

Analysis of Switching Intention of Cash Payment Users to Digital Payment (Linkaja) Using a Push-Pull-Mooring Approach

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Abstract. This study aims to examine customers' switching intention from cash payments to digital payment services employing the Push-Pull-Mooring (PPM) approach, utilizing a case study of students at Universitas Muhammadiyah Yogyakarta. Based on the Push-Pull-Mooring (PPM) model, this study investigated numerous factors impacting service switching intention. A structured questionnaire with 376 respondents was used to obtain primary data for this study. The Push, Pull, and Mooring Effects were among the independent factors investigated, whereas switching intention was the dependent variable. The data analysis was then performed using Partial Least Squares Structural Equation Modeling (PLS-SEM), utilizing SmartPLS 4 software. Research findings revealed that the Push Effect had a favorable and significant impact on switching intention, so customers tended to switch from cash payments. Because the Pull Effect favorably and considerably affected switching intention, customers tended to switch and use digital payments. Finally, the Mooring Effect was discovered to have a favorable and substantial influence on inhibiting switching intention, indicating that customers tended to remain with existing products and were loyal to cash payment methods. These findings suggest that consumers, particularly students at Universitas Muhammadiyah Yogyakarta, regard fintech as a supplement rather than a substitute.

Keywords: Digital Payments, Financial Technology, PLS-SEM, Push-Pull-Mooring, Switching Intentions, Universitas Muhammadiyah Yogyakarta.

1. Introduction

Through the cashless movement, the Indonesian government supports the digital economic age. Bank Indonesia, as a central bank, has compelling reasons to encourage the use of non-cash instruments in financial transactions to reduce the amount of money in circulation, lower cases of money counterfeiting, and reduce the high operational costs associated with printing, storing, circulating, and destroying money each year.

Financial technology (Fintech) is a digital-based innovation gaining traction in financial services. Fintech is a breakthrough new business innovation that blends financial services with digital-based information technology, transforming the financial services business model from manual to automatic via digital technology.

Digital payments, specifically, are gaining global attention in numerous parts of the economy and commerce as a modern alternative that may be employed, such as through m-banking services, Short Message Service (SMS) banking, and mobile payments, all of which are the consequence of improvements in mobile technology. Automatic Teller Machines (ATMs), e-money, online banking, credit cards, debit cards, mobile payments, and mobile banking services are among the particular solutions used in Indonesia to support digital payment transactions [1].

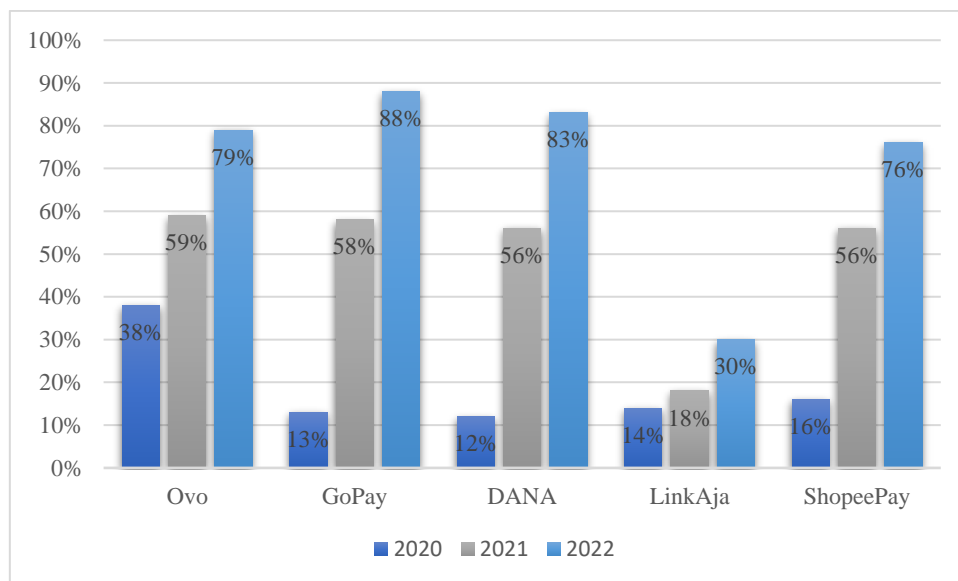


Figure 1. The Users of Digital Wallets 2020-2022

Source: databoks, DailySocial, dan Populix

According to figure 1, all users of digital wallets are increasing since 2020 to 2022. GoPay is recorded the highest in terms of growth percentage in digital wallets' users. Meanwhile, the LinkAja digital wallet records the lowest percentage growth, namely 12% in 2020, 18% in 2021, and 30% in 2022. This condition shows that users are not dominantly using it as payment platform compared to others. Thus, interesting to analyze on what make LinkAja digital wallet is not that much used in Indonesia.

LinkAja is one of the popular fintech payment applications in Indonesia. At the end of June 2019, Telkomsel's telecommunications provider released the LinkAja application, which can be used as a non-cash payment tool. This application combines several e-wallets belonging to BUMN and T-Cash belonging to Telkomsel.

Additionally, the fast growth of digital payments adds ease and practicality to financial transactions. It will probably raise public interest in using digital payments, particularly among students at Universitas Muhammadiyah Yogyakarta. Students are the ideal demographic for digital payment service entrepreneurs looking to expand their user base.

To examine their suitability to become respondents in this research, the researchers performed a preliminary study in which they sent pre-questionnaires to active students at Universitas Muhammadiyah Yogyakarta (UMY). Here are the results:

Table 1. Characteristics of the preliminary study based on active students at Universitas Muhammadiyah Yogyakarta

| Active students of Universitas Muhammadiyah Yogyakarta | Number | Percentage |
|---|---------------|-------------------|
| Yes | 417 | 100% |
| No | 0 | 0% |
| Total | 417 | 100% |

Source: Processed data, 2023

Table 1 reveals that 417 respondents (100%) were taken as of sample active students at Universitas Muhammadiyah Yogyakarta in 2023.

Table 2. Preliminary study on students who knew LinkAja digital payments

| Know LinkAja digital payments | Number | Percentage |
|--------------------------------------|---------------|-------------------|
| Yes | 413 | 99% |
| No | 4 | 1% |
| Total | 417 | 100% |

Source: Processed data, 2023

Based on Table 2, 413 respondents were students at Universitas Muhammadiyah Yogyakarta who knew about LinkAja digital payment services, with a percentage of 99%, and four respondents did not know about LinkAja digital payment services, with a percentage of 1%.

Table 3. Preliminary study based on students who Deal with LinkAja digital payment services

| Using digital payment LinkAja | Number | Percentage |
|--------------------------------------|---------------|-------------------|
| Have used | 37 | 9% |
| Have not used | 376 | 91% |
| Total | 413 | 100% |

Source: Processed data, 2023

In Table 3, 37 respondents (9%) utilized the LinkAja digital payment service, whereas 376 respondents (91%) did not use the LinkAja digital payment service.

In this case, students at Universitas Muhammadiyah Yogyakarta (UMY), who are of millennial age and are well-versed in technical innovations, are no strangers to fintech, though recorded only small numbers as LinkAja users. Moreover, digital payments are becoming increasingly popular, particularly among students. As a result, businesses must devise methods to deal with today's fierce competition.

Given that the LinkAja digital payment is no longer popularly used among students at UMY, the paper is aimed at analysing the factors pushing, pulling, and mooring its use by using push, push and mooring theory. Therefore, by identifying the factors, the LinkAja company could consider and put it as future strategy for more competitive and acceptable among people, particularly millennials to switch their intention from cash to digital payment.

Literature Review and Hypotheses Development

Digital Payment

Digital payments are transactions in which electronic devices are used to make payments. Digital money is a type of payment performed electronically and digitally through servers, network apps, and virtual accounts [2]. This shifts the function of cash as a means of payment to a non-cash form of payment and opens up many non-cash payment options.

Digital payments, sometimes known as electronic money by the general public, are classified into computer networks and digital systems. Digital payment is a method of payment made through digital mode [3] Payers and recipients use digital modes to send and receive money in payment transactions. All digital payment transactions are carried out online.

Digital Payment Dimensions

The dimensions of digital payment are as follows:

1. Efficiency relates to the ease with which consumers may utilize payment methods.
2. Service quality: When utilizing an electronic payment system, it relates to the entire support quality.
3. Perceived ease of payment refers to the ability to comprehend and use the payment system.
4. Perceived speed: In this model, speed refers to the interchange of payment information, which should result in real usage and, eventually, user satisfaction with the system.
5. Perceived enjoyment: It is believed that the enjoyment of using an electronic payment system has a substantial effect on user satisfaction.
6. Security: This model's security component ensures secure access to all accessible applications and facilities.
7. Actual use: Usage refers to the time a person spends interacting with technology.

Perceived benefit is an evaluation of the benefits of the electronic payment system to consumers and all sources of payment, including the time necessary to receive payments via the electronic payment system.

Digital Payment LinkAja

The change in the name of the E-cash product to LinkAja is a financial technology product resulting from the synergy of companies that are proud of the Indonesian nation, namely HIMBARA (Association of State-Owned Banks - Bank Mandiri, BRI, BNI, BTN), Telkomsel (T-cash), and Pertamina. To provide better and more complete digital transaction services for the public, Mandiri e-cash was combined into the LinkAja service. LinkAja is a platform managed by PT Fintek Karya Nusantara (which previously managed Tcash). LinkAja provides holistic services with various payment features, such as bill payments (electricity, PDAM, BPJS, and internet), transactions at merchants such as Pertamina, payment for modes of transportation, and online purchases. In the current digital era of Industry 4.0, it is no longer the time to carry lots of cash in one's wallet. LinkAja offers barcode scanning, or cellphone taps, to make financial transactions faster, safer, and easier.

LinkAja has a vision to provide digital payment services that differ from existing products today, focusing on meeting people's basic needs. The examples are the gas station digitalization program with Pertamina, the introduction of a touchless payment system on toll roads in collaboration with Jasa Marga, and the provision of digital payment services in various modes of public transportation, such as trains, buses, LRT, MRT, planes, and others

Push, Pull, and Mooring (PPM) Theory

Push Pull Mooring (PPM) theory is a concept proposed by Bansal et al. [4] to help people comprehend the complexities of user-switching behavior. In marketing, this PPM model has been used to determine consumer switching behavior. Bansal et al. [4] discovered that most customers switched voluntarily when there was a discrepancy between their expectations of the service offered and the reality they encountered or when something enticed them to try the service alternative.

This theory addresses the PPM concept and describes numerous elements that drive customer movement. These elements are then classified as Push, Pull, and Mooring factors. Push factors are pushing factors from old service providers (negative factors); in this case, it is a cash payment. Pull factors come from new service providers, namely the LinkAja digital payment service (positive factors). Also, Mooring factors can strengthen or weaken interest in switching [4]

Switching Intention

Customer switching is described as the ability to choose which item one prefers [5] Switching behavior in the service sector might result from a wide range of different products/services available or a fault with a previously purchased service. Customer switching is defined by Bansal et al. [4] as a user transfer from one service provider to another.

In general, according to Bhasin [6] four categories of characteristics have a significant impact on consumer behavior and play a key part in customer switching behavior:

1. Cultural factors, comprising culture, subculture, and social class, are the most influential factors connected to culture, where customers reside, and their requirements and preferences.
2. Social norms, values, and lore influence consumer purchasing behavior, such as reference groups, family members and their respective roles, and society.
3. Personal factors like age, cycle, income, and lifestyle influence consumer behavior.
4. Psychological factors impact consumer purchase decisions, including motivation, perception, learning, beliefs, attitudes, and thoughts.

Consumer Behavior

Consumer behavior, according to Hasan [7] is the study of the processes that occur when individuals or groups make decisions, make purchases, and use or organize products, services, ideas, or experiences to suit their needs and desires. According to Kotler and Keller [8] consumer behavior is the study of how people, groups, and organizations choose, purchase, and use various goods, services, ideas, or experiences to satisfy their needs and preferences.

Consumer behavior is particularly significant to individuals who, for various reasons, desire to influence or change that behavior, including those whose major focus is marketing.

Dimensions of Consumer Behavior

1. Customer satisfaction refers to customer happiness with the products or services they receive when using the payment system, and it is closely tied to whether users are satisfied with the products, services, and transactions they receive.
2. Consumer decisions include whether to use a product or service, transaction decisions, and recommendations to other parties. When picking between two options, a consumer will buy or use a product or service.

Producer Behavior

Producer behavior might show a producer's belief in selling and seeking profits [9]. Producer behavior theory discusses how producers engage or behave in their production activities to generate products efficiently. Producers strive to generate high-quality products by optimizing the utilization of their production resources [10].

On the other hand, according to Sunyoto [11] consumer behavior can be defined as individual activities in obtaining and using goods or services, including the decision-making process in preparation for determining these activities. Consumer behavior is especially significant to individuals who want to influence or change it for various reasons, including those whose major focus is marketing.

Market Theory

The Economics and Business dictionary states, "A market is a place where supply and demand occurs between sellers who want to exchange their goods for money and buyers who want to exchange their money for goods or services" [12]. Meanwhile, Budiono [13] stated, "The market

is the meeting point between the demand and supply curves. A market is where transactions occur between sellers and buyers. The goods or services transacted can be any goods or services, ranging from rice, vegetables, transportation services, money, or labor."

Additionally, a market is where supply and demand for products and services collide, which does not always imply a physical location as commonly conceived in everyday life. Markets can be physical and centralized or abstract and non-centralized. The most crucial aspect of a market is the exchange of buyers, sellers, and commodities or services.

Previous Research

Several earlier studies have examined the switching intention to payment instruments. In Taiwan, Yu and Chen [14] investigated consumers' switching from cash to mobile payments due to COVID-19 anxiety. The data from paper and online questionnaires were analyzed using descriptive statistical techniques. To test the proper model and hypothesis, they employed structural equation modeling (SEM). Their findings revealed that dissatisfaction with traditional payments and customer anxiety had a favorable and significant impact on switching intentions. During the pandemic, however, the attractiveness of alternatives had no substantial impact on customers' switching intentions from cash to mobile payments.

Another study Tang et al. [15] aimed to explore the factors influencing Malaysians' switching intention to m-payments during the coronavirus pandemic. Using the Push-Pull-Mooring framework, their research examined the influence of perceived lack of security, relative benefit of reimbursement, ease of use, habits, and self-confidence as factors influencing Malaysian consumers' switching intention to m-payment. The data were collected through convenience sampling and snowballing sampling methods by inviting respondents via social networking sites and email. Data analysis in research used Structural Equation Modeling (SEM) techniques. The results uncovered that perceived lack of security, level of ease of use, habits, and level of self-confidence had a significant impact on switching intention to m-payments in Malaysia. Nevertheless, the relative benefits of reimbursement did not significantly encourage them to switch to m-payments.

In addition, Wang and Peters [16] analyzed consumers' switching intentions from cash to mobile payments in restaurants during and after the pandemic. To achieve the research aims, a quantitative questionnaire survey was undertaken. The study also used SmartPLS for partial least squares structural equation modeling (PLS-SEM). The findings uncovered that customers' switching intention to mobile payments was assisted by the perceived inconvenience of cash, perceived convenience of mobile payments, and propensity to search for offers. Furthermore, perceived security and privacy, perceived health risks, consumer innovativeness, and social influence directly influenced and moderated customers' switching intentions to mobile payments.

Push Effect

Push Effect is deemed a negative factor that encourages consumers to be reluctant to use existing products or services (cash payments in this research), and the main factor is dissatisfaction with existing products or services. Perceived risk is believed to be one of the factors in consumer

decisions regarding the [17] choice of payment means [17]. The availability of alternative payment systems may encourage users to abandon cash payments and migrate to new payment systems with a low perceived risk of misuse of information. Perceived risk is the potential loss in the process and desired outcomes of using cash payment services.

Hypothesis 1: The Push Effect proxied by dissatisfaction and perceived risk positively and significantly affects switching intention.

Pull Effect

Alternative attractiveness is the extent to which consumers feel that viable competitive alternatives are available [18]. In this research, alternative attractiveness refers to the attractiveness of m-payment as an alternative to cash. Wibowo et al. [19] have identified dimensions of perceived ease, i.e., easy to learn, easy to use, clear, and understandable. In addition, the concept of convenience plays a key role in the service economy and is widely accepted to influence consumer behavior [20]. It contains several subconstructs, such as decision convenience, transaction convenience, benefit convenience, and post-benefit convenience, which reflect various ways to save consumers time and effort [21]. Through previous research conducted by Loh et al [22] Wang & Peters [16], and Yu & Chen [14] it was found that the Pull Effect factor had a positive and significant influence on switching intention.

Hypothesis 2: The Pull Effect proxied by alternative attractiveness, perceived ease of use, and perceived convenience positively and significantly affects switching intention.

Mooring Effect

According to Porter [23], switching costs are the costs involved in changing from one service provider to another, including not only costs that can be measured in monetary terms but also the psychological effects of becoming a client of the new provider and the effort and time involved. In FinTech studies, these social influences significantly influence behavioral intentions to adopt mobile banking and mobile payments and subsequently increase customer satisfaction. Perceived security and privacy reflect an individual's level of concern for m-payment features related to personal information and payment transactions [21]. Through previous research by Xia et al [24], Loh et al. [22] and Wang & Peters [16] it was found that the Mooring Effect factor had a positive and significant influence on switching intention.

Hypothesis 3: The Mooring Effect proxied by switching costs, social influence, and perceived security and privacy has a negative and significant effect on switching intention.

Research Model

This research used a qualitative approach, which was made quantitatively to test the switching intention of cash payment users to digital payment (LinkAja).

This research employed a purposive sampling technique, namely a non-probability sampling method. The criteria for selecting respondents included being active students at the Universitas Muhammadiyah Yogyakarta in 2023, knowing about LinkAja digital payments, and whether they had used the LinkAja digital payment application. The research model used in this research came from the PPM model, consisting of the Push Effect (Driving Factor), Pull Effect (Pulling

Factor), and Mooring Effect (Mooring Factor). Push factors come from old service providers (negative factors); in this case, it was a cash payment. Pull factors are derived from new service providers, i.e., the LinkAja digital payment service (positive factors). Also, Mooring factors can strengthen or weaken interest in switching [4]

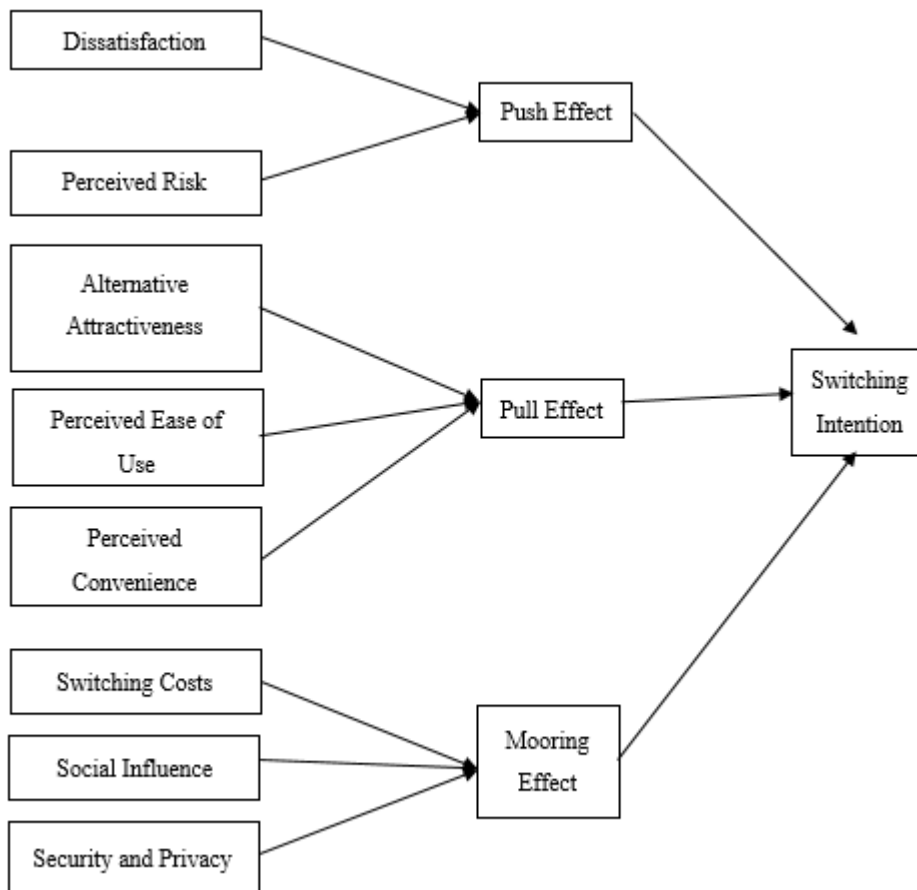


Figure 2. Research Model

2. Method

Subject and Object

In this research, the research subjects were Universitas Muhammadiyah Yogyakarta (UMY) students. Meanwhile, the object of this research was the factors influencing customers' switching to digital payment methods.

In this study, the researchers evaluated the elements influencing the potential for switching payment service customers, with an emphasis on the suitability of research subjects. Respondents in this study were active students at UMY who had never heard of LinkAja digital

payments, ever and had never used the digital payment application LinkAja. Students were the primary target of this research since they represent the millennial generation, who are well-versed in technology changes and are familiar with fintech. Furthermore, digital payments are becoming commonly used.

Data Type

The data type used in this study was primary data, which the researchers obtained directly from data sources corresponding to the variables analyzed. The data employed in this study were quantitative-qualitative in the form of numbers generated from the scoring results of the questionnaire answers given to respondents as research samples.

Data Collection

The data collection method used in this research was a questionnaire, which was then assessed using a Likert scale of five categories. These categories ranged from 1, indicating strongly disagree (STS), to 5, reflecting strongly agree (SS). The data collection occurred between June 17, 2023, and August 2, 2021. The questionnaire indicators in this study were designed based on the principles of PPM theory, as depicted in Figure 1. A total of 376 primary data were collected, where data were obtained from respondents based on their experiences. Next, validity and reliability testing was carried out to assess the accuracy of the questionnaire as a research instrument for measuring variables and assessing respondents' consistency in answering research questions.

Table 4. Respondent profile (N = 376)

| Variable | Category | Number | Percentage |
|----------|------------------------|--------|------------|
| Age | 19 | 45 | 12% |
| | 20 | 87 | 23% |
| | 21 | 91 | 24% |
| | 22 | 86 | 23% |
| | 23 | 42 | 11% |
| | 24 | 25 | 7% |
| | | 376 | 100% |
| Gender | Male | 184 | 49% |
| | Female | 192 | 51% |
| | | 376 | 100% |
| Faculty | Faculty of Law | 59 | 16% |
| | Faculty of Agriculture | 51 | 14% |

| Variable | Category | Number | Percentage |
|----------|--|--------|------------|
| Batch | Faculty of Social and Political Sciences | 47 | 13% |
| | Faculty of Engineering | 43 | 11% |
| | faculty of Economics and Business | 77 | 21% |
| | Faculty of Medicine and Health Sciences | 37 | 10% |
| | Faculty of Language Education | 33 | 9% |
| | Faculty of Islamic Religion | 29 | 7% |
| | | 376 | 100% |
| | 2017 | 10 | 3% |
| | 2018 | 17 | 5% |
| | 2019 | 104 | 28% |
| | 2020 | 100 | 27% |
| | 2021 | 80 | 21% |
| | 2022 | 65 | 17% |
| | | 376 | 100% |

Source: Processed data, 2023

According to Table 4, most respondents (91 people) were 21 and under. The number of female respondents was higher, at 192, than that of male respondents, at 184. The majority of respondents, as many as 77, were in the Faculty of Economics and Business, and the majority of respondents were in the class of 2019.

Findings

As explained [25], Partial Least Squares Structural Equation Modeling generates theory in exploratory research. PLS-SEM was utilized in this study to examine the measurement model (validity and reliability tests) and the structural model (testing the relationship between constructs). The structural model was designed using second-order constructs, with the formative model in second-order constructs and the reflective model in first-order constructs. The reflective model is a measuring model definition in which the underlying construct is thought to cause the indicators. The formative model, on the other hand, is a measurement model definition in which it is assumed that the specified indicators create the construct. The research model employed in this research was second order, where dissatisfaction, perceived risk, attractiveness of alternatives, perceived ease of use, perceived convenience, switching costs,

social influence, and security and privacy were measured reflectively. In contrast, Push, Pull, and Mooring Effects were measured formatively.

Testing Item Reliability and Validity

To measure the reliability and accuracy of assessment items related to the constructs in the research model, several tests were performed to evaluate internal consistency, convergent validity, and discriminant validity. To begin, the Composite Reliability score was calculated to ensure internal consistency. If the Composite Reliability value is more than 0.70, each construct demonstrates internal consistency as tested by the items. Table 2 displays that all constructs' Composite Reliability ratings exceeded the 0.70 criterion. These findings denote that the measurement items for these constructs are valid.

Table 5. Reliability

| Construct | Item | Cronbach's Alpha | Composite Construct Reliability > 0.70 | AVE > 0.50 |
|-----------------|-------|------------------|--|------------|
| Push Factors | | | | |
| Dissatisfaction | KT 1 | 0.852 | 0.853 | 0.772 |
| | KT 2 | | | |
| | KT 3 | | | |
| Risk | RIS 1 | 0.852 | 0.852 | 0.772 |
| | RIS 2 | | | |
| | RIS 4 | | | |
| Pull Factors | | | | |
| Attractiveness | DT 1 | 0.902 | 0.902 | 0.773 |
| | DT 2 | | | |
| | DT 3 | | | |
| | DT 5 | | | |
| Ease of Use | KEM 1 | 0.888 | 0.888 | 0.748 |
| | KEM 2 | | | |
| | KEM 4 | | | |
| | KEM 5 | | | |
| Convenience | KNY 1 | 0.9 | 0.9 | 0.769 |
| | KNY 2 | | | |
| | KNY 3 | | | |
| | KNY 4 | | | |

| Construct | Item | Cronbach's Alpha | Composite Construct Reliability > 0.70 | AVE > 0.50 |
|----------------------|-------|------------------|--|------------|
| Moore Factors | | | | |
| Switching Costs | B1 | 0.826 | 0.826 | 0.852 |
| | B2 | | | |
| Social Influence | PS 2 | 0.745 | 0.746 | 0.797 |
| | PS 3 | | | |
| Security and Privacy | KMN 1 | 0.921 | 0.921 | 0.864 |
| | KMN 2 | | | |
| | KMN 3 | | | |

Source: Processed data, 2023

Furthermore, the results of formative testing explain the cause-and-effect link between indicators and latent variables, indicating that changes in indicators will be mirrored in changes in latent variables. In this study, all constructs had an Outer Weight value greater than 0.5 and a t-value larger than 2, denoting that all formative indicators and associated constructs were highly significant. Besides, each indicator's Variance Inflation Factor (VIF) value was less than 5, suggesting no multicollinearity between these indicators.

Table 6. Formative testing results

| Second Order Construct | First Order Construct | Measure | Outer Weights | T Value | VIF |
|------------------------|------------------------|-----------|---------------|---------|-------|
| Push Effect | Dissatisfaction | Formative | 0.544 | 115.136 | 2.241 |
| | Perceived risk | | 0.527 | 106.303 | 2.241 |
| Pull Effect | Alternative Attraction | Formative | 0.368 | 82.809 | 3.386 |
| | Perceived Ease of Use | | 0.352 | 126.675 | 4.355 |
| | Perceived Convenience | Formative | 0.351 | 79.947 | 3.457 |
| | Switching Costs | Formative | 0.345 | 30.15 | 1.526 |

| Second Order Construct | First Order Construct | Measure | Outer Weights | T Value | VIF |
|------------------------|-----------------------|-----------|---------------|---------|-------|
| Mooring Effect | Social Influence | Formative | 11.34 | 36.442 | 1.621 |
| | Security and Privacy | | 0.372 | 51.109 | 1.339 |

Source: Processed data, 2023

Assessing discriminant validity determines whether the correlation coefficient between constructs is less than the square root of the extracted average variance (AVE). According to the data listed in Table 4, all correlation coefficients between constructs had values lower than the square root of the average variance extracted (AVE) for each construct. As a result, the research findings addressing the discriminant validity of all constructs were deemed acceptable.

Table 7. Fornell-Larcker testing

| | B | DT | KEM | KMN | KNY | KT | PS | RIS |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| B | 0.923 | | | | | | | |
| DT | 0.304 | 0.879 | | | | | | |
| KEM | 0.265 | 0.824 | 0.865 | | | | | |
| KMN | 0.414 | 0.347 | 0.324 | 0.929 | | | | |
| KNY | 0.282 | 0.772 | 0.828 | 0.382 | 0.877 | | | |
| KT | 0.324 | 0.514 | 0.514 | 0.205 | 0.508 | 0.879 | | |
| PS | 0.562 | 0.456 | 0.452 | 0.469 | 0.476 | 0.332 | 0.893 | |
| RIS | 0.333 | 0.569 | 0.56 | 0.172 | 0.555 | 0.744 | 0.385 | 0.879 |

Source: Processed data, 2023

Path Coefficient Testing

According to the path coefficient results in Table 8, the influence of the Push Effect on the switching intention of cash payment customers to digital payment systems had a coefficient value of 0.246. This suggests that for every increase in unfavorable perceptions of user dissatisfaction and risk with cash payments, millennial customers' switching intention to digital banks increases by 24.6%. Based on the statistical statistics, the p-value was $0.000 < 0.05$, meaning that this value produced statistically significant outcomes. The path coefficient results also revealed that dissatisfaction had a coefficient of 0.934 in producing the Push Effect. This

demonstrates that any rise in negative perceptions of dissatisfaction with cash payments creates a Push Effect, which increases consumers' switching intention to digital payment services by 93.4%, and statistical results showed a p-value of $0.000 < 0.05$, indicating that the results are significant.

Apart from that, the results on the path coefficient revealed that the influence of perceived risk in forming the Push Effect had a coefficient value of 0.933. This indicates that every increase in negative perception of the perceived risk of cash payments will form a Push Effect, which influences users' switching intention to digital payment services by 93.3%, and the statistical results uncovered a p-value of $0.000 < 0.05$, indicating significant results. Also, based on the path coefficient results, the influence of the Pull Effect on the switching intention of cash payment users to digital payment services had a coefficient value of 0.566. In other words, the higher the alternative attractiveness of digital payment services, the perceived ease of use, and the perceived convenience of using digital payment services, the higher the intention of cash payment users to switch to digital payment services by 56.6%. The statistical results show that the p-value was $0.000 < 0.05$, meaning that this value provided significant results.

Furthermore, the path coefficient data demonstrated that alternative attractiveness's role in forming the Push Effect was 0.927. This means that as the alternative attractiveness of digital payment systems increases, so does the influence on establishing the Push Effect. This coefficient value also indicates that as the level of alternative attractiveness increases, so does the formation of the Pull Effect, which influences the switching intention of millennial customers to digital banks by 92.7%, and statistical results yielded a p-value of $0.000 < 0.05$, indicating significant results. In addition, the path coefficient data showed that perceived ease of use had a coefficient value of 0.946 in producing the Pull Effect. This suggests that the better the ease of use of the digital payment service, the larger the impact on establishing the Pull Effect in attracting users' switching intention from cash payments to digital payment services. In this case, the easier it is to use the service to make users feel interested and confident in trying digital payment services, the more the formation of the Pull Effect increases, which influences users' switching intention to digital payment services by 94.6%, and statistical results demonstrated the p-value value of $0.000 < 0.05$, indicating significant results.

The path coefficient data also exhibited that the role of perceived convenience in producing the Push Effect had a value of 0.928. As digital payment services' perceived ease of use grows, so does the influence on establishing the Push Effect. This coefficient value also shows that increasing the level of convenience increases the formation of the Pull Effect, which influences the switching intention of millennial customers to digital banks by 92.8%, and statistical results obtained a p-value of $0.000 < 0.05$, indicating significant results. Additionally, based on the path coefficient results, the influence of the Mooring Effect on the switching intention of cash payment users to digital payment services had a coefficient value of 0.098, which means that the higher the switching costs, social influence, and security and privacy of using digital payment services, the higher inhibiting the switching intention of payment users to digital payment services by 9.8%. From the statistical results, the p-value was $0.031 < 0.05$, meaning that this value provided significant results.

Moreover, the results of the path coefficient exposed that the influence of switching costs on the formation of the Mooring Effect had a coefficient value of 0.770. This indicates that the higher the costs associated with switching users from cash payments to digital payment services, the stronger the influence on the formation of the Mooring Effect in inhibiting the switching intention of cash payment users to digital payments. In this case, every increase in switching costs can increase the formation of the Mooring Effect, which influences the switching intention of cash payment users to digital payment services by 77%, and statistical results showed a p-

value of $0.000 < 0.05$, which indicates a significant result. Aside from that, the path coefficient data revealed that social influence on Pull Effect formation had a coefficient value of 0.801. This implies that the higher the influence of the surrounding environment on digital payment services, the greater the impact on establishing the Pull Effect in attracting users' switching intention from cash payments to digital payment services. The greater the social interaction and the influence of recommendations from important people and friends around, which makes users feel interested and confident in trying digital payment services, the greater the formation of the Pull Effect, which influences the user's switching intention to digital payment services by 80.1%, and statistical results showed a p-value of $0.000 < 0.05$, indicating significant results. Finally, the results of the path coefficient displayed that the influence of security and privacy in forming the Mooring Effect had a coefficient value of 0.841. This suggests that the more positive the user's perception of the security and privacy of cash payments, the stronger the impact on the formation of the Mooring Effect. In this case, the better the user's perception of cash payments will further increase the formation of the Mooring Effect, which influences the user's switching intention to digital payment services by 84.1%, and statistical results showed a p-value of $0.000 < 0.05$, implying the significant results.

Table 8. Path coefficient testing

| Path | Original Sample | T-value | P-value |
|--|-----------------|---------|---------|
| Push Effect | | | |
| Push Effect -> Switching Intention (SI) | 0.246 | 4.073 | 0 |
| Dissatisfaction (KT) -> Push Effect | 0.934 | 115.136 | 0 |
| Risk (RIS) -> Push Effect | 0.933 | 106.303 | 0 |
| Pull Effect | | | |
| Pull Effect -> Switching Intention (SI) | 0.566 | 8.662 | 0 |
| Alternative Attraction (DT) -> Pull Effect | 0.927 | 82.809 | 0 |
| Perceived Ease of Use (KEM) -> Pull Effect | 0.946 | 126.675 | 0 |
| Perceived Convenience (KNY) -> Pull Effect | 0.928 | 79.947 | 0 |

| Path | Original Sample | T-value | P-value |
|--|-----------------|---------|---------|
| Mooring Effect | | | |
| Mooring Effect -> Switching Intention (SI) | 0.098 | 2.161 | 0.031 |
| Switching Costs (B) -> Mooring Effect | 0.77 | 30.15 | 0 |
| Social Influence (PS) -> Mooring Effect | 0.801 | 36.442 | 0 |
| Security and Privacy (KMN) -> Mooring Effect | 0.841 | 51.109 | 0 |

Source: Processed data, 2023

Hypothesis Test

In Table 9 of the hypothesis results, the Push Effect showed positive and significant results, so the Push Effect hypothesis was accepted. The results of this research can prove the concept [26] which states that the Push Effect has a positive effect on consumer switching intention. Furthermore, the pull effect revealed positive and significant results, so the Pull Effect hypothesis was accepted. The findings of this research are similar to previous research [4] indicating that the Pull Effect variable is a positive attribute attracting service users to switch to a certain goal, so the Pull Effect positively influences switching intention. Also, the Mooring Effect exposed positive and significant results, so the hypothesis on the Mooring Effect was rejected. Similar results were also found in research conducted by [25], where the Mooring Effect results showed positive values.

Table 9. Hypothesis testing results

| Code | Hypothesis | Direction of relationship | Results | Description |
|------|---|---------------------------|---------------------|-------------|
| H1 | The Push Effect influences switching intention. | (+) and Significant | (+) and Significant | Align |

| Code | Hypothesis | Direction of relationship | Results | Description |
|------|---|---------------------------|---------------------|-------------|
| H2 | The Pull Effect influences switching intention. | (+) and Significant | (+) and Significant | Align |
| H3 | Mooring Effect influences switching intention. | (-) and Significant | (+) and Significant | Not align |

Discussion

This study adds to the body of knowledge on digital payments. Financial technology, or fintech, has sparked interest in academic circles, resulting in various studies on the subject. Furthermore, this study attempted to empirically assess the research model in the context of consumer switching intention instead of generally used theoretical frameworks such as the Technology Acceptance Model (TAM). This study also has implications for future studies since it provides a foundation for a better understanding the switching intentions driving users to convert from cash to digital payments.

This research also has results for companies that still use cash payments. Hopefully, the findings from this research will provide insight for company owners to develop strategies in response to disruptions in cash payment services caused by the existence of digital payment services.

This study includes practical ideas for digital payment service entrepreneurs to enable easy access to customer support in payment applications, and digital service company owners can also provide free instructions on how to utilize digital payment applications. Specifically, this study focuses on customers' comprehension of switching intentions. As a result, it is recommended that companies that still use cash payments and digital payment companies use their respective competitive advantages to maximize profits and minimize losses caused by customer loss and market competition, which is becoming more intense.

4. Conclusions

This study discovered Push, Pull, and Mooring Effects in payment services. The findings demonstrated that the Push Effect, as proxied by dissatisfaction and perceived risk, positively and significantly influenced users' switching intentions from cash to digital payments. The more the user's perception of the dissatisfaction offered by cash payments, the more dissatisfied the user is with the service, and the greater the risk the user has with cash payments, the greater the user's switching intentions to digital payment services. Then, the Pull Effect, as represented by the attractiveness of alternatives, perceived ease of use, and perceived convenience, positively and significantly increased cash payment customers' intention to switch services to digital payments. Users are more inclined to consider switching services if they believe there is a more appealing service option to digital payments that provides greater ease and comfort. Also, as proxied by switching costs, social influence, and security and privacy, the Mooring Effect had

a favorable and significant influence on existing payment users' intention to switch to digital payments. Even if costs are associated with switching to new payment services and influences from the surrounding environment, including significant others and friends, guaranteed security and privacy will continue to influence switching to digital payment services.

Although the findings of this study have promising implications, some limitations must be addressed. First, because this study was conducted on a sample of students using cash payments, the findings may not apply to other groups or ages. Second, the sample data distribution was limited to students at Universitas Muhammadiyah Yogyakarta. As a result, future researchers are advised to acquire samples from different universities in Indonesia to make further comparisons. The resulting overview will be more representative and reflect variances in conditions that may differ between colleges due to involving multiple regions. Finally, the researchers could not establish if the responses provided by respondents reflected reality.

Based on the study's findings, the researchers might make the following recommendations. For the Push Effect, it is best for companies and MSMEs that use cash payments to pay attention to consumer dissatisfaction with cash payments, particularly in terms of refunds and risks that may harm customers, such as damaged money, because the Push Effect factor is the most significant in influencing switching intention when compared to other factors. Regarding the Pulling Effect, if digital payment firms wish to compete with other digital payment service providers, they should implement improvements encouraging customers to continue using existing digital payment services. In addition, digital payment providers can use social influence by creating peer-to-peer refer-a-friend programs that reward users for recommending digital payment services to their friends. Then, for the Mooring Effect, related institutions such as the government can assist in using digital payment services to improve overall security and quality. It could entail developing relevant and sustainable policies and encouraging the interchange of cybersecurity information.

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