Added Value and Ease of Using Quick Responses QrisIndonesian Standard (QRIS)

Melly Susanti^{1*}, Heru Kresnha Reza²

¹Department of Accounting, Faculty of Economic, Muhammadiyah Bengkulu University, Indonesia ²Department of Accounting, Faculty of Economics and Business, Esa Unggul University, Indonesia * Corresponding author:

Email : maksi07.unib@gmail.com

Abstract.

Mobile payments are increasingly being adopted by organizations as a new way of doing business in the 21st century. Through The server electronic money application based, electronic wallet, or mobile banking based on Quick Responses QRIS) provides convenience for consumers to do transaction. This study uses the Technology Acceptance Model (TAM) in testing consumer intentions using the QRIS application. The sampling technique used is the total sample. The sample in this study was obtained online, the questionnaire was distributed online through social media whatsapp, Facebook, Instagram. The sample used as many as 123 respondents who use the QRIS application in paying. The data is processed by using SPSS tool. The result is that the added value in the QRIS application has no effect on comfort. Convenience has a significant effect on comfort. Consumers who use the QRIS application prefer the convenience offered by the QRIS program rather than the added value in the QRIS application. Furthermore, it can be seen the magnitude of the influence on the results and discussion sections. This research contributes convenience for consumers in paying or transacting. ORIS provides convenience for consumers in shopping. Apart from QRIS, there are still many payment systems and methods that can be used by consumers, such as OVO, Dana, Go-Pay, Sakuku, Truemoney, Link Aja, and T-Cash. Further researchers can add other variables that have not been included in this study or can also use a payment system other than ORIS.

Keywords: Nilai Tambah, Kemudahan, Kenyamanan, QRIS, M-Payment

I. INTRODUCTION

According to a survey by the Indonesian Internet Service Providers Association (APJII) there is an increase users internet in percent of the total population in Indonesia. The results of We Are Social's research, there are 175.2 million internet users in Indonesia, an increase of 17% of internet users when compared to the previous year, (Panji, 2020). Despite the increase users , Indonesia is still lagging behind in the use of digital m-payments compared to developed countries such as Japan and China. Mobile-payments are widely adopted by organizations as a new way of doing business in the 21st century. Mark Indonesian m-payment transactions are around 32,446 million US dollars and is expected to continue to grow every year in connection with the development **fintech** in Indonesia. Make transactions using *barcodes* especially in developing countries is still very low [1,2,3]. The consumer's intention in making payments using m-payment is influenced by several factors

including; Cost, Perceived Benefits, Convenience, Suitability, Perceived Risk, Value Added, Absorption Capacity, Convenience, Trust, Other Attractiveness, Innovation Within TB, Social Influence[1,4,8,9,10]. The shift in changes in consumer behavior in transactions using m-payment as shown in the following picture;



Fig 1. Consumer Behavior in Using Digital Money

The image above explains that by making payments via cellular, there is no need to provide change for returns, can quickly make sales transactions and save time. With *M payment* has an impact on consumer behavior in shopping [2,3,5,6]. Consumers who originally used cash or used ATM cards will switch to using cellular in their transactions. Bank Indonesia (BI) has issued a payment system policy using a code, Quick Response (QR) Code can be used through server-based electronic money applications, electronic wallets, or mobile banking Quick Responses Indonesian Standard (QRIS), Indonesian consumers have switched to using QR make a payment. The emergence of QRIS will make it easier for various parties, namely digital financial and banking service providers, merchants, consumers, even local governments. The presence of QRIS is considered to be more efficient, because consumers and merchants don't have to have many patches QR Code on the cashier's desk. For the government, QRIS can help record regional financial receipt transactions such as tax payments so that the process is more efficient. QRIS itself is inclusive for all layers community and can be used for payment transactions in domestic and overseas.

Quick Response (QR) Code is an image that stores information in the form of a code or serial number which aims to provide information in it without having to type or search for that information. The function is the same as Barcode, but the difference is that if the Barcode has one scan, the QR Code has two scan dimensions. This is what makes QR Codes have the ability to accommodate more information than Barcodes. QR Code is capable of storing 7,089 numbers, 4,296 alphanumeric, 2,965 bytes, 1,817 Kanji. The capacity of the data stored is more than the barcode because it can store information vertically and horizontally [7]. QR Code can be read from various directions through detection patterns located at three corners as shown in the following Figure;

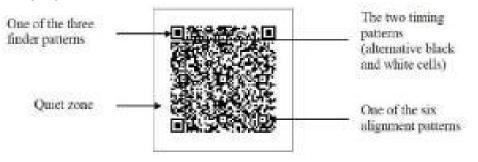


Fig 2.QR Code Source: (Meimaharani and Laily. 2014:270)

Scanner tool QR CodeAccording to a survey from nusaresearch with 500 respondents, android users reached 67.8%. While the rest respectively windows mobile, Symbian OS, RIM, iOS and Linux. So users will be very easy to install this application. With a Cashier System and Ordering Food and Beverages in a Restaurant Using an Android-Based Quick Response Code (QR Code) the researcher hopes to solve the time delay problem and also ease the waiter's work. With QRIS, people can easily and securely transact in one hand phone. On the other hand, QRIS is a the use of QR Codes will benefit buyers and sellers because standardization transactions take place efficiently through one QR code that can be used to all payment applications on mobile. For now, QRIS is the only QR Code that is valid in Indonesia. One of the best electronic wallets will implement this QRIS is OVO[11].Technology Acceptance Model (TAM) theory is used to test the intention of QRIS users. Davis (1986, 1989) introduced constructs in TAM, namely perceived usefulness (PU), perceived ease of use (PEOU), attitudes and behavioral intentions to use. In this study, it is limited by the added value and convenience variables as independent variables and convenience as the dependent variable.

II. METHODS

Types of Data And Sampling Method

The type of research carried out is a quantitative approach research by analyzing the answers to questionnaires distributed online. With the criteria of respondents in this study aged over 17 years and over and have used a payment application with QRIS. Online data collection using social media such as Facebook, WhatsApp, Instagram. The data was obtained by using SPSS 23 tool. The rating scale is a means of collecting data from respondents' answers which are recorded in stages or in stages. The reason the author uses a rating scale is because this rating scale is more flexible, not only measuring attitudes but also measuring respondents' perceptions of phenomena.

Data Collection Methods

Data were collected through a questionnaire distributed online for 12 months. Questionnaires were distributed to the people of Bengkulu Province which were carried out by giving a set of questions or a written statement to the respondent. The data obtained in this study were obtained directly from filling out a questionnaire (questionnaire) addressed to the respondents. Questions on the questionnaire are made on a *Likert* with 1-5. A score of 1-5 is used by researchers because it is simpler and has a middle value that is used for explain undecided or neutral in choosing an answer. For quantitative analysis, the answer can be given a score of 1 strongly disagree (STS), a score of 2 disagree, a score of 3 moderately agree, a score of 4 agree, and a score of 5 strongly agree.

Analysis Methods

The Data obtained were processed using the SPSS 22, for Windows and using multiple linear regression equations which were defined as follows:

 $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$

The data collection method used in this research is field research and literature. While one of the questionnaire methods is the distribution of questionnaires to obtain primary data from respondents.

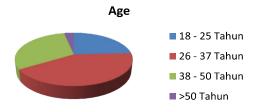
III. RESULTS AND DISCUSSION

A. Characteristics of Respondents by Age

abic.1. Characteristics of Respondents by Age				
Age	Total	%		
18 - 25 Tahun	30	0,241935		
26 - 37 Tahun	52	0,419355		
38 - 50 Tahun	38	0,306452		
>50 Tahun	4	0,032258		
Total	124	100%		

Table.1. Characteristics of Respondents by Age

Source: Distribution of Respondents' Questionnaires in 2021



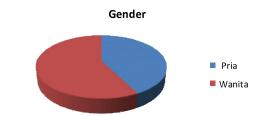
Respondents the most aged 26-37 years as many as 52 people, namely 41.93% and the lowest respondents aged > 50 years as many as 4 people, which is equal to 0.03%

B. Characteristics of Respondents Gender				
Table.2. Characteristics of Respondents by Gender				
	Gender	Total	%	
	Male	52	0.422764	
	Female	71	0.577236	

123

Sumber: Sebaran Angket Responden Tahun 2021

Total



Respondents were mostly female as many as 71 people or 57.72% while the male sex was only 52 people or 42.27%. Table 1 and table 2 explain that respondents in Bengkulu province who have used fintech services on payment systems using QRIS are on average 26 years old to 37 years old and the average ORIS is women.

Table 3.	Table 3. Validity Test Added ValueNT(X1)					
	*	NT1	NT 2	NT 3	NT 4	Value-added
NT 1	Pearson Correlation	1	-,196°	-,090	-,157	,128
	Sig. (2-tailed)		,030	,321	,084	,158
	N	123	123	123	123	123
NT 2	Pearson Correlation	-,196*	1	,737	,665**	,860**
	Sig. (2-tailed)	,030		,000	,000	,000
	N	123	123	123	123	123
NT 3	Pearson Correlation	-,090	,737	1	,594	,868
	Sig. (2-tailed)	,321	,000		,000	,000
	N	123	123	123	123	123
NT 4	Pearson Correlation	-,157	,665*	,594**	1	,801**
	Sig. (2-tailed)	,084	,000	,000		,000
	N	123	123	123	123	123
Value-	Pearson Correlation	,128	,860 ^{°°}	,868	,801	1
added	Sig. (2-tailed)	,158	,000	,000	,000	
	N	123	123	123	123	123

Validity and Reliability

Sumber: Olah Data 2022

Fintech licensed by the OJK is more reliable > 0.05, which is 0.158, so this question item is **invalid value**. So NT1 is not included in the regression test. I believe that money can be stolen in Fintech (NT2) services < 0.05 which is 0.000 then the NT2 statement is **valid**. I believe that personal privacy will be opened in Fintech

(NT3) services < 0.05 , which is 0.000, then the NT3 statement is valid. In general,
risky Fintech services $(NT4) < 0.05$, which is 0.000, then the NT4 statement is valid.

		KM 1	KM 2	Convenience
KM 1	Pearson Correlation	1	,781‴	,943''
	Sig. (2-tailed)		,000	,000
	N	123	123	123
KM2	Pearson Correlation	,781"	1	,944"
	Sig. (2-tailed)	,000		,000
	N	123	123	123
Convenience	Pearson Correlation	,943"	,944 ^{**}	1
	Sig. (2-tailed)	,000	,000	
	Ν	123	123	123

Table 4. Ease of Validity Test(X2)

Source: 2022 Data

Processing Easy-to-use Fintech services(KM1) and Fintech interface operations easy to do (KM2) has a significance value of <0.05, which is 0.000 then the statements KM1 and KM2 are valid.

		KN 1	KN 2	Comfort
KN 1	Pears on Correlation	1	,822"	,954"
	Sig. (2-tailed)		,000	,000
	N	123	123	123
KN 2	Pears on Correlation	,822**	1	,955**
	Sig. (2-tailed)	,000		,000
	N	123	123	123
Comfort	Pears on Correlation	,954"	,955**	1
	Sig. (2-tailed)	,000	,000	
	N	123	123	123

Table 5. Comfort Validity Test (Y)

Source: 2022 Data Processing

Using Fintech services is a comfortable experience (KN1) and I am interested in Fintech (KN2) services that have significant value <0.05, which is 0.000, the statements KN1 and KN 2 are **valid**. From the table above, all the questions given to the respondents have all been tested for reliability.value *Cronbach's Alpha* from all the questions tested is reliable, proven that the *Cronbach's Alpha* in each question is > 0.05, so the conclusion is that all questions are **RELIABLE**.

Test Reliability Tabel 6. Reliability Statistics

		_	
Cronbach's	Cronbach's Alpha Based on		
Alpha	Standardized Items	N of Items	
,712	,743		8

Source: 2022 Data Processing

Based on the table above, it can be seen that all items The question for the Value Added and Convenience variable is **RELIABLE**. This matter it is proven that

the entire value of *Cronbach's Alpha* on each question item greater than 0.5 that is 0.712. The number of questions in this study is a total of 8 questions.

Multiple Linear Regression Analysis

The results obtained from the multiple linear regression equation can be seen in the table below:

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	1,202	,673		1,787	,076
Nilai Tambah	,020	,034	,036	,597	,552
Kemudahan	,765	,063	,741	12,128	,000

a. Dependent Variable: Convenience

Source: 2022 Data Processing

From the table above, the regression equation can be made

 $Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$

 $Y = 1.202 + 0.020X_1 + 0.765X_2 + 673e$

Where:

Y = Comfort

a = Constant

b = Regression coefficient

 $X_1 =$ Value Added

 $X_2 = Ease$

The distribution table t is sought at a = 5% : 2 = 2.5% (two-tailed test) with degrees of freedom/df = n - k - 1 = 124-3-1 = 120 then t table is 1,979. Based on the table above, it can be concluded that the Value Added (NT) variable **has no effect** on Comfort (KN), because the significance KN is 0.552 > 0.05 while Ease (KM) **has a significant effect** on Comfort (KN), because the significance KN is 0.000 < 0.05

Multiple Correlation Analysis (R) and Determination (R2^{is})

Analysis is used to determine the relationship between the independent and dependent variables simultaneously. The value of R is between ZERO to ONE, the relationship is stronger if the value is closer to 1. The relationship is getting weaker if the value is close to ZERO then .

The results of the regression analysis are shown in the following table;

1 able 8. Multiple Correlation Results						
				Std. Error of the		
Model	R	R Square	Adjusted R Square	Estimate		
1	,746ª	,556	,548	1,095		

Table 8. Multiple Correlation Results

Source: 2022 Data Processing

R count is 0.746 indicating that there is a strong relationship between the independent variable and the dependent variable. There is an influence outside the variables studied by **44.4%** (100%-55.6%).

Simultaneous A	Analysis (F	⁷)
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Table 9. Simultaneous 1	Test Results
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Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	179,915	2	89,958	75,073	,000°
Residual	143,792	120	1,198		
Total	323,707	122			

Source: 2022 Data Processing

value_{count} $75,073 > F_{table}$ then **the hypothesis accepted** meaning that simultaneously there is an influence between variable independent and the dependent variable.

IV. CONCLUSION

From the results of the questionnaire distributed to 123 respondents using the QRIS application in Bengkulu City, it was found that the **added value** of the QRIS application had **no effect** on **comfort. Ease of Influence** significantly to **Comfort**. Consumers who use the QRIS application prefer the conveniences offered by the QRIS program rather than the added value in the QRIS application.TheTheory Technology Acceptance Model explains how the behavior of society/consumers in accepting and adopting technology.

Using the user's perception of ease, attitudes and behavioral intentions in accepting technology . In this study, the technology in QRIS that is offered to consumers in making payment transactions is acceptable because the QRIS application makes it easy for users to make transactions and QRIS is able to make consumers in Bengkulu City comfortable in transacting. This research contributes convenience for consumers in paying or transacting. QRIS provides convenience for consumers in shopping. Besides ARIS still has many payment systems and methods that can be used by consumers, such as OVO, Dana, Go-Pay, Sakuku, Truemoney, Link Aja, and T-Cash. Further researchers can add other variables that have not been included in this study or can also use a payment system other than QRIS.

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REFERENCES

- [1] Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust. *International Journal of Information Management*,37(3),99–110. https://doi.org/10.1016/j.ijinfomgt.2017.01.002
- [2] Boden, J., Maier, E., & Wilken, R. (2020). The effect of credit card versus mobile payment on convenience and consumers' willingness to pay. *Journal of Retailing and*

 Consumer
 Services,
 52(February
 2019),
 101910.

 https://doi.org/10.1016/j.jretconser.2019.101910

- [3] Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14(5), 265–284. https://doi.org/10.1016/j.elerap.2015.07.006
- [4] Ho, J. C., Wu, C. G., Lee, C. S., & Pham, T. T. T. (2020). Factors affecting the behavioral intention to adopt mobile banking: An international comparison. *Technology* in Society, 63(August), 101360. https://doi.org/10.1016/j.techsoc.2020.101360
- [5] Jouda, H. at all. (2018). The Effect of Perceived Risk on the Intention to Adopt Mobile Banking Services. Journal of Emerging Technologies and Innovative Research (JETIR) Www.Jetir.Org, 5(9), 2349–5162.
- [6] Kang, S. (2014). Factors influencing intention of mobile application use. *International* Journal of Mobile Communications, 12(4), 360–379. https://doi.org/10.1504/IJMC.2014.063653
- [7] Meimaharani R. dan Laily D. (2014). "Perancangan E-Commerce Goody Bag Spunbond Menggunakan Qr Code Berbasis Web Responsif". Prosiding SNATIF Ke-1. 357-366
- [8] Teo, A. C., Tan, G. W. H., Cheah, C. M., Ooi, K. B., & Yew, K. T. (2012). Can the demographic and subjective norms influence the adoption of mobile banking? *International Journal of Mobile Communications*, 10(6), 578–597. https://doi.org/10.1504/IJMC.2012.049757
- Usman, O., Monoarfa, T. A., & Marsofiyati. (2020). E-banking and mobile banking effects on customer satisfaction. *Accounting*, 6(6), 1117–1128. https://doi.org/10.5267/j.ac.2020.7.006
- [10] Verkijika, S. F. (2018). Factors influencing the adoption of mobile commerce applications in Cameroon. *Telematics and Informatics*, 35(6), 1665–1674. https://doi.org/10.1016/j.tele.2018.04.012
- [11] Zuraya, N. (2019). Penerapan Sistem Pembayaran QRIS Masih Menemui Kendala.Republika.Co.Id. https://republika.co.id/berita/pwgpvh383/penerapan-sistempembayaran-qris-masih-menemui-kendala