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Jurnal Informasi dan Teknologi

https://jidt.org/jidt

2024 Vol. 6 No. 1 Page: 240-244 e-ISSN: 2714-9730

Analysis of The Influence of Perceived Usefulness Factors and Subjective Norm on Intention to Use QR Code of Digital Wallet Users

Upik Djaniar^{1⊠}, Sukriyadi², Musran Munizu³, Sumiati Tomadehe⁴, Asri Ady Bakri⁵

¹Universitas Muhammadiyah Kupang ²Universitas Lelemuku Saumlaki ³Universitas Hasanuddin ⁴STAI Alkhairaat Labuha ⁵Universitas Muslim Indonesia

udjaniar@gmail.com

Abstract

The purpose of this study is to ascertain how behavioral intention to reuse is influenced by perceived usefulness, perceived ease of use, compatibility, subjective norm, perceived risk, perceived trust, and perceived cost of the QR payment. The researcher employed a survey approach, a single cross-sectional design for data collecting, and a conclusive research design with a descriptive research design type. Researchers employed the judgmental sampling method along with non-probability sampling strategies in this study. There were 100 samples used in this investigation, major data from the outcomes of distributing questionnaires served as the major data source. Researchers used the structure-equation modeling (SEM) technique to evaluate their hypothesis. The study's findings indicate that behavioral intention to utilize QR Code payments is positively influenced by perceived usefulness, perceived simplicity of use, compatibility, subjective norms, and perceived trust. An individual's intention to use the service again is positively correlated with how much they perceive the benefits, find it easy to use, find it matches their lifestyle, have support from significant others, and have a high degree of faith in the QR Code. Perceived risk and cost, however, do not significantly affect behavioral intention, indicating that people's intentions to use QR Codes again are not hampered by their sense of risk and associated expenses.

Keywords: Mobile Payment, Perceived Usefulness, Subjective Norm, Behavioral Intention.

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1. Introduction

Smartphones have become the main item that must be owned in this modern era, a multi-functional portable device that everyone is familiar with. The level of smartphone usage in Indonesia has increased quite significantly from year to year, making smartphones a tool or medium that everyone must have. Smartphone users in Indonesia reached 380 million, or 150 percent of the total population in Indonesia [1]. This is because the average population in Indonesia usually has more than one smartphone, which means one person can have two to three smartphones of their own. Due to the large level of smartphone usage in Indonesia, Indonesia has a very large market share for well-known brands that produce smartphones to be offered to people in Indonesia [2]. Of course, there are various smartphone brands spread across the Indonesian market. But with so many different brands competing with each other, it is certainly quite a difficult choice for people to decide which brand of smartphone they want to use. There are lots of activities or other things that we can do using smartphones, because smartphones are sophisticated tools that can support and help us carry out our daily activities to make them easier and simpler [3].

On average, Indonesians use their smartphones for various things, namely, the most popular ones are for activities on social media at 20 percent, watching videos using smartphones at 15 percent, playing games at 10 percent, looking for a place they want to visit at 9 percent, and the last one was used as a mobile banking facility at 15%. From the data that we have seen, the average Indonesian person uses mobile banking quite often, because mobile banking can help to carry out online banking transactions very easily through the application that is installed on the smart phone that we use [4]. Something that is almost the same as mobile banking, which is currently being widely used, is the m-payment system, which is a payment system using a smart phone connected to a device that has been provided. The use of m-payment has emerged as a new trend that Indonesian smartphone users are embracing due to the convenience of payment methods. The ease of topping up the balance in a virtual account connected to m-payment is also one of the factors that influences the level of use of m-payment. M-payment balances can now be topped up using a transfer system using mobile banking, so users don't need to bother going to an ATM if they want to top up their virtual account balance [5].

NFC and QR codes are the two main forms of mobile payment systems. Within the NFC system, the modulated field is either an electric field or a magnetic field that is not derived from radio electromagnetic waves. In addition to complementing this system with mobile payments, the NFC system's technology can be utilized in contactless payment systems like credit card and electronic ticket systems [6]. If the smart phone has an NFC system, you can use it by connecting it to the EDC machine, which is compatible with the NFC feature. On the other hand, there are also payments using the Quick Respond Code system, commonly known as QR Code, which is a form of code evolution from one dimension to two dimensions [7]. The use of the QR code method is very common in Japan and is widely used on Japanese cellphones. The payment method makes use of a QR code, which we scan using a smartphone connected to one of the applications that offers this feature, and then photograph [8]. With the ease of payment using the QR code method, the Indonesian government predicts that QR code will become a payment system that will become popular in Indonesia as time goes by and existing technology develops. The reason is that the NFC feature is not available on all smartphones sold on the market; only smartphones that have special specifications have this NFC feature, and usually smartphones that have the NFC feature are much more expensive when compared to smartphones that do not have this feature. Different from NFC, this QR code feature can be used by all smartphones because it only requires a camera to scan the two-dimensional code issued by the available EDC machine [9].

The degree to which a person thinks utilizing a mobile payment service would require little in the way of mental and physical work is known as perceived ease of usage. Put another way, consumers will find a mobile payment service easier to use if it doesn't involve a drawn-out procedure or challenging processes [10]. The degree to which an individual feels that using mobile payment services would improve their performance and productivity when making payments is known as perceived usefulness. Therefore, customers will benefit from a mobile payment service's valuable features when they utilize it [11]. The degree to which an innovation is perceived by potential consumers as being compatible with their requirements, habits, prior experiences, values, and personal beliefs is known as its compatibility [12]. Put otherwise, when a service offers innovations that align with the requirements, habits, and values of its users, they will readily embrace it. Subjective norms are a person's interpretation of what other people think about his suitability for engaging in particular behaviors. So, someone can follow the behavior of people who are considered important in their life based on other people's views [13]. A concept known as perceived risk captures consumers' feelings of apprehension about potential drawbacks from utilizing new technologies. When technology is seen as weak, users may experience feelings of unease that make them less likely to rely on it [14]. A subjective conviction that one party will perform its responsibilities in line with the expectations of the believing party is known as perceived trust [15]. Therefore, customers will have faith in a service if it upholds high standards of integrity when doing its duties. The degree to which a person thinks they will incur extra expenses as a result of using a mobile payment service is known as perceived cost [16]. If the user feels that using the service will provide an additional financial burden, then the user will feel the burden. Behavioral intention to reuse is a positive encouragement that makes users use a device continuously. So, services that provide a positive experience will encourage users to use the service repeatedly.

2. Research Methods

Research design is a framework used to conduct marketing research, which is part of each stage, and then the results can be implemented to solve a problem and make decisions in management. The researcher used a conclusive research design with a descriptive research design type, using a data collection method using a single cross-sectional design, and using a survey method. In this study, researchers used a non-probability sampling technique called the judgmental sampling method. Non-probability sampling is a sampling technique where not all parts of the population have the same chance of becoming part of the research sample in question. The number of samples in this study was 100. Main source of data for this study was first-hand information gathered from questionnaires sent out using non-probability sampling methods, specifically random questionnaires and getting information from a number of people who met the criteria. Researchers also use secondary data obtained from knowledge books, journals and related articles to strengthen the theory in this research. In this study, researchers used an interval scale. In this study, the structure equation modeling method was used to test the hypothesis.

3. Results and Discussion

With a t-value of 2.5, hypothesis testing in this study demonstrates that behavioral intention is significantly positively influenced by perceived utility. This suggests that a person's intention to utilize a mobile payment service is directly influenced by their opinion that the service will increase productivity and performance in payment transactions. It is probable that a mobile payment application will be utilized if it offers features and advantages that meet the needs of the user. An individual's intention to utilize a mobile payment application is subsequently determined by their view of the benefits offered by the service. Therefore, a product or service's perceived benefits are crucial in determining whether or not consumers would accept and use it. The findings of

this study have demonstrated that users' behavioral intentions when using QR Codes might be influenced by perceived usefulness. QR Code has benefits in terms of fast transaction processing speed by simply scanning the barcode found at the merchant. Not only that, the practicality of making payments using electronic money by simply scanning a barcode can save time compared to making cash payments, which may take time to give change for a larger payment amount. Apart from that, the practical benefits of electronic money can be accessed via mobile phones that can be carried anywhere, and several merchants are starting to accept more electronic money payments so that users can make payments more easily. With the benefits of QR codes mentioned above, it allows users to use QR code payments again.

With a t-value of 12.5, the research's hypothesis testing demonstrates that behavioral intention is significantly positively influenced by perceived ease of use. This suggests that perceived usefulness is directly positively impacted. The degree to which a person thinks utilizing a mobile payment service will require little in the way of mental and physical work is reflected in their perception of the service's ease of use. The benefits of using mobile payment services can be estimated and predicted based on perceived ease of usage. One of the key determinants of perceived advantages is perceived ease of use. The perceived advantages of utilizing a service are positively impacted by perceived ease of use. The study's findings suggest that consumers' perceptions of QR Codes' utility might be influenced by how simple they are to use. This demonstrates that when utilizing QR Codes to make payments, people feel more comfortable. One key component of the advantages is perceived simplicity of use. Thus, the more user-friendly the QR Code is, the more beneficial the application will be. The research findings are further supported by the average responses of respondents who stated that the QR Code transaction process was easy.

With a t-value of 2.5, the research's hypothesis testing results demonstrate that behavioral intention is significantly positively influenced by perceived ease of use. This suggests that behavioral intention is directly and favorably influenced. The degree to which a person thinks utilizing a mobile payment service would require little in the way of mental and physical work is known as perceived ease of usage. A mobile payment service is more beneficial and will attract more customers if it is simple to use. It has been demonstrated that users' adoption of technology-based goods and services is influenced by perceived ease of use, an original element in the Technology adoption Model (TAM). The likelihood that a user will use a service again might be influenced by how simple they believe it to be to use. Based on the research findings, it seems that users' behavioral intention with QR Codes is influenced by perceived ease of use. This shows that users feel at ease when using QR Codes. Apart from that, transaction procedures are also considered easy, and transactions using QR Codes are easy to carry out. Therefore, the convenience felt by users is proven to lead to the reuse of payments via QR Code.

According to the study's hypothesis testing, behavioral intention is significantly positively influenced by subjective norms, with a t-value of 3.5. This suggests that behavioral intention is positively impacted directly. The degree to which potential users believe an invention will fit in with their needs, routines, prior experiences, values, and personal beliefs is known as compatibility. The decision to use mobile payments is heavily influenced by compatibility. The inclination to use mobile payment services is most influenced by perceived suitability, to the extent that it aligns with the user's lifestyle. The primary factor that determines behavioral intention to use is compatibility. The findings of this study have demonstrated that compatibility can affect users' intentions for their behavior when using QR Codes. This demonstrates that the use of QR Codes for payments is consistent with the user's lifestyle. Additionally, users think that employing QR Codes fits with their chosen method of conducting business. It has been demonstrated that consumers' compatibility for the QR Code payment method influences their inclination to utilize the service again. The average respondent's responses, which indicated that they thought employing a QR Code would be suitable in the given circumstance, lend credence to this research.

According to the research's hypothesis testing, behavioral intention is significantly positively influenced by subjective norms, with a t-value of 3.5. This suggests that behavioral intention is positively influenced directly. Subjective norms are a person's interpretation of what other people think about his suitability for engaging in particular behaviors. The primary motivator for consumers' acceptance of mobile payment systems is subjective norms. An individual's intents to use services are influenced by subjective standards that represent their communal orientation and need to blend in with friends, family, and peers. Subjective norms are a precondition for a user's intention to use a service because behaviors are influenced by other people. The study's findings have demonstrated that users of QR Codes might have their behavioral intentions influenced by subjective norms. This indicates that the user is encouraged to use the QR Code for transactions by those in their immediate vicinity. In addition, the decision to utilize a QR Code is also influenced by the user's social circle. It has been demonstrated that encouragement from those in the vicinity can influence users' inclinations to utilize the QR Code once more. The average findings of respondents who said that those in their immediate vicinity would be in favor of using QR Codes also corroborate this conclusion.

Because the t-value in this study is 1.5, hypothesis testing indicates that perceived risk does not significantly affect behavioral intention. This suggests that behavioral intention is not directly impacted by perceived risk. Customers' perceptions of perceived risk are a reflection of their confusion about potential drawbacks from utilizing new technology, which may prevent adoption. Nonetheless, the buyer's intention to complete another purchase is unaffected by the perceived danger. This can be explained by the fact that consumers can depend on outside indications like a website's layout and design, content, and security standards. According to the study's findings, users of QR codes do not experience behavioral intention impairment as a result of perceived risk. This is evident from the results of the average respondent, who stated that using QR Codes as a transaction tool would be risky. However, this does not prevent users from using payment services via QR Code again. This conclusion shows that currently, users do not perceive significant risks when using payments via QR Code, so it does not prevent them from using the service again.

According to the research's hypothesis testing, behavioral intention is significantly positively influenced by perceived trust, with a t-value of 2.5. This suggests that there is a direct and substantial positive influence on behavioral intention. A person's subjective perception that another party will do its duties in line with their expectations is known as perceived trust. When it comes to financial activities like mobile banking and product purchases, trust can predict a consumer's decision to use mobile commerce services. Both the intention to utilize payment solutions and the influence of user behavioral intention are fully mediated by trust, which is a significant influencing element. Consequently, boosting consumer confidence in mobile payment services is crucial. According to the study's findings, users of QR codes can change their behavioral intentions based on their perception of trust. This shows that users believe that QR Codes are reliable as a payment method, offer security in transactions, and are transparent in their use. This high level of trust has been proven to lead to users' intention to reuse payment services via QR Code. This finding is also supported by the average results of respondents who stated that using a QR Code would provide transparency in transactions.

The research's hypothesis testing indicates that, with a t-value of 0.5, behavioral intention is not significantly influenced by perceived cost. This indicates that perceived cost has little direct impact on behavioral intention. The term "perceived cost" describes how much someone thinks using a mobile payment service will cost them extra. These findings suggest that the intention to use mobile payment services is unrelated to perceived expenses. This result contradicts the widely held belief that consumers may be deterred from using mobile payments by perceived costs, which might negatively impact their acceptance. Based on the research findings, it is established that behavioral intention in QR Code users is not impeded by perceived cost. This suggests that current users intend to utilize the service once more because they do not feel burdened by the extra expenses related to employing QR Codes. The average responses from those who indicated that employing a QR Code does not entail significant additional charges provide validity to this conclusion. This conclusion shows that users feel that using QR Codes does not require significant additional costs, so this does not prevent them from using the service again.

4. Conclusion

The research's findings allow for the following deductions to be made: Behavioral intention is positively impacted by perceived utility. This occurred as a result of the research's final t-value of 2.48 being displayed. Therefore, it can be said that people are more likely to make QR Code payments again if they believe their benefits to be greater. Perceived usefulness is positively impacted by perceived simplicity of usage. Thus, it can be said that people's perceptions of the advantages of QR Code payments are positively correlated with their perceived level of convenience. Behavioral intention is positively impacted by perceived ease of usage. Thus, it can be said that the more a person's positive opinion of convenience, the higher their likelihood of making another QR Code payment. Behavioral intention is positively impacted by compatibility. Consequently, it can be said that people's intentions to use a QR Code again are more likely to be affected by their belief that it will fit into their lifestyle.

Behavioral intention is positively impacted by subjective norms. Therefore, it can be said that people's intentions to use the QR Code again are more likely to be influenced by the sense of significant others' support for it. Behavioral intention is not influenced by perceived danger. Based on these findings, it can be concluded that people's intents to use QR Codes again are not hampered by the potential of views about the risks involved. Behavioral intention is positively impacted by perceived trust. Therefore, it can be said that the greater the degree of trust that people have in QR Codes, the greater the impact that QR Codes can have on people's intents to use them again. Behavioral intention is not influenced by perceived cost. These findings suggest that people's intentions to use QR Codes again are not hampered by the potential increased costs involved. Based on the findings of previous studies, researchers anticipate that their work will be beneficial to the company's development as well as to future researchers who may be interested in studying related subjects in order to provide higher-quality and more in-depth findings.

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