



The use of E-Payment Method and Its Influences on Student's Payment Transaction Method in Jayapura City

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Abstract: The purpose of this study is to describe the perspective of students in Jayapura city using the e-payment method in every payment transaction. The method used in this study is a quantitative method. The respondents selected were students who were carrying out lecture activities in Jayapura city. The results of the study found and concluded that the e-payment method is a new breakthrough in payment transactions that affect students who carry out lecture activities in Jayapura city. With the e-payment method, students in Jayapura city can make non-cash payment transactions and can reduce the use of cash as a means of payment. The results of this study indicate that the e-payment and payment transaction variables show valid and reliable results. The coefficient of determination value of the research results shows the ability of the e-payment variable in its influence on payment transactions by 57% and the rest are variables not discussed in this study. The results of the regression equation $Y = 3.491 + 0.786X$ show a positive direction coefficient result from e-payment on payment transactions and the hypothesis results show positive and significant results of e-payment on student payment transactions in Jayapura city, in the sense that with the existence of the e-payment payment method, students in Jayapura are much freer and much more motivated to make purchases in this case referring to payment transaction activities that are more in line with a practical lifestyle.

Keywords: Cash, E-payment, Jayapura, Payment, Students

1. INTRODUCTION

The rapid development of information and communication technology in recent decades has brought significant changes in various aspects of life, including in the payment system. One of the breakthroughs that is now widely used by the public is the e-payment method. The e-payment method allows financial transactions to be carried out digitally without using cash, thus providing convenience, speed, flexibility and efficiency in every payment transaction process. According to Hendrawan et al., (2023) In terms of efficiency, digital payments provide advantages, namely with a fast and easy transaction process. Transferring money between accounts, paying bills, or purchasing goods and services can be done quickly and this increases time efficiency and reduces excessive activities in transactions. Therefore, according to Maharsi (2024) The goal is not only to encourage economic growth but also to increase operational efficiency and expand the scope of banking services to previously underserved segments of the population. And according to

Sugiono (2023) if consumers feel that non-cash payments are useful and practical for daily activities such as paying electricity bills or non-cash shopping, they tend to use them.

Among the younger generation, especially students, the use of e-payment methods in every payment transaction is increasing along with the increasing ease of access to the internet, ownership of digital devices, and followed by changes in current lifestyles that prioritize practicality. According to Meiriza (2024) students tend to live a consumptive life. For example, students often buy the latest shoes models even though they already have a lot of shoes. They buy things they don't really need for maximum satisfaction. This is due to a strong desire to have something without thinking about needs. Many students are often seen competing in terms of appearance.

Students as part of the digital society are greatly influenced by technological developments including in daily consumption activities such as purchasing food, renting transportation services, purchasing college supplies, and access to entertainment. According to Yuliani (2020) there are students who consume so as not to feel out of date, so the student lifestyle tends to be consumptive and according to Fitriana et al., (2024) This is because with the existing convenience, the students finds it is very easy to spend money without thinking about structured expenses, while according to Dany (2023) most students are still far from parental supervision and control and financial knowledge is something very important for all parties, so that in making decisions do not fall into the wrong thing.

Jayapura City is one of the cities that is a center of education in east Indonesia experiencing quite rapid growth in the use of digital technology. This is also reflected in the pattern of student's purchasing activities that are starting to shift from conventional payment methods which use cash to e-payment methods in the payment process. However, the level of effectiveness and efficiency of using e-payment methods can vary because it is influenced by factors such as technological knowledge, access to digital banking services and the habits and preferences of each student.

Previous research related to this research is research from Saputra (2022). The purpose of this study was to determine how the interest of students in the Islamic Banking study program, Faculty of Islamic Economics and Business, UIN Fatmawati Sukarno Bengkulu, switched from cash payment to e-Payment. The researcher used the Descriptive Qualitative method with the Purposive Sampling technique, which is based on the existence of certain objectives and considerations related to the research problem. The research informants were 10 Islamic Banking students. Data collection techniques

consisted of observation, interviews and documentation. Data analysis techniques consisted of the reduction process, verification and drawing conclusions. The results of the study found that students' interest in switching from cash payment to e-Payment in this case the use of the Ovo application showed that there was student interest in switching to using E-Payment. This is supported by the various benefits provided by E-Payment for its users, such as promotions, providing convenience in transactions, saving payment time so that it becomes efficient, and providing offers in the form of discount vouchers and cashback. This study certainly has weaknesses because it only uses ten respondents.

The next study is a study by Wijaya (2023). The purpose of this study is to explain the perceptions of students in Jakarta towards buying and selling activities using the electronic payment method. The data collection method used is a qualitative method using informants to obtain a lot of information needed efficiently and can also exchange ideas or compare events found in other subjects by distributing questionnaires to 20 informants, where the informants are university students in the city of Jakarta and its surroundings. The results of the study stated that electronic payment showed (77.67%) of the expected score (100%) and showed that this electronic payment innovation was warmly welcomed and loved by the people of Jakarta.

With several previous studies mentioned, it is necessary to conduct further research with the aim of explaining the influence of e-payment on payment transaction activities based on the perceptions of students in Jayapura City.

2. LITERATURE REVIEW

Payment

According to Luckandi (2018) payment is an agreement between two or more parties to exchange one value for another value. The definition of payment according to Law No. 23 Article 1 (1999: 6) states that: "Payment includes a set of rules, institutions, and mechanisms used to transfer funds to fulfill an obligation arising from an economic activity." Meanwhile, according to Sahabuddin et al., (2023) Payment is a transfer of funds made to fulfill an obligation arising from economic activities through a set of rules, institutions, and mechanisms used.

E-Payment

According to Ming-Yen Teoh et al., (2013 in Wijaya, 2023) Electronic payment is a payment model that makes it easy and offers convenience to its users in making payment transactions. Users only need to make transactions by utilizing the internet, namely online, without having to meet or come far to meet the seller. Electronic payment is a representative of all non-cash payments, which are also interpreted as electronic payment transactions between business actors, buyers and sellers using savings accounts via the internet or electronic network. Electronic payment is currently used for long-distance transactions such as online shopping, along with the growing use of the internet and the increasing number of e-commerce, electronic payment is a solution that is present to replace the old payment transaction tools. Included in electronic payments are ATMs, e-money, internet banking, credit cards, debit, mobile payments, mobile banking. Meanwhile, according to Gaol (2012, in Nugroho, 2022), a special electronic payment system (e-payment) has been developed to be able to handle payments for goods electronically via the internet. Electronic payment systems for credit cards, digital cash, digital purchase total accumulation systems, stored value payment systems, peer-to-peer payment systems, electronic checks, and electronic bill payment systems. According to Silalahi et al., (2022) the e-Payment system tried by 3 important consumers is:

- a. Client or Consumer Every internet consumer can be considered as a potential consumer. Therefore, it is very important to create a method to ensure trust and security in the e-Payment transaction method.
- b. Merchant or Trader Trader is a consumer who sells his goods (products or services) to consumers and conducts business using e-Payment. In this case, the business method on e-Payment must be safe so that all consumers trust and are willing to carry out transactions.
- c. Bank or Payment Gateway or Trust Central Authority acts as a third party intermediary which is commonly used by a financial institution to handle, validate and authorize transactions attempted by consumers and merchants via e-Payment.

3. METHOD

The type of research used is a quantitative research method with the research population being students in Jayapura city. The research was conducted online using Google Form in distributing questionnaires to 100 students in Jayapura city because according to Hair et al., (2010, in Simatupang, 2024) a good sample size ranges from 100

- 200 respondents with the aim of maximizing reach to students in Jayapura city. The time needed in this study is one month starting in Januari 2025. According to Hajjar (2018, in Simatupang, 2024) the variables of the research will be tested for their instruments to obtain valid results with a correlation limit of ≥ 0.30 , and also according to Eisingerich & Rubera (2010, in Simatupang, 2024) reliability with a cronbach's alpha limit of ≥ 0.70 . According to Bevans (2020, in Simatupang, 2024) in order to obtain the results of the equation of the regression direction coefficient, simple regression is carried out using $Y = \beta_0 + \beta_1 X + e$, as well as partial hypothesis testing in order to obtain answers to the hypotheses given in this study in the form of:

- a. H0: That there is no positive and significant influence of e-payment on student payment transaction methods in Jayapura City.
- b. H1: That there is a positive and significant influence of e-payment on student payment transaction methods in Jayapura City.

The concept of thinking of this hypothesis can be seen in the following image:



Figure 1. Research thinking framework

4. RESULTS

Description of Research Respondents

Table 1. Respondent description

Respondent Data	Respondent Description	Amount	%
Gender	Man	55	37.9%
	Woman	90	62.1%
Respondent Age	18-25 Years Old	142	97.9%
	>25 Years Old	3	2.1%
Respondents' Source of Income	Parents	119	82.1%
	Work	26	17.9%

Source : Researched Data Processed, 2025

Table 1 shows the results for the description of respondents from this study that the most dominant gender in the use of e-payment is women with a total of 90 people or 62.1% of the total sample of 145 people, this is in accordance with the opinion of Burhan (2020, in Simatupang, 2024) that women make more transactions in a year, namely 26 transactions in a year compared to men who only have 14 transactions, but in terms of

transaction value, men spend 83% more in one transaction than women. For the age of respondents who dominate the most is the age of 18-25 years as many as 142 people or 97.9%, this is in line with the opinion of Mardiansyah (2022, in Simatupang, 2024) that users of digital wallet applications contribute 87%, most users are in the 18-24 age group. The most dominant source of income is income from parents with a total of 119 people or 82.1%.

Validity Test

Table 2. Validity test results

Variables	Item	r-Count	r-Table	Information
E-Payment	X1	0.732	0.162	Valid
	X2	0.670	0.162	Valid
	X3	0.719	0.162	Valid
	X4	0.615	0.162	Valid
	X5	0.725	0.162	Valid
Payment	Y1	0.687	0.162	Valid
Transactions	Y2	0.733	0.162	Valid
	Y3	0.733	0.162	Valid
	Y4	0.733	0.162	Valid
	Y5	0.727	0.162	Valid

Source : Researcher Data Processed SPSS 26, 2025

From the results of the validity test in table 2, it can be seen that all statement items have an r-count figure above the r-table which is 0.162, which means that it can be concluded that the results of the validity test show that all statement items are valid.

Reliability Test

Table 3. Reliability test results

Variables	Cronbach's Alpha Value	Cronbach's Alpha Limits	Criteria
E-payment	0.793	0.7	Reliable
Payment Transactions	0.834	0.7	Reliable

Source : Researcher Data Processed SPSS 26, 2025

Table 3 for the reliability test shows the results of Cronbach's Alpha e-payment 0.793, payment transactions 0.834., while the required Cronbach's Alpha limit is 0.70. This means that Cronbach's Alpha > Cronbach's Alpha limit, then it can be concluded that the criteria for the e-payment and payment transaction variables have reliable criteria.

Coefficient of Determination

Table 4. Coefficient of Determination

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	0.755a	0.570	0.567		2,514

Predictors : (Constant), E-Payment

Dependent Variable : Payment Transaction

Source : Researcher Data Processed SPSS 26, 2025

Table 4 shows the R Square value for the results of e-payment against payment transactions, the result is 0.570 or 57%, so it can be concluded that the ability of e-payment variables to payment transactions is 57%, while the remaining 43% is not a variable explained in this study such as price, product quality, service quality and several other variables. For the correlation coefficient or R value, the value is 75%, meaning that there is a strong correlation coefficient from e-payment to payment transactions.

Regression Equation

Table 5. Regression equation

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,491	1,044	0.755	3,343	,001
	E-payment	0.786	0.057		13,774	,000

Dependent Variable : Payment Transaction

Source : Researcher Data Processed SPSS 26, 2025

Table 5 shows the results for the regression equation $Y = 3.491 + 0.786X$, this means that if the constant is 3.491 that when the e-payment value is 0, then the value of the payment transaction is 3.491 and the value for the regression coefficient is 0.786. The explanation that can be given is that when adding 1 to the e-payment value, the value for the payment transaction variable increases by 0.786. Furthermore, the results of the equation show the results of a positive direction coefficient from e-payment to payment transactions. The positive e-payment coefficient to payment transactions indicates that the application of e-payment increases the likelihood that students will carry out e-payment

method payment activities. In this context, a positive coefficient refers to a positive relationship between the use of e-payment and payment transactions, which means that the more students use the e-payment method, the more likely students are to decide to make payment transactions with that method.

Hypothesis Testing

Table 6. Hypothesis testing

Coefficients^a

Model		t	Sig.
1	(Constant)	3,343	,001
	E- payment	13,774	,000

Dependent Variable : Payment Transaction

Source : Researcher Data Processed SPSS 26, 2025

For Table 6 against the hypothesis test, it was found that the t-value was 13.774 and the significance was 0.000. To obtain the hypothesis results, the first step was to find the value of the degrees of freedom ($df = (n-2) = 200 - 2 = 198$: 1.972, then carried out with the process of the t-value of $13.774 > t$ table 1.972, and also the significance value of $0.000 < \alpha$ 0.005. These results indicate that the H1 hypothesis is accepted because e-payment is able to influence payment transactions positively and significantly. E-payment has great potential to influence payment transactions positively and significantly. The use of e-payment can provide convenience, speed and security in the payment process, thereby improving the consumer purchasing experience. In addition, the application of the e-payment method can also open up purchasing channels, especially in the context of online trading where consumers can easily make purchases anytime and anywhere. Therefore, in terms of effectiveness, efficiency and convenience provided by e-payment, it can be an important factor in increasing student purchasing activities in this case the use of payment transaction methods.

5. DISCUSSION

The Effect of E-payment on Payment Transaction

According to Dehghan & Haghighi (2015, in Suryanto et al., 2022) e-payment is a payment method in a transaction using electronic media. This payment method does not require paper money or checks, making it easier for users to make transactions. According to Lestari et al., (2021) e-Payment services play an important role in the buying and selling transaction process on the e-Marketplace, especially in payment transactions, according to Gultom et al., (2023, in Simatupang, 2024) with electronic payments, consumers can pay quickly and easily without having to carry cash or go to a physical place to make payments, each company must establish security and trust appropriately and appropriately in the e-payment system and according to Novalianti et al., (2019) This encourages people not to use paper money, thus in line with Bank Indonesia's goal of "Less Cash Society". In using the e-payment method, it provides an advantage in minimizing the risk of losing cash or receiving counterfeit money and the e-payment method can also result in dependence on internet connections and become a challenge for students who do not understand the use of the e-payment method. In this case, it is necessary to increase digital literacy for students.

According to Simatupang (2024) High levels of security can also increase consumer confidence and encourage them to make purchases. Electronic payment service providers often offer special promotions and discounts to their users so that these benefits provide positive incentives for consumers to use electronic payments and choose certain products or services. According to Rabiah et al., (2020) The security and protection system in the e-payment system is the main thing that consumers consider when making transactions, when these two things are met, consumers will not hesitate to make payments. All forms of risk must be avoided because they will have an impact on the lack of consumer confidence. According to Nurohman et al., (2022) Some of the obstacles for people in using digital transactions such as the lack of public knowledge in operating digital payment applications; transaction needs in rural areas and areas far from urban areas; the environment and supporting facilities for digital transactions; and the risk of cybercrime and fraud cases. According to Silalahi et al., (2020) If the electronic payment system is considered safe and reliable, consumers will feel more comfortable making online transactions, the appropriateness of electronic payments can increase the number of consumers using electronic payments. The level of e-payment security and trust from consumers in this case students are very important because both of these things influence

each other and are the main keys to increasing e-payment users in the digital payment system. Trust from prospective consumers, which are students, in using the e-payment method in making payment transactions is obtained from increasing good digital literacy.

6. CONCLUSION

The e-payment method has become one of the payment transaction methods that is currently experiencing increasing use in all sectors of economic activity, especially in payment transaction activities among students in Jayapura City. The results of the study show that the e-payment method is able to influence student payment transaction activities in Jayapura City positively and significantly, in the sense that with the e-payment method, students in Jayapura are much freer and much more motivated to make purchases in this case referring to payment transaction activities that are more in line with a practical lifestyle and are integrated with today's digital lifestyle.

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