

# Indonesian Millennial Generation; Impact of Internal Factors and External Factors to use the intention of Financial Technology (Mobile Applications Payment) in Jakarta – Indonesia

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## ABSTRACT

This study aims to see the influence of internal factors - financial literacy and external factors of money saving and time saving on the interest in using mobile payment apps in the millennial generation in Jakarta - Indonesia. This study has 3 independent variables (x) and 1 dependent variable (y). This research is a quantitative research using a questionnaire aimed at the millennial generation in Jakarta - Indonesia. This study used purposive sampling with a total sample of 111 respondents who were tested using statistical analysis tools Structural Equation Model (SEM - SmartPLS 3.0).

The results of this study provide an explanation that the internal factor - financial literacy affects the interest in using mobile apps payment in the millennial generation in Jakarta - Indonesia. Likewise, external factors - money saving and time saving have the same effect on the interest in using mobile payment applications. This study provides input into consideration for mobile applications, payment companies in determining strategies to improve company performance.

This study has limitations in this research which is only limited to the internal factor variables - financial literacy and external factors of money saving and time saving. Another limitation is that the object of research is limited to the millennial generation in Jakarta, Indonesia. This can be an opportunity and suggestions for further research to add internal and external factors and expand the object of further research

## Keywords

internal factors, external factors, financial literacy, money saving, time saving, mobile applications digital payment, Jakarta – Indonesia

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## Introduction

Indonesia is a country that has the fourth largest population in the world with a total population of more than 268 million. Population growth of the productive age (15-64) is the population that dominates nearly 70% of the total growth over the next 10 years (Indonesia, 2017).

The millennial generation is the generation that dominates growth in the next 10 years (Rianto et al., 2019). In some literature, it is explained that millennial are a generation that is comfortable with technology, addicted to technology and is connected to several types of devices. The report from (Ministry of Communication and Informatics, 2018) explains that the growth of internet users in Indonesia has experienced a very significant increase, where in 2016 it reached 132.7 million people from a total population of 256.2 million and in 2017 it grew to 143.26 million people. This further reinforces the conclusion that the millennial generation as active internet users is a relevant fact.

The rapid development of information technology and the internet not only makes it easier, but has an impact on changing investment and transaction patterns. New behavior patterns and lifestyles make the use of financial technology increasingly attractive. *Financial Technology (Fintech)* makes servicing in financial services easier and more developed. The development of *fintech* today has featured new innovations in financial services, such as payment instruments, loan instruments and others (Evy Nur Sugiarti, 2019).

The high development of financial technology in Indonesia is marked by the increase in the number of genetic companies by 16 companies in 2006 to 165 companies in

2017 with total users of 616 thousand and Rp. 13.52 trillion in funds rolled out. Competition in the number of financial technologies with a large market share makes genetic companies have to find ways to improve company performance (Mohammad, 2019). One way to improve performance is to increase the number of users of financial technology companies.

This study discusses internal and external factors that influence customer interest in using financial technology, especially digital payments. Several studies assume that the internal factor variable - financial literacy is a factor that influences the interest in using, where the presence of financial literacy a person has the ability to make financial decisions to achieve prosperity. (Finance, 2018) Financial literacy is used as a tool used by someone to manage finances in a better direction. Several studies have different results in assessing the effect of financial literacy and interest in using. Research (Pratiwi, 2019) shows that financial literacy has an effect on interest in using, but different results in research (Pradikasari & Isbanah, 2018) . In addition to the internal factors that influence the interest in using applications, several studies mention external factors - money saving and time saving have an effect on the interest in using applications. Money saving and time saving have been written in many studies (Xu, Huang, et al., 2019) (Rianto et al., 2019) and have different results.

This research focus of companies that provide digital payment services that the generated right in Indonesia such as OVO, Gopay, Grab pay, shopee pay and the like. Several studies conducted similar studies with different results (Davis, 2015; Panday, 2015; Rianto et al., 2019; Wu & Wang, 2005; Xu, Sam, et al., 2019) .

This study adopts research from (Pradikasari & Isbanah, 2018) on the internal factor variable - financial literacy while the money saving and time saving variables are adopted from the research (Rianto et al., 2019)

## Literature Reviews

### Indonesian Millennial Generation

Some literature has explained about the millennial generation. According to (Leon, 2018) the millennial generation is a generation born between 1980 - 2004. This is in accordance with some previous literature (John stone, 2001) (Center, 2011).

Millennial are those who develop with information available online (Leon, 2018), so that it makes millennial friends with all residents on earth and do all activities more easily. In several studies, the millennial generation is a homogeneous group and has the characteristics of a generation that is comfortable with technology, is addicted to technology and is connected to several types of *device*. The Indonesian Millennial Generation is the generation that currently has the largest number in the Indonesian population structure. According to (Indonesia, 2017) the number of millennial generations will increase more in the next 10 years. Based on this fact, Indonesia's millennial generation has the potential to be the largest user of digital payment applications in Indonesia.

### The influence of factors - internal - financial literacy on the interest in using digital payment applications for the millennial generation in Jakarta - Indonesia

Financial Literacy is closely related to individual or personal financial management management, which investment decisions, funding, and good asset management (Putra et al., 2007). What Knowledge finance can encourage someone to make financial planning and minimize errors in investment decisions (Lusardi and Mitchell, 2007). Someone who has a low level of financial literacy tends to have low information coverage in making financial transactions so that interest in using digital payment applications will be low.

Financial literacy is one's knowledge of finance, which aims to achieve prosperity in the future will come. Their financial literacy is good then will help one understand the importance of the transaction easier and safer. Research conducted by (Pertiwi, 2018) and (Munawar et al., 2020) states that financial literacy has an influence on the decision to use digital payments. The higher the level of financial literacy someone, then would be the wiser, someone is in the decision to trade.

Based on the explanation above, the hypothesis of this study can be formulated as follows:

H1. There is an effect of financial literacy on interest in using digital payments

### Technology Acceptance Model (TAM)

The literature on TAM was developed and introduced by (Davis, 1989). In the TAM model, two main determinants of technology acceptance are formulated. The first factor, the perceived benefits, is the extent to which a person believes

that using a certain system will improve his job performance (Davis, 1989). The second factor is perceived ease of use, which refers to the degree to which a person believes that using a particular system will facilitate activities.

### Perceived Usefulness

Some literature attempts to explain the reasons people accept and reject information. Based on the literature developed by (Davis, 2015), it is explained that a person's intention in using applications is how the application can help facilitate their work better than before. The literature adopted from (Xu, Huang, et al., 2019) explains that the benefits of using technology are the perceived advantages of innovative products that refer to time savings, money savings and ease of use. Some literature has researched a lot about time saving, money saving and convenience (Xu, Huang, et al., 2019) and (Amaro & Duarte, 2015). This research focuses on the millennial generation of Jakarta, Indonesia who use digital payment mobile applications.

### The influence of external factors - money saving on the interest in using digital payment applications for millennial in Jakarta - Indonesia

The Indonesian millennial generation is the largest number in the Indonesian population structure. The money saving marketing strategy applied to online payment service companies is expected to have a positive impact on the interest in using online payment applications for millennial in Jakarta in carrying out certain routines and activities (Leon, 2018). The emergence of many digital payment applications has made competition in the applicable business environment, even tighter, so digital payment application companies must develop strategies to increase their interest in using digital payment applications to improve company performance (Mohammad, 2019). The factor that affects interest in using is a money saving (Xu et al., 2019). The importance of implementing a marketing strategy to increase profits can be achieved through discounts, cash back or limited promotional time.

Various studies have concluded that discounts, cash back, and limited promotions can increase interest in using online applications (Kim et al., 2011; Xu et al., 2019). Based on the above discussion, we can develop the following hypothesis: H2. Money saving affects the interest in using digital payment applications in the millennial generation in Jakarta

### The influence of external factors - time saving on the interest in using digital payments in millennial generation in Jakarta - Indonesia

Services on the digital payment mobile application or technology developed for use by consumers to get services without having to come and meet employees at the company (Leon, 2018). Digital payment mobile companies develop customer experiences where they make information, transactions and communications faster for customers (Leon, 2018). Based on research (Xu, Huang, et al., 2019) explains that the relationship between time and interest in using, among others: (a) Time is very meaningful (b) Time is a resource that has a value that can be converted into

money and effort, even though it is not tangible; (c) The literature on time as an influence on consumer behavior has been widely studied.

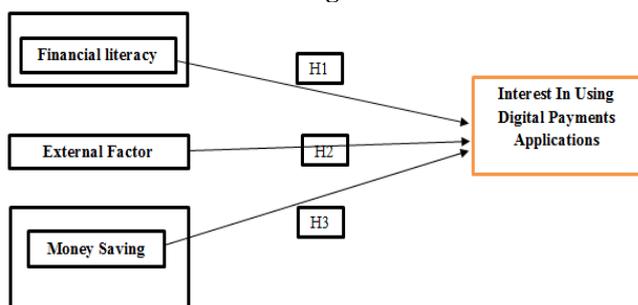
Based on the arguments and discussion above, a hypothesis can be concluded as follows:

H3. Time saving affects the interest in using digital payment applications in the millennial generation in Jakarta.

### Conceptual Framework

The thinking framework is an important part of the research process (Rianto et al., 2019). Good research can explain in detail the independent and dependent variables. Based on the above arguments, a research model can be built which is shown in Figure 1 as follows:

Image 1



Based on Figure 1 above, 3 hypotheses can be taken in this study, which are as follows:

H1. Internal factor - financial literacy affects the interest in using digital payment applications in the millennial generation in DKI Jakarta

H2. External factor - money saving affects the interest in using digital payment applications in the millennial generation in DKI Jakarta.

H3. External factor - time saving affects the interest in using digital payment applications in the millennial generation in DKI Jakarta.

### Method

#### Sample and Data Collection Process

This study focuses on the respondent millennial generation in the area of DKI Jakarta. This study adopted research from (Rianto et al., 2019) which was then applied to existing digital payment applications in Indonesia. The sample determinant in this study refers to (Hair et al, 2014) by counting the number of indicators multiplied by 5 so that the minimum number of samples is 95 respondents. This research uses non probability sampling with purposive sampling technique as a method of determining the sample. The criteria for determining the sample are: (1) millennial generation aged 16-40 years (Leon, 2018), (2) Respondents have a job, (3) Respondents are domiciled in the DKI Jakarta - Indonesia area. Research involving 130 respondent user applications, digital payments that are in Jakarta-Indonesia. Of the total 130 respondents, 121 respondents returned the questionnaire and only 111 respondents' data matched the criteria for this study.

### Measure variables and scale of validation

Internal measurement of the financial literacy variable in this study was adopted from research (Prihastuty & Rahayuningsih, 2018) which was measured by eight statement items. External measurements in this study were mostly adapted from research (Xu, Huang, et al., 2019). Money - Saving uses three question items adopted from (Lee et al, 2013; Li & Buhalis, 2006; Limayem et al, 2000) and time-saving variables using three item statements adopted from (Davis, 1989; Limayem et al. , 2000; Cho, 2004) Meanwhile, the dependent variable intention to use was measured using three statement items adopted from et al., 2008) with a five-point likert scale ranking of 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree.

### Discussion and Result

Smart PLS 3.0 software is used to confirm the validity of the indicators used and conclude the hypotheses built. This study examines internal factors - financial literacy and external factors - money saving and time saving on the interest in using digital payment applications for the millennial generation in DKI Jakarta - Indonesia.

### Results

Based on the results of the outer model variable items on financial literacy must be eliminated 1, 2, 3 and 7. The independent variable in this study is financial literacy. The validity test of the financial literacy variable is 0.840, 0.821, 0.806 and 0.819 while the money saving variable is 0.847, 0.903 and 0.866 and the time saving variable is 0.903, 0.939 and 0.958. The dependent variable in this research is the interest in using a digital payment application which has the following validity test results of 0.807, 0.855, 0.864, 0.861 and 0.825.

Table 1 shows the results of the reliability test and Average Variance Extracted (AVE).

Table 1 Test Results of composite reliability and AVE

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Financial Literacy	0.840	0.844	0.893	0.675
Money saving_	0.850	0.910	0.907	0.764
Time Saving	0.926	0.933	0.953	0.871
Use Intention mobile apps Payment_	0.899	0.912	0.925	0.710

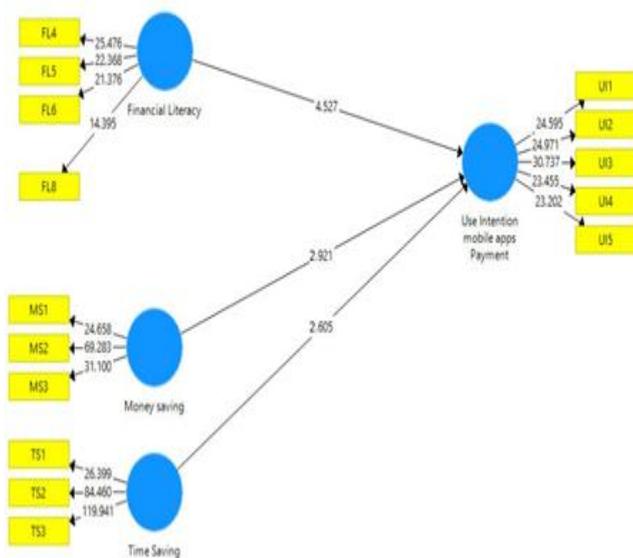
Based on the table above, it can be concluded that the results of the composite reliability of each independent and dependent variable are greater than (>0,70 ), namely financial literacy 0.893, money saving 0.907, time saving 0.953 and use intention 0.925. While the average variance

extracted (AVE) is greater than ( $>0,50$ ), namely financial literacy 0.675, money saving 0.764, time saving 0.871 and use intention 0.710.

In this study, the hypothesis is tested using the inner model test to see the effect of the independent variable financial literacy, money saving and time saving on the dependent variable interest using mobile payment application with the help of Smart PLS 3.0 software.

The results of the inner test in this study indicate that the influence of the variable money saving, time saving and ease of use on the intention use mobile digital payment applications for the millennial generation in Jakarta - Indonesia.

shown in Picture 1 as follows:



Based on the results of the inner research test above, it can be concluded that the independent financial literacy variable has a t-statistic value of  $4.527 > t\text{-table } 1.971$  with a p-value of 0.000, which means that H1 is accepted, so the financial literacy variable affects the interest in using digital applications payment in the millennial generation. In Jakarta - Indonesia. The independent money saving variable has a t-statistic value of  $2.921 > 1.971$  t-table with a p-value of 0.043, which means that H2 is accepted, the money saving variable has an effect on the interest in using digital applications payment in millennial in Jakarta - Indonesia. t-statistic value is  $2.605 > t\text{-table } 1.971$  with a p-value level of 0.040, which means that H3 is accepted, the time saving variable affects the interest in using digital applications payment for millennial in Jakarta - Indonesia.

The results of this study also prove that the R-square value is 83.4% which explains that the variation in the independent variable in this study is capable of explaining 83.4% of the variation in the dependent variable and the rest is explained by the variance of the variables in other research models.

## Conclusion

Based on the results of discussions and research conducted on the influence of internal factors - financial literacy and external factors - money saving and time saving on the interest in using mobile applications payment in the millennial generation in Jakarta - Indonesia, it can be concluded that Indonesia is a country that has the potential for population growth. 4th largest in the world. The population who is dominated by the millennial generation has made technology a lifestyle and lifestyle, including in the pattern of digital financial transactions. With the increasing number of financial technology, users and the number of digital transactions provide opportunities for genetic companies to analyze the factors that influence interest in using financial technology from digital payment behavior.

Based on the results of the research that has been done, it can be concluded that internal factors - financial literacy has an effect on the interest in using mobile applications payment in the millennial generation in Jakarta, Indonesia. While external factors - money saving and time saving also affect the interest in using the mobile apps payment for millennial in Jakarta Indonesia.

## Managerial Implications

Based on the results of the discussion of research on the influence of internal factors - financial literacy and external factors - money saving and time saving on the interest in using mobile applications, payment for millennial in Jakarta - Indonesia, the managerial implications that can be conveyed are as follows:

## Mobile Applications Payment Companies

Based on the results of the research we have done, the results show the influence of the relationship between internal factors - financial literacy on the interest in using mobile payment applications in the millennial generation in Jakarta, Indonesia. This can be used as a material for business considerations for mobile applications, payment companies to improve financial education for mobile applications payment users. Education can be done by providing outreach to educational centers such as schools and universities or through advertisements and visits to the millennial community. This research also shows that the external factor of money saving affects the interest in using mobile applications, payment for millennial in Jakarta, Indonesia. The results of this study can be a strategy in making company decisions, where the existence of discounts, cash back, free shopping, tax deductions and others can affect the interest of the millennial generation in using digital mobile application payment transactions. The results of the research on the external factor variable - time saving also provides a similar picture where the external factor of money saving affects the interest in using mobile applications payment in the millennial generation in Jakarta, Indonesia. Ease of transaction, speed and flexible time using digital-based payment applications can increase interest in using mobile payment applications for the millennial generation. These results can be used as a consideration for

companies in improving networks, making access easier, improving services and expanding reach to increase interest in using mobile payment applications to the millennial generation in Jakarta, Indonesia. .

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