

The Effect Of Network And Standardization Issue On The Use Of Digital Payment In Denpasar, Badung, Gianyar Areas

Angga Dwikayana¹, I Wayan Sukadana²

¹ Department of Economics, Udayana University, Denpasar, Bali, Indonesia

² Department of Economics, Udayana University, Denpasar, Bali, Indonesia

Abstract

Digital payments are technology-based payments. In digital payments, money is stored, processed, and received in the form of digital information and the transfer process is initialized through electronic payment instruments. Network and Standardization Issue are factors that are thought to influence the growth in the use of Digital Payment in Denpasar, Badung, and Gianyar areas. The number of samples used is 100 merchants, with the sampling technique is Random Cluster Sampling. Data collection obtained from the results of distributing questionnaires. The analysis technique used is multiple linear regression. The results showed that Network Issue had a positive and significant effect on the use of Digital Payment, Standardization Issue had a positive and significant effect on the use of Digital Payment. This means that the higher of Network and Standardization Issue, it will increase the growth of digital payments, but there are other factors that can also increase the growth in the use of digital payments.

Keywords: *Digital Payment, Network Issue, Standardization Issue.*

1. Introduction

Digital disruption has resulted in the creation of good welfare in a short period of time, and has provided challenges for all parties to exploit its potential and in making policies to regulate digitization for a country. In the face of digitalization, creative thinking and policy experiments are needed to avoid the widening of the income gap (Digital Economy Report, 2019). Digitalization allows trade on a large scale, especially for SMEs and new products, to have significant access to new markets based on digitization. For developing countries, there are significant things that promise that the digital economy will drive economic growth, increase capital and labor productivity, lower transaction costs, and facilitate access to global markets (Dahlman et al, 2016).

The digital economy can be described as a series of economic and social activities that rely on networks and platforms that support the internet protocol or IP (Internet Protocol) as part of the infrastructure of society (Going Digital, 2015). Based on the Digital Economy Report (2019), which states that digital data can be used for development purposes, solving social problems, increasing economic and social outcomes, and being a force for innovation and productivity growth. From a business perspective, the transformation of all sectors and markets through digitization can encourage the production of higher quality goods and services at lower costs.

Various players in the digital economy can interact with each other with the availability of a digital platform mechanism. As an intermediary and infrastructure, digital platforms are positioned to record and extract all data related to online actions and interactions between platform users. The growth of digital platforms is directly related to the capacity of these platforms to collect and analyze digital data (Digital Economy Report, 2019). In addition, digital platforms have the potential to create informal jobs and thus reduce unemployment. There are two different platforms, such as a transaction platform and an innovation platform. The transaction platform is a two / multi-sided marketplace with an online infrastructure that supports transactions between various parties. The transaction platform has become a core business model for large digital companies such as Amazon, Alibaba, OVO, DANA and Tokopedia, as well as for those who support digitally activated sectors such as Go-jek, Grab, and Traveloka. Meanwhile, innovation platforms create environments for coding (computer system coding) and content creators to develop applications and software, for example, operating systems such as Android, Apple iOS, or Linux and technology standards namely MPEG video and DVD (Digital Economy Report, 2019).

The growth of mobile payments in Indonesia has been supported by the development of payment systems in the banking sector and the development of the telecommunications industry, as well as software providers. Mobile Payment has several advantages such as safe transactions, attractive promos available, convenience and speed, as well as a large selection of

products. However, there are several weaknesses, such as requiring a supporting technology infrastructure, requiring knowledge of how to use it, and regulations or policies that still do not protect this digital payment system. Therefore, the application of mobile payments can be an alternative to embrace the layers of society who do not yet have access to payment and financial system services (do not yet have a bank account), especially those in remote areas, by utilizing the reach of the current telecommunication infrastructure can cover almost all regions in Indonesia (Profile of Digital Payment in Indonesia, 2019).

In simple terms, electronic money is defined as a means of payment in electronic form whose value is stored in certain electronic media. The use of electronic money as an innovative and practical means of payment is expected to help smooth payments for mass, fast and micro economic activities, so that its development can help smooth transactions on toll roads, in the field of transportation or transactions at minimarkets, food courts, or pay for parking. The development of electronic money is also expected to be used as an alternative means of non-cash payment that can reach people who have not had access to the banking system or do not have a bank account (Bank Indonesia, 2021).

However, cases of COVID-19 are still being confirmed in Indonesia. As consumers, when we have symptoms of a disease, now that we have been forced to adapt to new ways of receiving virtual medical care, the Halodoc and Alodokter digital platforms have reported skyrocketing usage of their apps and demand for their services. Therefore, there is a strong potential that the use of digital payments will increase for payment processing in these applications (Caroline, 2020).

Fintech services are considered to be able to make transactions both online and offline in just one transaction platform such as e-wallet applications. However, the penetration of e-wallets or what is known as digital payment in Indonesia, especially in Bali, is still low. Neither consumers nor merchants have used digital payment as the new payment standard. Digital payments should have a good impact on the ease and convenience of transactions and increase welfare. However, in its implementation, there are obstacles in standardizing the use of new technologies that are not used simultaneously.

2. Literature Review

Deni Trihasta (2008)

Which state that in digital payments, money is stored, processed, and received in the form of digital information and the transfer process is initialized through electronic payment instruments. Payment is traditionally made via cash, check, or credit card while digital payments are made using certain software, payment cards, and electronic money. The main components of a digital payment system include: money transfer applications, network infrastructure, rules and procedures that govern the usefulness of the system.

Abdurrahman (2015)

Which states that the emergence of digital payments makes the funds issued to be more transparent because every time a spending transaction occurs, the data will be recorded so that the expenses used in spending are easily monitored. In this case, it will make it easier for the checks to be carried out to determine the flow rate of funds both going out and entering the digital payment system. The resulting data cannot be manipulated, because the system has determined that it will automatically be recorded during the transaction process, both in the category of income and expenditure along with the date and amount of funds.

3. Problem Formulation

The hypothesis of this project is:

- a) Digital Payment is penetrated to be used as a means of payment at merchants or retailers in the Denpasar, Badung, Gianyar areas.
- b) Network Issue has a positive and significant effect on the use of Digital Payment in the Denpasar, Badung, Gianyar areas.
- c) Standardization Issue has a positive and significant effect on the use of Digital Payment in Denpasar, Badung Gianyar.
- d) Digital Payment contributes to the Balinese economy in the new normal era.

4. Research Methodology

This research design is a type of causality associative research. The location of this research was carried out in the Bali area, especially in the areas of Denpasar, Badung, Gianyar and targeting Alfamart, Indomaret, CK, Pepito, Malls and other supermarkets because the retailer and merchant industry has the potential for digital payment growth. and it is suspected that the use of digital payments by merchants and consumers in Bali is still low. The objects in this study are network issues and standardization issues that affect the use of digital payments. The method of determining the sample in this study is non-probability sampling using judgmental sampling. In this study, the minimum sample size in the market testing study was 100 respondents. The method used in this writing is by conducting interviews and distributing questionnaires. The data used are quantitative data in this study including data on the volume growth of Digital Payment transactions in Indonesia, and qualitative data in the form of respondents' opinions and statements in questionnaires regarding network issues and standardization issues. Research sources in the form of primary sources were collected by giving questionnaires to merchants, retailers and the public (respondents) which contained details of statements regarding the formulation of research problems, and secondary data in this study were time series data measuring 5 years (2016-2020) which comes from Bank Indonesia. The data analysis technique used is descriptive analysis and inferential analysis.

5. Analysis Result

Characteristics of Respondents

Based on the results of the study, it is known that the number of the Denpasar, Badung, Gianyar areas as samples is 100. Judging from the Merchant Area, the Badung area dominates in this study with a percentage of 56 percent. Seen from the Type of Digital Payment, Merchants who use the OVO Digital Payment Type dominate with a percentage of 30.4 percent. Judging from the Standardization Issue, Merchants who do not have a Standardization Issue dominate with a percentage of 67 percent. When viewed from the Percentage of Sales, Conventional sales dominate with a percentage of 72 percent. And seen from the type of digital payment used in the questionnaire, Gopay is the type of digital payment that merchants have used the longest.

Description of Research Variables

- The Network Issue variable (X1) has a minimum value of 0 and a maximum value of 5. The average value of Network Issue is 2.70, indicating that there are quite a lot of companies doing network issues. With a standard deviation value of 1.299
- The Standardization Issue variable (X2) has a minimum value of 0 and a maximum value of 1. The average value of Standardization Issue is 0.33, indicating that there are more companies that do not have Standardization Issue than those that carry out Standardization Issue. With a standard deviation value of 0.473
- The variable use of digital payment (Y) has a minimum value of 0 and a maximum value of 60. The average value of using digital payments is 27.55, indicating that companies using digital payments are quite high. With a standard deviation value of 11.093.

Based on the results of distributing questionnaires, the use of digital payments can be stated to contribute to the Balinese economy in the new normal era, this is because the Balinese are enthusiastic about using digital payments, because digital payments have advantages that conventional payment systems do not have, for example, such as saving time and costs, Financial records are tidier, safer, more comfortable, in the new normal era, the spread of the Covid-19 virus can be overcome by digital payments, so that there is no direct contact with conventional money which could be a source of the spread of covid-19 Therefore, the Balinese people are safer in making transactions at merchants in the Denpasar, Badung, Gianyar areas during the new normal era. Mercants have used Digital Payment at least since 2017, maximum since 2020, and on average, mercants are actively using digital payments in 2019. Based on data tabulation, out of 100 merchants using 5 Digital Payments, 28% of sales are generated from using digital payment. Some shops or mercants do not use digital payments because they think it is easier and faster if they do offline transactions, some other mercants say the reason they don't use digital payments is because they don't understand the procedures for using them.

According to researchers after conducting a survey, the digital penetration program in the Denpasar, Badung, Gianyar area was quite successful as an initial stage of shifting people's habits to use digital payments as a means of payment. The advantages of digital payment are indeed better than contactless, clean, efficient factors than conventional payments, but keep in mind that at this early stage of digital payment penetration, there are still many people who transact conventionally.

It is quite difficult collectively to change the habit of using digital payments, especially since there are still many traditional merchants or stalls that do not accept digital payments.

Classical Assumption Test Results

Based on the normality test using the One-Sample Kolmogorov-Smirnov Test shows that the Asymp value. Sig. (2-tailed) Kolmogorov-Smirnov is 0.065 greater than the alpha value of 0.05, so the data used in this study are normally distributed, and it can be concluded that the model fulfills the assumption of normality.

Based on the results of the multicollinearity test, it is shown that there are no independent variables that have a tolerance value less than 0.10 and a VIF value of more than 10. Therefore, the regression model is free of multicollinearity symptoms.

Based on the results of the heteroskedasticity test, it is shown that each variable such as Network Issue (0.763) and Standardization Issue (0.271) has a significance value greater than 5% (0.05). This shows that this study is free from heteroscedasticity symptoms.

Research Hypothesis Testing Results

F test results

Based on the test results, it is obtained that the F-value is 73.352 with a significance of 0.000 which is below 0.05, so it can be concluded that the regression model is fit with observational data and is suitable for use as an analysis tool to test the effect of independent variables on the dependent variable. The results of the determination test show that the value of R^2 is 60.2 percent, which means that 60.2 percent of the use of digital payments in Denpasar, Badung, Gianyar is influenced by the Network Issue (X1) and Standardization Issue (X2) variables and the remaining 39,8 percent is influenced by other variables not examined in this study.

The effect of the Network Issue variable on the use of digital payments

Based on the results of the analysis, it is explained that the significance level is $0.000 < 0.05$, which means that the Network Issue variable has a significant positive effect on the use of digital payments. The regression coefficient is 3,410, indicating that the increase in Network Issue will increase the use of digital payments in Denpasar, Badung, Gianyar areas. Network Issue has a positive effect on the use of digital payments in Denpasar, Badung, and Gianyar areas. If the average merchant has total sales of 10,000,000 Rupiah, then using the OVO digital payment product will increase sales by 8,512%. By using the GOPAY digital payment product, it will increase sales by 6.944%. By using the DANA digital payment product, it will increase sales by 4,872%. By using the digital payment product Link Aja will increase sales by 1.876%. And by using Shopee Pay's digital payment product, it will increase sales by 5,796%.

The effect of the Standardization Issue variable on the use of digital payments

Based on the results of the analysis, it can be explained that the significance level is $0.000 < 0.05$, which means that the Standardization Issue variable has a significant positive effect on the use of digital payments. The regression coefficient of 11,555 indicates that the increase in Standardization Issue will increase the use of digital payments in the Denpasar, Badung, Gianyar areas. Standardization Issue has a positive effect on the use of digital payments in Denpasar, Badung, and Gianyar areas. If merchants use QRIS, it will increase the use of Digital Payment by 11.5% compared to those without using QRIS.

The influence of digital payments contributes to the Balinese economy in the new normal era

Based on the results of distributing questionnaires, the use of digital payments can be stated to contribute to the economy of Bali in the new normal era, where the use of digital payments will increase in 2020. The increase in the contribution of digital payments is because the Balinese are enthusiastic about using this, because it has advantages such as saving time and costs, financial records are tidier, safer and more comfortable, in the new normal era here the spread of the covid-19 virus can be overcome by digital payments, because there is no direct contact with conventional money which could be a source of the spread of covid-19, so the Balinese are more safe in making transactions at Merchants in the Denpasar, Badung, Gianyar areas during the new normal era. Mercants have used Digital Payment at least since 2017, maximum since 2020, and on average, mercants are actively using digital payments in 2019. Some stores or mercants do not use digital payments because they think it is easier and faster if several offline transactions are made. Other mercants said the reason they did not use digital payment was because they did not understand the procedures for using it.

Research Implications

The theoretical implication of the results of this study provides evidence on the use of payment technology in

society, especially a new payment culture using digital payments. Digital payment is sufficiently penetrated by its use as a means of payment at merchants or retailers in the Denpasar, Badung, Gianyar areas. These results imply that in order to increase the penetration of the use of digital payments, the Government, Bank Indonesia and digital payment service providers should focus on expanding the socialization of the use of digital payments in the community, providing attractive offers on the use of digital payments, expanding the range of digital payment provision in Indonesia. Network Issue has a positive and significant effect on the use of Digital Payment in the Denpasar, Badung, Gianyar areas. These results imply that in order for Network Issue to increase, digital payment service providers must focus on expanding and increasing digital payment services at merchants or retailers so that the digital payment service provider community will also grow. Standardization Issue has a positive and significant effect on the use of digital payments in the Denpasar, Badung, Gianyar areas. These results imply that in order for Standardization Issue to increase, Bank Indonesia must focus on socializing the use of QRIS payment standards to the public and expanding QRIS services to merchants or retailers. Digital Payment contributes to the Balinese economy in the new normal era. These results imply that digital payments contribute to supporting health protocols in the form of reducing direct contact with merchants or retailers in the payment process, in order to avoid the spread of COVID-19. In addition, the results of this study can practically be a reference for other researchers who want to research on Digital Payment, Network Issues, and Standardization Issues.

6. Conclusion

Based on the results of the analysis and previous discussion, several conclusions can be drawn that the use of digital payment at merchants or retailers in the area of Denpasar, Badung, Gianyar is still low compared to conventional payment use. There is a positive and significant influence between Network Issue on the use of digital payments in the Denpasar, Badung, Gianyar areas. This means that the higher the Network Issue will increase the use of digital payments. There is a positive and significant influence between Standardization Issue on the use of digital payments in the Denpasar, Badung, Gianyar areas. This means that the higher the Standardization Issue, it will increase the use of digital payments. Digital payments can be stated as contributing to the economy of Bali in the new normal era. This is proven by the increasing use of digital payments in 2020. Digital payments also contribute to supporting health protocols in the form of reducing direct contact with merchants or retailers in the payment process, in order to avoid the spread of COVID-19.

As for some suggestions that can be given, such as based on the research results, it shows that the higher the Network Issue, Standardization Issue in Denpasar, Badung, Gianyar. Merchants in the Denpasar, Badung, Gianyar Tabanan areas must maintain the Network Issue, Standardization Issue, which will increase the use of digital payments in the Denpasar, Badung, Gianyar areas. To increase the penetration of the use of digital payments in the Denpasar, Badung, Gianyar area, it is necessary to open public awareness in making digital payments, by providing counseling from related governments to attract the public's interest in using digital payments, because digital payments are a mode of payment that is safer and more comfortable to use in the new normal era. To reduce the spread of covid-19, which can spread through conventional money. It is recommended that further researchers do not stick to the factors in this study such as Network Issue and Standardization Issue, but can add other factors that may affect the use of digital payments, and further researchers are expected to add or use other research subjects.

7. References

1. Abdurrahman, H. (2015). *Bisnis dan Muamalah Kontemporer*. Bogor: Al Azhar Freshzone Publishing
2. Bank Indonesia. (2020, Oktober). Retrieved from <https://www.bi.go.id/id/statistik/sistem-pembayaran/uang-elektronik/contents/transaksi.aspx>
3. Carl Dahlman, S. M. (2016). *Harnesing The Digital Economy for Developing Countries*. Paris: OECD
4. Mahani, S. A. (2019). *Profil Digital Payment di Indonesia*. 2.
5. Trihasta, D., & Fajaryanti, J. (2008). E-Payment Sistem. *Seminar Ilmiah Nasional Komputer dan Sistem Intelijen*, 616-617
6. TRPC. (2015). *Going Digital: Status and Future Potential of Internet-Based Economies Across Asia*. 3.

7. United Nations Conference on Trade and Development. (2019). *Digital Economy Report. Value Creation and Capture: Implications for Developing Countries*. New York: United Nations Publications