Perceived Enjoyment and Perceived Usefulness to Mobile Payment Users Continuance Intention

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ABSTRACT. This study investigates the crucial factors that shape the intention of mobile payment users to continue using these services, with a primary focus on the role of perceived enjoyment and perceived usefulness. Data were gathered from a sample of 150 active mobile payment users through a meticulously designed questionnaire to explore this phenomenon. The collected data were subjected to robust statistical analysis, utilising the multiple regression method facilitated by SPSS 24 software. Our findings highlight a significant and positive relationship between perceived enjoyment, perceived usefulness, and continuance intention in mobile payment services. In simpler terms, when users perceive a higher level of enjoyment and find the mobile payment service more useful, they exhibit a stronger inclination to persist in using it. This research underscores the pivotal role of these two factors and their interplay in shaping user intentions. The implications of this study are substantial for mobile application developers and service providers, emphasising the importance of strategically enhancing perceived enjoyment and perceived usefulness in their offerings to promote user satisfaction, trust, and continued engagement. As the mobile payment landscape evolves, understanding and optimising these factors will be essential for sustained success and user loyalty in the industry.

Keywords: Perceived Enjoyment, Perceived Usefulness, Continuance Intention.

1. INTRODUCTION

Advances in information technology affect all industries, including the financial sector. The financial industry is transitioning from traditional to digital. Fintech refers to financial technology. The growth of fintech has the potential to improve people's quality of life and has emerged as a new necessity in the world. Fintech is an important factor in people's way of life and the state of the economy because it helps new startups get started through mobile payments and can improve people's living standards (in South Asia, fintech can overcome the poverty of more than 600 million people and provide tangible evidence of startup profitability to increase investor confidence⁷).
Mobile payment services will be an influential factor, particularly in the fintech vertical and the financial landscape more generally, as device support moves towards fintech as part of the solution the fintech industry is trying to accommodate. This is based on growth, which shows that the number of smartphone users has exceeded the ownership of bank accounts by the public. Meanwhile, based on conditions in Indonesia, an inclusive financial system can be implemented (dailysocial.id accessed on 5th of December 2018).

Payment systems have evolved in recent years from simple cash or credit card transactions to various mobile payment systems. This transition occurred due to economic changes, technological advances on the Internet, and the proliferation of social media, networks, and mobile device use. As smartphones are ubiquitous, consumers benefit from the ease and convenience of paying for goods and services when using these new payment channels. Mobile payment systems have adapted not only to most digital and mobile-free realities but also to the new business environment, which allows business transactions to be carried out anywhere, anytime and by anyone 2.

Electronic or online payment systems have grown significantly, but mobile payments are far from the initial expectations2. The reasons are various high competition among various parties involved in the financial ecosystem (large technology companies, FinTech companies, startups, banks), concomitant development of the FinTech industry, and challenges implying the adoption of new FinTech systems by consumers, who are heavily influenced by the scarcity of knowledge about payments cellular2, 3 and doubts about user trust4. Indonesia already has more than fifty payment systems, including Shopeepay, OVO, Gopay, LinkAja, Jenius, Dana, Go Mobile, and others. This is related to efforts to promote mobile payment providers. Government assistance is needed to transition Indonesia to a cashless society5. Competition among mobile payment providers: Providers must build systems encouraging their clients to use their platforms regularly. A person's intention to use a payment application repeatedly is referred to as a follow-up intention5. Post-adooption behaviour is defined as continuing intentions. Mobile payment suppliers must ensure their clients can use their technology to maintain customer loyalty 6,7,5, 6. The user's intention to continue using technology is their continuity intention 8,9, 10.

The research problem is the low interest in long-term use (continuance intention) of mobile payment products in the transaction process in Indonesian society, as evidenced by the small portion of mobile payment payments compared to other methods and the low frequency of use. Previous research on continuance intentions relied on the Expectation Confirmation Model (ECM)11, which has been widely used to analyse consumer behaviour in the post-purchase or use stage11.

The study's goals also include determining the effect of reported happiness on users' intentions to continue using mobile payments. The study will seek to determine whether consumers with greater satisfaction are more likely to have strong intentions to continue using the service. Furthermore, this study aims to investigate the effect of perceived usefulness on users' desire to continue. In this scenario, the study will determine if consumers who find the mobile payment service beneficial are more likely to continue using it. Discovering Enablers and Barrier, this study tries to discover enabling and inhibiting elements that may impact the link between
reported enjoyment, perceived usefulness, user intents, and the relationship itself. Age, user experience, and other demographic parameters that may mitigate the connection are included.

Mobile payment service providers must understand what factors are crucial for customers so that consumers continue to use services or long-term use intentions (continuance intention) such as perceived enjoyment and perceived usefulness. Perceived enjoyment can be defined as a situation in which the act of using a particular system is considered pleasurable by itself, regardless of the performance consequences that stem from using that system\textsuperscript{12}. Meanwhile, perceived usefulness is defined as "the extent to which a person feels that using certain technologies will improve his performance\textsuperscript{13}.

Perceived enjoyment has also been shown to be a strong factor in influencing continuous use intention\textsuperscript{4,14,15}. Previous research stated that perceived enjoyment and perceived usefulness had an impact on continuance intention\textsuperscript{16}. Based on the above phenomena, a study was conducted to determine the effect of perceived enjoyment and usefulness on mobile payments' continuance intention.

1. Perceived Enjoyment

Perceived enjoyment is a key factor in determining user acceptance and continued use of technology\textsuperscript{17}. Perceived enjoyment is a critical factor in determining the success of gamification interventions\textsuperscript{18}. Perceived enjoyment is a crucial aspect of user experience in mobile applications\textsuperscript{19}. "Perceived enjoyment is a significant predictor of intention to use social networking sites\textsuperscript{20}. Perceived enjoyment is a key determinant of user satisfaction with e-learning systems\textsuperscript{21}. Perceived enjoyment is critical in determining user satisfaction and continued use of technology-based products\textsuperscript{22}. Perceived enjoyment can be influenced by various factors, including the user's prior experience, expectations, and product or service design. Perceived enjoyment can be influenced by a variety of factors, including the user's prior experience, expectations, and the design of the product or service\textsuperscript{23}. Perceived enjoyment is a key predictor of user engagement and loyalty, reflecting the user's emotional attachment to the product or service\textsuperscript{24}. Perceived enjoyment is a multidimensional construct that includes factors such as challenge, novelty, social interaction, and sensory appeal\textsuperscript{8}.

2. Perceived Usefulness

Perceived usefulness is a key determinant of user acceptance and adoption of technology\textsuperscript{8}. The perceived usefulness of a technology can be influenced by factors such as ease of use, compatibility with existing systems, and perceived benefits\textsuperscript{17}. Perceived usefulness is a subjective evaluation of the potential benefits that a technology can provide to an individual or organization\textsuperscript{25}. Perceived usefulness is essential in the decision-making process for adopting new technologies\textsuperscript{26}. Perceived usefulness can be enhanced through effective training, support, and communication strategies\textsuperscript{27}.

3. Continuance Intention

Continuance intention is a key indicator of user loyalty towards a product or service and is influenced by factors such as perceived usefulness, satisfaction, and switching costs\textsuperscript{11}. The measurement of continuance intention should consider both the cognitive and affective aspects of user behavior and the context in which the
behavior occurs. Continuance intention can be a useful predictor of future user behaviour and help organisations identify improvement areas in their products or services. Factors such as trust, social influence, and perceived risk can also impact continuance intention and should be considered in any analysis of user behavior. The measurement of continuance intention should be accompanied by an assessment of the user's overall experience with the product or service, including factors such as ease of use, reliability, and customer support.

2. METHOD

This type of research is explanatory research. The variables used are Perceived Enjoyment and Perceived Usefulness to the continuance intention of mobile payment. The sample used was 150 respondents. The sampling method used was non-probability sampling with purposive sampling. The research instrument was a questionnaire using a semantic differential scale 1-7 and used multiple regression analysis. The tool used to analyse the data is IBM SPSS 24 with the stages of the analytical method through data validity test and reliability test, normality test or Kolmogorov-Smirnov non-parametric statistical test (KS), hypothesis testing with F test and partial relationship test with T.

2.1 Research Hypothesis

Based on the research model in Figure 1, the hypotheses in this study are:

H1: Perceived Enjoyment has a positive and significant effect on continuance intention in using mobile payment applications.

H2: Perceived usefulness has a positive and significant effect on continuance intention in using mobile payment applications.

Figure 1 Research Model

3. RESULTS AND DISCUSSION

3.1. Validity Test

Validation check: The statement item is considered valid if the validity results exceed 0.361. According to the instrument validity test, all statements submitted to respondents have a validity coefficient value greater than the critical point of 0.361, indicating that the instrument is declared valid and can be used to assess research variables.

<table>
<thead>
<tr>
<th>Item</th>
<th>r Hitung</th>
<th>r Tabel</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 1</td>
<td>0.955</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td>PE2</td>
<td>0.955</td>
<td>0.361</td>
<td>Valid</td>
</tr>
<tr>
<td>PU1</td>
<td>0.884</td>
<td>0.361</td>
<td>Valid</td>
</tr>
</tbody>
</table>
Based on the data reliability testing findings reported, the reliability coefficient is larger than the critical point of 0.361, suggesting that this research instrument is reliable and viable for use as a variable in measuring this study and has met the criteria the research needs.

3.2. Normality Test

The normality test determines whether the regression model's dependent and independent variables are regularly distributed. When utilising the Kolmogorov-Smirnov test theory to prove normality, if the sig value is larger than alpha, the variable is normally distributed; if the sig value is less than alpha, the variable is not normally distributed.

Based on the normality test findings, the residual variable's probability value (sig) is more than 0.05 when applying the Asymp Sig. (2-tailed) residual value is 0.200, indicating that the author's data is normally distributed.

2.3 Multiple Regression Coefficient Analysis

The regression analysis used is multiple regression analysis; the independent variables are more than one. This analysis aims to determine whether there is a relationship between variable X1 (Perceived Enjoyment) and variable X2 (Perceived Usefulness) on Y (Continuance Intention). By using SPSS software, the following results are obtained:

Through the results of data processing as in the table above, a predictive model for PE and PU variables for continuance intention can be formed as follows:

\[
Y = 23.414 + 0.260X1 + 0.281X2 + e
\]

Based on the equation above, the regression coefficient of each independent variable can be interpreted as follows: A constant of 23.414 means that if the PE and
PU values are zero, then the continuous intention is 23.414. The PE regression coefficient of 0.260 states that each addition of one unit of PE score will increase the continuance intention by 0.617, assuming the independent variable PE is constant. PU regression coefficient of 0.281 states that each addition of one unit of PU score will increase the continuance intention by 0.281, assuming the independent variables are constant.

**Tabel 1.3 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>828.648</td>
<td>2</td>
<td>414.324</td>
<td>5.201</td>
<td>.007b</td>
</tr>
<tr>
<td>Residual</td>
<td>11710.445</td>
<td>147</td>
<td>79.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12539.093</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Y  
b. Predictors: (Constant), X2, X1*

Source: Results of SPSS data processing 24, 2023

Based on the table above, it can be seen that $F_{\text{count}}$ is 5.201. This value will be compared with the value of $F_{\text{table}}$ with $\alpha = 0.05$, $db1 = 2$ and $db2 = 150$. It is known that the value of $F_{\text{table}}$ is 3.09. From the above values, it is known that the value of $F_{\text{count}} (5.201) > F_{\text{table}} (3.09)$, $Ho$ is rejected, and $Ha$ is accepted. This means that perceived enjoyment and perceived usefulness together have a positive and significant effect on continuance intention. Based on the results of the research and discussion relating to perceived enjoyment and perceived usefulness on continuance intention, it can be concluded that the perceived enjoyment variable is in the weak category, the perceived usefulness variable is in the good category, and the continuance intention variable is in the good category.

4. **CONCLUSIONS**

According to the findings of this study, perceived enjoyment and perceived usefulness have a favourable and substantial influence on Continuance Intention. As a result, the influence is to pay attention to reported enjoyment and perceived usefulness as variables that might affect mobile payment Continuance Intention.

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