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## The Influence of Price Perception, Service Quality and Variation Behavior on Electronic Banking

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**Abstract:**

*This study aims to determine the Influence of Price Perception, Service Quality, Variation Seeking Behavior and Electronic Banking against Customer Switching Behavior with Relationship Duration as Moderation Variable. The data is processed by Structural Equation Modeling.*

*The researchers found that the perception of price, service quality, variation seeking behavior and electronic banking significantly influence the switching behavior of bank customers/customers. The duration of relationship as a moderating variable strengthens the influence of price perception, service quality, variation seeking behavior and electronic banking on the switching behavior of banking customers in DKI Jakarta Province.*

*The findings from this research can be used as a strategy for designing products and services, marketing strategies and customer service practices by banks in Jakarta to reduce customers' switch. It can also help improve operational services and customer satisfaction and loyalty by understanding the banking behavior of each customer.*

*Originality can be seen from the fact that this research is one of several studies focusing on the intention variables to switching interest by Jakarta banking customers such as variables variation seeking behavior, relationship duration that are used as a moderation variable.*

*For further research, it is advisable to researchers: to focus on switching behavior from a wide range of consumers (companies or SMES) and investigate the difference between switching intentions or switching behavior. This study also provides a further way to analyze the effects of moderate variables such as convenience in the relationship between variables and switching intentions.*

**Keywords:** *Price Perception, Service Quality, Variation Seeking Behavior and electronic banking, customer switching behavior, relationship duration.*

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## 1. Introduction

In the intense competition and the increasing globalization of financial markets, building customer loyalty has become the most important strategy for financial institutions. The banking industry should develop strong relationships with its customers to compete successfully in a competitive retail banking environment. Numerous studies have shown that bank profitability is closely related to customer retention (Garland, 2002; Reichheld and Sasser, 1990). The longer the bank can retain the customer, the greater the revenue and the customer's cost savings can be made. According to Duncan and Elliott (2002), customer loyalty is an important factor that contributes to organizational income and profit. Loyal customers usually establish stable relationships with organizations compared to unfaithful customers (Zeithaml *et al.*, 1996a). Customer loyalty can contribute to a company's revenue increase; reduce customer transfer rate; and develop new business through positive *word-of-mouth* advertising (Reichheld, 1996; O'Brien and Jones, 1995; Reichheld and Sasser, 1990). Thus, in the end, bank assets are not only primarily registered in the balance sheet, but also relate to the fact that the customer has been successfully maintained.

To remain competitive, bank providers must understand their customers not only to anticipate, but also to influence the behavior of banking switch (Beckett *et al.*, 2000). Some researchers have studied the switching behavior of consumer in some developed countries (Colgate and Hedge, 2001; Gerrard and Cunningham, 2000; Keaveney, 1995). However, their research is limited only to the developing countries (Zhou, 2004). Due to cultural differences, consumer evaluations of service quality and related constructs, such as, behavioral intentions, may be much different (Furrer, *et al.*, 2000; Winsted, 1997). Cultural differences also relate to the behavior of bank switching (Clemes *et al.*, 2007). The study analyzes the behavior of customer switching in China's retail banking industry - a changing economy from a centrally planned economy to a market economy (Wang *et al.*, 2003).

The increasing use of technology, liberalization, and deregulation have brought a revolution in how to serve customers. Technology disrupts the smoothness of business processes, so that customer behavior eventually switch. However, the main aspects of banking, such as trust and customer confidence in the institution, remain the same. This banking environment scenario has provided many opportunities and threats to management. For every company, losing customers is a serious setback in terms of current and future profits (Sathish *et al.*, 2011) and it costs five times as much to acquire one new customer rather than retain an old customer. Customer switching has a negative effect on market shares and profitability. The first reason is the high cost of advertising, promotion, sales and other needs, while the second reason is because new customers need a grace period until they get a profit (Athanasopoulos *et al.*, 2001). Therefore, banking practitioners must understand the drivers of switching behavior of banks to remain competitive because the shifting of services / services has become a serious

problem in the marketing of services. Although the behavior of customer switching for goods has been studied by many researchers (Day *et al.*, 1979), the behavior of customer switching for services has not received much attention from researchers, especially in the area of financial services. Behavior switching for services/services has different characteristics, namely *intangibility*, *inseparability*, *perishability*, *heterogeneity*, and *ownership* (Clemes *et al.*, 2000). Even within the service domain, each service type differs significantly based on the level of customer participation (Grace and O'Cass, 2003).

Bank management should therefore understand the behavior of their customers if the bank wants to influence the switching behavior of their customers (Clemes *et al.*, 2007). If bank management can develop a thorough understanding of the factors that impact the switching behavior of bank customers, banks can effectively avoid harmful consequences of customer switching, and improve long-term relationships with customers (Lees *et al.*, 2007). In facing this rapidly changing environment, retail banks must strive to create stronger ties with their customers. Based on the above information, it can be concluded that multi-bank relations is an incentive for banks to do their best to strengthen customer relationships. This study aims to assist bankers in dealing with the potential threats of consumer banking switching behavior by providing a key variable of customer switching behavior.

Building long-term relationships with customers is becoming an important strategy for most financial institutions in today's competitive financial market. The banking industry should develop a profitable long-term relationship with its customers in order to survive in a competitive retail banking environment. Banks want to achieve zero customer transfer and minimize new customer acquisition costs (Farquhar, 2004). Garland (2002), Rust and Zahorik (1993), and Trubik and Smith (2000) have studied the financial implications of customer maintenance and revealed that there is a strong relationship between customer loyalty and profitability in the banking system.

## **2. Literature review**

Almossawi (2001) empirically states that price is an important factor in the selection of banks for students. Gerrard and Cunningham (2004) argue that prices affect the behavior of switching between bank customers because prices have wider implications for bank customers than other service customers. Colgate and Hedge (2001) examine the switching behavior of bank customer in Australia and New Zealand and conclude that price is a key determinant, followed by service failures and denial of service. The same results were obtained in a study of Javalgi *et al.* (1989) who examined the factors influencing the decision of customers to choose a bank in the United States. This factor includes the customer's perception of the fairness of the bank's pricing policy. In the banking industry, prices have broader implications for not only covering costs but also interest charged on loans and savings (Gerrard and Cunningham, 2004). Price is an important factor that has a

direct effect on customer satisfaction and behavioral intentions (Cronin and Taylor, 1992; Varki and Colgate, 2001). Previous studies have shown that prices have an important impact on decisions to switch and relate to customers' intentions to switch (Keaveney, 1995; Colgate *et al.*, 1996; Stewart, 1998; Campbell, 1999; Colgate and Hedge, 2001; Dawes, 2004; Anjum *et al.*, 2011). In addition, a significant proportion of customer complaints after purchase relate to prices (Estelami and DeMaeyer, 2002). Furthermore, in the banking industry, Gerrard and Cunningham (2004) show that prices play a more influential role in influencing the switching behavior of customers compared to service failures and inconvenience. The researchers revealed that imposing high costs on customers, or increasing costs could have the opposite effect, such as pushing the move out and shrinking inside. In addition, from the results of research by Dawes (2004), it shows that there is a positive relationship between price increases and switching fees in the banking industry.

**H<sub>1a</sub>:** *Price Perception has a significant effect on the switching behavior of banking customers in DKI Jakarta Province.*

**H<sub>1b</sub>:** *Relationship duration moderates the influence of price perceptions on the switching behavior of banking customer in DKI Jakarta Province.*

Poor service quality is one of the determinants of unfavorable behavioral disadvantages and interests (Aydin and Ozer, 2005; Zeithaml *et al.*, 1996b). In the banking industry, responses from switching behaviors are related to quality perceptions (Rust and Zahorik, 1993; Yavas *et al.*, 2004). High-level service quality is essential to prevent banking customers from switching (Clemes *et al.*, 2007). Similarly, Chakravarty *et al.*, (2004) examined the role of relationships in the switching behavior of customer through various factors, including the dimensions of service quality and relationship dimensions. Mavri and Ioannou (2008) examined the switching behavior of Greek banking consumers and concluded that product and service quality, as well as, bank brand names have a positive effect in reducing switching behaviors, while demographic variables, including gender and education rates have little effect on switching. High quality of service is essential to retain customers (Zhang, 2009). A study reported that 42 percent of clients close their accounts and switch to other banks due to problems associated with services in the US banking industry (Berggren and Dewar, 1991).

Levesque and McDougall (1996) found that service problems and service recovery issues have a significant impact on customer satisfaction and customer intentions to switch banks. According to Leeds (1992), nearly half of bank customers switch banks due to poor service. In addition, Leeds (1992) also pointed out that improving the quality of service can reduce customers from switching to other banks. Similar research by Zeithaml *et al.* (1996a) asserts that unfavorable behavioral intentions can be determined by poor service quality. Therefore, unlike previous studies, Kura *et al.* (2012) found no significant effect of service quality (measured through empathy and assurance) on switching customers in banking.

Furthermore, Kura *et al.* (2012) studied the intention of switching through various relational factors in the Indian banking industry and revealed that the quality of service, satisfaction and trust significantly affected the barriers of switching. Based on a broad literature review of the relationship between service quality and switching behavior, the researchers chose to use the discomfort, reliability and staff who provided service as a three-dimensional quality of service in the study.

**H<sub>2a</sub>:** *Service quality significantly influences the behavior of banking customer switching in DKI Jakarta Province*

**H<sub>2b</sub>:** *Relationship duration moderates the effect of service quality on the behavior of banking customer switching in DKI Jakarta Province*

Mowen and Minor (2002) argue that looking for diversity refers to the tendency of consumers to search spontaneously in purchasing products/services. Behavior of variation-seeking is one form of human behavior that can not be explained by the classical theory of existing behavior. The main thought behind the behavior of variation-seeking is that humans have a natural need for variation in their needs under certain conditions. The necessity of variation-seeking is the impetus that arises from within the consumer when the consumer is exposed to brand selection (Van Trijp *et al.*, 1996 and Feinberg *et al.*, 1992). This is reinforced by the statement of Wilkie (1997) who argued that the underlying issue in the search for variation is due to a sense of curiosity in the consumer itself.

**H<sub>3a</sub>:** *Behavior of variation-seeking significantly influences the behavior of banking customer switching in DKI Jakarta Province.*

**H<sub>3b</sub>:** *Relationship duration moderates the effect of variation-seeking behavior toward the banking customer switching behavior in DKI Jakarta Province.*

Riquelme and Rios (2010) reported that internet banking and mobile banking may differ in channel characteristics and customer preferences. It provides the motivation to research the investigation on consumer switching behavior from online to mobile banking. In other words, this research aims to understand why certain customers are switching from online to mobile banking while others do not, to see why these customers prefer online banking to mobile banking. The results of the literature review show that many studies have comprehensively investigated the adoption of a single online or mobile banking, but the study of consumer switching from online to mobile banking is lacking. Likewise, literature suggests that the adoption of single technology or product-based services has been widely studied over the past three decades. Dasgupta *et al.* (2011) observe that the emergence of mobile banking can provide banks with a lucrative commercial opportunity to provide services to rural communities who are unable to access the internet. Given the enormous penetration of mobile phones, Cruz *et al.*, (2010) state that banks have enormous potential to offer mobile banking services to people living in remote villages, where computers connected to the internet are relatively few.

**H<sub>4a</sub>:** *e-banking has a significant effect on the banking customer switching behavior in DKI Jakarta Province.*

**H<sub>4b</sub>:** *Relationship duration moderates the effect of e-banking on the behavior of banking customer switching in DKI Jakarta Province.*

Based on the previous description, the conceptual framework model proposed in this research describes the research process that is analyzing and explaining the role of relationship duration in moderating the influence of price, service quality, variation seeking behavior, and electronic banking on the behavior of consumer switching.

### 3. Methodological grounds of the research

The inferential statistical analysis technique used is Structural Equation Model. The statistical analysis used to test the hypothetical research based on the relationship pattern among variables to be studied is the causal relationship (one or several independent variables on one or more dependent variables). The form of causal relationship used in this study is how the moderating variables can strengthen or weaken the relationship between independent and dependent variables.

The statistical method used in this research is hypothesis testing. Each variable is measured by a number of statement items and using a Likert scale from 1 = strongly disagree to 7 = strongly agree. Test validity was done by using the confirmatory factor analysis method and reliability was tested by using the internal consistency reliability method. The initial preliminary research is conducted with 60 respondents to ensure that the research instruments used are valid. The results in Table 1 show that the measuring tool used to measure every variable of price perception, service quality, invariable variation and electronic banking behavior is valid (all loading factors > 0.6).

While the reliability testing of each research variable also shows that each research variable used is reliable (coefficient Cronbach alpha > 0.6). This means that each measuring tool is suitable and appropriate to measure each variable and consistent to collect research data. The behavior of consumer switching that became the object of research was taken in five provinces of the special region of the capital city of Jakarta. Data were collected by spreading questionnaires, from January to February 2017 with 280 samples being collected, by using the purposive sampling technique.

**Table 3.** *Validity and Reliability Test*

Variable	Item	Validity	Reliability		
		Correlation	Information	Alpha	Information
Price	H1	0.79	Valid	0.84	Reliable
	H2	0.83	Valid		
	H3	0.89	Valid		

		H4	0.78	Valid					
		KP1	0.74	Valid					
		KP2	0.72	Valid					
		KP3	0.75	Valid					
Service Quality		KP4	0.77	Valid	0.89	Reliable			
		KP5	0.80	Valid					
		KP6	0.75	Valid					
		KP7	0.73	Valid					
		KP8	0.73	Valid					
		PMV1	0.74	Valid					
	Variation Behavior	Seeking	PMV2	0.74			Valid	0.80	Reliable
			PMV3	0.76			Valid		
		PMV4	0.72	Valid					
		PMV5	0.76	Valid					
		EB1	0.84	Valid					
ElectronicBanking		EB2	0.84	Valid	0.89	Reliable			
		EB3	0.80	Valid					
		EB4	0.81	Valid					
		EB5	0.75	Valid					
		EB6	0.78	Valid					
Durational Relationship		DH1	0.84	Valid	0.86	Reliable			
		DH2	0.85	Valid					
		DH3	0.84	Valid					
		DH4	0.84	Valid					
Consumer Switching behavior		PPK1	0.71	Valid	0.92	Reliable			
		PPK2	0.77	Valid					
		PPK3	0.83	Valid					
		PPK4	0.80	Valid					
		PPK5	0.78	Valid					
		PPK6	0.84	Valid					
		PPK7	0.85	Valid					
		PPK8	0.82	Valid					

The selected sampling criteria were consumers who had undergone bank switching, aged 17 years and above and residing in Jakarta area. In this study, the demographic data obtained was as follows: the majority of respondents studied (171) were women (61%); those aged 18-30 amounted to 199 persons (71%); 181 persons were unmarried (65%); 149 people (53%) had an undergraduate education and 173 were in the private sector employment / BUMN (62%); 120 people (43%) had savings and credit card accounts; 201 people (72%) had switched banks, from private banks to government banks; 125 respondents (42%) had an average income per month of 2.5 -5 million rupiah.

Data analysis method used was SEM (Structural Equation Modeling) with the support of LISREL Version 8.5 program. SEM is a statistical technique that allows testing of a series of relationships simultaneously. Before performing hypothesis testing, it is necessary first to test the model used. The fit conformity test was conducted to measure the suitability of the model used in this study (Hair, 2010).

#### 4. Results

After modification of the model, it appears that there is an improvement in the quality of conformity in the model obtained. An explanation of analysis results of the suitability testing of the measurement model is as follows: The p value = 0.000 and the chi-square value = 794,345, showing a good fit (close fit) when compared to the initial model 1028.91, because the smaller the chi-square is, the better and the value of  $p \geq 0.05$  shows a fit model. The value of RMSEA of 0.042 shows a good fit level because a model is said to be good fit if it has  $RMSEA \leq 0.05$ . The value of goodness of fit index (GFI) = 0.870. This value, if rounded up to 1 digit behind the comma, means 0.90. The GFI value ranges from 0 to 1 and the higher the GFI the better.  $GFI \geq 0.90$  is good fit, while  $0.80 \leq GFI < 0.90$  is a marginal fit. So, the model in this research is a good fit CMIN / DF value = 1.496 showing a model which is fit (good fit) because after modification, the value of CMIN / DF  $< 2.00$ . The value of TLI (total fit index) = 0.948. Because the value of TLI  $> 0.90$ , then the model match rate in this study is a good fit.

The value of comparative fit index (CFI) = 0.953. The CFI value ranges from 0 - 1, with higher values indicating a better fit. A CFI value  $\geq 0.90$  is a good fit and  $0.80 \leq CFI < 0.90$  which indicates a marginal fit. Therefore, the model in this study, based on the value of CFI, is good (good fit). Based on the above description, it can be concluded that the model used has met a good level of conformity. After analyzing the measurement model, structural model analysis is then performed. This analysis tests whether the hypothesis is accepted or rejected and indicates the causal relationship or the influence of latent variables with other latent variables. In this research, structural model analysis will be done twice, that is, analysis without the moderation variable, duration of relationship, and analysis with the moderation variable.

The structural model analysis obtained from the Lisrel output will show the influence between latent variables and other latent variables by looking at the value t (t-value). When t-value  $\geq 1.96$ , then the latent variable has a significant effect on other latent variables. The causality test performed is a test against the weight of each indicator being analyzed. This test is done the same as t test to regression weight or loading factor or lambda coefficient.

**H<sub>1a</sub>:** Price Perception has a significant effect on the switching behavior of banking customers in DKI Jakarta Province. The result of analysis shows that t-value is 2.88, which is bigger than 1.96 and the p-value is smaller than 0.05 so that the test is significant, and hypothesis is accepted.

**H<sub>2a</sub>:** Service quality significantly influences the behavior of banking customer switching in DKI Jakarta Province. The result of analysis shows that t-value is 5.36, which is bigger than 1.96 and p-value is less than 0.05 so the test is significant, and hypothesis is accepted.



**H<sub>3a</sub>:** Variation-seeking behavior significantly influences the behavior of banking customer switching in DKI Jakarta Province. The result of analysis shows that *t-value* is 6.81 which is bigger than 1.96 and *p-value* value is less than 0.05, so that the test is significant, and hypothesis is accepted.

**H<sub>4a</sub>:** e-banking has a significant effect on the switching behavior of banking customers in DKI Jakarta Province. The result of analysis shows that *t-value* is 7.41, which is bigger than 1.96 and *p-value* is less than 0.05, so that the test is significant, and hypothesis is accepted.

**Table 1.** *Hypothesis Testing Without Moderation*

Hypothesis	Path	t-value	t-tabel	Result
H1a	Price Perception → Consumer Switching Behavior	2.88	≥ 1.96	Hypothesis accepted
H2a	Service Quality → Consumer Switching Behavior	5.36	≥ 1.96	Hypothesis accepted
H3a	Variation Seeking Behavior → Consumer Switching Behavior	6.81	≥ 1.96	Hypothesis accepted
H4a	Electronic Banking → Consumer Switching Behavior	7.41	≥ 1.96	Hypothesis accepted

*Source: Primary Data Analysis (2017).*

This research tries to reveal the existence of a moderation variable, that is, duration of relationship which can disturb the relation between exogenous variables with endogenous variable. The duration of the relationship relates to the length of time that the respondent, or in this case, the customer of a bank using banking products, the frequency of customers interacting with banking services, the number of banking products held at the same time, and the intervals of the use of banking products.

**H<sub>1b</sub>:** Relationship duration moderates the influence of price perceptions on the switching behavior of banking customer in DKI Jakarta Province. The result of the analysis shows that the *t-value* increased to 5.32, indicating that the moderation variable strengthens the relationship so that the test result is significant, and the hypothesis is accepted.

**H<sub>2b</sub>:** Relationship duration moderates the effect of service quality on the switching behavior of banking customer in DKI Jakarta Province. The result of the analysis shows that the *t-value* increased from 5.36 to 5.96 and the value of *p-value* is smaller than 0.05, so that the test is significant, and the hypothesis is accepted.

**H<sub>3b</sub>:** Relationship duration moderates the effect of variation-seeking behavior on the switching behavior of banking customer in DKI Jakarta Province. The result of analysis shows that the *t-value* is 8.52 which is bigger than 1.96 and *p-value* is smaller than 0.05, so that test result is significant, and hypothesis is accepted.

**H4b:** Relationship duration moderates the effect of e-banking on the switching behavior of banking customers in DKI Jakarta Province. The result of the analysis shows that *t-value* 4.84. This is higher than 1.96 and the *p-value* is smaller than 0.05. Therefore, the test results can be stated as significant and the hypothesis is accepted. Table 2 illustrates that the moderating variables reinforce the influence of exogenous variables on endogenous ones by looking at the *t-value*, path, and the conclusion of whether the hypothesis is accepted or rejected.

**Table 2.** *Hypothesis Testing with Moderation*

Hypothesis	Path	t-value	t-tabel	Result
H1b	Price Perception → Consumer Switching Behavior	5.32	≥ 1.96	Hypothesis accepted
H2b	Service Quality → Consumer Switching Behavior	5.96	≥ 1.96	Hypothesis accepted
H3b	Variation Seeking Behavior → Consumer Switching Behavior	8.52	≥ 1.96	Hypothesis accepted
H4b	Electronic Banking → Consumer Switching Behavior	4.84	≥ 1.96	Hypothesis accepted

*Source: Primary Data Analysis (2017).*

## 5. Discussion

The discussion is conducted by considering the various theories and previous empirical research related to this research. The importance of price perception, service quality, variation-seeking behavior and electronic banking is to reduce or minimize the switching of customers from one bank to another. The concept of this research can also be applied to service agencies such as hospitals, hotels, airlines and other service companies. The results of this study are expected to explain the factors that can decrease the rate of consumer switching behavior especially in the service industry.

### ***The influence of price perception on consumer switching behavior:***

Price perception is represented by four (4) indicators. At the stage of confirmatory factor analysis, the four indicators meet the suitability of the model or *fit*. The four indicators have a loading factor value above 0.6 so that it can be used until the final stage to explain the latent variables of price perception. The greatest loading factor value is setting a high interest rate for the debt repayment loan (Hypothec) which becomes the burden for the customer and will improve the consumer's bank switching behavior. When associated with the results of the respondents' answers on this indicator, the average respondent's answers are categorized as neutral. The lowest indicator that needs to be improved in explaining the price perception is to provide a small interest rate on the savings of customers. This can be overcome by raising the savings interest rate.

High administrative costs, lending rates and debt repayment rates (mortgages) have an average score of 4.12 and 4.09. The length of customer relationship with the bank is not more than one (1) year and the frequency of interaction directly with the bank is less than one (1) per month or in other words not even once a month. Customers visiting the bank greatly affects customer decision to switch to another bank. In the banking industry, prices have wider implications, not only covering costs but also interest imposed or paid on loans and savings (Gerrard and Cunningham, 2004). Price is an important factor that has a direct effect on customer satisfaction and behavioral intentions (Cronin and Taylor, 1992; Varki and Colgate, 2001). Previous studies have shown that prices have an important impact on decisions to switch and relate to customers' intentions to switch (Keaveney, 1995; Colgate *et al.*, 1996; Stewart, 1998; Campbell, 1999; Colgate and Hedge, 2001; Dawes 2004; Anjum, 2011). In addition, a significant proportion of customer complaints after purchase relate to prices (Estelami and DeMaeyer, 2002).

***The influence of service quality on consumer switching behavior:***

Quality of service is illustrated by eight (8) indicators. In the stage of confirmatory factor analysis, the eight (8) indicators meet the suitability of the model or fit with the loading factor value of each indicator above 0.5 so that the eight (8) indicators are used until the final stage to explain the latent variable of service quality. Based on the highest loading factor, that is bank employees are not ready to answer customer's questions, (when service is the dominant indicator in explaining the behavior of consumer switching) the average value of respondent's answer lies between agree and strongly agree. According to respondents, unsuitable bank service hours, ATM machines that are often off line and not in strategic places, disappointing services, no useful information if there is a change of service, impolite representatives who are unable to answer customer's questions and solve their problems are all factors that make customers want to switch to other banks. The moderation variable is the average duration of the relationship, which is not long enough to influence the behavior of the customers switching from one bank to another bank.

Respondents feel that the job of a bank employee has a lot of challenges and the job requires soft skills so that bank customers feel satisfied. The smallest indicator in describing the quality of service are ATMs - automatic teller machines. Respondents refer to access to ATMs, these are often damaged (*off line*) and therefore bank employees need to improve their skills and soft skills in order to provide satisfaction to bank customers, thus it will increase the sense of ownership and employee loyalty to the success and sustainability of the company. The factors to keep in mind include appropriate bank opening hours and access to ATMs, reliable banking services and the behavior of the service providing staff. Quality of service is defined as the level of difference between normative expectations of customers on services and their perceptions on service performance. Its association

with behavioral intentions differs in each industry (Parasuraman *et al.*, 1988, 1994). High quality of service is essential to retain customers (Zhang, 2009).

***The influence of variation-seeking behavior on consumer switching behavior:***

The support to variation-seeking behavior is reflected by five (5) indicators and meets the suitability of the model with the loading factor value of each indicator above 0.5 so that the five (5) indicators are used until the final stage to explain the latent variables seeking behavior variation. Based on the highest loading factor value, the indicator always wants to feel the benefits of new bank service is a dominant factor in reflecting latent variables seeking behavior variation. This is also evident from the average respondent's answer that state they somewhat agree to the behavior of consumer switching.

The lowest value that describes the latent variable of variation seeking behavior is the desire to try new technology for better service. The reasons of the high desire to try new technology and banking services in other banks, are to get the benefits of more services than other banks, trying new products in other banks, and just curing the boredom with the existing banks. This greatly affects the behavior of the customers to switch to other banks. This is also triggered by the short relationship between the customer and the bank. Therefore, the company (bank) must create a better working environment, more comfortable and create a new technology (online) so that it can lower the number of customers who switch to other banks. Schiffman *et al.* (2010) say the behavior of seeking variation is a reasonable behavior for the consumer because of the stimulus factor from the outside which stimulates a person to tend to try the newly rated product.

***The influence of electronic banking on consumer switching behavior:***

Electronic banking is reflected by six (6) indicators and meets the suitability of the model with the loading factor value of each indicator above 0.5 so that the six (6) indicators are used until the final stages to explain the latent variable of electronic banking. Based on the highest loading factor value, the indicator such as limited bank service through mobile and internet banking, as well as, bank does not have adequate Automatic Teller Machine (ATM) is a dominant factor in reflecting the latent variable of electronic banking. This is supported by the average of respondents' answer which is somewhat agree. The lowest indicator in reflecting the latent variable of electronic banking is that the technology of ATMs is not reliable. This low indicator in reflecting electronic banking is also seen from the average respondents who answered somewhat agree with the highest result on the limited banking services via mobile and internet banking.

Customer perceptions of limited bank services through mobile and internet banking, lack of availability of ATM machines, a poor system of credit and debit cards, weak network systems, low ATM technology, and inadequate ATM service, trigger customers to switch to other banks with more complete facilities and infrastructure. The average length of the relationship duration turns out to be brief

as the moderating variable does not lead to increased consumer switching behavior. Researchers assume that electronic banking services in Indonesia still have the weaknesses mentioned above. The company also needs to improve electronic banking by always innovating in the mobile and internet banking service, so that customer service will be better. Electronic banking is typically in the form of ATMs, SMS, internet banking and telephone banking providing customers with alternative options to conduct online banking business (Gerrard and Cunningham, 2004; Durkin and Howcroft, 2003; Santos, 2003).

***The influence of relationship duration on consumer switching behavior:***

The duration of the relationship is reflected by four (4) indicators and meets the suitability of the model with the loading factor value of each indicator is above 0.5 so that the four (4) indicators are used until the final stage to explain the latent variable of the duration of the relationship. The duration of the relationship relates to the length of time a respondent, or in this case, a customer of a surviving bank, using banking products or services, the frequency of customers interacting with banking services, the number of banking products held simultaneously, and the intervals on the use of banking products.

The highest loading factor value is on the survival indicators of customers using banking services less than 1 year. This shows that the average relationship duration is very short between customers and the bank. Researchers predict that this trend to switch banks is caused by the fact that most respondents in the study are at a very vulnerable, young age and move from bank to bank in order to explore the quality of banking services, find competitive pricing, and seek banking services with the technology to support the needs of both personal as well as business financial transactions.

The second highest loading factor value is the frequency indicator associated with the use of direct banking services that lowers customer loyalty to a bank. Currently, customers very rarely interact directly with the bank, so it is very difficult for banks to build positive values in customers. For customers, the most important thing is how they can keep the funds in the bank safely, at a low cost, with competitive interest, and if the customer wants to borrow some funds they do not have to go through complicated procedures.

***Consumer switching behavior:***

The behavior of consumer switching bank is reflected by eight (8) indicators and meets the suitability of the model with the loading factor value of each indicator above 0.5 so that the eight (8) indicators can be used until the final stage to explain the latent variable of consumer switching behavior. Based on the highest loading factor value which includes the drawing of money in ATM in limited amounts, too much administrative requirements for a loan and the length of time the bank employees take to solve a customer's complaint. These are all dominant factors in reflecting the behavior of consumer switching.

This research indicators need to be improved by complementing facilities and infrastructure, such as, putting ATM machines in strategic locations and providing training for employees so as to acquire skills (hard skills and soft skills) to provide excellent qualified administrative services. This will reduce queuing times of customers.

## **6. Conclusions and recommendations**

In general, the greater the knowledge of bank management about the factors that influence the behavior of the customers switching, the greater their ability to develop appropriate strategies to reduce the switching behavior of the bank customers. Based on the results of data analysis and discussion related to price perception, service quality, variation seeking behavior, electronic banking, relationship duration, and the behavior of bank customer switching in DKI Jakarta, the conclusion results of this research are as follows: Price perception, Service quality, Variation seeking, and electronic banking behavior significantly influence the behavior of banking customer switching in DKI Jakarta Province. The duration of the relationship as a moderating variable strengthens the influence of price perception, service quality, variation seeking behavior and electronic banking on the switching behavior of banking customers in DKI Jakarta Province.

This study contributes to a limited body of empirical work concerning consumer behavior related to bank switching, especially in the context of Jakarta banking. This study provides a useful knowledge of switching behavior in the Jakarta banking industry by empirically identifying the factors that influence customers to switch banks. Analysis was used to examine the customers' switching behaviors. This study confirms that several factors affecting the behavior of consumer movements identified in the previous studies can also be applied to Jakarta banking such as Price, Service Quality, Effective Advertising Competition, Involuntary Switching, and Switching Cost. Next, this study also identifies factors that may be very important for the banking sector in Jakarta. These factors may also be appropriate to be considered as factors for other international studies on the switching behavior of bank customers.

In general, this study aims to improve our knowledge of the consumption behavior of banking services and help service marketers to understand consumers and the determinant factors that motivate the tendency to switch. In particular, the client managers involved in strengthening customer relationships should focus on the factors mentioned above. Banks should develop strategies that enhance positive response behavior towards customer satisfaction, interest rates, and service quality. At the same time, the strategy must be supportive in the prohibition of intention to switch. The strategy may include fulfilling the quality of service that customers want, preventing service issues that occur due to dissatisfied customers, offering competitive prices and positively facing customer complaints. Managers must

ensure the provision of competitive pricing for customers and take steps to increase the cost of switching.

Research has certain limitations as the result of a number of factors in this study. Researchers may next be able to add other variables, such as, customer purchase characteristics, including convenience. Future research can be done by observing the impact of these factors on actual switching behavior. Banking research in Jakarta also limits the ability to generalize the findings. Similar research can be done in other service domains (hotels, air transport, hospitals, etc.) or in different settings. Researchers can then focus on switching behavior from a wide range of consumers (companies or UMKM) and investigate the difference between switching intentions or switching behavior. This study also provides a further way to analyze the effects of moderation variables, such as convenience, in the relationship between variables and switching intentions.

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