E-Payment in The Eyes of Students: Analyzing the Impact of Trust, Risk, Benefits and Income

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ARTICLE INFO	ABSTRACT
	This research aims to determine the influence of a person's beliefs, risks, benefits, and income on interest in using e-payment, especially for Politeknik Negeri Batam students. This is quantitative research that uses non-probability sampling and collects respondent data using a Google Drive form, which will then be processed using IBM SPSS Statistics 23. The population of this research is active Politeknik Negeri Batam students who have used online payment methods or e-payments, with a total of 97 samples. The results of the tests carried out in this research show that trust has a negative effect and does not have a significant effect on a person's interest in using e-payment. Risk has a positive and significant effect on a person's interest in using e-payments. Benefits have a positive and significant influence on a person's interest in using e-payment. Income has a positive and significant effect on a person's interest in using e-payments.

INTRODUCTION

Technology and information are fields characterized by rapid and boundless development. With the current state of technology and information, they have a significant impact on the global economy. The amalgamation of technology and information within the global economy has given rise to the Fourth Industrial Revolution, commonly referred to as Industry 4.0.

This fusion of technology and information with the global economy has a profound influence on the realms of trade and business. One notable outcome of this amalgamation is the emergence of innovative payment models aligned with the advancements in communication and information technologies. The widespread availability of the internet enables rapid information dissemination across global networks. Applications utilizing the internet have proliferated across various sectors, impacting human activities in politics, social interactions, education, culture, as well as economic and business domains. Internet-enabled applications have brought about several changes in human performance.

Activities involving online transactions are commonly referred to as electronic commerce (e-commerce). E-commerce is categorized into two primary types: business-to-business e-commerce (B2B e-commerce) and business-to-consumer e-commerce (B2C e-commerce). B2B e-commerce dominates due to its higher transaction values; however, this doesn't diminish the significance of B2C e-commerce, which has its own substantial market share. The rapid growth and ease

of acceptance of e-commerce among the public are largely attributed to a key feature it offers: convenient online payment methods, referred to as e-payment.

E-payment emerged alongside the rapid expansion of e-commerce. It was introduced as a novel product aimed at facilitating transactions, leading various e-commerce companies to develop their e-payment systems. For instance, PT Telekomunikasi Selular introduced T-Cash, followed by Indosat and XL Axiata. During the 2010s, various brands of mobile payment (m-payment) services, banks, and application developers entered the field.

E-payment presents several advantages, including fast transaction processing and cost-effectiveness. Additionally, e-payment supports green technology by reducing the need for physical currency. Several factors influence an individual's inclination to use e-payment, including their perception of trust, perceived risks, benefits, and income levels. Trust is particularly fundamental when conducting online business transactions, as it is considered a key factor in ensuring that the exchange of goods and services between sellers and buyers culminates in customer satisfaction (Yousafzai, Pallister, & Foxall, 2003).

Trust is perceived as the consumer's belief in the fulfillment of their expectations regarding product or service performance and their overall satisfaction (Bolton, 1998). Satisfaction among consumers can mitigate the apprehension associated with using e-payment methods, increasing confidence in transactions and consequently boosting e-payment adoption. Trust is the belief of an individual or organization in the reliability, durability, and integrity of others in a relationship and the belief that their actions are in the best interest and will yield positive results for the trusted party (Peppers & Rogers, 2004).

The transition from physical payments to e-payment may initially appear unfamiliar to the wider public, akin to the early days of introducing debit or credit card payments. People tend to be concerned about the potential risks associated with e-payment methods. However, it's important to recognize that all payment methods entail some level of risk, which essentially measures the extent of deviation between the expected return and the actual return (Hanafi, 2006). Risk is a perception of ambiguity and undesirable consequences associated with a product or service. Risk represents uncertainty that can lead to losses or opportunities in business processes and daily activities (Prowanta, 2018).

People are more likely to switch from their traditional payment methods to e-payment when they perceive the benefits offered by the new method. Benefits are defined as the belief in the advantages obtained; this is the stage at which users believe that a specific technology or system will enhance their performance in their activities (Davis, 1989). Benefits are defined as an individual's level of confidence in a specific technology's ability to enhance their performance (Rianto, 2007). If the benefits of e-payment align with users' confidence that it can enhance their performance, e-payment becomes their primary choice for transactions. Conversely, if individuals are uncertain about a particular method, they are less likely to adopt it.

Income is a significant factor influencing an individual's decision to use e-payment. Higher income levels serve as a primary motivator for e-payment adoption.

When individuals earn above-average incomes, it often leads to an increase in their lifestyle preferences, making them more inclined to use e-payment as a means of facilitating their daily activities. Income refers to the gross inflow of economic benefits resulting from a company's normal activities during a specific period. This inflow increases equity and does not originate from contributions by investors (Kuswandi, 2015).

This research is a replication of a study by ANS Putri (2019) titled The Influence of Trust, Risk, Benefits, and Income on the Intention to Use E-Payment Among Students in Yogyakarta. The key difference in this study lies in the population and sample used. The researchers focus on the student population of Politeknik Negeri Batam to assess the influence of trust, risk, benefits, and income on the inclination to use e-payment. Considering the financial limitations that students often face due to their allowance, the study aims to determine whether this factor influences students in their use of e-payment. Additionally, given the geographical characteristics of Batam as an island region, distant from the central trade hubs of Indonesia, particularly Java, this study investigates students' perceptions of e-payment based on their experiences. Data collection in this research is conducted through the distribution of questionnaires to students majoring in Management and Business at Politeknik Negeri Batam. Given the background information provided, it is necessary to examine the views of Politeknik Negeri Batam students regarding e-payment as a transaction method.

METHOD

The type of data used in this research is quantitative data, which consists of values or scores obtained from the responses to an online questionnaire that will be distributed to students. The source of data for this research is primary data, which is information collected directly from the primary source through the distribution of questionnaires to the students.

The research instrument is a tool used for data collection to measure natural or social phenomena that are being observed (Sugiyono, 2013). In this study, the data collection method employed is a questionnaire. A questionnaire is a data collection technique in which the researcher provides a written list of questions or statements for respondents to answer (Sugiyono, 2013). In this research, the researcher will distribute the questionnaire through Google Forms.

The questionnaire is divided into two parts. The first part contains questions related to the personal profiles of the respondents, such as name, gender, year of enrollment, and the academic program of the Politeknik Negeri Batam students. The second part contains statements to be filled out by the students. In this research, the researcher uses a Likert scale to ensure the accuracy of the data. The Likert scale is employed to measure the attitudes and opinions of individuals or groups of people towards social phenomena (Sugiyono, 2013).

RESULTS AND DISCUSSIONS
Respondent Character
Researchers grouped respondents into several points, namely gender, income/pocket money earned in one month, study program taken, and length of time using e-payment as a transaction tool.

<div align="center">Table 1. Respondent Character</div>

By Gender		
Female	65	67%
Male	32	33%
Based on Study Program		
Accounting	9	9%
Managerial Accounting	53	55%
Applied Business Administration	27	28%
Logistic and International Trade	8	8%
By Age		
18-20	0	0%
21-23	73	75%
24-26	24	25%
>26	0	0%
Based on Income/Allowance		
< Rp 1.000.000	24	25%
Rp 1.000.000–Rp 1.500.000	20	21%
Rp 1.500.000–Rp 2.000.000	17	18%
> Rp 2.000.000	36	37%
Based on Time of Use		
<1 tahun	6	6%
1-3 tahun	22	23%
4-5 tahun	30	31%
>6 tahun	39	40%

<div align="center">Source: Primary Data, 2023</div>

Data Quality Test
The validity test in this study used Pearson Correlation, which calculates the correlation between the scores of each question and the total score. This validity test has a significance level of 0.05, with a total of 97 respondents. The critical value (r-table) used is 0.195. A questionnaire item is considered valid if the calculated "r" value is greater than the critical value (r-table).

To assess the level of consistency of the tested instrument, a reliability test is conducted. Reliability is a requirement for a questionnaire to be considered valid. The test used in this research for reliability is Cronbach's Alpha. This test is performed by correlating each question/statement with another within each variable, with a Cronbach's Alpha value of ≥0.60 to be considered reliable or consistent.

Table 2. validity and reliability test results

Variables	Indicators	Correlation Coefficient	Sig 2 tailed	Alpha Cronbach	Critical Value
Trust	Continue to pay using e-payment	.790	.000	.757	.60
	Confident about e-payment	.677	.000		
	The popularity of e-payment	.795	.000		
	E-payment providers offer good service	.786	.000		
Risk	Risk considerations	.819	.000	.852	.60
	Privacy risks	.819	.000		
	Special risks	.877	.000		
	Risk of losing money	.824	.000		
Benefit	Ease of transactions	.838	.000	.794	.60
	Transaction speed	.812	.000		
	Transaction efficiency	.731	.000		
	Transaction premium	.764	.000		
Income	Desire because of income	.854	.000	.807	.60
	Consumption of goods and services	.872	.000		
	Total Income	.844	.000		
Interest	Benefits of e-payment	.830	.000	.779	.60
	Payment insights	.863	.000		
	Ease of use	.818	.000		

Source: Primary Data, 2023

Based on the validity test results from the table above, it explains that the questionnaire used to measure trust, risk, benefits, income and interest in transactions using e-payment shows validity. In another hand, based on the table, it can be concluded that each instrument in this study meets the criteria to be considered reliable and consistent, as the value for each instrument is above 0.60. In other words, their reliability levels are relatively high. Therefore, the questions in the questionnaire that was distributed can be used as instruments in further research.

Classic Assumption Test
Before testing multiple regression analysis on the research hypothesis, it is first necessary to test the classical assumptions on the data being processed.

Based on the test results, it is explained that the significance value of Asiymp (2-tailed) is 0.382, which means the value is greater than 0.05. Based on decision-making in the Kolmogorov-Smirnov test, it can be concluded that the data is normally distributed.

From the test results, it can be explained that each independent variable in this study does not have multicollinearity. This can be seen in the tolerance value column, which has a value of more than 0.10 and a VIF of less than 10.

Based on the test results, the heterocadicity test carried out in this study had a value of more than 0.05. This indicates that there is no sign of heteroscedasticity.

Coefficient of Determination Test

The coefficient of determination (R^2) test is conducted to determine the extent of the influence of independent variables on the dependent variable. The R^2 test is used to assess how well the independent variables in this study can explain the dependent variable. The R^2 value falls between 0 and 1 ($0 \leq R^2 \leq 1$).

Table 3. Coefficient of Determination Results

Model	R	Adjusted R Square
1	.812	.645

Source: Primary Data, 2023

Based on the above, the results of the regression equation estimation in the regression analysis show a coefficient of determination (R^2) of 0.645 and a correlation coefficient (R) of 0.812. The R^2 value in this study indicates that the accuracy level of the functional relationship is 0.645. This means that statistically, the independent variables of trust, risk, benefits, and income contribute consistently to the interest in using e-payment among students in the Management and Business department at Politeknik Negeri Batam.

Multiple Linear Regression Test

The results of the multiple linear regression analysis in this study can be observed in table below:

Table 4. Multiple Linear Regression Results

Model	Unstandardized Coefficients		Sig.
	B	Std. Error	
(Constant)	1.064	.798	.186
Trust	-.017	.081	.832
Risk	.305	.065	.000
Benefit	.265	.070	.000
Income	.164	.077	.035

Source: Primary Data, 2023

Based on the results in Table 20, the formula used to determine the influence of trust, risk, benefits, and income on the interest in using e-payment is as follows:

Interest = 1.064 - 0.017 (Trust) + 0.305 (Risk) + 0.265 (Benefits) + 0.164 (Income)

This formula represents the relationship between the independent variables (trust, risk, benefits, and income) and the dependent variable (interest in using e-payment) based on the regression analysis. The coefficients (B) associated with each independent variable indicate their respective impact on the dependent variable. The significance levels (Sig.) help determine the statistical significance of these relationships.

Hypothesis Test

The t-test conducted in this study uses the comparison method between the T-table and T-critical values with a significance level of 0.05 (α=5%) and a degree of freedom (df) of 94, calculated by subtracting the number of statements from the number of variables. Therefore, the critical t-value used is 1.98552. Here are the results of the t-test in this study:

Table 5. T-Test Results

Model	t	Significant
Constant)	1,333	,186
Trust	-,212	,832
Risk	4,712	,000
Benefit	3,774	,000
Income	2,140	,035

Source: Primary Data, 2023

Based on table, it can be concluded that:
- The constant (intercept) does not have a significant effect on the interest in using e-payment (t = 1.333, Significant. = 0.186).
- Trust does not have a significant effect on the interest in using e-payment (t = -0.212, Significant. = 0.832).
- Risk has a significant effect on the interest in using e-payment (t = 4.712, Significant. = 0.000).
- Benefits have a significant effect on the interest in using e-payment (t = 3.774, Significant. = 0.000).
- Income has a significant effect on the interest in using e-payment (t = 2.140, Significant. = 0.035).
- These results indicate that trust does not significantly affect the interest in using e-payment, but risk, benefits, and income all have a significant impact on the interest in using e-payment.

Discussions

Based on the results of hypothesis testing conducted, it was found that the t-value is less than the t-table value, with 0.212 < 1.985, and the probability value is greater than the significance level, with 0.832 > 0.05. This result indicates that trust does not significantly influence a person's interest in using e-payment, thus, the first hypothesis is rejected. Due to the rapid advancement of information technology and

the widespread use of the internet, trust is no longer a crucial factor in influencing a person's interest in using e-payment. The majority of e-payment users are individuals in need of a product or service, making the benefits derived from using e-payment their primary concern. These findings are not in line with the research conducted by Putri (2019), Rahim (2017), Yogananda (2017), and Listianti & Saputro (2018), which state that trust has a positive and significant impact on the interest in using e-payment. However, this study aligns with the research carried out by Shomad & Purnomosidhi (2012), Hong & Cho (2011), and Kim, Ferrin, & Rao (2007), all of which have similar findings that trust does not affect a person's interest in using e-payment.

Based on the results of hypothesis testing, it was found that the t-value is greater than the t-table value, with 4.712 > 1.985, and the probability value is less than the significance level, with 0.000 < 0.05. This indicates that risk significantly influences a person's interest in using e-payment, hence the second hypothesis is accepted. According to the obtained test results, risk perception plays a crucial role in a person's interest in using e-payment. Common risks experienced by individuals when conducting online transactions include security concerns and uncertainty regarding the products/services ordered. As e-payment service developers continually enhance their systems, they indirectly reduce the risks faced by users during online transactions. These results are in line with the research by Putri (2019) and Yogananda (2017), which state that risk significantly affects the interest in using e-payment.

Based on the results of hypothesis testing, it was found that the t-value is greater than the t-table value, with 3.774 > 1.985, and the probability value is less than the significance level, with 0.000 < 0.05. This indicates that the benefits significantly influence a person's interest in using e-payment, and thus the third hypothesis is accepted. It can be concluded that the more benefits a user derives, the more it influences their interest in using e-payment, as greater perceived benefits reduce user dissatisfaction. Therefore, e-payment service providers need to maintain and sustain the benefits received by users to ensure user loyalty, intensity, and attract new e-payment users. These findings align with the research by Putri (2019), Aritonang & Arisman (2018), Mentari (2018), and Yogananda (2017), which also state that benefits significantly affect the interest in using e-payment. This study is also in line with one of the TAM (Technology Acceptance Model) concepts, Perceived Usefulness, which explains the benefits users gain when using technology.

Based on the results of hypothesis testing, it was found that the t-value is greater than the t-table value, with 2.140 > 1.985, and the probability value is less than the significance level, with 0.035 < 0.05. This indicates that income significantly influences a person's interest in using e-payment, hence the fourth hypothesis is accepted. Income is one of the factors that can influence a person's level of consumption. Individuals with higher income levels tend to be interested in using e-payment because higher income leads to increased consumption. Therefore, income is an essential factor in determining a person's interest in using e-payment. These results are in line with the research by Putri (2019) and Mentari (2018), which state that income significantly affects the interest in using e-payment.

CONCLUSIONS
Conclusion

The research findings suggest that trust does not significantly influence a person's interest in using e-payments. This implies that in today's rapidly advancing technology and internet-driven world, trust may no longer be a crucial factor influencing e-payment adoption. People's primary concern appears to be the benefits derived from using e-payments.

The research indicates that risk has a significant impact on a person's interest in using e-payments. Users' perception of risks associated with online transactions, particularly in terms of security and uncertainty about ordered products or services, plays a critical role in their e-payment adoption.

The study shows that the perceived benefits significantly influence a person's interest in using e-payment. The more benefits users perceive, the greater their interest in adopting e-payment. To maintain user loyalty and attract new users, e-payment service providers must focus on delivering and sustaining these benefits.

Income is identified as a significant factor influencing a person's interest in using e-payments. Individuals with higher incomes tend to be more interested in e-payment adoption, as increased income levels correlate with higher consumption patterns.

In summary, trust may not be the primary driver for e-payment adoption, while factors like risk perception, perceived benefits, and income levels significantly impact users' interest in using e-payment. These findings align with some previous research but contradict others, indicating the complex and evolving nature of e-payment adoption.

Recommendations

Based on the research findings, several recommendations can be made. First and foremost, e-payment service providers should prioritize risk mitigation by enhancing security measures and offering guarantees for online transactions. Emphasizing the benefits of e-payment, such as convenience and cost savings, should be a key marketing focus. To attract a diverse user base, it's crucial to target users across various income levels. Educational initiatives can play a significant role in informing users about the safety measures in place.

Continuous monitoring and improvement of e-payment systems, as well as collaboration with trusted institutions, can further boost user confidence. Leveraging mobile and online platforms, conducting user awareness campaigns, ensuring regulatory compliance, and staying innovative through market research are essential steps for e-payment providers. These recommendations collectively aim to enhance the trustworthiness and appeal of e-payment systems, ultimately expanding their user base and improving user satisfaction.

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