

The Dimension of Service Quality and Its Impact on Customer Satisfaction, Trust, and Loyalty: A Case of Malaysian Banks

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ABSTRACT

Banking is an important industry in a nation but with the intense competition of various banks available, it is the services provided that crucially distinguishes the banks. Previous studies have examined the relationship between service quality, customer satisfaction, perceived value, loyalty, trust and image. These studies adopted the SERVQUAL model to measure service quality in banks which may be five dimensional. This study proposes to measure service quality by applying six dimensions: tangibles, empathy, reliability and security, price, online banking and convenience. These six dimensions are used to examine the relationship between service quality, perceived value, customer satisfaction, bank image, customer loyalty and customer trust among bank customers in the Klang Valley, Malaysia. Data were analysed by structural equation modelling (SEM) in order to test all the relationships between the variables in the model. The findings support the proposed hypotheses, which are consistent with the theoretical framework. The results indicate that the dimensions of tangibles, empathy, reliability and security, and online banking have a significant positive relationship with perceived value. The analyses show that service quality, customer satisfaction, bank image and trust are important determinants of loyalty.

Keywords: Customer Loyalty, Customer Satisfaction, Image, Malaysia, Service Quality, Trust

JEL Classification: M30

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1. Introduction

In the banking sector, the whole range of business activities and generation of income are closely related to its customers. Customers are demanding and they often become critical of the quality of the services and products provided for their experience, thus maintaining customers become an important issue. To retain customers and to protect and sustain long-term customer interest, banks need to maintain an ongoing relationship with their customers. One way to do that is to understand the needs of bank customers, thereby serving them satisfactorily but to do that, banks have to improve their service quality. Berry, Parasuraman, and Zeithaml (1988) state that service quality is a differentiator and the most powerful and competitive weapon and it is a strength of leading service firms.

Many studies have been conducted in the need to understand the nature and dimensions of service quality and to enhance customer loyalty across many different service settings and countries (i.e. Robinson, 1999; Behara, Fisher, & Lemmink, 2002; and Ladhari, Ladhari, & Morales, 2011). However, the results indicate that the service quality (SERVQUAL) model and its measurement scale are changing in conformity to the different types of service or country. The five dimensions (tangibles, reliability, responsiveness, assurance and empathy) of the service quality approach developed by Parasuraman, Zeithaml, and Berry (1985) appears to be less universally applicable (Gilmore, 2003). Expanding on that, Bahia and Nantel (2000) develop a bank service quality model containing six dimensions (effectiveness and assurance, access, price, tangibles, service portfolio, and reliability) for retail banking needs. Conversely, Guo, Duff, and Hair (2008) propose four dimensions (reliability, human capital, communication and technology) to capture service quality in the Chinese banking sector. This phenomenon seems to suggest that what constitutes as dimensions of service quality differ from sector to sector, and from country to country. For the purpose of this study, the service quality model is further modified so as to assess the level of service quality in the Malaysian banking sector. In this model, the convenience, online banking and price dimensions are included so as to measure their impact on service quality. Consequently, the dimensions applied in the service quality model that is adopted for this study are tangibles, empathy, reliability and security, convenience, online banking, and price.

Given the high competition that exists in the banking environment, any bank that wants to survive well has to take into consideration the

retention of its customers. According to Caruana and Malta (2002), banks should provide a service that can result in a high level of customer satisfaction if they want to maintain a long-term relationship with their customers. Garbarino and Johnson (1999), and Gustafsson, Johnson, and Roos (2005) investigated customer satisfaction and trust and their effect on loyalty. Hoq, Sultana, and Amin (2010), and Amin, Isa, and Fontaine (2013) examine customer satisfaction and its effect on image, customer trust and customer loyalty for Islamic banks in Malaysia. A quick search indicates that studies which focus on the mediating role of trust and bank image between customer satisfaction and loyalty are limited. Therefore, it is also important to study customer satisfaction, and the mediating effect of bank image on the relationship between customer satisfaction, trust and loyalty for Malaysian commercial banks.

In Ndubisi and Chan (2005), factor analysis was employed to determine the key dimensions of relationship marketing on the perceived quality of bank-customer relationship, and on customer satisfaction. Kumar, Fong, and Manshor (2009) use descriptive statistics and factor analysis to assess the level of the service quality of banks. Interestingly, these studies do not include the perceived value and its relationship to customer satisfaction in the banking sector. According to McDougall and Levesque (2000), it is appropriate to determine the relationship of perceived value to customer satisfaction. Angur, Natarajan, and Jahera (1999) find that perceived value plays a significant role in the Indian banking sector. To address this gap which exists in Malaysia, perceived value in the service quality of banks is thus incorporated into this study. This study begins by first exploring the dimensions of service quality from the customers' perspective for the purpose of establishing the relationship between service quality and perceived value. Next, it examines staff competency and customer satisfaction as well as customer trust and its effect on customer loyalty. Finally, this study also aims to examine the mediating roles of perceived value between service quality and customer satisfaction, and the mediating role of bank image between customer satisfaction and customer trust.

The outcome of this study contributes to the existing literature in that the service quality model becomes even more refined in terms of dimensions used. Previous studies focusing on service quality in the Malaysian banking sector use the SERVQUAL approach but the current study uses a modified bank service quality model which consists of six dimensions namely tangibles, empathy, reliability and security, convenience, online banking, and price. The online banking dimension

is included because technological innovations demand that a bank distinguishes itself from its competitors (Abdullah & Kassim, 2009) in that manner. In addition, Parasuraman and Grewall (2000) emphasise the importance of technology in shaping buyer-seller interactions and recommend further investigation into the impact of technology on service quality which is addressed by the current study. Further, since the study by Kumar et al. (2009) reveals the importance of convenient banking facilities which contributes towards customer satisfaction, the convenience dimension was also added to the modified service quality model for bank customers. According to Awan, Bukhari, and Iqbal (2011), the convenient availability of financial service is ranked high on the list of priority by customers for service quality in the banking sector of Pakistan. Likewise, Bahia and Nantel (2000) and Host and Knie-Andersen (2004) also include the price dimension in developing measures of service quality in financial institutions. Therefore, the online banking, price and convenience dimensions are included in this study so as to better assess the service quality of a bank.

The paper is organised as follows. Section 2 discusses the relevant literature and section 3 discusses the relationship between the variables. Section 4 describes the data and methodology used in this study and section 5 presents the results. Section 6 is the discussion while section 7 provides the summary and conclusion of this study.

2. Literature Review

2.1 Service Quality Dimensions

The conceptualisation of service quality includes both the service outcome and service delivery process. The service outcome is a consumer's evaluation concerning the result of a service production process (Lehtinen & Lehtinen, 1991). The service delivery process concerns how the end result of the process is transferred to the customer (Parasuraman et al., 1985). This comprises the way bank staff provide and perform their respective tasks, what they say, and their service delivery. Parasuraman et al. (1985) define service quality as a form of attitude that results from the comparison of service expectation and performance.

Previous studies may agree that service quality forms a multidimensional construct but there is no firm agreement regarding the generic dimensions. For example, LeBlanc and Nguyen (1988) identify three dimensions of service quality (physical, corporate, and interactive).

However, the measure introduced by Parasuraman et al. (1985; 1988) known as SERVQUAL consists of five dimensions (tangibles, empathy, reliability, responsiveness, and assurance). Of the five dimensions, tangibles discusses physical facilities, equipment, and the appearance of personnel; empathy refers to understanding and being concerned with the needs of individual customers; reliability is largely concerned with the ability to perform the promised service in a dependent and accurate manner; responsiveness involves the willingness of the staff to assist customers and provide prompt service; while assurance relates to the competence of the system and secure service.

Many studies have adopted the SERVQUAL model to measure service quality in various business settings, including the banking industry. Several studies (i.e. Kwon & Lee, 1994; Wang, Lo, & Hui, 2003; and Kumari & Rani, 2011) used the SERVQUAL with five dimensions to examine the quality of bank services. There are also studies that used a modified SERVQUAL model to measure service quality in financial institutions. Host and Knie-Andersen (2004), for example, use the SERVQUAL dimensions together with the price dimension to measure service quality in financial institutions. Guo et al. (2008) develop a new measure for service quality in the Chinese banking by using SERVQUAL as a starting point. They identify four dimensions of service quality namely, reliability, human capital, technology, and communication. Abdullah and Kassim (2009) use the dimensions encompassing human skills, online banking, tangibles, and empathy to measure the service quality in Qatari Islamic banks.

2.2 Perceived Value

Perceived value is conceptualised as the customer's overall evaluation of what is received and what is given (Zeithaml, Bitner, & Gremler, 2009) or a trade-off between perceived benefits and costs (Lovelock & Wirtz, 2011). Cronin, Brady, and Hult (2000) state that perceived value consists of two parts - the benefits received (economic, social, and relationship) and the sacrifices made (price, time, effort, risk, and convenience) by the customer. Most studies agree that perceived value constitutes the evaluation made by consumers on the utility of the service/product according to their perception of what had been received and what had been given (Kotler & Keller, 2011).

Andreassen and Lindestad (1998) find that when evaluating the service value, customers take into account the quality of a service. It is also thought that a higher service quality will result in an increased

perceived value. McDougall and Levesque (2000), and Oliver (2010) indicate that perceived value is an important driver of customer satisfaction and the subsequent consequences for post-purchase behavioural intention. In this study, perceived value refers to the overall perception and concluding remarks of the customer regarding the bank's services. The overall remarks of a customer are based on his/her expectations regarding various aspects of the service quality and the actual service he/she received from the bank. Korda and Snoj (2010) find that the perceived value variable has a potential to be a mediating variable in the relationship between service quality and customer satisfaction in the context of the banking industry.

2.3 Customer Satisfaction

Customer satisfaction is a result of the provision of services and goods that either meets or exceeds customer needs. The literature discusses two approaches to operationalise satisfaction, namely transaction-specific and cumulative satisfaction. Transaction-specific satisfaction is identified as a customer's evaluation of his/her experience with a particular service/product transaction (Olsen & Johnson, 2003) whereas cumulative satisfaction is the customer's overall consumption experience with a product/service over time. Many of the previous studies on customer satisfaction use the cumulative satisfaction concept (Gupta & Zeithaml, 2006).

When a customer is evaluating the service performance of a firm, he/she compares his/her expectation prior to purchase or consumption with the actual service provided. If the service/product performance equals or is above his/her expectation, satisfaction is guaranteed. However, when the service/product performance is below expectation (a negative disconfirmation), the customer feels dissatisfied (Oliver, 1980). According to Reichheld (1993), satisfied customers are more likely to recommend the bank to others, thereby reducing the bank's cost of providing even more services because of fewer complaints. Studies have proven that the level of satisfaction experienced by customers in respect of a service/product will influence their decision to remain as a customer of the bank (e.g. Levesque & McDougall, 1996; Amin et al., 2011).

2.4 Loyalty

The conceptualisation of loyalty is discussed in the literature in two ways: behaviour and attitude (Baumann, Elliott, & Hamin, 2011).

Behaviour loyalty refers to customer's behaviour to repurchase such as purchasing frequency and proportion of purchase while attitude loyalty refers to the emotional and psychological state of the customer to repurchase (Reichheld, 1993). It can be concluded that customer loyalty is an intended behaviour that is related to a product/service or the organisation. Oliver (1999, p. 34) defines loyalty as "a deeply held customer commitment with a product/service that is reflected by his/her purchase repetitions of the same brand while ignoring any other influences to leave that brand". Overall, the literature describes loyalty as when a customer repeatedly purchases a service/product over time, or when a customer has favourable attitudes towards a service/product (Wong & Sohal, 2003; Baumann et al., 2011). In this study, loyalty refers to the continuing patronage of a particular bank by a customer over time (Ladhari et al., 2011).

According to Caruana and Malta (2002), a bank customer often develops an attitude towards a purchasing behaviour that is based on past experience. It is this past experience that affects customer retention of the purchase or his/her desire to switch. Bearden and Teel (1983) state that customer satisfaction is important as it guarantees purchase repetition and customer loyalty. When a customer is loyal to a bank, he/she will stay with the same bank, continuously using it, making purchase of new services with the bank, and recommending the bank's services to others. On the other hand, when a customer is dissatisfied with the bank's services/products, he/she will react negatively and switch to another bank (Amin et al., 2011).

2.5 Image

According to Keller (1993), corporate image is the perception a customer has of a company as a result of his/her memory of that company. Nguyen and Leclerc (2011) define image as the range of associations that comes to mind when a customer hears the name of a company. Thus, a well-known image is an asset because it influences the customers' perception of a firm. The literature suggests that image consists of two components namely, functional and emotional (Kennedy, 1977). Functional image refers to tangible dimensions that can be identified and measured whereas emotional image refers to the psychological aspects of an individual customer's experiences and attitude towards an organisation (Amin et al., 2013).

Andreassen and Lindestad (1998) find that corporate image will influence a customer's preference of a company when service attributes

are difficult to evaluate. An organisation will have a good image if the customer believes that he/she is receiving a high value service/product. Many studies, such as Nguyen and LeBlanc (1998), and Ball, Coelho, and Machas (2004) indicate that customer satisfaction is significantly related to image. Bontis, Booker, and Serenko (2007), and Amin et al. (2013) find that bank image can be improved via customer satisfaction. The results of the study by Hu, Kandampully, and Juwaheer (2009) show that image serves as an important factor that influences customer loyalty.

2.6 Trust

In the business environment, trust is a relevant factor in a collaborative relationship. A customer's trust is a confident belief in the service provider (Garbarino & Johnson, 1999). According to Mcknight and Chervany (2002), trust has three characteristics - ability, benevolence and integrity. Ability refers to the belief of the customer (trustor) that the service provider (trustee) has the capability to fulfil what the service provider needs to do. Benevolence is the extent to which the service provider is believed to do good to the customer, besides its motive to earn a profit. Integrity refers to the customer's belief that the service provider makes good-faith agreements, acts ethically, and provides true information.

Within the banking sector, trust means that the bank is trustworthy, honest, practices integrity and is reliable in delivering services to its customers. Studies such as Garbarino and Johnson (1999), Singh and Sirdeshmukh (2000), and Gounaris (2005) show that trust is an important factor that influences the intention of the customer, and develops and sustains long-term customer relationships. The high level of trust leads to future potential of the relationship between the customer and the service provider. Amin et al. (2013) examine the role of customer satisfaction and customer loyalty for Islamic banks and they find that when the customer is unwilling to trust the bank, the customer is also unable to be loyal.

3. Relationships between the Variables

In this study, a modified measurement for bank service quality is employed so as to capture a customer's perceptions of service quality. Service quality is measured by asking the respondents to give a score for each of the performance items in relation to their expectations. The

six dimensions for bank service quality measurement considered in this study are:

1. The dimension "tangibles", which assesses the surrounding physical/objects (e.g. physical facilities, equipment, and communications materials) and objects (e.g. the appearance of banks);
2. The dimension "empathy", which assesses the bank's ability and effort to meet the needs of each customer;
3. The dimension "reliability and security", which measures the bank's ability to deliver the services accurately and secure services;
4. The dimension "price", which measures the cost of delivery of the services;
5. The dimension "online banking", which assesses the ease of use of the bank's online service and assurance; and
6. The dimension "convenience", which assesses the bank's ATM location and parking facilities.

Literature looking at service quality reveals that bank managers need to be aware of the fact that the convenience factor may influence customers' satisfaction (Levesque & McDougall, 1996). Almosawi (2001) confirms that customers emphasise on factors such as banks being located in a convenient spot, the presence of 24-hour ATMs, and the availability of parking space in the vicinity of the bank premises. Berry, Seiders, and Grewal (2002) find that the convenience of service influences a customer's evaluation of a particular service which includes both satisfaction and perceived values. Kumar et al. (2009) include an additional dimension, convenience, to the SERVQUAL model. Their finding indicates that the convenience factor plays a significant role in delivering the service quality of banks in Malaysia. In this study, convenience is the ability to access the bank's services through its location, operating hours, ATM location, and the presence of a complete range of available services.

Internet technology has transformed the conventional banking service to such an extent that instead of a customer visiting a bank, banking services are now available at the customer's choice of time and place. Dean (2002) argues that online banking is one of the strong predictors of the satisfaction and loyalty levels of customers. Abdullah and Kassim (2009) include the online banking dimension to examine the service quality in Qatari Islamic banking. Based on prior literature, the online banking dimension is added into the current service quality

model so as to investigate whether online banking influences customers' perception concerning the quality of services, and their corresponding satisfaction with a bank.

Zeithaml (1988) argues that the model should further include monetary as well as non-monetary dimensions. Varki and Colgate (2001) discover that there is a significant relationship between price and customer satisfaction. According to Host and Knie-Andersen (2004), there are very few studies that include the price effect in the service quality model; thus they encompass the dimension of price in their study. Their result indicates that price perceptions have a positive impact on customer satisfaction, thus it is suggested that price be used as an independent variable to describe customers' satisfaction. Bolton and Myers (2003) agree after noting that customers are concerned with the costs of obtaining the services.

Prior literature (e.g. Andreassen & Lindestad, 1998; Angur et al., 1999; McDougall & Levesque, 2000; and Cronin et al., 2000) indicates that service quality often leads to perceived value which is defined as a judgement or valuation made by the customer when making comparison of the benefits of a service/product in relation to its costs (Zeithaml, 1988; Zeithaml et al., 2009; Lovelock & Wirtz, 2011). This study posits that perceived value relates positively with the six bank service quality dimensions.

Based on the literature review, the variables noted in the context of this study are conceptualised. First, the tangibles dimension hereby refers to the surrounding objects while the reliability and security dimension focuses on the accuracy of the services and secure transaction management. The price dimension includes adequate explanation on the service charges, clear itemisation of fees and service charges in bank statements, and acceptable fees. The empathy dimension relates to the care and individual attention given by the bank staff to the customer while convenience is defined as the presence of a complete range of available services, with convenience locational accessibility and operating hours cited as important. Online banking refers to the online services which provides easy accessibility of banking services based on the customer's time and place, clear instructions, short waiting time and adequate security features.

The dimension of customer satisfaction is conceptualised as customer satisfaction with the bank and overall satisfaction with the services offered by the bank. Customer loyalty is conceptualised as a customer's continuing patronage of a particular bank over a period of

time. Bank image is operationalised based on the dimensions of image attributes. The attributes of a bank's image is defined as a customer's perception and his/her corresponding memory. Trust is defined as the indicator of customer's confidence in the quality and reliability of the service provider. Staff competency is conceptualised as staff's possession of the required skills and knowledge in performing a task thus providing the services. Previous studies consider the effect of staff competency as a dimension of service quality, however, this study suggests that staff competency will influence customer satisfaction directly. Therefore, from the above literature review, this study proposes the following hypothesis:

H_{1a-f}: The dimensions of bank service quality are positively related to perceived value.

Zeithaml (1988) suggests that satisfaction relies on perceived value; if a customer is of the opinion that he had received "value for money", he would experience a higher level of satisfaction as compared to another customer who thinks otherwise. Studies done by Chen and Chang (2005), and Glaveli, Petridou, Liassides, and Spathis (2006) include perceived value as a dimension in studying the relationship between service quality and customer satisfaction. They find that perceived value directly influences the level of customer satisfaction. In the context of this study, customer satisfaction refers to the accumulated experience of a customer's purchase and consumption experience. Based on the review of previous studies, this study hypothesises that perceived value has a significantly positive effect on customer satisfaction. Higher levels of perceived value will lead to higher customer satisfaction.

H_{2a}: Perceived value is positively related to customer satisfaction.

Prior research has documented that satisfaction is affected by competence which is measured by commitment and communication. Commitment refers to a way of responding to a customer's needs (Kholi & Jaworski, 1990) and communication means to provide the customer with timely and reliable information. Thus, competence is expected to be a central expectation within a business relationship, and fulfilling this expectation is seen as driving customer satisfaction (Selnes, 1998). A study by Manrai and Manrai (2007) suggests that the management of banks should be aware of factors which can enhance the competency and

efficiency of their staff. Staff competency refers to the possession of the required skills and knowledge to perform a service. It is undeniable that bank staff need to have the ability to provide good advice to customers for instance on how best to operate businesses, or effective ways to solve their financial problems related to business. This ability of the staff to assist customers with their problems can also affect customer satisfaction because satisfaction is an evaluation of an outcome that is compared to an expectation. In this regard, staff competency is seen as an interactive dialogue between the bank and its customers which can lead to a shared understanding of performance outcome and expectations (Selnes, 1998). A higher level of staff competency will lead to a correspondingly higher level of satisfaction. Thus, this study hypothesises that:

H_{2b}: There is a positive relationship between staff competency and customer satisfaction.

Generally, it is assumed that if a customer is satisfied with a service, he/she is likely to repeat using a particular service if not to try other services. Previous studies (e.g. Nguyen & LeBlanc, 1998; Kim, Lee, & Yoo, 2006; Abdullah & Kassim, 2009; and Amin et al., 2011) conclude that higher satisfaction leads to customer loyalty which, in the context of this study, is taken to mean an intention to repurchase a service/product from the same bank. Customer satisfaction acts as a mediator in the link between service quality and loyalty as a higher level of satisfaction can lead to a higher level of customer loyalty. Thus, the relationship between customer satisfaction and customer loyalty is hypothesised as:

H₃: Customer satisfaction is positively related to customer loyalty.

Na, Marshall, and Keller (1999) argue that image cannot be measured by attribute measurement alone. They claim that it must include measurement of consumers' perceptions of the value and benefits attainable from using the product/service. This denotes the importance of examining the effect of image based benefits on consumer's satisfaction. Worcester (1997) defines bank image as the net result of the interaction of all experiences, impressions, beliefs, feelings and knowledge people have about a bank. Studies such as those done by Nguyen and LeBlanc (1998), Ball et al. (2004) and Bontis et al. (2007) indicate that customer satisfaction has a significantly

positive relationship with corporate image. Similarly, Amin et al. (2013), who focus on Islamic banks in Malaysia, find that higher customer satisfaction improves the bank's image. Previous studies (i.e. Osman, 1993; Andreassen & Lindestad, 1998) propose that loyalty is determined by a firm's image while Ball et al. (2004) and Brunner, Markus, and Klaus (2008) find that a bank's image can indirectly effect loyalty through trust. Garbarino and Johnson (1999) maintain the importance of trust in developing customer loyalty. In this study, image refers to an accumulated attitude that is directed towards the bank, and bank image is a latent variable in the development of customer loyalty. Based on the above discussion, the following hypotheses are proposed:

- H₄: Customer satisfaction is positively related to bank image.
- H₅: Bank image is positively related to customer trust.
- H₆: Customer trust is positively related to customer loyalty.

4. Research Methodology

4.1 Sample

The target respondents were bank customers who have experience with online banking transactions. To ensure that the survey instrument reached the target, respondents were asked the following questions before they were allowed to proceed to the survey questionnaire: Do you have a bank account? Do you use online banking services? Convenience sampling was adopted as the approach to collect data as it was not viable to obtain the socio-demographic data of all the bank customers. Thus, walk-in customers of the banks were approached for the survey at the entrance of banks which are located in the Klang Valley area of Malaysia. A self-administered interview questionnaire was designed for this study. Respondents were asked to fill in the survey questionnaire before they entered the bank. This is done in accordance to Culiberg and Rujsek (2010)'s suggestion that customers who complete the questionnaire before entering a particular bank would be able to provide their overall impression of the service quality of the bank more reliably. A pilot study using the same questionnaire was conducted on 30 respondents so as to ensure that the questionnaire items were appropriate to the research objectives. A total of 900 questionnaires were distributed in different branches of 15 banks, of which 748 usable responses were finally compiled for analysis.

4.2 Measurement

The instrument used to measure the constructs involved in this study is adapted from the existing literature so as to suit the needs of a study that involves looking at bank customers' satisfaction. Each question item is set with a seven-point Likert-type scale ranging from strongly disagree (1) to strongly agree (7). The questionnaire is divided into two parts: part one focuses on the respondent's demographic variables, such as age, gender, monthly income and other personal information. The second part contains questions regarding the constructs proposed in the research model (see Figure 1). The respondents indicated their level of agreement with each statement.

Items related to tangibles, reliability and security, and price were adapted from Bahia and Nantel (2000), and Host and Knie-Andersen (2004). The measurement for the empathy dimension was adapted from Kumar et al. (2009) while the measurement for the convenience dimension was assessed by using items adapted from Kumar et al. (2009). The items used to measure online banking were adapted from Abdullah and Kassim (2009) and items for perceived value were adapted from Cronin et al. (2000). The measurements for staff competency were adapted from Rakstis (1996) while measurements for customer loyalty were adapted from Ladhari et al. (2011). Customer loyalty is conceptualised as a consumer's continuing patronage of a particular bank over a period of time.

In the context of this study, staff competency is conceptualised as the possession of the required skills and knowledge in performing a service. Previous studies consider the effect of staff competency as a dimension of service quality. However, this study suggests that staff competency will influence customer satisfaction directly. In order to measure customer satisfaction, customers were asked to state their satisfaction with the bank and their overall satisfaction pertaining to the services offered by the bank.

Bank image is operationalised based on the dimensions of image attributes. According to Keller (1993), image attributes can be classified into product-related attributes and non-product-related attributes (i.e. price, packaging or product appearance information, user and usage imagery). In this study, bank image was assessed by items adapted from Nguyen and Leblanc (2001), and Ladhari, Soulden, and Ladhari (2011). The image of the bank was measured by three items, i.e. had a good impression of the bank, good image in the minds of consumer, believe that the bank has better image than its competitors. The items

for trust were adapted from Singh and Sirdeshmukh (2000) and trust here is defined as the indicator of customer confidence in the quality and reliability of a service provider.

The research model (Figure 1) shows the proposed relationship between the different variables. The model implies that when a bank delivers service of a high quality, this will in turn result in the creation of superior customer values and high level of customer satisfaction; this is also true for the competency of the bank staff. A high level of customer satisfaction will improve the evaluation of the image, customer trust, and loyalty. To test the relationships, the structural equation modelling procedure applied AMOS 18.

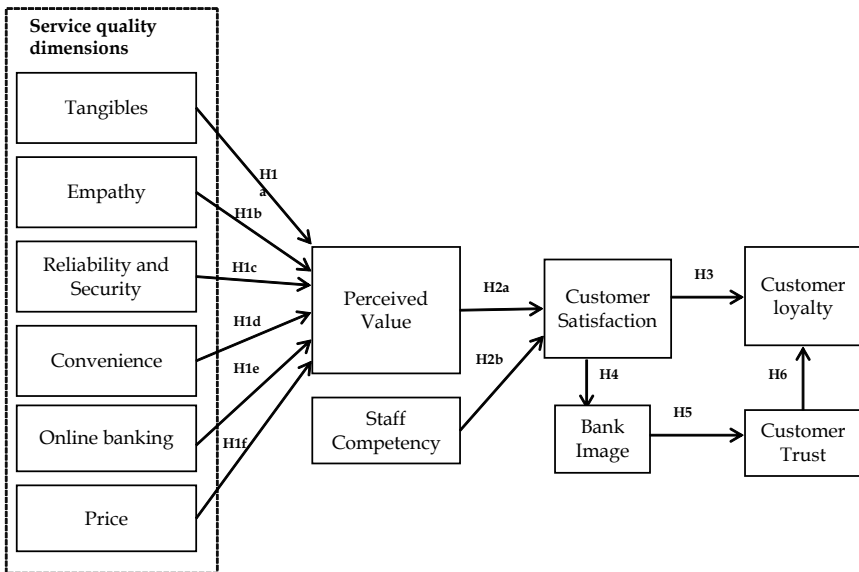


Figure 1: Research Model

5. Results

5.1 Demographics

A list of the respondents' demographic characteristics is provided in Table 1. The respondents were almost equally apportioned between males (48 per cent) and females (52 per cent). Majority of the respondents

were between 21 and 39 years old (50 per cent) and majority of the respondents preferred online banking (70 per cent), ATM machines (71 per cent), and tellers at the bank (67 per cent). Approximately 40 per cent of the respondents indicated that they have been with their respective banks for between 1-4 years, while 38 per cent responded that they have been with their respective banks for between 5-10 years and 19 per cent indicated that they have been using the same bank for more than 10 years. Concerning the types of accounts opened with their banks, 93 per cent of the respondents have savings account, 48 per cent have current account, 18 per cent have fixed deposit, and 54 per cent enjoyed loan facilities.

Table 1: Demographic Summary of Survey Respondents

| Demographic variables | Percent (%) |
|-------------------------------------------------|-------------|
| Age (year) | |
| 18-20 | 9.1 |
| 21-30 | 19.1 |
| 31-39 | 29.8 |
| 40 -45 | 12.5 |
| 46 and above | 29.5 |
| Gender | |
| Male | 48 |
| Female | 52 |
| Customers preference | |
| Online banking | 70 |
| ATM | 71 |
| Teller at bank | 67 |
| The period time of bank's customer relationship | |
| 1-4Years | 40 |
| 5-10years | 38 |
| More than 10 years | 19 |
| The customer bank account types | |
| Saving | 93 |
| Current | 48 |
| Fixed deposit | 18 |

5.2 Construct Reliability and Validity

The validity and reliability of the measurement was confirmed via confirmatory factor analysis (Hair, Black, Babin, & Anderson, 2009).

There are two types of factor analysis for verifying construct validity: (1) exploratory factor analysis (EFA) which is performed using SPSS; and (2) confirmatory factor analysis (CFA) which is performed using structural equation modelling (SEM). In this study, the exploratory factor analysis was performed to assess construct validity. The results of the EFA in this study show that the factor loadings of most items are greater than 0.50 and each of these items load strongly on their associate factors. The constructs derived from the exploratory factor analysis were used in the assessment of the measurement model in the SEM for the purpose of testing the research model (Hair et al., 2009). The SEM is a multivariate technique that combines aspects of multiple regression and is able to estimate a series of inter-related and inter-dependent relationships simultaneously (Byrne, 2009). This technique is capable of combining both unobserved variables (latent) and observed variables (manifest) into both measurement and structural models. Further, Hair et al. (2009) state that the SEM is the ultimate multivariate procedure in analysing both the construct validity and the theoretical relationships between a set of concepts represented by multiple measured variables.

Composite reliability and average variance extracted (AVE) were used to assess the reliability of the constructs. The summary of the results is presented in Table 2. According to Hair et al. (2009), the composite reliability represents the degree to which the items indicate the unobserved construct. In Table 2, the composite reliability for all the constructs is greater than the recommended level of 0.70 (Carmines & Zeller, 1988). This indicates a high content consistency between the questions related to each of the constructs. Fornell and Larcker (1981) state that the criteria for establishing reliability is when the AVE value is greater than 0.50. The results in Table 2 show that all the AVE values of all the constructs are greater than 0.50 which is above the recommended level. This provides further evidence of reliability. The results of the exploratory factor analysis (EFA) show that all the items are significantly loaded on their predefined constructs. In this study, all the loadings of the path estimates ranged between 0.60 and 0.90 and the signs of the parameter estimation are all in a similar direction for measuring the specific latent variables.

5.3 Structural Model

When the measurement model demonstrates a good fit, the SEM is depicted in order to test the hypotheses and the relationship between

Table 2: Composite Reliability and Average Variance Extracted

| Constructs | Regression Weight | Composite reliability | Average variance extracted |
|----------------------------------------------------------------------------------------|-------------------|-----------------------|----------------------------|
| Tangibles | | 0.803 | 0.817 |
| Maintaining clean and pleasant branch facilities | 0.727 | | |
| The lobby area is comfortable while waiting for services | 0.886 | | |
| Provide easy-to-read and understandable bank statement | 0.728 | | |
| Empathy | | 0.808 | 0.823 |
| Bank staff is friendly and polite | 0.785 | | |
| Bank staff is very responsive to customer's complaints | 0.839 | | |
| Bank staff is polite when handling customer's complaints | 0.837 | | |
| Reliability and security | | 0.721 | 0.669 |
| My bank maintains error-free records (e.g. accurate bills and statements) | 0.820 | | |
| My bank keeps confidentiality of account and privacy of customers | 0.863 | | |
| My bank delivers up to date record | 0.785 | | |
| Physical security at bank is adequate (e.g. security guards, CCTVs) | 0.623 | | |
| Perceived value | | 0.915 | 0.825 |
| My bank always deliver excellent overall service | 0.891 | | |
| The services offered by my bank are high quality | 0.830 | | |
| My bank offers me a complete range of products | 0.885 | | |
| Convenience | | 0.780 | 0.793 |
| Bank extended working hours to meet customers' need | 0.709 | | |
| Number of open tellers during peak hours is adequate | 0.872 | | |
| Waiting time for receiving services is not too long and satisfactory | 0.800 | | |
| Online Banking | | 0.931 | 0.854 |
| The online banking has adequate security features | 0.782 | | |
| The online banking is fast in making transaction | 0.891 | | |
| It is easy to learn how to operate online system | 0.902 | | |
| The online system makes appropriate confirmation concerning the completion transaction | 0.868 | | |
| I got confirmation in every online transaction by sms | 0.700 | | |
| The online banking system has user-friendly interface | 0.830 | | |

The Dimension of Service Quality and Its Impact on Customer Satisfaction, Trust, and Loyalty: A Case of Malaysian Banks

| | | | |
|-------------------------------------------------------------------------------------------|-------|-------|-------|
| Price | | 0.718 | 0.667 |
| My bank offers wide choice of loan maturity period and interest rates | 0.808 | | |
| My bank is innovative in launching new products to match unique needs of its customers | 0.737 | | |
| The fees and charges of my bank are reasonable and competitive to its industry standard | 0.709 | | |
| Staff competency | | 0.901 | 0.833 |
| Bank's staff able to explain bank's products and services to customer | 0.835 | | |
| Advices and recommendations given by bank's staff solved my problem/match my needs | 0.888 | | |
| Bank's staff able to conduct transaction immediately or in a short waiting period | 0.892 | | |
| Customer satisfaction | | 0.876 | 0.800 |
| The services of my bank meet my expectations | 0.820 | | |
| I am satisfied with my bank | 0.813 | | |
| I did the right thing when I chose this bank for its services | 0.824 | | |
| I am satisfied with the quality of my bank's services | 0.783 | | |
| Bank image | | 0.822 | 0.727 |
| I will continue to patronize my bank even if the service charges are increased moderately | 0.843 | | |
| I am likely to pay a little bit more for using the services of my bank | 0.913 | | |
| To me, my bank would rank first among the other bank | 0.742 | | |
| Customer trust | | 0.897 | 0.822 |
| Bank staff are trustworthy | 0.771 | | |
| My bank treats me in an honest way in every transaction | 0.774 | | |
| I feel safe in my transaction with the bank | 0.837 | | |
| My bank will not let other people know my account balance | 0.730 | | |
| Bank staff ask some verification questions when customer uses phone banking service | 0.842 | | |
| Bank tellers accurately verify all transaction requests | 0.860 | | |
| Customer loyalty | | 0.893 | 0.822 |
| I would like to remain as a customer of my present bank | 0.820 | | |
| I will say positive things about my bank to other people | 0.811 | | |
| I consider myself to be loyal to my bank | 0.877 | | |

the independent and dependent variables. The same fit indices that were used in the measurement model were used to test the structural model. Table 3 summarises the overall fit indices of the structural model. The overall model fit indices remain within an acceptable range (Hair et al., 2009), and the results are indicative of the fact that the structural model achieve a good level of fit.

Table 3: Fit Indices for Structural Model

| Quality-of-fit measure | Recommended value | Structural model |
|----------------------------------------------------|-------------------|------------------|
| Chi-square/degree of freedom value (χ^2/df) | ≤ 3.00 | 2.511 |
| Standardised root mean square residual (SRMR) | ≤ 0.05 | 0.057 |
| Tucker Lewis index (TLI) | ≥ 0.95 | 0.904 |
| Comparative fix index (CFI) | ≥ 0.90 | 0.917 |
| Incremental fix index (IFI) | ≥ 0.90 | 0.921 |
| Root mean square of error approximation (RMSEA) | ≤ 0.05 | 0.064 |
| Goodness of fit index (GFI) | ≥ 0.90 | 0.798 |

The results of the research model imply that the model fits well. The goodness-of-fit (GOF) for the overall measurement model, the chi-square (χ^2) test, is $\chi^2 = 2095$, with 832 degrees-of-freedom. Since the p -value is sensitive to the size of the sample, this study also considers other indices in order to confirm the validity of the measurement model. Table 3 shows that the research model of this study indicates the acceptable goodness-of-fit indices. The value of the comparative fit index (CFI) is 0.917, goodness-of-fit index (GFI) is 0.798, adjusted goodness-of-fit index (AGFI) is 0.759, Tucker Lewis index (TLI) is 904, and the root mean square of error approximation (RMSEA) is 0.064; all within acceptable ranges, and the overall model fit indices are in correspondingly good positions. The results show that the overall model fit indices are at good levels due to the fact that the values of CFI and TLI exceed 0.90, the RMSEA is much lower than 0.08 while the Chi-Square is less than 3 (Hair et al., 2009). The two fit indices for GFI and AGFI are lower than the commonly cited thresholds of 0.90. However, this value is in the range of the recommended levels (Yen & Lu, 2008; Doll, Xia, & Torkzadeh, 1994). To evaluate the overall model fit, there are a number of indices including absolute fit measures, incremental

and parsimonious for measure (Hair et al., 2009). There are three types of model fit indices: (1) parsimonious index, (2) incremental index, and (3) absolute fit index. Researchers should choose different model fit indices to represent different measures. According to Hair et al. (2009), researchers should report at least one incremental index and one absolute index in addition to the Chi-square (χ^2) value. At least one of the indices should be badness-of-fit index rather than goodness-of-fit. Generally, the RMSEA is chosen as the badness-of-fit index to provide consistent results across different estimation approaches (Kline, 2010).

Table 4: Hypotheses Testing results

| Constructs | Hypothesis | β | S.E. | C.R. | P | Support |
|-------------------------------------------|------------|---------|-------|--------|-------|---------|
| Tangibles → Perceive value | H1a | 0.146 | 0.055 | 2.543 | ** | Yes |
| Empathy → Perceive value | H1b | 0.206 | 0.051 | 3.412 | *** | Yes |
| Reliability and Security → Perceive value | H1c | 0.387 | 0.054 | 5.774 | *** | Yes |
| Convenience → Perceive value | H1d | 0.056 | 0.046 | 0.924 | 0.355 | No |
| Online Banking → Perceive value | H1e | 0.258 | 0.049 | 4.617 | *** | Yes |
| Price → Perceive value | H1f | 0.053 | 0.058 | 0.807 | 0.420 | No |
| Perceive value → Customer satisfaction | H2a | 0.843 | 0.056 | 13.252 | *** | Yes |
| Staff competency → Customer satisfaction | H2b | 0.146 | 0.032 | 3.587 | *** | Yes |
| Customer satisfaction → Loyalty | H3 | 0.536 | 0.133 | 3.891 | *** | Yes |
| Customer satisfaction → Image | H4 | 0.996 | 0.071 | 14.893 | *** | Yes |
| Image → Trust | H5 | 0.925 | 0.063 | 15.223 | *** | Yes |
| Trust → Loyalty | H6 | 0.348 | 0.120 | 2.573 | ** | Yes |

Notes: B = Standardised Regression Weight, S.E. = Standardised Error, C.R. = Critical Ratio. ** < *p*-value 0.05 and *** *p*-value <0.01.

Table 4 presents the parameter estimates and hypothesised relationships. Ten out of the 12 hypotheses are supported. Hypotheses H_{1a} to H_{1f} examine the relationships of the bank service quality dimensions and perceived value. The results show that tangibles,

empathy, reliability and security, and online banking have significant positive influences on perceived value. Therefore, H_{1a} , H_{1b} , H_{1c} , and H_{1e} are supported. The results reveal that these factors are important for customers when they evaluate the perceived value. These factors account for 68 per cent of variance in the perceived value. The reliability and security dimension and online banking service are strong predictors of the perceived value. However, convenience and price are insignificant determinants of perceived value. This seems to imply that a customer's perceived value of a bank is determined by its tangibles, empathy, reliability and security, and the level of online banking services. Another possible explanation is that customers generally use more online facilities and thus convenience does not really influence their perception of a bank's service quality. The price dimension shows that it does not affect customer's inferences about perceived value. This is probably due to the price range for services/products which is relatively competitive with no substantial price differences among the fifteen banks surveyed.

The results also show that the competency of bank staff and perceived value have a positive and significant effect on customer satisfaction thus, supporting H_{2a} and H_{2b} . This account for 89 per cent of the variance on customer satisfaction which suggests that customer perception regarding a bank's perceived value will influence the customer's satisfaction. It also confirms the hypothesis that if the bank's staff has adequate knowledge to help the customer, the customer will be more satisfied with the bank.

Concerning the relationship between customer satisfaction and customer loyalty, customer satisfaction has a significant positive influence on customer loyalty intentions. Additionally, customer satisfaction has a significant positive effect on bank image. The results support H_3 and H_4 . The results indicate that there is a significant positive effect between image, trust, and loyalty respectively thus, supporting H_5 and H_6 . Customer satisfaction and trust are two strong determinants of customer loyalty to a bank, and this accounts for 75 per cent of the variance.

6. Discussion

Generally, the results support the study's hypotheses, and confirm that the dimensions of tangibles, empathy, reliability and security, and online banking have a positive and significant effect on perceived value. The results demonstrate that perceived value strongly influences customer

satisfaction. This suggests that perceived value is relative to bank service quality and plays a significant role in customer satisfaction. The findings are consistent with the study done by McDougall and Levesque (2000) in which perceived value is seen as an important mediator between service quality and customer satisfaction. The results of the current study also indicate that when a customer is satisfied with a bank's service quality, the customer will more likely favour the bank and be continuously loyal to it. This finding is consistent with previous research such as Anderson and Sullivan (1993) who find that customer satisfaction increases loyalty as well as positively and significantly relates to bank image. This means that if a customer is satisfied with the bank's services, the customer's attitude towards the bank improves, resulting in him/her perceiving the bank in a positive light. This finding is consistent with that of Hoq et al. (2010) which thus signifies that bank managers should improve the service quality of their respective banks if they want to retain their current customers or attract new customers, and if they intend to remain competitive in this industry.

This study considers that staff competency has a direct effect on customer satisfaction, and hypothesises that there is a significant relationship between staff competency and customer satisfaction. The results support the hypothesis and show that the skills and abilities of the staff to provide proper services for customers will also increase customer satisfaction. It is implied that the level of competency among bank's staff will inspire trust and confidence in customers, and that staff's functionality can directly influence customer satisfaction. This finding suggests that banks need to train their employees in an extended variety of skills that can render the staff to become responsive and empathetic towards their customers thereby increasing their satisfaction.

The bank's image directly affects the customer's trust, and also indirectly affects customer's loyalty. If a bank provides valuable service to a customer, it will lead to higher customer satisfaction, and this in turn will improve its image. This finding is consistent with the study done by Wang et al. (2003) who find that customer satisfaction has a positive impact in the creation of a bank's image. Their results indicate that a bank's image plays a major role in developing a customer's trust in a bank which in turn leads to the customer's inevitable loyalty to that bank. Trust is also important for improving customer loyalty as a customer who trusts his/her bank is less likely to switch to other banks. This implies that when a customer is unwilling to trust a bank, the customer is also unable to remain loyal. As a customer cannot "try" a

service (the customer has to engage a bank's service prior to experiencing it), a bank's image will influence a customer's trust that the bank will deliver the service as promised. Once a customer receives confirmation that guarantees this trust, the customer hopes and seeks to maintain the loyalty of that relationship.

The results of this study show that convenience is insignificant in determining the customer's perceived value. This seems to suggest that a convenient location or parking area and prolonged banking hours are not the determinants of service quality. The advancement in technology today is changing the landscape of the banking service and products in the banking sector. The acceptance of online banking and the provision of a banking service via the Internet decrease the effect of convenience factors on service quality. A customer is able to conduct most banking transactions via the Internet and online banking; thus, the location of the bank and its operating hours will not directly affect the perceived value. This finding emphasises the importance of finding various ways for the provision of services including the use of self-service technology such as ATMs, online banking, phone banking, and mobile banking.

The results of this study also show that price does not significantly affect the perceived value. In the context of Malaysian banking, service/product pricing is not influential on customer-perceived value. In this study, price is measured by the service charges, fee and charges of service delivery, and the interest rates of loans and saving accounts. The lack of a significant relationship between pricing and perceived value can be attributed to price insensitivity, or the fact that the differences in the pricing policies of banks might not be significant enough to affect customer satisfaction. This might simply imply that customers are insensitive towards the current price levels. The results of this study agree with the findings of Hallowell (1996) who indicates that price is less important than other factors in perceiving service value. This finding indicates that customers are willing to remain with the bank if they perceive that the banks will provide good quality services or products, thereby rendering price as an insignificant measure of service quality.

7. Conclusion

In the present competitive Malaysian banking context, bank customers are presented with a wider choice of services and products. Therefore, to gain customer loyalty, banks need to deliver superior services which exceed customer expectations. To achieve this objective, banks need to

understand how customers evaluate the quality of the services they offer, how customers choose a bank in preference to another bank, and on what principle customers give their long-term patronage. Banks should not just focus on improving customer satisfaction but also target on improving customer perceptions of overall service quality and simultaneously, increasing customer's perceived value of the bank.

The fit statistic of the validity of the model indicates that the indicator variables contributing to the composite variables represent the valid measures of the underlying construct of service quality. Nevertheless, any dimension of service quality can be subjected to further improvement, hence, this is an area for future research. The results of this study indicate that four dimensions - tangibles, empathy, reliability and security, and online banking - are statistically significant and affect perceived value. The tangibles of the service facility such as equipment and machinery, empathetic service to customer, providing customer service with reliability and security, and online banking will result in improved quality of the service delivery which in turn, will lead to a higher perceived value. The findings indicate that perceived value is an important contributor to customer satisfaction. Thus, banks need to consider perceived value with service quality when designing a service or product. In addition, perceived value should be included in the study of customer satisfaction and loyalty.

It is clear that banks need to build a loyal relationship with their customers via customer satisfaction. Generally, when a customer seeks services, the customer is seeking to establish and maintain a relationship with the bank. When the customer is satisfied with a bank's services, he/she hopes to develop a relationship that emanates from his/her emotional connection to the bank. In addition, trust is also an important indicator that plays a major role in sustaining a long-term relationship with customers. Ensuring the safety of the customer's transactions, keeping promises, making the customer feels confident in the bank's offering, and accurately verifying all transaction requests can contribute to customer loyalty. Another important finding of this study is the impact of customer satisfaction on a bank's image, as the bank's image will affect a customer's trust in the bank, and consequently, his/her corresponding loyalty. The possible explanation is when a customer is satisfied with his/her bank, he/she will then trust the bank, and will continue to patronise that particular bank. This will serve to improve the bank's image in the long run.

There are, however, limitations to this study. Data were collected from bank customers in the Klang Valley, Malaysia where the population is generally deemed to be more financial savvy and educated. Hence, the findings of this study may not be generalisable to other contexts. Future researchers may expand this study to cover bank customers throughout Malaysia as well as in neighbouring countries. In addition, the present paper did not analyse the impact bank image has on service quality or on customer satisfaction hence, future studies may be conducted to examine these relationships.

References

- Abdullah, A.M.A, & Kassim, N.M. (2009). Measuring perceived service quality in Qatari Islamic banks. *Journal International Business and Entrepreneurship Development*, 4(1/2), 90-106.
- Almossawi, M. (2001). Bank selection criteria employed by college students in Bahrain: An empirical analysis. *International of Bank Marketing*, 19(3), 115-125.
- Amin, M., Isa, Z., & Fontaine, R. (2011). The role of customer satisfaction in enhancing customer loyalty in Malaysian Islamic banks. *The Service Industries Journal*, 31(9/10), 1519-1532.
- Amin, M., Isa, Z., & Fontaine, R. (2013). Islamic banks: Contrasting the drivers of customer satisfaction on image, trust, and loyalty of Muslim and non-Muslim customers in Malaysia. *International Journal of Bank Marketing*, 31(2), 79-97.
- Anderson, E., & Sullivan, M. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12, 125-143.
- Andreassen, T.W., & Lindestad, B. (1998). Customer loyalty and complex services: The impact of corporate image on quality, customer satisfaction and loyalty for customer with varying degrees of service expertise. *International Journal of Service Industry Management*, 9(1), 7-23.
- Angur, M.G., Nataraajan, R., & Jahera, J.S. (1999). Service quality in the banking industry: An assessment in a developing economy. *International Journal of Bank Marketing*, 13(3), 116-123.
- Awan, H.M., Bukhari, K.S., & Iqbal, A. (2011). Service quality and customer satisfaction in the banking sector: A comparative study of conventional and Islamic banks in Pakistan. *Journal of Islamic Marketing*, 2(3), 203-223.
- Bahia, K., & Nantel, J. (2000). A reliable and valid measurement scale for the perceived service quality of banks. *International Journal of Bank Marketing*, 18(2), 84-91.
- Ball, D., Coelho, P.S., & Machas, A. (2004). The role of communication and trust in explaining customer loyalty: An extension to the ECSI model. *European Journal of Marketing*, 38(9/10), 1272-1293.

- Baumann, C., Elliott, G., & Hamin, H. (2011). Modeling customer loyalty in financial services: A hybrid of formative and reflective constructs. *International Journal of Bank Marketing*, 29(3), 247-267.
- Bearden, R.M., & Teel, J.E. (1983). Selected determinants of consumer satisfaction and complaint behavior. *Journal of Marketing Research*, 20, 21-28.
- Behara, R.S., Fisher, W.W., & Lemmink, J.G.A.M. (2002). Modelling and evaluating service quality measurement using neural network. *International Journal of Operations & Production Management*, 22(20), 1162-1185.
- Berry, L.L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, 66(3), 1-17.
- Berry, L.L., Parasuraman, A., & Zeithaml, V.A. (1988). The service quality puzzle. *Business Horizon*, 31(5), 35-43.
- Bolton, R.N., & Myers, M.B. (2003). Price-based global market segmentation for services. *Journal of Marketing*, 67(3), 108-128.
- Bontis, N., Booker, L.D., & Serenko, A. (2007). The mediating effect of organizational reputation on customer loyalty and service recommendation in the banking industry. *Management Decision*, 45(9), 1425-1445
- Brunner, T.A., Markus, S., & Klaus, O. (2008). Satisfaction, image and loyalty: New versus experienced customers. *European Journal of Marketing*, 42(9/10), 1095-1105.
- Byrne, B.M. (2009). *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming*. New York, London: Rutledge, Taylor & Francis Group.
- Carmines, E.G., & Zeller, R.A. (1988). *Reliability and Validity Assessment*. Beverly Hills, CA: Sage.
- Caruana, A., & Malta, M. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7&8), 811-828.
- Chen, T.Y., & Chang, H.S. (2005). Reducing consumers' perceived risk through banking service quality cues in Taiwan. *Journal of Business and Psychology*, 19(4), 521-539.
- Cronin, J.J., Brady, M.K., & Hult, G.T. (2000). Assessing the effect of quality, value, and customer satisfaction on consumer behavioural intentions in service environments. *Journal of Retailing*, 76(2), 193-218.
- Culiberg, B., & Rujsek, I. (2010). Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Economic and Business Review*, 12(3), 151-166.
- Dean, A.M. (2002). Service quality in call centers: Implications for customer loyalty. *Managing Service Quality*, 12(6), 414-423.
- Doll, W.J., Xia, W., & Torkzadeh, G. (1994). A confirmation of factor analysis of the end-user computer satisfaction instrument. *MIS Quarterly*, 18(4), 39-50.
- Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 39, 39-50.

- Garbarino, E., & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationship. *Journal of Marketing*, 63(2), 70-87.
- Gilmore, A. (2003). *Service, Marketing and Management*. London: Sage Publication.
- Glaveli, N., Petridou, E., Liassides, C., & Spathis, C. (2006). Bank service quality: Evidence from five Balkan countries. *Managing Service Quality*, 16(4), 380-394.
- Gounaris, S.P. (2005). Trust and commitment influences on customer retention: Insights from business-to-business services. *Journal of Business Research*, 58, 126-140.
- Gupta, S., & Zeithaml, V. (2006). Customer metrics and their impact on financial performance. *Marketing Science*, 25(6), 718-739.
- Guo, X., Duff, A., & Hair, M. (2008). Service quality measurement in the Chinese corporate banking market. *International Journal of Bank Marketing*, 26(5), 306-327.
- Gustafsson, A., Johnson, M.D., & Roos, I. (2005). The effects of customer satisfaction, relationship commitment dimensions and triggers on customer retention. *Journal of Marketing*, 69, 210-218.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2009). *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice Hall.
- Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: An empirical study. *International Journal of Service Industry Management*, 7, 27-42.
- Host, V., & Knie-Andersen, M. (2004). Modeling customer satisfaction in mortgage credit companies. *The International Journal of Bank Marketing*, 22(1), 26-42.
- Hoq, M.Z., Sultana, N., & Amin, M. (2010). The effect of trust, customer satisfaction and image on customers' loyalty in Islamic banking sector. *South Asian Journal of Management*, 17(1), 70-93.
- Hu, H.H., Kandampully, J., & Juwaheer, T.D. (2009). Relationships and impacts of service quality, perceived value, customer satisfaction, and image: An empirical study. *The Service Industries Journal*, 29(2), 111-125.
- Keller, K.L. (1993). Branding shortcuts. *Marketing Management*, 14(1), 18-23.
- Kennedy, S.H. (1977). Nurturing corporate image. *European Journal of Marketing*, 11(3), 120-164.
- Kholi, A.K., & Jaworski, B.J. (1990). Market orientation: The construct, research propositions, and managerial implications. *Journal of Marketing*, 54(2), 1-18.
- Kim, W.G., Lee, Y.K., & Yoo, Y.J. (2006). Predictors of relationship quality and relationship outcomes in luxury restaurants. *Journal of Hospitality & Tourism Research*, 30(2), 143-169.
- Kline, R.B. (2010). *Principles and Practices of Structural Equation Modeling*. New York: Guilford.

- Korda, A.P., & Snoj, B. (2010). Development, validity and reliability of perceived service quality in retail banking and its relationship with perceived value and customer satisfaction. *Managing Global Transitions*, 8, 187-205.
- Kotler, P., & Keller, K.L. (2011) *Marketing Management*. Upper Saddle River, NJ: Prentice Hall.
- Kumar, M., Fong, T.K., & Manshor, A.T. (2009). Determining the relative importance of critical factors in delivering service quality of banks: An application of dominance analysis in SERVQUAL model. *Managing Service Quality*, 19(2), 211-228.
- Kumari, H.V., & Rani, S. (2011). Customer perception of service quality in the retail banking sector. *European Journal of Business and Management*, 3(3), 299-306.
- Kwon, W., & Lee, T. (1994). Measuring SQ in Singapore retail banking. *Singapore Management Review*, 16(2), 1-24.
- Ladhari, R., Ladhari, I., & Morales, M. (2011). Bank service quality: Comparing Canadian and Tunisian customer perceptions. *International Journal of Bank Marketing*, 29(3), 224-246.
- Ladhari, R., Soulden, N., & Ladhari, I. (2011). Determinants of loyalty and recommendation: The role of perceived service quality, emotional satisfaction and image. *Journal of Financial Service Marketing*, 16(2), 111-124.
- LeBlanc, G., & Nguyen, N. (1988). Customers' perceptions of service quality in financial institutions. *International Journal of Bank Marketing*, 6(4), 7-18.
- Lehtinen, U., & Lehtinen, J.R. (1991). Two approaches to service quality dimensions. *The Service Industries Journal*, 11(3), 287-303.
- Levesque, T., & McDougall, G.H.G. (1996). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12-20.
- Lovelock, C.H., & Wirtz, J. (2011) *Services Marketing: People, Technology, Strategy*. Boston: Prentice Hall.
- Manrai, L.A., & Manrai, A.K. (2007). A field study of customers' switching behavior for bank services. *Journal of Retailing and Consumer Services*, 14, 208-215.
- McDougall, G.H.G., & Levesque, T. (2000). Customer satisfaction with services: Putting perceived value into the equation. *Journal of Services Marketing*, 14(5), 392-410.
- McKnight, D.H., & Chervany, N.L. (2002). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, 6(2), 35-59.
- Na, W.B., Marshall, R., & Keller, K.L. (1999). Measuring brand power: Validating a model for optimizing brand equity. *The Journal of Product and Brand Management*, 8(3), 170-184.
- Ndubisi, N.O., & Chan, K.W. (2005). Factorial and discriminant analyses of the underpinnings of relationship marketing and customer satisfaction. *International Journal of Bank Marketing*, 23(7), 542-557.

- Nguyen, N., & LeBlanc, G. (1998). The mediating role of corporate image on customers' retention decisions: An investigation in financial service. *International Journal of Bank Marketing*, 16(2), 52-65.
- Nguyen, N., & Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in service. *Journal of Retailing and Customer Services*, 8(4), 227-236.
- Nguyen, N., & Leclerc, A. (2011). The effect of service employees' competence on financial institutions' image: Benevolence as moderator variable. *Journal of Service Marketing*, 25(5), 349-360.
- Oliver, R.L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Oliver, R.L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-44.
- Oliver, R.L. (2010). *Satisfaction: A Behavioral Perspective on the Consumer*. Armonk, NY: M.E. Sharpe.
- Olsen, L.L., & Johnson, M.D. (2003). Service quality, satisfaction and loyalty: From transaction-specific to cumulative evaluations. *Journal of Service Research*, 5(3), 184-195.
- Osman, M.Z. (1993). A conceptual model of retail image influences on loyalty patronage behaviour. *The International Review of Retail, Distribution and Customer Research*, 31, 149-166.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49, 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L.L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., & Grewall, G. (2000). The impact of technology on the quality-value-loyalty chain: A research agenda. *Journal of the Academy of Marketing Science*, 28(1), 168-174.
- Rakstis, T.J. (1996). *How to Keep Your Customers*. New York: Kiwanis.
- Reichheld, F.F. (1993). Loyalty-based management. *Harvard Business Review*, 71(2), 64-73.
- Robinson, S. (1999). Measuring service quality: Current thinking and future requirements. *Marketing Intelligence & Planning*, 17(1), 21-32.
- Selnes, F. (1998). Antecedents and consequences of trust and satisfaction in buyer-seller relationship. *European Journal of Marketing*, 32(3/4), 305-322.
- Singh, J., & Sirdeshmukh, D. (2000). Agency and trust mechanisms in customer satisfaction and loyalty judgements. *Journal of the Academy of Marketing Science*. 28(1), 150-167.
- Varki, S., & Colgate, M. (2001). Role of price perceptions in an integrated model of behavioral intentions. *Journal of Service Research*, 3(3), 232-240.
- Wang, Y., Lo, H., & Hui, Y.V. (2003). The antecedents of service quality and product quality and their influences on bank reputation: Evidence from banking industry in China. *Managing Service Quality*, 13(1), 72-83.

- Worcester, R.M. (1997). Managing the image of your bank: The glue that binds. *International Journal of Bank Marketing*, 15(5), 146-152.
- Wong, A., & Sohal, A. (2003). Service quality and customer loyalty perspectives on two levels of retail relationships. *Journal of Services Marketing*, 17(5), 495-513.
- Yen, C.H., & Lu, P. (2008). Effects of e-service quality on loyalty intention: An empirical study in online auction. *Managing Service Quality*, 18(2), 127-146.
- Zeithaml, V.A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52, 2-22.
- Zeithaml, V.A., Bitner, M.J., & Gremler, D.D. (2009) *Services Marketing: Integrating Customer Focus Across the Firm*. Boston: McGraw-Hill Irwin.

