

# **Antecedent Intention to Use Mobile Payment at Pasar Rakyat Micro Enterprises in Jakarta During the Covid-19 Pandemic and Clustering the Characteristic Respondent using K-Means**

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## **Abstract**

This study aims to determine whether enthusiasm has a positive effect on perceived usefulness and intention to use mobile payments, and also whether anxiety enthusiasm has a positive effect on perceived usefulness and intention to use mobile payments and whether perceived usefulness affects intentions to use mobile payments. And the second is to look for patterns from the respondent's profile using data mining using the clustering method with k-means using the R Studio software from primary data with 178 respondent data and after that it is linked to the results of quantitative analysis with PLS-SEM with smartpls software. The following results are obtained, where enthusiasm affects perceived usefulness of 0.899 and anxiety affects perceived usefulness of 0.18, while the effect of enthusiasm on intention to use is 0.463, while the effect of perceived usefulness on intention to use is 0.312, and the influence of anxiety on intention to use is -0.226, which means that if anxiety increases, the intention to use will decrease. Meanwhile, from the results of machine learning by using clustering on the respondent's profile using k-means, in within cluster sum of squares by cluster is 76 %, and it can be seen that the respondent's profile which will increase the intention to use mobile payment is that the total sales are at most under 500 thousand, then the most education in clusters 1 and 3 is at the level of SMA is about 63 percent and the rest are elementary school graduates, and the network that is most widely used is Indosat and the number of suppliers is 1-3 and the number of customers is between 2-10 customers and the last gender is mostly male.

**Keywords:** Enthusiasm, Anxiety and Perceived Usefulness and Intention to Use Mobile Payment, Data Mining, Clustering, K-Mean

## **1. Introduction**

Small or micro businesses and market traders in Indonesia reach 12 million market traders in Indonesia according to data from the DPP of the Indonesian Market Traders Association. According to BPS data, market traders in Indonesia in 2019 there were 15,567 traditional markets in Indonesia with a total of 2,818,216 market traders. This number is still small when compared to 65 million micro-enterprises in Indonesia. But during the pandemic, 43 percent of market traders in Indonesia during the pandemic were closed because it was quiet.

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Therefore, the role of market traders and micro-enterprises in Indonesia is very large for the Indonesian economy. And according to INAMIKRO there are 5 things that are scary for people's markets and micro-enterprises, namely:

1. Lack of digital literacy, finance and business protection
2. Lack of capital literacy (bank credit)
3. Lack of technological literacy and innovation
4. Lack of literacy to a larger market: marketplace, online store, e-commerce, e-logistics, e-export.
5. Lack of literacy in promotion and business networks as well as literacy on business and legal permits.

Micro, Small and Medium Enterprises (MSMEs), including traditional markets, have a very crucial role for the Indonesian economy. Of the approximately 64.2 million existing MSMEs, it is recorded that MSMEs contribute to Indonesia's GDP of more than 60%. (Anggraini, 2021). The Covid-19 pandemic also has an impact on MSMEs, especially market traders, where the government is making efforts to prevent the spread of Covid-19 by imposing PPKM (Enforcement of Community Activity Restrictions) which prevents people from crowding in one particular location, and for that the market is a place where this happens. buying and selling transactions, and the COVID-19 pandemic conditions, the government urges no cash exchange, in order to reduce the spread of covid-19. Therefore we need payment technology that can be done online. In order to change the habit of making transactions using cash, INAMIKRO has software that will help market traders to make transactions online, and also make payments online.

The problem that was caught by INAMIKRO from market traders was how to change the habits of these market traders in using technology-based applications, for that information technology literacy is needed to ensure that market traders can use payment technology and also borrow online. According to INAMIKRO, the needs of market traders for access to technology are at the time of buying and selling transactions and also access to capital.

According to (Nilamsari et al., 2020) the measurements made for MSMEs are related to enthusiasm and productivity factors, computer anxiety, which will affect the ability to work using computers. The ability to use computers will also increase work productivity, as researched by (Agus Tri Indah K, 2017).

### ***Objective of the Research***

To test whether the factors of enthusiasm, and productivity, computer anxiety, which will affect the ability to work using a computer. Beside that from the respondent data is can be processed by using data mining method and also using the clustering with k-means algorithm to get the more characteristics of respondent from this research.

### ***Benefit of the Research***

The benefits from this research are the market traders feel enthusiastic or anxious about using mobile payments. And using the data mining method to give more clear about the respondent characteristics by using clustering with k-means method.

## 2. Literature Review

### *Enthusiasm*

According to (Watson et al., 1988) said that in carrying out one's actions will be driven by positive emotions and negative emotions, one of the positive emotions that encourage action is enthusiasm, and because this enthusiasm is a motivational boost from within a person, because it is often referred to as internal motivation or self-efficacy. According to (Frenzel et al., 2009) enjoyment is caused by feelings of high enthusiasm. Finally, according to (Mustaqim et al., 2022) high enthusiasm will accelerate learning e-learning or learning new technologies.

### *Anxiety*

According to (Watson et al., 1988) said that in carrying out a person's actions will be driven by positive emotions and negative emotions, one of the positive emotions that encourage action is anxiety, and because of anxiety there will be reluctance or anxiety in using computers. According to (Awobamise et al., 2022) people still suffer from social anxiety or communication fear when venturing into social media spaces or as a result of using social media, causing anxiety about technology. And the last one according to (Mustaqim et al., 2022) states that anxiety causes e-learning learning to be slow.

### *Perceive Usefulness*

According to (Actual et al., 2021) states that perceived usefulness has a direct effect on intention to use or interest in using a technology. Perceived usefulness is defined as the individual's level of belief that using a particular system or technology will improve the quality of his work. Furthermore, according to (Andre Tanujaya, 2020) stated that perceived usefulness is the main determinant of intention to use. And the last is according to (Davis. D. Fred, 1989) which states that the tendency to use or not to use an application to increase confidence in the use of technology to improve performance in their work.

### *Intention to Use Mobile Payment*

According to (Teo, 2011) states that the intention to use mobile payment is influenced by usability and also the ease of using a computer, where the ease of using a computer is influenced by the more expert someone uses a computer, the easier it will be to use a computer. According to (Yu & Zadorozhnyy, 2021) expertise in computers will affect the intention to use mobile payments. And the last one according to (Putra et al., 2021) states that the use of technology because of anxiety will inhibit intention. So in this study it is necessary to test whether enthusiasm and anxiety affect the use of technology for market traders.

### *Influence of enthusiasm to Perceived Usefulness*

According to (Bahiyah & Kusumadewi, 2013) stated that the use of MRI is strongly influenced by the enthusiasm of medical personnel, so that the adoption of technology becomes easier. In addition, according to (Andre Tanujaya, 2020) states that enthusiasm affects the perceived usefulness of using the M-TIX application. Finally, according to (Subakdo Eko Yulianto, 2011) states that enthusiasm will motivate e-learning learning so that it is easier or in other words increases perceived usefulness.

**H1:** Enthusiasm has a positive effect on perceived usefulness

### *Pengaruh Anxiety terhadap Perceived usefulness*

According to (Yoshida, 2016) there are 14 statements that contain anxiety when conducting an assessment of perceived usefulness. And according to (Sinnema et al., 2013) states that anxiety is a barrier to perceived usefulness. And also according to (School et al.,

1995) that anxiety has an indirect impact on intention but usually has a large impact on perceived usefulness. Based on the literature study above, a hypothesis will be made

**H2:** Anxiety has a positive effect on perceived usefulness

***The influence of enthusiasm on the intention to use mobile payment***

According to (Indah & Agustin, 2019) stating enthusiasm will increase perceived usefulness which will ultimately increase the use of GO-PAY (as a mobile payment) in the city of Padang. According to (Mahfuroh & Wicaksono, 2020) age determines the use of mobile payments. Finally, according to (Yanto Widi, 2020) stated that enthusiasm will make users become comfortable in using mobile payments, and will automatically have a positive effect on intentions to use mobile payments.

Based on the literature study above, a hypothesis will be made

**H3:** Enthusiasm has a positive effect on intention to use mobile payment

***The influence of anxiety on the intention to use mobile payment***

According to (Sinnema et al., 2013) anxiety will have a negative effect on the use of technology. And according to (Sinnema et al., 2013) states that anxiety is a barrier to perceived usefulness. And also according to (School et al., 1995) that anxiety has an indirect impact on intention but usually has a large impact on perceived usefulness. So that anxiety will have a negative impact or reduce perceived usefulness which will have an impact on the intention to use mobile payment.

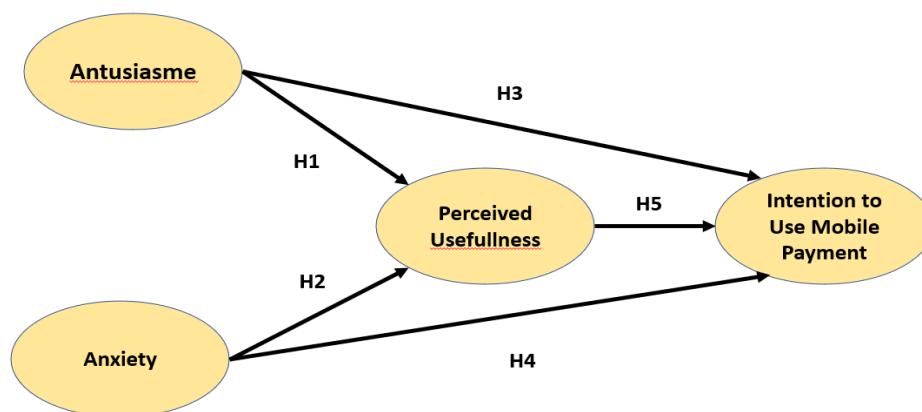
Based on the literature study above, a hypothesis will be made

**H4:** Anxiety has a positive effect on intention to use mobile payment

***The influence of perceived usefulness on intention to use mobile payment***

According to (Andre Tanujaya, 2020) states that perceived usefulness has a positive effect on the use of M-TIX. And according to (Liébana-Cabanillas et al., 2020) states that perceived usefulness has a positive effect on intentions to use mobile payments. Finally, according to (Indah & Agustin, 2019) stated the perceived usefulness of increasing the use of GO-PAY (as a mobile payment) in the city of Padang.

**H5:** Perceived usefulness has a positive effect on intention to use mobile payment



**Gambar 4.** Rerangka Penelitian

### 3. Research Methodology

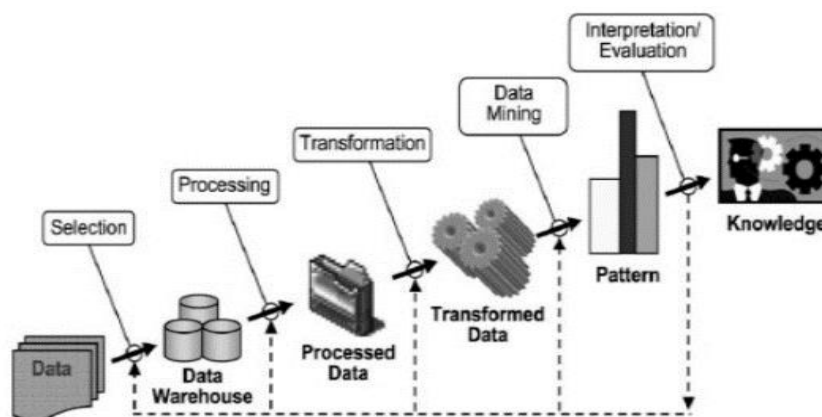
This study uses two methods, the first is to use the Data Mining Method with a clustering algorithm to be able to group the respondent's profile. The second is a quantitative research method aimed at testing whether enthusiasm, anxiety has an effect on expertise in using computers and has an impact on intention to use technology. The data collected is 178 respondents who will be asked to market traders, where the data collection is using the google form. And the sampling technique is confinement sampling.

#### 3.1 Data Mining Method

According to (Fatmawati, 2018) data mining is a process of finding useful new correlations, patterns or trends by mining a large number of data repositories, using pattern recognition such as statistics, and mathematical techniques, and the results of data mining can be divided into four groups. namely prediction models, clustering, association, estimation, classification.

##### 3.1.1 Data Mining Processing Steps

According to (Fatmawati, 2018) said that the stages of the data mining process are starting from data selection from data sources to target data which are often referred to as datasets that are used as the basis for data processing, then the process is continued with data processing or data cleansing, here the data preparation begins for further processing, for example whether the data has number type or factor or date, and then the data in the data cleansing is also done by removing special characters, then after that the transformation is carried out, namely transforming the data from the cleansing data into the target data, the process then is to do data mining or data model based on a method that is suitable for the data, and the last is the process of interpreting the knowledge obtained from processing the data. And the data mining process stages can be seen in Figure 1. Data mining process steps.



**Figure 1.** Datamining process steps.

##### 3.1.2 k-Means and Clustering

According to (Fatmawati, 2018) clustering is the process of grouping data into several clusters or groups that have maximum similarity, data between clusters has minimal similarity.

According to Ledolter, J. (2013) observations on  $n$  units,  $(x_1, x_2, \dots, x_n)$ , with the observation on unit  $i$  representing a  $p$ -dimensional vector of features (attributes). The  $k$ -means clustering method partitions the  $n$  units into  $k \leq n$  distinct clusters,  $S = \{S_1, S_2, \dots, S_k\}$ , so as to minimize the within-cluster sum of squares

$$\arg \min_s \sum_{j=1}^k \sum_{x_i \in S_j} \|x_i - \bar{m}_j\|^2$$

### 3.2 Quantitative Methods

This type of research is survey research of the population. This type of research is quantitative by testing hypotheses and correlations. This research is not causal (cause and effect) between research variables. The results of hypothesis testing can be generalized to the population

#### 3.2.1 Variable Operationalization

**Tabel 1.** Variable Operationalization

Symbol	Construct	Description	Sources
A1	Enthusiasm	The view that working with computers is fun	(Nilamsari, 2020)
A2		Desire to learn computer	
A3		Feeling happy to learn computer	
A4		The view that the more you are trained to learn computers, the better	
A5		The view that learning computers requires patience	
A6		Desire to work with computers	
A7		The view that working with computers increases productivity	
A8		Feelings of needing a computer to do work	
A9		The view that working with computers is fun	
AN1	Anxiety	The feeling of fear of making an irreparable mistake	(Nilamsari, 2020)
AN2		Feeling unfamiliar with computers	
AN3		Fear of destroying or losing data on the computer	
AN4		Feeling difficult to understand the technical aspects of computers	
AN5		Feeling difficult to understand the buttons on the computer	
AN6		Feelings of fear of computer dependence	
AN7		Feelings of tension and nervousness working with computers	
AN8		The feeling of fear of making an irreparable mistake	
PU1	Perceived Usefulness	I intend to use mobile payment in the future.	(Nilamsari, 2020)
PU2		I will always try to use mobile payment in my daily life.	
PU3		I plan to use mobile payment frequently.	
PU4		I predict that I would use mobile payments	
IU1	Intention to Use	1. I intend to use mobile payment in the future.	(Teo, 2011)
IU2		2. I will always try to use mobile payment in my daily life.	
IU3		3. I plan to use mobile payment frequently.	
IU4		4. I predict that I would use mobile payments	

Data is collected from primer data from 178 respondent using questioner , and Ina Mikro volunterary walked into the market trader to help the respondent to fill in the questioner by google form.

## 4. Result

### 4.1 Data Mining Process

Of the 23 variables from the initial question from the respondent's profile, coding is carried out first as in for each choices that it is not number, Its will converts all alphabet into numeric number, dan it call it a coding process.

After that, multiple regression is carried out to be able to assess what data has an effect on the Intention to use mobile payment and the regression results are obtained, and only the positive coefficients will be selected without seeing significant or not so that more comprehensive characteristics can be obtained, then there are 7 data that will be collected. used for clustering, namely education, number of suppliers, gender, total sales, network and ever borrowed, and the number of customers such as Table 3 Multiple Regression, to be parameters for making clusters using the k-means method with R Squared is 0.395259739.

**Tabe; 3. *Multipe Regression dan R Square***

	<b>Coefficients</b>	<b>t Stat</b>	<b>P-value</b>
Intercept	1.635953232	5.691482	5.40905E-08
Pendidikan	0.342579333	5.650773	6.60522E-08
Jml_Sup	0.306119388	5.580847	9.28985E-08
JK	0.204478726	1.462609	0.145420667
Tot_Penj	0.094011357	0.892093	0.373603816
Jaringan	0.027494558	0.758793	0.449026988
Pernah_Minjam	0.027295046	0.879901	0.380155001
Jum_Pel	0.00592322	0.608369	0.543754579

R Square	0.395259739
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After that, only using the R Studio program in conducting the clustering method with k-means, so that after clustering, 3 large groups of respondents will be obtained, namely cluster 1, cluster 2 and cluster 3. After processing, the data is obtained as below and Within cluster sum of squares by cluster is 76 %, using R Studio.

```
library(ggplot2)
library(cluster)
library(factoextra)
R.Version()
univ<-read.csv2(file.choose())
univ
## first, clustering on just Red and White meat (p=2) and k=3
## clusters
numberik<-univ[3:6]
View(numberik)
```

```
dataclus<-na.omit(numberik)
datafix<-scale(dataclus)
head(datafix)

fviz_nbclust(datafix,kmeans,method='wss') ##K=2
fviz_nbclust(datafix,kmeans,method='silhouette')## K=2
set.seed(9999)
gap_stat<-clusGap(datafix,FUN=kmeans, nstart=25, K.max=10, B=180)
fviz_gap_stat(gap_stat)
final<-kmeans(datafix,3,nstart=25)
print(final)
```

Clustering vector:

```
1 2 3 4 5 6 7 8 9 10 11 12 13 14
2 2 2 2 2 2 2 1 1 2 3 2 2 2
15 16 17 18 19 20 21 22 23 24 25 26 27 28
3 3 3 2 3 1 2 2 2 2 2 3 3 3
29 30 31 32 33 34 35 36 37 38 39 40 41 42
3 3 3 2 2 2 2 3 3 1 2 3 1 2
43 44 45 46 47 48 49 50 51 52 53 54 55 56
1 2 3 3 3 3 2 2 2 3 2 3 3 1
57 58 59 60 61 62 63 64 65 66 67 68 69 70
1 3 2 2 3 3 1 2 3 2 2 3 2 3
71 72 73 74 75 76 77 78 79 80 81 82 83 84
2 2 2 3 3 3 2 2 1 3 2 3 1 3
85 86 87 88 89 90 91 92 93 94 95 96 97 98
2 3 2 3 3 2 3 2 3 2 3 2 3 1
99 100 101 102 103 104 105 106 107 108 109 110 111 112
1 2 1 3 1 3 2 2 2 2 2 1 3 2
113 114 115 116 117 118 119 120 121 122 123 124 125 126
2 2 3 2 2 2 2 2 2 1 2 2 3 3
127 128 129 130 131 132 133 134 135 136 137 138 139 140
2 1 1 2 2 1 3 2 2 2 2 2 2 1
141 142 143 144 145 146 147 148 149 150 151 152 153 154
2 2 1 2 3 2 2 1 3 2 2 2 2 2
155 156 157 158 159 160 161 162 163 164 165 166 167 168
2 3 2 2 1 1 1 3 1 1 2 2 3 3
169 170 171 172 173 174 175 176 177 178
2 2 1 1 2 3 1 3 3 1
```

Within cluster sum of squares by cluster:

```
[1] 22.88889 35.80583 33.06061
(between_SS / total_SS = 76.0 %)
```



**Tabel 4** *Clustering dari Respondent*

Cluster	Kode	Tot_penj	Pendidikan	Jaringan	Jml_Sup	Jum_Pel	Pernah Minjam	JK
Cluster 1	1	46	8	24	5	0	55	44
Cluster 1	2	28	16	11	24	2	0	35
Cluster 1	3	4	44	3	10	17	2	
Cluster 1	4	1	3	35	0	9	1	
Cluster 1	5		8	6	0	42	0	
Cluster 1	6			0			15	
Cluster 1	7			2			5	
Cluster 1	8			1			0	
Cluster 2	1	42	33	21	6		66	60
Cluster 2	2	31	19	6	21	8	1	13
Cluster 2	3		19	1	3		3	
Cluster 2	4			31				
Cluster 2	5			9				
Cluster 2	6			1				
Cluster 2	7			2				
Cluster 2	8			2				
Cluster 3	1	10	2	8	0		14	15
Cluster 3	2	10	7	1	5		0	9
Cluster 3	3	1	10	0	6		1	
Cluster 3	4	3	1	11	4			
Cluster 3	5		4	2	1			2
Cluster 3	6			0				2
Cluster 3	7			1				5
Cluster 3	8			1			1	
Cluster 3	10					21		
Cluster 3	15						1	
Cluster 3	20						1	

From the results of table 4 Clustering of Respondents, we get results that give a similar pattern between cluster 1, cluster 2 and cluster 3, namely, firstly, the total sales at most are under 500 thousand, then the most education in clusters 1 and 3 is at SMA level is around 63 percent and the rest are elementary school graduates, and the network that is most widely used is Indosat and the number of suppliers is 1-3 and the number of customers is between 2-10 customers and the last gender is mostly male

#### 4.2 Result from Quantitative Method

##### Outer Model

To prove the reliability and validity of the model, the following steps are carried out:

**Indicator Reliability (Outer loading).** According to Hair et al. (2019), an indicator is reliable if the value of the outer loading is  $> 0.708$ . Table 2 shows that all indicators are greater than 0.708, so it can be stated that all indicators representing each construct are considered reliable

**Table 5. Outer Loading**

Constructs and items	Loading
<b>Antusism ( AVE = 0.895 , CR = 0.986 )</b>	
A1 The view that working with computers is fun	0.959
A2 Desire to learn computer	0.962
A3 Feeling happy to learn computer	0.969
A4 The view that the more you are trained to learn computers, the better	0.964
A5 The view that learning computers requires patience	0.821
A6 Desire to work with computers	0.958
A7 The view that working with computers increases productivity	0.967
A8 Feelings of needing a computer to do work	0.959
<b>Anxiety ( AVE = 0.972 , CR = 0.995 )</b>	
AN1 The feeling of fear of making an irreparable mistake	0.985
AN2 Feeling unfamiliar with computers	0.983
AN3 Fear of destroying or losing data on the computer	0.990
AN4 Feeling difficult to understand the technical aspects of computers	0.987
AN5 Feeling difficult to understand the buttons on the computer	0.982
AN6 Feelings of fear of computer dependence	0.990
AN7 Feelings of tension and nervousness working with computers	0.986
<b>Perceived Usefulness ( AVE = 0.888 , CR = 0.958 )</b>	
PU1 I intend to use mobile payment in the future.	0.954
PU2 I will always try to use mobile payment in my daily life.	0.940
PU3 I plan to use mobile payment frequently.	0.944
PU4 I predict that I would use mobile payments	0.933
<b>Intention to Use Mobile Payment ( AVE = 0.945 , CR = 0.980 )</b>	
IU1 I find using m-payments useful in my daily life.	0.976
IU2 Mobile payment is very helpful.	0.971
IU3 Work becomes easier after using mobile payments.	0.968
IU4 Mobile payments helps me to do things better and effectively	0.972

### **Construct Reliability (Cronbach alpha & Composite reliability)**

The second step is to test the construct reliability, which is measured by Cronbach's alpha which must be more than 0.7, and the AVE which must be more than 0.5 (Hair et al., 2019). From table 3, we can see that Cronbach's negligence is greater than 0.7 and AVE is greater than 0.5 so it can be stated that all constructs are reliable.

**Construct Validity Test.** The third step is to test the construct validity as depicted in table 6, which is measured by the Fornel-Larcker. The value must be greater than the value on the left-hand side and below it (Hair et al., 2019).

**Table 6. Construct Reliability**

	Cronbach's Alpha	Composite Reliability	Result
<b>Antusiasme_</b>	<b>0.983</b>	<b>0.986</b>	Reliable
<b>Anxiety</b>	<b>0.995</b>	<b>0.996</b>	Reliable
<b>Intention to Use_</b>	<b>0.980</b>	<b>0.986</b>	Reliable
<b>Perceived Usefulness_</b>	<b>0.958</b>	<b>0.970</b>	Reliable

### *Convergent Validity*

The fourth step is to test the construct validity, which is measured by the AVE which must be more than 0.5.

**Table 7.** *Convergent Validity*

	<b>Average Variance Extracted (AVE)</b>	<b>Result</b>
<b>Antusiasme_</b>	<b>0.895</b>	Valid
<b>Anxiety</b>	<b>0.972</b>	Valid
<b>Intention to Use_</b>	<b>0.945</b>	Valid
<b>Perceived Usefulness_</b>	<b>0.888</b>	Valid

### *Discriminant Validity*

The fourth step is to test the construct validity, which is measured by the Fornell-Larcker Criterion

**Table 8.** *Fornell Larcker Criteria*

	<b>Antusiasme_</b>	<b>Anxiety</b>	<b>Intention to Use_</b>	<b>Perceived Usefulness_</b>
<b>Antusiasme_</b>	0.946			
<b>Anxiety</b>	-0.810	0.986		
<b>Intention to Use_</b>	0.922	-0.823	0.972	
<b>Perceived Usefulness_</b>	0.885	-0.711	0.882	0.943

From table 8. all construct have value < 0.9 so all construct has reliable and valid.

### *Inner Model*

In testing the inner model, what is seen in this section is the quality of the research model for empirical testing. The results of the Inner Model come from Bootstrapping processing using smartpls and the value of T Statistics for each Path can be identified. The model quality parameters used in this inner model are Variance Inflation Factor (VIF), R-square, Q-square, and Q-square predict.

### *Inner VIF*

As previously mentioned, the model quality parameters used in the Inner Model are Variance Inflation Factor (VIF), R-square, Q-square (Hair et al., 2019).

**Table 9,** *Inner VIF*

	<b>Intention to Use_</b>
<b>Antusiasme_</b>	<b>6.630</b>
<b>Anxiety</b>	<b>2.914</b>
<b>Perceived Usefulness_</b>	4.600

From Inner VIF antusiasme has little high, but Anxiety and Perceived Usefulness has no multicolloniarity

### *R Squared*

**Table 10,** *R Square*

	<b>R Square</b>
<b>Intention to Use_</b>	0.889
<b>Perceived Usefulness_</b>	0.783

R-Square from intention to use has value 0.889 and its substantial, so antusiasme and perceived usefulness and anxiety has 88,9 % influence to intention to use mobile payment. Its also R-Square from perceived usefulness has value 78.3 % and its substantial, so antusiasme and anxiety has influence perceived usefulness 78,3 % and rest of it has influence by other variable that has not explain in this research.

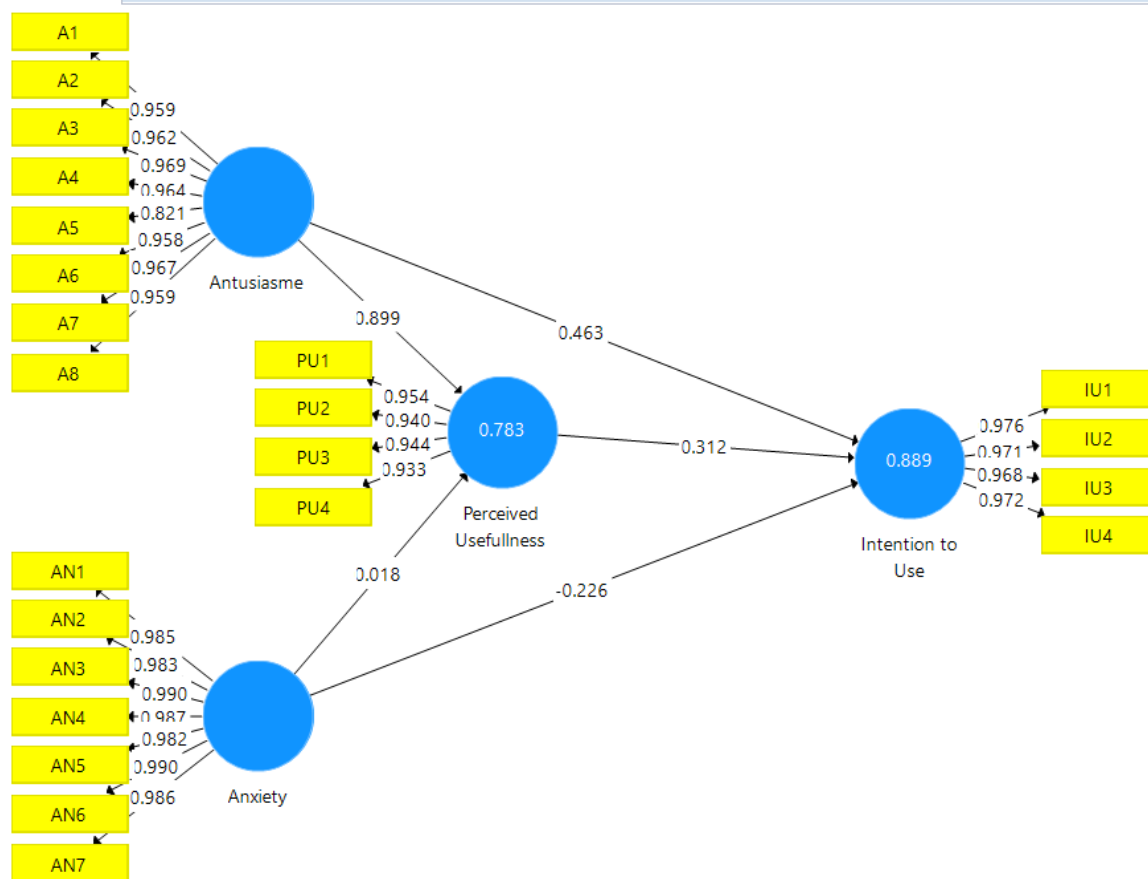
**Q-Square**

The value of Q2 is in the range of 0 to 1 (Hair et al., 2019). If it is found that the Q-squared value is more than 0 to 0.25, it can be said that the predictive ability is small or can be referred to as small predictive relevance. However, if the Q-squared value is between 0.25 to 0.5, it can be said that the predictive ability is medium or can be referred to as medium predictive relevance. However, if the Q-squared value is more than 0.5, it can be said that the predictive ability is large or referred to as large predictive relevance. The greater the value of Q-squared, or the closer to the value of 1, the more precise the predictive ability of a variable in predicting the output or research results which is relatively the same if there is a change in the data parameters (Hair et al., 2019). This value indicates the quality of the proposed model to be tested empirically. The Q2 value obtained from the calculation results using the blindfolding menu on PLS-SEM gets the results according to the table below

**Table 11. Q Square and Q Square Predict**

	Q Square Relevant	Q Square Predict
Intention to Use	0.833	0.864
Perceived Usefulness	0.690	0.777

**Gambar 1. New Model**



## Discussion

**Table 12.** *Hipotysis Test*

	Original Sample	T Statistics	P Values	Result
Antusiasme_ -> Intention to Use_	0.463	6.044	0.000	Supported
Antusiasme_ -> Perceived Usefulness_	0.899	16.317	0.000	Supported
Anxiety -> Intention to Use_	-0.226	4.664	0.000	Supported
Anxiety -> Perceived Usefulness_	0.018	0.246	0.403	Not Supported
Perceived Usefulness_ -> Intention to Use_	0.312	4.774	0.000	Supported

The outer loading, it can be seen that all indicators are more than 0.708, so they are reliable, and when viewed from construct reliability, all Cronbach alpha values are > 0.5 and composite reliability is more than 0.7, so the construct is said to be reliable. Likewise with construct validity with AVE all constructs are more than 0.5, so all constructs are valid. Then for the inner VIF, only enthusiasm is a bit more than standard 5, while the other constructs don't look multicollinearity. Meanwhile, the R Square of Intention to use includes substantial predictive accuracy because it has a value of 0.889 and perceived usefulness has a value of 0.783 which is included in moderate predictive accuracy. And the last is Q Square of Intention to use is 0.833 and Q Square of Perceived usefulness is 0.690 so it is included in Large Predictive Relevance

The hypothesis test where in the hypothesis H1 enthusiasm has a positive effect with a value of 0.463 and is significant on intention to use, then hypothesis H2 where enthusiasm has a positive effect with a value of 0.899 and is significant on perceived usefulness, and hypothesis H3 where anxiety does not have a positive effect with a value of -0.226 and is significant. on intention to use, then hypothesis H4 where anxiety has a positive effect with a value of 0.018 and is not significant on perceived usefulness and finally hypothesis H5 where perceived usefulness has a positive effect with a value of 0.312 and significant intention to use.

## Conclusion And Recommendation

The new model, it can be seen that enthusiasm has an effect on perceived usefulness of 0.899 and anxiety has an effect on perceived usefulness of 0.18, while the effect of enthusiasm on intention to use is 0.463, while the effect of perceived usefulness on intention to use is 0.312, and the influence of anxiety on intention to use is -0.226 which means if anxiety increases then intention to use will decrease. Meanwhile, from the results of machine learning by using clustering on the respondent's profile using k-means, in within cluster sum of squares by cluster is 76 %, it can be seen that the respondent's profile which will increase the intention to use mobile payment is that the total sales are at most under 500 thousand, then the most education in clusters 1 and 3 is at the level of SMA is about 63 percent and the rest are elementary school graduates, and the network that is most widely used is Indosat and the number of suppliers is 1-3 and the number of customers is between 2-10 customers and the last gender is mostly male.

The limitation of this research is that this research has only been conducted in 2 big markets in Jakarta, so later it can be carried out outside Jakarta, especially outside Java

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