WHY TRADITIONAL MARKET BUYERS GOING DIGITAL: An Empirical Study on Switching Behavior

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Abstract

This study attempts to provide a strengthened understanding of why people switch from traditional payment to digital payment QRIS (Quick Response Code Indonesian Standard). Grounding on the push, pull, mooring model as a framework, I proposed dissatisfaction and transaction inconvenience as the push factor, easy of use and critical mass as the pull factor, and switching cost as the mooring factor. I tested the proposed model by conducting a paper-based survey in Surakarta's traditional market at the Center of Java, Indonesia by comprising respondents comprising a total of 150 buyers. The results of the PLS-SEM analysis demonstrated that except for transaction inconvenience, all the proposed variables have been confirmed. From a theoretical implication, this study offers significant contributions to switching behavior literature by investigating the applicability of the PPM Model in a traditional market context. From a practical implication, these findings provide useful implications and insights for digital payment brands on how to encourage customers to switch from their traditional payment habits.

Keywords: Critical Mass; Digital Payment; Easy of Use; Switching Cost; Transaction Inconvenience

INTRODUCTION

Technological advances have driven many changes in almost all aspects of human life, including the way people transact. In the past, people used cash to make payments, but now they have been replaced by digital payments (cashless). PWC's Global Consumer Insights Survey 2019 reports that Asian consumers are more active in using digital payments than those in Europe and America. China ranks highest in the use of digital payments at 86%. But Vietnam has the highest percentage increase in Asia from 2018 and 2019, Vietnam's percentage increased 24% from 37% to 61%, followed by Thailand which increased 19%, Malaysia 17%, Philippines 14%, Singapore 12%, and Indonesia 9%. According to Pram (2016), digital payment is a payment method that uses Internet facilities as an intermediary. There are various digital payment applications that are popular in Indonesia, including *e-wallets* , debit and credit cards, QRIS, *mobile banking* , and PayPal.

Among these payment applications, QRIS (*Quick Response Code Indonesian Standard)* is a national QR code standard to facilitate QR code payments in Indonesia which

was launched by Bank Indonesia and the Indonesian Payment System Association (ASPI) on 17 August 2019. Initially, this digital payment application was developed to simplify the transaction process and minimize physical contact during the pandemic. After the pandemic began to subside, the use of QRIS turned out to be a habit for most people, especially the millennial generation. The popularity of QRIS has caused many people to start switching from traditional payments to digital payments using digital QRIS. Switching behavior is consumer behavior to move from the previous product/service to another product/service Burnham et al. (2007). Switching behavior is divided into two types: horizontal switching and vertical switching. Horizontal switching is a transition from one brand to another for the same type of product/service. Vertical switching is a transition from one version to another on the same product/service brand.

Previous researchers have investigated the factors influencing customer intentions to switch from one brand. Hsieh (2022) found 2 factors that influence switching intentions, namely dissatisfaction and switching costs. Research conducted by Bellami and Avida (2018) identified several factors driving customer switching intentions, including; price, service quality, switching costs, customs, relative advantage, relative convenience and safety, and subjective norm. Furthermore, another study conducted by Purwandari, et al. (2022) found that *transaction inconvenience* and *critical mass* had a positive effect on switching intentions, while *switching costs* had a negative effect on switching intentions.

Bansal, et all. (2005) suggests that there are 3 factors that can influence customer switching intentions, namely push factors, pull factors, and inhibiting factors. Many studies apply the PPM model to transform consumer behavior. For example, Chen et al., (2019) used PPM to study switching intentions regarding mobile private cloud storage services. Zhang et al., (2014) applied PPM to study shifts in Chinese consumer loyalty regarding mobile services. Zhang et al., (2012) studied the switching of online blogging services. Chou et al., (2016) also applied PPM to explore consumer *free-riding behavior* within channels and across channels in multi-channel environments. However, there is still little research on the phenomenon of customer migration from traditional payments to digital payments in traditional market environments.

For driving factors, Bansal et.al,. (2005) revealed that customer satisfaction has a negative effect on *switching intention*. When consumers are not satisfied, consumers will tend to switch. In addition, Wibowo (2008) describes several determinants of transfer, such as quality and satisfaction. Ye et al. (2022) and Fan et al,. (2021) also found that there was a positive influence between dissatisfaction and consumer switching intentions. If consumers feel their expectations on the performance of a service are not met, then consumers will switch to other services that they feel are capable of meeting their expectations. Tran et al.,

(2019) in their research suggested that inconvenience factors could encourage users to abandon cash payments and switch to mobile payment services.

For the pull factor, supported by research conducted by Bellami, Avida (2018) shows that ease of use, which is included in the pull factor, will make someone switch from banking-based financing services. Liu et al. (2021) show that the intention to switch from internet payments to m-payments is influenced by critical mass. If most of the friends of potential users use m-payment, this situation can attract customers to switch so as not to become a minority.

As for the inhibiting factors, Liu et al (2021) showed that *switching costs* have a negative effect on the intention to switch. Meanwhile, Guo (2021) found that *switching* costs had an insignificant impact on *the switching behavior of smartphone* users. Based on some of the studies mentioned above, using the PPM framework, this study proposes a hypothetical model as shown in Figure 1.
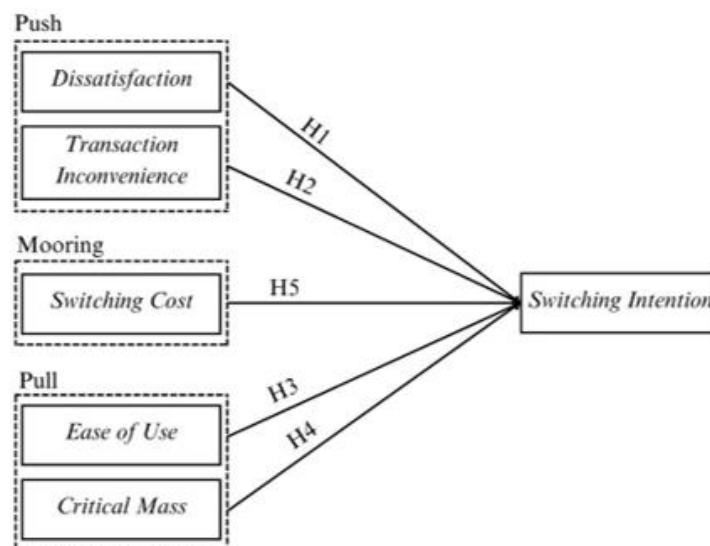

Figure 1. Research Model

METHODOLOGY

The population used in this study are buyers at traditional markets in Surakarta City, Central Java, Indonesia who use QRIS when making transactions. The survey was conducted by randomly distributing questionnaires to visitors to the traditional market for 2 weeks. By using a purposive random sampling technique, 150 valid samples and 13 invalid samples were obtained because they did not complete filling out the questionnaire to completion. Data analysis in this study used Partial Least Square Structural Equation Modeling (PLS-SEM) with

SmartPLS 4.0 Hair et al. software. (2012). The measurement items in this study use instruments that have been tested from previous studies, as shown in Table 1.

Table 1. Items Measurement

Construct	Item	Loading
Dissatisfaction α = 0.90; CR=0.89; AVE=0.71	1. I feel dissatisfied with using the systempayment cash	0.82
	2. I feel the cash payment system is notcan fulfill my service need	0.92
	3. I feel the cash payment system is notcan make ends meet my specifics	0.92
	4. I feel the cash payment system is notcan fulfil right service time	0.88
Transaction Inconvenience α = 0.87; CR=0.90; AVE=0.79	1. I feel the hassle of using the systemcash payment due to have to prepare Money right to pay	0.88
	2. I feel the hassle of using the systemcash payment because often sellers No give change	0.90
	3. I feel the hassle of using the systemcash payments because it is often cash The change I received was not correct with the amount it should be accepted	0.88
Switching Cost α = 0.87; CR=0.89; AVE=0.72	1. I felt that switching from cash to digital payments would be labor intensive	0.81
	2. I feel that going from cash payments to digital payments is going to take a lot of time	0.88
	3. I feel that becoming an expert in using digital payments will not be easy for me	0.82
	4. In general, it will be a pain to switch to digital payments	0.89
Ease of Use α = 0.91; CR=0.91; AVE=0.86	1. I find learning to use the QRIS digital payment system easy to understand	0.92
	2. It is easy for me to become proficient in using the QRIS digital payment system	0.93
	3. I feel that my interactions with the QRIS digital payment system procedures are clear and understandable	0.92
Critical Mass α = 0.87; CR=0.89; AVE=0.71	1. Many people I know use the QRIS digital payment system more often	0.82
	2. Many people I know will continue to use the QRIS digital payment system	0.86
	3. The people closest to me feel that using the QRIS digital payment system is reliable, so I will use it too	0.85
	4. I'm sure the number of users of the QRIS digital payment system will increase	0.84
Switching Intention α = 0.89; CR=0.90; AVE=0.75	1. I feel dissatisfied with using the systempayment cash	0.76
	2. I feel the cash payment system is notcan fulfill my service need	0.89
	3. I feel the cash payment system is notcan make ends meet my specifics	0.90
	4. I feel the cash payment system is notcan fulfill the right service time	0.92

Note: CR = composite reliability, AVE = average variance extracted

RESULTS AND DISCUSSION

Data Collection

As reported in Table 2, approximately 54% of participants were female and 46% male; the majority (17.9%) are aged between 21 - 25 years, and 65% are high school seniors and 23% are undergraduates. Most of the respondents have experienced using QRIS (40%) 3-4 times, on average they earn 2 to 3 million (37%).

Table 2. Demographic Information of Respondents

Measure	Category	Freq.	%	Measure	Category	Freq.	%
Gender	Female	81	54	Education	Junior High School	15	10
	Male	69	46		Senior High School	45	30
Umur	16-20	12	8		Undergraduate	60	40
	21-25	54	36		Post Graduate	30	20
	26-30	18	12				
	31-35	5	3	Experience using QRIS	1 – 2 times	25	17
	36-40	7	5		3 – 4 times	60	40
	41-45	13	9		4 – 5 times	45	30
	46-50	13	9		> 5 times	20	13
	51-55	20	13	Income per month	2 million and below	33	22
	≥56	8	5		2 – 3 million	55	37
					4 – 5 million	42	28
					>5 million	20	13

Measurement Model

To assess the structural model, I analyzed the relationship between hypotheses. The results of the structural model are illustrated in Figure 2.
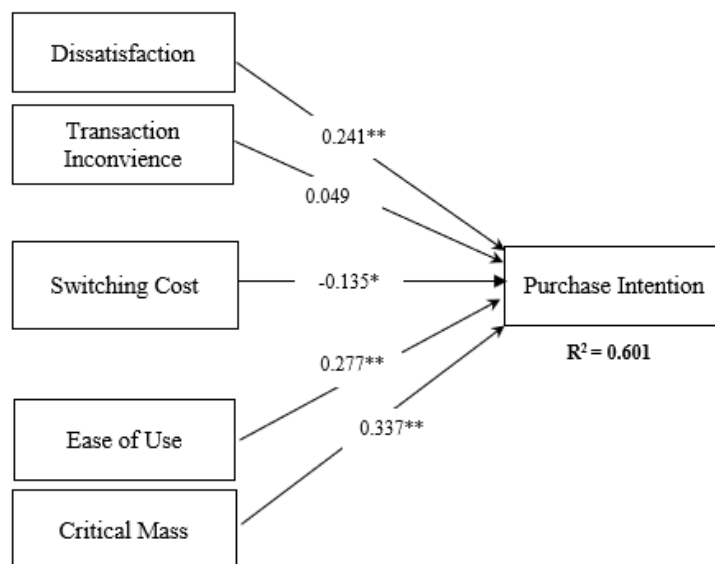

Figure 2. Results of Structural Model

I also tested the reliability, construct validity, convergent validity, and discriminant validity to assess the properties of the measurement model. As shown in Table 1, Cronbach's alpha and CR for all of the constructs were above the benchmark value of 0.70 (Hair et al. 2014). It represents the judgment of sufficient reliability for each construct. To assess construct validity, I examined the factor loadings of each reflective construct. The factor loadings ranged from 0.84 to 0.94, which met the minimum requirement of a value greater than 0.70, indicating the validity of each item construct (Chin, 1998).

To access convergent validity, I applied average variance extracted (AVE). All AVE values exceeded 0.50, suggesting sufficient convergent validity (Henseler et al., 2009), as shown in Table 1. To assess the discriminant validity, the cross-loading differences were much higher than the suggested threshold of 0.1, as shown in Table 3.

Table 3. Results of Cross Loading

	CM	DC	EU	SC	SI	TI
CM 1	**0.824**	0.201	0.431	-0.156	0.439	0.232
CM 2	**0.860**	0.215	0.423	-0.130	0.460	0.341
CM 3	**0.849**	0.360	0.476	-0.233	0.515	0.407
CM 4	**0.838**	0.228	0.611	-0.379	0.657	0.365
DS 1	0.147	**0.817**	0.328	-0.016	0.380	0.513
DS 2	0.299	**0.924**	0.366	-0.075	0.459	0.636
DS 3	0.295	**0.921**	0.389	-0.168	0.479	0.611
DS 4	0.299	**0.879**	0.428	-0.193	0.488	0.703
EU 1	0.502	0.432	**0.923**	-0.460	0.578	0.490
EU 2	0.537	0.355	**0.933**	-0.457	0.629	0.466
EU 3	0.595	0.406	**0.922**	-0.396	0.644	0.496
SC 1	-0.229	-0.054	-0.332	**0.813**	-0.302	-0.162
SC 2	-0.216	-0.061	-0.381	**0.877**	-0.287	-0.208
SC 3	-0.227	-0.074	-0.398	**0.818**	-0.342	-0.090
SC 4	-0.285	-0.227	-0.470	**0.891**	-0.416	-0.210
SI 1	0.439	0.339	0.460	-0.258	**0.756**	0.330
SI 2	0.558	0.426	0.578	-0.310	**0.893**	0.447
SI 3	0.566	0.439	0.620	-0.395	**0.896**	0.471
SI 4	0.608	0.550	0.641	-0.415	**0.918**	0.548
TI 1	0.470	0.662	0.527	-0.289	0.555	**0.882**
TI 2	0.278	0.571	0.405	-0.095	0.367	**0.901**
TI 3	0.288	0.611	0.431	-0.098	0.437	**0.881**

Note: CM= Critical Mass; DS= Dissatisfaction; EU= Ease of Use; SC= Switching Costs; SI= Switching Intention; TI= Transaction Inconvenience

Discussion

Effect of Dissatisfaction on Switching Intention

Based on the relationship between the variable dissatisfaction and switching intention, it has a p-value of 0.001 (≤ 0.05). It can be said that dissatisfaction has a positive and significant influence on switching intention. Hardiyati (2010) argues that good service quality within a company, it will create satisfaction for its customers. After consumers are satisfied with the product or service they receive, consumers will compare the services provided. If consumers feel completely satisfied, they will repurchase and provide recommendations to others to buy at the same place. This proves that quality also affects consumer switching intentions.

The research results obtained are in line with research conducted by Satria (2019), it can be concluded that service quality influences switching intention. It can be seen that if consumers are not satisfied with the services provided by a company, then these consumers will have the intention of switching to other services. Services provided by a company are needed because, with these services, consumers will feel satisfied and will continue to use these services.

Effect of Transaction Inconvenience on Switching Intention

The relationship between the variable transaction inconvenience and switching intention has a p-value of 0.537 (> 0.05). it can be said that transaction inconvenience has no significant effect on switching intention. Transaction Inconvenience does not affect Switching Intention due to several factors including the desire to use a service. If the consumer feels uncomfortable making a transaction, the consumer will have the intention to switch. This intention to switch is because these consumers want to get better service and feel that other companies can provide far more optimal service. Not only that but inconvenience when making transactions can be caused by transaction delays that are often experienced by consumers so that they use different and far more optimal services.

But not all consumers have the intention of switching because of the inconvenience of transactions, sometimes there are consumers who choose to use these transactions even though they feel uncomfortable because the transactions used have many advantages and are able to carry out their responsibilities optimally and provide convenience to consumers when making payments.

Effect of Ease of Use on Switching Intention

The variable of ease of use with switching intention has a p-value of 0.006 (≤ 0.05). it can be said that ease of use has a positive and significant influence on switching intention. The convenience that exists in a product or service can affect the intention to switch owned

by customers or customers. If a service is considered easy enough to use, then the service will be categorized as effective so that the service can be utilized optimally. but on the contrary if the service or product is difficult to use then this tends to cause a desire to switch that is present in the minds of consumers and customers so that the product or service will receive less attention from customers and customers. therefore related to convenience must be optimized because the easier the service can be used, the smaller the intention to switch that is owned by consumers.

Effect of Critical Mass on Switching Intention

The critical mass variable with switching intention has a p-value of 0.002 (≤ 0.05). Thus it can be said that critical mass has a positive and significant influence on switching intention. Critical mass part of social influence. When many people use a particular product or service, customers may be curious to use it too. This desire to switch is because customers or consumers want to get better service as experienced by the people around them.

Effect of Switching Cost on Switching Intention

The relationship between the switching cost variable and switching intention has a p-value of 0.041 (≤ 0.05), meaning that switching cost has a negative and significant effect on switching intention. A possible explanation is that for individuals who stated that there was no point in switching to a new payment system, perhaps because they felt resistance to it. These may include search, transaction, and learning costs, discounts on loyalty, custom, emotional costs, and cognitive effort, along with financial, social, and psychological risks.

CONCLUSION

This study answers the need for theoretical insights into customers' horizontal switching behavior toward the presence of digital payment systems.

Bringing the PPM model as a framework, I propose a model that embraces dissatisfaction and transaction inconvenience as the push factor, easy use and critical mass as the pull factor, and switching cost as the mooring factor. Specifically, I have three key findings as outlined below.

First, dissatisfaction with the existing traditional payment systems pushes customers to switch to digital payment systems. When consumers are not satisfied using traditional payments, maybe consumers will switch to digital payment systems that are simpler and not necessary to carry cash. Interestingly, transaction inconveniences in a traditional payment do not affect switching intentions. Although people feel uncomfortable (for example, no change) they still use conventional payment because not all merchants provide digital payment facilities.

Second, ease of use significantly pulls switching intention. When customers experience that the new system is easier to use, they might leave the old system. On the contrary, if it is difficult, the customer will continue to use the incumbent payment system. Critical mass has a

positive and significant influence on switching intention. When many people use digital payments, customers might be interested to follow them to get better service as experienced by the people around them.

Third, the mooring factors are composed of perceived switching costs. Switching cost includes monetary and non-monetary costs. If users perceive the high switching cost, they are reluctant to switch to digital payment. Thus, for newcomers, in the early period, monetary reward is regarded as an effective way to reduce customers' perceived switching cost and attract potential users in the digital payment market.

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