

Factors Affecting Bandung Students Using Internet Banking As A Non-Cash Payment Tool in The Covid-19 Pandemic Era (Case Study Of Livin Application By Mandiri Bank)

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Abstract

To deal with the Covid-19 pandemic situation which requires people to keep their distance from each other, therefore examples of activities such as payment transactions must also be carried out with health protocols. This research takes students in Bandung as the object. This study examines how students in Bandung use the Internet Banking application as a non-cash payment instrument during the Covid- 19 pandemic. The research method used in this research is quantitative. The sample used is 390 respondents. Data collection techniques used are interviews and online questionnaires. The data analysis used is descriptive analysis and simple linear regression analysis. The results of the study partially show that non-cash payment instruments have a positive and significant impact on the use of Internet Banking, the value of $t_{count} (20,870) > t_{table} (1,966)$. This shows that the influence of the independent variable, namely non-cash payment instruments on the dependent variable, namely the use of Internet Banking is 52.8% while the remaining 47.2% is influenced by other factors not examined in this study.

Keywords

Non-Cash Payment, Internet Banking, Livin Mandiri app.

1. Introduction

Technology enables innovation in many sectors, especially in financial technology services or Financial Technology is growing rapidly. One form of technology service that is being developed is Internet Banking (IB). This is because banking services are currently required to be more flexible, fast, and easy in line with technological developments in the era of globalization. Internet Banking is becoming the most profitable among other e-commerce applications. All banks have introduced Internet Banking to improve services and reduce costs. In addition, IB will not only benefit the bank but will also meet the needs of customers. Banking technology adjustments must at least offer services that support customer or user activities and can be accessed easily. For this reason, customers are recommended to use internet services because they do not need to physically meet face-to-face with bank officers and do not need to deal with other customers. This is to reduce inconvenience, transaction costs, and time.

With regard to minimizing physical contact between customers or users, the world is also being hit by the Covid-19 pandemic, which requires reducing and limiting human activities that require direct or physical contact to prevent transmission of the virus. This has prompted governments in various countries to make several policies, one of which is physical distancing. This policy was also called by the World Health Organization (WHO) which advised banking customers to make transactions online. Governments in more and more countries are taking action to encourage contactless or physical payments. This is because many people are worried about the spread of the Covid-19 virus through physical money. Physical money can be a medium for transmitting the virus when it is touched by an infected person. Therefore, WHO recommends processing payments using digital money whenever possible. Prior to this pandemic, cashless or physical payments via smartphones were already known to many people in developing countries such as Thailand, Vietnam, and Indonesia. In Indonesia, there has been an appeal to make digital payments submitted by the Governor of Bank Indonesia, especially in the era of the Covid-19 pandemic to prevent transmission. Based on the background that has been described, the authors are interested in conducting research with the title "Factors Influencing Bandung Students Using Internet Banking as a Non-Cash Payment Tool in the Covid-19 Pandemic Era (Case Study of the Livin Application by Bank Mandiri)".

1.1 Objectives

Based on the background described, the formulation of the problem that can be formulated by the author is as follows:

- a. How does the Non-Cash payment instrument affect student transactions in Bandung during the Covid-19 pandemic?
- b. How does the Non-Cash payment instrument affect the way students transact in Bandung using Internet Banking?
- c. How can Livin Mandiri Internet Banking help students in Bandung when making transactions?

2. Literature Review

According to Muzdalifa, Rahma, and Novalia (2018), the Financial Technology (Fintech) industry is one of the financial service innovations that is gaining popularity in the current digital era and technology with the concept of digitizing payments is one of the most developed sectors in the Fintech industry in Indonesia. In this case the Fintech sector is most expected by the government and society to encourage and increase the number of people who have access to be able to use financial services. According to Article 1 Number 1 of Bank Indonesia Regulation Number 19/12/PBI/2017, it is stated that Financial Technology is a technology user in the system in the financial sector that produces new service products, technology, and or business models and can have an impact on conditions of monetary stability, stability in the financial system, and/or efficiency, smoothness, security and reliability of the payment system. Meanwhile, according to the Financial Stability Board in (Nizar, 2017) defines Fintech as a form of technological innovation in financial services that can produce business models, applications, processes or products with material effects related to the provision of financial services.

An electronic payment system is a payment system that allows a person to pay for various transactions, check balance amounts, and make instant transfers of funds not only from banks but also payment service providers (Irdianty & Aditya, 2020; Kristensen & Solvoll, 2019; Muthurasu & Suganthi, 2019). Digital payment methods are considered easier, simpler, and profitable if service providers provide discounts or discounts on certain payments (Chellapalli & Kumar, 2020b). On the other hand, digital payments also have security risks that threaten users because not all payment service providers, including banks provide adequate technical protection. Therefore, fraud or fraud is often found in digital payment systems (Alaeddin et al., 2018; Zhang et al., 2019; Peha & Khamitov, 2004).

According to the Circular Letter of Bank Indonesia No. 6/18/ DPNP of 2004, Internet Banking is one of the bank services that allows customers to obtain information, communicate and carry out banking transactions via the internet network, and is not a bank that only provides banking services via the internet. , so the establishment and activities of internet only banks are not allowed. According to Egan and Prawoto (2013) Internet Banking performs all banking activities using internet technology.

Internet banking according to (Riswandi, 2005) is the use of the internet as a channel for long-distance transfers, and also includes conventional services, such as providing accounts for sending funds between customers, including services such as electronic bills, which customers can use to receive and pay bills on the bank's website.

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Meanwhile, according to Bank Indonesia Circular Letter No. 6/18/ DPNP of 2004, Internet Banking is one of the bank services that allows customers to obtain information, communicate and carry out banking transactions via the internet network, and is not a bank that only provides banking services via the Internet. internet, so the establishment and activities of internet only banks are not allowed. Meanwhile, according to Warjiyo (2006), non-cash payment instruments provide benefits to the economy, including: increasing consumer satisfaction levels with reduced transaction costs, a source of income for non-cash payment service providers, increased transaction speed, economic growth, and welfare levels.

Therefore, there is a relationship between the two variables, namely the existence of a Non-Cash payment system that triggers the emergence of Internet Banking, which can provide benefits for customers or banks. For customers, Internet banking eliminates space and time limits. convenience and speed in conducting banking transactions whenever and wherever customers want to transact and for the bank, internet banking can be a solution in minimizing infrastructure development budgets compared to opening ATM outlets (Yazid & Suryanto, 2016).

3. Methods

This study aims to determine the factors that influence students in Bandung in using Livin Mandiri internet banking as a non-cash payment instrument in the Covid-19 pandemic era. This model explains the influence between variables, namely the non-cash payment instrument variable in the use of internet banking.

The research method used in this study is a quantitative method, the measurement scale used is an ordinal scale and uses a Likert scale as an attitude scale. The sample used in the study was 390 respondents. Data collection techniques used are questionnaires and literature study. The data analysis technique used is descriptive analysis and simple linear regression analysis. Here are the results of the analysis. Based on the research objectives, this research includes descriptive and causal research. Research (Resseffendi, 2010) says that descriptive research is research that uses observations, interviews or questionnaires about the current state of the subject that we are researching based on questionnaires and so on in collecting data to test hypotheses or answer a question. Through this descriptive research, researchers will know the situation being studied. This study aims to determine the effect of Covid-19 on students in Bandung in transacting using Livin Mandiri internet banking. Causal research is research conducted if the researcher wants to describe the cause of a problem (Indrawati, 2015).

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4. Results and Discussion

Simple linear regression analysis was used to determine the effect of the independent variable, namely Non-Cash Payment Instruments (X) on the related variable, namely the use of Internet Banking (Y) which was carried out on 390 student respondents in Bandung (table 1).

Table 1. Results Of Simple Linear Regression Analysis
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11.004	1.401		7.853	.000
Non-Cash Payment Instruments	.384	.018	.727	20.870	.000

a. Dependent Variable: Penggunaan *Internet Banking*

Based on the Output (Coefficients), the calculation of the multiple linear regression equation is as follows:

$$Y = 11.004 + 0.384$$

The analysis of the simple linear regression equation above is as follows:

1. Constant value (a)

Based on the results of simple linear regression analysis, the a (constant) value of 11.004 is positive. This can be interpreted that the independent variable has a unidirectional or positive relationship to the dependent variable.

2. Value of Non-Cash Payment Instrument Trend Variable (X)

The regression coefficient value for the Non-Cash Payment Instrument Variable (X) is positive at 0.384, which means that if there is an increase in the Non-Cash Payment Instrument Variable (X) by one unit, the Internet Banking Usage Variable (Y) will increase by 0.384 (38.4%). positive means that there is a positive relationship between the Non-Cash Payment Instrument Variable (X) and the Internet Banking Usage Variable (Y).

Partial Hypothesis Testing or t-test is used to determine the effect of each Independent Variable, namely Non-Cash Payment Instruments on the Dependent Variable, namely Internet Banking Use. Here are the results of the t test:

Table 2. Test Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11.004	1.401		7.853	.000
Non-Cash Payment Instruments	.384	.018	.727	20.870	.000

a. Dependent Variable: Penggunaan *Internet Banking*

Based on table 2, the results of the t table calculations are 5%: $2 = 2.5\%$, $df(n-1, 390-1 = 389)$ and the results obtained for the t table are 1.966. The following is a description of the results of the t test:

Non-Cash Payment Instrument (X) The results of testing with SPSS for the Non-Cash Payment Instrument variable (X) obtained a tcount of 20.870 with a significant value of less than 0.05. So it can be concluded that H0 is rejected and H1 is accepted, which means that there is a partial and significant effect of non-cash payment instruments on the use of Internet Banking Students during the Covid-19 pandemic era in Bandung.

The Coefficient of Determination (R²) aims to test how big the contribution or ability of the influence of the independent variable to the dependent variable is. The results of the coefficient of determination test are as follows in table 3:

Table 3. Determinant Coefficient Test Results

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.727 ^a	.529	.528	2.09293

a. Predictors: (Constant), Alat Pembayaran Non Tunai

Table 3 shows that the R value is 0.727 and R square (R²) is 0.528. This figure is used to see the magnitude of the influence of Non-Cash Payment Instruments on Internet Banking Use. To calculate R Square using the Coefficient of Determination with the following formula:

$$\begin{aligned}
 KD &= R^2 \times 100\% \\
 &= (0.727)^2 \times 100\% \\
 &= 52.8\%
 \end{aligned}$$

This figure shows a coefficient of determination of 52.8%. This shows that the influence of the Independent Variable, namely Non-Cash Payment Instruments on the Dependent Variable, namely the Use of Internet Banking, is 52.8% while the remaining 47.2% is determined by other variables not included in this study.

Based on research that has been conducted on 390 respondents, namely students in Bandung as a sample with a majority profile of women with a percentage of 59.7% or as many as 233 respondents from eight universities in Bandung with the majority being in level two or Semester three to four with a percentage of 36.7%. All respondents are users of the Livin Mandiri Internet Banking application who have the majority income/pocket money of Rp 1,000,000 – Rp 3,000,000 with a percentage of 91%.

Based on descriptive analysis, respondents' responses regarding Non-Cash Payment Instruments to Students during the Covi-19 pandemic era in Bandung on the dimensions of understanding functions with an average of 90.25%, dimensions of understanding the benefits of use with an average of 89%, dimensions of understanding of non-payment instruments cash with an average of 89.5%, the dimension of understanding how to use it with an average of 89.25%, and the dimension of understanding the risks/losses of using non-cash payment instruments with an average of 88.33%. Overall, the non-cash payment instrument variable scored 89.26% and on the continuum line was in the very good category. This states that the overall understanding of student non-cash payment instruments in Bandung during the Covid-19 pandemic is very good.

1. Descriptive Analysis of Functional Understanding Dimensions

The dimensions of understanding the overall function are already in the very good category. This is evidenced by the percentage value of 90.25%. The highest value on the dimension is in the statement "The features of the Livin Mandiri internet banking application are easy to understand in use." with a percentage of 91%. Based on the available data, the researcher analyzed and got the results of the discussion, namely that students in Bandung during the Covid-19 pandemic were very good at understanding the functions of the Livin Mandiri application feature for payment transactions during the pandemic so that transactions could be done easily.

2. Descriptive Analysis of the Dimensions of Understanding the Benefits of Use

The dimensions of understanding the benefits of overall use are in the very good category. This is evidenced by the percentage value of 89%. The highest value on the dimension is in the statement "In using Livin Mandiri internet banking, transactions are safer." with a percentage of 90%. Based on the available data, the researchers analyzed and got the results of the discussion, namely that students in Bandung during the Covid-19 pandemic felt safe when making payment transactions using the Livin Mandiri Internet Banking application so they were vulnerable to the impact of the Covid-19 pandemic.

3. Descriptive Analysis of Understanding Non-Cash Payment Instruments

The dimensions of understanding the benefits of overall use are in the very good category. This is evidenced by the percentage value of 89.5%. The highest value on the dimension is in the statement "Knowing various types of non-cash payment applications (e-money / e-payment)." with a percentage of 90%. Based on the available data, the researcher analyzed and obtained the results of the discussion, namely that students in Bandung during the Covid-19 pandemic were very good at understanding and recognizing various types of non-cash payment instruments such as Internet Banking, e-wallet and others as a means of non-cash payment transactions. cash during the Covid-19 pandemic.

4. Descriptive Analysis Understanding How to Use

The dimensions of understanding how to use the whole are already in the very good category. This is evidenced by the percentage value of 89.25%. The highest value on the dimension is in the statement "I understand how to make transactions using the qrish scan feature" with a percentage of 90%. Based on the available data, the researcher analyzed and got the results of the discussion, namely that students in Bandung during the Covid-19 pandemic were very good at using the features that the Livin Mandiri application had, one of which was the Qrish scan which could speed up the process of a payment transaction during the Covid-19 pandemic. 19.

5. Descriptive Analysis Understanding the Risks/Loss of Using Non-Cash Payment Instruments

The dimensions of understanding the risks/losses of using non-cash payment instruments are in the very good category. This is evidenced by the percentage value of 88.33%. The highest score on the dimension is in the statement "I understand the risks of personal data security." with a percentage of 90%. Based on the existing data, the researcher analyzed and obtained the results of the discussion, namely that students in Bandung during the Covid-19 pandemic

understood the risk of personal data leakage such as account numbers and full names when using the Livin Mandiri application.

Based on descriptive analysis, respondents' responses regarding the use of Internet Banking by students during the Covid-19 pandemic era in Bandung were on the dimension of risk perception with an average of 72.75%, the dimension of perceived usefulness with an average of 71%, and the dimensions of interest in usage behavior with an average of 72.75%. an average of 74.75%. Overall, the non-cash payment instrument variable scored 72.83% and on the continuum line was in the good category. This states that the overall use of Student Internet Banking in Bandung during the Covid-19 pandemic was good.

1. Descriptive Analysis of Risk Perception Dimensions

The overall risk perception dimension is in the good category. This is evidenced by the percentage value of 72.75%. The highest value on the dimension is in the statement "Using Livin Mandiri internet banking, the guarantee of the confidentiality of my identity is more secure than using cash during a pandemic" with a percentage of 75%. Based on the available data, the researcher analyzed and obtained the results of the discussion, namely that students in Bandung during the Covid-19 pandemic felt that when using the Livin Mandiri application as a non-cash payment transaction tool, they could reduce risks such as identity confidentiality because in certain processes transactions can be carried out remotely. without having to meet each other between users.

2. Descriptive Analysis of the Dimensions of Perceived Usefulness

The overall usability perception dimension is in the good category. This is evidenced by the percentage value of 71%. The highest value on the dimension is in the statement "Using Livin Mandiri internet banking improves" my productivity as a student during the Covid-19 pandemic era." with a percentage of 71%. Based on the available data, the researcher analyzed and obtained the results of the discussion, namely that students in Bandung during the Covid-19 pandemic could carry out daily activities more productively when using the Livin Mandiri application as a non-cash payment transaction tool because in addition to saving time, it could also save costs. when compared in some cases such as money transfers that still use an ATM machine.

3. Descriptive Analysis of Interest in Usage Behavior

The overall usage behavior interest dimension is already in the good category. This is evidenced by the percentage value of 74.75%. The highest value on the dimension is in the statement "In the future, I will continue to use Livin Mandiri internet banking" with a percentage of 77%. Based on the available data, the researcher analyzed and got the results of the discussion, namely that students in Bandung during the Covid-19 pandemic believed in the Livin Mandiri application to be used as a non-cash payment instrument during the pandemic and so on and could be said to be satisfied.

The results of this study based on a descriptive analysis of non-cash payment instruments are included in the very good category while the use of Internet Banking is in the good category. Based on the t-test (partial) there is a partial and significant effect of non-cash payment instruments on the use of Internet Banking. This is shown based on the results of the t-test with a value of $t_{count} > t_{table}$ ($20.870 > 1.966$) and a significant value < 0.05 , which means H_0 is rejected and H_a is accepted. So the hypothesis of this research proves that there is an influence of the non-cash payment instrument variable on the use of Internet Banking Students in Bandung during the Covid-19 pandemic.

The existence of a non-cash payment system that triggers the emergence of Internet Banking, which can provide benefits for customers or banks. For customers, Internet banking eliminates space and time limits. Internet banking offers convenience and speed in conducting banking transactions whenever and wherever customers want to transact and for the bank, internet banking can be a solution.

5. Conclusion

Based on the results of research conducted by researchers on students in Bandung during the Covid-19 pandemic about the factors that influence Bandung students using Internet Banking as a non-cash payment instrument in the Covid-19 pandemic era (Case study of the Livin application by Bank Mandiri) the following conclusions are drawn:

- The development of the non-cash payment system has had a positive impact, namely the emergence of various non-cash payment instruments, especially Internet Banking.
- Internet Banking is very helpful for non-cash payment transaction activities during the Covid-19 pandemic.
- The Livin Mandiri application is very influential on the activities of Bandung students in conducting non-cash payment transactions during the Covid-19 pandemic.

- d. The use of the Livin Mandiri application reduces the impact of the Covid-19 pandemic, namely reducing virus transmission.
- e. Based on the conclusions of the research that has been submitted, the researchers would like to propose some suggestions as follows:
- f. Prioritizing non-cash payment transactions rather than using cash in order to save time so that the payment process is efficient and effective.
- g. Prioritizing non-cash payment transactions rather than using cash in order to save time so that the payment process is efficient and effective.

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