

COMPARATIVE ANALYSIS OF CUSTOMER PAYMENTS PREFERENCE BETWEEN CASH PAYMENT AND DIGITAL PAYMENT TO CUSTOMER AT INNOVATION AND ENTREPRENEURSHIP CENTER UNIVERSITY OF SAM RATULANGI

ANALISIS PERBANDINGAN PREFERENSI PEMBAYARAN KONSUMEN ANTARA PEMBAYARAN TUNAI DAN PEMBAYARAN DIGITAL PADA KONSUMEN DI PUSAT INOVASI DAN KEWIRAUSAHAAN UNIVERSITAS SAM RATULANGI

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Abstract: This study aims to analyze the differences in consumer preferences between cash and digital payments, considering factors such as ease of use, security, and cost. Data were collected through questionnaires from 100 respondents using a quantitative approach. Data analysis was conducted using an independent sample t-test to examine differences in the variables being tested. The results showed a significant difference in consumer payment preferences for the security factor, while no significant differences were found in consumer preferences for ease of use and cost between cash and digital payments. These findings can serve as a reference for the Innovation and Entrepreneurship Center to enhance payment facilities, ensuring consumer comfort and optimal transaction processes.

Keyword: Payment Preference, Cash Payment, Digital Payment, Ease Of Use, Security, Cost

Abstrak: Penelitian ini bertujuan untuk menganalisis perbedaan preferensi konsumen antara pembayaran tunai dan digital, dengan mempertimbangkan faktor kemudahan, keamanan, dan biaya. Data dikumpulkan melalui kuesioner dari 100 responden, dengan menggunakan pendekatan kuantitatif. Analisis data dilakukan dengan uji beda (independent Sample T-Test) untuk melihat perbedaan variabel yang akan diuji. Hasil penelitian menunjukkan adanya perbedaan signifikan preferensi pembayaran konsumen pada faktor keamanan, sedangkan preferensi konsumen untuk faktor kemudahan penggunaan dan biaya tidak terdapat perbedaan signifikan diantara pembayaran tunai dan pembayaran digital. Temuan ini dapat menjadi referensi bagi pusat inovasi dan kewirausahaan untuk meningkatkan fasilitas pembayaran sehingga konsumen dapat merasa nyaman dan transaksi berjalan dengan optimal.

Kata Kunci: Preferensi Pembayaran, Pembayaran Tunai, Pembayaran Digital, Kemudahan Penggunaan, Keamanan Biaya

INTRODUCTION

Research Background

As the digitization of the financial sector continues to grow rapidly, especially in the payment system, the implementation of technology has become a positive trend for the public in choosing their preferred payment method. This aligns with the idea that each technology is created to simplify individuals' activities—the easier the technology, the greater the interest in using it. This is certainly related to consumer preferences in choosing a product, where preference refers to a choice or tendency to favour one option over another. Consumers' choices in using payment methods are varied. Some still prefer cash transactions because they are accustomed to it and feel more comfortable conducting transactions in person. On the other hand, digital payments offer various advantages, such as the convenience of transacting without carrying cash, faster processes, and additional security features provided by digital payment service providers.

While digital payment methods such as e-wallets, mobile banking, and QR codes are gaining popularity due

to their speed and ease of use, many customers still prefer cash for its simplicity and anonymity. For some, especially in areas with limited digital infrastructure, cash remains the most reliable option. Others may stick to cash due to habit or because they feel it gives them better control over their spending. Consumer preferences in choosing a payment method are often influenced by several factors, including ease of use, security level, and transaction costs.

The advance of technology has also influenced the emergence of a new payment system concept, namely Digital Payment. Digital payment is the digitization of the financial sector, where consumers no longer need to carry cash to make transactions. With the emergence of Digital Payment, there has been a shift from the use of cash payment methods to non-cash methods (Lopian, J. S., 2021). The shift from cash payments to non-cash payments is also marked by the government's efforts through Bank Indonesia in the Less Cash Society Movement. The Less Cash Society is a new concept where transactions tend to use less cash. This has led to many payment service companies starting to create various digital payment products such as E-Wallets, Mobile Banking, QRIS (QR Payment), Credit Cards, Virtual Accounts, Internet Banking, and their derivative products. This provides the public with a wide range of options for making transactions, with various features available.

The comparative analysis of cash and digital payment preferences is essential in the context of changing consumer behavior. Different demographic groups exhibit varying levels of comfort and trust in digital payment methods. For instance, younger, more tech-savvy customers may prefer the convenience of mobile payments, while older individuals might feel more secure with cash transactions. By identifying these preferences can better align its services with the expectations and habits of its customers, fostering a more inclusive and satisfying experience. At the Innovation and Entrepreneurship Center of Sam Ratulangi University, understanding customer payment preferences is crucial. Despite the global shift towards digital payments, a significant portion of customers continues to rely on cash transactions.

The Innovation and Entrepreneurship Center at Sam Ratulangi University is a facility that represents a breakthrough by Sam Ratulangi University in providing students with a space that prioritizes innovation, creativity, and technology in creating products. Various transactions occur between consumers and entrepreneurs, whether through cash or digital payments. There are around 26 merchants selling a variety of culinary products, all of which offer both cash and digital payment systems such as QRIS, bank transfers, and e-wallets. However, several issues have been identified at this facility, such as complaints about poor internet signals that can disrupt digital transaction processes, leading to discomfort and a tendency not to use digital payment methods. Additionally, low financial literacy makes consumers sometimes hesitant and afraid to use digital payment applications or services due to concerns over transaction fees and data security on the apps. Some consumers prefer to use cash but are often limited by the amount they can carry and the risk of loss due to the large number of visitors during operational hours. This is seen as impractical, which contrasts with the majority of the consumers young people who prefer more practical, safe, and low-cost payment methods. Transactions using digital payments sometimes require additional fees for each transaction, which can burden consumers. Similarly, in cash transactions, consumers occasionally pay more due to the lack of change or small denominations, which also discourages the use of cash payments.

Research Objective

To identify the significant difference in consumer preferences between the use of cash payment and digital payment among consumers at the Innovation and Entrepreneurship Center at Sam Ratulangi University.

THEORETICAL FRAMEWORK

Consumer Preferences

Consumer preferences play an important role in the consumer decision-making process. Preferences are defined as the tendency or ability of consumers to make choices when faced with several alternatives. According to Munandar (2012), consumer preferences can be described as a liking or choice that is more favored by consumers. These preferences are formed through the interaction of consumers with various products available in the market. In the economic context, preferences reflect how consumers assign value to one good or service compared to another.

Payment System

A payment system is a system that encompasses various provisions used to execute payments and fulfill obligations arising from economic activities related to payments (Widyayanti, 2020). The payment system continues to evolve and change. The shift, along with the emergence of technology, has led to a transition from the role and use of cash towards digital payments, known as Digital Payment or Electronic Money (E-Money). Therefore, in line

with this phenomenon, the payment system is currently divided into two categories: cash payment instruments and non-cash payment instruments (Abdi et al., 2023). The difference between these two types of payment systems is reflected in the instruments used.

Cash Payments

A cash payment system is a payment using government-issued currency made by the recipient of goods or services to the seller, in the form of banknotes or coins (BI, 2020). Cash payments involve a two-way exchange, where the payer (consumer, buyer) hands over banknotes and, if necessary, receives change from the payee (merchant, seller) in the form of banknotes. The burden of exchanging cash is proportional to the amount of money required for the transaction. Banknotes are still commonly used due to several advantages, including low production costs, ease of transport, portability, and no transaction fees beyond the face value. However, there are drawbacks, such as the difficulty of carrying large amounts of cash, its susceptibility to damage, and its tendency to be lost.

Digital Payments

The digital payment system is a form of payment mechanism that operates online via the internet, aimed at facilitating product transactions by consumers. Digital payment systems have become increasingly popular due to the many benefits they offer, both for consumers and producers. This trend has been further accelerated by the rise of e-commerce, which encourages people to engage in online transactions (Tarantang et al., 2019). Digital payments can be considered more efficient because, in most transactions, administrative fees are rarely added, and even when they are, the fees tend to be lower compared to going to a physical store to meet those needs. Additionally, products sold through apps often have lower prices compared to physical stores because they come directly from the primary source, making the offered prices relatively cheaper. Digital payments clearly help people meet their needs more effectively and efficiently.

Previous Research

Chen, Chen, and Wang (2021) examined why consumers vary in their payment preferences at chain restaurants (mobile vs. traditional payments) as well as how their preferences influence their perceptions and intentions to use mobile payments. Research findings were derived from two online panel surveys with a total of 1,200 Taiwanese mobile phone users. Regression analyses and analysis of variance were used to examine the antecedents and consequences of the preferred payment methods at chain restaurants. The results showed that customers who preferred traditional payment methods (cash or credit card) perceived mobile payment as not very useful, somewhat risky, and not popular within their social groups. On the contrary, more innovative and venturesome customers perceived mobile payment as very convenient, low risk, and fun to use.

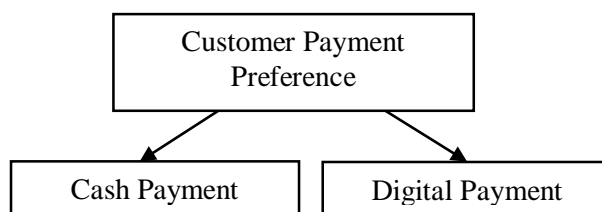
Shafitri and Taufiq (2022) discussed the differences in the frequency of transactions and the nominal value of transactions at UPN "veteran" East Java students. This study uses a quantitative approach to collect data using a questionnaire survey method. A total of 100 students have e-money applications. For data analysis, this study used a t-test analysis of two different samples, namely the independent sample t test difference test. The results of this study indicate that there are no differences in cash and non-cash transactions in the frequency of transactions when viewed in terms of gender, household group and area of residence. Meanwhile, in the nominal value of the transaction, there are differences in terms of the UKT group and gender.

Yutaviando (2019) examined the factors that influence student interest in using non-cash transactions. This study uses a survey method and takes samples of students from the Faculty of Economics and Business, University of Brawijaya Malang with a sample of 65 respondents. This study uses Partial Least Square (PLS) as a method and SmartPLS 3.2.7 Application to test the research data. The results show that the ease of use, benefits of use, and security have a positive and significant effect on students' interest in using non-cash transactions, while the cost and information access variables are considered to have a negative and insignificant influence on students' interest in using non-cash transactions.

Research Hypothesis

Ho: There is no significant difference in Consumer Preference in using between Cash Payment and Digital Payment

Ha: There is a significant difference in Consumer Preference in using between Cash Payment and Digital Payment.

Conceptual Framework**Figure 1. Conceptual Framework***Source: Literature Review***RESEARCH METHOD****Research Approach**

In this study, comparative research is used to analyse and compare consumer preferences between cash payment and digital payment at the Innovation and Entrepreneurship Center of Sam Ratulangi University. According to Pickvance (2005), the purpose of comparative analysis is to understand and explain the underlying mechanisms that contribute to the development of an event, characteristic, or relationship by comparing variations in explanatory variables.

Population and Sample Size

Sugiyono (2021:130) explained that a population as a defined group of individuals, objects, or subjects that share certain characteristics and quantities, which are chosen by researchers to study and then to draw conclusions. The Object of this research is the customer at Innovation and Entrepreneurship Center University of Sam Ratulangi. This research was conducted by distributing questionnaires to 100 respondents, demonstrating that the sample size used in this study exceeds the minimum or required number of respondents, and for the sampling method, will use purposive sampling technique to obtain information based on the specified criteria.

Data Collection Method

The data sources for this study will consist of primary data, where the data to be used for further research will be derived from the preferences of consumers who have made transactions using cash payment or digital payment. The primary data will be obtained through questionnaires when consumers make transactions using cash payment and digital payment methods.

Data Collection Method

The data will be obtained through questionnaires. The questionnaire to be used includes various types of answers to be selected based on the respondents' choices. As defined by Sekaran, questionnaire is a list of question in writing and has been formulated previously and will be answered by respondents, usually in clearly defined alternatives.

Operational Definition and Measurement of Research Variable

Customer payment preference refers to how customers' preferences for certain payment methods are measured based on various factors influencing their choice of payment methods. These preferences can be determined through the following indicators:

1. Ease of Use: Refers to the level of ease and convenience customers experience when using a payment method, including accessibility, speed, and a simple transaction process.
2. Security: Measures the extent to which customers feel that the payment method is safe from risks such as loss of personal data, financial threats like theft or loss of money, and transaction fraud.
3. Cost: Refers to the additional costs incurred by customers when using a particular payment method, such as administrative fees, transaction fees, or applicable deductions.

The scale of measurement that is used by researchers to determine the response of respondent's response to each question is given by using the Likert Scale. For Quantitative data analysis, respondents' answers are given a score, with the following measurement results: 1) Give a score of 1 if strongly disagree, 2) Give a score of 2 if

disagree, 3) Give a score of 3 if uncertain, 4) Give a score of 4 if agree, 5) Give a score of 5 if strongly agree.

Testing of Research Instruments

The validity test are used to determine whether the questionnaire's questions are legitimate and consistent with the research. To check the validity of the data, the researchers will use Pearson's correlation as an analytical tool based on the data obtained.

Reliability is a value that indicates the consistency of a measurement tool in measuring the same phenomenon. To test the reliability of the questionnaire used, a reliability analysis is conducted based on the Cronbach's Alpha coefficient. A variable is considered reliable if the Cronbach's Alpha value is greater than 0.6.

Data Analysis Method

Normality Test

The data normality test determines if the data follows is at a normal distribution level or not. The Kolmogorov-Smirnov test utilized in this study to ensure data normality with the premise that the sample group was small (less than 30). The test format is based on comparing the probability (p) or significance (Sig.) value to the degrees of freedom (dk) at $\alpha = 0.05$. The significance test goes as follow:

1. If the Sig. Or P-value > 0.05 then, the data is considered normal.
2. If the Sig.Or P-value < 0.05 then the data is considered abnormal.

Independent Samples T-test

The significance of the mean between two groups is evaluated using the Independent Sample T-Test. Independent-samples t-test uses the variance between the two samples being compare, which is not significantly different (homogeneous).

The criteria of the t-test as follows:

1. Sig >0.05 means Ho is accepted
2. Sig <0.05 means Ha is accepted

RESULT AND DISCUSSION

Result

Validity and Reliability Tests

Table 1. Validity Test Result

Variable	Cash Payment			Digital Payment		
	Sig (2tailed)	Pearson Correlation	Status	Sig (2tailed)	Pearson Correlation	Status
Ease Of Use	<0.001	0.800	Valid	<0.001	0.883	Valid
Security	<0.001	0.870	Valid	<0.001	0.893	Valid
Cost	<0.001	0.884	Valid	<0.001	0.908	Valid

Source: Data Processed, 2024

The data above shows the Pearson product-moment correlation value (r), With N = 100, the r table value is 0.195, where the calculated r value > r table = 0.195, indicating that all items are valid.

Table 2. Reliability Test Result

Cash Payment		Digital Payment	
Cronbach Alpha	N of Items	Cronbach Alpha	N of Items
0.870	15	0.758	15

Source: Data Processed, 2024

The reliability test results in the table above show Cronbach's alpha values of 0.870 and 0.758, indicating that the data is reliable.

Table 3. Normality Test Result

		One-Sample Kolmogorov-Smirnov Test
		Unstandardized Residual
N		28
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	4.53598218
Most Extreme Differences	Absolute	.145
	Positive	.145
	Negative	-.077
Test Statistic		.145
Asymp. Sig. (2-tailed) ^c		.138

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Data Processed, 2024

Based on the results of the table 3, the significance value for the normality test is $0.138 > 0.05$ with the decision with the decision H_0 accepted and H_a rejected. This normality test using one-sample kolmogorov-smirnov. The conclusion that the data is normally distributed.

Independent Sample t-test Result

Table 4. Independent Sample t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig.(2-tailed)
Ease of Use	Equal variances assumed	8.065	.005	.347	98	.729
	Equal variances not assumed			.286	35.726	.776
Security	Equal variances assumed	14.015	<.001	-2.095	98	.039
	Equal variances not assumed			-1.741	36.137	.090
Cost	Equal variances assumed	3.787	.055	-.951	98	.344
	Equal variances not assumed			-.809	37.321	.212

Source: Data Processed, 2024

Table 4 shows that:

1. The results of a comparison for ease of use between cash payment and digital payment with a sig (2-tailed) value of $0.729 > 0.05$, indicating that H_0 is accepted and H_a is rejected. Therefore, there is no significant difference in consumer preference based on ease of use between cash payment and digital payment.
2. The results of a comparison for security between cash payment and digital payment with a sig (2-tailed) value of $0.039 > 0.05$, indicating that H_a is accepted and H_0 is rejected. Therefore, there is a significant difference in consumer preference based on Security between cash payment and digital payment.
3. The results of a comparison for cost between cash payment and digital payment with a sig (2-tailed) value of $0.344 > 0.05$, indicating that H_0 is accepted and H_a is rejected. Therefore, there is no significant difference in consumer preference based on Cost between cash payment and digital payment.

Discussion

Consumer Payment Preference Between Cash Payment and Digital Payment by Ease of use

The statistical test results indicate that the null hypothesis (H_0) is accepted, and the alternative hypothesis (H_a) is rejected. This suggests that there is no significant difference in consumer preferences for transactions at the Innovation and Entrepreneurship Center of Sam Ratulangi University based on ease of use between cash and digital

payment methods. In other words, consumers do not clearly perceive one payment method as easier to use than the other. This finding indicates that ease of use is not a dominant factor in determining consumer payment preferences between cash and digital methods.

Consumer Payment Preference Between Cash Payment and Digital Payment by Security

The results of the statistical test analysis indicate that the alternative hypothesis (H_a) is accepted, while the null hypothesis (H_o) is rejected. Therefore, it can be concluded that there is a significant difference in consumer preferences based on the aspect of security between cash and digital payment methods. This finding suggests that consumer perceptions of the security level of the two payment methods differ significantly. This is likely influenced by the security systems of each payment method, where cash payments are often perceived as prone to being lost, damaged, destroyed, or even counterfeited. This concern is amplified in places like the Innovation and Entrepreneurship Center of Sam Ratulangi University, which is a crowded location, leading consumers to feel apprehensive about using cash. On the other hand, digital payment methods are considered to have lower security risks. Each vendor is supported by QR codes integrated with security systems provided by the institutions issuing the digital payment products, making consumers feel secure when conducting transactions

Consumer Payment Preference Between Cash Payment and Digital Payment by Cost

The statistical test analysis indicates that the null hypothesis (H_o) is accepted, while the alternative hypothesis (H_a) is rejected. Therefore, it can be concluded that there is no significant difference in consumer preferences based on transaction cost between cash and digital payment methods. This finding suggests that consumers do not clearly perceive cost as a significant distinguishing factor between the two payment methods. Both cash and digital payments are considered to have comparable cost levels by consumers, making this aspect not a primary determinant in choosing a payment method. At the Innovation and Entrepreneurship Center of Sam Ratulangi University, both cash and digital payment systems can be said to involve minimal or no transaction costs. Although cash payments may occasionally result in consumers not receiving change, which could be perceived as a cost, this is considered a rare occurrence and is not regarded as a factor influencing transaction costs. Similarly, for digital payments, which use QRIS or other digital payment products, no transaction fees are applied, allowing consumers to make transactions comfortably. As such, it can be concluded that there is no significant difference in consumer payment preferences between cash and digital payment methods in terms of transaction costs.

CONCLUSION AND RECOMMENDATION

Conclusion

1. There is no significant differences in customer payments preference between cash payment and digital payment based on ease of use. This indicates that consumers do not distinctly perceive one payment method as easier to use than the other. Both cash and digital payments have their respective advantages in terms of ease of use: cash payments do not require additional devices or internet connections, while digital payments offer quick transactions with minimal errors.
2. There is a significant differences in customer payments preference between cash payment and digital payment based on Security. Consumers tend to perceive digital payments as more secure than cash payments. This is due to the inherent risks associated with cash, such as loss, damage, or counterfeiting, which are amplified in crowded locations like the Innovation and Entrepreneurship Center at Sam Ratulangi University. In contrast, digital payments are considered safer because they are supported by modern security systems, such as encryption, two-factor authentication, and integrated QR codes.
3. There is no significant differences in customer payments preference between cash payment and digital payment based on Cost. Consumers view both methods as comparable in terms of transaction costs. For cash payments, although there is a minor risk, such as not receiving change, it is deemed insignificant. Meanwhile, digital payments, such as those using QRIS, do not impose additional fees, allowing consumers to use them comfortably.

Recommendation

1. It is necessary for the Management of the Innovation and Entrepreneurship Center at Sam Ratulangi University to develop payment facilities, such as adding more payment product and enhancing security features to support payment transactions. This will ensure that customers can comfortably conduct transactions using either cash or digital payments. Additionally, it is recommended to organize all facilities to provide a more convenient

transaction experience for consumers.

2. Payment system providers and companies in the payment industry is essential to improve systems and develop features in payment tools, allowing consumers to use these payment methods more comfortably and efficiently.
3. Researchers and science-based development institutions are expected to contribute to advancements, particularly in the economic field focused on payment systems, incorporating indicators such as ease of use, security, and cost. In the future, further studies with additional variables and broader indicators are anticipated, which can have a direct impact on society, especially on cash and digital payment users.

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