

The Reasons of Why Customers Choose COD as Their Payment Method When Shopping Online

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Abstract— The rapid adoption of technology affects payment methods causing changes in consumer behavior when choosing the payment method that they will use as a complement to the online shopping process in e-commerce. This study investigated the factors encouraging customers to choose Cash on Delivery (COD) payment method while shopping online. This research uses quantitative methods and a sample of 155 respondents who often do online shopping in e-commerce and used Cash on Delivery as their payment method. Questionnaire is used to collect data. Method used in this study is Partial Least Squares-Structural Equation Modeling analysis techniques which is operated using SmartPLS ver. 3 software. It was found that promotion factors, social factors, personal factor, perceived ease of use factors, and perceived usefulness factors play an important role in determining the decision to use Cash on Delivery (COD) payment method when shopping online. Personal factors are the most dominant factors.

Keywords— *Cash on Delivery (COD); Consumer Behavior; Purchasing Decision; Promotion; Technology Acceptance Model (TAM).*

I. INTRODUCTION

At this time, there has been a change in consumer behavior in Indonesia. This is due to the presence of e-commerce and various payment method. The rapid adoption of technology and the internet has led to the emergence of various payment methods, especially digital payments. This digital payment method is widely used by business people, one of which is by e-commerce. E-commerce utilizes this payment method as a means of buying and selling transactions on its platform. Besides adopting digital payment, e-commerce also provides alternative payment method using cash or better known as Cash on Delivery (COD).

The presence of the digital payment method is expected to create a cashless society ecosystem, as was the goal of the National Non-Cash Movement (GNNT) by Bank Indonesia. On the other hand, it was stated that e-commerce can shift people's tendency to transact cashless [11]. So it can be

concluded that the presence of e-commerce and digital payments is considered able to encourage the achievement of GNNT's goal of creating a Cashless Society ecosystem. However, in contrast to the original purpose of providing COD as an alternative payment method, in fact the level of COD usage in e-commerce is very high compared to digital payment methods. This is evidenced by a survey conducted by Badan Pusat Statistik (BPS) in 2021. Among the many payment methods that e-commerce provides, not all payment methods are popular. COD has the highest number of users at 78.72%, followed by bank transfers at 16.33% [1]. But on the other hand there are payment methods that have a very small percentage such as e-wallet and cards.

In order to increase the use of digital payments, it is necessary to do research on the factors that drive the decision to use the COD payment method when shopping online. So it can be an evaluation for digital payment service providers to improve their products according to consumer needs. Therefore, it can help achieve the goals of the Cashless Society movement through online shopping activities using digital payment methods.

II. LITERATURE REVIEW

A. Marketing Mix

Marketing is a process that aims to meet the needs and desires of individuals or groups by providing and offering products and services [10]. The existence of intense competition in Indonesian e-commerce requires e-commerce players to have an effective marketing strategy. Marketing mix is the variables that can be controlled and used by the company to achieve sales target.

The one of the marketing mix variable is promotion which a method of communication that the company uses for their consumers which aims to provide information related to the products being marketed in order that consumers want to buy it, such as customers use Cash on Delivery (COD) payment method because of the existing advertising or promotions

through social media. The presence of promotions by e-commerce against COD payment method will encourage consumer decisions in using this payment method when shopping online.

B. Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is a theory to understand technology acceptance which was first introduced by Davis (1989) [4]. Beliefs that determine behavior when using technology are perceived ease of use and perceived usefulness. The use of this model has been widely applied to online purchasing research and has been successfully adapted and developed into e-commerce [7]. This time, the authors will use TAM model to understand why customers use Cash on Delivery (COD) as their payment method when shopping online.

The first construct of TAM is perceived ease of use which is how far the innovation is considered easy to use and easy to understand [14]. The use of e-commerce applications requires users to have the skills, abilities, and expertise in using the internet [3]. E-commerce must provide features that make it easier for customers to use their platform. Thus, the presence of the COD payment method is able to create a perception of convenience for customers as a complement to their online shopping process. The second construct of TAM is perceived usefulness, which indicates how much customers believe that a system can improve their performance [4]. The meaning of improvement in work performance is a payment method can be useful, profitable, can be completed faster, and increase effectiveness in online shopping activities. The reason why customers don't use digital payments is because it makes transactions ineffective (for example related to speed and flexibility) [12]. Therefore, the cod payment method is considered capable of increasing the effectiveness of online shopping.

C. Consumer Behavior

Consumer behavior is how an individual, group, or organization chooses, buys, uses an item or service that is expected to meet their needs and desires [9]. The customer's decision to behave is influenced by the surrounding environment. Consumer behavior itself is influenced by social factors such as reference groups and family [10]. In making a decision to choose a payment method when shopping online, customers can be influenced by recommendations from the closest people such as friends and family. Knowing reviews from friends or family regarding their experience of using a payment method when shopping online can encourage their decision. Families have an important role in consumer decision making because the intensity of frequent meetings. Thus, it will be able to generate stronger trust on the advice given.

Moreover, personal factors also play an important role in influencing customer behavior. Lifestyle and values are one of the dimensions of personal factors. Nowadays, people tend to always want to keep up the existing trends such as online shopping. Not everyone has a digital payment account but still wants to shop online. As of to fulfill their wants, they use Cash on Delivery (COD) payment method because they only need to

pay with cash and do not need to register a digital payment account but still can complete the online shopping process.

III. RESEARCH METHODOLOGY

This study investigates the factors encouraging customers to choose Cash on Delivery (COD) payment method while shopping online. The previous sections were an evidence of our understanding and recommendations of the critical factors encouraging the adoption of payment method when online purchasing. This section will describe the details of research method.

A. Research Data

This research uses quantitative methods with primary data sources collected through online questionnaires. The sampling method in this research is to use a purposive sampling technique with the criteria, e-commerce users, have shopped at e-commerce, and use Cash on Delivery (COD) payment methods.

B. Instrument

The measurement scale of this study is promotion, perceived ease of use, perceived usefulness, social, and personal. Respondents were asked to indicate which statements they agreed or disagreed with based on their experiences. The questionnaire is divided into three parts, the first part contains screening questions, the second part contains questions about demographics, and the third part of the questionnaire contains 22 questions aimed at measuring promotional factors, perceived ease of use, perceived usefulness, social, and personal. Each factor is measured using a Likert scale, where the measurement starts from 1 (strongly disagree) to 5 (strongly agree).

C. The analysis techniques

This study uses the Partial Least Square-Structural Equation Model (PLS-SEM) research technique. PLS is one of the SEM techniques that can analyze latent variables, indicators, and direct measurements [15]. In SEM-PLS there are two stages, namely the outer model and the inner model. The outer model is a test of validity and reliability in order to show how the manifest variable represents the latent variable to be measured. The outer loading value must be > 0.70 and the Average Variance Extracted (AVE) must be > 0.50 to prove validity. Composite reliability must be > 0.70 and Cronbach's Alpha must be > 0.70 to indicate reliability. While the inner model is carried out with the aim of explaining how the influence of latent variables on dependent latent variables is tested using path coefficients with bootstrapping (resampling method).

IV. RESULT AND CONCLUSION

A. Respondents

The questionnaire was filled out by 268 people, 113 of whom were eliminated because they did not meet the screening process related to the purposive sampling criteria which

required respondents to be e-commerce users who had shopped online at e-commerce using Cash on Delivery (COD) payment method. Therefore, 155 respondents were found successfully passed the screening process.

Demographic data of respondents found that the majority of respondents were female (66%), aged 17-23 years (57%), resided in DKI Jakarta (33%), had a high school education/equivalent (41%), status as university students (53%), have an income of IDR 1,000,000 – IDR 5,000,000 (39%), have used e-commerce for 2-3 years (30%), and have a frequency of online shopping 2-5 times / month (64%).

B. Result

1. Outer Model Evaluation

The measurement model shows how the manifest variable or observed variable represents the latent variable to be measured. The components of the outer model evaluation are convergent validity and composite reliability. Convergent validity is measured using the outer loading parameter. Individual reflexive measures can be said to be correlated if the value is > 0.7 with the construct to be measured [5]. The value of Average Variance Extracted (AVE) must > 0,5.

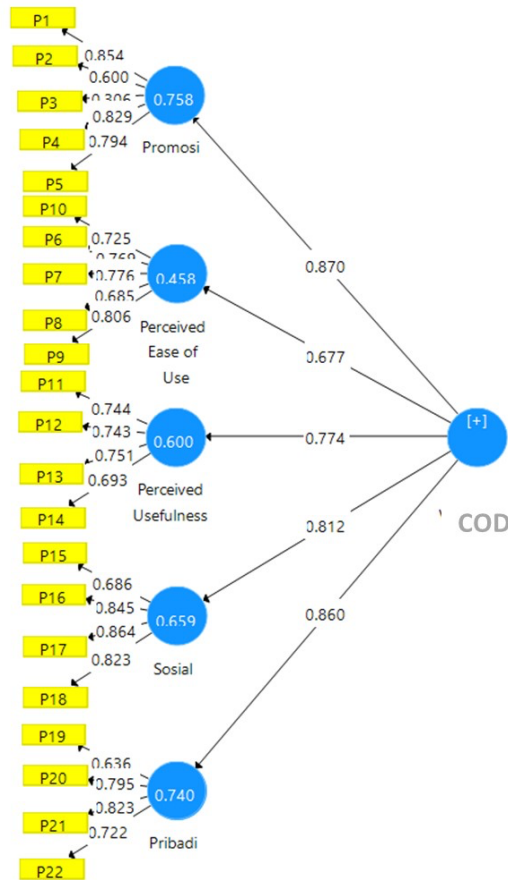


FIGURE I. MEASUREMENT MODEL TESTING 1

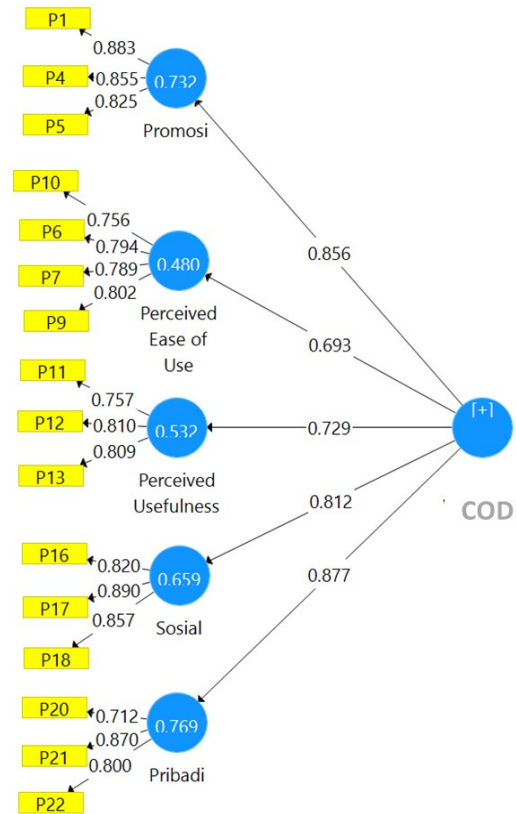


FIGURE II. MEASUREMENT MODEL TESTING 2

From the analysis of the measurement model, it is known that there are several manifest variables that have a factor loading value of <0.7. So, to fulfill the rule of thumb, the manifest variable that has a value < 0.4 must be dropped from the model.

TABLE I. LOADING FACTORS OF ALL VARIABLES

Variable	Indicator	Outer Loadings		Description
		Stage1	Stage2	
Promotion Factor	P1	0.8538	0.8827	Valid
	P2	0.5998		Drop
	P3	0.3063		Drop
	P4	0.8285	0.8528	Valid
	P5	0.7941	0.8275	Valid
Perceived Ease of Use Factor	P6	0.7694	0.7934	Valid
	P7	0.7755	0.7912	Valid
	P8	0.6850		Drop
	P9	0.8060	0.8013	Valid
	P10	0.7253	0.7548	Valid
Perceived Usefulness Factor	P11	0.7439	0.7587	Valid
	P12	0.7428	0.8076	Valid
	P13	0.7506	0.8100	Valid
	P14	0.6932		Drop

Social Factor	P15	0.6857	Drop	
	P16	0.8447	0.8237	Valid
	P17	0.8638	0.8900	Valid
	P18	0.8232	0.8533	Valid
Personal Factor	P19	0.6359	Drop	
	P20	0.7951	0.7259	Valid
	P21	0.8231	0.8680	Valid
	P22	0.7223	0.7908	Valid

Based on the table, it is found that the factor loading value in stage 2, all manifest variables have a value > 0.7 , therefore nothing is dropped. This means that all items are validly able to reflect each variable. So that all manifest variables have met the rules of the measurement model and can be continued for further testing which is composite reliability. In PLS-SEM using SmartPLS, to measure the reliability of a construct can be done in two ways, with Cronbach's Alpha and composite reliability. But, using Cronbach's Alpha to test the reliability of a construct will give a lower value (under estimate) so it is more advisable to use Composite Reliability.

TABLE II. CONSTRUCT RELIABILITY AND VALIDITY

Variabel	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Perceived Ease of Use	0.7941	0.8656	0.6170
Perceived Usefulness	0.7032	0.8350	0.6280
Personal	0.7101	0.8383	0.6349
Promotion	0.8158	0.8903	0.7302
Social	0.8175	0.8914	0.7326

Based on the table it is found that the value of all variables in reliability testing using either Cronbach's Alpha or Composite Reliability is > 0.7 . Therefore, it can be concluded that the tested variables are valid and reliable.

2. Inner Model Evaluation

In evaluating the inner model, the steps that need to be tested are to look at the significance value in order to determine the relationship between the constructs. This can be seen through the path coefficient. The significance level can be seen in the t-test and p value obtained from the bootstrapping process (resampling method). The significance value used (two-tailed) t-value is 1.96 (significance level = 5%). Meanwhile, the p-value will be considered significant if the p-value ≤ 0 . The following table is the result of the t-statistical test to test the significance level of the indicator on the latent variables in the second order construct.

TABLE III. PATH COEFFICIENT

CFA	Loading Factor	T Statistics ((O/STDEV))	P Values
COD -> Perceived Ease of Use	0.6931	6.5813	0.0000

COD -> Perceived Usefulness	0.7293	7.5563	0.0000
COD -> Personal	0.8770	48.1981	0.0000
COD -> Promotion	0.8557	32.9657	0.0000
COD-> Social	0.8120	18.3087	0.0000

All factors play an important role in determining the decision to use COD. The results of the factor analysis with CFA (Confirmatory Factor Analysis) show that the personal factor is the most important factor with the largest coefficient value of 0.8770, followed by the promotion factor with a coefficient of 0.8557, the third largest factor is the social factor with a large coefficient of 0.8120, the fourth is the perceived usefulness factor with a large coefficient of 0.7293 and the lowest factor is perceived ease of use with a coefficient of 0.6931.

C. Discussion

From the literature review described above, the purpose of this study is to find out what factors make customers use the Cash on Delivery (COD) payment method when shopping online and what factors dominate. The results show that the factors behind the use of the COD payment method are personal factors, promotional factors, social factors, perceived usefulness, and perceived ease of use. This finding is in line with [8] that stated the online shopping method has become a customer's lifestyle, but because they still want to control the product purchased, they still use the COD payment method for payment [13]. This is also strengthened by the statement that the value adopted by customers is to maintain their privacy. When using a credit card, their data can be spread to many parties, so they prefer COD [6].

Based on the results of the grouping of respondents, it can be concluded that the COD payment method is also chosen by consumers who have a higher education level and have a fairly young age, where they are suspected of having the skills and ability to access digital payment methods. So, it can be concluded that the perception of technology does not have a huge influence on consumer decisions when using COD payment methods, but it is caused by consumer behavior and the existing promotion.

D. Conclusion

This study was designed to determine the factors driving consumers to use the Cash on Delivery (COD) payment method when shopping online. There are five constructs that have been developed and after being tested using quantitative research, the results show that they play a significant role in determining the decision to use the COD payment method. The five factors are promotional factors, perceived ease of use factors, perceived usefulness factors, social factors, and personal factors. It found that personal factors were the most dominant factors. The tendency of respondents in choosing personal factors shows that in making decisions, the value of beliefs contained in themselves and the tendency to always follow the trend have a strong enough contribution. This is

consistent with research [2] which states that personal factors have a significant influence on purchasing decisions.

For further research, it is recommended to conduct COD research based on the product purchased, for example for convenience good products which are relatively cheap compared to shopping goods which are relatively more expensive. Thus, it can be re-examined the personal factors which are the main reasons for this research.

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