ASEAN Marketing Journal

Volume 13 Number 2 December

Article 3

12-30-2021

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Nasreen, Jareena and Lubis, Arief Wibisono (2021) "DETERMINANTS OF CUSTOMERS' ADAPTATION TO INTERNET BANKING: EVIDENCE FROM GREATER JAKARTA AREA, INDONESIA," ASEAN Marketing Journal: Vol. 13: No. 2, Article 3.

DOI: 10.21002/amj.v13i2.13541

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DETERMINANTS OF CUSTOMERS' ADAPTATION TO INTERNET BANKING: EVIDENCE FROM GREATER JAKARTA AREA, INDONESIA

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Abstract

Manuscript type: Research Article

Research Aims: This paper aims to analyze factors that affect customers' adaptation to using Internet Banking among banks' customers in Indonesia. The variables hypothesized to influence adaptation to using Internet Banking are Importance of Internet Banking Needs, Compatibility, Convenience, Communication, and Benefits of Internet Banking.

Design/methodology/approach: This study uses Structural Equation Modelling (SEM) on a sample of 215 Internet Banking customers from Greater Jakarta Area, Indonesia.

Research Findings: This study found that Benefits of Internet Banking has a significant positive influence on Importance of Internet Banking Needs, which, however, does not influence customer adaptation. Similarly, Compatibility has no influence on customer adaptation. On the other hand, Convenience, and Communication are proven to have significant and positive influences on Customer Adaptation to Internet Banking in Indonesia.

Theoretical Contribution/Originality: This research uses the theory of Technology Acceptance Model (TAM) to explain Indonesian customers' adaptation to Internet Banking by combining the models from Ege Oruç & Tatar (2017) and Jahangir & Parvez (2012).

Practitioner/Policy Implication: The results of this study suggest that banks should provide easier, more attractive and secure facilities for users. Banks should invest more in promoting Internet Banking either internally through information by bank officers or spreading media brochures to customers in line at the back.

Research limitation/Implications: There are some limitations of this research in terms of the number of respondents, geographical coverage, the model used, questionnaire design and respondent's perception. Further research might consider to address these issues.

Keywords: Internet Banking services, customer adaptation, online banking, E-commerce, Importance of Internet Banking

INTRODUCTION

With Internet Banking technology which has now progressed tremendously over time, both banks and customers can benefit from the more efficient and effective working of the banking industry. Banks that offer Internet Banking services have a competitive advantage over traditional banks, as the former provide lower transaction costs and better customer services that meet customer demand. Internet Banking, E-commerce and Financial Technologies fall under the same

family where their ultimate goal is to be agile, innovative, and cost-effective, while at the same time enhance customer experience and allow to create new products and better data handling (Takieddine & Sun, 2015).

According to the studies by Tan & Teo (2000), online banking on average saves 40% of the operational costs as compared to offline banking. This could be because as customers prefer online transactions, there is less need for there being an offline physical branch and therefore, banks could save the cost of infrastructure and enjoy increased revenues. The convenience of using Internet Banking is what attracts and retains new customers as they are able to access account information and engage in financial transactions with a touch of a screen at any time of the day. Furthermore, it saves them the time and effort it would take to go to the brick-and-mortar store every time to manage their personal financial transactions. There is no restriction of banks opening hours and travelling to the bank as the financial services are available 24 hours every day in the week on any of their preferred electronic device (Takieddine & Sun, 2015).

Nevertheless, even with all the benefits of Internet Banking, some customers are still resistant to use it (Cheng et al., 2008). This is because Internet Banking acceptance and adaptation are faced with serious problems and consequences.

In order to understand Internet Banking usage, it is important to predict the resistance to innovations such as Internet Banking which is more often than not overlooked by the previous researchers. Previous researches tend to focus on the predictors of the use of Internet Banking as opposed to figuring out why individuals resist making the change from traditional banks to Internet Banking.

It is interesting to investigate this issue in Indonesia due to Internet Banking's potential development. According to the World Bank (2012), the implementation of ICT in the country is relatively small compared to its overall Gross Domestic Product (GDP). This has driven the government to allocate at least 10% of its investment for the expansion of Information Technology (IT) infrastructure from 2011 to 2030. Statista (2019) states that the number of internet users in Indonesia in 2019 is expected to be around 107.2 million. and this figure is projected to grow to 150 million in 2023. The Indonesian Internet Service Provider Association (APJII) also indicates that the level of internet traffic has reached 5Gbps for international bandwidth usage and 80 Gbps for domestic traffic. With a higher use of internet users in the country, there has been a significant increase in digital banking penetration in Indonesia. The longitudinal survey data from Barquin et al. (2015) show that the proportion of respondents using internet banking via their PCs or smartphones increased by more than seven-fold from 2011-2014.

Internet Banking providers are expected to leverage this potential to achieve further growth. The internet penetration and thus the usage of Internet Banking has been skyrocketing in Indonesia. The most popular payment gateways are KlikBCA and Mandiri Internet as they provide both the conventional method, like transfer-based, and modern method of payments. KlikBCA is provided by BCA, which currently holds the 3rd rank in the top 10 banks in Indonesia as of 2018 based on total assets, while Mandiri Internet is provided by Bank Mandiri, which is at the 2nd rank (Investments Indonesia, 2019). Although Bank BCA has the 3rd rank when it comes to assets, it dominates the other banks in terms of Internet Banking, as it has the highest transaction value and frequency in mobile

banking. It was also one of the first banks to launch Internet Banking in Indonesia.

Considering the abovementioned problems, this research would like to investigate the real choice of consumption done by Indonesian customers when deciding whether or not they would adapt to using Internet Banking services. Specifically, this study uses a sample of more than 200 internet banking users in Greater Jakarta, Indonesia, which can be considered as one of the most developed urban areas in the country. Following the study by Ege Oruç & Tatar (2017) and Jahangir & Parvez (2012), this research aims to answer the following questions using the Technology Acceptance Model (TAM) framework: (1) Does Importance of Internet Banking Needs have a significant and positive influence on Customer Adaptation to Internet Banking?; (2) Does Compatibility have a significant positive influence on Customer Adaptation to Internet Banking?; (3) Does Convenience have a significant and positive influence on Customer Adaptation to Internet Banking?; (4) Does Communication have a significant and positive influence on Customer Adaptation to Internet Banking?; and (5) Does Benefits of Internet Banking have a significant and positive influence on Importance of Internet Banking Needs?

Previously, several studies have done studies with related topics in Indonesia (see for example: Susanto et al., 2013; Franksiska et al., 2017; Assegaff, 2016). However, these studies were focused on specific contexts that are different from the one raised in this study. For example, the study by Assegaff (2016) concentrates on the sample in Jambi, which has different demographic characteristics from Greater Jakarta area, while Franksiska et al. (2017) look at the rural community. Moreover, these existing studies do not use TAM, which can be considered as a comprehensive framework to examine this issue.

The remaining of this paper is structured as follow: the second section reviews some related concepts and literature relevant to the topic of this research, i.e. customers' adaptation. Afterwards, explanations of data and methodology used in this study are provided in section 3. Section 4 presents the main findings and discussions of this research. Finally, section 5 concludes the overall paper.

LITERATURE REVIEW

Customers' adaptation

According to the Merriam-Webster Dictionary, adapt is a verb that means "to change for a new situation or purpose." In this context, the noun of adaptation is used to describe a customer's willingness to change from using the services of traditional banks to Internet Banking. More often than not, "adaptation" is often mistaken "adoption", but these terms are not similar. Adopt is also a verb but it means "to begin to use something." The difference between the terms "customer adaptation" and "customer adoption" is that when customers adapt to Internet Banking, they are making a switch from traditional banks to online banks due to the many benefits. However, customers adopt Internet Banking when they start using the online services provided by the local banks for the first time. Laforet & Li (2005) highlights that customer's attitude toward the adaptation depends on their computer knowledge and their level of experience using new innovative and technological advancements. Security level and risk are also factors that affect the acceptance and adaptation of Internet Banking. For instance, the more secure it is, the more users will adopt the Internet Banking service. As it is harder to make customers try new innovative products, banks should ensure that customers who have started using their online services must continue to use them, for example, by offering promo codes and coupons to online users which will reduce their transaction costs. Nevertheless, it is important to note that customer adaptation may fluctuate due to the availability of technology, the infrastructure needed, and the context in which the technology is being used.

Customers' awareness

The question that often arises when discussing Internet Banking is whether customer awareness of the service, as well as the advantages of using Internet Banking service, is effective and sufficient enough in improving customers' intention to adopt Internet Banking by eliminating the notion of perceived risk in the customers' minds (Hanafizadeh & Khedmatgozar, 2012). Customer awareness of the Internet banking service can be increased by stressing its effectiveness, time and effort savings, and immediate reward gain. Internet Banking is not only beneficial for customers but also for the banks providing the service. As stated in Weshah (2013) it allows the banks to improve by providing and facilitating easy and quick banking service, cheap communication tools with customers, new products and services to bank customers, and effective control of banking system errors. Internet Banking serves as an alternative to "brick and mortar" banks where customers have to waste time standing in long queues only to get charged with a commission fee for consulting with a real live bank teller (Saunders, 2011).

Compatibility

When an innovation matches the user's values and needs, the technology is said to be

compatible (Rogers, 2003). According to Kuo & Yen (2009), the behavioral intention to adopt new technology is directly predictable by compatibility. Internet banking services may seem more compatible with customers once they have perceived the benefits of using Internet Banking services to perform certain activities. In today's modern banking era, customers are known to be tech-savvy and have sufficient IT knowledge, therefore they are extremely compatible with the delivery channel of Internet Banking. When customers perceive they are compatible with using the Internet, it automatically makes them believe that they will perceive Internet Banking with the same compatibility (Tan & Teo, 2000).

Convenience

Convenience is defined as how much time and effort is spent in contact with the product or service from the customer's point of view. Products that ooze convenience are called convenience goods in the world of marketing as they are the goods that are easily available for purchase at any selling unit. Many researches such as Beauchamp & Ponder (2010) point to convenience being an important underlying influence customers to adopt Internet Banking. As the banking industry is a service industry, through Internet Banking, customers benefit from service convenience where there exists a realization of time and effort required by the customers in obtaining the service. Customers benefit from convenience when their time and efforts are saved. Apart from the characteristics of time and effort saving, convenience is also determined by the accessibility of the product or service. Online accessibility is when the user is able to access any information and service from any website depending on the hardware and software used, the internet connection, and the user's technological knowledge. As

Internet Banking is available online, banks are made accessible to customers via the bank's website or mobile application.

Communication

The level of communication between a bank and its customers is crucial in determining their intention to use online banking. This is because an important factor in determining a bank's success in implementing Internet Banking is customer trust (Özkan et al., is and trust earned through communication. Additionally, electronic communication (e-communication) crucial variable in customer satisfaction. Customer satisfaction is defined as a customer's cognitive and affective evaluation of their personal experiences of the services provided to them. Ernst and Young conducted a survey regarding consumer banking in 2012 which consisted of more than 28,500 customers in 35 countries. The findings of the Global Consumer Banking Survey show customers value communication clarity the most when it comes to increasing their satisfaction. In order for banks to make their Internet Banking successful, they need to retain existing customers. One way to do so is by creating customer loyalty and high retention. Iyer & Bejou (2004) has proven that customer satisfaction increases loyalty. The more satisfied a customer is with the services provided by their current bank, the less likely she or he will switch to competitors as their switching costs will be very high. This can be achieved when customers build a strong emotional and structural tie with the bank which ensures that they will remain with their current bank as long as the bank continues to meet the customer's satisfaction. Therefore, it can be said that e-communication not only affects customers' satisfaction but their loyalty as well.

Conceptual model

This research would like to incorporate the models from Jahangir & Parvez (2012) and Ege Oruç & Tatar (2017) in order to know the comprehensive effect that the benefits of Internet Banking have on customer's adaptation to use Internet Banking services. Jahangir & Parvez (2012) investigated the impact of Importance of Internet Banking Compatibility, Convenience, Communication, and Benefits of Internet Banking on Customer Adaptation to Internet Banking. The findings of this study are such that Convenience, Importance of Internet Communication Banking, and statistically significant related to Customer Adaptation to Internet Banking. Meanwhile, the variables of Compatibility are not significantly related to Customer Adaptation. The model is shown in Figure 1.

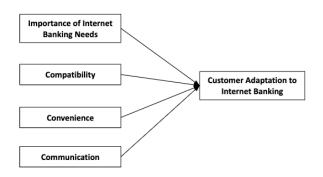


Figure 1. Model by Jahangir & Parvez (2012)

Source: Jahangir & Parvez (2012)

Meanwhile, the study by Ege Oruç & Tatar (2017), as can be seen from Figure 2, also includes the variable Benefits of Internet Banking and shows that Benefits of Internet Banking and Communication have a significant impact on Importance of Internet Banking Needs while Customer Adaptation to Internet Banking has a significant and positive impact on Communication" and "Convenience. These results provide full support for the hypotheses.

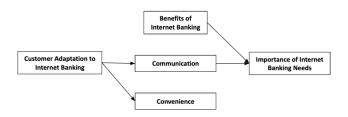


Figure 2. Model by Ege, Oruç & Tatar (2017)

Source: Ege, Oruç & Tatar (2017)

Combining the two models, the framework used in this study is depicted in Figure 3.

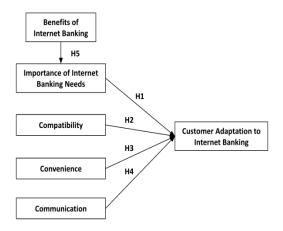


Figure 3. Research Model

Source: Authors' Modification from Jahangir & Parvez (2012) and Ege, Oruç & Tatar (2017)

The proposed model used in this research would like to test the hypotheses of:

H1: Importance of Internet Banking Needs has a significant and positive influence on Customer Adaptation to Internet Banking.

H2: Compatibility has a significant and positive influence on Customer Adaptation to Internet Banking

H3: Convenience has a significant and positive influence on Customer Adaptation to Internet Banking

H4: Communication has a significant and positive influence on Customer Adaptation to Internet Banking.

H5: Benefits of Internet Banking has a significant and positive influence on Importance of Internet Banking Needs.

RESEARCH METHOD

The sample used in this research are respondents who have used Internet Banking services in the last six months and live in the Greater Jakarta totalling 215 area. observations. The data is only derived once 2019. We distributed April questionnaire adopted from Jahangir & Parvez (2012) to potential respondents who have previously used Internet Banking services. demographics The of the respondents are shown in Table 1.

Table 1. Respondents' demographics

Measure	Items	Number of respondents	Percentage (%	
Age	< 18	13	6.0	
8	18 – 34 (Millennials)	131	60.9	
	35 – 50 (Gen Z)	58	27.0	
	51 – 70 (Baby Boomers)	13	6.0	
Gender	Male	60	27.9	
Gender	Female	155	72.1	
Education Level	Less than a high school diploma	7	3.3	
Education Level	High School degree or equivalent	7 76	35.3	
	Bachelor's degree	82	38.1	
		42	19.5	
	Master's degree			
	Doctorate	1	0.5	
T 1 .	Others	7	3.3	
Employment	Student	91	42.3	
Status	Employed part-time (less than 40 hours a week)	10	4.7	
	Employed full time (40+ hours a week)	55	25.6	
	Self-employed	24	11.2	
	Unemployed (currently looking for work)	12	5.6	
	Unemployed (not currently looking for work)	13	6	
	Retired	-	-	
	Unable to work	1	0.5	
	Others	9	4.1	
Geographical	Jakarta	165	76.7	
Location	Bogor	5	2.3	
204411011	Depok	9	4.2	
	Tangerang	12	5.6	
	Bekasi	9	4.2	
	Others	15	7	
Marital Status	Single	126	58.6	
Mariar Status	Married	85	39.5	
		3	1.4	
	Divorced Widowed	3 1	0.5	
Avorogo		21	9.8	
Average	< Rp 1,000,000 Pr 1,000,000 Pr 5,000,000			
Spending per	Rp 1,000,000 – Rp 5,999,999	110	51.2	
month	Rp 6,000,000 – Rp 10,000,000	42	19.5	
D	> Rp 10,000,000	42	19.5	
Purpose of using	Check banking information	120	55.8	
Internet Banking	Transfer purposes	186	86.5	
service	Online shopping	124	57.7	
	Saving purposes	81	37.7	
Frequency of	At least once a week	143	66.5	
using Internet	Once every 2 weeks	41	19.1	
Banking service	Once a month	18	8.4	
	Around 3-4 per quarter	4	1.9	
	Once every 3 months	9	4.2	
	Never	0	<u> </u>	
Total		215	100	

Source: Authors' Calculation

In processing the data, Structural Equation Modelling (SEM) was employed using LISREL 8.51. This technique was chosen because according to Malhotra (2007), it allows researchers to simultaneously test the dependence relationships inter-related between the measured variables and the latent variables, as well as the relationship among the latent variables. The objects of this study are the direct impacts of "Importance of Internet Banking Needs", "Compatibility", "Convenience" and "Communication" on "Customer Adaptation to Internet Banking" and the impact of "Benefits of Internet Banking" on "Customer Adaptation to Internet Banking" through "Importance of Internet Banking Needs". A pretest was first conducted with 59 respondents to identify and eliminate potential problems in data collection. Variables that are neither valid nor

reliable were then eliminated. Next, the main survey was conducted by distributing the online questionnaire to the respondents. With regards to the sample size, the use of SEM requires that the number of observations should equal to at least five times of the number of questions. Therefore, having 215 respondents can be considered sufficient.

All six main variables were measured using a 5-point Likert scale, where respondents can rate their agreements to the statements describing each variable from "Strongly Disagree" to "Strongly Agree". Each scale point denotes a different level of Agreeability where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. Table 2 shows the breakdown of the operationalization of variables along with their respective sources and scale points.

Table 2. Operationalization of Variables

Latent Variables	Indicators	S	Scale	Source
Importance of Internet Banking	IBN1	Internet Banking is an easier way to solve my banking needs.	Likert 1-5	Jahangir & Parvez (2012)
Needs	IBN2	Internet Banking gives me greater control over my finances.		
	IBN3	Internet Banking allows me to manage my finances effectively.		
	IBN4	Internet Banking is a convenient way to manage my finance.		
	IBN5	Internet Banking allows me to manage my finances efficiently.		
	IBN6	Internet Banking is useful to manage my financial resources.		
Compatibility	COMP1	Internet Banking is compatible with my lifestyle.	Likert 1-5	Jahangir & Parvez (2012)
	COMP2	Internet Banking fits well with the way I like to manage my finances.		
	COMP3	Using Internet Banking fits into my working style.		
Convenience	CON1	My bank is efficient in providing Internet Banking service.	Likert 1-5	Jahangir & Parvez (2012)
	CON2	The Internet Banking service provided by my bank is convenient in terms of location.		(= 0 = 2)
	CON3	My bank provides 24 hours of Internet Banking service.		
	CON4	My bank always provides prompt Internet Banking service.		
Communication	COM1	The Internet Banking service of my bank is very open in case of communicating with its customer.	Likert 1-5	Jahangir & Parvez (2012)

Latent Variables	Indicators	S	Scale	Source
	COM2	The Internet Banking service is very		
		prompt in case of responding to its		
		customer.		
	COM3	The Internet Banking service of my bank		
		always provides me quality information.		
Customer	CAIB1	I am able to access the internet at any	Likert 1-5	Jahangir & Parvez
Adaptation to		time at work and at home.		(2012)
Internet Banking	CAIB2	My bank provides all the documentary		
		evidence for all the transactions		
		performed online.		
	CAIB3	The terms and conditions of Internet		
		Banking service set by my bank are		
		acceptable.		
	CAIB4	My bank provides trial period of doing		
		online banking transaction before		
		registering for the Internet Banking		
		service.		
Benefits of	BIB1	Internet Banking gives me greater control	Likert 1-5	Jahangir & Parvez
Internet Banking	DVD4	over my finances.		(2012); Ege Oruç &
	BIB2	Internet Banking is compatible with my		Tatar (2017).
	DID4	lifestyle.		
	BIB3	Internet Banking fits well with the way I		
	DID 4	like to manage my finances.		
	BIB4	I am able to access the Internet at any		
		time at work and at home.		

Source: Authors' Calculations

RESULT AND DISCUSSION

Results

We first examined the validity and reliability of the indicators used in this study. The results indicate that variable CAIB4 is neither valid nor reliable. Thus, before conducting the main test, CAIB4 is deleted. The validity and reliability test results of the main-test

data are given in Table 3. Some of the results do not meet the cut-off rates of the Standardized Loading Factor (SLF) value, t-value, Construct Reliability (CR) value or Average Variance Extended (AVE) value. However, these indicators are still used in this research as this research is a replication of previous research (Jahangir & Parvez, 2012; Ege Oruç & Tatar, 2017) and these indicators are important in explaining the variables used.

Table 3. Validity and Reliability of Main-Test

Indicators	SLF Value	t-value	CR value	AVE value
	≥ 0.50	≥ 1.96	≥ 0.70	≥ 0.50
IBN1	0.45	6.69		
IBN2	0.80	13.88	0.90	0.60
IBN3	0.83	14.53		
IBN4	0.83	14.63		
IBN5	0.83	14.75		
IBN6	0.82	14.29		
COMP1	0.77	13.45		0.45
COMP2	0.86	15.80	0.63	
COMP3	0.06	3.84		
CON1	0.77	12.72	0.85	0.50
CON2	0.77	12.85		
CON3	0.66	10.32		0.58
CON4	0.84	14.46		

Indicators	SLF Value	t-value	CR value	AVE value
	\geq 0.50	≥ 1.96	≥ 0.70	≥ 0.50
COM1	0.89	16.17		
COM2	0.83	14.40	0.87	0.70
COM3	0.82	14.23		
CAIB1	0.65	9.78		0.55
CAIB2	0.74	11.57	0.79	
CAIB3	0.83	13.50		
BIB1	0.07	4.16	0.54	0.35
BIB2	0.78	13.52		
BIB3	0.88	15.86		
BIB4	0.03	2.27		

Source: Authors' Calculations

Following the validity and reliability test of the main survey data, the goodness of fit of the measurement model and structural model is assessed as shown in Table 4. This shows

that the measurement model and structural model used in this research has a good and marginal fit.

Table 4. Model Fit Test

Model Fit Test	Measurement Model		Structural Model	
	Value	Interpretation	Value	Interpretation
Goodness-of-Fit Index (GFI)	0.66	Marginal Fit	0.67	Marginal Fit
Adjusted Goodness- of-Fit Index (AGFI)	0.56	Marginal Fit	0.59	Marginal Fit
Chi-square (X^2)	(df= 215) 1269.12 (P=0.0)	-	(df= 219) 1208.10 (P=0.0)	-
Estimated Non- Centrality Parameter (NCP)	1054.12	-	989.10	-
Confidence Interval for NCP	(945.70; 1170.02)	-	(883.77; 1101.92)	-
Root Mean Square Residual (RMR)	0.16	Good Fit	0.088	Good Fit
Standardized Root Mean Residual (SRMR)	0.22	Marginal Fit	0.13	Marginal Fit
Root Mean Square Error of Approximation (RMSEA)	0.15	Good Fit	0.15	Good Fit

Source: Authors' Calculations

Discussions

This research has discovered several findings. Firstly, the result in Figure 4 shows that Hypothesis 1 is not supported. This shows that customers in Indonesia do not adapt to Internet Banking even though they are fully aware of the importance of the need for services offered by Internet Banking. This is consistent with the findings of Chen & Barnes (2007) which proves that customers recognizing how important Internet Banking services are not encouraged to adapt to using Internet Banking due to the issue of initial trust formation. The reason why this research failed to accept this hypothesis could be because Trust was not included as an indicator for the variable Importance of Internet Banking Needs. The indicators of this variable derived from Jahangir & Parvez (2012) focused more on the technical reasons for needing Internet Banking such as efficiency and control, rather than the emotional drivers of adapting to Internet Banking such as trust.

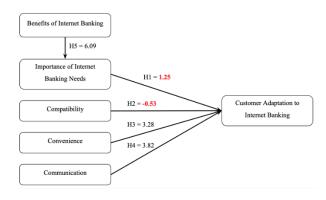


Figure 4. SEM Results Source: Authors' Calculations

Secondly, we can also see that Hypothesis 2 means is not supported. This compatibility does not have an impact on Indonesian customer's adaptation to Internet Banking. result. in which This the respondents not sure if they are are Banking, with Internet compatible is consistent with the study of Jahangir & Parvez (2012) where compatibility is not significant in measuring customer adaptation to Internet Banking in Bangladesh. Another study by Anuar et al. (2012) has the findings that show a majority of Muslim customers prefer using ATMs and physically going to the bank to interact with a human teller as compared to using the services of Internet Banking. Additionally, the reason why customers are not compatible with using Internet Banking service may be due to its complexity and trialability (Anuar et al., 2012). In Indonesia, the banks providing Internet Banking service, such as BCA, do not offer customers a trial period. When the customers are not allowed to reduce their uncertainty of the complexity of using Internet Banking, they are not likely to adapt to Internet Banking.

Thirdly, it can be seen from the results that Hypothesis 3 is supported. This means that customers in Indonesia will adapt to Internet Banking when the services provided by the bank offering Internet Banking are the most convenient to them. The findings of Fawzy et al. (2017) prove that convenience is an important factor in Internet Banking usage. It is found that the more convenient the innovation is to customers in terms of location, availability and accessibility, the more likely the customers will use the innovation. Moreover, convenience is found to be one of the most significant factors predicting the adaptation of customers to Internet Banking (Fawzy et al., 2017). This finding is consistent with the study by Jahangir & Parvez (2012) and Ege Oruç & Tatar (2017) where convenience has a significant relationship with customer adaptation to Internet Banking.

Hypothesis 4 is seen to be supported and this shows that communication does have an impact on Indonesian customer's adaptation to Internet Banking as the more the bank

responds to the customer's needs, the more satisfied the customers will be and then adapt to using the service. This result is consistent with the finding of Jahangir & Parvez (2012) where communication is found to be statistically significant in terms of Bengali customer's adaptation to Internet Banking. Here, the variable of communication is able to explain 4.3% of customer adaptation to Internet Banking. In the study by Ege Oruç & Tatar (2017), communication also has a significant impact on Internet Banking and can explain customer adaptation to Internet Banking by 73.6%, which is relatively high. The findings of Kirakosyan & Dănăiață (2014) state that communication is an important element in building proper Customer Relationship Management (CRM) in order to increase customer satisfaction and loyalty, which will encourage them to use Internet Banking services.

Lastly, Hypothesis 5 is seen to be supported, which means that customers in Indonesia recognize that the benefits of Internet **Banking** contribute to their needful importance which is the first step in adapting to Internet Banking. The finding is consistent with the study of Ege Oruc & Tatar (2017) where the variable Benefits of Internet Banking is able to explain Customer Adaptation to Internet Banking by 54.2%. Furthermore, it is proved in Saunders (2011) that the main benefit of Internet Banking that makes it important is that it provides the same services as traditional "brick and mortar" banks with time and cost savings. The elimination of a physical store and bank tellers at every branch allows banks to provide the customers with immediate banking service via the Internet at a very low transaction cost.

CONCLUSION

The results of this research reveal that only the variables of Convenience and Communication have significant and positive influences on Customer Adaptation to Internet Banking. Contrary to the results of Jahangir & Parvez (2012) and Ege Oruç & Tatar (2017), Importance of Internet Banking Needs and Compatibility do not have an influence on Customer Adaptation to Internet Banking. However, the result of this research that Benefits of Internet Banking has an influence on Importance of Internet Banking Needs is consistent with the findings of Ege Oruç & Tatar (2017).

There are several implications with regards to the results of this study for banks' management. Internet Banking is a product of a bank that aims to facilitate customers in performing banking transactions at any time without the hassle of going to the bank or ATM and standing in line. Convenience and communication are the factors that have been shown to be important in this research for adaptation to Internet Banking. Therefore, banks should pay attention to these aspects. With regards to convenience, they can achieve their goals by creating easier to use facilities for users. As based on the finding of this study communication is also important, banks should invest more in promoting Internet Banking either internally through information by bank officers or spreading media brochures to customers in line at the back. Banks should also engage in external promotion outside the bank by targeting popular public areas such as transportation stations and shopping centers with communication media such as television screens places strategically to attract the maximum attention. Social media can be a strong promotion platform.

There are some limitations of this research in terms of the number of respondents, geographical coverage, the model used, questionnaire design and respondent's perception. First, the respondents collected in this research were only 215 people from the Jabodetabek area. This sample is not sufficient in representing the total population of Indonesia. Therefore, for a wider generalization, it is recommended to use more respondents who are domiciled from all areas in Indonesia. Second, this research was a single cross-sectional study which means that the information is only collected at one point in time. According to Poon (2004), a longitudinal study will be more appropriate in identifying customer adaptation as it will give a complete and clear picture of the situation.

Third, the respondents used in this research were dominated by age and employment status which causes bias. Thus, future research should consider a more balanced ratio. Another direction for further studies is to modify or extend the model used in this research as to provide new insights which could potentially be used for customer behavior data analysis by the banks in Indonesia looking to improve their Internet Banking services. For example, a specific attention to security issues in Internet Banking use can be included in the future research, as more than 60% of global bank customers experienced frauds including those related to Internet Banking (KPMG, 2019).

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