

Research Article

A Study on Factors Affecting the E-Money Adoption in Aceh

M Rasyidin^{1*}, Sri Hartati², Nova¹, Zulfikar³, M Saleh⁴ and Muhammad Rizal⁴

¹ Department of Retail Management, Universitas Almuslim, Bireuen, Aceh, Indonesia, 24261

² Department of Management, Sekolah Tinggi Ilmu Manajemen Indonesia, Meulaboh, Indonesia, 23617

³ Department of Economics Education, Universitas Almuslim, Bireuen, Aceh, Indonesia, 24261

⁴ Department of Development Economics, Universitas Almuslim, Bireuen, Aceh, Indonesia, 24261

*Corresponding Author: m.rasyidin79@gmail.com | Phone Number: +6281377447797

ABSTRACT

This study aims to investigate the impact of understanding and perceived usefulness on the interest in using e-money in Aceh Province. The research employs a quantitative approach, targeting e-money users in the region. A purposive sampling technique was utilized, resulting in a sample size of 133 participants, selected via the Unknown Populations method. Data were collected via questionnaires distributed through Google Forms. The analysis involved validity, reliability tests, normality tests, multicollinearity tests, heteroscedasticity tests, and regression analysis tests (ANOVA). The model applied was multiple linear regression analysis. Findings indicate that understanding has a positive and significant effect on the interest in using e-money, while perceived usefulness also positively and significantly influences this interest.

Keywords: Understanding; Usefulness; E-Money; Customers

1. INTRODUCTION

The rapid development of information technology in this day and age has made people's lifestyles change and become more dependent on technology. But on the positive side, it can make things easier to be more effective, efficient, and economically considered compared to the lifestyle before the existence of information technology. Information technology has been widely used in daily activities in society. This is indicated by the presence of various kinds of information technology facilities developed for the community. The emergence of smartphones is strong evidence of technological sophistication as a form of creativity and innovation created by humans in this modern era. The impact of this information technology penetrates into all sectors, including the financial sector (Rudianti & Mesaroh, 2023). According to Kasmir in Azizi (2019) in the banking world, technological developments have also given their own color. One proof of technological development is the emergence of electronic payment instruments. Payment instruments have changed, starting from cash in the form of conventional metal and paper; now they have developed in a more practical form called e-money. In general, people are more familiar with banknotes as a means of making payments. The use of money as a means of payment is a basic need for almost every community activity (customer activity).

E-Money is a non-cash payment instrument other than credit cards and debit cards. E-money also offers advantages over debit and credit cards, namely providing convenience, speed, and efficiency. E-money is featured as a payment instrument intended for small-value transactions. In its development, e-money emerged as a complementary non-cash payment instrument that has been used there. E-money can take the form of prepaid cards (such as Flazz BCA, Indomaret Card, and BRIZZI) or e-wallets (such as T-Cash from Telkomsel, Dompot Indosat, and XL Cash from XL). E-money is also launched in collaboration with certain institutions, so that an agency's ID card can also function as e-money (Wulandari, Soseco, & Narmaditya, 2019). E-money is often understood as a system of accounting for the right to public and private currency. Today, such systems use electronic storage media. But it should be noted that such systems, as well as cashless payments, date back thousands of years. As such, modern electronic systems are simply advanced versions of thousands of years old technology. When investigating electronic money from that perspective, it can be said that the modern means of accessing bank accounts—bank payment cards and internet banking—are not electronic money, as these systems only allow operations with real money deposited in bank accounts. In other words, these products only provide a means of access to real money (V.Vlasov, 2017). Based on Bank Indonesia Regulation No.11/12/PBI/2009 dated April 13, 2009 on e-money (Electronic Money), what is meant by e-money is a payment instrument that fulfills the following elements: 1.) Issued based

on the value of money paid in advance by the holder to the issuer; 2.) The value of money is stored electronically in a medium such as a server or chip; 3.) Used as a means of payment to merchants who are not electronic money issuers; and 4) The value of electronic money deposited by the holder and managed by the issuer is not a deposit as referred to in the laws governing banking (Fauziah & Nurhasanah, 2020).

In Indonesia, e-money was legalized on April 13, 2009 in Bank Indonesia Regulation Number 11/12/PBI/2009 concerning e-money (Electronic Money). The number of e-money circulating in Indonesia has recently increased. Based on statistical data, the amount of electronic money in circulation has increased from 2015 to 2016, especially from 2016 to 2017 which experienced a very drastic increase (Harjanto, 2019). E-money has several advantages over other electronic payment instruments, namely prioritizing speed, convenience, and efficiency in transactions. As a relatively new payment instrument in Indonesia, electronic money aims to reduce the growth rate of cash usage. The development of e-money is able to create a less-cash society trend, which is the behavior of people who use non-cash transactions by utilizing the convenience offered by these transaction tools. Although not yet widely used as the main transaction tool, electronic money has the potential to replace the function of cash as the main payment tool. Holders of electronic money must have a type of electronic money according to their needs because there are many types of electronic money circulating in Indonesia that offer different facilities and features. E-money is one of the non-cash payment tools that can make life easier. However, there are still many people who do not understand the function and how to use this payment tool. One of the reasons why people still do not use electronic money is because they think that electronic money is the same as other types of cards, such as debit or credit cards, even though it is clearly different. E-money can be used without using a PIN or other personal identification, while debit and credit cards still use a pin input system in transactions. This is clearly different from e-money, which is certainly much easier (Mentari, Setiawina, Budhi, & Sudirman, 2019). In an effort to increase interest in using e-money, the government, banks, and issuing companies need to know several factors that influence public interest in using e-money.

2. RESEARCH METHOD

This research uses a quantitative approach. This approach is used to examine the symptoms of a particular population or sample by using research instruments as statistical data collection. The type of research used is causal comparative, which is a type of research that aims to test the effect of the independent variable on the dependent variable. This research was conducted on e-money voters in the Aceh Province Region. The research implementation time starts from December 2023 to January 2024. This research was conducted by distributing questionnaires (questionnaires) to e-money owners in the Aceh Province Region using Google Forms. The population in this study are people in the Aceh Province Region who own e-money. The population size cannot be known with certainty. This is because each community can have more than one product considering its easy ownership and no account is needed. The sampling technique is using the Unknown Populations technique. The sample used in this study amounted to 133 respondents. The data collection technique used in this research is a survey using a questionnaire. The measurement scale used in this study is the Likert scale. Likert scale is a measurement scale with five response categories that range from "strongly agree" to disagree. The model used in this study is a multiple linear regression analysis model with the following formulation:

$$\text{E-money} = a + b_1 \text{ Understanding} + b_2 \text{ Usefulness} + e$$

Description where a represents a constant, b_1 and b_2 denote the regression coefficients, and e is the error term.

3. RESULTS AND DISCUSSION

3.1 Respondent Characteristics

Respondent's identity is a statement obtained from respondents in the form of questionnaire data distributed by writers containing age, level of education, gender and level of education of the community.

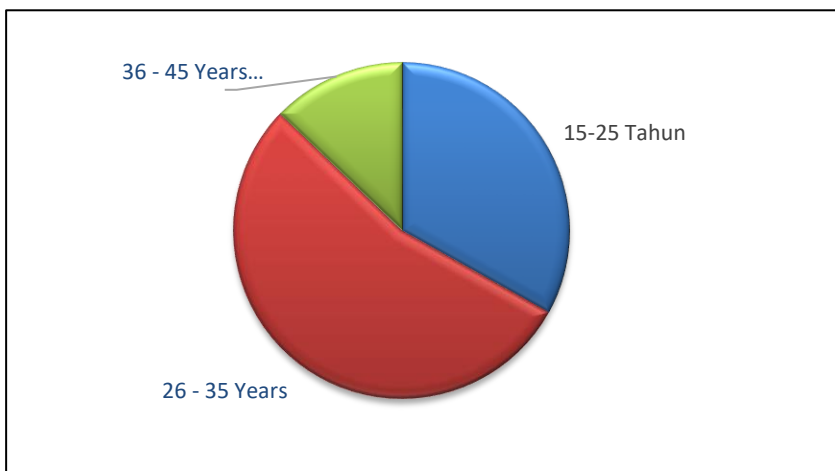


Figure 1. Gender

Based on Figure 1, it shows that the ages of respondents ranged from 15 to 25 years, with a total of 44 people, or 33%. Respondents aged between 26-35 years were 72 people, or 54% and those aged between 36 and 45 years were 17 people, or 13%.

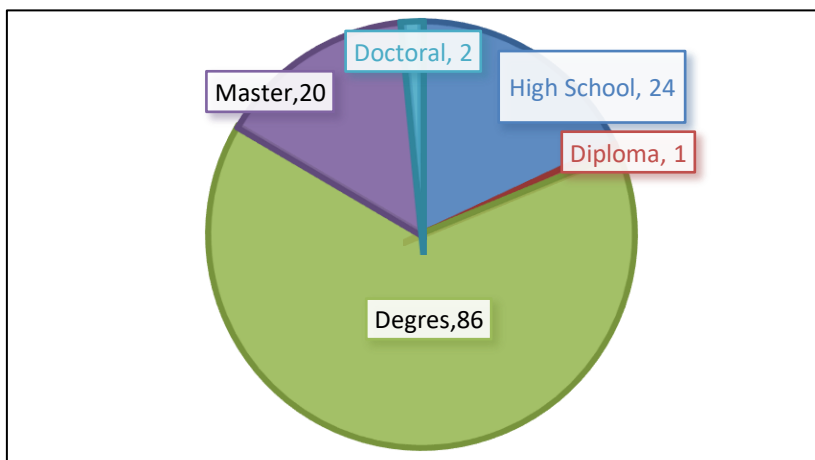


Figure 2. Education level

In Figure 2, the last level of education is 86 people, or 65%) are Bachelor (S1) graduates. There were 20 Masters (S2) graduates, or 15% and 2 Doctoral (Doctoral) graduates, or 1.5%. Meanwhile, there were 24 high school graduates, or 18% and 1 diploma (D III) graduate, or 18%..

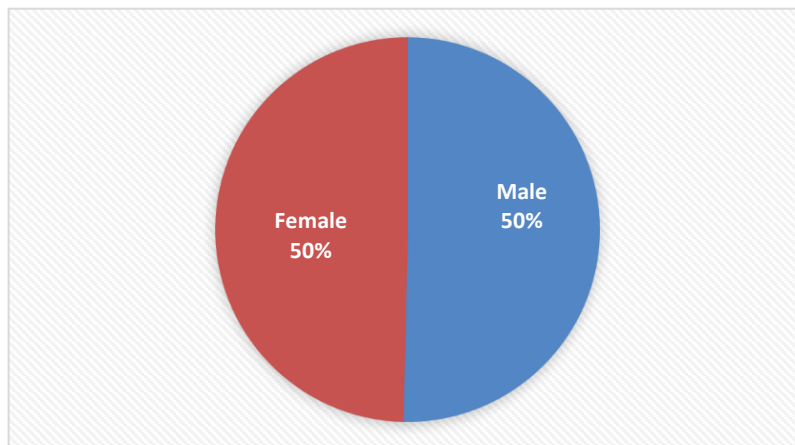


Figure 3. Gender

In **Figure 3**, the last type of man has 67 people, or 50%) and women, 66 or 50%.

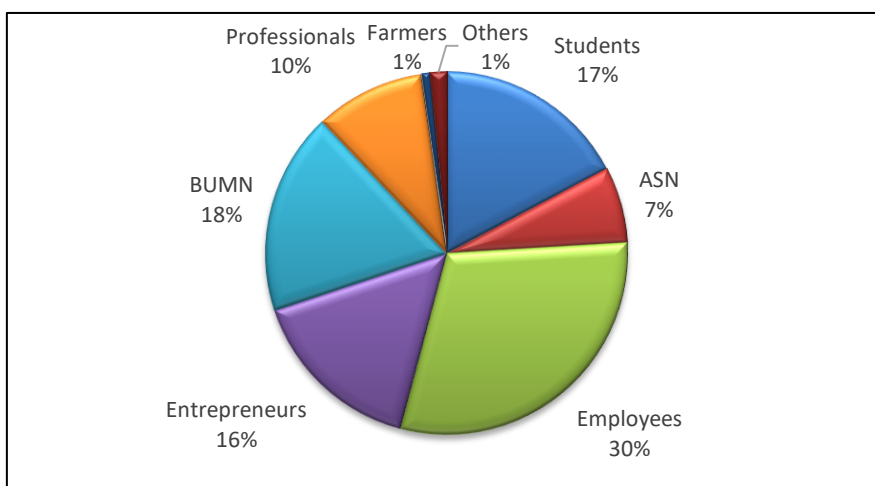


Figure 4. Work

Based on **Figure 4**, the work of respondents is dominated by employees, as many as 40 people, or 30%, who work as ASN, as many as 9 people, or 7%. Respondents who were still students had 23 people, or 17%, entrepreneurs had 21 people, or 16%, who worked in BUMN as many as 24 people or 18%, professional as many as 13 people or 10% and farmers as many as 3 people or 2%.

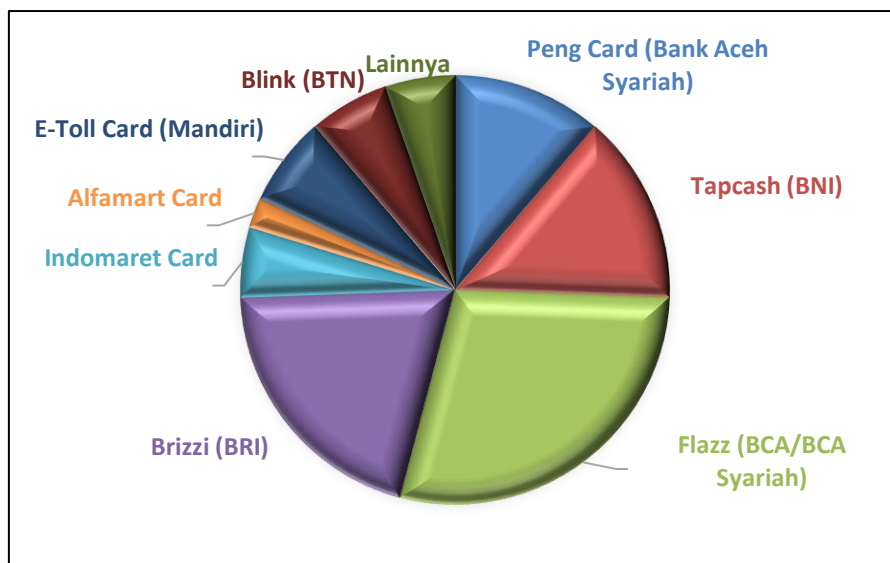


Figure 5. Types of E-Money

Based on **Figure 5**, the type of e-money used by 15 respondents or 11% uses Peng Card (BPD Aceh Syariah), 19 people or 14% use Tapcash (BNI). There are 38 Flazz (BCA Syariah) users or 39% and Brizzi (BRI) e-money users are 27 people, or 27%. Indomaret Card users are 7 people, or 21% and Alfamart users are 3 people, or (9%). Meanwhile, E-Toll Card (Mandiri) is 9 people, or 7%, and Blink BTN is 8 people, or 6% and the remaining 7 people, or 5.3% use other e-money.

3.2 Validity and Reliability Tests

Validity tests are used with the aim of determining the level of validity of an instrument or measuring tool. It is called valid if the instrument can be used to measure the thing that should be measured. The validity calculation results for each variable can be seen in the table below:

Table 1. Validity Test

Understanding		Usefulness		Customer Interest	
Question Items	R test	Question Items	R test	Question Items	R test
X _{1.1}	0.201	X _{2.1}	0.29	Y ₁	0.313
X _{1.2}	0.218	X _{2.2}	0.347	Y ₂	0.293
X _{1.3}	0.427	X _{2.3}	0.299	Y ₃	0.205
X _{1.4}	0.284	X _{2.4}	0.433	Y ₄	0.414
X _{1.5}	0.298	X _{2.5}	0.330	Y ₅	0.432
X _{1.6}	0.381	X _{2.6}	0.236	Y ₆	0.429
-	-	X _{2.7}	0.438	Y ₇	0.380
-	-	X _{2.8}	0.286	Y ₈	0.414

The r table value is 0.169, while the calculated r value for questions on each of the variables above is > r table. The calculated r value ranges from 0.201 – 0.432. This shows that the calculated r value > r table. So, all question items used to measure each variable are valid. Meanwhile, reliability testing aims to find out whether the relevant instrument can be used to collect data. The following are the results of the reliability test calculations for all variables, namely:

Table 2. Reliability Test

Variable	N of Items	Cronbach's Alpha
Understanding	6	0.631
Usefulness	8	0.665
Customer Interest	10	0.681

Table 3 presents Cronbach's Alpha values for all variables that exceed 0.6, indicating that all research variables are reliable. This means that the questionnaire items yield consistent results across different instances, and the data collected is accurate and suitable for use as a measurement tool in the research.

3.3 Classical Assumption Test

Normality testing is carried out using the one-sample Kolmogorov-Smirnov test. All Asymptote results. Sig. (2-tailed) above 5%. So it can be concluded that the data is normally distributed because it is more than 0.05. Meanwhile, to test multicollinearity data using collinearity statistics (Tolerance and VIF). If the VIF value is < 10 or the tolerance value is > 0.01, then it is stated that multicollinearity does not occur. The output results show that all independent variables have a tolerance value greater than 0.01 and a VIF of less than 10. This proves that there is no multicollinearity relationship between the three independent variables. The heteroscedasticity test functions to test whether there is an influence of the independent variable on the residual variable. This test uses the Glesjer model. The regression model does not contain heteroscedasticity because all dependent variables (Abs_RES) have a significance of less than 5%.

3.4 Regression Analysis

The results show that service, reputation and security have a positive and significant effect on Generation Z's decision to use Sharia banking. For more details regarding the size and significance of each influence on customer decision variables, see the table below:

Table 3. Analysis of Varians

Variable	Coefficients
Understanding	0.272 *** (0.112) [0.016]
Usefulness	0.498 *** (0.086) [0.000]

Note : *** Sig level at 10

Based on **Table 3**, it can be seen that all variables have a positive and significant effect. Understanding and utilization influence customer interest in using e-money in Aceh Province.

3.5 Discussion

1. The Influence of Understanding on Interest in Using E-Money in Aceh Province

There is a positive influence of understanding on interest in using e-money. Utilizing e-money which is easy to use can increase customers' interest in using it. If the registration process, topping up balances, and transactions with e-money are simple and intuitive, customers will tend to be more interested in adopting it. This ease of use can include a friendly user interface, a responsive application, and good support from the e-money provider. Trust and a sense of security in using e-money are important factors in influencing customer interest. Customers want to be confident that their transactions with e-money are well protected from the risk of fraud and unauthorized access. With strong security protection, such as data encryption, two-factor authentication, and protection against loss or theft, customers will feel more confident to use e-money. Utilization of e-money can provide practicality for customers in conducting daily transactions. Customers can make payments quickly and easily through their mobile devices without the need to carry cash or physical cards. This practicality can increase customer interest in using e-money.

2. The Influence of Usefulness on the Decisions of Sharia Banking Users in Aceh Province

The Influence of Usefulness on the Decisions of Sharia Banking Users. Sharia Compliance: One of the main benefits that influences the decisions of Islamic banking users is the bank's compliance with sharia principles. Sharia banking users look for financial institutions that operate in accordance with Islamic principles, such as the prohibition of *riba* (interest), speculation, and transactions involving uncertainty (*gharar*). This benefit gives users confidence that their funds are managed *halally* and in accordance with their religious values. The benefits of products and services offered by Islamic banks also influence user decisions. Islamic banks offer products and services that comply with sharia principles, such as *murabahah* financing (buying and selling with known profits), *mudarabah* (profit sharing), and *wakalah* (fund management). Users' decisions to choose a sharia bank are influenced by the usefulness of products and services that suit their needs and preferences. Another benefit that influences user decisions is the trust and transparency demonstrated by Islamic banks. Islamic banking users want to be confident that the bank is carrying out its operations honestly, transparently, and responsibly. These benefits include disclosing clear information regarding operational mechanisms, sharia policies, and *halal* use of funds. High trust and transparency increase users' decisions to use Islamic banks. The benefits of good service quality also play an important role in the decisions of Islamic banking users. Users expect friendly, responsive, and quality service from sharia banks. Ease of access, technological capabilities, and good customer support are factors that influence the usefulness of service quality. Users' decisions to use Islamic banks can be influenced by positive experiences in interacting with banks and getting solutions that meet their needs. The benefits of sharia compliance, appropriate products and services, trust and transparency, and service quality are factors that influence the decisions of sharia banking users. Islamic banks need to consider these factors and strive to meet user expectations by providing products and services that comply with sharia principles, maintain transparency, build trust, and provide a good user experience. Thus, Islamic banks can increase user interest and decisions to use services.

4. CONCLUSION

Based on the results of the research and discussion regarding the influence of understanding and usefulness on using e-money, it has a significant effect on the interest variable in using e-money in the Aceh Province region. This means that the greater the level of understanding of e-money among the public, the greater their interest in using e-money. The usefulness of e-money has a significant effect on the variable interest in using e-money in the Aceh Province region. This means that the greater the level of usefulness of e-money to the community, the greater their interest in using e-money.

REFERENCES

- Artina, N. (2021). Pengaruh Persepsi Manfaat, Persepsi Kemudahan, Kepercayaan Dan Fitur Layanan Terhadap Tingkat Kepuasan Pelanggan Dalam Menggunakan E-Money. *In Forbiswira Forum Bisnis dan Kewirausahaan*, 11(1); 120-131.
- Bibi, S. &. (2020). Efektivitas Model Blended Learning Terhadap Motivasi Dan Tingkat Pemahaman Mahasiswa Mata Kuliah Algoritma Dan Pemograman. *Jurnal Pendidikan Vokasi*, 5(1); 74-87.

- Davis, A. (2022). An Evolutionary Perspective on Appearance Enhancement Behavior. *Archives of Sexual Behavior*, 51(1), 3-37.
- Ebigbagha, Z. S. (2021). Major Development Communication Paradigms and Practices: Implications for Graphic Communication. *African Research Review*, 10(3), 317-337.
- Fauziah, N., & Nurhasanah, N. (2020). The Effect of The Perception of Electronic Money on Comsumptive Behavior of Stei Sebi Student. *Jurnal Ekonomi Dan Perbankan Syariah*, 8(1); 63-84.
- Harefa, D. (2023). The Relationship Between Students'interest in Learning and Mathematics Learning Outcomes. *Jurnal Pendidikan Matematika*, 2(2), 1-11.
- Harjanto, N. (2019). Developing Stronger Indonesian Rural Banks. *Review of Integrative Business and Economics Research*, 8; 313-324.
- Kusumawati, T. I. (2019). Komunikasi Verbal Dan Nonverbal. Al-Irsyad. *Jurnal Pendidikan dan Konseling*, 6(2); 261-264.
- Meiske H. Tangnga, M. M. (2021). Pemahaman Dan Kepercayaan Masyarakat Dalam Membentuk Minat Menggunakan E-Money. *Jurnal Maneksi* , 10(1); 248-54.
- Mentari, N. W., Setiawina, I. N., Budhi, M. K., & Sudirman, W. (2019). Jurnal Internasional Ilmu Sosial Dan Humaniora. *Factors Influencing Consumer Interest in Using E-Money*, 3(2); 176-186.
- Puspitasari, D., & Danaya, B. P. (2021). Pentingnya Peranan Komunikasi Dalam Organisasi. *Jurnal Ekonomi Manajemen Sistem Informasi*, 3(3); 256-261.
- Rudianti, W., & Mesaroh, S. (2023). Increased Use of E-Money During The Covid 19 Pademic . *Jurnal Ilmiah Ekonomi*, 18(1); 165-180.
- Salminen, S. C. (2021). The International Scientific Association of Probiotics and Prebiotics (ISAPP) Consensus Statement On The Definition And Scope Of Postbiotics. *Nature Reviews Gastroenterology & Hepatology*, 18(9); 649-667.
- V.Vlasov, A. (2017). The Evoluation Of E-Money. *European Research Studies*, 20(1); 215-224.
- Van Der Eijk, P. Z. (2022). E-Cigarette Markets and Policy Responses in Southeast Asia: A Scoping Review. *International Journal Of Health Policy And Management*, 11(9), 1616.
- Wulandari, D., Soseco, T., & Narmaditya, B. S. (2019). Analysis of the Use of Electronic Money in Efforts to Support the Less Cash Society. *International Finance and Banking*, 3(1); 1-10.