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The Effect of Using Indonesian Standard Quick Response Code (QRIS) on Increasing Sales to Merchants in Pematangsiantar City

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Abstract

The purpose of this research was to determine the effect of the use of The Indonesian Standard Quick Response Code (QRIS) on increased sales. This study uses descriptive quantitative by using primary data. Collecting data using a questionnaire with a Likert scale. The research variable consists of the perception of benefits (X_1) and the easy perception (X_2) while the dependent variable is sales (Y). The number of samples in this study was as many as 45 merchants in the city of Pematangsiantar. The results showed that the perception of benefits had a negative and insignificant effect on increased sales, while the perception of ease had a positive and significant effect on the increase in sales. The perception of benefits and the perception of convenience have a moderate correlation with increased sales. The perception of benefits and the perception of convenience have a moderate relationship with increased sales. Perception of benefits and easy perception contributed 24% in explaining the increase in sales, while the remaining 76% was influenced by other factors not studied in this research.

Keywords

perception of benefit; easy perception; sales

Budapest Institute



I. Introduction

The most prominent development of financial technology (fintech) in Indonesia is the field of payments. Today, the growing payment technique in society is digital-based payments (Mayanti, 2020). The application of e-money that has been used for online and offline payments can make it easier for merchants or merchants to transact. The existence of cooperation between merchants and e-money providers will increase financial inclusiveness and encourage economic development (Sihaloho *et al*, 2020). The economic condition of the population is a condition that describes human life that has economic score (Shah et al, 2020). Economic growth is still an important goal in a country's economy, especially for developing countries like Indonesia (Magdalena and Suhatman, 2020).

The advancement of innovation today is increasingly bringing significant changes, especially in areas of business that have undergone many significant changes from scratch, such as direct sales to online sales (Hardiky *et al*, 2021). The rapid development in the technology industry forces people to be more familiar with financial transaction activities digitally (Financial Technology) one of them when making payment gateway transactions. Before the development of financial technology innovation today, e-commerce was first initiated and developed. The desire for a fast and secure payment system is the reason behind the implementation of digital financial transaction services (Saputri, 2020).

According to Bank Indonesia, non-cash payment techniques are divided into two, namely, e-money and e-wallet. E-money or electronic money is a chip-based (offline) payment technique while e-wallet or digital wallet, is a server-based payment technique

(online), such as OVO, Go-Pay, Dana, Link-Aja, and i-saku (Devita, 2020). The advantage of paying using this digital wallet lies in its practicality, convenience and security. Some stages of payment are done simply. Until finally the transaction is declared successful, and the proof of transaction will be sent into the consumer's transaction history automatically (Saputri, 2020).

Likewise, the growth of digital wallets makes businesspeople in Pematangsiantar City specifically to merchants interested in using the Indonesian Standard Quick Response Code (QRIS) in hopes of supporting increased sales. Based the information that researchers get from merchant correspondents in Pematangsiantar said that when making non-cash transactions with buyers, make transactions easier, simpler, efficient, and faster. According to the Representative Office of Bank Indonesia Pematangsiantar that the number of merchant developments using QRIS has increased according to the socialization carried out by payment system service providers (PJSP) to switch to using QRIS, which can be shown in figures 1 and 2 below.



Source : KPw Bank Indonesia, per 30 July 2021 Figure 1. Number of Merchants Per Working Area KPw Pematangsiantar

Based on figure 1 above it is known that the number of merchants per working area of the representative office until July 30, 2021 consists of 2 cities and 6 districts. Merchants are grouped into 4 segments (economic sectors) including culinary, retail, philanthropy and services. The largest number of merchants is in the city of pematangsiantar with a total of 11,818 merchants. Of the many merchants that exist, not all merchants have used the QRIS application.

Provinsi/Kab/Kota	Volume <u>Transaksi</u> QRIS	Nominal <u>Transaksi</u> QRIS
Kab. Asahan	18.950	1.617.007.177
Kab, Batu Bara	6.082	504.519.885
Kab, Labuhan Batu	11.482	541.890.080
Kab. Labuhanbatu Selatan	3.101	118.200.185
Kab, Labuhanbatu Utara	1.993	103.290.535
Kab. Simalungun	7.694	422.331.561
Kota <u>Pematang Siantar</u>	36.515	2.334.104.662
Kota <u>Tanjung Balai</u>	14.997	454.850.342
TOTAL	100.814	6.096.194.427

Source : KPw Bank Indonesia, until July 2021 *Figure 2. Development of QRIS Transaction Value and QRIS Transaction Volume*

QRIS transaction volume up to July 2021 reached 36,515 transactions, with 2,334,104,662 nominal QRIS transactions. The use of QRIS has become a positive trend lately for businesses and consumers. Given its benefits in helping non-cash transaction processes more efficiently, the use of QRIS by merchants will be able to help improve their business performance, especially during pandemics like today. Based on the results of research and interviews, researchers found several things, among others, the benefits obtained from the use of QRIS as a non-cash payment tool that makes transactions more effective and can increase sales, but this research found barriers that lead to low utilization of non-cash payments by consumers or the general public and the absence of information about QRIS to merchants and the public. With this barrier, many merchants no longer use the QRIS application, there are even merchants who are closed. By following with the existing phenomenon, the authors are interested in doing this research to find out more deeply whether using the QRIS application can increase sales at existing merchants in pematangsiantar city.

II. Review of Literature

2.1 Quick Response Code Indonesian Standard (QRIS)

Quick Response Code Indonesian Standard or commonly abbreviated as QRIS (kris read) is the unification of various QR from various Payment System Service Providers (PJSP) using QR Codes. QRIS was developed by the payment system industry together with Bank Indonesia so that the transaction process with QR Code can be easier, faster, and maintained security. All Payment System Service Providers who will use the Payment QR Code must apply QRIS (https://www.bi.go.id/). This payment system was pioneered by Bank Indonesia and the Indonesian Payment System Association (ASPI). The standard used in the preparation of QRIS is the EMV Co International Standard (Europe MasterCard Visa). This standard is used to support interconnection and interoperability between organizers, between instruments, between countries so that it can be open.

2.2 Benefit of Perception

Perceived usefulness is the degree to which an individual accepts that utilizing technology will improve the ability of his or her work (Jogiyanto, 2007). The perception of benefits, in this case, is connoted by the merchant's wishes for various reasons providing many benefits in using QRIS as a digital payment method, such as transactions more effectively and efficiently, errors in transactions can be minimized, and no difficulty in converting money. This is in line with Davis's opinion (1989) which states that the perception of benefits is that a person's belief in technology will have a positive effect on improving its performance if it is beneficial to users of that technology.

2.3 Easy Perception

According to Jogiyanto (2007) the perception of ease is a belief in the decisionmaking process. If a person feels that an information system is easy to use or not difficult to understand then it will use it. If a person feels that an information system is easy to use or not difficult to understand then it will use it. Conversely, if a person feels that the information system is not easy to use or difficult to understand then the person will not use it. According to Davis (1989), convenience is the level at which a person believes that the use of a system is not difficult to understand and does not require heavy effort from the wearer to be able to use it. So that convenience can be interpreted that a system is made not to complicate its use, but a system is made to provide convenience for its users. Therefore, someone who uses a particular system will work more easily when compared to someone who works manually. Ease of explaining that if a technology is easy to use, then users will tend to use the technology and will be useful for improved performance.

2.4 Sales

Sale is a managerial social process in which individuals and groups get what they need and want, creating, offering, and exchanging valuable products with others (Kotler and Amstorng, 2016)whereas according to Basu (Swasta, 2000) sales are a process of exchanging goods or services between sellers and buyers. Sales activities are complementary activities or supplements from purchases, to allow transactions to occur. The purpose of sales is to increase sales volume, earn certain profits and maintain the growth of a business.

2.5 Hypothesis

The conceptual framework in this study is shown in figure 1 below :



Figure 3. Framework Conceptual

From the conceptual framework above, research hypotheses that can be developed are:

- H1: The perception of benefits has a significant effect on the increase in sales to merchants in the city of Pematangsiantar.
- H2: The perception of convenience has a significant effect on the increase in sales to merchants in the city of Pematangsiantar.
- H3: The perception of benefits and convenience has a significant effect on the increase in sales to merchants in pematangsiantar city.

III. Research Method

This type of research is quantitative descriptive research. The dependent variable in the study was sales (Y) while the independent variable was the use of QRIS with the scope of benefit perception (X_1) and ease perception (X_2) . Data collection is done by interviewing, observing, and distributing questionnaire (using the Likert scale) to 45 merchants in the city of pematangsiantar. The study used instrument tests consisting of intrusions to measure the perception of benefits, instruments to measure ease of use and intrusions to measure sales. Quantitative data analysis in this study includes data quality tests (validity and reliability), classical assumption tests (normality tests, multicollinearity tests and heteroskedasticity tests), correlation and determination analysis, multiple linear regressions and hypothesis tests (t-test and F test).

IV. Results and Discussion

This study uses data quality tests that include validity and reliability tests or instrument tests. The test of validity and reliability of the instrument is the perception of benefits, the perception of convenience, and sales. The results of the validity and reliability test can be shown in the table below:

Table 1. Results of Test Validity and Reliability of Benefit Perception Instruments (X1),Ease Perception (X2), and Sales (Y)

Variable	R-Value	Sig. value	Ket.	Cronbach's Alpha	N of Item	Ket.
Perception of Benefit	0,330	0,027	Valid	0,683	45	Reliable
Easy Perception	0,629	0,000	Valid	0,671	45	Reliable
Sales	0,831	0,000	Valid	0,814	45	Reliable
Courses Data massage C	DCC (2021)					

Source: Data process, SPSS (2021)

Based on table 1 above it is shown that all question items contained in research instruments are valid and reliable. The instrument is said to be valid with the value of each variable greater than the r-table value where the r-table value is 0.294 (N-2, and alpha 5%) and the significance value is less than 0.05 (alpha 5%). This research instrument is said to be reliable because the correlation coefficient value r alpha Cronbach of each variable is greater than the standard reliability value of 0.60.

4.1 Normality Test

Normality tests are conducted to find out whether the data is normal or not. In this research the normality test used was a one-sample kolmogorov-smirnov test. Where if sig value. > alpha, the data is normal. The significance level used is 5% or 0.05.

		Unstandardized Residual
N		45
Normal Daramatarsab	Mean	26,1111
Normal Parameters *	Std. Deviation	1,87353
	Absolute	,171
Most Extreme Differences	Positive	,123
	Negative	-,171
Kolmogorov-Smirnov Z		1,149
Asymp. Sig. (2-tailed)		,143
Source: Data process, SPSS (2021)		

r	Table 2. Normality 7	Гest
One-Sample Kolmogorov-Smir	nov Test	

Based on the results of the test of one sample of Kolmogorov Smirnov in table 3 above, it is known that the value of asymp. Sig (2-tailed) is 0.143 or 0.118 > 0.05 so it can be concluded that the data in this study is a normal distribution.

4.2 Multicollinearity Test

Multicollinearity tests are used to test whether there is a correlation between independent variables. A good regression model is one in which there is no correlation

between independent variables. Multicollinearity tests used are with TOLL (Tolerance) and VIF (Inflation Factor Variant). Multicollinearity test results are presented in the following table :

Table 3. Multicollinearity Test					
Variable Tolerance VIF					
Perception of Benefit	0,815	1,228			
Easy Perception	0,815	1,228			
Source: Data magazing SDSS (2021)					

Source: Data process, SPSS (2021)

Based on the results of the multicollinearity test in table 4, the benefit perception TOLL value and ease perception is 0.815 while the VIF value of benefit perception and ease perception is 1,228. This indicates that both variables do not experience symptoms of multicollinearity because the TOLL value is greater than 0.10 and the VIF value is less than 10.

4.3 Heteroskedasticity Tests

Heteroskedasticity tests are used to test the inequality of variance from residual one observation to another. A good regression model is that there are no symptoms of heteroskedasticity or homoskedasticity. Scatter plot charts were used to test whether or not heteroskedasticity occurred in this study. The results of heteroskedasticity testing are as follows:



Based on the results of heteroskedasticity testing it was found that there were random spreading plots with unclear patterns located above or below the number 0 on the residual studentized regression axis, thus it was said that there were no symptoms of heteroskedasticity in regression models.

Table 4. Multiple Linear Regression Test Results						
	Model Unstandardized Coefficients Standardized Coefficients					
		B	Std. Error	Beta		
	(Constant)	-,561	2,756			
1	Benefit of Perception	-,080	,106	-,112		
	Easy perception	,347	,098	,528		

Source: Data process, SPSS (2021)

From the results of regression testing obtained the equation $Y = -0.561 - 0.080X_1 + 0.347X_2$, meaning that the perception of benefits negatively affect the increase in sales and the easy perception has a positive effect on the increase in sales. The regression coefficient value for the benefit perception variable is -0.080 which means that in the event of an increase in the perception of benefits by 0.080 will reduce sales by 0.080%. The regression coefficient value for the easy perception variable is 0.347 which means that in the event of an increase in easy perception by 0.347 will increase sales by 0.347%.

4.4 Correlation and Determination

The correlation coefficient indicates how close the relationship is between independent variables and dependent variables. If the value of r is close to one then it is said that the correlation between independent variables and dependent is very high correlation. The coefficient of determination is used to see how much variation from an independent variable can explain the overall variation of a dependent variable. If the value of R^2 is close to one, the greater the influence of the independent variable explaining the dependent variable.

Table 5. Coefficient of Correlation and Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,490 ^a	,240	,204	1,18546

The result of the correlation coefficient based on table 7 above is known that the value of r is 0.490, which means the perception of benefits and ease has a moderate correlation with sales. The coefficient of determination indicates the value of R^2 is 24%, which indicates that the high low in sales can be explained by the perception of benefits and easy perception. The remaining 76% was affected by other variables outside of the study.

4.5 Simultaneous Test (F Test)

Simultaneous tests or commonly called F tests are used to test whether there is an influence of independent variables together on dependent variables. If a significant value < 0.05 then the independent variable affects simultaneously the dependent variable.

Table 6 E Test

	Table 0. 1º Test							
AN	OVA ^a							
Model		Sum of	df	Mean Square		F	Sig.	
		Squares			_		-	
	Regression	18,621		2	9,310	6,625	,000 ^b	
1	Residual	59,024	4	42	1,405			
	Total	77,644	4	44				
C	har Olah Data	CDCC (2021)						

Sumber : Olah Data, SPSS (2021)

Simultaneous test results (test F) based on table 5, it is known that the F_{test} value > F_{table} (6,625 > 2.61) or the significance of < 0.05 (0.000 < .005), meaning that together the perception of benefits and easy perception have a significant effect on increased sales.

4.6 Partial Test (t Test)

Partial tests or commonly referred to as t tests are used to test whether there is an effect of independent variables on a dependent variable. If a significant value < 0.05 then the independent variable has a partial effect on the dependent variable.

Table 7. t						
Model		t	Sig.			
	(Constant)	-,204	,840			
1	Perception of Benefit	-,755	,455			
	Easy Perception	3,539	,001			

Easy Perception Sumber : Data Diolah, SPSS (2021)

Partial test results (t-test) based on table 6, it is known that the value of perception of benefits is $t_{test} < t_{tabel}$ (-0.538 < 2.02108) or significance > 0.05 (0.593 > 0.005). This means that partially X₁ has no significant effect on Y, so it is concluded that H₁: perception of benefits has a significant effect on increased sales, rejected because it is not proven based on the results of the t-test.

The benefit perception value is $t_{test} > t_{tabel}$ (3.539 > 2.02108) or significance < 0.05 (0.001 < 0.005). This means that partially X₂ has a significant effect on Y, it is concluded that **H₂:** easy perception has a significant effect on the increase in sales, received because it is proven based on the results of the t-test.

V. Conclusion

The test in this research was to determine if there was an effect of the using of QRIS on increased sales at merchants. The scope of independent variables includes the perception of benefits and the perception of convenience. After various discussions, it was concluded that:

- a. Instrument testing results including tests of validity and reliability show that the data used in this research is valid and reliable.
- b. Classical assumption testing results that include normality tests, multicollinearity and heteroskedasticity tests show that the data used in this research are normal-distributed and free from symptoms of multicollinearity and heteroskedasticity.
- c. Perception of benefit (X_1) shows a regression coefficient value of -0.080 with a significant value of 0.455. This shows that the perception of benefits has a negative and insignificant effect on the increase in sales at merchants in Pematangsiantar City.
- d. Ease perception (X2) shows a regression coefficient value of 0.347 with a significant value of 0.001. This shows that the easy perception has a positive and significant effect on the increase in sales at merchants in pematangsiantar City.
- e. The perception of benefits and easy perception having a moderately correlation with increased sales and high sales can be explained by the perception of benefits and easy

perception by 24% while the remaining 76% is explained by other factors not studied in this research.

With all the limitations that exist, the advice that can be given based on this research is:

- 1. On the perception of benefits, QRIS can prevent fraud in transactions. But this is still an obstacle for merchants because some customers feel the data in the QRIS application can be misused by merchants. For that, it's good if the merchant rewards loyal users of QRIS so that it can increase sales for merchants.
- 2. In the perception of convenience, the use of QRIS is generally accessible in some ewallets but nevertheless, there are still e-wallets that have not synchronized QRIS. For this reason, merchant issuing is expected to be able to make improvements to QRIS synchronization so that consumer e-wallets can be used more optimally and can increase sales for merchants.
- 3. More researchers should be conducted related to the effect of the use of QRIS on increased sales with variables outside of this study.

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