

Analysis of the Readiness for Digitalization of Cashless Payment Systems in Msmes in South Kuta Subdistrict, Badung District, Bali Province



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ABSTRACT: The development of the digitalization process and the use of technology in the elements of economic influences the payment system in society. One of the main aspect in the transaction process is the payment system used. This research aims to first analyze digitalization readiness cashless payment system for MSMEs in South Kuta, secondly to analyze the simultaneous and partial influence of the owner's skills MSMEs, digital access and digital ecosystems. This research uses a quantitative approach in associative form. The data used in this research is primary data using purposive sampling techniques collection obtained from MSMEs owners in South Kuta, 98 people. The analysis technique used is analysis binary logistic regression. The research results show the readiness of MSMEs owners in South Kuta as seen from the skill variable of MSMEs owners, digital access, and digital ecosystems have differences with research previously. Simultaneously the skills of MSMEs owners, digital access, and the digital ecosystem has a significant influence on the readiness of the digitalization system non-cash payments (cashless) for MSMEs in South Kuta. By the partial variables digital access and digital ecosystem have a significant positive effect while the skills of MSMEs owners do not have a significant effect on readiness to digitize the non-cash (cashless) payment system for MSMEs in South Kuta. Based on research results, to increase readiness MSMEs are advised to ensure that digital access is provided properly and constructively stable digital ecosystem, and the government is expected to consider regulations discounts or transaction rates that apply to MSMEs.

KEYWORDS: Digital payment system; MSMEs; Cashless

I. INTRODUCTION

Indonesia, as an archipelago with a high population density, is in the process of transitioning from cash transactions to digital money. Cash transactions still have weaknesses, especially in terms of security, such as counterfeit money fraud. In the first quarter of 2022, Bank Indonesia stated that it had found 33,668 counterfeit notes in circulation. A total of 32,180 pieces were found by Bank Indonesia, and 1,488 pieces were found by the police. The existence of counterfeit money causes losses to the community in terms of transaction security. The potential for counterfeiting cash has a negative impact on the transaction process between consumers and producers. Another disadvantage is that when transactions require people to carry cash, especially in large amounts, it raises concerns about theft and crime. The Central Bureau of Statistics (2022) noted that theft is the most common crime in villages in Indonesia, reaching more than 36-45 percent of all villages during the 2014-2021 period. The ownership of cash is also influenced by the existence of bank facilities and banking operating hours around the community. This is considered inefficient, as people cannot freely obtain money and make transactions within 24 hours. This procedure is one of the reasons why cash is less efficient, and people are starting to switch to non-cash (digital) transactions that are easily accessible at any time (Muhammad Amar Ma'ruf, 2023). The value of efficiency and security that is more guaranteed is the fundamental reason for people to switch from cash to non-cash (digital) payment systems. The implementation of a non-cash (digital) transaction system provides a multiplier effect for all economic actors. In this case, MSMEs, which also have the position of economic actors as producers and distributors, are the business units closest to the community, so they are expected to be able to adjust to existing advances. The development of MSMEs is inseparable from MSME owners, who are the driving force of innovation and management systems.

TABEL 1. POPULATION OF BANDUNG REGENCY BY SUBDISTRICT

Subdistrict	Population by Subdistrict (Thousand)								
	Male			Female			Male + Female		
	2018	2019	2020	2018	2019	2020	2018	2019	2020

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North Kuta	78.26	87.63	90.72	74.34	83.21	86.23	152.60	170.84	176.95
Kuta	53.39	57.19	58.34	49.38	52.91	54.04	102.77	110.10	112.38
South Kuta	65.41	71.04	72.86	61.99	67.38	69.17	127.40	138.42	142.03
Mengwi	65.65	67.03	67.41	64.39	65.75	66.20	130.04	132.78	133.61
Abiansemal	45.51	46.04	46.16	45.77	46.30	46.47	91.28	92.34	92.63
Petang	13.08	12.97	12.91	12.83	12.75	12.69	25.91	25.72	25.60
Badung	321.30	341.90	348.40	308.70	328.30	334.80	630.00	670.20	683.20

Source: BPS, 2022

In accordance with the table above, it can be seen that the population density of Kecamatan (Subdistrict) Kuta Selatan has consistently been the highest for three consecutive years compared to other Subdistricts. This also applies to both male and female genders. Based on this data, it is concluded that the opportunity for economic transaction in South Kuta subdistrict is higher than in other subdistricts. The level of population density in South Kuta District is also supported by foreign tourists and local tourists.

The distribution of tourists to South Kuta District can also be seen from the data that has been collected by I Gusti Ngurah Rai International Airport.

Tabel 2. Distribution Data of Tourist Arrivals to Badung Regency

No	Subdistrict	Number (Person)
1	North Kuta	5.067
2	Kuta	19.474
3	South Kuta	22.988
Total		47.531

Source: Dispar Badung Regency, 2022

Based on data on the distribution of tourists to Badung Regency through I Gusti Ngurah Rai Airport, it can be seen that the highest distribution is South Kuta district. The existence of tourist visits in South Kuta District certainly has an impact on transactions in existing tourism activities. From these data, it is not an exaggeration if South Kuta District can be said to be the economic engine in Badung Regency. The high level of tourist visits in South Kuta district plays a big and important role in the progress of MSMEs in the area. These tourist visits not only come from the domestic scope but also come from abroad/foreign countries. So that the transaction process and payment system applied to MSMEs can significantly affect turnover. For example, foreign tourists who are accustomed to transacting without cash will find it difficult to make payments if the existing MSMEs/sellers have not implemented a non cash payment system (cashless). However, on the other hand, if MSMEs have been able to provide a variety of payment systems in cash and non cash such as the use of CC/Debit cards/QRIS scans, there will be potential or opportunities for an increase in transactions with foreign tourists due to the eate of payment systems that facilitate the transaction process.

II. RESEARCH AND METHODS

This research uses a quantitative approach with an associative type of research, aimed at determining the relationship between two or more variables that explain a phenomenon (Rusiadi, 2016:12). In this study, the associative approach is used to determine the effect of MSME owner skills, digital access, and digital ecosystems on the readiness for the digitalization of cashless payment systems in MSMEs in South Kuta District. The researchers chose South Kuta District, Badung Regency, Bali Province, as the location, given that it has the highest population density in Badung Regency and the highest number of tourist visits from I Gusti Ngurah Rai Airport. This results in a high level of transactions between foreign tourists and local MSMEs in the surrounding tourist areas.

The dependent variable is the variable that is measured to determine the magnitude of the effect or influence of other variables. In this study, the dependent variable is the readiness to implement a cashless payment system for MSMEs in South Kuta District. The independent variable is a variable whose variation affects other variables. In this study, the independent variables are owner skills, digital access, and the digital ecosystem, which influence the implementation of the digitalization of the cashless payment system. In this study, the readiness for the digitalization of the cashless payment system is measured by a dummy variable: (d=1) = MSMEs in South Kuta District are ready to implement the digitalization of the cashless payment system; (d=0) = MSMEs in South Kuta District are not ready to implement the digitalization of the cashless payment system. The owner skills variable is measured by the level of knowledge of MSME owners regarding digital financial literacy. These variables are measured by the availability of access

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to non-cash payment tools, such as business accounts, EDC machines, QR codes, mobile banking, and internet signal coverage, which will support the implementation of the digitalization of cashless payment systems. The digital ecosystem variable is measured by the habits or culture of the MSME owners within the digital ecosystem.

This study utilizes both quantitative and qualitative information. The sampling technique used in this study is purposive sampling, which is a data collection method based on certain considerations (Sugiyono, 2012: 218). This technique was chosen because the sample in this study has specific criteria, namely MSMEs that must be located in South Kuta. The data analysis technique employed in this research is the logistic regression test. This technique aims to address the weaknesses of the LPM (Linear Probability Model), which provides unsatisfactory results as it may produce estimated probabilities that are less than zero or greater than one. Logistic regression is a cumulative distribution function (CDF) model, which ensures that the value of the dependent variable lies between 0 and 1, in accordance with probability theory.

RESULTS AND DISCUSSION

Model Fit Test Results

The fit model test aims to determine and test the feasibility of the regression model used in this study. The results of the fit model test conducted in this study are Hosmer and Lameshow's test and Nagelkerke R Square test.

Tabel 3. Hosmer and Lameshow's Test Results

Step	Chi-square	df	Sig.
1	6.715	7	.459

Source: Attachment 1, SPSS 2024

Based on Table X.X, the Chi-square value calculated is $6.715 < \text{Chi-square table } 12.017$ with a significance probability of 0.459 which value is greater than the level of significance, 0.05. Thus it can be concluded that H_0 is accepted. This means that there is no difference between the predicted classification and the observed classification, so that the regression model used can explain the data and can be used for further analysis.

Tabel 4. Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	110.903 ^a	.217	.290

Source: Attachment 2, SPSS 2024

The Nagelkerke R Square value of 0.290 means that 29% of the readiness to implement a non cash or digital payment system is influenced by the skills of the MSME owners, digital access, and the digital ecosystem. The rest is explained by other factors not mentioned in the model.

Simultaneous Effect of Owner Readiness, Access, and Digital Ecosystem on the Readiness of MSMEs to Implement Cashless Payment Systems.

The first objective of this study is to analyze the simultaneous effect of training, work experience, networking, education, age, and marital status on the length of time it takes to obtain employment. To assess the simultaneous effect, the F-test is used, with the results shown in Table 5.

Tabel 5. Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	23.932	3	.000
	Block	23.932	3	.000
	Model	23.932	3	.000

Source: Attachment 3, SPSS 2024

The calculated X^2 value = $23.932 > X^2$ table value of 7.815, with a significance level of 0.000 (< 0.05). Therefore, H_0 is rejected,

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and $H1$ is accepted, meaning that the addition of independent variables has a significant effect on the model. In other words, the model is considered fit and better compared to the model without the addition of independent variables.

Partial Effect of Owner Readiness, Access, and Digital Ecosystem on MSME Readiness to Implement a Cashless Payment System.

The second objective of this study is to analyze the partial effect of Owner Readiness, Access, and the Digital Ecosystem on MSME readiness to implement a cashless payment system. To assess the partial effect, the t-test is used, with the results shown in Table 11.

Table 6. Variables in the Equation

Step 1a	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
							Lower	Upper
X1	-.237	.590	.161	1	.688	.789	.249	2.506
X2	1.348	.575	5.492	1	.019	3.850	1.247	11.890
X3	1.189	.517	5.295	1	.021	3.284	1.193	9.039
Constant	-9.262	2.561	13.082	1	.000	.000		

Source: Attachment 4, SPSS 2024

Based on Table 11, the partial regression test (t-test) shows that from the calculation results in Table 1.1, the Wald value = 0.161 < X^2 table = 1.985, with a significance value of 0.688 > 0.05 and a coefficient value of β_1 (MSME owner skills) of -0.237. This means that H_0 cannot be rejected, indicating that the skills of MSME owners, in this case, do not have a positive or significant effect on the readiness to implement digital payment systems in MSMEs in South Kuta District. A Wald value of 5.492 > X^2 table = 1.985, with a significance value of 0.019 < 0.05, and a coefficient value of β_2 (digital access) of 1.348 was obtained, meaning that H_0 is rejected and that digital access has a positive and significant partial effect on the readiness to implement digital payment systems in MSMEs in South Kuta District. A Wald value of 5.295 > X^2 table = 1.985, with a significance value of 0.021 < 0.05, and a coefficient value of β_3 (digital ecosystem) of 1.189 was also obtained, meaning that H_0 is rejected, and the digital ecosystem has a positive and significant partial effect on the readiness to implement digital payment systems in MSMEs in South Kuta District.

Logistic Regression Coefficient Interpretation

The interpretation of the coefficients of the logistic regression equation is explained in more detail as follows:

1. $\beta_0 = -9.262$

The coefficient of -9.262 indicates that if other variables are considered constant, on average the logit value will decrease by 9.262. This means, if other variables are considered constant, then the probability of readiness to implement the digitalization of the cashless payment system in MSMEs in South Kuta Subdistrict will decrease by 0.07 or 7% (data obtained from $\frac{1}{1 + e^{-(-9.262)}}$).

2. $\beta_1 = -0.237$

The coefficient of -0.237 indicates that if other variables are considered constant, on average the logit value will decrease by 0.237. This means, if other variables are considered constant, if the skills of MSME owners are getting better, the probability of readiness to implement the digitalization of the cashless payment system in MSMEs in South Kuta District will decrease by 0.44, or 44% percent (data obtained from $\frac{1}{1 + e^{-(-0.237)}}$).

3. $\beta_2 = 1.348$

The coefficient β_2 of 1.348 indicates that if other variables are held constant, the average logit value will decrease by 1.348. This means that, if other variables are considered constant, if digital access improves, the probability of readiness to implement the digitalization of cashless payment systems in MSMEs in South Kuta District will increase by 0.79 or 79 percent (data obtained from $\frac{1}{1 + e^{-1.348}}$).

4. $\beta_3 = 1.189$

The coefficient β_3 of 1.189 indicates that if other variables are held constant, the average logit value will decrease by 9.262. This means that, if other variables are considered constant, if the digital ecosystem improves, the probability of readiness to implement the digitalization of cashless payment systems in MSMEs in South Kuta District will increase by 0.76 or 76 percent (data obtained from $\frac{1}{1 + e^{-1.189}}$).

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III. RESEARCH IMPLICATIONS

Based on the research results outlined in the previous explanation, several conclusions can be drawn as follows:

- 1) The readiness of owners, access, and the digital ecosystem have a simultaneous effect on the readiness of MSMEs to implement cashless payment systems.
- 2) The skills of MSME owners do not have a partial effect on the readiness of MSMEs to implement cashless payment systems.
- 3) Digital access has a partial effect on the readiness of MSMEs to implement cashless payment systems.
- 4) The digital ecosystem has a partial effect on the readiness of MSMEs to implement cashless payment systems. Based on these research results, the government, particularly Bank Indonesia, in deciding the rate regulations for each digital transaction should consider the fact that MSMEs have profits that are not constant and tend to still be in small nominal amounts. The government is expected to re-evaluate the implementation of discounts and rates on cashless payment systems for MSMEs, especially micro-scale businesses. It may be considered to apply payment system discounts for a certain period after the business has stabilized. MSME owners should read more and understand information about cashless payment systems to know what kind of digital payment systems can be effectively implemented by these MSMEs. The public is expected to be aware of the supporting factors for the smooth transaction of cashless payment systems. The public is also expected to maintain a positive, safe, and constructive digital culture, both economically and socially.

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