

MARKETING | RESEARCH ARTICLE

# Analysis of Factors Influencing Switching Intention to Use of M-Payment Applications

Teddra Naufal Abdurrahim<sup>1</sup>, Agus Aribowo<sup>2</sup>

<sup>1,2</sup> Department of Management, Faculty of Law and Business Digital, Universitas Kristen Maranatha, Bandung, Indonesia. Email: [teddranfl16@gmail.com](mailto:teddranfl16@gmail.com)<sup>1</sup>, [agus.aribowo@eco.maranatha.edu](mailto:agus.aribowo@eco.maranatha.edu)<sup>2</sup>

## ARTICLE HISTORY

**Received:** June 17, 2025

**Revised:** July 01, 2025

**Accepted:** April 01, 2026

## DOI

<https://doi.org/10.52970/grmapb.v6i2.1408>

## ABSTRACT

Every consumption activity is influenced by various factors related to security, trust, and transaction efficiency. This underpins the importance of adapting to technological innovation, particularly in modern payment systems. The purpose of this study was to evaluate consumer tendencies toward switching to mobile-based digital payment systems (m-payment). The sampling technique used was purposive sampling, with 100 active students from the Faculty of Law and Digital Business, Maranatha Christian University, from 2021 to 2024. The data used was primary data collected through an online questionnaire using Google Forms. This study was analyzed using multiple linear regression using SPSS version 30 software, focusing on the influence of the push effect, pull effect, and mooring effect variables (variable X) on switching intention (variable Y). The results showed that the pull effect and mooring effect had a significant positive influence on the intention to switch to m-payment, while the push effect had a significant negative influence. Of the three variables, the pull effect was the most dominant factor. Although the Push-Pull-Mooring model proved relevant in this study, limitations arose because the study only involved one educational institution, making the results less generalizable. Therefore, it is recommended that future research involve a more diverse sample and consider the addition of new variables.

**Keywords:** Push Effect, Pull Effect, Mooring Effect, Switching Intention, Digital, M-Payment.

**JEL Code:** E44, F31, F37, G15

## I. Introduction

Technological developments in the information and communication sector are now profoundly influencing many sectors of modern life, such as business processes and how companies engage with consumers. One such innovation is the use of digital applications in programs like membership cards to change or influence consumer intentions. This technology not only helps companies improve operational efficiency but also offers unique added value to customers. Digital transformation refers to the use of digital technology in various areas of social life, not just limited to digital literacy or skills, but also encompassing companies' adaptation to new technologies and processes to improve operational efficiency (Muliati, 2024). The internet is a global network system that connects various devices through digital technology. Access to this network is generally achieved through two main methods: using a cellular data connection or a wireless

network (Wi-Fi). The disadvantage of cellular data lies in the stability of the connection, which depends on the quality of the signal received by the device. Conversely, Wi-Fi has the advantage of a more stable connection, but its range is limited. Gadget, a term in English, refers to small electronic devices with various functions. The use of gadgets that easily connect to the internet is constantly being improved (Sugandha, 2021).

Customers desire a seamless experience when purchasing products and services through digital applications. Digital applications provide customers with easy access to meet their needs. These applications are considered an evolution of integrated software on personal computers, which typically have limited functionality and are not interconnected. Acceptance of digital applications is based on positive user perceptions of the application's ability to meet their expectations. This level of acceptance is evaluated through user feedback and the frequency with which the application is used to purchase products and services (Khrais, 2021). Fintech financial technology is a digital innovation that is gaining popularity in the financial services sector. Fintech is a business innovation that integrates financial services through digital information technology, which is transforming the type of financial services business that began with manual methods and then shifted to automation through the use of digital technology (Wiranatakusuma, 2024). Mobile payment is a digital payment method conducted using mobile devices and technologies, such as cellular data, radiofrequency, and near-field communication (NFC). Mobile payment offers various benefits to consumers, including payment speed, convenience, and security (Tang, 2022).

Mobile payment (m-payment) is a payment method that integrates physical payment instruments with mobile devices. It can be categorized into two types. Based on the technology used, the first category is remote mobile payment (RMP), which involves transactions through e-commerce networks. Remote mobile payments provide consumers with the convenience of transferring money anytime, anywhere, regardless of time, space, or location. The mobile phone does not need to be near a card reader or sensor to complete the payment process. Most of these payment methods require credit or debit card information to be entered before or during payment, and security measures in the form of an authorization code are used to process the payment (Yu, 2022). Push-pull mooring is a framework used to explain human movement from one location to another. The push effect refers to negative factors from the originating location that encourage individuals to move from the primary location to an alternative. When the indicator value at the originating location is low, individuals are more likely to choose to move elsewhere. The pull effect, on the other hand, refers to positive factors from the destination that attract individuals to move. If users perceive that the service attributes at the alternative location are superior, this will encourage them to move. Meanwhile, the mooring effect is an inhibiting factor, which can be personal or social, that influences user satisfaction and limits their decision to switch (Yusuf, 2022).

The availability of various brands allows consumers to easily switch from one brand to another. This change is triggered not only by the increasing number of choices but also by the intensity of competition in advertising. The phenomenon of brand switching can also occur due to problems with the product currently being used. Experts state that factors that can influence switching behavior include quality and satisfaction, the cost of switching brands, interest in alternative products or services, commitment, trust, the tendency to seek alternatives, social influence, and variety. These factors are then grouped into a push and pull framework (Muttaqin, 2022). This mindset is rooted in the quality of the product or service offered, which creates a natural attraction that encourages consumers to choose it. Conversely, there are negative factors that encourage consumers to switch. These two factors indicate that alternative products or services have positive pull value. The relationship between push-pull factors and mooring variables includes personal and social factors that, on the one hand, inhibit consumers from changing their preferences towards the original product or service, but on the other hand, can support switching to another product or service (Muttaqin, 2022).

According to (Campos Pimenta et al., 2023), consumer dissatisfaction due to service performance that does not meet expectations can drive their intention to switch. If the quality of service received falls short of expectations, consumers tend to feel disappointed and start looking for alternatives. The primary factor causing consumers to abandon a service is poor service quality. Furthermore, high levels of customer satisfaction and the availability of other service options are also significant factors in their decision to switch

to a new provider (Nurlinda, 2024). Switching intention refers to the likelihood that a customer will replace their current service provider with a new one. Switching between two providers within a specific timeframe is considered a form of migration. This migration is divided into two categories: temporary and permanent. This phenomenon reflects the behavior of consumers switching from one service provider to another, with the majority being voluntary, with only a small number being forced. To better understand consumer switching behavior, the push-pull-mooring (PPM) framework can be used to describe the switching process holistically (Sugandha, 2021).

The research findings revealed that the pull effect and mooring effect have a positive influence on an individual's intention to switch (switching intention), while the push effect has a negative impact. The positive impact of the pull effect indicates that the attractiveness of other alternatives—such as superior features, more affordable prices, or better user experience—encourages someone to consider and ultimately switch. On the other hand, the mooring effect, which includes personal and situational aspects such as social norms, habits, and emotional bonds, also strengthens the tendency to switch if the conditions are supportive of change. The results of the t-test indicate that the push effect variable has a negative and significant effect on the Y variable, which means that an increase in the push effect decreases switching intention. This finding is in line with research (Teguh et al., 2025) which also found a negative relationship between the push effect variable and switching intention, thus strengthening the evidence of an inverse relationship between the two variables.

## II. Literature Review and Hypothesis Development

### 2.1. Grand Theory

The Push, Pull, Mooring (PPM) theory is an approach developed by Bansal et al. (2005) to provide a deeper understanding of the complexity of user switching intentions. In a marketing context, this model is used to analyze consumer tendencies to switch services. Studies show that the majority of consumers switch voluntarily, either due to a discrepancy between service expectations and the reality they experience, or due to factors that encourage them to try alternative services (Wiranatakusuma & Septiani, 2024).

### 2.2. Push Pull Mooring (PPM) Framework

Ravenstein's "Laws of Migration" formed the basis for the development of the push-pull-mooring model and the push-pull components within the PPM framework. This framework is used to understand the process of consumers switching from one product to another. PPM groups migration factors into three main categories: push (negative factors that motivate someone to leave their current state), pull (attractions or incentives that invite them to new alternatives), and mooring (social or interactive factors that can influence the decision to switch or stay). The consumer switching process shows similarities to human migration patterns (Krishnan & Raghuram, 2023). Previous research has largely focused on the adoption or intention to continue using mobile payments, but little has explored the reasons why users switch from internet payment methods to mobile payments. This study identifies the need to understand user switching behavior in this context and uses the PPM framework to predict the factors contributing to such switching (Fan, 2021).

### 2.3. Push Effect

The push effect refers to the impulse that drives individuals to move from their original location to a new location, a phenomenon also known as consumer migration (Moon, 1995). Research on this topic reveals that customer satisfaction and dissatisfaction are the primary factors that trigger their switching from their current service provider (Bansal et al., 2005). Hsieh et al. (2012) argue that the push to switch arises when customers feel dissatisfied with the service they receive, leading them to consider using other services

(Sugandha, 2021). Aspects included in this variable include low service quality and inadequate levels of satisfaction.

#### 2.4. Pull Effect

According to the PPM framework, if an alternative offers more benefits than the current one, consumers are likely to change their behavior (Gulmez, 2020). According to Bellami (2008) and Muttaqin (2022), the presence of attractive factors can increase the likelihood of customers switching services. The attractiveness offered by other service alternatives plays a role in shaping consumer behavior in making switching decisions (Bellami, 2018:38). The dimensions of this variable are alternative attractiveness and subjective norms.

#### 2.5. Mooring Effect

The decision-making process for consumers to switch from a service or product they use is complex (Li and Ku, 2018). Despite the negative effects of the product that encourage customers to switch, as well as attractive factors that motivate the use of new services, consumers often show resistance to change. In particular, situational and personal factors can prevent consumers from switching services (Bansal et al., 2005). The mooring effect, also considered a barrier to change, causes consumers to remain with the same service despite the presence of many alternatives (Gulmez, 2020). The dimension of this variable is switching cost.

#### 2.6. Switching Intention

Switching intention measures the extent to which a consumer is likely or confident to replace the product or service provider they are currently using with another. Three main factors influence this switching decision: the push effect, the pull effect, and the mooring effect. Service quality plays a role in shaping customer satisfaction, where the level of satisfaction can determine a customer's tendency to seek other alternatives. Switching intention is closely related to switching costs, as these costs are a factor influencing switching intention in the switching process (Satriadi, 2022). Consumers with a high level of loyalty are considered to have a low intention to switch (Picón et al., 2014). However, in certain situations, customers may switch to another brand or company even if they are satisfied (García et al., 2020). Conversely, dissatisfied customers do not always switch to another brand (Usadi & Pradnyan, 2022). The dimensions of this variable are intention, hope, and intention as a plan.

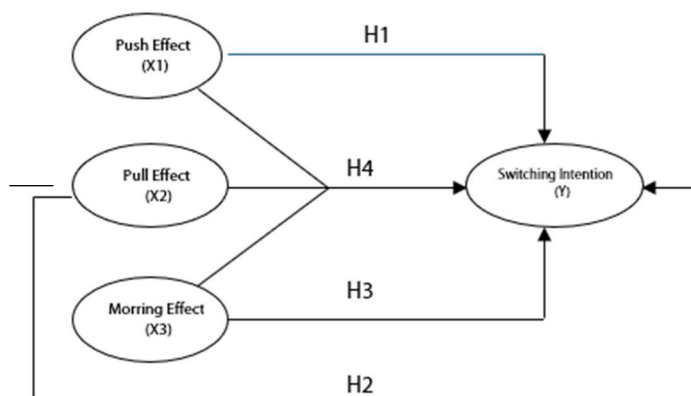
*H1: The push effect has a negative and significant impact on consumers' switching intention from internet payment methods to m-payment. Based on the push, pull, mooring (PPM) framework, the push effect is a negative motivating factor that encourages consumers to escape from their current situation. This finding aligns with research (Teguh et al., 2025) that also found a negative relationship between the push effect and switching intention, thus strengthening the evidence of an inverse relationship between the two variables. Therefore, I hypothesize that the greater the perceived push effect, the lower the consumer's intention to switch to m-payment.*

*H2: The pull effect has a positive influence on consumers' switching intention to m-payments. The attractiveness or incentives offered by m-payments, as part of the pull effect, can entice consumers to switch. Previous research shows that strong incentives can increase consumer switching intention (Fan, 2021). Therefore, I hypothesize that the greater the attractiveness offered by m-payments, the higher the consumer's intention to switch.*

*H3: The mooring effect significantly influences switching intention to m-payments. The mooring effect, which encompasses social and interactive elements, can influence consumers' decisions to switch or stay. Research shows that social support and interaction with other users can strengthen switching*

*intentions (Krishnan & Raghuram, 2023). Therefore, I hypothesize that a strong mooring effect will increase consumers' switching intention to m-payments.*

*H4: The push effect, pull effect, and mooring effect collectively have a positive and significant influence on switching intention to move to m-payments. The three independent variables collectively influence the dependent variable by a significant amount, exceeding 60%.*



**Figure 1. Research Model**

### III. Research Method

#### 3.1. Type of Research

This research uses a quantitative modeling approach, which focuses on objectively measuring social phenomena through numerical data to obtain accurate and focused results (Melati, 2020). The study, entitled "Factors Influencing Switching Intention in Using M-Payment," aims to analyze the influence of push, pull, and mooring effects on switching intention. The main focus is to assess the extent and how these three factors influence consumers' decisions to switch to m-payment services.

#### 3.2. Place and Time of Research

This research was conducted at Maranatha Christian University, Bandung City, with a duration of one month, in January 2025. The research activity schedule includes guidance from October to April, questionnaire collection in January, data analysis in January, data processing in January, research examination in April, and research hearing in April/May.

#### 3.3. Operational Definition of Research Variables

In this study, several variables were identified, both as independent and dependent variables. Each variable has clear dimensions, indicators, and measurement scales. The independent variable push effect (X1), this variable refers to the push effect, which includes the dimensions of low service quality and low satisfaction. Indicators used in measuring this variable include, I often experience delays in the transaction process when using internet payment services, I feel less secure when making transactions using internet payment services due to the lack of security guarantees, I feel dissatisfied when making internet payment transactions because they are less efficient. Measurement of this variable is carried out using a Likert scale, which allows respondents to express the extent to which they agree or disagree with the given statement. The source for this variable is taken from research (Sugandha, 2021). The independent variable pull effect (X2), this variable refers to the pull effect, which includes the dimensions of alternative attractiveness and

subjective norms. Indicators used to measure this variable include, having more innovative and attractive technology, offering more attractive promotions and offers, frequently seeing influencers recommend m-payment, becoming a more popular trend among people around, hearing many satisfied people. The measurement scale used is Likert, and the source for this variable is taken from research (Nurlinda, 2024). The Independent Variable mooring effect (X2), this variable refers to the mooring effect, which includes the dimension of switching costs. Some indicators used to assess this variable include, worry that there will be additional costs to pay when switching, and feeling that the registration process when switching is too complicated and time-consuming. The measurement scale used is Likert, and the source for this variable is taken from research (Sugandha, 2021). The Dependent Variable switching intention (Y), this variable refers to the mooring effect, hoping that the new service will be easier to use, hoping that the new service will provide a higher level of security, hoping that by switching to the new service, will get more attractive offers and promotions, planning to seek support from close people who have used the new service before switching, planning to try the new service in the near future as an alternative to the previous service. The measurement scale used is Likert, and the source for this variable is taken from research (Nurlinda, 2024).

### 3.4. Population and Sampling

Maranatha Christian University students from the Faculty of Law and Digital Business, graduating from 2021 to 2024, who use smartphones are the selected population relied upon in this study. The population studied belongs to Generation Z. This population is considered unlimited because its number cannot be determined (Sari, 2024). Therefore, a purposive sampling technique was used to determine the sample size. According to (Hair et al., 2014), the number of samples in the study is 5 to 10 times the number of indicators. The number of indicators used in this study was 15, resulting in a minimum sample size of 75 respondents (Yunita, 2023).

### 3.5. Data Collection Methods

Data collection in this study was conducted through two main steps. The first step involved distributing a questionnaire using a Likert scale with a value range of 1 (strongly disagree) to 5 (strongly agree). This questionnaire contained statements related to the push effect, pull effect, mooring effect, and switching intention, which aimed to measure respondents' level of agreement with each statement. The second step involved a literature review, which involved studying various references such as documents, scientific articles, and relevant theories to strengthen the quantitative data obtained. As stated by Indah (2020), the data in this study were quantitative and obtained from questionnaires that were analyzed using a numerical approach.

### 3.6. Data Source

In conducting this research, two types of data were used: primary data and supporting data. Primary data was collected directly through questionnaires distributed to respondents. The questionnaire contained several statements related to push, pull, and mooring factors, as well as the tendency to switch services. Meanwhile, supporting data was obtained through a literature review, such as books, scientific articles, and other relevant documents, to strengthen the findings of the primary data. As explained by Indah (2020), the type of data analyzed was quantitative and sourced from the questionnaire results, measured on a numerical scale (Sari, 2024).

### 3.7. Data Analysis Method

Data analysis in this study aims to evaluate the relationships between variables to gain a deeper understanding of the collected data. The analysis process was conducted using SPSS statistical software as a

data processing tool. The initial step began with instrument validity and reliability testing to ensure that each item in the questionnaire accurately measures the intended aspect and is reliable. According to Hurdawaty (2020), instrument reliability is measured using Cronbach's Alpha ( $\alpha$ ), with a threshold of  $\alpha > 0.6$  as an indicator of adequate internal consistency. Validity is considered valid if the correlation ( $r$ ) with the total score is greater than 0.30 (Sugiyono, 2018).

After the instrument validation stage was completed, the next step was to conduct a series of tests against the basic assumptions required in linear regression. A normality check was performed to assess whether the data had a near-normal distribution, and this process was carried out using the Kolmogorov-Smirnov approach (Nurchahyo, 2018). To determine the presence of excessive linear relationships between independent variables, a multicollinearity analysis was performed using the Variance Inflation Factor (VIF) and Tolerance values. A model is considered free of multicollinearity if the VIF does not exceed 10 and the Tolerance is greater than 0.1. To determine whether there is inequality in the variance of the regression residuals in each observation, a heteroscedasticity test is performed by observing the distribution pattern of points on a scatterplot.

This study applies multiple linear regression analysis to identify the relationship between the dependent variable and several independent variables. This approach is used to explain the extent to which the dependent variable, namely switching intention, is influenced by more than one predictor factor (Triyanto, 2019). As explained by Triyanto (2019), multiple linear regression analysis is a statistical technique that models the linear relationship of several predictor variables to the response variable through the equation:  $Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n + e$ . In this equation,  $Y$  represents the intention to switch,  $a$  is a constant value,  $b_1$ ,  $b_2$ , and so on indicate the regression coefficients of each independent variable, while  $e$  represents the measurement error (Ani, 2022).

In this study, hypothesis testing was conducted using a t-test analysis, which aims to determine whether each independent variable has a significant influence on the dependent variable partially (Nurchahyo, 2018). This procedure involves comparing the calculated t-value with the critical t-value at a 5% significance level. If the calculated t-value is greater than the table t-value, the variable is considered to have a significant influence. To assess the contribution of the independent variables in explaining the variability of the dependent variable, the coefficient of determination ( $R^2$ ) indicator is used. A high  $R^2$  value indicates that the model is able to explain most of the variation in the dependent variable (Ani, 2022). This analysis strategy was used to comprehensively evaluate how push, pull, and mooring factors influence the intention of students at the Faculty of Law and Digital Business at Maranatha Christian University to switch to digital payment systems (m-payment).

## IV. Result and Discussion

### 4.1. Demography of Respondent

**Table 1. Gender distribution of respondents**

Gender	Number of Respondents	Percentage
Laki-laki	54	54%
Perempuan	46	46%
Total	100	100%

**Table 2. Age Distribution of Respondents**

Age Category	Number of Respondents	Percentage
17-29	100	100%
30-44		
Total	100	100%

**Table 3. Smartphone Using Distribution of Respondents**

Choice	Number of Respondents	Percentage
Ya	100	100%
Tidak		
Total	100	100%

**Table 4. M-payment Using Distribution of Respondents**

Application Category	Number of Respondents	Percentage
Dana	35	35%
Gopay	44	44%
Ovo	6	6%
Shopeepay	15	15%
Total	100	100%

#### 4.2. Statistical Result

This study tested the instrument to ensure that the questionnaire used as a measuring tool had adequate validity and reliability. Validity indicates the extent to which the instrument measures its intended purpose, while reliability refers to the stability or consistency of the measurement results.

##### a. Validity Test

Validity testing is used to determine the extent to which an instrument is able to measure what it is intended to measure. An item is considered valid if it has a correlation ( $r$  count) with the total score greater than 0.30 (Sugiyono, 2018).

**Table 5. Push Effect Validity Test Result Data (X1)**

Question	R Count	Description
PSE1	0.682	Valid
PSE2	0.702	Valid
PSE3	0.626	Valid

Based on the analysis results in the table, it can be seen that all statement items (PSE1, PSE2, and PSE3) have calculated R values exceeding 0.30. This finding indicates that all items used to measure the push effect variable (X1) meet the validity criteria. This means that the measuring instrument used in this study has been proven to be appropriate for representing the construct being studied. Thus, the data obtained through this instrument can be considered accurate and reflect the actual conditions. High validity of the research instrument is a crucial aspect in ensuring the reliability of the data and the integrity of the analysis results.

**Table 6. Pull Effect Validity Test Result Data (X2)**

Question	R Count	Description
PLE1	0.724	Valid
PLE2	0.736	Valid
PLE3	0.681	Valid
PLE4	0.748	Valid
PLE5	0.724	Valid

From the analysis results displayed in the table, it can be seen that all question items (PLE1, PLE2, PLE3, PLE4, and PLE5) have an R Count value greater than 0.30. The validity test results show that all question items used to measure the pull effect variable (X2) are proven valid. This indicates that the instrument used in the study is able to effectively measure the intended construct, so that the results obtained are accurate and reflect the actual conditions. The high level of validity of this instrument is one of the key elements in ensuring

the reliability and quality of data collected in the study. Thus, the results of the pull effect variable (X2) can be trusted and used for further analysis in this study.

**Table 7. Mooring Effect Validity Test Result Data (X3)**

Question	R Count	Description
ME1	0.754	Valid
ME2	0.623	Valid

Based on the analysis results shown in the table, it can be seen that the ME1 and ME2 question items obtained an r count value greater than 0.30. Based on the validity test, it can be concluded that all items used to measure the Mooring Effect variable (X3) meet the valid criteria. This finding indicates that the measurement instrument in this study has a good ability to represent the intended construct accurately and consistently. With a valid instrument, the resulting data can be considered accurate and reflect the actual conditions. Therefore, the values obtained from the Mooring Effect variable (X3) are worthy of being used as a basis for the next stage of analysis in this study.

**Table 8. Switching Intention Validity Test Result Data (Y)**

Question	R Count	Description
S11	0.631	Valid
S12	0.576	Valid
S13	0.570	Valid
S14	0.596	Valid
S15	0.698	Valid

Based on the analysis results presented in the table, all statements in the Switching Intention indicator (codes S11 to S15) have a calculated r value greater than 0.30. This indicates that all items in the Switching Intention (Y) variable have met the validity criteria. This means that the instrument is able to represent the construct to be measured accurately and reliably. The high validity of these items is an important foundation in ensuring the reliability of the data obtained. Therefore, the measurement data for the Switching Intention variable can be considered valid and suitable for use in the next analysis stage in this study.

#### b. Realibility Test

Reliability testing aims to evaluate the consistency of the results obtained from the questionnaire instrument, particularly in measuring each indicator related to the research variables. In other words, this test is used to ensure that the measuring instrument produces stable and reliable data when used under similar conditions. According to Hurdawaty (2020), a questionnaire is considered reliable if respondents' responses to the questions shown stability over a certain period. In this study, reliability testing utilized SPSS software with a Cronbach's Alpha ( $\alpha$ ) approach. An instrument is categorized as having adequate reliability if the  $\alpha$  value reaches or exceeds 0.6.

**Table 9. Realibility Test Result**

Variables	Cronbach's Alpha	Number of Items	Description
Push Effect (X1)	0.866	3	Reliable (Cronbach's Alpha > 0.6)
Pull Effect (X2)	0.806	5	Reliable (Cronbach's Alpha > 0.6)
Mooring Effect (X3)	0.920	2	Reliable (Cronbach's Alpha > 0.6)
Switching Intention (Y)	0.794	5	Reliable (Cronbach's Alpha > 0.6)

The purpose of the reliability test is to evaluate the extent to which the instrument used is able to measure variables consistently. In this study, testing was conducted using Cronbach's Alpha values, with a minimum threshold of 0.6 as an indicator that an instrument is considered reliable. For the push effect variable, a value of 0.866 was obtained from three statement items, indicating excellent internal consistency. The pull effect variable produced a value of 0.806 from five indicators, which also indicates a strong level of reliability. The mooring effect variable showed an  $\alpha$  value of 0.920 based on two items, while the other results showed a figure of 0.907, both indicating high stability. For the switching intention variable, the achieved  $\alpha$  value was 0.794 from five items, confirming that the measuring instrument for this variable is also quite reliable. Overall, all variables in the study showed Cronbach's Alpha values above the minimum standard, thus it can be concluded that all instruments have adequate reliability and support the feasibility of the data used for further analysis.

c. Normality Test

The purpose of the normality test is to identify whether the residuals from a regression model follow a normal distribution. This assumption is a crucial prerequisite for applying regression analysis, as if it is not met, the analysis results may be less valid. In this research area, the normality test is performed using a significance value, where the residual is declared to have a normal distribution if the value is above 0.05.

**Table 10. Kolmogorov-Smirnov Normality Test Result Data**

		Unstandardized Residual
N		100
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	1.89371716
Most Extreme Differences	Absolute	.082
	Positive	.082
	Negative	-.073
Test Statistic		.082
Asymp. Sig. (2-tailed)		.092
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance		

From table 10 it can be said that the residual values are normally distributed, because it shows that the significant value is  $0.92 > 0.05$ .

d. Multicollinearity Test

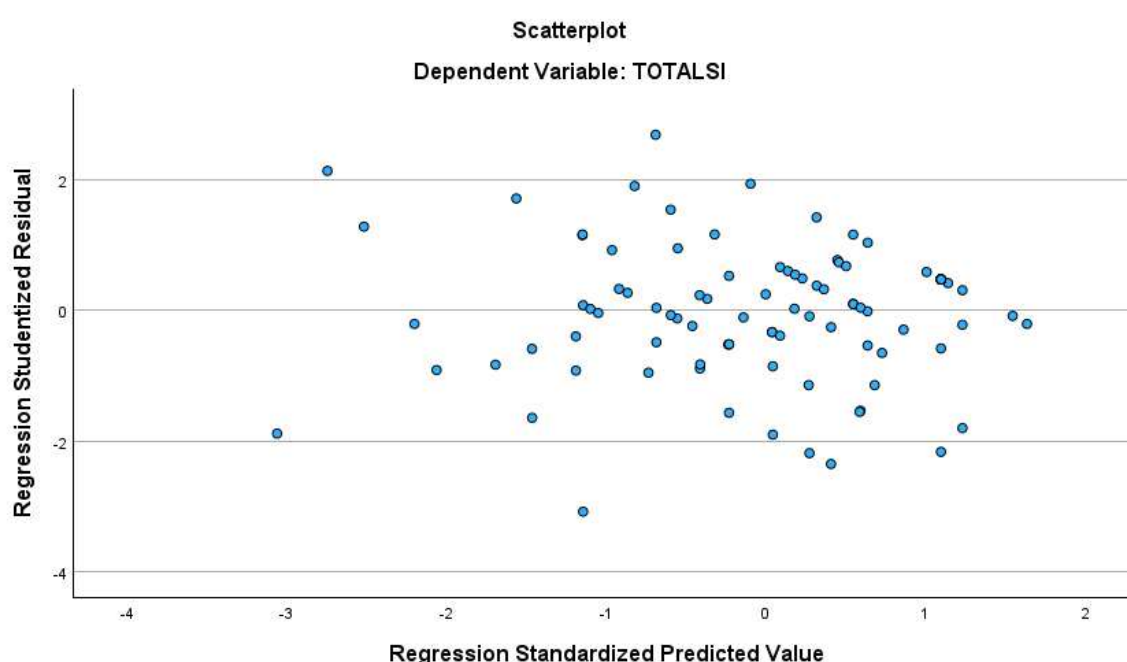
Multicollinearity testing is performed to determine the presence of high correlation between independent variables in a regression model. Multicollinearity can make it difficult to accurately estimate parameters and interfere with the reliable interpretation of analysis results. In this study, multicollinearity symptoms are identified using two measures: the Variance Inflation Factor (VIF) and Tolerance. A model is considered free of multicollinearity if the VIF is less than or equal to 10 and the Tolerance value is at least 0.1 or greater.

**Table 11. Multicollinearity Test Result Data**

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Push Effect	.596	1.678
	Pull Effect	.579	1.727
	Mooring Effect	.629	1.589

Referring to the information in Table 11, the push effect variable has a tolerance value of 0.596 and a VIF of 1.678. The pull effect variable shows a tolerance of 0.579 and a VIF of 1.727. Meanwhile, the mooring effect obtained a tolerance of 0.629 and a VIF of 1.589. All tolerance values for the independent variables are above the minimum limit of 0.1, indicating that there is no high correlation between variables in terms of data distribution. This means there is no strong indication of multicollinearity in this regression model. Furthermore, all VIF values are recorded below 10, indicating there is no significant increase in the variance of the coefficient estimates due to the relationship between the independent variables. Based on these findings, it can be confirmed that the regression model used is not experiencing multicollinearity. Therefore, the relationship between the independent variables can be considered normal, and the estimated regression coefficients can be used as a reliable basis for analysis.

e. Heteroscedasticity Test



**Figure 2. Heteroscedasticity Test**

The scatterplot results from the heteroscedasticity test show that the data points are randomly distributed without forming a clear pattern around the horizontal line (zero value). This distribution pattern indicates that the residual variance is stable or homogeneous, so there is no indication of heteroscedasticity in the regression model tested.

f. Analyse linéaire multiple

According to (Erwan 2019), class analysis based on a linear combination of attributes, with predetermined weights, serves as a tool for expression. In this study, there are three independent variables: push effect, pull effect, and mooring effect, and one dependent variable: switching intention. Based on the multiple linear regression analysis calculations performed with SPSS 30, the following is a multiple linear regression equation model.

$$Y = 7.490 - 0.105X_1 + 0.643X_2 + 0.211X_3$$

Description:

- a. The regression constant obtained is 7.490, indicating that if the push effect (X1), pull effect (X2), and mooring effect (X3) are present, then switching intention is positive.
- b. The regression coefficient for variable X1 is negative at 0.105, indicating that an increase in X1 will cause a decrease in Y, and vice versa.
- c. Meanwhile, variable X2 has a positive coefficient of 0.643, meaning that every increase in X2 will be followed by an increase in Y.
- d. The same is true for variable X3, which has a positive coefficient of 0.211, indicating that an increase in X3 will have an impact on the value of Y.

The detailed results of the multiple linear regression analysis are presented in table 13 below.

**Tabel 13. Multiple Linear Analysis Test Results**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.490	.661		12.265	<.001
	Push Effect	-.105	0.35	-.139	-3.018	.003
	Pull Effect	.643	.034	.905	18.914	<.001
	Mooring Effect	.211	.072	.141	2.935	.004

g. Hypothesis Test

A Sig value < 0.05 indicates a significant effect, and if it is exactly 0.05, then to find out whether there is a significant effect or not, you can compare the calculated T with the T table.

**Tabel 14. T-test Result Data**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.490	.661		12.265	<.001
	Push Effect	-.105	0.35	-.139	-3.018	.003
	Pull Effect	.643	.034	.905	18.914	<.001
	Mooring Effect	.211	.072	.141	2.935	.004

From the analysis results, the three independent variables demonstrated a significant influence on the dependent variable. This is evident from the significance values generated by each variable. Variable X1, for example, has a significance value of 0.03, which is below the 0.05 level of significance.

Therefore, it can be concluded that X1 has a significant influence on variable Y. Meanwhile, variable X2 recorded a significance value of less than 0.001, which is also statistically far below the 0.05 significance limit, confirming that X2 also has a significant influence on Y. Furthermore, variable X3 recorded a significance value of 0.04, which is also less than 0.05, indicating a significant influence on the dependent variable. Overall, the significance values for all three independent variables are below 0.05, indicating that all have a significant influence on variable Y.

According to Ani et al. (2022), the coefficient of determination is used to assess the extent to which an independent variable is able to explain changes or variations in the dependent variable. The R<sup>2</sup> value is in the range between 0 and 1. If the R<sup>2</sup> value is low, this indicates that the ability of the independent variable to explain variations in the dependent variable is still limited.

**Tabel 15. Data from the Coefficient of Determination Test Result (R2)**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.778 <sup>a</sup>	0.605	0.593	1.923
a. Predictors: (Constant), Mooring Effect, Push Effect, Pull Effect				
b. Dependent Variable: Switching Intention				

Based on the data above, it is known that  $R^2$  (R Square) is 0.605. This indicates that the push effect, pull effect, and mooring effect influence 60.5% of switching intention. In comparison, other variables not examined in this study influence the remaining 39.5% of switching intention.

#### 4.3. Discussion

##### a. The Influence of the Push Effect on Switching Intention

The push effect has been shown to contribute to consumers' tendency to switch from internet-based payment methods to m-payment systems, as demonstrated by the analysis of the relationship between the push effect and switching intention. A significance value of 0.03, which is smaller than the critical limit of 0.05, indicates that this variable has a statistical effect. However, the calculated t value of -3.018, which is below the t table value of 1.985, indicates that the relationship between the two is negative, meaning that the higher the push effect, the lower the switching intention. Thus, the first hypothesis in this study can be accepted. Validity tests on all push effect indicators indicate that all items are valid because the calculated r value is each greater than the value (0.30). In addition, the results of the reliability test revealed that all indicators have values above 0.6, which means this measurement instrument is considered consistent. The significance value below the 0.05 threshold strengthens the evidence that partially, the push effect has a significant effect on switching intention in the context of the transition to digital payment services. This finding is in line with research by (Susanti et al., 2025) and (Teguh et al., 2025) which hypothesizes that the push effect has a positive and significant effect on switching intention.

##### b. The Influence of Pull Effect on Switching Intention

The pull effect has a positive influence on consumers' switching intention from internet payment methods to m-payment, as seen from all the tests above that observe the relationship between the pull effect and switching intention. The significance (sig) results show a value of less than 0.05 or 0.005, which is  $<0.01$ , and the t value is 18.914 with a t table value of 1.985, so that hypothesis 2 is accepted. The validity test of the pull effect indicator is declared valid because the r count value is greater than the value (0.30). Furthermore, in the reliability test, each variable produces a value greater than 0.6. The possibility of consumers choosing to switch to using m-payment is higher. The calculation of the significance value shows a value smaller than the predetermined significance standard ( $0.005 < 0.05$ ). Thus, the pull effect partially has a positive and significant effect on switching intention in the shift from digital payments to m-payment.

##### c. The Influence of Mooring Effect on Switching Intention

The mooring effect has been shown to have a positive influence on consumer intention to switch from internet-based payment methods to m-payment, as indicated by the results of the previous analysis that examined the relationship between the mooring effect and switching intention. The significance value obtained was 0.05, below the threshold of 0.05, and the calculated t value of 2.935 exceeded the t table value of 1.985. This supports the acceptance of the third hypothesis. Validity testing of the mooring effect indicators showed valid results, because the calculated r value was greater than the value (0.30). Meanwhile, the reliability test also showed that all variables had values greater than 0.6, which indicates that the instrument used is reliable. This finding confirms that the possibility of consumers to switch to m-payment increases significantly. With a significance value smaller than the previously determined significance level ( $0.005 < 0.05$ ), it can be concluded that the mooring effect has a positive and significant influence on switching intention in

the context of the transition to an m-payment-based digital payment system. This finding is in line with research by (Nurriza Rizky Robitha, 2025) and (Krishnan & Raghuram, 2023) which hypothesizes that the mooring effect has a positive and significant effect on switching intention.

## V. Conclusion

This study aims to analyze the influence of push, pull, and mooring effects on people's switching intentions when shifting from digital payments to mobile payments. The findings indicate that the independent variables (pull and mooring) contribute positively and significantly to the dependent variable, but the independent variable (push) contributes negatively and significantly to the dependent variable. The T-test results show that the push effect has a negative T-value, indicating that an increase in the push effect will decrease switching intention, and vice versa. Meanwhile, the pull effect is the most dominant variable, having the highest T-value in the T-test. Furthermore, perceptions of the mooring effect are also important factors influencing switching intention. These findings have strategic value both academically and practically. Academically, this study enriches the literature on consumer behavior by utilizing the Push-Pull-Mooring (PPM) theoretical framework, which was previously more commonly used in the context of individual or organizational migration. From a business perspective, understanding these three factors is crucial for mobile payment service providers. Marketing strategies and product development that consider the push, pull, and barrier factors can be effective.

This study has limitations that should be considered, namely the limited scope of data collection at a single university. This condition limits the generalizability of the findings to a broader population, as the behavior and preferences of students from other universities or with different backgrounds may exhibit different patterns. Therefore, the results of this study should be understood as a reflection of a specific local context. Furthermore, although the Push-Pull-Mooring (PPM) model successfully explained the influence of switching intention, there is still room for enriching the analysis by considering additional variables. Based on these limitations, it is recommended that future research be conducted with a broader scope of respondents, encompassing various universities or even user segments beyond students. Furthermore, exploration of new variables that are more contextual and relevant to the dynamics of changing digital consumer behavior is necessary to generate a more comprehensive and applicable understanding of the factors influencing the intention to switch from digital payments to mobile payment services.

## References

- Ani, J. (2022). Pengaruh Citra Merek, Promosi Dan Kualitas Layanan Terhadap Keputusan Pembelian Konsumen Pada E-commerce Tokopedia Di Kota Manado. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*. <https://doi.org/10.35794/emba.v10i1.38279>
- Fan, L. (2021). Mobile Payment: The Next Frontier of Payment Systems? - An Empirical Study Based on Push-Pull-Mooring Framework. *Journal of Theoretical and Applied Electronic Commerce Research*. <https://doi.org/10.4067/S0718-18762021000200111>
- Gulmez, M. (2020). Transition Process From Using Member Cards To Mobile Applications: a review on the starbucks app. *Journal of Osmaniye Korkut Ata University Faculty of Economics and Administrative Sciences R*, 4(2), 1–18.
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool for Business Research. *European Business Review*, 26(2), 106–121.
- Hurdawaty, R. (2020). Pengaruh Brand Image Terhadap Keputusan Pembelian Pada Domino's Pizza Lippo Karawaci Utara. *Jurnal Mandiri Ilmu Pengetahuan, Seni, Dan Teknologi*. <https://doi.org/10.33753/mandiri.v4i1.105>

- Indah, D. R. (2020). Pengaruh Citra Merek, Kualitas Produk dan Harga terhadap Keputusan Pembelian Produk Hand and Body Lotion Vaseline. "Jurnal Samudra Ekonomi Dan bisnis. <https://doi.org/10.52970/grmapb.v5i1.454>
- Khrais, L. T. (2021). The Role of Mobile Application Acceptance in Shaping E-Customer Service. Future Internet. <https://doi.org/10.3390/fi13030077>
- Krishnan, G., & Raghuram, J. N. V. (2023). Exploring factors and contextual applications of the Push-Pull Mooring (PPM) framework in switching intention: A systematic literature review. Multidisciplinary Reviews, 7(1). <https://doi.org/10.31893/multirev.2024003>
- Melati, R. S. (2020). Pengaruh Harga Dan Online Consumer Review Terhadap Keputusan Pembelian Case Handphone Pada Marketplace Shopee. Jurnal Pendidikan Tata Niaga. <https://doi.org/10.26740/jptn.v8n2.p%25p>
- Muliati. (2024). Transformasi Bisnis di Era Digital: Pengembangan Strategi dan Keterampilan Berbisnis Online. Celebes Journal of Community Services. <https://doi.org/10.37531/celeb.v3i1.1145>
- Muttaqin, F. (2022). Pengaruh Push, Pull, And Mooring effect Terhadap Switching Intention Konsumen Mobile Legends: Bang Bang Pada league Of legends: Wild Rift. "Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, Dan Pendidikan.
- Nurchahyo, B. (2018). Analisis Dampak Penciptaan Brand Image Dan Aktifitas Word Of Mouth (WOM) Pada Penguatan Keputusan Pembelian Produk Fashion. Jurnal Nusantara Aplikasi Manajemen Bisnis. <https://doi.org/10.29407/nusamba.v3i1.12026>
- Nurlinda, R. A. (2024). Factors Influencing Customer Switching Intentions in Online Food Delivery: A Perspective of The Push-Pull-Mooring Model. "Jurnal Manajemen Perhotelan.
- Sari, I. M. (2024). The Influence of Brand Image, Price, and Product Quality on Purchasing Decisions for iPhone Products. Golden Ratio of Marketing and Applied Psychology of Business. <https://doi.org/10.33059/jseb.v11i1.1983>
- Satriadi. (2022). Redefining The Concept of Consumer Switch Intention: A Literature Review. "Majalah Ilmiah Bijak. <https://doi.org/10.31334/bijak.v19i1.1890>
- Sugandha, A. P. (2021). Pengaruh Push, Pull, Dan Mooring Terhadap Switching Intention Pada Konsumen Pengguna Wifi Di Era Pandemi Covid-19. Jurnal Ilmu Manajemen, 9(4).
- Tang, K. L. (2022). Factors Influence Switching Intention to M-payment Using Push-Pull-Mooring Framework During the Coronavirus Pandemic in Malaysia. Asian Journal of Research in Business and Management. <https://doi.org/10.55057/ajrbm.2022.4.3.55>
- Teguh, C., Salim, L., Katolik, U., Atma, I., & Fadila, R. (2025). Analysis Of The Influence Of Push , Pull And Mooring. locus journal: Research & Devotion, 4(4), 1532–1547. <https://doi.org/doi.org/10.58344/locus.v4i4.3986>
- Triyanto, E. (2019). Implementasi Algoritma Regresi Linear Berganda Untuk Memprediksi Produksi Padi Di Kabupaten Bantul. rabit : Jurnal Teknologi Dan Sistem Informasi Univrab.
- Usadi, P., & Pradnyan, M. (2022). Predicting Switching Intention Among Generation Y Using DeLone & McLean (Study on Shopee App). Jurnal Ekonomi Manajemen Dan Bisnis. <https://doi.org/10.29103/e-mabis.v23i2.865>
- Wiranatakusuma, D. B. (2024). Analysis of Switching Intention of Cash Payment Users to Digital Payment (Linkaja) Using a Push-PullMooring Approach. Proceedings of the 1st UHAMKA International Conference on Economics and Business. <https://doi.org/10.4108/eai.18-12-2023.2349522>
- Yu, S. Y. (2022). Consumers' Switching from Cash to Mobile Payment under the Fear of COVID-19 in Taiwan. Sustainability. <https://doi.org/10.3390/su14148489>
- Yunita, E. (2023). The Influence of Push-Pull-Mooring Effects on E-Wallet Customer Switching in Generation Z in DKI Jakarta. The South East Asian Journal of Management. <https://doi.org/10.21002/seam.v17i1.1177>

- Yusuf, H. G. (2022). Pengaruh Push Pull Mooring Terhadap Switching Intention Pada Pengguna Aplikasi Video On Demand Di Masa Pandemi Covid-19. *Indonesian Journal of Business Intelligence*. <https://doi.org/10.21927/ijubi.v5i1.2321>
- Campos Pimenta, M. T., de Mesquita, J. M. C., Shin, H., & Urdan, A. T. (2023). The Role of Customer Complaint Management on Switching Intention and Customer Exit in Fitness Centers. *Services Marketing Quarterly*, 44(1), 51–72. <https://doi.org/10.1080/15332969.2022.2126081>
- Nurriza Rizky Robitha, K. K. N. (2025). Pengaruh Push, Pull, dan Mooring Pada Switching Intention Konsumen Pertamina ke Shell. *Jurnal Sosial, Ekonomi Dan Humaniora*, 7(1), 1–14. <https://doi.org/https://doi.org/10.56244/sosiera.v4i1.929>
- Peña-García, N., Gil-Saura, I., Rodríguez-Orejuela, A., & Siqueira-Junior, J. R. (2020). Purchase intention and purchase behavior online: A cross-cultural approach. *Heliyon*, 6(6). <https://doi.org/10.1016/j.heliyon.2020.e04284>
- Susanti, R., Pramana, E., Junaedi, H., & Informasi, T. (2025). Online Learning Pada Pegawai Negeri Sipil Berbasis Teori Push. 07(April), 18–26.