# A Study on Factors Affecting Intention of Choosing Internet Banking and Intention of Continuity

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#### **Abstract**

Purpose – The finance industry especially the banking industry has been facing unprecedented atmosphere due to Internet Specialized Bank, P2P financing, mobile banking, etc. Furthermore borrowing and lending task which is the core business of banking can be done by internet without visiting bank. So called new business platform for the banking industry has emerging, and accordingly banks have to find new strategies to survive. Banks need to maintain existing customers by understanding customers' perceived value and attract new customers. In this research, we investigate the relationship among Internet Banking Use, Trust, Bank Loyalty, Continuity, and Switching Barrier. The variables represent what customers perceive as values regarding banking and what make them to switch banks. Especially switching barriers are analyzed whether they have control effects on customers' behavior leaving or staying their current bank. By understanding factors affecting customers' decision making, banks can set up strategies not to lose existing customers and to attract new customers.

Research design, data, and methodology – The first step is to test whether the customers' perceived value on internet banking affect internet banking use and bank loyalty. The second step is to test trust which consists of system trust and bank trust affect internet banking use affects internet banking use and bank loyalty. The third step is to analyze whether switching barriers for internet banking have control effect on leaving the current or staying. The data was collected by questionnaire and analyzed using SPSS. Demographic characteristics, factor analysis, regression analysis, and 3 step regression analysis were conducted.

Results – All sub-variables of customers' perceive value, usefulness, ease of use, customization, convenience, is turned out to affect internet banking use and bank loyalty at statistically significant level. Of system trust which consists of two sub-variables, task performance trust and security trust, task performance affects internet banking use and bank loyalty but security trust does not. Three sub-variables of Bank trust, promise keeping, opportunistic behavior, employee trust, affect internet banking use but regarding bank loyalty promise keeping and employee trust affect but opportunistic behavior does not affect bank loyalty. The switching barriers for internet banking are turned out to have control effect on the process from internet banking use to continuity and from bank loyalty to continuity.

Conclusions - The customers' perceived value on internet banking use are chosen from extant study results. They are usefulness, customization, ease of use and convenience. All the four variables are meaningful regarding internet banking. Regarding trust, customers are still suspicious on security of the system. However customers have confidence in internet banking in terms of tasks. Of bank trust customers believe that banks will keep their promises and the employees are trustworthy but they also think that banks can make decisions for their own benefit when conflicts between customers and bank break out. The switching barriers which consist of three factors, switching costs, difficulties of new environment and uncertainties of new bank, have control effect on switching internet banks. Therefor for banks not to lose existing customers need to make the barriers higher.

The contribution of this study is as follows. First, we found what factors regarding customers' perceived value on internet banking affect the use. Second the trust regarding internet banking has to be divided into two aspects which are system trust and trust of bank itself. Finally, the switching barriers on internet banking are influential to switching banks and continuity.

Keywords: perceived customer value, system trust, bank trust, bank loyalty, switching barrier

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#### 1. Introduction

In our daily life, convenience, speed has been very important virtue in decision making. This attitude can also be applied to banking. Banks have introduced tele-banking, internet-banking, and mobile-banking to meet customers' need. These new banking channels are not only for customers' need but also for banks' strategic measure. For banks, the number of branch was one of the most important measure determining their competitiveness, income size because in a branch most banking related tasks were handled. However the atmosphere surrounding banking industry has been changed very rapidly and fundamentally. The competitiveness among banks has been sharp, and external conditions including financial crises have affected the banking industry. However, the most dramatic change has been technical innovation. Most banking tasks are no long done in a branch face-to-face, instead telephone, internet system or mobile networks have replaced the role of branch office or clerks. With these rapidly changing conditions mean new competing paradigm to bank. This competing ground is no long for among banks only, which means new intruders including authorizing pay and check task specializing business as well as new internet banks. Banks need to keep their existing customers and attract new customers created by new business route.

The center of competing paradigm is internet banking because the number of use or the amount of trade through internet banking is not comparable to the other banking channels and the lending task which is the basic source of income to banks has been done using internet. So, competitiveness of internet banking is the key for a bank to gain competitiveness in the banking industry. The ultimate goal of internet banking is cutting costs by reducing face-to-face tasks and increasing revenues. Reducing face-to-face tasks can give convenience to customers by reducing time and efforts. All the effects can be taken only when a bank secures certain number of customers.

Banks have to understand what make customers use internet to secure existing customers and attract new customers. In this research, factors affecting customers' internet banking use. As factors customers' perceived value, trust, bank loyalty are considered and also switching barriers are investigated to analyze switching intention.

## 2. Theoretical Background and Precedent Studies

From precedent studies, the factors affecting internet banking are customers' perceived value, trust toward bank and internet system, loyalty, and switching variable.

## 2.1 Perceived Customer Value

Customers' perceive value includes many meanings and accordingly researchers define the value differently. From consumer's point of view, the value is feeling of satisfaction or utility from consuming product or service and measured size of the feeling is perceived value (Berger & Nasr, 1988; Gupta & Lehmann, 2004). For providers, the contributing interests provided as customers consume goods and services can be defined as customers' perceived value (Jain & Singh, 2002).

Reflecting the diversity of customer perceived value, Sweeney and Soutar (2001) suggest multi-facet components of the concept, emotional value, social value, and functional value as shown in the Table 1

Table 1. Multi-facet components of customer value

Customer Value	Contents
Emotional value	feeling or emotional value derived from products or services
Social value	social value derived from products
Functional value	value from saving time or reducing costs
Quality	value derived from the difference between expected performance and perceived quality

Internet banking is treating financial information for the purpose of financial transactions. Internet banking can be viewed as one of electronic commerce distributing information and service based on systems of software and networks (Kim & Kim, 2002). So the customers' perceived value also reflects the characteristics of the system. As for the customers' perceived value, researchers' suggestions are different. For example, Noh and Lee (2005) introduce ease of use, customization, site composition and design, reaction time, information quality, Kim and Kim (2002) show usefulness, trust, customization, ease of use, fun, while HAN (2004) argue usefulness of information, economic usefulness, customization.

Rafi and Alnaser (2017) report that e-customer service and perceived value significantly influence on internet banking adoption and brand loyalty of Banks for the case of Malaysia. Abdallah et al. (2018) argue that in Jordan

behavioral intention is significantly influenced by performance expectancy, effort expectancy, hedonic motivation, price value and perceived risk; however, social influence does not have a significant impact on behavioral intention. According to Berraies et al. (2017), quality, price and emotional perceived values' dimensions of MB applications are predictors of customers' e-trust. Within this spectrum, age acts as a moderator in these latter relationships. Findings also suggested that e-trust has positive effects on e-satisfaction and e-loyalty. In this research, the main purpose is to investigate factors affecting customers' internet banking adoption and continuity. Reflecting the characteristics of internet banking, we choose the components of customers' perceived value as usefulness, ease of use, customization, and convenience.

#### 2.2 Trust

Although concept of trust has been defined differently (Curral & Judge, 1995; Mayers et al., 1995; Nooteboom et al., 1997, etc.), trust is credibility formed between persons involved. Regarding internet banking, trust performs its role in determining whether to use internet banking or not. To make contracts to use internet banking, lots of personal information is asked to provide to banks, customers are worried about information leakage by hackers or other groups for improper use.

Regarding internet banking trust, trust for internet system and trust for bank itself should be classified separately (Kim et al., 2003). Trust for the system means customers' belief and expectation that the system can perform as they intended. On the other hand, trust for the bank is that customers believe banks will keep their promise, banks do not misuse customers' information, and employees of the bank are trustworthy. Trust for the system as a channel of banking is customers' expectation and belief in the electronic commerce and consists of main will to adopt internet banking. In this research, trust for the system and trust for the bank is separately considered.

#### 2.3 Loyalty

Customer loyalty is not only a favorable attitude toward certain goods or services but also referencing the attitudes to surrounding people (Gerpott, Rams, & Schindler, 2001; Zeithaml, Berry, & Parasuraman, 1996). Or customer loyalty is emotional condition preferring, addicting to or affectionate to certain firm's employees, goods and services and mind or immersion to buy or use again (Oliver, 1997). Definition of customer loyalty can be explained by three methods of approaches, that is, approach of action, approach of attitude, and approach of unification (Dick & Basu, 1994; Oh, 1995).

The approach of unification is integrating approaches of action and attitude to define the definition synthetically (Dick & Basu, 1994; Oliver, 1997; Zeithaml, 2000). In this research we follow the approach of unification approach and see the customer loyalty comprising both attitude and action.

# 2.4 Switching Barrier

Switching barrier means all the physical, human, emotional, situational factors blocking changing trading partner. Although switching barrier helps current goods and services providers to keep existing customers, for providers trying to attract new customers switching barrier acts as obstacles.

Recently of switching barriers switching costs have the spotlight (Jones et al., 2002; Keaveney, 1995). Generally speaking, switching costs include psychological, emotional cost as well as economic costs. Also switching costs contain costs to change to an alternative (Jones, 2002). Switching cost is customers' perceived monetary and non-monetary costs that have to be paid when changing existing provider (Gremler, 1995). As customers recognize switching costs as obstacle to changing trading partner, they show loyalty to existing partner continuously (Ganesan, 1994).

In this research, as switching barriers for internet banking, we adopt switching costs (Dick & Basu, 1994), human factors (Berry & Parasuraman, 1991), and attractiveness of alternatives (Anderson & Narus, 1990)

### 2.5 Continuity

Continuity means customer's intention to continue current relationship with existing partner who is satisfied with existing provider's goods and services (Yun et al., 2013). Continuity intension is an attitude that a customer wants to continue the relationship with existing provider. For a firm customer's continuity intension is definite source of profit and new customers who can be influenced by the customer with continuity intension (Kalwani & Narayandas, 1995). Customers develop trust and expectation and hold intension to keep the trade in the future (Shin, 2011). As result variables repurchase intension and repetitive purchase action (Dick & Basu, 1994), intention to reference (Tuškej, Golob, & Podnar, 2011), variation of switching costs (Gremler, 1995), brand loyalty (LaBarbera & Mazursky, 1993) are suggested.

## 3. Design of Research

## 3.1 Operational Definition and Hypotheses

The main focus of this research is on internet banking. And more specifically relation among variables of customer values, trust, bank loyalty, switching barriers, continuity intension that are supposed to affect internet banking is analyzed. Customer values from internet banking are benefits related parts. That is, those values are coming from benefits of interests, support, and convenience of doing tasks using internet banking. Due to these benefits, customers bear costs of time and efforts to learn, endure possible losses caused from mistakes doing internet banking (Noh & Lee, 2005; Han, 2004; Kim et al., 2003).

In this research, based on above discussion we define customer value as benefits from using internet banking, and set up the following hypothesis.

H1. Customer values regarding internet banking affect internet banking use.

As sub-variable of customer value, usefulness, ease of use, customization, and convenience are chosen. Thus the following hypotheses are set up.

- H1-1. Usefulness of customer values affects internet banking use
- H1-2. Ease of use of customer values affects internet banking use
- H1-3. Customization of customer values affects internet banking use
- H1-4. Convenience of customer values affects internet banking use

Customer values related to internet banking give customers positive mind about bank itself and bank related tasks. Kim and Kim (2002) show that loyalty for internet banking site affects loyalty toward bank itself by empirical analysis. So, the following hypotheses are chosen.

- H2. Customer values about internet banking affect bank loyalty.
- H2-1. Usefulness of customer values affects bank loyalty.
- H2-2. Ease of use of customer values affects bank loyalty.
- H2-3. Customization of customer values affects bank loyalty.
- H2-4. Convenience of customer values affects bank loyalty.

Internet banking is one of electronic commerce distributing information and service built on various software and network (Kim & Kim, 2002). This kind of system is always followed by trust issue. Risks of system malfunction, hacking, misuse of customers' personal information exist. These kinds of risks also affect customer choosing internet banking. Customers use internet banking because of system trust and bank trust in spite of these risks. So we set up the following hypotheses. And of trust toward system, there are two sub-variables, task performance trust and security trust.

- H3. System trust affects internet banking use.
- H3-1. Task performance trust of system trust affects internet banking use.
- H3-2. Security trust of system trust affects internet banking use.

In this research, trust is divided into trust for network system for internet banking and trust for bank itself (Nooteboom et al., 1997; Kim et al., 2003). Trust for bank consists of three sub-variables, to keep promises, not to act opportunistically, and employee trust. According to these discuss, the following hypotheses are set up.

- H4. Bank trust affects bank loyalty.
- H4-1. Keeping promises of bank trust affects bank loyalty.
- H4-2. Opportunistic action of bank trust affects bank loyalty.
- H4-3. Employee trust of bank trust affects bank loyalty.

bbBank trust, bank loyalty affects internet banking use (Kim et al., 2003). Bank loyalty based on trust indicates system trust and loyalty (Lee, 2015), thus affects internet banking use. So we establish the following hypothesis.

H5. Bank loyalty affects internet banking use.

When choosing internet banking, it has been shown that customer loyalty for internet banking site affects bank loyalty affirmatively (Kim & Kim, 2002; Lee, 2015). The emerging of internet specialized banking indicates that the lending and borrowing money process which is bank core task will be dome through internet. Therefore

customers tend to thing internet banking bank as main bank. Based on these discusses, we set up the following hypothesis.

H6. Internet banking affects bank loyalty.

Internet bank use based on trust for internet banking system and bank itself means satisfaction and loyalty for current trading bank (Kim & Kim, 2002; Noh & Lee, 2005; Han, 2004). We can suppose this satisfaction and attitude can affects continuity, so the following hypotheses 7 and 8 are established.

- H7. Internet bank use affects continuity.
- H8. Bank loyalty affects continuity.

As discussed, regarding internet banking, switching barrier include switching costs of psychological and emotional costs as well as economic costs. As factors of switching barriers, economic costs required changing (Dick & Basu, 1994), barriers related to human relations (Berry & Parasuraman, 1991), attractiveness of alternatives (Anderson & Narus, 1990) are considered. The results of empirical test show that switching barriers have control effects on the trace from customer satisfaction to switching intention (Anderson et al., 1994; Jones et al., 2002; Gwinner, 1998).

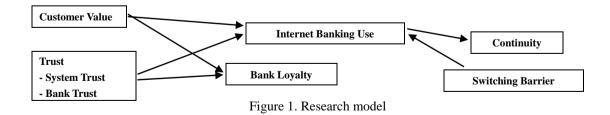
On mobile banking research, switching barriers are turned out not to have control effects between customer satisfaction and switching intention (Kim & Oh, 2007). However, the difference that the main benefits of mobile banking are movability, security, responsiveness while economic gains and convenience is the main benefits of internet banking should be considered (Kim & Kim, 2002).

Taking the above discussion into account, we set up the following hypotheses 9 and 10. For switching barriers, switching costs, difficulties of adapting new environment, uncertainty of new bank is considered as sub-variables.

- H9. Switching barriers have control effects while internet banking use affects continuity.
- H9-1. Switching costs of switching barriers have control effects while internet banking use affects continuity.
- H9-2. Difficulties of adapting new environment of switching barriers have control effects while internet banking use affects continuity.
- H9-3. Uncertainty of new bank of switching barriers has control effects while internet banking use affects continuity.
- H10. Switching barriers have control effects while bank loyalty affects continuity.
- H9-1. Switching costs of switching barriers have control effects while bank loyalty affects continuity.
- H9-2. Difficulties of adapting new environment of switching barriers have control effects while bank loyalty affects continuity.
- H9-3. Uncertainty of new bank of switching barriers has control effects while bank loyalty affects continuity.

## 3.3 Research Model

The research model for this study can be drawn as follows.



#### 3.4 Composition and Data Collection of Questionnaire

The questionnaire was composed of general questions, demographic characteristics, customer value, trust, internet banking use, bank loyalty, switching barrier, and continuity. The customer value was partially adapted to the purpose of this study, and the 22 items were composed of the values presented as ease of use, customer service, usefulness, customization, ease of use, interest (Kim & Kim, 2002), economic usability, and customization (Kim & Kim, 2004)

The reliability of the system for internet banking and the trust of the bank were divided into questionnaires. Trust in the system was modified to fit this study based on the research of Kim and Kim (2002), Kim and Oh (2007), and Lee (2015). Based on the research by Kim et al. (2003), trust in the bank was modified and adjusted according to the study in consideration of the factors (Han, 2016; Park & Ha, 2010) suggested by the trust related studies. It consists of 16 questions.

The questionnaire items related to the switching barriers and relationship continuity intention were selected and modified to fit the study by referring to the research of Kim and Oh (2007) and Kim and Han (2011). The questionnaires were distributed randomly from July to the end of September, 2018, and 300 copies were distributed and 287 copies were collected. The remaining 270 copies were excluded from the questionnaire. The analysis utilized SPSS 2.0 version.

# 4. Empirical Analysis

Empirical analysis was followed by demographic analysis and factor analysis. Regression analysis was conducted to verify whether each factor was affected, and analysis was conducted to verify whether switching barriers had a moderating effect.

# 4.1 Demographic Characteristics

The demographic composition of respondents is summarized in the following table.

Table 2. Demographic characteristics

Construct	Configuration
Sex	Male: 116(43%), Female: 154(57%)
Age	20's: 55(20.4%), 30's: 97(35.9%), 40's: 92(34.1%), 50's: 269.6%)
Marital status	Married: 123(45.6%), Unmarried: 147(54.4%)
Education	J. College: 75, College: 164, Master attending: 6, Master and above: 25
Income	Less than 100Man Won: 52, 100–200: 46, 200-300: 55, 300–400: 54, 400-500: 25, 500-600: 18, 600-700: 14, 700
	and more: 6
Occupation	Students: 24, Self-employed: 16, Blue-color: 17, Worker: 27, Specialist: 25, House-wife: 35, Etc: 26

# 4.2 Factor Analysis

The results of the factor analysis are summarized in the following table.

Table 3. Summary of factor analysis

Factor	Eigen value	Cronbach's alpha	Variance explained
Customer value			
Usefulness	5.045	0.831	20.180
Ease of use	3.821	0.850	15.283
Customization	3.594	0.896	14.377
Convenience	2.240	0.867	8.962
System trust			
Task trust	1.940	0.732	38.794
Security trust	1.651	0.783	33.027
Bank trust			
Promise	3.369	0.851	38.794
Opportunity	2.278	0.653	18.983
Employee	1.687	0.759	14.059
Internet Banking use	1.677	0.807	83.866
Bank loyalty	2.796	0.800	55.926
Switching barrier			
Switching costs	4.758	0.778	31.720
Difficulties of New environment	2.640	0.896	17.597
Uncertainty of new Bank	1.890	0.759	12.598
Continuity	1.762	0.735	58.731

In the above table, reliability analysis shows that there is no problem in reliability because all of them are 0.7 or more except for opportunistic behavior. Factor analysis results for each independent variable are as described above. The following are the results of correlation analysis between independent variables.

Table 4. Summary of correlation analysis of independent variables

	Usefulness l	Ease of use Cu	stomization C	onvenience Ta	sk trust Secur	ity trust Promi	se Opportunity	Employee	
Usefulness	1								
Ease of use	.329	1							
Customization	.218	.181	1						
Convenience	.267	.294	.099	1					
Task trust	.303	.377	.200	.438	1				
Security trust	.073	.055	.363	004	.203	1			
Promise	.181	.119	.265	.136	.286	.537	1		
Opportunity	.185	.211	.068	.171	.220	112	158	1	
Employee	.208	.192	.192	.187	.323	184	.261	.042	1

# 4.2 Regression Analysis

As a result of the factor analysis, customer value converged with usefulness, excellence, customization and convenience, and system trust related to banking of internet banking is extracted as trust and safety trust. Trust in the bank itself consisted of commitment, opportunistic behavior, and employee confidence. The following are the results of analyzing the influence of factors extracted by factor analysis.

Table 5. Summary results of regression analysis

Independent Variable	Dependent Variable	Std. Error	beta	t-value	significant	Adj. R2	F
Customer value	Internet Banking use						
- Usefulness		.061	.408	7.308	.000	.163	53.41
- Ease of use		.056	.387	6.873	.000	.147	47.23
-customization		.047	.188	3.141	.000	.032	9.866
- Convenience		.050	.477	8.894	.000	.225	79.10
System trust	Internet Banking use						
-Task trust		.051	.604	12.408	.000	.362	153.7
-Security trust		.043	.060	.992	.322	.000	.984
Bank trust	Internet Banking use						
-Promise		.051	.297	5.098	.000	.085	25.99
-Opportunity		.050	.228	3.840	.000	.049	14.75
-Employee		.057	.258	4.374	.000	.063	19.13
Customer value	Bank loyalty						
-Usefulness		.071	.252	4.272	.000	.060	18.25
-Ease of use		.062	.359	6.291	.000	.125	39.58
-Customizaiton		.050	.314	5.419	.000	.095	29.36
-Convenience		.061	.256	4.332	.000	.062	18.76
System trust	Bank loyalty						
-Task trust		.064	.434	7.882	.000	.185	62.12
-Security trust		.046	.283	4.828	.000	.077	23.31
Bank trust	Bank loyalty						
-Promise		.061	.304	5.230	.000	.089	27.35
-Opportunity		.057	.027	.438	.661	003	.192
-Employee		.063	.249	4.210	.000	.059	17.73
Internet Banking use	Bank loyalty	.062	.398	7.105	.000	.155	50.48
Bank Loyalty	Internet Banking use	.398	.051	7.105	.000	.155	50.48
Internet Banking use	Continuity	.065	.332	5.769	.000	.107	33.28
Bank loyalty	Continuity	.052	.550	11.068	.000	.311	122.5

Among the customer values, usefulness, convenience, customization, and convenience all have a significant

effect on the adoption of Internet banking. These results are consistent with the convenience results of Kim & Kim (2002), and different results are obtained in the case of customization and usability. In the case of customization, it can be concluded that the result of the study by Noh and Lee (2005) suggests the result of verification with customer value. The effect of trust on the system on the adoption of Internet banking is related to the results of Kim and Kim (2002). Kim and Kim (2002) report that customer loyalty to Internet banking sites leads to loyalty to banks. The results of Kim et al. (2003) related to bank trust on the adoption of Internet banking set the sub-variables as compliance with commitments and abuse of opportunities in bank trust, and high income group and low income group had significant influence on opportunity abuse and commitment The results are presented. These results are generally similar to the results of this study. The results of this study are as follows. The results of system trust have a significant effect on customer loyalty, which is similar to the results of Noh and Lee (2005), Han (2004) and Lee (2015), and almost same to the results of those Gwinner et al. (1998), Garbarino & Johnson (1999), and Reichheld (2000) who suggested that trust is more important than treatment.

On the other hand, the trust for the bank employees in this study has a significant effect on the internet banking use. The results of the analysis of the effect of internet banking - related customer value on loyalty to the bank showed that the usefulness, excellence, customization, and convenience are significant for bank loyalty. These results are consistent with the results of Kim and Kim (2002) and Lee (2015) that loyalty to Internet banking sites has a significant effect on bank loyalty. In the case of mobile banking, the results are similar to the results of internet banking.

The results of this analysis show that trust in the trust of Internet banking system has no significant effect on adoption of Internet banking. These results are interpreted as a result of expressing concerns about hacking or disclosure of external information. In addition, bank opportunistic behavior has a significant effect on intention to use internet banking, which is consistent with the results of Kim et al. (2003), but the loyalty to the bank itself is not significant. The results of this study are as follows. First, we examine the relationship between bank loyalty and bank loyalty. First, bank loyalty is positively related to bank loyalty. On the other hand, it can be interpreted that internet banking has an attitude to adopt even considering the fact that internet banking has a significant influence on adoption.

In addition, the adoption of Internet banking has a significant effect on the loyalty of the bank, and the loyalty of the bank also has a significant effect on the adoption of the Internet banking. In addition, the adoption of internet banking and bank loyalty has been shown to have a significant influence on the relationship persistence. This result is similar to the results of Noh and Lee (2005), and it is consistent with the results of mobile banking study that customer satisfaction has a negative effect on the conversion intention (Kim, 2007).

# 4.3 Control Effect Analysis

# 4.3.1 Analysis Contents

One of the main concerns of this study is the analysis of the role of conversion barriers in relation to the prevention of departure of existing customers and the verification of whether switching costs are controlled in the process of adoption of internet banking.

The results of this study are as follows. First, the effect of the adoption of the path - related Internet banking on the sustainability of the relationship and the bank loyalty and the relationship between the two. The control effect is determined by whether or not the explanatory power (R2) is significantly increased under the significance level.

## 4.3.2 Analysis Results

In the process of adopting Internet banking, the following table shows the analysis results on the effect of conversion cost, the difficulty of adapting to new environment, and the effect of changing bank uncertainty. First, it can be seen that the conversion cost does not have a modulating effect as shown in the following table.

Table 6. Summary of control effect analyses of switching costs on internet banking use and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.096	1.055	.099	29.608	1	268	.000		
2	.093	1.057	.000	.000	1	267	.999		
3	.090	1.057	.001	.175	1	266	.676		

Table 7. Summary of control effect analyses of difficulty of new environment on internet banking use and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.096	1.055	.099	29.608	1	268	.000		
2	.093	1.057	.000	.033	1	267	.856		
3	.090	1.059	.000	.092	1	266	.762		

It can be seen from the above table that the difficulty of adaptation to the new environment also has no control effect. The following is the uncertainty of the replacement bank.

Table 8. Summary of control effect analyses of uncertainty of new bank on internet banking use and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.096	1.055	.099	29.608	1	268	.000		
2	.098	1.054	.005	1.633	1	267	.202		
3	.115	1.045	.019	5.906	1	266	.016		

In the above table, the uncertainty of the replacement bank has a moderate effect. The uncertainty of the bank that switched to the new bank after adoption of the Internet banking is the result of influencing the change of the Internet bank.

The following is an analysis of whether switching costs have a moderating effect in the process of bank loyalty affecting the relationship continuity. First, the results of the analysis on whether or not the conversion cost is controlled are summarized in the following table.

Table 9. Summary of control effect analyses of switching costs on bank loyalty and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.097	1.055	.000	29.865	1	268	.000		
2	.095	1.056	.001	.300	1	267	.584		
3	.094	1.057	.003	.875	1	266	.350		

In the above table, it can be seen that the conversion cost does not have a moderating effect in the process of bank loyalty affecting the relationship persistence. The following is the analysis result of whether or not the adjustment difficulty of the new environment adaptation effect.

Table 10. Summary of control effect analyses of difficulties of new environment on bank loyalty and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.097	1.055	.100	29.865	1	268	.000		
2	.094	1.057	.000	.040	1	267	.842		
3	.099	1.054	.009	2.562	1	266	.111		

In the above table, it can be seen that the difficulty of adaptation to the new environment does not have a moderating effect in the process of bank loyalty affecting the relationship persistence. The following are the results of the analysis of the effect of the regulatory uncertainty on the replacement bank.

Table 11. Summary of control effect analyses of uncertainty of new bank on bank loyalty and continuity process

Model	Adj. R sq.	Std. Error	Variation of Statistics						
			Variation of R sq.	Variation of F value	df1	df2	Significance Prob. of F		
1	.097	1.055	.100	29.865	1	268	.000		
2	.094	1.056	.001	.288	1	267	.592		
3	.146	1.026	.058	9.093	1	266	.000		

In the table above, it can be seen that the bank loyalty has a moderating effect on the replacement bank's uncertainty in the process of affecting the relationship persistence.

#### 4.3 Sintering

In summary, the results of the above regulatory effect analysis show that uncertainty about the replacement bank has a moderating effect in the process of the influence of the adoption of internet banking on the sustainability of the relationship and the influence of the bank loyalty on the sustainability of the relationship. These results suggest that there are some unreliable factors such as opportunistic behaviors that customers have about banks. Therefore, even if customers change from an existing bank to another bank, they cannot benefit from special advantages or benefits, and that there is a possibility that there will be a lot of trouble. The results of this study are different from those of Kim (2007), who suggested that the results of analyzing the adjustment effect of conversion barriers in the process of customer satisfaction affecting the conversion intention in mobile banking study Results are shown.

#### 5. Conclusion

In this study, we examined the factors affecting the adoption of Internet banking and the relationship. It is one of the ways to maintain the competitiveness of banks and increase their profits in the face of the emergence of Internet professional banks and the emergence of new and various banking channels. This is because it is judged that the tendency analysis is very urgent.

To summarize the results, usefulness, excellence, customization, and convenience of customer value have significant effects on adoption of internet banking. These results are somewhat different from those of the earlier period when Internet banking was introduced. As the internet banking becomes more common, the value that customers perceive has become more diverse, and the result of reflecting the aspect of choosing Internet banking according to the way that each customer wants.

Trust in the system is divided into trust in the system and trust in the bank itself. Trust in the system has a significant effect on adoption of Internet banking, but trust in the trust has a significant effect Results are showing. This seems to be a reflection of the customer's perceived lack of confidence in the safety of the Internet system. The results of this study are as follows. First, the effect of bank commitment on trust in the bank has a significant effect on adoption of internet banking and loyalty to banks. However, opportunistic behavior has a significant effect on internet banking, and the confidence in the bank is partial.

The results of the analysis of the effect of internet banking - related customer value on loyalty to the bank showed that the usefulness, excellence, customization, and convenience are significant for bank loyalty. In addition, the adoption of Internet banking has a significant effect on the loyalty of the bank, and the loyalty of the bank also has a significant effect on the adoption of Internet banking. In addition, adoption of Internet banking and bank loyalty has a significant influence on the relationship persistence.

In summary, the results of the regression analysis show that uncertainty about the replacement bank has a moderating effect in the process of the influence of the adoption of internet banking on the sustainability of the relationship and the effect of the bank loyalty on the continuation of the relationship. This result is interpreted as a result of the recognition that it is difficult for a customer to have reliable trust or belief in a newly selected bank even if the bank is replaced with a bank to perform the Internet banking business. This result can be said to be consistent with the result that opportunistic behavior has no significant effect on loyalty to the bank among the sub - variables of trust to the bank.

New banking practices, such as the launch of an Internet bank and the widespread availability of non-face-to-face loans, are likely to cause major industry changes. In order to enhance competitiveness in such an environment, we should focus on maintaining existing customers and securing new customers. In order to do this, it is necessary to understand what the value is perceived by customers and thoroughly analyze the barriers to conversion. It is necessary to remind customers that they are attracting customers by identifying and providing the value they recognize, and that the barriers to conversion can be a cost-perceived barrier to customers, as indicated by Porter (1980). In other words, understanding the conversion barrier can reduce the intention of the customer to convert, and thus there is not too much room to retain the acquired customer and to utilize it to attract third-party customers.

In this study, we examined the effect of customer value, trust, and conversion barrier on internet banking adoption. This study analyzed the relationship between customer value and the adoption of Internet banking, the distinction between trust in trust systems and trust in banks, and the effect of the adjustment of switching barriers. It is anticipated that it will be possible to obtain information on the propensity of customers to improve the

profitability of banks.

In this study, we tried to analyze the effect of customer value on the adoption of Internet banking, and it could be a more systematic study if the researcher includes the factors that influence customer value. In addition, a comparative study with mobile banking will also help to make a more systematic interpretation of the research results.

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