizations within a larger area. An appropriate area and its component parts or units of analysis must be chosen. The unit of analysis - the smaller geographic area - presents alternatives. For instance, in any study involving people, the individual is commonly thought of as the unit of analysis. However, the unit of analysis and the corresponding sample size are determined by the way the study is conducted.

Another way of setting the boundaries in a study is to determine the participants in the study and the major action process in the boundary setting is the protection of the individuals or groups of people involved in the study (DePoy and Gitlin, 2005). In keeping with this, the researcher disclosed to the participants involved, bank customers and employees, full knowledge of the purpose of the study and the nature of their involvement. This was done by being consciously aware of the problems of confidentiality and anonymity that might arise. The said participants were involved in the preliminary study and main survey (with consent forms attached to the questionnaires, refer to Appendix 1A-1C, 2A-2C, 3A and 3B) and the distribution of the self-administered questionnaire.

Generalization in this study is to theory and not to the specific population being studied to test the theory. It is not intended, therefore, to draw general conclusions concerning the nature of strategy formation in one country as compared to another (Yin, 1994). Instead, the focus is to see if otherwise equivalent firms differ in ways associated with the national values attributed to countries and to test those associations. The subjects, therefore, were chosen on the basis of equivalence and suitability for the purpose of the study, rather than being randomly selected (Yin, 1994). The number of respondents studied, and how they are selected, depends on the research questions that are being asked. For quantitative analysis, intended to test a priori hypotheses, the numbers of bank employees and customers required also depends on the nature of the research

questions, the extent of generalization intended from any findings and the size and type of population from which the respondents are drawn.

Figure 4.2: A Model of the sampling



Adapted from: Neuman (2000)

While a purposive sampling procedure was undertaken, it was decided to involve as many banks as possible that fitted the criteria for entry into the study, within defined geographical regions. Sufficient organizations could be found within one region, Kuala Lumpur to achieve the target number of respondents (see Figure 4.2). Sample sizes of forty or more have been shown to provide reproducible results in surveys of this kind, at least in terms of the proportions of aspects mentioned by respondents (Johns and Lee-Ross, 1997; Johns and Howard, 1997).

The main population of bank customers involved in this study consisted of savings account holders and personal financees. Some of these potential respondents had years of experience in working, whilst others had various educational backgrounds such as postgraduate degrees, bachelors degrees, diplomas, STPM and equivalent (comparable to A-level), SPM (comparable to O-level) or other. They came from various occupational backgrounds and domiciles.

These respondents possessed characteristics that were different from, say, one established customer to different environments of the service delivery process, styles and habits. They were to be responsible for their own relationship when they were not meeting any bank employees during face-to-face interactions which only take place when they come to their frequently visited bank.

Detailed backgrounds of participants are portrayed in the tables in Chapter 5 of data analysis along with distributions of respondents who participated in the study. The respondents' demographic backgrounds were researched in the last section of the questionnaires in the preliminary study and main survey. In accordance with Merriam (1998), the criteria that the researcher established for purposeful sampling directly reflected the purpose of the study and guided to the identification of the information-rich case.

Overall, conducting an insightful piece of research in a developing country like Malaysia is not that easy to do, especially for the inexperienced researcher though it can be done with some knowledge of the local society, good relationships with reliable sources of data and some forethought regarding possible pitfalls. As in Figure 4.2, the model for sampling frame in this study is drawn. There were four banks agreed to participate with restriction that they would administered the questionnaires to the bank employees.

The horizontal focus refers to the sample or subject upon which the research is conducted. Typical horizontal groupings are as follows: geographical, e.g. Malaysia as one particular country; market segment grouping and specific subject, such as one particular organization. It is possible to conduct this research at more than one level simultaneously but this depends on respondents' feedback in the data collection. Each of these levels of analysis calls for a different kind of statistical analysis (Johns and Lee-Ross, 1998). This aspect determines how a researcher measures variables or themes (Neuman, 2000). The following vertical levels make a useful point for narrowing this research topic down: organizational level, e.g. comparison between four different organizations in the Malaysian banking sector and group level, e.g. comparison between groups within the organization (e.g. different groups of employees and customers in each bank).

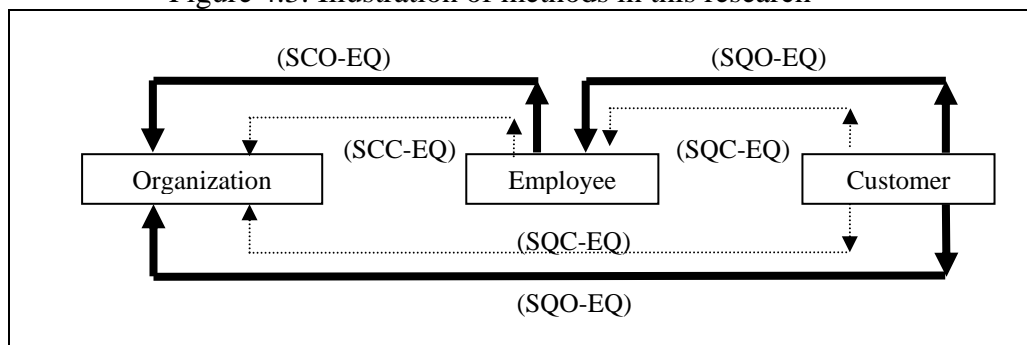
4.4 Instruments used to collect the data

To design the survey, a number of measures needed to be taken. Firstly, the fewest possible indications needed to be given about the researcher's own categories, by only revealing the research agenda in the most general terms. Secondly, the questions used to provide structure and comparability in the survey had to be designed so as not to drive the response into predetermined categories.

4.4.1 The pilot and preliminary study questionnaires

Johns and Lee-Ross (1995) suggested new techniques based upon open-ended interviews or perhaps free-response questionnaires which might provide a more realistic insight into the way customers' expectations color or influence their perceptions of service quality.

Figure 4.3: Illustration of methods in this research



Note:

1. **—————** Used Profile Accumulation Technique (PAT) questionnaires in the preliminary study
2. **-----** Main survey
3. **SCO-EQ** Service climate open-ended questionnaire
4. **SQC-EQ** Service quality open-ended questionnaire
5. **SCC-EQ** Service climate close-ended questionnaire
6. **SQC-EQ** Service quality open-ended questionnaire

Figure 4.3 indicates the overview of the instruments used in the preliminary study and main survey. The researcher employed the Profile Accumulation Technique (PAT) which uses open-ended questionnaires, as proposed by Johns and Lee-Ross (1995, 1997) in the preliminary study.

Data from bank customers was gathered by means of one-sheet questionnaires, which asked respondents on one side to fill in empty boxes beneath two prompts: "The things I like best about the services provided by the bank" and "My reasons for the aspects are ...". The other side referred to

deficiencies e.g. *“The things I like least about the services provided by the bank”* and *“My reasons for the aspects are ...”*. Respondent profile information questions were included; such as gender, age, job, frequently visited bank, how frequently they visited their favorite bank, duration as a customer of the particular bank and frequently used services provided by the bank. Data from bank employees was gathered by means of one-sheet questionnaires, which asked respondents on one side to fill in empty boxes beneath two prompts: *“The things I like best about the organization”* and *“My reasons for the aspects are ...”*. The other side referred to deficiencies e.g. *“The things I like least about the organization”* and *“My reasons for the aspects are ...”*. The respondents’ background information; such as gender, age, position, department/unit and length of tenure, was gathered from the later sections in the questionnaire.

During the elicitation process, the respondents were to write their responses based on the prompts written in the questionnaires. From the responses, the researcher categorized the lists in the broad areas described. After categorizing the broad areas, the researcher then elicited responses from these areas using as closely as possible the language that the respondents had used when writing the items for the questionnaire and revising the items. According to Tashakkori and Teddlie (1998) this procedure was carried out because the analyses from this phase were used to inform the construction of a more structured and quantifiable survey instrument.

Additionally, the information about respondents' demographic profiles (refer to Appendix 1A-1C and 2A-2C) were also taken into account when constructing the statements of the items in the main study questionnaire. The profiling section for the pilot and preliminary study was categorized as follows: seven key customer demographic variables on which the overall measures were analyzed, including: gender, age, job, frequent visited bank, duration of being a customer for the particular bank, average monthly visits and frequently used services of the bank. There were five key employee demographic variables on which the overall measures were analyzed, including: gender, age, position, department or unit and length of tenure in the organization.

4.4.2 The main survey questionnaires

The purpose of this phase of the study was to gain a big picture of service climate and service quality in the banking sector in Malaysia, to overview the areas involved and have some background information about the context e.g. banks, customers and employees. The questionnaire was the technique used in collecting the data. The questionnaire was used as the data collection instrument because of the advantages it offered, such as wider distribution and the subsequent reduction in distribution bias. Besides that, the questionnaire offers advantages in terms of costs, speed, sample size, time and communication (Oppenheim, 2001).

The stages of the design of the questionnaire used in this study consisted of the selection of the items to be presented in the questionnaire and constructing the questionnaire. Having reviewed the literature on evaluation of service quality and service climate from the previous related research in the banking sector, the elicitation process through the open-ended responses provided assisted the researcher with important data which was essential for the selection of items in the questionnaire. Predominantly references on designing a questionnaire were seriously considered by looking at other questionnaires as references whereby the researcher was able to see what was good and poor about them and derive more confidence, since even many well known instruments look terribly imperfect in retrospect. The references also presented directions on how to design the proper construction of the questionnaire. It was intended in the selection of the constructs to cover the elements that definitely could help answer the research questions, such as the respondents' characteristics, perceptions, enabling environments in the service delivery process, preferred instructional and delivery approaches.

The questionnaires involved were the self-administered questionnaires in which administered with the help of someone in an official capacity; in this case the researcher and co-researcher involved in the fieldwork. It should be noted that only dimensions were the results from responses in the pilot and preliminary study. The items in the questionnaires were not conceived from scratch; old favorites, as proposed by Gorard (2001) many are available commercially, a lot of are available from academic and other public archives.

In these questionnaires, the questions were principally based and adapted from a number of items found by prominent scholars in the service climate (Katz and Kahn, 1978; Parkington and Schneider, 1979; Schneider, 1980; Schneider *et al*, 1980; Schneider and Bowen, 1985; Schneider *et al*, 1992; Rayniese and Harker, 1992; Singh, 2000; Andrews and Rogelberg, 2001) and service quality field (Le Blanc and Nguyen, 1988; Lewis, 1991; Kwan and Tan, 1993; 1994; Avkiran, 1994; Johnston, 1995; Galloway and Blanchard, 1996; Hartline and Ferrel, 1996; Stafford, 1996; Joseph *et al*, 1999; Allred, 2000; Lassar *et al*, 2000; Othman and Owen, 2001; Newman, 2001; Adlaigan and Buttle, 2001; 2002; Jun *et al*, 2002; Gounaris *et al*, 2003; Jamal and Nasser, 2003; Vijayan and Shanmugam, 2003) which are reported instruments designed to assess various service orientations and their use of different strategies for certain services. The questions were based on and adapted from a few noted studies that have been carried out successfully.

Gorard (2001) assured that the advantages of using such previous instruments and questions are considerable because the instruments used have been piloted, used previously, are mature and ready to be used, probably on a far larger scale than the researcher could envisage. This can carry some extra authority for the readers of this study.

The questionnaires were then translated into the respondents' first language, the Malaysian language. This was done due to the feedback of

respondents from the pilot study. They had difficulty responding to the items listed in the pilot study questionnaire, which was written in English with a translated version below each item. The feedback received was that the respondents preferred every item to be listed in the Malaysian language only, to avoid misunderstanding and the respondents also comprehended better if all items were in their mother tongue. By the end of January 2006, the researcher had received the questionnaires and started entering the data from the questionnaire using the NVivo 7 program in February 2006. The data was then analyzed using the SPSS for Windows program in August 2006.

The questionnaire for service climate consisted of 121 items; all employed Likert-type items and there were seven open-ended questions. Thus, in this study the open-ended questions were used not to create statistical patterns but to help explain or give strength to conclude on the research questions, wherever applicable. This part of the questionnaire focused on eleven main variables: benefit, bonus, reward and salary; corporate image; customer service; facilities; organization, department and branch; management; organization output; products and services; workforce and myself. The need to measure service climate as the dependent variable is critical in order to evaluate if the service delivery that is currently being utilized is actually effective. Some of the items used were adapted to suit the environment and culture of the population in Malaysia being studied so related issues could be examined. Respondents rated the items in the questionnaire on a five point Likert-scale (refer to Appendix 3B for sample of questionnaire).

Table 4.1: Service climate questionnaire dimension content

Dimension	No. of items	Dimension focus
Benefit, bonus, reward and salary	8	Opportunity to get a better position in this bank. Adequacy of salary. Awards and recognition in this bank. The performance appraisal process. Performance feedback or rewards other than pay or fringe benefits. Internal equity or fairness of compensation including salary, hours worked, and fringe benefits. External equity (or market competitiveness) of compensation, including salary, hours worked, and fringe benefits. Employees are paid enough for the time they spend in public relations for the company (e.g. preparing for demonstrations).
Corporate image	3	Customer satisfaction is the number one priority of the business. My organization provides excellent services to its customers. Providing high quality services to our customers should be the number one priority of my organization.
Customer service	17	I have the time I need to give good customer service. My manager tells me that high quality customer service is expected. The manager sets definite quality standards of good customer service. Customer service really counts. Complaints receive prompt attention. My bank tries to take the customer's point of view. My bank knows what type of customer it serves best. High quality service is emphasized as the best way to keep customers. Poor quality of service leads to loss of customers. Effectiveness would a drive to improve the quality of customer service be, if it were instigated by senior management. How important is the internal quality of service to customer service? Is the bank's quality of customer service improving? Give friendly and courteous service. Give prompt and efficient service. Explain bank policies and procedures (to customer). Give accurate service to accounts.

		Overall customer contact (e.g.: face-to-face, email or telephone).
Facilities	11	<p>Equipment and machinery in my bank are well-serviced and rarely break down.</p> <p>Office conditions and facilities.</p> <p>Equipment and instruction manuals for the equipment.</p> <p>Automation systems/computers/management information systems and instruction manuals for the systems.</p> <p>Supplies (adequacy, appropriateness, and availability).</p> <p>Availability of monetary (budget) resources.</p> <p>Providing accurate and complete paperwork.</p> <p>Information needed to do your job.</p> <p>Workload given.</p> <p>I have the tools and resources to do my job well.</p> <p>I satisfied with my current workplace environment.</p>
Organization	25	<p>Quality of my bank in recruiting new staff.</p> <p>Hiring procedures (who and how).</p> <p>Staffing levels (quantity and sufficiency).</p> <p>Amount of turnover.</p> <p>Training programs (availability, timing and content).</p> <p>Opportunities for career development and advancement.</p> <p>Job security.</p> <p>Emphasis on service demonstrated by things that are done or said at this location (including supervisory and systems/clerical support).</p> <p>Emphasis on service demonstrated by things that are done or said by people or levels outside of this location.</p> <p>Solicitation and responsiveness to customer opinions on service delivery.</p> <p>My bank has the characteristics of the larger organization (e.g. flexible, changing and rigid).</p> <p>My bank is competitive in its market.</p> <p>Association with bank is satisfying.</p> <p>The way I feel about quality is very similar to the way my organization feels about quality.</p> <p>I understand why it is so important for my bank to value diversity to recognize and respect value of differences in race, gender, age, etc.</p> <p>My bank has strategic managerial planning (e.g. anticipation of problems).</p> <p>My bank outlined rules, guidelines, and general procedures governing the work.</p> <p>My bank encourages communication, cooperation, coordination, and support within the work group (e.g. among peers or task group members).</p> <p>My bank supports group-level relationships (e.g. interdepartmental relationships).</p>

		<p>Having all customer records in a central location makes it easier for the bank.</p> <p>My bank's policies are consistently followed.</p> <p>Following the company's suggested telephone call monitor process.</p> <p>To costs involved in monitoring and improving the quality of service may outweigh the benefits to the bank.</p> <p>Is the bank's internal quality of service improving?</p> <p>Is sufficient being done to improve the internal quality of service?</p>
Department and branch	4	<p>My bank encourages communication, cooperation, coordination and support between functional units or levels of management within the unit.</p> <p>My bank encourages communication, cooperation, coordination and support between functions in the unit and between functions and entities outside the unit (e.g., between the branch and the home office or between branches)</p> <p>Do you feel that the internal quality service differs from branch to branch?</p> <p>How satisfied are you with the information you receive from management on what is going on in your department?</p>
Management	18	<p>Employees are trusted by upper management.</p> <p>Effectiveness of two-way communication between you and your manager.</p> <p>Senior management communicates with employees at all level.</p> <p>My manager visibly demonstrates a commitment to quality.</p> <p>Senior managers visibly demonstrate a commitment to quality.</p> <p>My manager supports employees when they come up with new ideas on customer service.</p> <p>My manager sets definite quality standards of good customer service.</p> <p>My manager meets regularly with employees to discuss work performance goals.</p> <p>My manager accepts the responsibilities of his/her job.</p> <p>My manager gets the people in different jobs to work together in serving customers.</p> <p>My manager works at keeping an orderly routine going in the bank.</p> <p>My manager takes time to help new employees learn about the bank and its customers.</p> <p>My boss is committed to improving the quality of our service.</p> <p>My boss appreciates high quality service.</p> <p>Senior management is consistent in word and deed.</p> <p>Bank management makes sure that each department is adequately staffed.</p> <p>Explain bank policies and procedures (to employees).</p> <p>How satisfied are you with the information you receive from management on what is going on in your bank?</p>
Organization output	2	<p>Quotas, targets and overall performance are the measures of the organization</p>

		Output is the measure of goal accomplishment Evaluating the methods and efficiencies of the programs themselves is beyond the scope of this quantitative ratings system.
Products and services	7	My bank is well-prepared by marketing for the introduction of new products and services. Products serve customer's interests. Quality of service really counts. Quality of service is important but the quality of the products is more important. Do you sometimes feel that the bank underestimates the importance of the quality of service provided to customers? The process of giving service and the service customers receive in term of service quality. The products offered to customers.
Workforce	9	The magnitude of workforce optimization by engaging employees and optimize their performance with integrated approach to strategic workforce planning in order to cope with workforce-related challenges and to meet their workforce needs. The features would be assessed are morale, fairness, supports and values of employee. e.g. Morale of those around me is good.
Myself	27	The assessments regarding the required diversify ability, skills and knowledge that an employee needs when they have to perform the services the customer inquire. Beside that, an employee also should have the quality, attitude to be a good employee; awareness towards the customer's wants and needs. e.g. I feel encouraged to come up with new and better ways of doing things.

Table 4.3: Service quality questionnaire dimension content

Dimension	No. of items	Dimension focus
Automated Teller Machine	5	The bank's capability to provide accessible ATMs, good services, the pledge of security and accuracy of statement printing. To see how far the degree of ATM's problems during weekends and festive seasons from the customer's response. e.g. The services provide by ATM is good.
Corporate image	17	The extent of sum of the impressions that hold about the organization, in other words, the reputation. The substantial characters that will be evaluated in this survey are: contribution to society, consistency service standard through different branches, ease and frequency of contact, ease and privileges of membership, easily understood statements. The subtle features to be assessed are:

		right the first time, promptness of service, clarity of correspondence, accuracy, willingness to help, caring, individualized attention, trust, fairness, honesty and attentiveness to customer's banking needs. e.g. My bank performs the service right the first time.
Customer interaction and customer service	15	Communication between (atleast) between two participants; in this study are employee and customer. It is best described as a set of behaviors and communications. It is about managing the quality of each touchpoint: policies, promises, expectations, confidentiality, respect from the perspective of the customer in creating their experiences with the intent to maximize the value returned. e.g. My bank policies are clearly explained in advance of action.
Online and phone banking	3	The level of easiness of reaching through and immediate response from the bank.
Physical features and facilities	24	The degree of customer appreciate the use of the facilities being provided by the bank such as the location, appearance and arrangement, availability of instruments, procedures, tidiness, comfort, atmosphere, opening hours, safety and system. e.g. The physical approachability of service location, including the ease of finding one's way around the service environment and the clarity of route (near workplace, home, governmental buildings, shopping centres).
Products and services	27	The customer roles in influencing the bank's products and services, how far they use them, and appreciation of the subtle features of it. e.g. Deposits are guaranteed secured.
Rates and charges	13	The appropriateness of rates and charges and its allied procedures by the bank in the eye of the customer. e.g. Informing of account charges
Management	39	The evaluation regarding the required diversify ability, skills and knowledge that a management needs when they have to perform the particular services that the customer inquire. Beside that, the management also should have the quality, attitude to be a good employer; awareness towards the customer's wants and needs. e.g. Quality of advice given about managing my finances.
Staff	43	The assessments regarding the required diversify ability, skills and knowledge that an employee needs when they have to perform the services the customer inquire. Beside that, an employee also should have the quality, attitude to be a good employee; awareness towards the customer's wants and needs. e.g. The ability to answer my questions.

Table 4.2: Likert-scale items and examples

Likert-scale items	Example
“Very poor” to “Very good”	Opportunity to get a better position in this bank.
“Strongly disagree” to “Strongly agree”	Providing high quality services to our customers should be the number one priority of my organization.
“Very unimportant” to “Very important”	How important is the internal quality of service to customer service?
“Very mild” to “Severe”	Is the bank’s internal quality of service improving?
“Strongly dissatisfied” to “Strongly satisfied”	How satisfied are you with the information you receive from management on what is going on in your department?
“No extent” to “Great extent”	To what extent does your bank value its employees?
“Never” to “Always”	Do you receive praise for the service you give by the bank?
“Very unclear” to “Very clear”	How clear are you about the mission of your bank?

Items that are worded positively or reversed in the second part of the questionnaire must be reflected before an individual’s score can be computed (Pintrich *et al*, 1991). In other words, if an item has to be reversed, a respondent who has circled 1 for that item now receives a score of 5, a 2 becomes a 4 and a 3 remains as a 3.

The questionnaire for service quality consisted of 186 items; all employed Likert-type items and there were three open-ended questions. This part of the questionnaire focused on eleven main variables: Automated Teller Machine (ATM); corporate image; customer interaction and customer service; online and phone banking; physical features and facilities; products and services; rates and charges; management and staff. The need to measure service quality as the dependent variable is critical in order to evaluate if the service delivery perceived by the bank customers is actually effective. Some of the items used were adapted

to suit the environment and culture of the population in Malaysia being studied so related issues could be examined. Respondents rated the items on the questionnaire on a five point Likert-scale (refer to Appendix 3B for sample of questionnaire).

Table 4.4: Likert-scale items and examples

Likert-scale items	Example
“Strongly disagree” to “Strongly agree”	The services provide by ATM is good. Deposits are guaranteed secured.
“Very poor” to “Very good”	My banks’ contribution to society. The ability to answer my questions.

In general, all aspects or dimensions proposed by the respondents through their responses in the service climate and service quality questionnaires consisted of nineteen attributes presented by Johnston (1995) in his article, which involved research done in one of the banking institutions in the United Kingdom. The attributes illustrated by him were: commitment; friendliness; courtesy; flexibility; comfort; availability; cleanliness/tidiness; reliability; integrity; attentiveness/help; care; responsiveness; competence; communication; access; security; functionality; aesthetics and miscellaneous.

Permission from each respondent to fill in the demographic profile section in the questionnaires was favorably supported by the respondents themselves. Prior to this consent to distribute the questionnaires was also sought from the human resource managers in each of the participative banks. A total of 138 bank employees and 306 bank customers from various backgrounds filled in the two different questionnaires. The demographic variables for main survey for the bank

customers were: gender, age, status, job, working sector, highest education achieved, work experience, duration of being a customer of the particular bank, average monthly visits, type of savings account for savings account holders or type of personal loan for personal financees, other bank members and who had encouraged the respondent to be a member of the bank. There were eleven key employee demographic variables on which the overall measures were analyzed, including: gender, age, status, ethnicity, highest education attained, duration of work experience in the banking sector and duration in the particular position.

These categories were included in the profile questions because it was important to the researcher to have knowledge of the majority of the respondents involved in this study. From the profile, initial characteristics of respondents could be determined besides their behaviours and their environment when they are interacting with each other in general, keeping in mind that all the respondents were involved in answering the self-administered questionnaire.

4.5 Administration procedures

When, where and who, non-response bias (which is a very important issue and is discussed in Armstrong and Overton, 1977), response rates, dates and protocols of interviews (Yin, 1989) were all important, so that the research is reliable, that is, it could be repeated. Explicit concern was about specific

procedures used to handle internal and external validity (Yin, 1989; Parkhe, 1993).

4.5.1 Piloting the study

The first step taken to conduct this study was to run a pilot study to determine the focus and nature of the study and eventually narrow down towards its objectives. The pilot study was undertaken in April 2005. The main objective of the study was to carry out a descriptive survey of the attitudes, practices and beliefs of the research students in the University of Stirling. It was mainly focused on their experiences, whether as an observer, a bank employee or customer, in order to look at the effectiveness of Profile Accumulation Technique mainly in the banking sector and the potential dimensions take place from the responses.

Thirty research students participated in the pilot study from various nationalities and study backgrounds. The pilot study was approached using the survey method approach. The research instruments used in the pilot study were self-administered questionnaires distributed to the research students. The time line for the pilot study was laid out as in Table 4.5.

Table 4.5: Time line for the studies and surveys conducted

	Tasks	Time	Location
Pilot study			
i.	Formulating questionnaire	January 2005	
ii.	Identifying respondents	March	Scotland
iii.	Distribute questionnaire	April	
Preliminary study			
i.	Amendment of questionnaires for bank customer and	June 2005	

	employees	July	
ii.	Identifying respondents	August	Malaysia
iii.	Distribute questionnaire		
Main Survey			
i.	Amendment of questionnaires for bank customer and employees	November 2005	
ii.	Construct, revise items for questionnaires and translated to Malaysian language	December December	Malaysia
iii.	Identifying respondents	January 2006	
iv.	Administer enumerator	January	
v.	Distribute questionnaire		
vi.	Conduct discussions with enumerator		

The questionnaire made use of the Profile Accumulation Technique (PAT) proposed by Johns and Lee-Ross (1995; 1997). The students were required to provide their point of view regarding any aspect of the open-ended questionnaires, divided into two groups of respondents: those experienced as a bank customer and those experienced as a bank employee. The researcher employed purposive sampling for the pilot study. Samples of pilot data were analyzed in the manner planned for the preliminary data collection period. All data collected during the trial period was discarded and not included in the final analysis.

4.5.2 The preliminary study

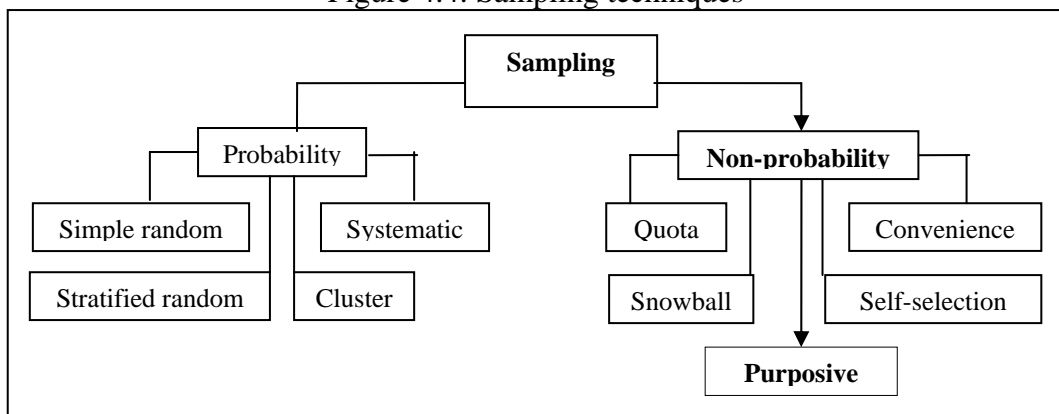
The best method to identify questions relevant for a measurement instrument, according to Churchill *et al* (1974), is to use exploratory studies. It is with this view in mind that the first stage of this research was conducted. The aim was to find out which aspects and attributes are related to perceived service quality in banking encounters with different banking customers and perceived

service climate for dissimilar bank employees. For that reason, arrangements for the preliminary study's data collection were effected between the researcher and co-researcher in Malaysia. The sampling technique employed was purposive sampling as in Figure 4.4, with specific purposes in the researcher's mind. Since the collection of data was predominantly in Malaysia with cooperation from bank customers and bank employees that were approached personally by enumerator, the researcher did not need to be very strict in outlining the specific characteristics of the respondents' backgrounds. A combination of two different types of questionnaire was assumed to be a useful tool in studying the phenomenon under consideration, in order to be able to bridge the gap and at the same time to widen understanding and to discover new concepts and ideas. The main aim of the elicitation process, which was to help in designing the self-administered questionnaires, particularly for bank customers and bank employees in the main survey which was framed in a language that the respondents could relate to, was basically achieved.

Prior to the commencement of the data collection, the researcher identified the respondents that were willing to be involved in this study. The enumerator had set meetings with the particular respondents to discuss the researcher's study objectives and also to request consent to carry out the collection of data by sending them the questionnaires by mail, once permission from them had been granted. To reduce the possibility of compromising confidentiality through the involvement of many surveyors, data in this study was collected only by the

researcher and enumerator. From the results of the meetings, only seventy five bank customers (response rate of 50.00%) and fifty three bank employees (response rate of 35.33%) were willing to participate in the preliminary study after one hundred and fifty questionnaires had been sent to each group of respondents attached to Maybank, Bumiputra Commerce Bank Berhad (BCBB), Islamic Bank, Bank Simpanan Nasional (BSN), Rashid Hussin Bank Berhad (RHBB), Muamalat Bank, Hongkong and Shanghai Banking Corporation Limited (HSBC), Public Bank and other financial institutions. None of the respondents mentioned any of banks that they were dealing with.

Figure 4.4: Sampling techniques



Source: Saunders *et al* (2003)

It was best to include a biographical section at the end of the questionnaire. In general, personal questions deter respondents from responding. Putting them at the end allows respondents to be drawn into the less threatening part of the questionnaire and to become committed to it. This may also help to improve the response rate (Johns and Lee-Ross, 1998). But, the length of the questionnaire might reach unmanageable proportions which might have compromised the response rate (Boshoff and Tait, 1996).

According to Cohen *et al* (2000), anonymity ensures that information provided by participants does not reveal their identity. The personal data of the bank employees and customers was presented in an anonymous way. Confidentiality was considered important in this study because the disclosure of information about what was happening in the sector might result in banks' incompetence in delivering their services and products was being revealed. This could end up as an embarrassment. A number of techniques were included to ensure anonymity and confidentiality of the findings. The use of pseudonyms, instead of the participants' real names, meant that people other than the researcher could not identify the participants from the information presented in the study. The questionnaires were sent to a number of bank customers and bank employees with a covering letter requesting customer feedback about the quality of services and service climate from the employees' point of view, which was attached to each questionnaire with guidance as to how to answer the questionnaires. Anonymity and confidentiality were promised, as stated in the covering letter to the banks and each participant willing to participate was voluntary. It was customized with the name of the bank and a few lines of introductory text specific to the banks and each respondent. The university's logo had been put on top of the first page (before the consent section) in each questionnaire in order to show the serious intent of the research. A week after the initial mailing, reminder emails were sent to the enumerator in order to ascertain the progress of the survey.

Each of the respondents was given three colored questionnaires; green for positive experience perceptions, pink for negative experience perceptions and blue for respondents' expectations. Responses provided on the colored papers were a useful way of framing any knowledge to discover new constructs, for example the employees' perceptions and attitudes towards the banking institution. The questionnaires for bank customers were returned and the responses were coded and categorized in general as such: Automated Teller Machine (ATM); corporate image; customer interaction and customer service; online and phone banking; physical features and facilities; products and services; rates and charges; management and staff. Similarly, the feedback from the employee questionnaires was returned and the responses were coded and classified as follows: benefit, bonus, reward and salary; corporate image; customer service; facilities; organization; department and branch; management; organization output; products and services; workforce; myself.

4.5.3 Main survey

Planning the schedule for collecting the data was tedious work and many factors were taken into consideration. Since the collection of data was predominantly conducted on the premises of the banking institution involved, all public holidays were checked before making trips to Malaysia. However, there were circumstances that were unavoidable, which resulted in the researcher postponing and rescheduling appointments. To add to these unavoidable

circumstances, the researcher needed to have cooperation from the enumerator in order to accomplish the research plan and achieve the research objectives. Prior to the commencement of the data collection, the researcher identified the banks willing to be involved in the study. The researcher had set meetings with the Human Resource Managers for all local banks to discuss the study objectives and also to request permission to carry out the collection of data, entering the premises and using the institution's facilities during the researcher's fieldwork once permission had been granted by the managers. From the results of the meetings, only three banks gave positive feedback with conditional agreement. They stated that they would effect the distribution of the employee questionnaire due to strict business confidentiality. Organizations may be reluctant to give up company time for the survey with groups of employees assembled for the purpose (Sekaran, 2000).

Subsequently, the researcher and enumerator made arrangements for data collection using the customer questionnaire outside the participative banks' premises. Respondent were selected from those customers visiting the sampling locations during the chosen time intervals, in order to eliminate sampling frame errors and to ensure representation of the population under study. The questionnaires were personally administered to establish rapport and motivate respondents. Doubts could be clarified during data collection. This technique is less expensive when administered to groups of respondents and an almost 100% response rate is expected. Respondents' anonymity is high. Therefore, cooperation

from the bank is needed (Rayniese and Harker, 1992). The questionnaires were distributed during various working hours of the same day (e.g. Monday, Wednesday and Friday) from morning until evening, as well as during various weeks in a month, to avoid any potential bias owing to the high concentration of bank customers during certain hours of the day, or on certain days of the week. Allred (2001) suggested, in order to reduce the probability of response bias, the use of a survey technique to gather the data but there is therefore a need for careful explanation from survey administrators to respondents. Fink (1995) illustrated that every researcher hopes for a high response rate but there is an acceptable response rate; 70.0% is adequate. The researcher's efforts included follow-up meetings and gift incentives like pens.

Finally, non-response bias was investigated in order that no significant bias would be detected. Limitations: the nature of measures used. All were based upon the perceptions of the participating customers and employees. Therefore, the potential for data inaccuracies due to item misinterpretation or predisposition to certain responses on the part of the participant does exist.

4.6 Computer programs used to analyze the data

Data is met in a variety of guises as transcripts, diaries, case notes and even pictures. Managing all this information can often be daunting enough without worrying about how to glean any insight from it. Multivariate approaches

require large numbers of data sources, in order to satisfy distributional assumptions of multivariate normality. This normally precludes, on the grounds of cost, the use of methods (such as open-ended surveys) that are well suited to the accessing of context-rich data.

4.6.1 NVivo 7

At an early stage of this study, the researcher needed to obtain and handle very rich text based information in the form of results from the open-ended Profile Accumulation Technique questionnaires, where deep levels of analysis on both small and large volumes of data were required. The study's findings are based on the analysis of data. Stake (1995:71) asserts "*there is no particular moment when data analysis begins*". Analysis involves giving meaning to first impressions and final compilations, in essence taking apart the information collected through reading and re-reading accounts followed by deep thinking. To Stake (1995) it is the pulling apart of instances and putting them back together in a more meaningful way that allows the findings to emerge from the open ended questionnaire.

NVivo 7 was found to be the solution to remove many of the manual tasks associated with analysis, like classifying, sorting and arranging information; therefore the researcher had more time to explore trends, build and test theories and ultimately arrive at answers to questions. The key components of NVivo 7

projects include documents, cases, memos, annotations, nodes, sets and attributes. It leads through hands-on practice in creating new projects, opening existing projects, copying projects and building/modifying projects; followed by document management tasks, including preparing and formatting documents in Microsoft Word, importing documents, editing documents and creating cases from documents. The researcher had to learn to create attributes, assign attributes to cases, as well as importing attributes from Excel. Two types of nodes which are free nodes and tree nodes were used in the analysis process in order to extract the information into the form of dimensions. Various coding methods were then addressed in order to organize the data. Examples are given on building efficient and organized node systems. Thematic analysis was used in the preliminary study. As a result, themes or sub themes that were able to provide understanding of the aspects that were central to the aims of the research were identified. These emerging themes were then clustered or categorized into main headings. Once these themes had been determined, the process was continued of interpreting and drawing meaning from the displayed data.

The researcher also learned how to record and keep track of emerging ideas in qualitative data analysis by using memos and annotations, and how to link them to the documents. Four types of queries were covered: text search, node query, matrix query and compound query, and exercises were conducted to run different types of queries. In the end, NVivo 7 would be able to picture models on

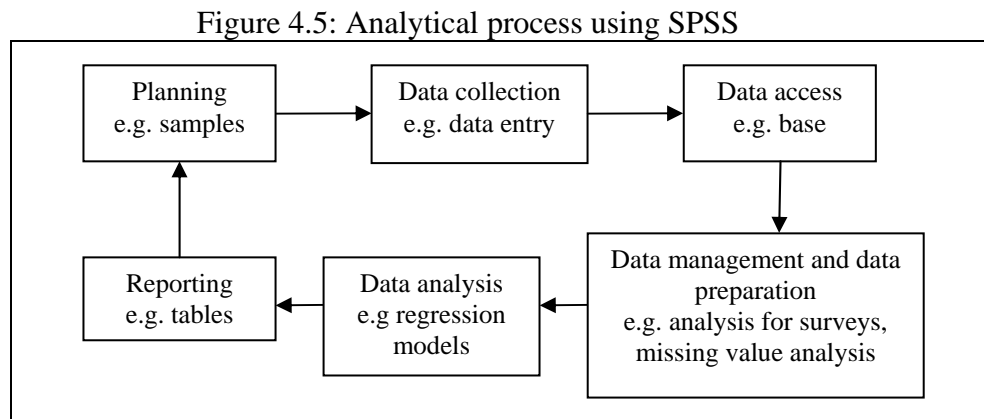
how to visually explore patterns and relationships with the intention to change the way the researcher viewed ideas, processes and people.

4.6.2 Statistical Package for Social Sciences (SPSS)

Quantitative approaches require numbers, as in close-ended questionnaires in the main survey. For example, if two groups are being compared, the commonly used chi-squared test of difference between groups requires a minimum of ten in each group, but usually more if the distributions are uneven (as would usually be anticipated). Other non-parametric tests have been developed, particularly for healthcare research, to be able to draw statistical inference from small samples and uneven distributions (Conover, 1999; Pett, 1997). There is much more involved in data analysis than just doing analysis. Most likely, before the researcher may start analysis; data has to be ready, and then, once analysis is complete, there is a need to put results into a format people can understand and use.

In order to carry out analysis which involves numbers, the SPSS version 15.0 is a powerful software package for microcomputer data management and quantitative analysis. SPSS provides a broad range of capabilities for the entire analytical process. Its power and flexibility can be seen in a wide variety of identification, estimation, forecasting and diagnostic methods available; it provides the opportunity for continuous interaction during the model-building

process and has the ability to quickly create new series as functions, transformations or components of the observed series for further analysis. The analytical process in Figure 4.5 shows the steps involved by preparing the data for analysis, analyzing, reporting the data and sharing the results.



With SPSS, the researcher may generate decision-making information quickly using powerful statistics, understand and effectively present the results with high-quality tabular and graphical output, share the results with others using a variety of reporting methods, and take advantage of the analytical asset storage and deployment capabilities of other SPSS products.

4.7 Other issues

There were a number of concerns that needed to be considered while the researcher carried out this study, which might have impacted the results as a whole.

Expectations forms were given out to different respondents from those answering the perceptions part in the pilot study. The reason was, with reference to the study on the research students that they preferred to duplicate the answer in an adapted version of the first part (either expectations or perceptions). There were also difficulties for the researcher to analyze the various kinds of answers which were not specific to any of the dimensions stated by previous researchers. The technique might need prompts.

A number of writers, notably Usunier (1998) and Tayeb (1988), have highlighted problems associated with the use of language in cross-cultural research. In such research, some of those involved have to work in a non-native language, which will inevitably, at some stage, challenge the free-flow of meaning between researcher and subject. If the subject of the study were straightforward, this might not be a major problem, and one that could be handled through the use of effective translators. Ensuring even superficial equivalence of meaning in terms used by different managers in different countries presents straightforward language difficulties in translation, either by the managers (if only one language is used in the study) or by the researchers (if many languages are used). Even the best translations involve compromises and losses of nuance, and translation usually involves the risk of error. Equivalence of meaning of even apparently straightforward terms can never be assumed, especially in comparative international management research. It has already been highlighted how

meanings vary considerably between groups even when the native languages are the same.

Clearly, using standardized terms in different nations in a cross-cultural study is highly problematic. Since the meaning of the categories for the bank employees and customers remains unknown with the questionnaire and other non-contact methods of data gathering, so is the meaning of the data recorded. In order to access the meanings behind the terms used, extensive and open ended investigation is required. Ideally, those chosen for study should be habitually conversant in two national languages (Malaysian and English), and perhaps also a single global technical language, such as the technical international English used in specialist technological fields worldwide.

Item contents in these questionnaires were adapted from Johns and Lee-Ross (1995; 1997) and Johns *et al* (1997). This technique is called the Profile Accumulation Technique (PAT). It has only (widely) been used in hospitality and tourism in the United Kingdom. There were challenges in using this technique in the banking sector. The researcher could not replicate or modify the tested questionnaire or any findings. The variables came from respondents' responses only. Thus, reliability and validity could not be proven or compared with other research studies.

Consistent respondents' understanding cannot be guaranteed because of the simplicity of questions asked. Some researchers believe that respondents possess characteristics that make them different from each other in terms of behavior as informants in research.

Non-response to an entire survey introduces error or bias (Fink, 1995). Another type of non-response is item non-response. This occurs when respondents do not complete all items on a survey form. This type of bias comes about when respondents do not know the answer to certain questions or refuse to answer them because they believe them to be sensitive, embarrassing or irrelevant. For example, respondents may leave out their year of birth and salary.

Although the data collected for this study was not politically, socially or physically sensitive in nature, ethical issues were nonetheless considered important. An important aspect of the data collection process was the researcher-participant relationship during the survey administration. The nature of the cultural context of Malaysia, however, meant that the researcher was limited in the form of relationship that she could develop with the participants. The ethical issues taken into consideration during the development of this research study were informed consent, access and acceptance, anonymity and confidentiality (Cohen *et al.*, 2000).

There are two essential factors that must be taken into account in any credible research: how reliable the data is, the extent to which measures give consistent results and its validity – the extent to which they correspond to the true position of the person or object or the characteristic being measured (Selltis, 1976). The research findings were supported only through survey administration in stages one and two of this study. There are, of course, limits to any research. The limitations of this study are explained in the discussion of results and findings: Chapter 6.

Guba and Lincoln (1989) suggested that internal validity in rigour is parallel to the standard of credibility in trustworthiness. Guba and Lincoln (1989); Merriam (1998) recommended several techniques for enhancing credibility. The credibility of this study was enhanced by emphasizing rapport between the researcher and the participants, including bank employees and customers. This was initiated through a preamble conversation before the administration of the survey started for each respondent.

To clarify and verify the repeatability of an observation or interpretation, this study employed triangulation at several levels (Merriam, 1998; Stake, 1998). Patton (1990) describes four levels of triangulation; methods triangulation, triangulation of sources, analyst triangulation and theory and perspective triangulation. Creswell (1998) recommends triangulation and member checking techniques for evaluating the trustworthiness of the case study. Triangulation has

been defined as making sure to use multiple and different sources, methods, researchers and theories to provide compelling evidence (Creswell, 1998; Merriam, 1998). Within this study, though the same data collection was used, there were three different phases, the pilot, the preliminary and the main study undertaken. Merriam (1998); Guba and Lincoln (1989) suggest that sharing the information and findings with peers can contribute to the credibility of the research. In this study, colleagues from the same research area were often engaged in discussions of the new findings. Member checking meant that the participants of the research were asked to review the findings of the study (Merriam, 1998; Creswell, 1998). As stakeholders, research supervisors and colleagues were given a number of respondents' questionnaires to provide them with opportunities to revise responses, and to allow them to give additional information if desired. For this purpose, supervisors were also asked to examine rough drafts of this study in order to verify findings. Peer examination, also called peer review or debriefing, included asking a colleague to comment on the findings as they emerged. Formal debriefing by committee members and professional peers at postgraduate seminars provided opportunities for the researcher's methodology and preliminary findings to be evaluated. The comments and questions were critical in shaping the emergent design.

Is the data stable over time? Guba and Lincoln (1989:242) suggest that instability may occur “...*because inquirers are bored, are exhausted, or are under considerable psychological stress from the intensity of the process*”. This,

however, does not include changes that occur as a result of methods reconstruction (Guba and Lincoln, 1989). In this regard, dependability of this study was enhanced by having only one researcher collect the data. This ensured that the data collector was critically aware of the purpose and importance of the data throughout the data collection process. The researcher believes that the study was carried out with reasonable care and that the process of the study was consistent with the methodology described.

4.8 Summary

In this chapter, the methods and the instruments of collecting the data used and their relationship to each other with their respective significance have been discussed. The focus of this study has been maintained to determine the relationships between service climate and service quality through the participative bank customers' perceptions of their frequently visited bank and bank employees' perceptions of their organization. The survey approach chosen for the pilot study, preliminary study and the main survey not only incorporated quantitative methods but the combination of perceptions between bank customers and bank employees in collecting data was conceptualized to accomplish an in-depth understanding of the participants' experiences of the participative banks with the 'aspects' provided.

The scope of this study is restricted by its location to areas (Kuala Lumpur and Selangor) and also to one time data collection. It also involved the gathering of data from various secondary sources; reports from participative banks, National Productivity Corporation annual reports and the Malaysian Economics Report published every year. The demographic background of the respondents represents a profile that may be of value for the study to be replicated in other situations (e.g. in a different country or in a different bank). The evidence found in this study may not be generalized to the banking sector generally, but its contribution lies in representing a group of customers' and employees' perceptions, characteristics and preferred aspects, which have been taken for granted in earlier studies and not been given much attention, thus presenting a contribution to the service climate and service quality body of knowledge. This study might call forth insights and raises questions about the future direction of the specific dimensions of the service climate and service quality relationship. It forges a foundation on which a more extensive study could be undertaken to examine further the generalisability of the findings, for instance in the field of the banking, survey administration, involvement (e.g.level and type) of bank employees and customers and richness of data from the questionnaires to determine the particular direction of the relationship between service climate and service quality.