TECHNOLOGY ACCEPTANCE MODEL, HALAL MSMEs INTENTION IN USING QRIS

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Abstract

The use of QRIS in the payment system used by halal MSMEs, there are still many limitations and problems that often arise, so in this case, researchers try to construct the Technology Acceptance Model theory, and Theory of Planned Behaviour, which aims to see the extent of its influence on the intensity of halal MSMEs in using QRIS. This research is quantitative research, with the SmartPLS analysis tool. The object of research is Halal MSMEs in the city of Medan. The questionnaire distribution uses two methods, namely online and offline. As for what is obtained, the X1 variable (Technology Acceptance Model) has a non-significant effect on variable Y (MSME intensity using QRIS) is 1.476 or 14.76%. Then the X2 variable (Theory of Planned Behavior) has a significant effect on Y (Intensity of halal MSMEs using QRIS) is 7,245 or 72.45%.

Keywords: TPB, TAM, MSMEs, QRIS

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are instruments in the development of the Indonesian economy. Where the role of MSMEs is very large for economic growth, with the number reaching 99% of all business units. The contribution of MSMEs to GDP also reached 60.5% and to employment as much as 96.9% of the total national employment (Kemenko Perekonomian, 2022). It cannot be denied that MSMEs have an important role in supporting economic growth in Indonesia. However, there are still many limitations faced by MSMEs related to the lack of access to financial institutions, low human resource capabilities, limited use of technology, and not being able to keep up with changes in consumer tastes or needs that are export-oriented. Currently, there are two focuses of the government in responding to the limitations of MSMEs, first access to financial institutions, where the government provides special programs for MSMEs to obtain financing, the program is *Kredit Usaha Rakyat* or KUR. Second, namely the use of technology, the government has currently developed digital payments, where digital payments are developed based on the Quick Response Code Indonesia Standard (QRIS). Currently, QRIS has begun to be used by MSMEs as a more efficient non-cash payment system. The advantages of QRIS include being able to accept switching from different types of merchants. Furthermore, Bank Indonesia explained that QRIS is a digital payment system that is fast, cheap, safe and reliable. As of mid-September 2021, 10.4 million merchants have been integrated with QRIS, an increase of 120.22% from the same period the previous year. Bank Indonesia will continue to increase the number of merchants integrated with QRIS (Elena, 2021).

Although there has been an increase in merchants who have been integrated with QRIS, MSME players are still reluctant to implement the payment system, because there are still many limitations and problems encountered. MSMEs in the application of the QRIS payment system, including difficulty in retrieving funds that enter the QRIS account used by MSMEs, transaction limits, network constraints that often arise in QRIS transactions, and the many break-ins that occur in the use of payments with the QRIS system. In fact, payment with the QRIS system also encourages government programs related to cashless society. (Firman Hidranto, 2021). Due to the large number of MSMEs that are reluctant to use QRIS-based payments. For this reason, this study tries to construct the Theory of Planned Behavior

and the Technology Acceptance Model, in order to offer a comprehensive model that will later explain the driving and inhibiting factors for MSMEs in using the QRIS payment system. For this reason, the constructs of the Technology Acceptance Model theory that will be used are perceived usefulness and perceived convenience. While the Theory of Planned Behaviour and Technology Acceptance Model explain the three main factors in shaping intentions and behaviors are, first, internal motivation which is formed from a series of perceptions related to intentions and behavior (attitude towards the behavior); secondly, The influence of outsiders, especially those who are considered influential and important (subjective norm); third, perceived barriers to implementing intentions and behavior (perceived behavioral control) (Mahyuni1 & Setiawan, 2021). This research will also support one of the goals of the Sustainable Development Goals (SDGs) program, namely building resilient infrastructure, to support inclusive, sustainable industrialization and foster innovation in the economy.

REVIEW OF LITERATURE

This research will reconstruct the Theory of Planned Behavior and the Technology Acceptance Model, in finding a comprehensive model that will later explain the driving factors and inhibitors of MSMEs in using the QRIS payment system. This research will also be able to see and become a solution in realizing a cashless society in Indonesia, and of course encourage the development of MSMEs in the international arena (Nasution & Sihotang, 2022). The studies that will be referred to are as follows:

Karniawati, Gede, Luh dan I Gede, conducted research in 2021, with the title "Community Perception of Using QR Code Payment in Era New Normal" This research discusses community perceptions and factors that influence the community in using QRIS. The approach taken, using a qualitative approach. The results obtained, that most people are familiar with QRIS, it's just that they don't know how to use QRIS, so people still often use cash transactions (Karniawati et al., 2021). In research, it also discusses the lack of government socialization in the use of QRIS, so that people only know QRIS but cannot use it. Research conducted by Ni putu, identifies that understanding or knowledge of QRIS, can have an impact on increasing the use of QRIS, so to prove this, researchers will prove in

quantitative form with the first hypothesis, namely the better the understanding of MSMEs of QRIS, the more MSME intentions in using QRIS. Understanding is a reconstruction of the Theory of Planned Behavior.

Setiawan and Mahyuni conducted research in 2020 (Setiawan & Mahyuni, 2020) conducted research with the title "QRIS in the Eyes of MSMEs: Exploration of MSME Perceptions and Intentions to Use QRIS" has conducted research in 2020. This study aims to explore how MSMEs perceive QRIS and the factors that influence their intention to use QRIS. The results of this research also found that MSMEs' intentions to use QRIS are influenced by external influence and obstacles that often arise. In research conducted by Setiawan, recommendations for further research use the variable of benefits of using QRIS for sellers and buyers. For this reason, the researchers tried to reconstruct the Technology Acceptance Model, using variables on the benefits of using QRIS for MSMEs.

Widowati and Moch conducted research in 2022 (Widowati & Moch Khusaeni, 2022) conducted research with the title "QRIS Digital Payment Adoption in MSMEs". The purpose of this study is to analyze the determinant factors for the adoption of digital payment technology in this case the QR Code Indonesian Standard in MSMEs, especially in the Greater Malang area. The research approach uses quantitative methods. The results reveal that the intention or intention of MSME players to use QRIS digital payments is determined by perceived ease of use, perceived usefulness, trust, and positive attitudes towards using QRIS while the compatibility factor is found to have no effect. In research conducted by Widowati also explains that perception will also have a negative impact, if many people or users find negative things about making transactions. Because there are still many that are encountered by MSME players, related to the difficulty in retrieving money that is included in QRIS transactions. For this reason, researchers construct the Technology Acceptance Model, using convenience as the variable to be tested.

Sekarsari conducted research in 2021 (Sekarsari et al., 2021) with the title "Optimizing the Implementation of the Quick Response Code Indonesia Standard (QRIS) at Merchants in the Surakarta Region". The purpose of this research is to find out the application of QRIS, find out the obstacles that occur, the benefits obtained, and the solution to the problem of implementing QRIS. This type of research is descriptive qualitative with a case

study approach. The result of this study is that the application of QRIS in the Surakarta area is still not optimal which can be seen from these obstacles. Due to the many obstacles that make traders rarely use QRIS. In this case, the researcher tries to test again related to the obstacles found by MSMEs in using QRIS. This obstacle factor is taken or constructed from the Theory of Planned Behaviour, so that later in the questionnaire made will refer to the Theory of Planned Behaviour, which includes networks, costs, and weighs the amount of risk and benefits.

Listiawati conducted research in 2022 (Listiawati et al., 2022) with the title "QRIS Efficiency in Improving Digital Payment Transaction Services for Culinary Micro-Small and Medium Enterprises in Depok City" this study aims to analyze the efficiency of QRIS in helping to increase payment services to customers digitally. The results obtained that the use of QRIS makes digital payments for culinary MSMEs in Depok more efficient, it's just that in the context of merchants, the role of consumers really determines the merchant's decision to adopt digital payment methods, including using QRIS. For this reason, researchers will conduct a Theory of Planned Behavior contraction, using variables external to MSMEs in determining the use of QRIS.

Currently, halal MSMEs are also the center of conversation, where in addition to increasing economic income, halal MSMEs are also predicted to increase tourists coming to Indonesia. Therefore, currently halal MSMEs continue to be developed and also receive special attention from both Islamic and non-sharia financial institutions (Ismail et al., 2023) (Wahyuni et al., 2016).

RESEARCH METHOD

The research approach used is a quantitative approach, with the SmartPLS analysis tool. The object of the research is halal MSMEs in the city of Medan, so the sample used in the study uses the formulation of the number of research indicators multiplied by ten (Pradesyah et al., 2023), so as to get 90 samples, because the number of indicators in the study was 9 indicators. To get maximum results, researchers distributed research questionnaires via google form and distributed questionnaires manually, then the results were

tabulated and then processed using the SmartPLS application. The hypothesis offered is as follows:

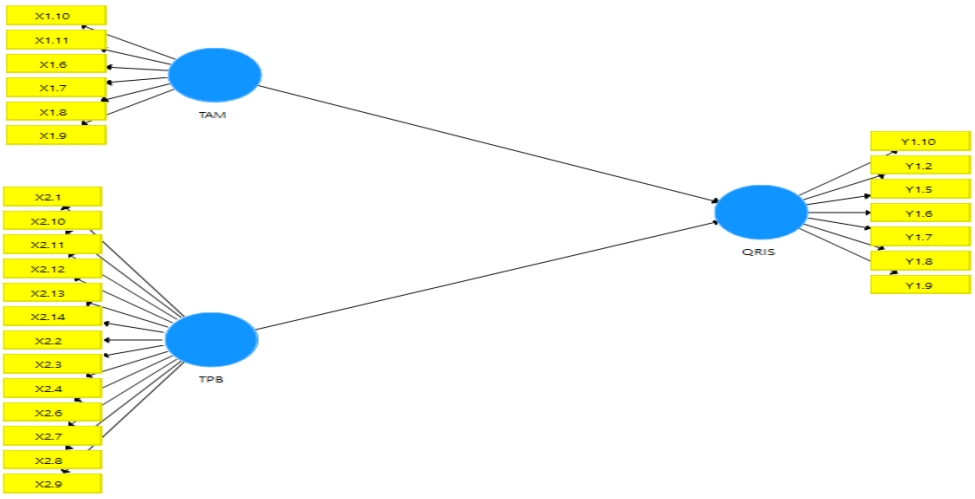
1	H1	There is an influence of the Technology Acceptance Model on the intensity of using QRIS in Halal MSMEs
	Ha	There is no effect of the Technology Acceptance Model on the intensity of using QRIS in Halal MSMEs.
2	H2	There is an influence of Theory of Planned Behaviour on the intensity of using QRIS in Halal MSMEs.
	Ha	There is no influence of Theory of Planned Behaviour on the intensity of using QRIS in Halal MSMEs.

RESULTS AND DISCUSSION

The object of this research is halal MSMEs in Medan city, to obtain the desired research data, researchers used two methods of distributing questionnaires, namely online (via google form), and online by going directly to the trader's place and giving a research questionnaire. In the research questionnaire there are 36 statements given to the research sample. The details of the 36 statements are spread over the Technology Acceptance Model variable as many as 11 statements, Theory of Planned Behavior as many as 15 statements, and the intensity of using QRIS as many as 10. After obtaining data from respondents, the researcher tabulated the data into XL, and then entered the data into the SmartPLS application, so that from the first analysis the following results were obtained:

Figure 1.

Validity and Reliability Test



In the figure above, it is shown that the first variable statement which previously amounted to 11 statements became 6 statements, because 5 more statements did not meet the requirements. Then the second variable which originally had 15 statements is now 13 statements, and meanwhile 2 statements were declared not meeting the requirements. Then the next variable which originally had 10 statements submitted, is now 7 statements, and 3 statements do not meet the requirements. In the process of eliminating questionnaires, the requirement is used, that the outer Loading value for each statement must be greater than > 0.7, so that it can be continued for the data processing process. For this reason, the results of the statements that are declared valid in the Outer Loading test are as follows:

Table 1.

Validity Test (Outer Loading)

	QRIS	TAM	TPB
X1.10		**0,890**	
X1.11		**0,848**	
X1.6		**0,845**	
X1.7		**0,838**	
X1.8		**0,757**	
X1.9		**0,847**	

X2.1			**0,829**
X2.10			**0,786**
X2.11			**0,822**
X2.12			**0,849**
X2.13			**0,724**
X2.14			**0,771**
X2.2			**0,854**
X2.3			**0,728**
X2.4			**0,780**
X2.6			**0,892**
X2.7			**0,873**
X2.8			**0,786**
X2.9			**0,769**
Y1.10	**0,866**		
Y1.2	**0,768**		
Y1.5	**0,755**		
Y1.6	**0,863**		
Y1.7	**0,897**		
Y1.8	**0,876**		
Y1.9	**0,859**		

The table above shows that the outer loading value of each variable is > 0.7, which means that the data can be processed for the next stage, of course, this refers to Hair et al. (2019), if the outer loadings value is > 0.7, it means that the data can be used and declared valid. This test is carried out, to measure the ability of the natural questionnaire to reveal something that is measured by the questionnaire itself (Sugiyono, 2019). After being declared valid in measuring the outer loading value obtained, the next step is to test the reliability or see the reliability value in the data processing results. Reliability tests are carried out in order to prove the accuracy, consistency and accuracy of the instrument in measuring constructs. In PLS-SEM and using the Smart PLS 3 program, to calculate the reliability of a construct with reflexive indicators can be done in two ways, namely with Cronbach's Alpha and

Composite Reliability. The construct is declared reliable if the composite reliability or Cronbach alpha value is above 0.70. (Fajri et al., 2022). The results of the data processing carried out are as follows:

Table 2.

Construct Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
QRIS	**0,898**	**0,924**	**0,920**	**0,625**
TAM	**0,892**	**0,906**	**0,917**	**0,650**
TPB	**0,955**	**0,961**	**0,960**	**0,650**

Based on the results of the reliability test on the Technology Acceptance Model (TAM) variable, the Theory of Planned Behavior (TPB) obtained a value of α1 0.892, α2 0.955, while the variable Intensity of using QRIS in halal MSMEs has an α value of 0.898. These results are declared reliable because α > 0.7. Then in analyzing the results obtained, a construct will be declared reliable if it has a composite reliability value > 0.6 and is strengthened by a Cronbach's Alpha value > 0.7. The composite reliability value of 0.6 - 0.7 and also the Cronbach's alpha value of > 0.7 are recognized as having good reliability (Hair et al., 2019). Based on the table above, all constructs have a composite reliability value and Cronbach's alpha > 0.7 so it is concluded that they are reliable. All latent constructs are required to have an AVE value > 0.5 to describe a good measurement model. Based on the table above, it is known that each indicator of the latent construct is able to explain 50% or more of its variance (Wong, 2013; Hair et al., 2019). In the results obtained from the study, all components meet the requirements, be it Cronbach's Alpha, rho_a, Composite, and AVE, for this reason, data processing and analysis can be carried out again in the study. Furthermore, hypothesis testing is carried out.

Hypothesis submission is based on the results of testing the inner model (structural model) which includes the r- forecourt affair, parameter coefficients and t-statistics. To see whether a hypothesis can be accepted or rejected, namely by paying attention to the significant value between constructs, t-statistic and p-value. This hypothesis submission was carried out with the help of SmartPL S (Partial Least Forecourt) 4.0 software. The value of

the value can be seen from the bootstrapping results. The rules of numb used in this study are t-statistic > t-table 1.29 with a significance level of p-value < 0.05 (5%) and a positive coefficient. The results obtained are as follows:

Table 3.

Path Coefficients Results

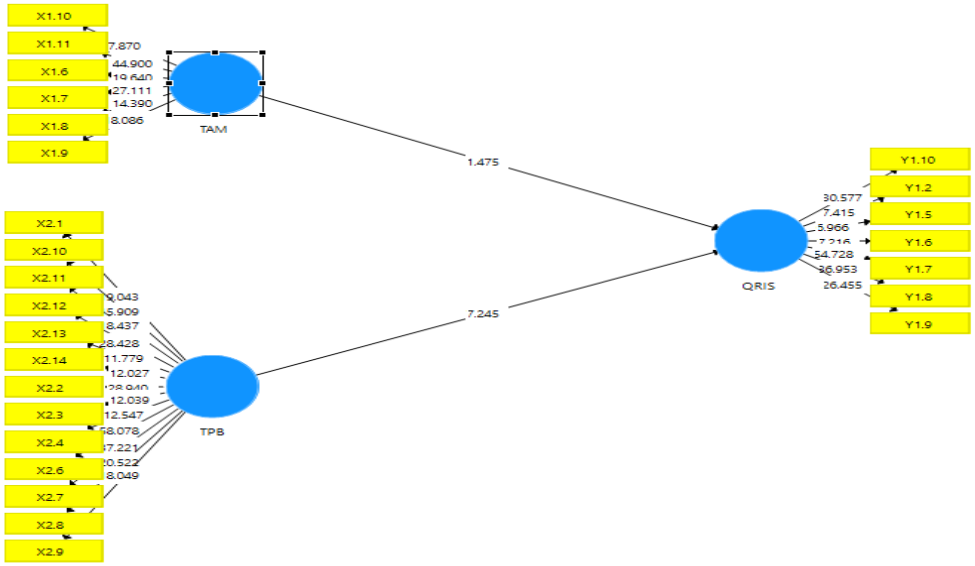
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
TAM -> QRIS	0,246	0,242	0,167	1,475	**0,141**
TPB -> QRIS	1,155	1,153	0,159	7,245	**0,000**

Based on the results of the analysis, it can be concluded that the results of the hypothesis submission in this study are as follows:

1. The effect value of variable X1 (Technology Acceptance Model) on Y (Intensity of MSMEs using QRIS) is 1.476 > 1.29, then the p-value is 0.141 > 0.05 and the other coefficient values are positive. This means that H1 is accepted, there is an insignificant effect of the Technology Acceptance Model on the intensity of halal MSMEs using QRIS in Medan city.
2. The effect value of variable X2 (Theory of Planned Behavior) on Y (Intensity of MSMEs using QRIS) is 7.245 > 1.29, then the p-value is 0.000 < 0.05 and the other coefficient values are positive. This means that H2 is accepted, there is a significant influence of the Technology Acceptance Model on the intensity of halal MSMEs using QRIS in Medan city.

The results above are entered in the equation model $\eta 1 = 1.476\ \xi 1 + 7.245\ \xi 2 + \zeta$. And then it can also be seen or evaluated through the inner model obtained. The inner model obtained from the results of data processing is as follows:

Inner Model Results



CONCLUSION

The use of QRIS in the payment system used by halal MSMEs, there are still many limitations and problems that often arise, including the difficulty of retrieving funds that enter the QRIS account used by MSMEs, transaction limits, network constraints that often arise in QRIS transactions, and the many break-ins that occur in the use of payments with the QRIS system. This is what causes the government's program on cashless society or efforts to realize a non-cash society to still not be realized. Because many MSMEs are afraid of using QRIS-based payments. For this reason, this study tries to construct the Theory of Planned Behavior and Technology Acceptance Model. The results of this study indicate that variable X1 (Technology Acceptance Model) has a non-significant effect on variable Y (MSME intensity using QRIS) is 1.476 or 14.76%. Then the X2 variable (Theory of Planned Behavior) has a significant effect on Y (Intensity of halal MSMEs using QRIS) is 7,245 or 72.45%.

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