CHAPTER 3

RESEARCH METHODOLOGY

3.1   INTRODUCTION

This chapter discusses the research methodology employed starting with a summary of a number of testable hypotheses which can be derived from the proposed framework in Chapter 2. This is followed by discussions on type of data sourced, data collection method, measurement of constructs, questionnaire design, sampling technique and data analysis technique.

3.2   HYPOTHESIS OF STUDY

Below is the list of hypotheses as proposed from the previous chapter:

H_1:   *Retail banking customers perceive operational excellence of their main banker to be more prominent than customer intimacy or product leadership.*

H_2:   *Retail banking customers expects their main banker to deliver more of operational excellence than customer intimacy or product leadership.*

H_3:   *There is a difference between retail banking customer's perception and their expectation of their main banker's value disciplines.*

H_4:   *Customer perception of value disciplines has an influence on behavioural, attitudinal and cognitive loyalty.*

H_5:   *Customer perception of value disciplines has an influence on service loyalty.*

H_6:   *Customer perception of value disciplines is different between local and foreign bank.*

H_7:   *The type of bank and facilities has an influence on service loyalty.*

3.3   DATA SOURCE

As the objective of the research is to examine the relationship between customer value perception and service loyalty, primary data is required. Primary data is to be sourced from individuals that have a banking relationship with a bank in Malaysia.

3.4   DATA COLLECTION METHOD

A survey via self administered questionnaire and electronically disseminated questionnaire was proposed. A self administered questionnaire enables the researcher to clear any possible doubts; ensuring more accuracy and higher response rate (Sekaran, 2003). While electronically disseminated questionnaire may not be as advantageous as a self-administered method in terms of clearing any potential doubts or obtaining higher response rate, however, this method is also selected as it allows the researcher to gain a wider response from a larger population and provides the convenience for respondents (especially working adults) to respond to the questionnaire at their leisure time. Despite the differences, both methods are the most cost effective and less time consuming compared to other methods such as interviews or focus groups (Sekaran, 2003).

3.5   MEASUREMENT OF CONSTRUCTS

Measurement is defined as the assignment of numbers or other symbols to characteristics of objects according to certain pre-specified rules (Malhotra, 1999). In this study, the items used to measure value disciplines and service loyalty constructs were adopted from previous studies as follows :

i. Constructs on Operational Excellence, Customer Intimacy and Product Leadership were taken from Bick et al. (2004).

ii. Constructs on service loyalty which comprises of behavioural loyalty, attitudinal loyalty and cognitive loyalty by Lu and Tang (2001).

A summary of the definition of constructs, measurement items and sources of measurement items for each construct is per Table 3.1.

3.5.1 Measuring Customer's Perception of Value Disciplines

Following the theory of value disciplines, Bick, et al. (2004) had developed 24 items to measure the three value disciplines according to the key values advocated by Treacy and Wiersema in 1993. Though no statistical data is available to compare the reliability of these constructs, however, these items are adopted given it is the only available item to measure the perception of value disciplines. The following sub section presents items used.

Table 3.1: Definition and measurement of constructs

Constructs	Definition		Items of Measurement	Sources
Perception of Value Discipline				
Operational Excellence	The ability of an organization to provide customers with reliable products and services at competitive prices and delivered with minimal difficulty and inconvenience.	1	My bank's electronic banking facilities are secured.	Bick, Brown and Bratt, 2004
		2	My bank's systems allow me to perform my banking needs.	
		3	My bank offers me convenient service.	
		4	My bank delivers its promises on time.	
		5	The efficient behaviour of employees in the bank, instills confidence in me.	
		6	My dealings with my bank are hassle free.	
		7	My bank's operating hours are convenient to me.	
		8	I get fair value for the bank charges that I pay.	
Product Leadership	The ability of an organization to offer customers with leading edge products and services that consistently enhance the customer's usage or application of the product, thereby making other rivals' goods obsolete.	1	My bank offers me a range of credit facilities that meet my requirements.	Bick, Brown and Bratt, 2004
		2	My bank offers me useful online products and services.	
		3	My bank offers me products that reflect my earnings and wealth status.	
		4	My bank develops products based on customers' needs.	
		5	My bank offers me a comprehensive range of investment products.	
		6	My bank provides me with enough information to allow me to make informed product choices.	
		7	My banking products reflect the bank's recognition of my future potential.	
		8	My bank offers me innovative loan facilities.	
Customer Intimacy	An approach to segment and target the market precisely and then tailor offerings to match the demands of the niche market	1	I feel that I can trust my bank with personal information.	Bick, Brown and Bratt, 2004
		2	When I have a problem, my bank shows a sincere interest in solving it.	
		3	My bank has my best interests at heart.	
		4	My bank is able to tailor its products and services to meet my needs.	
		5	My bank actively seeks to provide me with a total financial solution.	
		6	My bank's staff, is sufficiently empowered to solve difficult banking problems.	
		7	My bank understands my individual needs and circumstances.	
		8	My bank follows up to seek my opinion on their service.	

Table 3.1: Definition and measurement of constructs (Continue)

Constructs	Definition	Items of Measurement		Sources
Expectation of Value Discipline				
Operational Excellence	Similar to the above	1	Convenient and efficient service.	Bick, Brown and Bratt, 2004
		2	Hassle free banking.	
		3	Fair value for the bank charges that I pay.	
Product Leadership	Similar to the above	1	Products that reflect my earning and wealth status.	Bick, Brown and Bratt, 2004
		2	Useful online products and services.	
		3	Cutting edge financial products.	
Customer Intimacy	Similar to the above	1	Tailor-made solutions to my financial needs.	Bick, Brown and Bratt, 2004
		2	Individualised and personal service.	
		3	Caring staff members who have my best interest at heart.	
Service Loyalty				
Behavioural Loyalty	Defines loyalty as a behaviour such as repeated purchase towards a certain brand of interest, word of mouth, period of usage.	1	There is a very high probability that I will use this bank again.	Lu & Tang, 2001
		2	I have recommended other people to use this bank.	
		3	I will say positive things to other people about the service provided by this bank.	
		4	I will give positive feedback to this bank.	
		5	I will try new products and services that are recommended by this bank.	
Attitudinal Loyalty	Defines loyalty as a commitment of the customer towards the service relationship or to the service provider in the form of repeat purchase intention and preference.	1	I will continue to use this bank even if the price or service charge has increased somewhat.	Lu & Tang, 2001
		2	I have strong preference for this bank.	
		3	I will continue banking with this bank, regardless of everything being changed somewhat.	
Cognitive Loyalty	Defines loyalty arising from consumer's conscious decision-making process in the evaluation of alternative brands before a purchase is effected. For example choice reduction behaviour and first in mind.	1	This bank is the first choice on my mind when I consider doing my banking transactions.	Lu & Tang, 2001
		2	Assuming that I have only three choices when I need to do banking, this bank must be one of them.	
		3	I regularly conduct my banking needs with this bank for a long period of time.	

3.5.1.1 Measuring Customer Perception of Operational Excellence

Operational excellence is defined by Treacy and Wiersema (1993) as the ability of an organization to provide customers with reliable products and services at competitive prices and delivered with minimal difficulty and inconvenience. Key attributes of operational excellence are thus, price, convenience and quality (summarised in Table 3.2). In the study by Bick et al. (2004), operational excellence is measured using eight items per Table 3.3.

Table 3.2 : Key Values of Operational Excellence

Behaviour of Customer Segment	Customer Values
Price is the dominant factor. Generally not particular about what they buy but are concern about the lowest possible price with minimum hassle.	1. price 2. convenience 3. quality

Table 3.3. Items used to measure Operational Excellence

1. My bank's electronic banking facilities are secured.
2. My bank's systems allow me to perform my banking needs.
3. My bank offers me convenient service.
4. My bank delivers its promises on time.
5. The efficient behaviour of employees in the bank, instills confidence in me.
6. My dealings with my bank are hassle free.
7. My bank's operating hours are convenient to me.
8. I get fair value for the bank charges that I pay.

The items above covers a range of factors that are common in bank patronising research from the quality and security of banking service

especially through internet banking (Gerard and Cunningham, 2001); convenience and fair value of price (Kaynak and Harcar, 2005) which are deemed important aspects of a bank's operations. This is supported by local findings by researchers such as Haron et al. (1994) found fast and efficient services, speed of transactions, friendliness of bank personnel and confidentiality of bank as important operational factors that affect bank selection in Malaysia. Similarly, in a survey of bank patronage factors among Islamic Banking retail customers, Dusuki and Abdullah (2007) note that aside from financial reputation, the other important factors that customers consider in a bank are operational aspects such as quality service, convenience and product price.

3.5.1.2   Measuring Customer Perception of Product Leadership

Product leadership on the other hand, refers to the ability of an organization to offer customers with leading edge products and services that consistently enhance the customer's usage or application of the product (Treacy and Wiersema, 1993). By doing so, organisations are able to make other rivals' goods obsolete and achieve market share with their unique and comprehensive product offerings. Key values are as summarised in Table 3.4.

Table 3.4 : Key Values of Product Leadership

Behaviour of Customer Segment	Customer Values
New, different and unusual product attracts them. Demand the latest, state of the art products or components.	1. innovative 2. new and comprehensive offerings

The constructs developed by Bick et al. (2004) outlines the 8 items to measure customer's perception of product leadership per Table 3.5.

Table 3.5. Items used to measure Product Leadership

1. My bank offers me a range of credit facilities that meet my requirements.
2. My bank offers me useful online products and services.
3. My bank offers me products that reflect my earnings and wealth status.
4. My bank develops products based on customers' needs.
5. My bank offers me a comprehensive range of investment products.
6. My bank provides me with enough information to allow me to make informed product choices.
7. My banking products reflect the bank's recognition of my future potential.
8. My bank offers me innovative loan facilities.

The above items look at various product aspects from credit facilities to online facilities which are offered by banks to retail customers. Internet banking is considered a popular channel among retail banking customers (BNM, 2003). In addition, it also considers the product usability in terms of whether the products offered is reflective of the respondent's current financial positions (Owusu-Frimpong, 1999; Ta and Har, 2000), whether the products meet customer needs and are innovative.

3.5.1.3 Measuring Customer Perception of Customer Intimacy

The third value discipline takes on an approach to segment and target the market by tailoring offerings to match the demands of the niche market (Treacy and Wiersema, 1993). Market leaders focusing on customer intimacy

typically look at the customer's lifetime value and not just the value of a single transaction. Key values summarised by Treacy and Wiersema per Table 3.6.

Table 3.6 : Key Values of Customer Intimacy

Behaviour of Customer Segment	Customer Values
Concern with obtaining precisely what they need (unique requirements) and are willing to pay a premium or make sacrifice in terms delivery time or inconvenience to get what they want.	1. unique offering 2. personalized service

Table 3.7. Items used to measure Customer Intimacy

1. I feel that I can trust my bank with personal information.
2. When I have a problem, my bank shows a sincere interest in solving it.
3. My bank has my best interests at heart.
4. My bank is able to tailor its products and services to meet my needs.
5. My bank actively seeks to provide me with a total financial solution.
6. My bank's staff is sufficiently empowered to solve difficult banking problems.
7. My bank understands my individual needs and circumstances.
8. My bank follows up to seek my opinion on their service.

The items developed by Bick et al. (2004) to measure customer loyalty are as per Table 3.7. As customer intimacy is about knowing your customer and building a relationship, this construct is measured by antecedents of relationship such as trust, commitment, communication and conflict handling. The use of antecedents of relationship as a proxy to measure relationship quality is also supported by other researchers such as Ndubusi, Chan and

Ndubisi (2007) who found significant positive relationship between trust, commitment and conflict handling on relationship quality in a survey among customers of retail banks in Malaysia.

3.5.2 Measuring Customer Expectation of Value Disciplines

In order to measure customer expectation of the value disciplines, Bick et al. (2004) had developed 9 items by using 3 items each to measure each value discipline. The items are as per Table 3.8.

Table 3.8. Items used to measure Customer Expectation of Value Disciplines

1. Convenient and efficient service.	OE
2. Hassle free banking.	OE
3. Fair value for the bank charges that I pay.	OE
4. Useful online products and services.	PL
5. Products that reflect my earning and wealth status.	PL
6. Cutting edge financial products.	PL
7. Tailor-made solutions to my financial needs.	CI
8. Individualised and personal service.	CI
9. Caring staff members who have my best interest at heart.	CI

OE = Operational Excellence, PL = Product Leadership, CI = Customer Intimacy

The above items were selected from the earlier 8 items that were used to measure customer perception of the value disciplines respectively. Though no explanation is provided, but each of the items selected reflect the key values of the value disciplines.

3.5.3 Measuring Service Loyalty

Customer loyalty can be defined in many ways. Dick and Basu (1994) defined customer loyalty as "the strength of relationship between an individual's relative attitude and repeat patronage towards a certain brand, service, vendor or store" while Gremler and Brown (1996) describes loyalty as "the degree to which a customer exhibits repeat purchasing behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service exists". Other researchers described loyalty as the likelihood of a customer returning, making business referrals, providing strong word-of-mouth, as well as providing references and publicity (Chen and Hu, 2010; Bowen and Shoemaker, 1998; Tam, 2004).

3.5.3.1 Dimensions of Service Loyalty

As discussed in Chapter 2, in order to have a more holistic approach to measure customer loyalty, the model of service loyalty by Lu and Tang (2001) is proposed. Lu and Tang (2001) in their research on service loyalty measured service loyalty based on the following behaviours, attitudes or cognitive actions:

a. Repeat purchase behaviour – which is often referred to the continued commitment to buy from a certain entity (Shemwell,Yavas and Bilgin, 1998).

b. Word of Mouth (WOM) is a form of oral communication about a service provider offered by someone who is perceived not to obtain monetary gain from so doing (Ardnt, 1968; Gremler and Brown, 1998). WOM is an effective tool to encourage customer loyalty as personal recommendations received about service providers are often very influential in consumers' purchase decisions (Murray, 1991; Heskett, Sasser and Schlesinger, 1997).

c. Period of usage – means the frequency or time interval which the customer keeps consuming the particular service from the service provider continuously. This is common indicator for assessing loyalty as it reflects long-term characteristics of service loyalty (Kendrick, 1998).

d. Price tolerance – this refers to the inelasticity of demand due to price. Loyal customers are often founds to be willing to pay a premium whenever they perceived risk is high when asked to switched (De Ruyter, Wetzels and Van Birgelen, 1999).

e. Repeat purchase intention – customers are loyal when they have repeat purchase intention from the same service provider with affective commitment (Shemwell et al, 1998).

f. Preference – a measure of attitudinal loyalty as 'true' loyalty can only be attained when the customer expressed strong and positive preference as well as high repeat patronage on an entity (Zeithaml, Berry and Parasuraman, 1996; Dick and Basu, 1994).

g. Choice reduction behaviour – customers with a strong loyalty would appear to reduce the search motivation and eventually forgo other alternatives and reduce competitive efforts on decision making (Dick and Basu, 1994; Gremler and Brown, 1996).

h. First in mind – the cognitive action suggests that extremely loyal customers will be ideally limited to only one choice that should be the first choice in their minds (Caruana, 1999). Therefore, customers who are loyal will always consider that particular service provider first.

By categorizing service loyalty into 3 distinct parts i.e. behavioural, attitudinal and cognitive loyalty; managers are able to employ different marketing strategies to capture different type of loyal customers (Lu and Tang, 2001). For instance, to create cognitive loyalty, branding and customer experience is important compared just advertising which may be able to capture behavioural or attitudinal loyalty at that point of time.

Lu and Tang had earlier tested the model which comprises of 11 items (as per Table 3.9) among regular customers of phone banking service and western restaurant service. Cronbach alpha values of 0.82, 0.65 and 0.82 were obtained respectively for behavioural loyalty, attitudinal loyalty and cognitive loyalty. Although one of the values were marginally below the suggested cutoff line of 0.70, it is still retained as a reliable measure of service loyalty because the items contribute significantly to this dimension and show high item-to-total correction.

Table 3.9. Items used to measure Service Loyalty

Items	Loyalty Construct
1. There is a very high probability that I will use this bank again.	Behavioural Loyalty
2. I have recommended other people to use this bank.	
3. I will say positive things to other people about the service provided by this bank.	
4. I will give positive feedback to this bank.	
5. I will try new products and services that are recommended by this bank.	
6. I will continue to use this bank even if the price or service charge has increased somewhat.	Attitudinal Loyalty
7. I have strong preference for this bank.	
8. I will continue banking with this bank, regardless of everything being changed somewhat.	
9. This bank is the first choice on my mind when I consider doing my banking transactions.	Cognitive Loyalty
10. Assuming that I have only three choices when I need to do banking, this bank must be one of them.	
11. I regularly conduct my banking needs with this bank for a long period of time.	

3.6 QUESTIONAIRE DESIGN

A structured questionnaire was developed for the purpose of the survey using constructs from Bick, et al. (2004). The questionnaire was tested for face validity by pilot testing among a few respondents to gauge the clarity of the questions against their understanding. Feedback received, were then used to revise the layout and presentation of the questionnaire before dissemination.

The questionnaire was distributed in two ways. Firstly, it was self-administered. This method was selected as it enables a higher percentage of response rate. Secondly, the questionnaire was also distributed electronically via email to UM yahoo groups. Respondents were also encouraged to forward the questionnaire to their friends and family. This method offers the convenience to the respondents to fill up the questionnaire at their leisure time and allows the researcher to reach out to a larger segment market.

In terms of layout, the questionnaire comprise of five parts. A copy of the questionnaire is available in Appendix A. Part A examines the respondent's value perception about the values delivered by their main banker while Part B investigates the respondent's expectation in terms of their main banker's value disciplines. In Part C, respondent's preference of value disciplines (in the order of importance) is solicited while in Part D, respondents are required to answer a series of questions relating to their service loyalty. Lastly, Part E provides the researcher with information pertaining to the respondent's profile and bank usage habits.

In order to avoid ambiguity, the definition of main banker is provided upfront as follows; the bank which the respondent conduct most of their normal banking activities or the bank which they hold an operating / salary account or the bank which they have the most long-standing relationship.

The questionnaire comprises of 24 items to measure respondent's perception, 9 items to measure expectation and 11 items to measure service loyalty. Altogether there were 44 items and 5 variables. All 44 items were

measured based on 7 point Likert scale, in ascending order starting with 1 for "strongly disagree" to 7 for "strongly agree". The 7 point Likert scale was displayed in a numerical format at the beginning to the section to aid respondents in answering the items. For Part C, where respondents were asked to rank order their preference of value disciplines according to descending scale starting with 3 for 'very important' to 1 for 'less important'.

3.7 SAMPLING TECHNIQUE

Under this section, the sampling technique is discussed which includes the method adopted, sample size as well as sample selection.

3.7.1 Sampling Method

Non probability sampling using convenience sampling was adopted. The cross sectional survey was conducted starting from July to August 2010. As the survey is targeted at any individual consumers that maintain a banking relationship with either a local or foreign bank in Malaysia, the questionnaire was distributed to the general public within Klang Valley. In addition, as Klang Valley holds the most concentration of local and foreign banks, the response would be more representative of the population in Malaysia as compared to distributing the questionnaire in other places / states.

The sampling method used in this study differs slightly from the previous research by Bick et al. (2004). As Bick et al. attempts to analyse the perception of local banks in South Africa a cluster sampling was performed whereas in this study, a convenience sampling is undertaken.

3.7.2 Sample Size

In order to ensure reliability of results, a convenience sample size of N=500 was targeted. Tabachnick and Fidell (2001) proposes a sample size of N > 50 + 8m (where m = no. of independent variables) for multivariate analysis. Hence, based on the number of variables, the proposed sample size is expected to be sufficient.

3.7.3 Sample Selection

In this study, primary data is collected using self-administered and electronically disseminated questionnaires to respondents from the targeted sample size of UM MBA students and alumni. UM MBA students and alumni represent a suitable sample population as most if not all students have an existing operating account or credit card with a financial institution in Malaysia. This is because these students are mainly working adults and for those who are full time students, the pre-requisite would be to have an account with an financial institution in Malaysia to pay for school fees.

3.7.4 Data Analysis Techniques

The primary data collected is analysed using SPSS. Though this study attempts to replicate an earlier research by Bick, et al. (2004), however, the data analysis technique used in this study differed slightly from the previous research due to the difference in sample method and objectives. As the earlier research attempts to evaluate the difference in perception of value disciplines among four banks in South Africa, correspondence and cluster analysis was used.

In this study, hypothesis testing is used to explain the nature of relationships and to establish if there are differences among groups or the independence of certain variables. A correlational and regressional study is then undertaken in order to establish relationships between independent variables and dependant variable. Significance of the relationship is determined based on the cut off at $p < 0.05$.

In order to examine the prominence of value disciplines among respondents as well as the difference in perception and expectation, paired sample t-test is used. The relationship between the bank psychographics (i.e. type of bank and facilities) and service loyalty were measured using two way analysis of variance (ANOVA).

3.8   CHAPTER SUMMARY

This chapter presents a summary of testable hypotheses which was derived from the proposed framework in Chapter 2. Subsequently, data collection method and measurement of constructs was discussed. This is followed by a narration on the questionnaire design, sampling technique and data analysis technique.