




## The Effect of Electronic Payment Instruments on the Lifestyle of the Millennials in the Jabodetabek

Septina Puspitasari <sup>a</sup>, Rindah Febriana Suryawati <sup>b</sup><sup>1</sup> , Izmi Dwira Eriani <sup>b</sup>

<sup>a</sup> Department of Management, Faculty of Economic and Management, IPB University, Bogor, Indonesia

<sup>b</sup> Department of Business, Faculty of Vocational Studies, Universitas Airlangga, Surabaya, Indonesia

### APA Citation:

Puspitasari, S., Suryawati, R. F., & Eriani, I. D. (2023). The Effect of Electronic Payment Instruments on the Lifestyle of the Millennials in the Jabodetabek. *TIJAB (The International Journal of Applied Business)*, 7(1), 87-103.

Submission Date: 23/02/2023

Revision Date : 10/03/2023

Acceptance Date: 21/03/2023

Published Date : 28/03/2023

### Abstract

**Background:** Electronic payment instrument provides easier medium of daily transaction among millennial. The ease of use of electronic payment leads to a need to investigate whether it has an impact on millennial generation lifestyle.

**Objective:** This study aims to analyze the effect of using electronic payment instruments on millennial lifestyles.

**Method:** Survey questionnaires were distribute in this study and resulted in 191 questionnaires to be analyzed using Structural Equation Modelling.

**Results:** The results showed that there are positive and significant effect of convenience on activities, interests, and opinions, usefulness on activities and ideas, and the development of usage attitudes on claims and statements. Meanwhile, efficacy's effect on interest and usage attitude's impact on activities has a positive but not significant effect.

**Conclusion:** Three manifest variables: perceived ease of use, perceived usefulness, and attitude toward using, are factors that affect the use of electronic payment instruments. The electronic payment use was also proves as millennial lifestyle. Further, factors affecting millennial activity of using such payment method are: perceived ease of use and perceived usefulness. While factors affecting millennial interest to use such payment method are attention toward using and perceived ease of use. Factors affecting millennial opinion of using such payment method are perceived ease of use, attention toward using, and perceived ease of use. This research implies that the development of electronic payment instruments should consider and improve the security, backup systems and database recovery to support the activity and interest of using electronic payment instruments.

**Keywords:** electronic payment; lifestyle; millennial; sem; technology acceptance model

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



<sup>1</sup> Corresponding author.

E-mail address: [rindah.febriana.s@vokasi.unair.ac.id](mailto:rindah.febriana.s@vokasi.unair.ac.id)

## 1. Introduction

Christmastianto (2017) states that the development of digital technology provides significant changes to people's behaviour in all aspects of daily life, such as the development of online commerce (e-commerce), online transportation, and financial technology (Fintech). According to the World Bank (2016), Fintech is a technology used by industries consisting of companies to make their economic system and delivery of financial services more efficient.

Financial technology innovation due to the current global evolution has also influenced the development of fintech in Indonesia. The development of fintech in Indonesia is ranked second in ASEAN after Singapore, and by 2020 is predicted to become one of the largest digital markets in ASEAN (Ali and Purwandi, 2016). The increasing number of internet users supports this. In 2015 internet users in Indonesia amounted to 93.4 million people (47.9% of the population) and continued to increase in 2018 to 171.17 million people (64.8% of the population) APJII (2019). Fintech players in Indonesia are still dominant in doing business in the payment sector by 42.22%. Currently, electronic payment instruments are one of the fintech innovations in the payment sector that encourage the creation of a cashless society.

The development of information technology and payment systems has gradually shifted from cash payment patterns to non-cash payments. This non-cash payment consists of three basic payment instruments: paper-based, card-based, and electronic-based (Setijoso, 2006). One of the most widely used payment instruments is electronic payment instruments. All-digital electronic payment tools make it easy for the millennial generation to transact in meeting their daily needs. This is because the millennial generation, born between 1982 and 2002, is surrounded by digital media (Raines, 2003).

The convenience, speed, and accuracy offered by digital media, including electronic payment tools, will impact the millennial generation's lifestyle. Arifin (2017) entitled the effect of hedonic treadmill syndrome on the use of financial technology in the millennial generation. Hedonic treadmill syndrome explains the theory of the search for happiness which is likened to someone who will remain in the same place even though he continues to walk on a treadmill. An example of this theory is when a person has an income of five million per month, that income will be used up to spend. Likewise, when the income earned increases to 15 million per month, the income will also be exhausted. This is because expectations or expectations and lifestyles also increase along with the increase in revenue earned.

According to Silitonga (2010), Jabodetabek is the largest urban area in Indonesia and Southeast Asia. As a metropolitan area, the lifestyle of the Jabodetabek millennial generation is classified as consumptive. The millennial generation is willing to spend money to follow the trends around them, for example, spending time at coffee shops. Previously, coffee connoisseurs were dominated by spinach half men, but now the trend is spreading to young people. In addition, trendy coffee shops that are more modern have replaced roadside coffee shops. Many payment services have also collaborated with electronic payment issuers, such as OVO and Go-Pay, which offer cashback. It is unsurprising that FinTech, in the form of electronic payment instruments, has become a favorite and current trend. Based on the explanation above, this study aims to analyze the electronic payment instruments on the lifestyle of the millennial generation in Jabodetabek.

## 2. Literature Review

### 2.1. *Financial Technology (FinTech)*

Based on Bank Indonesia regulation Number 19/12/PBI/2017, Financial Technology (FinTech) is defined as financial system technology that produces new products, services, technology, and/or business models. It can have an impact on monetary stability, financial system stability, efficiency, smoothness, security, and reliability of the payment system.

### 2.2. *Positive and Negative Aspects of Using the Cashless Society*

The cashless society is a term used by Bank Indonesia in relation to a cashless society (Abbas, 2017). This cashless society policy has an impact on both positive and negative aspects.

#### a. Positive Impact

One of the strengths of a cashless society is its increased tax base, as most transactions can be tracked by the government (Tavares, 2015). In addition, there are convenience and efficiency offered. Non-cash payments can improve remote access to payments, reduce queues, and save individual time (Akinola, 2012; Mallat, 2007).

Concerning crime reduction, non-cash payments can reduce illegal activities, such as terrorism, illegal immigration, human trafficking, and corruption can be limited. Thus, the application of a cashless society not only helps economic stability but also has the opportunity to reduce crime (Olusola et al., 2013; Rogoff, 2015).

#### b. Negative Impact

The most complicated subject with non-cash payments is the issue of privacy. The government will have a record of the total consumer transactions to obtain individual privacy from this information. Apart from privacy, cashless payments, of course, allow computer hackers to commit their crimes. So, security issues become an essential factor that needs to be considered. The government has issued Bank Indonesia Regulation No. 11/12/PBI/2009. This regulation regulates the implementation of electronic money (Abbas, 2017).

### 2.3. *The Use of Electronic Payment Instruments*

A benchmark for assessing the acceptance of information technology by users. Electronic payment instruments can be one of the technologies whose acceptance level can be measured. One method that can be used to measure the acceptance and use of technology is the Technology Acceptance Model (TAM). According to Rahayu et al. (2017), there are several influencing factors, including:

#### 1. Perceived Usefulness

Perceived usefulness describes a person's belief that using the system will improve performance.

#### 2. Perceived Ease of Use

Perceived ease of use describes a person's confidence that using information systems is easy and does not require significant effort from the wearer. This convenience will reduce the energy, thought, and time used to learn and use information systems.

#### 3. Attitude Towards Use

Attitude towards use is the tendency of initial responses to pleasant or unpleasant conditions on a particular object. Theoretically, attitude reflects one's feelings on things in good or bad situations favourable or unfavourable. Attitude arises because a person has a value determined by a belief in the thing. Certain behaviours can also affect a person's new beliefs to change attitudes in other conditions.

#### 4. Behavioural Intention

Behavioural intention is a person's desire to perform a specific behaviour or a person's tendency to continue using certain technologies.

#### 5. Actual Usage

The actual usage is a fundamental condition of the use of information systems. Behaviour or actual usage is challenging to observe and measure through a list of questions.

### 2.4. *Lifestyle*

Lifestyle describes the whole person who interacts with his environment (Kotler & Keller, 2009). The lifestyle of society will be different from other societies. Even from time to time, the lifestyle of an individual and specific community groups will move dynamically. Lifestyle measurement is measured by the Activities, Interests, and Opinions (AIO) component (Prasetijo & Ihalauw, 2005).

Lifestyle is a model of life that is identified from how people spend their time (activities), what they think is important in their environment (interests), and what they think about themselves and the world around them (opinions) (Assael, 1984). Lifestyle will develop on each AIO dimension identified by Plummer in Assael (1984), described in Table 1 below, regarding the lifestyle inventory.

**Table 1.** The Component of AIO

Activities	Interest	Opinions
Work	Family	Themselves
Hobbies	Home	Social issues
Social events	Work	Political
Vacation	Community	Business
Entertainment	Recreational	Economy
Member of the club	Cloths	Educational
Community	Foods	Product
Shopping	Media	Future
Sports	Achievement	Culture

### 2.5. *Millennial Generation*

According to Ashraf (2018), a generation is a group of individuals who identify their group based on the similarity of the year of birth, age, location, and events in the life of the group of individuals with a significant influence on their growth phase. The theory of generational differences was popularized by Neil Howe and William Strauss in 1991. According to Howe and Strauss (2000), millennial are those born between 1982-2000. This generation grew up in the booming internet era. Lyons (2004) states that the millennial generation is very reactive to environmental changes around them and pays more attention to wealth. Millennial also have different individual characteristics, depending on where they grew up, their economic strata, and their family's social status. In addition, millennial are fanatical users of social media. Technological developments significantly affect their lives, their political and economic views are more open, and they have very open communication patterns compared to previous generations.

### 2.6. *Previous Research*

The use of electronic payment instruments has previously been studied by Ramadani (2016), which results in the conclusion that the use of electronic money has a positive and significant effect on student consumption spending. In addition, the use of electronic payment instruments was also investigated by Genady (2018), who concluded that the convenience, usefulness, and promotion of electronic money significantly influence decisions on the use of electronic money in the community with a case study in DKI Jakarta Province. It is an indicator of the variables of electronic payment instruments, namely ease, usefulness, and attitude of use. Meanwhile, the difference between this research and previous research is that this research uses the PLS-SEM method for data processing, research objects, number of samples, lifestyle variables, and discussion results. The literature review should explain any theories or frameworks used in the study and describe the difference between the manuscript and other papers, which is innovative.

## 3. **Method**

The sampling technique in this study used non-probability sampling, namely the purposive sampling method. Purposive sampling was conducted based on specific characteristics (Umar, 2013). The determination of the Millennial Generation sample was carried out with specific considerations, namely with the condition that respondents were 19-37 years old, had electronic payment instruments (m-banking/e-banking/e-money), and was domiciled in Greater Jakarta.

This research was conducted by distributing online questionnaires through google forms distributed through social media and obtained 191 respondents. This study used causal-comparative to quantitative research methods, in which the researchers showed a relationship between two or more causal variables, where there was the independent variable (X) as the affecting variable and the dependent variable (Y) as the affected variable (Sugiyono, 2013). The independent variable is the use of electronic payment instruments use the TAM model variables, namely Perceived Ease of Use (PEU), Perceived Usefulness

(PU), and Attitude Toward Using (ATU). According to Assael (1984), The lifestyle variable measured by the Activities, Interests, and Opinions (AIO) component.

### 3.1. *Perceived Ease of Use (PEU)*

The definition of PEU is the confidence level a person has that using technology will be free of effort (Chandra, 2016). According to Venkatesh et al. (2003), the indicators of PEU are the system is easy to understand, practical in use, the system is easy to use, and the system is easy to reach. Several previous research, Genady (2018), Sigar (2016) and Hadiyati and Damayanti (2018). show that PEU has a positive effect on the interest in using e-money. Thus, the first hypothesis in this study is:

H1: There is a positive effect of PEU on the activities

H2: There is a positive effect of PEU on the interests

H3: There is a positive effect of PEU on the opinions

### 3.2. *Perceived Usefulness (PU)*

The definition of PU is a person's level of belief that using technology will improve his job performance (Chandra, 2016). According to Venkatesh et al. (2003), the indicators of PU are the use of the system accelerates the process, the use of the system increases effectiveness, the use of the system is beneficial to individuals, and the use of the system increases productivity. Several previous research, Genady (2018), Priambodo and Prabawani (2016), and Anggraeni (2015) show that PU has a positive effect on the interest in using e-money. Thus, the first hypothesis in this study is:

H4: There is a positive effect of PU on the activities

H5: There is a positive effect of PU on the interests

H6: There is a positive effect of PU on the opinions

### 3.3. *Attitude Toward Using (ATU)*

The definition of ATU is the overall feeling reaction of the individual to use the system (Chandra, 2016). According to Chandra (2016), the indicators of ATU are the convenience of interaction, enjoy using the system, the system is not dull, happy to use the system. Several previous research, Weng et al. (2018), Sternad Zabukovšek et al. (2019), and Mailizar et al. (2021) show that ATU has a positive effect on intention to use. Thus, the first hypothesis in this study is:

H7: There is a positive effect of ATU on the activities

H8: There is a positive effect of ATU on the interests

H9: There is a positive effect of ATU on the opinions

The data analysis method used in this research is Structural Equation Model (SEM) analysis. According to Dwipradnyana et al. (2017), PLS-SEM aims to test the predictive relationship between constructs by seeing whether there is a relationship or influence between the constructs. The consequence of using PLS-SEM is that the test can be carried out without a robust theoretical basis, ignoring several assumptions (non-parametric) and the accuracy parameters of the prediction model seen from the coefficient of determination (R-square). Therefore, PLS-SEM is very appropriate to be used in this study. Data processing was carried out using Microsoft Excel 2010 and SmartPLS 3.2.6 software.

## 4. **Results and Discussions**

### 4.1. *Characteristics of Respondents*

The respondents of this research are the millennial generation aged 19 – 37 years who use electronic payment instruments and live in Greater Jakarta. The following are the characteristics of respondents, including gender, age, income, and types of electronic payment instruments owned.

**Table 2.** The characteristics of respondents

Characteristics	Total Respondent	Percentage (%)
Gender		
Male	51	27
Female	140	73
Age		
19-24	177	93
25-30	10	6
31-37	2	1
Income		
<Rp.1 000 000	22	12
Rp.1 000 000 – Rp.2 000 000	95	50
Rp.2 000 001 – Rp.3 000 000	23	12
Rp.3 000 001 – Rp.4 000 000	13	7
Rp.4 000 001 – Rp.5 000 000	15	8
> Rp.5 000 000	23	12
Types of Electronic Payment Instruments	134	70
M-Banking	23	12
E-Banking	172	90
E-Money		
Domicile		
Jakarta	48	25
Bogor	81	42
Depok	20	10
Tangerang	21	11
Bekasi	21	11

Based on table 2, the respondents of this study were dominated by women, who had a percentage of 73%. According to Munandar (2001), men are less interested in shopping and are often deceived because they cannot wait to choose before buying, while women like to shop because they are more interested in fashion symptoms, are concerned with social status, are less interested in the technical things of the goods they are going to buy. Therefore, women who prefer shopping need electronic payment tools to facilitate their transactions.

Most of the respondents in the aspect of age are 19-24 years, which is 93%. According to Mentari and Bendesa (2018), this age is productive and is more open to technological developments. Researchers assume that electronic payment instruments are a separate trend for teenagers. At the same time, the income aspect is dominated by respondents with pocket money/income of Rp1.000.000 – 2.000.000. This is because most respondents are in the age range of 19-24 years and are still in the school age range, so the pocket money /revenue is still below the Jabodetabek UMR. in contrast, the majority of respondents in this study live in Bogor by 42%. While the rest, namely Jakarta, by 25%, Depok by 11%, Tangerang by 11%, and Bekasi by 10%.

The use of electronic payment instruments in this study refers to using electronic payment instruments made through mobile phones. The electronic payment instruments studied were m-banking, e-banking, and e-money. The study's results obtained 191 respondents aged 17-34 in Jabodetabek. A total of 134 people uses e-money, 23 people use e-banking, and 172 people use m-banking. The most used electronic payment instrument is the use of e-money. Currently, e-money is chosen as an alternative electronic payment instrument that is considered the most suitable for micro to retail payments, which are expected to be able to process payments quickly, plus the cashback offered.

#### 4.2. *The Use of Electronic Payment Instruments and the Lifestyle of the Millennials in Jabodetabek*

Electronic payment instruments and the Millennial Generation's Lifestyle in Jabodetabek are measured using a Likert scale. The Likert scale consists of five response points: strongly agree, agree, neutral, disagree, and strongly disagree (Likert, 1932). The percentage index calculates the results of the data obtained from the Likert scale through the following steps:

1. Determine the Total Score

$$\text{Total Score} = T \times P_n$$

Notes:

T = Total number of respondents who voted on each Likert number

P<sub>n</sub> = Choice of likert score numbers

2. Determine Index Interpretation (%)

$$\text{Index (\%)} = \text{Total Score} / Y \times 100$$

Notes:

Index % = score interpretation

Total score = The result of multiplying the total number of respondents with the Likert score number

Y = Highest score Likert x Number of respondents (5 x 191 = 955)

After obtaining the index value (%), there are criteria for interpreting scores based on the intervals described in table 3 below:

**Table 3.** Interpretation criteria score based on interval

Index (%)	Explanation
0% - 19.99%	Strongly Disagree (SD)
20% - 39.99%	Disagree (D)
40% - 59.99%	Neutral (N)
60% - 79.99%	Agree (A)
80% - 100%	Strongly Agree (SA)

#### 4.3. *Use of Electronic Payment Instruments*

Electronic payment instruments have become a trend for modern society in Greater Jakarta, especially for the millennial generation, who are "literate" in technology. Currently, almost every shopping place provides transaction services with electronic payment tools, such as OVO and Go-Pay. In addition, m-banking and e-banking provide convenience for top-ups, transfer payments to any destination account, and making payments to e-commerce that provides online payments.

The use of electronic payment instruments in this study is discussed from three aspects: ease, usefulness, and attitude of use. The following is the final result of calculating the percentage index of the construct of convenience, usefulness, and attitude of use.

**Table 4.** The percentage value of the electronic payment instrument indicator index

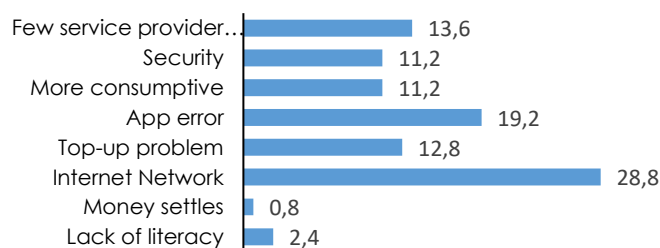
Constructs	Indicator Code	Index (%)	Note
PEU	K1	89.843	SA
	K2	89.215	SA
	K3	92.356	SA
	K4	83.351	SA
	K5	92.461	SA
	K6	85.445	SA
	K7	77.277	A
	K8	82.932	SA
PU	T1	88.586	SA
	T2	86.597	SA
	T3	87.853	SA
	T4	79.372	A
	T5	87.016	SA
	T6	79.476	A
	T7	79.796	A
	T8	79.372	A
ATU	S1	86.178	SA
	S2	86.806	SA
	S3	83.770	SA
	S4	85.654	SA

Based on table 5, 75% of indicators fall into the category of strongly agree, and 25% fall into the agree on category. It can be concluded that respondents agree and strongly agree that the three constructs of convenience, usefulness, and attitude of use are factors that encourage the use of electronic payment instruments. The most significant index percentage is found in the K5 indicator, an electronic payment instrument that is easy to carry everywhere. This is because electronic payment instruments can be accessed via smartphones. Meanwhile, the smallest index percentage is in the K7 indicator, namely outlets that provide easy-to-reach electronic payment instruments.

#### 4.4. *Complaints about the use of electronic payment instruments*

The use of electronic payment instruments, of course, needs to be improved. This is because there are still complaints from respondents, including less stable internet networks, security problems, application errors often occur, top-up problems such as admin fees that are too large, money settles when not in use, and lack of literacy.

The less stable internet network is the biggest complaint about using electronic payment instruments. The internet network is most needed when using electronic payment instruments. If there is no internet network, the application cannot be used, so that that transaction failure will occur. Stakeholders need to pay attention to this so electronic payment instruments can be used. The percentage of respondents' complaints using electronic payment instruments can be seen in Figure 1.

**Figure 1.** Percentage of complaints using electronic payment instruments



#### 4.5. *Electronic Payment Instruments as a Millennials' s Lifestyle in Jabodetabek*

In this study, the lifestyle of the millennial generation in Jabodetabek in the use of electronic payment instruments is measured by three AIO components (Activities, Interests, and Opinions).

**Table 5.** Lifestyle indicator index percentage value

Construct	Indicator Code	Index (%)	Notes
Activities	A1	72.565	A
	A2	68.272	A
	A3	81.361	SA
	A4	83.141	SA
	A5	54.345	N
	A6	55.078	N
	A7	88.167	SA
	A8	49.319	N
	A9	72.880	A
Interests	M1	78.743	A
	M2	64.817	A
	M3	79.372	A
	M4	69.843	A
	M5	82.722	SA
	M6	83.351	SA
	M7	81.047	SA
	M8	79.162	A
	M9	85.340	SA
Opinions	O1	73.613	A
	O2	65.759	A
	O3	86.806	SA
	O4	83.979	SA
	O5	79.686	A
	O6	83.456	SA
	O7	77.173	A
	O8	85.340	SA
	O9	81.047	SA

Based on the data above, the index percentage is dominated in the category of strongly agree at 44.45%, agree at 44.45%, and neutral at 11.10%. Most respondents agree and strongly agree with using electronic payment instruments as a modern lifestyle for the millennial generation in Jabodetabek. The percentage of the most extensive indicator index in the lifestyle component is the A7 indicator, namely the use of electronic payment instruments for shopping, at 88.167%. Psychologically, a person will find it easier to spend money in non-cash, thereby increasing a consumptive lifestyle, namely by shopping (Ramadani, 2016). In contrast, the lowest percentage is the A5 indicator, which uses electronic payment instruments to pay club membership funds. This low percentage is because only some join the club, so electronic payment instruments are not widely used.

#### 4.6. *Partial Least Square Analysis*

In this study, model testing was carried out using six latent variables (constructs). These constructs include; convenience, usefulness, and usage attitude, which represent the variable of using electronic payment instruments and the millennial generation's lifestyle variables in Jabodetabek are represented by the constructs of activities, interests, and opinions. Each construct has a manifest (indicator). Each indicator in this study is denoted by a letter. The indicator symbols can be seen in Table 6 below.

**Table 6.** Indicators and indicator codes

Variables	Indicators	Code
PEU	Easy to understand system	K1
	How to use easy to understand	K2
	Practical to use	K3
	Doesn't require much effort	K4
	Easy to carry everywhere	K5
	Can be used anytime	K6
	Outlets are easy to reach	K7
	Many outlets accept transactions	K8
PU	Fast transaction	T1
	Transactions are not long-winded	T2
	Better transaction nominal accuracy	T3
	Sense of secure	T4
	Certain benefits	T5
	Efficient	T6
	Increase productivity	T7
	Effectiveness	T8
ATU	Comfortable	S1
	Enjoy using system	S2
	Boredom	S3
	Enjoyment	S4
Activities	Work	A1
	Hobbies	A2
	Social events	A3
	Vacation	A4
	Entertainment	A5
	Member of the club	A6
	Community	A7
	Shopping	A8
	Sports	A9
Interests	Family	M1
	Home	M2
	Work	M3
	Community	M4
	Recreational	M5
	Cloths	M6
	Foods	M7
	Media	M8
	Achievement	M9
Opinions	Themselves	O1
	Social issues	O2
	Political	O3
	Business	O4
	Economy	O5
	Educational	O6
	Product	O7
	Future	O8
	Culture	O9

#### 4.7. SEM Model Testing

SEM model testing evaluates the measurement model (outer model) and structural model (inner model). The evaluation and interpretation of the model that has been formed are as follows:

##### 4.7.1 Measurement Model (Outer Model)

The outer model describes the relationship of the indicator block (loading) with its construct. The convergent validity of the measurement model with reflexive indicators can be seen from the correlation between item/indicator scores and construct scores. Individual indicators are considered reliable if they have a correlation value above 0.70, but loading 0.50-0.60 is still acceptable (Ghozali, 2008). The Figure 2 below provide the SEM Model of this study.

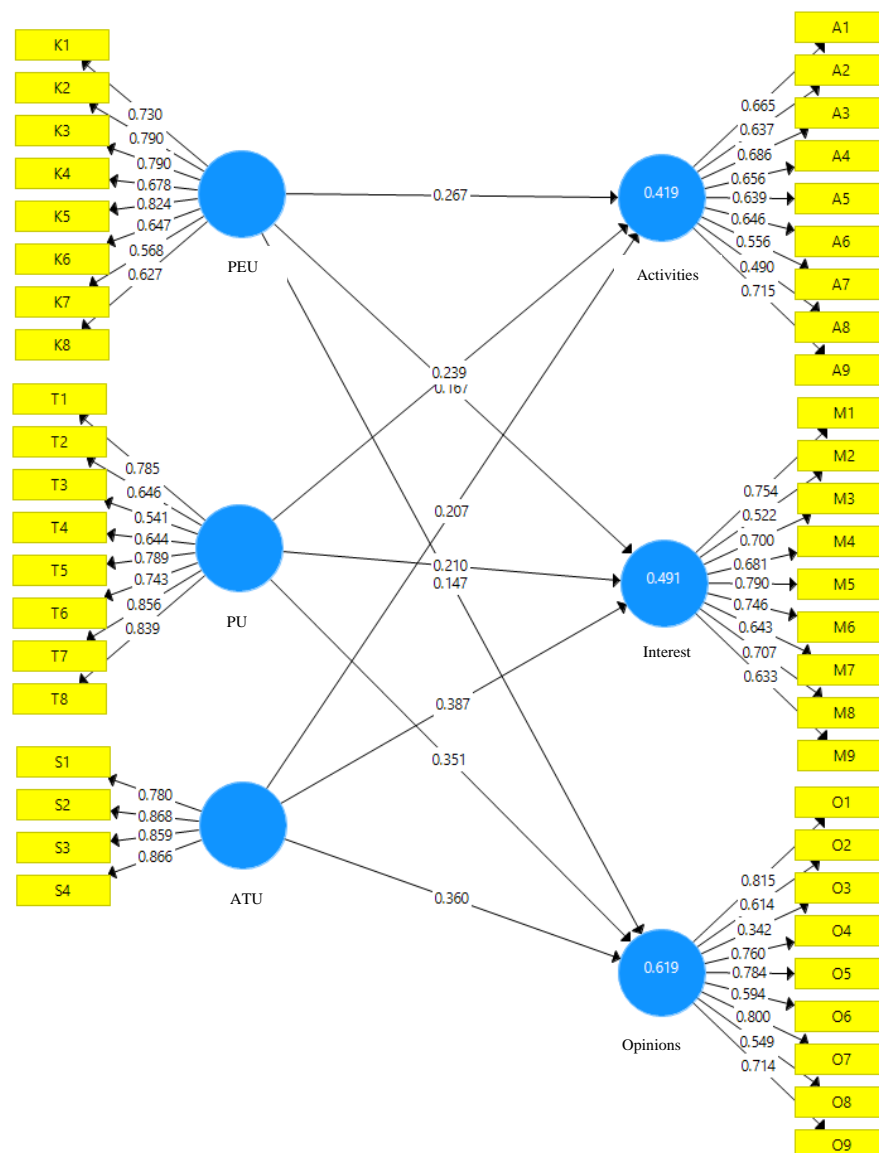


Figure 2. SEM model

The Average Variance Extracted (AVE) results is presented in Table 7 below.

**Table 7.** AVE value before dropping

Variable	Average Variance Extracted (AVE)
Activities	0.404
PU	0.544
PEU	0.507
Interests	0.477
Opinions	0.462
ATU	0.712

In this study, some indicators need to be dropped from the model because it has a factor loading value of less than 0.50, namely O3. Meanwhile, to fulfil discriminant validity, which requires a minimum AVE value of 0.50, the indicators that need to be dropped in addition to the O3 indicator are A4, A7, A8, M2, and O8. In the SEM model, the O3 indicator needs to be excluded from the opinion variable because the O3 indicator, which describes electronic payment instruments used for political purposes, is not strong enough to reflect lifestyle constructs. In addition, indicators A4 (use of electronic payment instruments for entertainment), A7 (use of electronic payment instruments for shopping), and A8 (use of electronic payment instruments for sports purposes) need to be excluded from the activity variable, indicator M2 (interested in the use of electronic payment instruments for a mortgage) needs to be excluded from the interest variable, and O8 (electronic payment instrument part of the future of crypto currencies) needs to be excluded from the opinion variable because according to the discriminant validity test it is not strong enough to reflect lifestyle constructs. After that, the PLS analysis was recalculated, resulting in a new model.

#### 4.7.2 Discriminant Validity

Discriminant validity is used to determine whether or not each construct is valid. This can be seen from each construct's Average Variance Extracted (AVE) value. Each construct is said to be valid if the AVE value is  $> 0.50$  (Ghozali, 2014). The results of the AVE output indicate that the initial SEM model has an AVE value of  $< 0.50$  on the three variables of activity, interest, and opinion. Each has a value of 0.404, 0.477, and 0.462, as described in Table 8 previously. Therefore, the indicators A4, A7, A8, M2, and O8 were removed to increase the AVE value to  $> 0.50$  so that each construct has a valid value. After eliminating indicators in several activity variables, interests, and opinions, the results of the AVE output have AVE values of 0.517, 0.502, and 0.544, respectively, as described in Table 8 and as an indication that the construct is valid.

**Table 8.** AVE after dropping

Variables	Average Variance Extracted (AVE)
Activities	0.517
PU	0.544
PEU	0.507
Interests	0.502
Opinions	0.544
ATU	0.712

In addition to using AVE, discriminant validity can also be seen in the cross-loading between the construct indicators. In this study, the results of the cross-loading output describe the correlation of activity constructs with their indicators, namely A1, A2, A3, A5, A6, and A9, which is higher than the correlation of indicators with other constructs. Likewise, the other five constructs, namely convenience,

usefulness, interest, opinion, and attitude of use, have a higher correlation than each. This shows that the construct predicts indicators in the block better than other block indicators, so it can be concluded that each indicator is valid for each construct.

#### 4.7.3 Reliabilities Test

The reliability test was measured by two criteria, namely composite reliability and Cronbach's alpha of each construct. Constructs are said to be reliable if both are  $> 0.70$  (Ghozali, 2014).

**Table 9.** Composite reliability and cronbach's alpha

	<i>Composite reliability</i>	<i>Cronbach's alpha</i>
Activities	0.865	0.822
PU	0.903	0.877
PEU	0.890	0.859
Interests	0.889	0.859
Opinions	0.891	0.857
ATU	0.908	0.865

The output results of composite reliability and Cronbach's alpha show that all constructs are worth  $> 0.70$ , so these variables are reliable, so it can be concluded that the constructs have good reliability.

#### 4.7.4 Structural Model (Inner Model)

The structural model or inner model describes the relationship between constructs. The inner model test is done by looking at the R-square value, which is the goodness fit test of the model.

**Table 10.** R-square

	R Square
Activities	0.281
Interests	0.505
Opinion	0.620

The R-square value for the activity construct is 0.281, which means that the variability of the activity construct that can be explained by the constructs of convenience, usefulness, the attitude of use and interaction is 28%. At the same time, the constructs of convenience and usefulness can explain the constructs of interest and opinion, the attitude of use and their interactions, which are 50.5% and 62%, respectively.

The second test is to see the natural effect by looking at the value of the parameter coefficient and the actual value of t-statistics. The output results of the bootstrapping method can be seen in Table 11.

**Table 11.** Path coefficients (Mean, STDEV, t-values)

	Original sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistics ((O/STERR))	Hypothesis
PEU -> Activities	0.233	0.231	0.117	1.992	Accepted
PU -> Activities	0.262	0.276	0.109	2.406	Accepted
PU -> Interests	0.197	0.202	0.108	1.825	Rejected
ATU -> Activities	0.085	0.083	0.102	0.834	Rejected
ATU -> Interests	0.400	0.405	0.096	4.173	Accepted

PEU -> Interests	0.177	0.174	0.087	2.038	Accepted
PU -> Opinion	0.358	0.366	0.080	4.494	Accepted
ATU -> Opinion	0.334	0.330	0.074	4.529	Accepted
PEU -> Opinion	0.170	0.170	0.071	2.389	Accepted

The coefficient value, which has a positive value, means that there is a positive influence in the influence of the construct. At the same time, the effect is said to be real or significant if the t-statistic has a value  $> 1.96$  (real t-table 5% = 1.96). The output results can be discussed as follows:

H1: There is a positive effect of PEU on the activities

The effect of convenience on activity has a parameter coefficient of 0.233, meaning that convenience has a positive effect on activity. The higher the ease of accessing electronic payment instruments, the higher the activity of using electronic payment instruments. Meanwhile, the t-statistic value of the effect of convenience on activity is 1.992, which is above 1.96, indicating that the effect of ease on activity is significant. It can be concluded that the ease of use of electronic payment instruments encourages respondents' activities in the use of electronic payment instruments in everyday life. The following research conducted by Waspada (2012) showed that the ease of use of this electronic payment instrument encourages transaction activities to be efficient because the transaction process can be carried out quickly, making it easier for merchants not to bother providing little money for change and not needing to provide cash inventory that too big.

H2: There is a positive effect of PEU on the interests

The effect of Perceived Ease of Use on interest has a parameter coefficient of 0.177, meaning that there is a positive influence of Perceived Ease of Use on interest, namely the higher the Perceived Ease of Use in accessing electronic payment instruments, the higher the interest in using electronic payment instruments. While the t-statistic value of the effect of Perceived Ease of Use on interest is 2.038, which is above 1.96, indicating the effect of Perceived Ease of Use on significant interest. It can be concluded that the Perceived Ease of Use of using electronic payment instruments affects respondents' interest in using them in everyday life because the instructions for using electronic payment instruments are already listed in the instructions for use so that users can learn for themselves. In addition to being easy to learn and understand, electronic payment instruments are also easy to use when transacting at various merchants (merchants/stores) that support electronic payment transactions. This result accordance with the research of Priambodo and Prabawani (2016) that electronic payment instruments have high ease of use, meaning that the easier it is to use, the more interested users of electronic payment instruments will be to use electronic payment instruments.

H3: There is a positive effect of PEU on the opinions

The effect of Perceived Ease of Use on opinions has a parameter coefficient of 0.170, meaning that there is a positive influence of Perceived Ease of Use on opinions, namely the higher the Perceived Ease of Use in accessing electronic payment instruments, the respondents' opinions regarding the use of electronic payment instruments are also higher or positive. While the t-statistic value of the effect of Perceived Ease of Use on interest is 2,398, which is above 1.96, indicating the effect of Perceived Ease of Use on significant opinions. It can be concluded that the Perceived Ease of Use of the use of electronic payment instruments affects respondents' opinions on the use of electronic payment instruments.

According to Putritama and Sari (2020), ease of use is the level of confidence that a person using technology will be free from effort. The intensity of use and interaction between users and electronic payment systems can also indicate ease of use. The convenience offered in this electronic payment instrument indirectly supports the opinion sub-indicators studied. For example, electronic payment tools address social problems, such as the Kitabisa.com platform, which provides donation services in real-time with e-banking payment methods, and m-banking.

H4: There is a positive effect of PU on the activities

The effect of usefulness on activities has a positive effect with a parameter coefficient of 0.262. At the same time, the t-statistic value of 2.406 shows that the usefulness of activities has a significant effect. It can be concluded that the benefits offered by electronic payment instruments encourage respondents' activities in their daily lives. The speed benefits offered by electronic payment instruments attract respondents to support their activities, such as watching movies. Respondents can book tickets with applications such as tix.id and make payments online.

H5: There is a positive effect of PU on the interests

The effect of usefulness on interest has a positive parameter coefficient of 0.197 with a t-statistic of 1.825. These results indicate a positive effect of usefulness on interest, but the effect of usefulness on activity is not significant. The results of the analysis of the effect of benefit on interest are not following the researcher's hypothesis. Other factors, such as the security factor, make someone less interested in using electronic payment instruments. Several respondents complained that using electronic payment instruments is not necessarily safe. The more users of electronic payment instruments, the more the impact on the increasing number of cybercrimes. This is evidenced by several fraudulent news on behalf of customer service electronic payment instruments that harm consumers.

H6: There is a positive effect of PU on the opinions

The effect of expediency on opinion has a positive parameter coefficient value, which is 0.358 and has a t-statistic value above 1.96, which is 4.494. The results show that there is a positive effect of usefulness on opinions and the Influence of usefulness on significant opinions. It can be concluded that the benefits offered by electronic payment instruments encourage respondents' opinions on using them. One example of a utility influencing opinion is that electronic payment instruments are more efficient than cash payments. This can shape respondents' opinions that electronic payment instruments create a cashless society culture.

H7: There is a positive effect of ATU on the activities

The usage attitude towards the activity has a positive parameter coefficient of 0.085, and the t-statistic value is below 1.96, which is 0.834, which shows a positive effect. However, the effect of usage attitude on the activity is not significant. The results of the analysis of the Influence of usage attitudes on activities are not following the researcher's hypothesis. Usage attitudes such as happy to use and comfortable to use do not necessarily make electronic payment instruments support one's activities. This can be seen from respondents' complaints, who revealed that only a few merchants provide electronic payment services. In addition, errors often occur during the transaction process.

H8: There is a positive effect of ATU on the interests

The effect of usage attitude on interest has a positive parameter coefficient of 0.262 and has a t-statistic value above 1.96, which is 2.406. This shows that the attitude of use has a positive and significant effect on interest. The higher the attitude of use, the higher the interest in using electronic payment instruments. This is because respondents already like electronic payment instruments. Thus, respondents will be interested in using electronic payment instruments regularly in the future. If the respondent already has a high attitude towards using electronic payment instruments, the respondent will recommend other people to use electronic payment instruments.

H9: There is a positive effect of ATU on the opinions

The effect of usage attitude on opinion has a parameter coefficient of 0.334, meaning that usage attitude has a positive influence on opinion. The higher the attitude toward use, the respondent's opinion regarding the use of electronic payment instruments is also higher or positive. Meanwhile, the t-statistic value of the influence of usage attitudes on opinions is 4,529, which is above 1.96, which indicates that the influence of usage attitudes on opinions is significant. It can be concluded that the attitude of using electronic payment instruments, such as being happy, comfortable, not bored, and enjoying the use, encourages respondents' positive opinions in using electronic payment instruments.

## 5. Managerial Implications and Conclusions

### 5.1. Managerial Implications

The managerial implication of this research is a recommendation addressed to all stakeholders related to electronic payment instruments. Some implications to be considered are:

1. Most of the hypotheses in this study are accepted, which shows the influence of electronic payment instruments on the lifestyle of the millennial generation in Jabodetabek. This is an opportunity for micro-to-retail businesses to cooperate with electronic payment instrument issuers. The more merchants that provide electronic payment instruments, the consumer's desire to transact non-cash will be fulfilled so that a cashless society lifestyle will be created.
2. In this study, there are still many complaints from respondents. The most significant percentage of respondents' complaints are internet network problems. Stakeholders such as providers should

improve their internet network system to make it more stable, so electronic payment instruments can be used properly.

3. Security is an important factor in maintaining the data of users of electronic payment instruments. The publisher should improve the security system by increasing the minimum-security measures, which include prevention, detection, and containment security measures. In addition, legal arrangements are needed to guarantee the rights and obligations of the stakeholders are made in writing and clearly in each agreement document that can be easily accessed and understood.
4. In this study, respondents complained about frequent interruptions when using electronic payment instruments. Publishers should improve the backup and recovery system for their electronic payment instrument database so that their data will be maintained when there is an interruption.

## 5.2. Conclusion

Based on the results of the research that has been done, it can be concluded as follows:

1. The percentage index on the electronic payment instrument indicator is in the “agree” and “strongly agree” categories. It can be concluded that most respondents agree and strongly agree that the three components, such as convenience, usefulness, and attitude of use, are factors that encourage respondents to use electronic payment instruments.
2. In the lifestyle component, most indicator index percentages are in the agree category of 44.45% and strongly agree 44.54%. This shows that most respondents agree and strongly agree about using electronic payment instruments as a lifestyle for the millennial generation in Jabodetabek.
3. The effect of convenience on activities, interests, and opinions, the effect of usefulness on activities and opinions, and the effect of usage attitudes on interests and opinions have a positive and significant influence. Meanwhile, the effect of usefulness on interest and the influence of usage attitudes on activities has a positive but insignificant effect.

## References

- Abbas, A. E. (2017). Literature review of a cashless society in Indonesia: evaluating the progress. *International Journal of Innovation, Management and Technology*, 8(3), 193-196.
- Akinola, O. S. (2012). Cashless society, problems and prospects, data mining research potentials. *International Journal of Computer Science and Telecommunications*, 3(8), 49-55.
- Anggraeni, R. (2015). Pengaruh Persepsi Kemudahan Penggunaan dan Persepsi Kegunaan Terhadap Niat Untuk Menggunakan dan Penggunaan Aktual Layanan Jejaring Sosial Berbasis Lokasi (Studi pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya Malang). *Ekonomi Bisnis*, 20(1).
- APJII, Association of Indonesian Internet Service Providers. (2019). Results of the 2018 Indonesian Internet User Behavior and Penetration Survey.
- Arifin, A. (2017). Hedonic Treadmill Syndrome Terhadap Penggunaan Financial Technology Pada Generasi Millennial.
- Ashraf, R. (2018). Multigenerational employees: Strategies for effective management. *International Journal of Economics and Management Science*, 7(3), 301-315.
- Assael, H. (1984). *Consumer behavior and marketing action*. Kent Pub. Co.
- BI, Bank Indonesia. (2009). Bank Indonesia Regulation Number: 11/12/PBI/2009 concerning Electronic Money.
- Chandra, P. (2016). Pengujian Technology Acceptance Model Terhadap Sikap Adopsi Internet Banking di Universitas Lampung. Universitas Lampung.
- Chrismastianto, I. A. W. (2017). Analisis SWOT Implementasi Teknologi Finansial Terhadap Kualitas Layanan Perbankan di Indonesia. *Jurnal Ekonomi dan Bisnis*, 20(1), 133-144.
- Dwipradnyana, I., Pratiwi, I., & Astawa, I. (2017). Analisis Structural Equation Modeling (SEM) Dengan Pendekatan Partial Least Square (PLS). *Maj. Ilm. Untab*, 14(2), 173-178.
- Genady, D. I. (2018). Pengaruh kemudahan, kemanfaatan, dan promosi uang elektronik terhadap keputusan penggunaan uang elektronik di masyarakat (studi kasus di Provinsi DKI Jakarta) UIN Syarif Hidayatullah Jakarta: Fakultas Ekonomi dan Bisnis].



- Ghozali, I. (2008). *Structural equation modeling: Metode alternatif dengan partial least square (pls)*. Badan Penerbit Universitas Diponegoro.
- Hadad, M. D. (2018). *Financial Technology (FinTech) di Indonesia, Kuliah Umum Tentang FinTech-IBS*.
- Hadiyati, P., & Damayanti, N. (2018). The Impact of Usefulness Perception, Easiness Perception, Trust and Security on Interest to Use Flazz Bca Electronic Money. *International Journal of Advanced Research (IJAR)*, 6(11), 798-804.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. Vintage.
- Kotler, P., & Keller, K. L. (2009). *Manajemen pemasaran*. edisi.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology*.
- Lyons, S. (2004). An exploration of generational values in life and at work [Carleton University].
- Mailizar, M., Almanthari, A., & Maulina, S. (2021). Examining teachers' behavioral intention to use E-learning in teaching of mathematics: an extended TAM model. *Contemporary Educational Technology*, 13(2), ep298.
- Mallat, N. (2007). Exploring consumer adoption of mobile payments—A qualitative study. *The Journal of Strategic Information Systems*, 16(4), 413-432.
- Mentari, A. C., & Bendesa, I. (2018). Analisis faktor-faktor yang mempengaruhi minat dalam menggunakan uang elektronik di Kota Denpasar, Provinsi Bali. *E-Jurnal EP Unud*, 7(4), 646-676.
- Munandar, A. S. (2001). *Psikologi industri dan organisasi*.
- Olusola, M., Oludele, A., Chibueze, O., & Samuel, O. (2013). Cashless society: Drives and challenges in Nigeria. *International Journal of Information Sciences and Techniques*, 3(2).
- Prasetijo, R., & Ihalauw, J. J. (2005). *Perilaku konsumen*.
- Priambodo, S., & Prabawani, B. (2016). Pengaruh Persepsi Manfaat, Persepsi Kemudahan Penggunaan, Dan Persepsi Risiko Terhadap Minat Menggunakan Layanan Uang Elektronik (Studi Kasus Pada Masyarakat di Kota Semarang). *Jurnal Ilmu Administrasi Bisnis*, 5(2), 127-135.
- Putritama, A., & Sari, R. S. P. (2020). Factors Affecting the Interest in Using E-money for Millennials. *Jurnal Economia*, 16(2), 245-256.
- Rahayu, F. S., Budiyanto, D., & Palyama, D. (2017). Analisis Penerimaan E-Learning Menggunakan Technology Acceptance Model (Tam) (Studi Kasus: Universitas Atma Jaya Yogyakarta). *Jurnal Terapan Teknologi Informasi*, 1(2), 87-98.
- Raines, C. (2003). *Connecting generations: The sourcebook for a new workplace*. Thomson Crisp Learning.
- Ramadani, L. (2016). Pengaruh penggunaan kartu debit dan uang elektronik (E-Money) terhadap pengeluaran konsumsi mahasiswa. *Jurnal Ekonomi dan Studi Pembangunan*, 8(1), 1-8.
- Rogoff, K. (2015). Costs and benefits to phasing out paper currency. *NBER Macroeconomics Annual*, 29(1), 445-456.
- Sigar, J. (2016). Pengaruh Persepsi Kegunaan, Persepsi Kemudahan Dan Persepsi Kesenangan Niat Menggunakan Uang Elektronik Di Manado. *Jurnal EMBA*, 4(2), 498-507.
- Silitonga, D. (2010). Tahapan perkembangan metropolitan jabodetabek berdasarkan perubahan pada aspek lingkungan. *Jurnal Perencanaan Wilayah dan Kota*, 21(3), 197-214.
- Sternad Zabukovšek, S., Picek, R., Bobek, S., Šišovska Klančnik, I., & Tominc, P. (2019). Technology acceptance model-based study of students' attitudes toward use of enterprise resource planning solutions. *Journal of Information and Organizational Sciences*, 43(1), 49-71.
- Sugiyono, D. (2013). *Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D*.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
- Waspada, I. (2012). Percepatan Adopsi Sistem Transaksi Teknologi Informasi Untuk Meningkatkan Aksesibilitas Layanan Jasa Perbankan. *Jurnal Keuangan dan Perbankan*, 16(1).
- Weng, F., Yang, R.-J., Ho, H.-J., & Su, H.-M. (2018). A TAM-based study of the attitude towards use intention of multimedia among school teachers. *Applied system innovation*, 1(3), 36.