



## DATASET ON DETERMINANTS OF USE MOBILE PAYMENT (QRIS) AMONGST GENERATION Z

Monika Febriyanti <sup>1</sup>  
Emaridial Ulza <sup>2</sup>  
Ummu Salma Al Azizah <sup>3</sup>

### ABSTRACT

**Objective:** to examine the factors influencing Generation Z's interest in using mobile payments (QRIS), focusing on financial innovation, ease of use, and perceived financial risk.

**Theoretical framework:** grounded in the theory that financial innovation, ease of use, and perceived financial risk are key determinants of Generation Z's intention to use mobile payments (QRIS).

**Method:** participants for the study were chosen through a non-probability sampling technique, with the sample consisting of Generation Z individuals (born 1997-2010) residing in DKI Jakarta, and data were collected through the distribution of questionnaires to a random sample of 400 respondents, subsequently analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

**Results and conclusion:** generation Z's interest in mobile payments (QRIS) is significantly influenced by the positive effects of financial innovation, ease of use, and perceived financial risk, underscoring the overall inclination toward utilizing financial services, with noteworthy implications for the adoption of cashless movements, particularly government initiatives like QRIS.

**Implications of the research:** the study offers valuable insights for crafting government programs focused on cashless movements, particularly QRIS, as the findings indicate that highlighting financial innovation and ease of use can significantly boost Generation Z's adoption of mobile payments.

**Originality/value:** the dataset provides original insights into factors shaping Generation Z's interest in mobile payments (QRIS), with its value residing in its potential to inform and guide the development of government initiatives targeting the promotion of cashless transactions among the younger population.

**Keywords:** Financial Innovation, Ease of Use, Financial Risk, Mobile Payment, QRIS, Amongst Generation Z.

## CONJUNTO DE DADOS SOBRE DETERMINANTES DO USO DE PAGAMENTO MÓVEL (QRIS) ENTRE A GERAÇÃO Z

### RESUMO

**Objetivo:** Examinar os fatores que influenciam o interesse da Geração Z em usar pagamentos móveis (QRIS), com foco em inovação financeira, facilidade de uso e risco financeiro percebido.

**Referencial teórico:** Com base na teoria de que a inovação financeira, a facilidade de uso e o risco financeiro percebido são os principais determinantes da intenção da Geração Z de usar pagamentos móveis (QRIS).

**Método:** Os participantes do estudo foram escolhidos por meio de uma técnica de amostragem não probabilística, com a amostra consistindo de indivíduos da Geração Z (nascidos entre 1997 e 2010) residentes em DKI Jakarta, e

<sup>1</sup> University of Muhammadiyah Prof. DR. HAMKA, Jakarta, Indonesia.

E-mail: [monikafebriyanti10146@gmail.com](mailto:monikafebriyanti10146@gmail.com)

<sup>2</sup> University of Muhammadiyah Prof. DR. HAMKA, Jakarta, Indonesia. E-mail: [emaridialulza@uhamka.ac.id](mailto:emaridialulza@uhamka.ac.id)  
Orcid: <https://orcid.org/0000-0003-3293-3617>

<sup>3</sup> University of Muhammadiyah Prof. DR. HAMKA, Jakarta, Indonesia. E-mail: [ummusalma@uhamka.ac.id](mailto:ummusalma@uhamka.ac.id)  
Orcid: <https://orcid.org/0000-0002-0248-9060>



os dados foram coletados por meio da distribuição de questionários a uma amostra aleatória de 400 respondentes, posteriormente analisados por meio da Modelagem de Equações Estruturais por Mínimos Quadrados Parciais (PLS-SEM).

**Resultados e conclusão:** O interesse da geração Z em pagamentos móveis (QRIS) é significativamente influenciado pelos efeitos positivos da inovação financeira, facilidade de uso e risco financeiro percebido, ressaltando a inclinação geral para a utilização de serviços financeiros, com implicações notáveis para a adoção de movimentos sem dinheiro, especialmente iniciativas governamentais como o QRIS.

**Implicações da pesquisa:** O estudo oferece insights valiosos para a elaboração de programas governamentais focados em movimentos sem dinheiro, especialmente QRIS, pois as descobertas indicam que destacar a inovação financeira e a facilidade de uso pode impulsionar significativamente a adoção de pagamentos móveis pela Geração Z.

**Originalidade/valor:** O conjunto de dados fornece percepções originais sobre os fatores que moldam o interesse da Geração Z em pagamentos móveis (QRIS), e seu valor reside no potencial de informar e orientar o desenvolvimento de iniciativas governamentais voltadas para a promoção de transações sem dinheiro entre a população mais jovem.

**Palavras-chave:** Inovação Financeira, Facilidade de Uso, Risco Financeiro, Pagamento Móvel, QRIS, Entre a Geração Z.

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## 1 INTRODUCTION

### 1.1 SPECIFICATION TABLE

Subject	Economy and Business
Specific subject area	Economy and Business
Type of data	Table
How data were acquired	A survey method was carried out to collect the quantitative data
Data format	Raw
	Analysed
Parameters for data collection	The data on Financial Innovation, Ease of Use, and Financial Risks are Collected Using Mobile Payment Adoption Questionnaires
Description of data collection	Based on data from the Central Statistics Agency (BPS) the population of generation Z in DKI Jakarta reached 2,297,094 inhabitants. Respondents of 400 use the Slovin formula, by distributing online questionnaires
Data source location	Jakarta, Indonesia
Data accessibility	The data available in Mendeley Data

## 2 THEORETICAL BASIS

### Value of the Data

1. The data set describes Financial Innovation, Ease of Use, and Financial Risk in mobile payment (QRIS) adoption as data for governments or service providers on interest in



using mobile payments (QRIS) in supporting government programs, namely the non-cash movement.

2. This data set will enable QRIS service providers to attract more users, especially Generation Z.
3. This data set will be useful for mobile payment (QRIS) development.
4. Data shows that generation z has an interest in using mobile payment (QRIS) because it is ease of use.
5. This data can be used to examine factors that influence the use of mobile payment (QRIS).

### 3 RESEARCH METHOD

The questionnaire in the form of an online survey was distributed to Generation Z born between 1997 and 2010 and who residing in DKI Jakarta. The questionnaire includes data on individual demographic variables, financial innovation, ease of use, financial risk, and intention to use mobile payments (QRIS) among Generation Z. A total of 19 items were adapted from previous research, with a five-point Likert scale ranging from “1” (strongly disagree) to “5” (strongly agree) to measure the intention to use mobile payments (QRIS). The constructs and their measured variables are presented in Table 1. The questionnaire data was collected in raw data files, which are attached to this main article as a supplementary document. A total of 400 usable responses were collected.

**Tabel 1**

*Constructs and measurement items.*

Construction		Measurement Items	Source
Financial Innovation	FI1	If I hear about an innovative payment system, I will try it	(Liébana-Cabanillas et al., 2018) (Shetu et al., 2022)
	FI2	If I find out about a new mobile-based payment system (QRIS), I look for ways to use it	
	FI3	I love experimenting with new mobile-based payment systems (QRIS)	
	FI4	In general, I don't mind trying a new mobile-based payment system (QRIS).	
Ease of Use	EOU1	QQRIS-based mobile payment (Mobile Payment) is easy to use	(Liébana-Cabanillas et al., 2018) (Zhao et al., 2019)
	EOU2	Using QRIS-based mobile payments is clear and understandable	
	EOU3	QRIS-based mobile payment (Mobile Payment) completes all payment transactions thereby saving me time	



	EOU4	The QRIS-based mobile payment process is clear and easy to understand	
	EOU5	I feel comfortable for QRIS-based mobile payments because they are easy to use	
Financial Risk	FR1	I feel unsafe sending my personal and financial information across websites using QRIS-based mobile payments	(Zhao et al., 2019)
	FR2	I think my mobile payment (mobile payment) account information may be hacked and I may lose my money	(Senyo & Osabutey, 2020)
	FR3	I think QRIS based mobile payments are financially risky, I need to waste a lot of time fixing them	
	FR4	I feel that there will be problems with financing transactions when using QRIS-based mobile payments	
	FR5	There is too much uncertainty with QRIS-based mobile payment services	
Intention to Use	INT1	I intend to use QRIS-based Mobile Payment in the future.	(Zhao et al., 2019)
	INT2	I will likely use QRIS-based mobile payments soon	(Rahman et al., 2020)
	INT3	I have been using the QRIS-based mobile payment method (Mobile Payment) for some time now	
	INT4	I tend to increase my use of QRIS-based mobile payments in my daily life.	(Shetu et al., 2022)
	INT5	I always recommend to others to use mobile payment (Mobile Payment) without cash	

## 4 RESEARCH RESULTS

The profiles of the respondents (N = 400) and accompanying descriptive data are presented in the tables provided below (Tables 2).

**Table 2**

*Profile and characteristics of respondents.*

Demographic	Characteristic	N	Percentage (%)
Gender	Male	73	18.25%
	Female	327	81.75%
Birth year	1997-2000	121	30.25%
	2001-2005	222	55.50%
	2006-2010	57	14.25%
Domicile	East Jakarta	201	50.25%
	West Jakarta	52	12.50%
	Central Jakarta	25	6.25%
	South Jakarta	78	19.50%
Status	North Jakarta	44	11.00%
	Student	296	74%
	Worker/Employee	83	20.75%
	Others	21	5.25%

Source : Anlyzed with SmartPls 3.0

A total of 400 data were collected from questionnaires via the Google form on Generation Z in DKI Jakarta. As shown in Table 2, the majority of respondents were 327



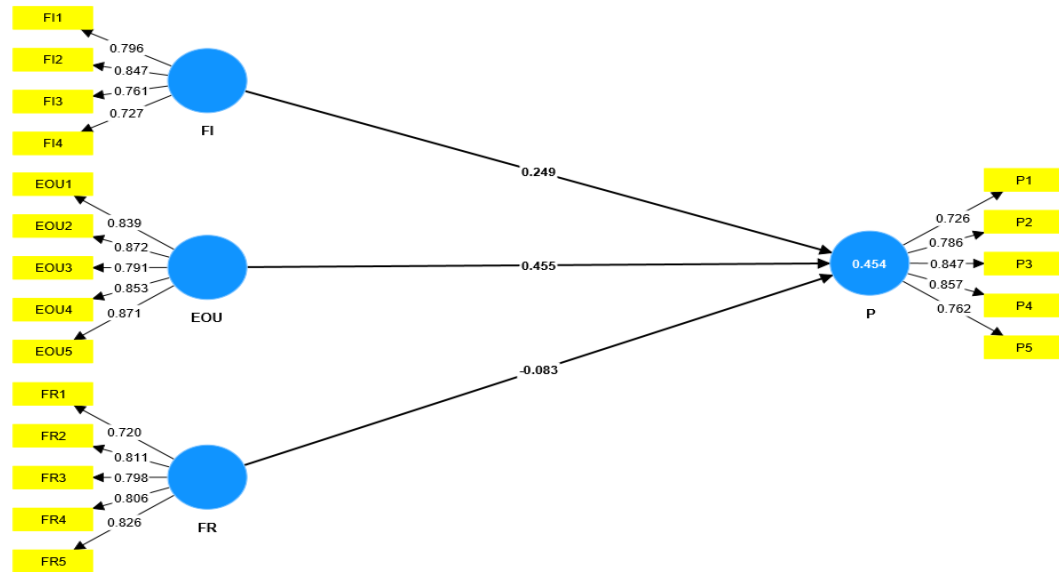
(81.75%) and 73 (18.25%), respectively, many of whom resided in East Jakarta (N = 201, 50.25%), followed by South Jakarta (N = 78 , 19.50%), West Jakarta (N = 52, 12.50%), North Jakarta (N = 44, 11.00% and Central Jakarta (N = 25, 6.25%) In addition, the birth years 2001-2005 (N = 222, 55.50%) dominated, followed by 1997-2000 (N = 121, 30.25%) and 2006-2010 (N = 57, 14.25%). In terms of respondent status, students/students (N = 296, 74%) dominated, followed by workers/employees (N = 83, 20.75%) and others (N = 21, 5.25%). The 400 data were then statistically analyzed, and the results are presented in Tables 3–7 below.

**Table 3**

*Mean, Standard Deviation, Skewness and Kurtosis.*

Items	Mean	Standard Deviation	Kurtosis	Skewness
FI1	4.210	0.797	1.472	-1.049
FI2	4.330	0.697	1.352	-0.954
FI3	3.975	0.938	0.547	-0.863
FI4	4.255	0.771	3.049	-1.327
EOU1	4.468	0.751	3.211	-1.613
EOU2	4.428	0.728	1.793	-1.289
EOU3	4.405	0.769	2.383	-1.402
EOU4	4.357	0.778	1.907	-1.295
EOU5	4.367	0.737	2.251	-1.269
FR1	2.880	1.068	-0.537	0.167
FR2	2.908	1.151	-0.844	0.083
FR3	2.475	1.053	-0.113	0.582
FR4	2.732	1.063	-0.529	0.287
FR5	2.487	1.032	-0.050	0.547
INT1	4.300	0.745	2.254	-1.169
INT2	4.197	0.839	1.877	-1.203
INT3	4.107	1.020	0.828	-1.167
INT4	3.800	1.077	-0.352	-0.644
INT5	3.830	1.064	-0.389	-0.633

Source: Anlyzed with SmartPls 3.0

**Figure 1***Structural Model Measurement And Analysis.*

Source: Anlyzed with SmartPls 3.0

The instrument's reliability and validity are described in Tables 4 and 5.

**Tabel 4***Reliabilitas dan validitas.*

	Cronbach's alpha (CA)	Rho A	Composite Reliability	Average Variance Extracted (AVE)
Ease of Use	0.900	0.905	0.926	0.715
Financial Innovation	0.791	0.802	0.864	0.615
Financial Risk	0.852	0.855	0.894	0.629
Intention to Use	0.855	0.859	0.897	0.635

Source : Anlyzed with SmartPls 3.0

**Tabel 5***Discriminant Validity.*

	Ease of Use	Financial Innovation	Financial Risk	Intention to Use
EOU1	0,839	0,523	-0,279	0,478
EOU2	0,872	0,527	-0,304	0,522
EOU3	0,791	0,522	-0,245	0,516
EOU4	0,853	0,534	-0,301	0,568
EOU5	0,871	0,554	-0,267	0,603
FI1	0,487	0,796	-0,157	0,388
FI2	0,595	0,847	-0,209	0,508
FI3	0,437	0,761	-0,201	0,438
FI4	0,438	0,727	-0,205	0,395
FR1	-0,188	-0,162	0,720	-0,224
FR2	-0,214	-0,179	0,811	-0,242
FR3	-0,296	-0,188	0,798	-0,222



FR4	-0,267	-0,185	0,806	-0,217
FR5	-0,338	-0,257	0,826	-0,257
INT1	0,482	0,391	-0,215	0,726
INT2	0,491	0,445	-0,254	0,786
INT3	0,570	0,481	-0,250	0,847
INT4	0,512	0,451	-0,243	0,857
INT5	0,486	0,444	-0,208	0,762

Source : Anlyzed with SmartPls 3.0

The correlation test is shown in Table 6 below, and the results of hypothesis testing is shown in Table 7.

**Tabel 6**

*Correlation test.*

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )
FI -> INT	0,249	0,251	0,060	4,159
EOU -> INT	0,455	0,455	0,061	7,501
FR -> INT	-0,083	-0,085	0,041	1,995
FI -> INT	0,249	0,251	0,060	4,159

Note. " $p < 0,05$ ."

Source : Anlyzed with SmartPls 3.0

**Tabel 7**

*Hypothesis testing.*

Hypothesis (H)	Path	Original (O)	Sample (M)	Standard Mean Deviation (STDEV)	T Statistics ( O/STDEV )	P-Value	Result
H1	FI -> INT	0,249	0,251	0,060	4,159	0,000	Supported
H2	EOU -> INT	0,455	0,455	0,061	7,501	0,000	Supported
H3	FR -> INT	-0,083	-0,085	0,041	1,995	0,046	Supported

Significant at  $p < 0.05$  (5%).

Source : Anlyzed with SmartPls 3.0

The result of coefficient analysis is explained in the Table 8 below:

**Table 8**

*The coefficient analysis.*

	<i>R Square</i>	<i>R Square Adjusted</i>
Intention to Use	0,454	0,450

Source : Anlyzed with SmartPls 3.0



## 5 ANALYSIS AND DISCUSSION OF THE RESULTS

Primary data collection was by online surveys. Using the non-probability sampling technique with ramus slovin, 400 Generation Z individuals living in DKI Jakarta were surveyed. This data article is that investigates the factors of mobile payment system (QRIS) usage. QRIS is a new financial innovation that easy to use, especially for Generation Z, but this perceived simplicity does not exclude the possibility of perceived risks, one of which is financial risk, which continuously affects the willingness of Generation Z to use mobile payments (QRIS). A Google form was used to distribute questionnaires to the target audience online in order to gather study data. A total of 400 statistics on Generation z in DKI Jakarta were gathered using a non-probability sampling method.

The Partial Least Square Structural Equation Model (PLS-SEM) with SmartPLS 4.0 was used to measure reflective for the 400 data. The proposed model is measured according to reflective measurement criteria [6]. The construct is declared reliable if the Cronbach's Alpha and Composite Reliability values are more than 0.70. Table 4 shows that Cronbach's Alpha and Composite Reliability (CR) values for all constructs exceed 0.70. The AVE value is expected to be more than 0.50. Table 4 shows that all constructs provide an AVE value greater than 0.50.

Table 7 shows that H1, H2, H3 have a T-statistic greater than 1.96 with  $p > 0.05$ . Therefore, the proposed hypothesis (H1, H2, H3) is supported in this study because it meets the criteria. The results show that the variables FI and EOU have a significant positive impact on the variable INT. Moreover, the variabel FR had a significant negative effect on variable INT. The coefficient ( $\beta$ ) shows how strong the influence of a construct is on other constructs in the structural model. The highest value indicates that the influence of the construct is the most significant as a predictor. The EOU variable in Table 6 shows the highest value, namely 0.455 so that it can be said that the EOU variable as an exogenous variable has the most significant effect on the INT variable as an endogenous variable.

## 6 FINAL CONSIDERATIONS

Consumer interest in trying new technology-based services and a tendency towards new ideas show the importance of innovation in technology adoption behavior [6]. It was found that the higher the innovation of a financial service, the higher the interest of individuals in using financial services such as mobile payment (QRIS). QRIS is a payment system innovation from financial services launched by Bank Indonesia to make it easier for people to make payment





transactions. With the presence of service innovations such as QRIS, this can be an attraction, especially for Gen-Z whose daily lives are fast paced and rely heavily on the use of technology. Gen-Z also feels that there is a perceived convenience that facilitates transaction activities. Even though there is perceived convenience, it does not rule out the possibility of perceived risk. It was found that the perceived risk was low in the uncertainty or financial problems they would face if they used the service. Even though people think that the perceived financial risk is low, they must pay attention to what might happen to financial problems when using payment services (QRIS).

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