

## **Chapter 3**

### **Research Methodology**

#### **3.1 Introduction:**

This research was conducted on quantitative research method bases; which had identified by Maxwell (1996); as an inductive approach. The research process involved a literature review to identify the dependent and independent factors used as well as the relationship among them; further more identifying the service quality dimension in retail banking.

To conduct the study, a self-designed questionnaire was used to collect the data. A(Likert) interval scale used to describe the service quality and customer satisfaction, also a 5 itemized rating scale used to describe customer expertise; and for value perceptions we use category scale, at the end of the questionnaire a section about customer's profile (demographics) was included; such data will help to describe the sample characteristics after data analysis.

A pilot test with 50 respondents was done in order to asses question clarity, respondent understanding of questions meaning , to identify and eliminate any problems, helping to make corrective changes or adjustments before actually collecting data from the target population. Factor analysis was used to analyze dimensions of service quality, which in turn used as inputs in regression analysis for predicting customer satisfaction with bank.

In general a few methods had been adopted in collecting data, using questionnaire, sampling furthermore using analysis technique to examine the collected data.

### **3.2 Development of model and hypotheses:**

“A hypothesis can be defined as a tentative explanation of the research problem, a possible outcome of the research, or an educated guess about the research outcome.” (Sarantakos, 1993: 1991). An index for customer satisfaction measurements was constructed; where:

CS= customer satisfaction

SQ = service quality

SV= service value,

CD= core dimension of service quality

RD= relational dimension of service quality

TD= tangible dimension of service quality

C\_ex = customer expertise

G = gender of respondent

A= age of respondent

Ed= education of the respondent

Occ. = occupation of the respondent

M\_inc = monthly household income of the respondent

Eth. = dummy variable, Arab=1 otherwise = 0

YinM= number years respondents had been staying in Malaysia.

A linear regression used to measure the strength of association between customer satisfaction and the independent variables; and the following regression model was used to show how far the independent (explanatory) variables have an effect on the level of customers' satisfaction:

$$CS = \alpha_0 + \beta_1 CD + \beta_2 RD + \beta_3 TD + \beta_4 SV + \beta_5 C_{ex} + \beta_6 Eth. + \beta_7 CD \times SV + \beta_8 RD \times SV + \beta_9 TD \times SV + \epsilon_i$$

While the analysis of variance (ANOVA) was undertaken to analyze the impact of the demographic factors on customer satisfaction.

### **3.3 Selection of Measures:**

The cores, rational and tangible dimensions of service quality were adopted from previous literature dealing with service quality and customer satisfaction (Levesque and McDougall, 1996; Naser et al., 1999). The service quality attributes used in this research (a total of 17) are set out in Table (1). In this study five-point Likert-type scale from 1 (“strongly disagree”) to 5 (“strongly agree”) was used to measure service quality, customer expertise and customer satisfaction. Measuring product class expertise (Customer expertise); was adopted from literature dealing with customer expertise (Cowley, 1994), were likely to influence the degree of customer satisfaction. Value measurement adopted from Zeithaml (1988) where four consumer definitions of product or service value were recognized. Basically customer satisfaction composes of overall attitudes that customers have towards the bank based on the various interactions between the bank and the customer (Levesque and McDougall, 1996) ; customers were asked to

state their satisfaction with the bank on a scale from 1 (very dissatisfied) to 5 (very satisfied).

Table (1) the 3 Service quality dimensions and related attributes

1	2	3	Description statement	attributes
SQ- CD1			When my bank promises to do something by a certain time, it does so	Reliability
SQ - CD2			My bank performs the service right the first time	Reliability
SQ - CD3			My bank provides the services at the time it promises to do so	Reliability
SQ - CD4			My bank performs the services accurately	Reliability
SQ - CD5			My bank tells you exactly when services will be performed.	Reliability
	SQ-RD1		Employees in my Bank are always willing to help	Responsiveness
	SQ-RD2		Employees in my Bank are consistently courteous	Assurance
	SQ-RD3		My bank gives me individual attention	Empathy
	SQ-RD4		Employees in my bank understand my specific needs	Empathy
		SQ-TD1	The fiscal facilities of my bank are visually appealing	Tangibles
		SQ-TD2	Parking facilities provided to customers are adequate	Access
		SQ-TD3	My bank personnel are neat in appearance	Tangibles
		SQ-TD4	My bank has convenient branch locations	Access
		SQ-TD5	My bank offers a complete range of services	Tangibles
		SQ-TD6	My bank provides easily understood statements	Assurance
		SQ-TD7	It is very easy to get into and out of my bank quickly	Access
		SQ-TD8	My bank personnel have the required skills and knowledge	Assurance

According to Levesque and McDougall, 1996; Naser et al., 1999 ; three common measures of customer satisfaction were used to conduct the study as shown in Appendix (9) details the items used to measure each construct.

### **3.4 Sampling design and data collection:**

The research covers the banking customers in Kuala Lumpur and Selangor in Malaysia in order to explore customer satisfaction among two ethnic groups of customer: Arab and Non-Arab towards banking services.

Arab bank customer can be defined as a member of a Semitic, Arabic-speaking people originally inhabiting the Middle East, while the Non- Arab bank customer can include the local plus the foreigners who is working or studying in Malaysia. Target sample was chosen to conduct the study and can cover a wider and different range of bank customers so that can reflect the effect of demographic factors on customer satisfaction.

Bank customers were surveyed in different places between Selangor and Kuala Lumpur. The survey was administrated on a convenience sampling basis. Two data collection methods were used; personally or self-administrated questionnaire and electronically administrated (online) questionnaire, and more than 3 weeks time needed to distribute and collect the questionnaire. The questions were divided into 5 sections. Section 1 provides description of service quality; section 2 covers value perceptions of the bank customer; section 3 introduces customer expertise descriptions; section 4 is on customer satisfaction and section5 is covering the demographic factors (respondent's profile).

Basically, we get 93 online responses, also of the 300 self-questionnaire distributed 194 responses were returned; only 187 completed questionnaires were usable for data

analysis, and 7 responses were discarded due to incomplete response. As result (280) responses from bank customers were included in data analysis process.

### **3.5 Data analysis Techniques:**

The Statistical Package for Social Science (SPSS 16.0) was used to analyze the collected data. Relevant techniques were applied to analyze the data such as; reliability analysis, frequencies, means, and ANOVA analysis, percentage and regression. The hypothesized model testing using SPSS 16.0 will be discussed in chapter 4.