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Analysis Of The Differences In Payment Methods By Using Qris And Cash Between Generations Y And Z

Fredian Simanjuntak^{1✉}, Fendy²

Mahasiswa Fakultas Sistem Informasi, Universitas Internasional Batam

Dosen Fakultas Sistem Informasi, Universitas Internasional Batam

Email: fredian.simanjuntak@uib.ac.id^{1✉}

Abstrak

Pembayaran menggunakan qr menjadi sesuatu yang penting di Masyarakat kita. Di penelitian ini, peneliti bertujuan untuk menemukan alasan di balik penggunaan metode pembayaran antara Generasi Y dan Generasi Z. Serta bertujuan untuk menemukan alasan melalui penilitan kuantitatif menggunakan kuesioner. Penilitan menemukan factor-faktor yang mempengaruhi seperti Kebergunaan Ponsel, Kemudahan Penggunaan Ponsel, Persepsi Kemudahan Transaksi, Persepsi Kecepatan Transaksi, Optimisme, Inovasi Personal, dan Niat Perilaku berkontribusi pada adopsi pembayaran menggunakan kode QR. Hasil penelitian ini diharapkan dapat memberikan wawasan kepada masyarakat antara Generasi Y dan Generasi Z untuk beradaptasi terhadap teknologi di masa depan.

Kata Kunci : *Pembayaran QR, QRIS, Generation Y, Generation Z*

Abstract

QR code payments have become an integral part of today's society. In this research, we aim to explore the reasons behind the usage of this payment method among Generation Y and Generation Z. We intend to uncover these reasons through quantitative data collected via a questionnaire. Our research has found that factors such as Mobile Usefulness, Mobile Ease of Use, Perceived Transaction Convenience, Perceived Transaction Speed, Optimism, Personal Innovativeness, and Behavioral Intention contribute to the adoption of QR code payments. The results are expected to provide valuable insights for both Generation Y and Generation Z on how to adapt to future technological advancements.

Keyword: *QR Code Payment, QRIS, Generation Y, Generation Z*

INTRODUCTION

In the last few years, society has no longer paid for goods or services with cash, credit, and debit cards as payment methods. De Luna said that the number of available payment methods has increased (Yan et al., 2021). One of the payment methods that has been quite a phenomenon in recent years is mobile payment. That's because mobile phone users have increased dramatically over the past decades (Sajedifar et al., 2019), and also Covid-19 that forced society to use this payment method.

COVID-19 has influenced customer purchasing behavior, especially the acceptability of mobile payments based on quick response (QR) codes (Alamoudi, 2022). The effect of the "new normal" is one of the significant impacts that change customer purchasing behavior. Therefore, some firms try to adopt new strategies to be sustainable in consumption or production and vice versa. To do that, some firms find several technologies to streamline their shopping. One of the several technologies that fit this generation is a quick response (QR) code for simplicity and convenience in a transaction.

In Indonesia, this mobile payment method is still quite recent for generation Y. According to Cheng, a developed country showed that 98% of the Y-generation respondents had used smartphones. However, only 50% of respondents had used e-wallets because most respondents still preferred cash payments to e-wallets (Pertwi et al., 2021). Inversely proportional to generation Z (Zoomers), they have more explored technology usage and are more responsive to its changes (Rahadi et al., 2021). Indonesia is now trying to enhance this mobile payment by implementing "QRIS" (Quick Response Code Indonesia Standard), and they already started to implement this QRIS by national on January 2020. Nowadays, QRIS is one of the payments that is quite a lot used by big E-commerce in Indonesia, such as Blibli, Tokopedia, Shopee, etc., which shows that Indonesia is trying to implement this QRIS payment method rather than use Cash.

In this study, we will investigate the difference in payment usage by using QR and Cash between generation Y and generation Z, which is still in the early stage and followed by many countries, especially Indonesia. This study will compare these 2 payment methods based on the theoretical basis of QRIS payment adoption and deepen the understanding of comparison between generations Y and Z on the usage of QRIS and Cash. In this research, we are looking for the answer to the following research question: How are perceived ease of use, perceived usefulness, and service security correlated with consumer satisfaction and the perceived value of contactless payment? What are the internal relationships between user satisfaction, the perceived value of the service, habitual behaviors, continuous usage of the service, and word-of-mouth recommendations of the

service? (Zhong & Moon, 2022) And what type of payment method that's this generation looking for?

LITERATURE REVIEW

This research was conducted based on research by (Dube et al., 2020). The study focuses on reviewing technology adoption models and theories that seek to assist business firms in accessing readiness and acceptance of this kind of new technology. This paper aims to review technology adoption models that are relevant to information systems studies on the latest technology, ERP, cloud computing, and other systems implemented in business organizations. This paper's methodology reviews and explores three technology adoption models and theories relevant to IS and IT studies published between 2003 and 2018. This study's results could assist in analyzing the acceptance and utilization of new technologies and can also improve such models and theories in adopting new technologies.

Research by (Putu et al., 2021) focuses on the search to analyze society's perception of using QR code payment in the era new normal. The research aimed to explore people's perceptions and the factors that influence people's intention to use QRIS for transactions in the new normal period. The study was conducted using the qualitative descriptive method and preparing questions concerning the Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB). This research result hope can provide knowledge for society. It can be used as a reference for related parties to formulate the right strategy in increasing both the number of merchants and the use of QRIS for transactions in the new normal era to improve the service of digital payments and support the creation of a cashless society in Indonesia.

The third research by (Yan et al., 2021) is about Qr code and mobile payment in many business sectors, especially in the retail industry. The study aims to ascertain the critical antecedents that impact the m-payment adoption intention, particularly the type of m-payment that utilizes the Quick Response (QR) code technology through an extended Mobile Technology Acceptance Model. The study uses the quantitative method and Mobile Technology Acceptance Model (MTAM) to develop it. This study offers several theoretical and practical implications for some retail businesses and stakeholders in this retail sector.

The following research by (de Block & Vis, 2019) discussed transforming data qualitative data into quantitative data by using qualitative comparative analysis(QCA). This research aims to enhance people studies transparency. The research uses qualitative data method and converts to quantitative data method. And lastly, the study provides knowledge to comparing several methods or even transforming qualitative to quantitative data or vice

versa.

The final research by (Dospinescu et al., 2021) was to define the factor of fintech services and various indicators influencing consumer satisfaction regarding the fintech technologies and services for millennials and generation z. The research aims to fill the literature gap and respond to stakeholders' expectations and needs in the fintech business area. The method they use is quantitative, with the purposive sampling method. And the results of the article for stakeholders and the scientific community are about the impact of fintech technologies on millennials and generation z.

Author	Research Year	Research Summary
Octavian Dospinescu , Nicoleta Dospinescu , Daniela-Tatiana Agheorghiesei	2021	This research uses the quantitative method to define the factor of fintech services and fintech technology, so the result proves that this research can be used for stakeholders and the scientific community as references.
Ni Putu Ani Karniawati, Gede Sri Darma, Luh Putu Mahyuni, I Gede Sanica	2021	This study was conducted using a qualitative descriptive method, which proves that many informants still don't understand what QRIS is.
Li-Ya Yan, Garry Wei-Han Tan, Xiu-Ming Loh, Jun-Jie Hew, Keng-Boon Ooi	2021	This study uses the quantitative method and MTAM model to develop the study. It proves that the more beneficial the technologies are to the user, the more favorable for them to adopt the technologies.
Thando Dube, Rene Van Eck, Tranos Zuva	2020	This paper's methodology reviews and explores three technology adoption models and theories relevant to IS

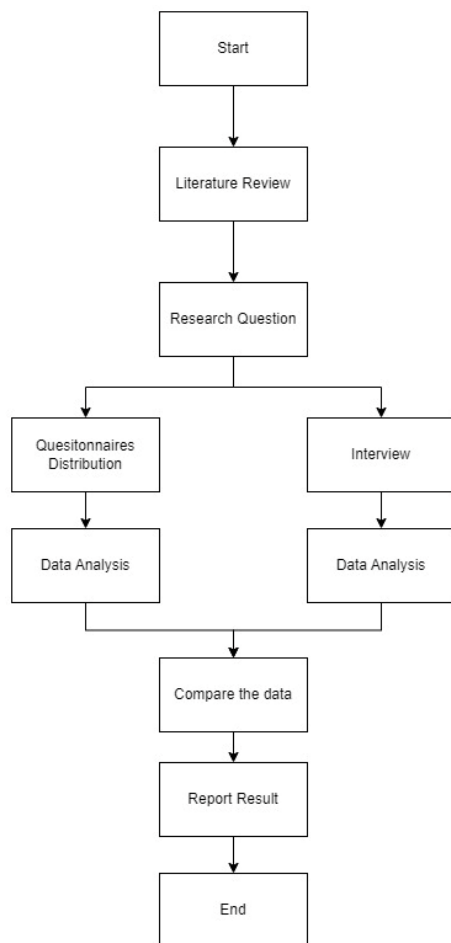
		and IT studies published between 2003 and 2018. This paper proves that some new models and theories are still being utilized, and many business organizations are trying to accept them.
Debora de Block and Barbara Vis	2019	The last research uses the qualitative data method and converts it to the quantitative data method, and this paper tries to prove that this method can be transformed by using comparative analysis

Based on the literature review above, we will do research regarding the QRIS and Cash reviewing them and then try to compare them on generations y and z as done by (Dube et al., 2020). As done in research, we will use the Mobile Technology Acceptance Model (MTAM) (Yan et al., 2021) and use a quantitative approach with variable perceived transaction convenience, perceived transaction speed Mobile Usefulness, Mobile Ease Of Use, Behavioral Intention, Optimism, and personal innovativeness, and using the qualitative method that done by (Putu et al., 2021). And lastly, we compare these two kinds of methods based on research conducted by (de Block & Vis, 2019). Then for the target to gather data, we targeted generation millennials and generation z as used by (Dospinescu et al., 2021).

METHODOLOGY

In this part, the researcher will make a research flow as part of the framework for the topic discussed by the researcher. Function and research flow are used to explain the phase, the process flow from the analysis start to the report of the result from the analysis. As we can see from the research flow below.

Figure 3.1 Research Flow



We will research and study to find the solution to identified problems. Researchers try to use and collect journals that can support our topic, From the journals that had already been researched to help the researcher complete this research. Then we will research to identify the problems from the phenomenon mentioned in the background. This problem has been found and will be analyzed and compared to determine which is more preferred to use or benefit to achieve the objective of this study.

After identify the problem we will try to gather data from the audience through questionnaire distribution to finish this research. After that the researcher will try to gather data from the audience by the questionnaire. The researcher gets two data sets with the same question but different Generation. In this phase, we tried to analyze data given by the audience to see the result of this research then researcher already gets two data sets from the questionnaire distribution from the same question but have a generation, so the researcher compares the data to see what results from this research. Lastly, we will document the research result and turn it into a report. In order for the audience can have a better understanding of this research

RESULT AND DISCUSSION

We distributed the questionnaire to all relevant individuals and organizations in the Kepulauan Riau region between October 3, 2023, and October 12, 2023, which spanned approximately one week and two days. We received responses from a total of 452 respondents. Below are the characteristics of the respondents.

Table 4. 1 Respondent Characteristics

Characteristics	Description	Number	Percentage
Gender	Male	304	67.3%
	Female	148	32.7%
Age	11-26	237	52.4%
	27-42	215	47.6

Based on the respondent characteristics we can draw a following conclusion such as Gender distribution and Age distribution. 67.3% of the respondents in the sample are male, while 32.7% are female. This suggests a higher representation of males in the group compared to females. 52.4% of the respondents fall in the age group of 11-26 which is including in the group of the generation Z And 47.6% of the respondents fall in the age group of 27-42 which indicate them in the group of the generation Y.

This indicate that the distribution is relatively balanced between these two age group within the sample. Validity is concerned with whether the measuring instrument measures the behaviour or quality that it is intended to measure and is a measure of how well the measuring instrument performs its function (SÜRÜCÜ & MASLAKÇI, 2020). The Validity test is performed to assess the accuracy and precision of the collected data, determining whether it is suitable for the research and can yield high-quality and meaningful analytical results. A variable is deemed valid when it achieves a Pearson Correlation value of at least 0.3 at a significance level of 0.01. The detailed results of the validity test are presented in Table 4.2 below.

Table 4. 2 Validity Test Results Generation Y

Variable	Code	Pearson Correlation	Description
Mobile Usefulness	MU1	0.776	Valid
	MU2	0.597	Valid
	MU3	0.823	Valid
	MU4	0.496	Valid
Mobile Ease	MEOU1	0.691	Valid

Of Use	MEOU2	0.809	Valid
	MEOU3	0.785	Valid
	MEOU4	0.897	Valid
Perceived Transaction Convenience	PTC1	0.521	Valid
	PTC2	0.893	Valid
	PTC3	0.763	Valid
Perceived Transaction Speed	PTS1	0.908	Valid
	PTS2	0.905	Valid
	PTS3	0.884	Valid
Optimism	OP1	0.857	Valid
	OP2	0.873	Valid
	OP3	0.882	Valid
Personal Innovativeness	PI1	0.868	Valid
	PI2	0.895	Valid
	PI3	0.806	Valid
Behavioral Intention	BI1	0.863	Valid
	BI2	0.830	Valid
	BI3	0.559	Valid
	BI4	0.834	Valid

Table 4. 3 Validity Test Results Generation Z

Variable	Code	Pearson Correlation	Description
Mobile Usefulness	MU1	0.781	Valid
	MU2	0.748	Valid
	MU3	0.814	Valid
	MU4	0.675	Valid
Mobile Ease Of Use	MEOU1	0.887	Valid
	MEOU2	0.790	Valid
	MEOU3	0.700	Valid
	MEOU4	0.833	Valid
Perceived Transaction Convenience	PTC1	0.508	Valid
	PTC2	0.844	Valid
	PTC3	0.657	Valid

Perceived Transaction Speed	PTS1	0.901	Valid
	PTS2	0.931	Valid
	PTS3	0.913	Valid
Optimism	OP1	0.835	Valid
	OP2	0.659	Valid
	OP3	0.920	Valid
Personal Innovativeness	PI1	0.815	Valid
	PI2	0.854	Valid
	PI3	0.749	Valid
Behavioral Intention	BI1	0.799	Valid
	BI2	0.894	Valid
	BI3	0.637	Valid
	BI4	0.858	Valid

In a reliability test, a variable should achieve a minimum score of 0.6. Those variables that meet this threshold will be classified as reliable, with their significance increasing as the score goes higher. Conversely, variables scoring below the range of 0.5 to 0.6 will be deemed less significant. Anything falling below 0.5 is irrelevant and should not be given substantial consideration

Table 4. 4 Reliability Test Result Generation Y

Variable	Cronbach Alpha	Description
MU	0.694	Valid
MEOU	0.505	Valid (Not Significant)
PTC	0.801	Valid
PTS	0.520	Valid (Not Significant)
OP	0.871	Valid
PI	0.873	Valid
BI	0.781	Valid

Table 4. 5 Reliability Test Generation Z

Variable	Cronbach Alpha	Description
MU	0.694	Valid
MEOU	0.694	Valid
PTC	0.805	Valid
PTS	0.723	Valid
OP	0.888	Valid
PI	0.701	Valid
BI	0.661	Valid

From the variable above we will conclude into 4 main categories firstly is *Perceptions of QR Code Mobile Payment, Willingness to Experiment with New Technology, Technology's Impact on Daily Life and Behavioral Intentions Toward QR Code Mobile Payment.*

From the Perceptions of Qr Code Mobile Payment itself the Generation Y Generation Y tends to have a high level of internal consistency in their perceptions of QR code mobile payment, indicating a relatively uniform set of beliefs about its advantages. Generation Z also has strong internal consistency in their perceptions, suggesting a similar and reliable pattern of views regarding the benefits of QR code mobile payment. Both generations have a consistent and reliable understanding of the benefits of QR code mobile payment, which could lead to greater acceptance and adoption of this technology.

From the Willingness to Experiment with New Technology Generation Y displays a high level of internal consistency in their openness to experimenting with new technology, indicating a strong and uniform attitude toward technology experimentation. Although Generation Z has a lower Cronbach's alpha value, it still suggests moderate internal consistency, signifying a relatively reliable pattern in their willingness to try new technology. Both generations express a positive willingness to experiment with technology, which is essential for technology adoption and innovation. Generation Y appears to be particularly enthusiastic in this regard.

From the Technology's Impact on Daily Life Generation Y demonstrates a high level of internal consistency in their belief that technology provides more control, convenience, and opportunities in daily life, indicating a strong and uniform perception of technology's role. Generation Z also exhibits strong internal consistency, suggesting a similar and highly reliable pattern of views regarding the impact of technology on daily life. Both generations have a consistent and reliable belief that technology enhances their daily lives, which underscores the importance of technology in their lifestyles.

And lastly Behavioral Intentions Toward QR Code Mobile Payment Generation Y's behavioral intentions toward using QR code mobile payment in the future display a moderate level of internal consistency, indicating a fairly reliable pattern of intentions. Generation Z has a lower Cronbach's alpha value, suggesting a reduced level of internal consistency in their behavioral intentions.

In summary, the implications suggest that both Generation Y and Generation Z generally have positive perceptions of technology and its impact on their lives. However, there are variations in how they approach technology adoption and their behavioral intentions. These insights can be valuable for businesses and policymakers looking to tailor technology adoption and marketing strategies to different generational preferences and attitudes.

CONCLUSION

Based on the data from 457 respondents in the questionnaire, we have drawn conclusions regarding the differences in payment methods between Generation Y and Generation Z. The conclusion that has been reached is as follows:

1. Both generations exhibit strong internal consistency in their perceptions of QR code mobile payment. This suggests that they share a consistent and reliable understanding of the benefits of this payment method, indicating a positive environment for its acceptance and adoption.
2. Both Generation Y and Generation Z express a willingness to experiment with new technology. While Generation Y displays a particularly high level of enthusiasm for technology experimentation, Generation Z also demonstrates a moderate level of openness to trying out new technology.
3. Both generations believe that technology has a significant and positive impact on their daily lives. They share a consistent and reliable belief that technology provides more control, convenience, and opportunities in their daily activities.
4. Behavioral intentions toward using QR code mobile payment in the future show variations in internal consistency. Generation Y appears to have a more cohesive pattern of behavioral intentions, while Generation Z exhibits slightly lower internal consistency in this regard.

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