

Analysis of the Effect of Performance Expectancy, Effort Expectancy, and Lifestyle Compatibility on Behavioral Intention QRIS in Indonesia

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Abstract

The important objective of this study is to analyze the effect of performance expectancy, effort expectancy, and lifestyle compatibility on behavioral intention toward QRIS in Indonesia. The data collected in this study are quantitative data using a quantitative approach. The population in this study is MSME actors in Indonesia, and the sample obtained using the convenience sampling method was as many as 140. Data analysis used instrument tests, normality tests, regression tests, hypothesis tests, correlation tests, and the coefficient of determination. The results showed that performance expectancy and lifestyle compatibility positively and significantly affected behavioral intention. At the same time, the other results show that effort expectancy has a positive but insignificant effect on behavioral intention. The study's conclusion confirms that to increase the enthusiasm of MSME actors to use QRIS as an alternative to non-cash payments, the government and relevant stakeholders need to conduct in-depth socialization regarding the benefits and advantages of using QRIS for MSME actors. Furthermore, QRIS users must be careful of QR code counterfeiting by irresponsible parties and sabotage of QR Code user accounts which lead to cyber crime.

Keywords: Performance Expectancy, Effort Expectancy, Lifestyle Compatibility, Behavioral Intention

Introduction

The development of technology-based payment systems has dramatically changed the architecture of traditional payment systems that rely on physical currency as a means of payment (Sudirman, Halim, et al., 2021). Although physical currency is still widely used as a means of payment in the international world, with the rapid development of payment system technology, cash payment methods are gradually changing to cashless payments (Halim et al., 2020). Bank Indonesia issued the Quick Response Code Indonesian Standard (QRIS) program. QRIS provides an alternative non-cash payment method more efficiently (Indonesia, 2019). QRIS (Quick Response Code Indonesian Standard) is a QR code issued by Bank Indonesia and has been standardized for all QR code-based payment applications, such as OVO, GoPay, LinkAja, Dana, and so on (Basoeky et al., 2021). QRIS is provided by merchants or sellers, while consumers use digital wallets, mobile banking, or server-based electronic money (Rumondang et al., 2019). QRIS can be used by all people, from small traders to merchants in malls, because the QRIS code can be printed on plain paper without using an EDC machine (Halim, Sibarani, et al., 2021). QRIS is not a new application or payment instrument but an interface. Often consumers make decisions based on how they feel, not based on objective reality. Therefore, it is necessary to consider consumer perceptions of the business and its products or services (Murdiyanto, Sugih, Dhakirah, Kurniawan, et al., 2022). Consumer perceptions can be included as an important part of designing marketing strategies (Nana Triapnita Nainggolan, Munandar et al., 2020). Although marketers cannot impose perceptions on consumers, they can try hard to understand them by determining the factors influencing them and how these perceptions are processed (Sherly et al., 2020). The use of QRIS has become a positive trend lately for business actors and consumers. Given its benefits in helping process non-cash

transactions more efficiently, the use of QRIS by MSMEs will be able to help improve their business performance (Marpaung et al., 2021)

Transactions with QRIS benefit buyers and sellers (merchants) because transactions occur efficiently through one QR code that can be scanned using all service operators on our cell phones. The current QR Code payment system is considered to be still not efficient enough because each service provider has a different machine and system (Halim, Grace, et al., 2021). From the seller's point of view (merchant), the benefits obtained are increased practicality because only one QR Code payment with the QRIS standard is needed to accept payments from various sources of funds or different payment instruments. In addition to facilitating transactions, the implementation of QRIS for PJSPs is also to overcome the emergence of business monopolies that have been feared to occur. When standardized, this payment system can be monitored better and with one door by the regulator. Even so, some obstacles from the payment system using the QR Code still need to be addressed (Indonesia, 2019). This payment system relies heavily on signals or internet connections, so make sure your internet connection is stable so that transactions can run smoothly and not fail. In addition, not all merchants use the QR Code system, especially since the penetration of non-cash payment systems is currently still concentrated in big cities, so there is still a need to expand the penetration of non-cash payments to improve the economic level of the community and facilitate payment transactions. From the merchant's side, some complaints about the slow amount of funds entered after the successful transaction (Rumondang et al., 2019).

Changes in consumer behavior occur from time to time. Previously, consumers only had a limited choice of brands and less information about a product or service (Sinaga et al., 2021). Unlike today, consumers have more information, and of course, it is faster and easier to research the offerings of several products and brands (Murdiyanto, Sugih, Dhakirah, Brahma Wahyu Kurniawan, et al., 2022). Performance expectations can be explained as the extent to which individuals believe that using the system will help achieve the performance gain of a product (Angelina & Aswin Rahadi, 2020). In making choices and buying a product or service, consumers often involve many decision choices such as whether, why, when, where, how, how much, how often, and for how long consumers will buy, use, or discard an offer. Ease of use perceived by consumers refers to the extent to which the use of a system obtains additional information based on the suitability of the user's skill level and knowledge (Chang et al., 2017). The results of a previous study presented by (Welly et al., 2020) highlight a positive relationship between performance expectancy and intention to use mobile banking. The same thing was also stated by (Bagla & Sancheti, 2018), who examined the gap in satisfaction in digital wallets in India, stating that performance expectancy has a positive and significant effect on behavior to use Fintech. Based on the results of several previous studies, this research is carried out to develop hypotheses, namely:

H1: Performance expectancy affects behavioral intention

In addition to the aspect of performance expectancy, effort expectancy is also an important factor as a stimulant to encourage the use of the QRIS payment system. Not infrequently, consumers make purchases because their psychological factors are met. When marketers can meet the psychological needs of consumers, such as by providing comfort, understanding it, and making it important, this can be why consumers purchase from these marketers compared to others (Aysha et al., 2021). Perceived Usefulness (PU) or a feeling of usefulness, a construct in the TAM model defined as a feeling judged by consumers when adopting a new finding that the technology used can help ease their work or tasks in daily life (Chen, 2013). In other words, This condition leads to the perspective of consumer performance regarding the results of the experience after feeling the benefits of adopting new technology (Wonglimpiyarat, 2017). The research of (Moslehpour et al., 2018) investigates the decision to buy online by Taiwanese consumers based effort expectancy after using E-Wallet payments so that this can be a predictor of consumers' intention to adopt FinTech in fulfilling their financial transaction needs. As stated by (Huei et al., 2018) regarding the adoption of mobile banking in India, and (Lavenia et al., 2018), regarding the adoption of mobile banking in Iran, it is stated that the feeling of effort expectancy by consumers will determine the behavior of its users in adopting the technology.

H2: Effort expectancy affects behavioral intention

Another factor suspected of influencing the behavioral intention of payment systems with QRIS is style compatibility. Self-concept summarizes a person's beliefs about his attributes and how he evaluates himself (Solomon, 2011). Self-concept is a picture of how individuals see themselves. Self-concept explains why

consumers wear certain fashions, buy products, and drive certain cars. Thus the self-concept determines consumer behavior because it describes how consumers see themselves and how they think other people see them (Chawla & Joshi, 2019). Marketers who understand how self-concept plays a role in consumer decisions to make purchases will use it as a marketing message and advertisement to reach potential customers (Lie, Halim, et al., 2023). Internal and external factors determine a person's lifestyle (Sudirman, Wijaya, et al., 2021). Lifestyle is reflected in external appearance, both internal and external influences of consumers (Stocchi et al., 2019). Lifestyle can be an important factor for marketers to determine their target market. Knowing the target market's lifestyle will make it easier for marketers to plan promotions, both media, promotions, and marketing messages to be delivered (Lie, Inrawan, et al., 2023). Compatibility can be defined as the extent to which people perceive innovation as compatible and usable regardless of the boundaries of space and time (Chawla & Joshi, 2019). Research (Rembulan & Firmansyah, 2020) and (Oktania & Indarwati, 2022), presented detailed studies to identify critical factors that encourage and hinder the adoption of mobile banking services, one of which is influenced by lifestyle compatibility.

H3: Lifestyle compatibility affects behavioral intention

The importance of regulations related to the QRIS payment system is currently believed to be the beginning to encourage MSME actors to use non-cash transactions, commonly referred to as a cashless society. Several literature studies explain that the behavior that encourages someone to use new technology is largely due to its strong role in shaping the user experience (Putri et al., 2019). Based on (Abrahão et al., 2016), behavioral intention is used to study the orientation of a person's behavior to adopt new technology. (Fitria & Winata, 2020) said behavioral intention shows how hard a person's effort is to commit to a behavior. The intensity of high commitment reflects the realization of healthy behavior. Consumers with a higher intention to adopt new technology are more likely to become adopters and will recommend the technology to others (Lancelot Miltgen et al., 2013). Based on the explanation of the background and some previous research results and seeing the potential that exists in the QR Code payment model and to support the development of the digital economy, it is important to research performance expectancy, effort expectancy, and lifestyle compatibility, as an illustration, to see the extent of the interest of MSME actors—using a payment system with QRIS. Therefore, the important objective of this study is to analyze the effect of performance expectancy, effort expectancy, and lifestyle compatibility on behavioral intention toward QRIS in Indonesia.

Materials and Methods

This study uses a literature and field research design with a quantitative approach. The data collection technique used a questionnaire distributed online through Telegram social media. The population in this study is SMEs in Indonesia. The sampling method used in this study is the convenience sampling method, which was chosen because it is the fastest method due to time constraints, and anyone who meets the characteristics that represent the population can be used as a sample if the person is considered suitable as a data source. According to (Hair, 2014), the number of samples can be determined from 5-10 times the number of indicators used in a single construct. This study uses 41 indicators from the existing constructs, so the number of samples obtained 14 x 10 is 140 samples. Data analysis used an instrument test, normality test, regression test, hypothesis test and correlation test, and the coefficient of determination.

Results and Discussion

Instrument Test

The validity test is carried out to determine the extent to which the accuracy or accuracy of a measurement instrument in carrying out its size function is so that the data obtained can be relevant to the purpose of the measurement. The results of the validity test can be seen in table 1 below:

Table 1. Validity Test Results

Variable	Code	Corrected item- Total correlation	Results
Performance Expectancy	PE1	0.552	Valid
	PE2	0.561	Valid
	PE3	0.465	Valid

	PE4	0.460	Valid
Effort Expectancy	EE1	0.445	Valid
	EE2	0.471	Valid
	EE3	0.453	Valid
	EE4	0.440	Valid
Lifestyle Compatibility	LC1	0.445	Valid
	LC2	0.449	Valid
	LC3	0.476	Valid
Behavioral Intention	BI1	0.510	Valid
	BI2	0.522	Valid
	BI3	0.536	Valid

Source: Data Processing (2022)

Based on the results of the validity test above, it can be concluded that all indicators of the variables in this study are valid. Furthermore, the reliability test is used to measure the stability of the indicators of a variable. A questionnaire is reliable if a person's answers to questions are consistent and stable from time to time. The results of the reliability test can be seen in table 2 below:

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	Instrument Items	Results
Performance Expectancy	0.821	12	Reliable
Effort Expectancy	0.813	12	Reliable
Lifestyle Compatibility	0.806	9	Reliable
Behavioral Intention	0.849	9	Reliable

Source: Data Processing Source (2022)

The reliability test results in table 2 above show that all indicators have a Cronbach's alpha value if the item is deleted > 0.70 , so it can be concluded that all variable indicators in this study are reliable.

Normality test

A normality test determines the formula used in hypothesis testing and whether the data is normally distributed. Normality test using Kolmogorov-Smirnov test. The results of the normality test can be seen in table 3 below:

Table 3. Normality Test Results

Variable	N	KS Test	asyp. Sig. (2-Tailed)
Performance Expectancy	140	0.784	0.261
Effort Expectancy	140	0.757	0.201
Lifestyle Compatibility	140	0.804	0.267
Behavioral Intention	140	0.886	0.354

Source: Data Processing (2022)

Based on the table of normality test results above, the value of Asymp Sig. (2-Tailed) each variable is above 0.05, so it can be concluded that each variable is normally distributed.

Hypothesis testing

Hypothesis testing was conducted to analyze the effect of performance expectancy, effort expectancy, and lifestyle compatibility on behavioral intention, assuming that the results obtained were based on a significant relationship. The results of hypothesis testing can be seen in table 4 below:

Table 4. Hypothesis test

Model	t-count	Sig.
Constant	7.179	.000
Performance Expectancy	2,303	.023
Effort Expectancy	0.350	.727
Lifestyle Compatibility	3.860	.000

a. Dependent Variable: Behavioral Intention

Source: Data Processing (2022)

Based on the results of the data analysis presented in table 4, it can be seen that the significant level of the performance expectancy variable is $0.023 < 0.05$, meaning that performance expectancy has a positive and significant effect on behavioral intention. Then the significant level on the effort expectancy variable is $0.727 < 0.05$, meaning that effort expectancy has a positive but not significant effect on behavioral intention. Further results explain the significant level of the lifestyle compatibility variable of $0.000 < 0.05$, meaning that lifestyle compatibility has a positive and significant effect on behavioral intention.

Correlation Test and Coefficient of Determination

Correlation coefficients were used to calculate the strength of the relationship between performance expectancy, effort expectancy, and lifestyle compatibility with behavioral intention. The results of the calculation of the correlation coefficient and the coefficient of determination can be seen in table 5 below:

Table 5. Analysis of Correlation and Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.553a	.305	.290	0.805

a. Predictors: (Constant): Performance Expectancy, Effort Expectancy, Lifestyle Compatibility

b. Dependent Variable: Behavioral Intention

Source: Data Processing (2022)

Based on the correlation coefficient analysis results, the correlation coefficient value (r) is 0.553, which means that there is a fairly strong and positive relationship between performance expectancy, effort expectancy, and lifestyle compatibility on behavioral intention. Furthermore, the coefficient of determination (R) of 0.305 means that the high and low behavioral intention of 30.5% can be explained by performance expectancy, effort expectancy, and lifestyle compatibility, while the remaining 69.5% can be explained by other variables not discussed in the study. These are social influence, trust, habit, security, hedonic motivation, and price.

Discussion

Based on the analysis of the first hypothesis test, obtained results explain that performance expectancy has a positive and significant effect on behavioral intention, as evidenced by a significant level of $0.023 < 0.05$. These results prove that performance expectancy is very important to encourage behavioral intention to payment systems using QRIS. When shopping traditionally or online with the QRIS payment system, the features provided by each merchant are very easy to use and provide great benefits for users. The first impression obtained by QRIS users regarding this user interface can create a comfortable and enjoyable online shopping experience. For SMEs and Indonesian online consumers, a well-organized User Interface, which has a beautiful appearance and contains all the information they need, can enhance the shopping experience directly proportional to the purchase decision. The increasing dependence on smartphones and the number of application-based services that can accommodate the daily needs of consumers require application developers to be more skilled at integrating their payment systems with QRIS. On the other hand, another QRIS benefit that can be obtained as a payment method in stores is that it can prevent us from being scammed. One of the fraudulent tricks that are quite common among sellers, namely payments using counterfeit money. The increasing dependence on smartphones and the number of application-based services that can accommodate the daily needs of consumers require application developers to be more skilled at integrating their payment systems with QRIS.

On the other hand, another QRIS benefit that can be obtained as a payment method in stores is that it can prevent us from being scammed. One of the fraudulent tricks that are quite common among sellers, namely payments using counterfeit money. The increasing dependence on smartphones and the number of application-based services that can accommodate the daily needs of consumers require application developers to be more skilled at integrating their payment systems with QRIS. On the other hand, another QRIS benefit that can be obtained as a payment method in stores is that it can prevent us from being scammed. One of the fraudulent

tricks that are quite common among sellers, namely payments using counterfeit money. Another benefit of QRIS that can be obtained as a payment method in stores is that it can prevent us from being scammed. One of the fraudulent tricks that are quite common among sellers, namely payments using counterfeit money. Another benefit of QRIS that can be obtained as a payment method in stores is that it can prevent us from being scammed. One of the fraudulent tricks that are quite common among sellers, namely payments using counterfeit money.

Based on the analysis of the second hypothesis test, obtained results explain that effort expectancy has a positive but not significant effect on behavioral intention, as evidenced by a significant level of $0.727 > 0.05$. These results prove that when several MSME actors and consumers experience problems in making online payments with QRIS, this will actually give a bad impression so that it affects their behavior to reuse the payment system. From the results of interviews with several respondents, it turns out that there are several QRIS features that often fail when they want to make payments. MSME actors and consumers can compare various payment systems for better prices and more diverse options. Of course, the convenience factor plays a very big role. The more comfortable a consumer's shopping experience is, the greater the business opportunity to make the consumer a repeat customer. On the other hand, even though it has been widely used by the millennial generation, merchants who provide QRIS are still very limited, especially if you want to make payments in traditional markets. Most of them only accept payment using cash. Furthermore, for now, the nominal QRIS transaction is limited to a maximum of Rp. 10 million per transaction, which has resulted in some MSME players and consumers preferring to transact using the transfer method.

Based on the analysis of the third hypothesis test, obtained results explain that lifestyle compatibility has a positive and significant effect on behavioral intention, as evidenced by a significant level of $0.000 < 0.05$. These results prove that the lifestyle compatibility aspect is one of the dominant factors that influence behavioral intention to use QRIS. One of the benefits of QRIS is that it can make the transaction process faster. This is because QRIS allows customers to not have to bother carrying a lot of cash. On the other hand, the seller does not have to look for change when making buying and selling transactions. With this cashless method from QRIS, the payment process will be easier and faster as long as there is an internet connection. SMEs and consumers simply scan the QRIS code through a supported application, enter the payment amount, and complete the payment. In addition, another benefit of QRIS is that it helps customers to choose various payment methods. So, they can pay for orders according to the money application they have, as long as it is supported by QRIS. Not even a few people have transformed into cashless, so it is quite difficult when they have to pay with cash. With the help of QRIS, they will be easier and more comfortable when making buying and selling transactions. With the benefits of QRIS as a payment method, the security of buying and selling transactions will be guaranteed. This is because the principle of payment by scanning a QR code is similar to balance transfers between accounts.

Conclusions

Based on the results of data analysis and research discussion, it can be concluded that to increase the enthusiasm of MSME actors to use QRIS as an alternative to non-cash payments, the government and relevant stakeholders need to conduct in-depth socialization regarding the benefits and advantages of using QRIS for MSME actors. . At this stage, it is also important to gain a deeper understanding of the new business model that is growing among MSME players so that they understand how to implement a digital payment system. Pay more attention to the financial drivers that underlie the business model and the possibility of causing friction or changes in behavior from cash to non-cash. Changes in the market structure in the future, such as the level of competition, competitiveness, and market composition, of which can affect various business models in the system, which may affect financial stability in ways that cannot be predicted today, so it is necessary to manage a scalable and secure payment system to minimize fraud. Although, at this time, there are no major risks in macro-finance, it would be better if they could be anticipated beforehand. Furthermore, QRIS users must be careful of QR code counterfeiting by irresponsible parties and sabotage of QR Code user accounts that lead to cyber crime (either revealing the user's identity or changing the QR Code containing a virus or malware). Therefore, support from every stakeholder in the digital payment ecosystem is needed to build security to avoid the threat of crime, as well as for banks to be able to improve application technology, servers, and human resources.

As a recommendation, of course, this research has limitations. For further research, you can develop and explore matters related to behavioral intention or add other related variables that have not been used in this

study. Furthermore, the sample size used in the study is still small and has not been able to provide general generalizations, further research should add a larger sample size from different regions. Then, the characteristics of the respondents are still dominated by SMEs from small and medium scales, so for further research, it is important to include respondents from the micro-scale. On the other hand,

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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