



## The Application of UTAUT Modified Model to Analyze the Customers Use Behavior of Shopee Paylater

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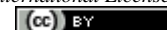
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### Abstract

Paylater is one of the newest payment methods in e-commerce that implements a buy now, pay later system or an installment mechanism. This service is the latest payment option launched by e-commerce. This study aims to determine user acceptance perceptions that influence satisfaction, sustainability intentions, and user use behavior. The Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) model, which also includes the variables perceived trust and pleasure, was employed in this study. This study adopted a quantitative methodology, distributing online surveys with 26 questions and using SmartPLS version 3.3.2 tools to analyze the data. According to the study's findings, eight out of ten hypotheses are supported. Effort Expectancy on Satisfaction and Price Value on Satisfaction are two hypotheses that are ruled out since their path coefficients and T-test values, respectively, are less than 0.1 and 1.96.

**Keywords:** Paylater, Payment, E-Commerce, Satisfaction, UTAUT.

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### 1. Introduction

The development of information technology has caused changes in culture and habits in everyday people's lives. This progress has an impact on various fields. Cyberspace business, which is today in high demand by the public in the form of online shops or online buying and selling activities (e-commerce), is one area impacted by technical changes. Currently, the use of e-commerce is a requirement for an organization or company engaged in business to be able to compete globally [13]. Many studies reveal that e-commerce has a positive impact on business activities. Now, many large companies and MSMEs use e-commerce as an effort to increase business competitiveness against their competitors. In financial technology, the term "pay later" is now popular. With the concept of "buy now, pay later," Paylater enables customers to make installment purchases of both goods and services without the use of a credit card [14]. The Paylater technique has gained popularity recently, especially when the COVID-19 outbreak forced individuals to switch to digital transactions. People also need credit to be able to manage their finances in the future. Given the impact of this pandemic, many people have been laid off from their jobs. So that it is a little difficult to make ends meet if there is no credit assistance [1].

E-commerce is the main industry that drives Indonesia's economic growth. The presence of Paylater as a payment method for e-commerce transactions provides benefits for both the community and the e-commerce actors themselves [2]. Communities can meet their needs quickly and easily without having to worry about their cash flow. Meanwhile, the advantage for e-commerce players or merchants is to help them increase the average sales value [5]. The Paylater payment scheme feature is rapidly developing because several e-commerce giants such as Tokopedia, Shopee, Traveloka, Bukalapak, Gojek, etc. have implemented the Paylater payment system. The COVID-19 pandemic has had various impacts on society, ranging from changes in human behavior to major impacts on the economic situation. E-commerce takes advantage of this change in consumer behavior by offering "Buy Now, Pay Later" payments. When shopping, users have the choice of several different payment options [3]. Payment options have a significant impact on customer behavior (use behavior), according to prior studies. Based on the research results of previous researcher, the desire to reuse the Paylater feature has a beneficial impact on online purchasing decisions [4]. These findings indicate that Paylater's simplicity shapes the user's desire to continue using it, which will increase their tendency to decide to shop online [6].

UTAUT is a research model developed by previous researcher to assess how well information technology is received by users. In order to create variables that serve as direct predictors and utilize behavior to predict user

acceptance of a technology, the UTAUT research model incorporates many theories of technology acceptance. Performance expectancy, effort expectancy, social influence, and facilitating conditions are some of these variables. The research model UTAUT has been expanded into UTAUT 2 to explore the adoption and usage of technology in the consumer setting. Three new constructs have been added: hedonic motivation, price value, and habit. Hedonic motivation is the pleasure one has while using technology or other systems that are connected to consumer behavior [12]. Price value is characterized as a trade-off between the user's cognitive capabilities and the application's perceived advantages. This variable is also related to the costs incurred by consumers to use the technology and whether the benefits obtained are comparable to the costs incurred. Habit is defined as a user's habit of using information systems automatically because they have gone through the learning process [7].

Satisfaction is the result of an evaluation of the user's experience using a particular information technology or service [8]. The result can be feelings of satisfaction, concern, or dissatisfaction. According to previous researcher, in the theory of expectation-disconfirmation theory, satisfaction is a psychological state of the user resulting from a cognitive disconfirmation assessment [9]. User satisfaction is closely related to the user's decision to continue using a service or an information technology and affects the frequency of using a system, commonly called use behavior [11]. Numerous studies have revealed that the majority of the UTAUT 2 model's variables significantly influence and have a positive relationship with satisfaction [10].

## **2. Research Methods**

Utilizing a quantitative methodology, this study. The foundation of quantitative research is ideas and hypotheses. To observe causal relationships, researchers employ manipulation techniques and control variables via formal instruments. The researcher attempts to condense the data into a numerical structure before doing a variable analysis. Drawing conclusions by deduction, setting norms by consensus, and using research language packaged in the form of a report Data collection was carried out by conducting a survey using a questionnaire using Google Form tools, as well as statistical data analysis using several tools, including Microsoft Word for writing reports, Microsoft Excel for classifying questionnaire data, Smart PLS for processing data resulting from distributing questionnaires, Draw.io for making images that support research, and Mendeley Desktop for writing references used by researchers as a reference. The participants in this study are Greater Jakarta-based online shoppers who have used the Paylater option as a transaction payment method. Purposive sampling is the methodology used in this study. 500 respondents were included as samples in this study, according to researchers. Collecting data using literature studies, observations, and surveys.

## **3. Results and Discussion**

According to the findings of a demographic analysis of 500 respondents, female users (30%) outnumber male users (70%). Respondents were dominated by the 18–22 year age group, namely 150 respondents with a percentage of 59.8% of the total respondents. The domicile of Paylater users is dominated by respondents from the DKI Jakarta area (30%), Depok (20%), Bogor (20%), and at least from the Bekasi (30%). Respondents were dominated by student groups (30%), followed by private employees (30%), entrepreneurs (20%), civil servants with (10%), and at least 10% are housewives. This result is related to demographic results based on the age range; most are 18–22 years old, which is the average age of a student in general. The respondents' data in the income category is dominated by respondents with incomes of less than Rp 1,000,000 (40%), followed by respondents with incomes of Rp 1,000,000–Rp 3,000,000 (30%), and respondents with incomes of more than Rp 5,000,000 (30%). User groups who earn less than IDR 1,000,000 will tend to try to use Paylater rather than groups of users with high incomes. This is also related to the age and occupation groups that are dominated by students in the age range of 18–22 years, where this age group does not have a steady income, thus encouraging them to use Paylater to meet their needs and lifestyle.

Respondents were dominated by groups that had used the internet for more than 10 years with (50%), followed by respondents who had used the internet for 7–10 years (30%), respondents who had been online for 4–6 years received 10%; those who had been online for 1–3 years received 10%. These results indicate that respondents are generally very familiar with using the internet; this is what encourages individuals to shift their shopping habits from offline to online. This also shows consumer confidence in digital transactions. Respondents who have used e-commerce for 1–3 years (50%), followed by those who have used it for 4–6 years (30%), those who have used it for more than 6 years (10%), and those who have used it for less than a year (10%), are the least likely to have done so. According to the analysis's findings, it is adequate to make arrangements for responders to be aware of a new feature, namely Paylater, with a dominance of 1–3 years of use. In the old usage category, respondents who had used the Paylater payment method were dominated by respondents with a rare frequency (20%), respondents with a frequent frequency (30%), respondents with a rather frequent frequency (30%), respondents with a rather rare frequency (10%), respondents with a very rare frequency (5%), and at least respondents with a very frequent frequency (5%).

Four steps of testing were used to analyze the measurement model (outer model): item-by-item reliability, internal consistency reliability, average variance extracted, and discriminant validity. Determine the reliability and validity of the research model by evaluating the measurement model. The following are the outcomes of the study of the measurement model with four stages of testing: The results of the loading factor test have met the criteria because the large correlation between each indicator variable and the construct already has a loading factor value above 0.7, so all statements used in the research questionnaire are said to be valid. A composite reliability value greater than 0.7 was found for the internal consistency reliability test results in this investigation. With consistency between the statement items in this research questionnaire, it can be said that all the variables are acceptable and valid and also meet the requirements to be used to measure the construct or variables studied. The AVE test results obtained show that the AVE values of all variables are above 0.5. It can be said that the magnitude of the variance or diversity of the manifest variable (the independent variable) contained in the latent variable (the dependent variable) is declared valid because it has shown an ideal convergent. According to the cross-loading values in this study, each variable's indicators are more valuable than their correlations with other variables or constructs. When compared to the correlation between two constructs, the AVE value is higher. Additionally, it complies with all test requirements. After testing discriminant validity, average variance extracted, individual construct reliability, internal consistency reliability, and reliability of the internal consistency, it can be concluded that the model in this study has statistically favorable traits and satisfies the minimal threshold requirements. The outcomes of the four tests also demonstrate that the research model in use meets the necessary standards to move on to evaluating the structural model (inner model).

As can be seen from the path coefficient ( $\beta$ ) results above, the relationship between the independent and dependent variables specifically, the relationship between social influence variables and satisfaction has a path coefficient ( $\beta$ ) value below 0.1 and is therefore deemed to be insignificant. the findings of the coefficient of determination test, where the use behavior (UB) has an R2 value of 0.451, satisfaction (SAT) has an R2 value of 0.6660, and behavioral intention (BI) has an R2 value of 0.665. The independent variables performance expectancy (PE), effort expectancy (EE), social influence (SI), hedonic motivation (HM), pricing value (PV), and perceived trust (PT) can therefore be understood as explaining modestly, namely 66% of satisfaction (SAT), 66.5% moderately from behavioral intention (BI), and 45.1% moderately from use behavior (UB). The results of the T-test, where there are eight accepted hypotheses, namely BI-UB, FC-BI, H-BI, HM-SAT, PE-SAT, PT-SAT, SAT-BI, and SI-SAT. because it has a higher t-test score greater than 1.96, and two hypotheses were rejected, namely EE-SAT and PV-SAT, because they had a t-test value of less than 1.96. It is known that the hypothetical path relationships  $PT \rightarrow SAT$  (0.156),  $FC \rightarrow BI$  (0.299), and  $H \rightarrow BI$  (0.233) have a medium effect size value. Consequently, it can be said that these hypotheses have a moderate impact on the model's structure. While the other seven hypotheses have little effect on the structure of the model.

Based on the results of the measurement model analysis (outer model) that was done previously, the model proposed by the researcher has a good level of reliability and validity. This is indicated by all indicators having loading factor values above 0.7 and composite reliability above 0.7. In addition, all the indicators used in this study have an AVE value above 0.5, which means that they have a measure of convergent validity, or the validity of each relationship between the indicators and the variables is said to be good, and the indicators for each variable are more significant than the connection with other constructs as determined by the results of the discriminant validity test, and they also meet the necessary conditions. Based on the findings from testing the route coefficient ( $\beta$ ), coefficient of determination (R2), bootstrapping t-test, effect size (f2), predictive relevance (Q2), and relative impact (q2) of the structural model analysis (inner model).

Based on the results of the structural model analysis that has been carried out, the t-test shows that H1, namely the relationship  $PE \rightarrow SAT$ , is accepted. In addition, it is also evidenced by the results of the path coefficient ( $\beta$ ) of 0.258, which can be defined as indicating that the  $PE \rightarrow SAT$  hypothesis has a significant positive effect. One could assert that performance expectancy (PE) significantly improves satisfaction (SAT). It can be said that users feel that Paylater brings benefits to transactions, such as increasing effectiveness and efficiency in making payments, considering that the mechanism for using Paylater is fairly practical. It is able to influence and have a significant relationship with satisfaction. Based on the results of the structural model analysis that has been carried out, the t-test shows that H2, namely the relationship  $EE \rightarrow SAT$ , is rejected. However, the result of the path coefficient ( $\beta$ ) value is 0.118, which means that the  $EE \rightarrow SAT$  hypothesis has a significant positive effect but does not have a strong effect because, based on the effect size (f2) and relative impact (q2) values, the effect of effort expectancy (EE) on satisfaction (SAT) is very small. These results indicate that the ease of using a service or technology is not enough to determine user satisfaction. Based on the survey results in this study, the majority of respondents answered 'disagree' to the questionnaire statement regarding the convenience of Paylater services. This can be one of the reasons for the rejection of the effort expectancy hypothesis for satisfaction due to the user's expectations of convenience and the perception that Paylater can simplify user efforts in terms of effort and time in making transaction payments that are not as expected, so that in this study the hypothesis was rejected.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H3, namely the relationship  $SI \rightarrow SAT$ , is accepted. However, the result of the path coefficient ( $\beta$ ) value is -0.117, which means that the  $SI \rightarrow SAT$  hypothesis has no significant or negative significant effect. It can be said that this hypothesis is accepted, but social influence (SI) does not have a significant positive effect on satisfaction (SAT). These results indicate that social influence has an influence on satisfaction, but the effect is not significant. Based on the results of observations through surveys, the majority answered 'somewhat disagree' or 'neutral' to the statement that users are influenced by the people around them to use Paylater services, but they are still quite satisfied with Paylater services.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H4, namely the relationship  $HM \rightarrow SAT$ , is accepted. In addition, it is also proven by the results of the path coefficient ( $\beta$ ) of 0.210, which can be defined as indicating that the  $HM \rightarrow SAT$  hypothesis has a significant positive effect. It can be said that hedonic motivation (HM) has a significant positive effect on satisfaction (SAT). The results of this study indicate that users feel pleasure and enjoyment in using the Paylater payment option service, so they feel satisfied with the benefits offered and enjoy doing transactions. Researchers assume that the pleasure of using Paylater services so as to create this satisfaction is based on the fact that the transaction process becomes practical, and if users frequently use this service, the transaction limit will increase, so that the more the limit is added, the more users will like or enjoy using the Paylater method.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H5, namely the relationship  $PV \rightarrow SAT$ , is rejected. However, the result of the path coefficient ( $\beta$ ) value is 0.141, which means that the hypothesis  $PV \rightarrow SAT$  has a significant positive effect but does not have a strong effect because the effect size ( $f^2$ ) and relative impact ( $q^2$ ) values indicate that the effect of price value (PV) on satisfaction (SAT) is very small. These results indicate that the quality of service is not always commensurate with the costs incurred to use it. Based on the survey results in this study, the majority of respondents answered 'disagree' to the questionnaire statements regarding the equivalence between the quality of service received and the costs incurred (interest, admin fees, handling fees, and fines). This can be one of the causes of the rejection of the price value hypothesis on satisfaction because users feel it is not worth the costs incurred to obtain services that do not meet expectations, so in this study the hypothesis was rejected.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H6, namely the relationship  $PT \rightarrow SAT$ , is accepted. In addition, it is also evidenced by the results of the path coefficient ( $\beta$ ) of 0.332, which can be defined as indicating that the  $PT \rightarrow SAT$  hypothesis has a significant positive effect. It can be said that perceived trust (PT) has a significant positive effect on satisfaction (SAT). The results of this study indicate that users feel safe when making payment transactions using Paylater services, so satisfaction arises because users feel that all data and information provided to e-commerce parties is well maintained and safe. Therefore, the perception of user trust greatly influences user satisfaction with using the Paylater payment method.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H7, namely the relationship  $FC \rightarrow BI$ , is accepted. In addition, it is also proven by the results of the path coefficient ( $\beta$ ) value of 0.375, which can be defined as indicating that the  $FC \rightarrow BI$  hypothesis has a significant positive effect. It can be said that the facilitating condition (FC) has a significant positive effect on behavioral intention (BI). The results of this study indicate that users feel facilitated by having adequate resources such as gadgets, stable internet connections, and other devices that can access the internet that can support the use of Paylater services. In addition, if users are facilitated to easily get help from other people if they are having difficulties or problems using Paylater, then the user's intention to continue using it will be in line.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H8, namely the relationship  $H \rightarrow BI$ , is accepted. In addition, it is also proven by the results of the path coefficient ( $\beta$ ) of 0.351, which can be defined as indicating that the hypothesis  $H \rightarrow BI$  has a significant positive effect. It can be said that habit (H) has a significant positive effect on behavioral intention (BI). Thus, it can be conceptualized that habit is cognitive, either directly or indirectly, by having a positive impact on reuse intention. Habit can build perceptions that reflect the results of using Paylater. Users who use Paylater need a habit to ensure that by using a new payment method with a system that is easy to understand and easy to implement in making payment transactions, they will feel like continuing to use the payment method Paylater in all the activities they need without having to find it difficult to use the service. This is also supported by direct observations made by researchers that user interest in using Paylater services is influenced by habits because users' habits of shopping online support the ease of using applications, which influences user interest in using Paylater services.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H9, namely the  $SAT \rightarrow BI$  relationship, is accepted. In addition, it is also proven by the results of the path coefficient ( $\beta$ ) of 0.287, which can be defined as indicating that the  $SAT \rightarrow BI$  hypothesis has a significant positive effect. It can be said that satisfaction (SAT) has a significant positive effect on behavioral intention (BI). The results of this study indicate that by using Paylater as a whole, they are very satisfied with the quality of the services provided. On the basis of satisfaction, it has a positive impact on the continuous use of Paylater.

Based on the results of the structural model analysis that has been carried out, the t-test shows that H10, namely the relationship  $BI \rightarrow UB$ , is accepted. In addition, it is also proven by the results of the path coefficient ( $\beta$ ) of 0.671, which can be defined as indicating that the hypothesis  $BI \rightarrow UB$  has a significant positive influence. It can be said that behavioral intention (BI) has a significant positive influence on use behavior (UB). The results of this study indicate that the user's intention to use Paylater on an ongoing basis influences the user to increase the frequency of use, and it can be said that the user will automatically choose the Paylater payment method when making any payment transactions. It can be concluded that the higher the user's intention to use Paylater, the higher the level of actual behavior using Paylater.

#### 4. Conclusion

In this study, the factors that most influence user satisfaction in using Paylater services are good performance (performance expectancy), pleasure that comes from using the service (hedonic motivation), and perceptions of user trust (perceived trust). Indirectly, these variables affect the intention to use sustainable practices. Based on the research results, the mechanism for using Paylater is fairly effective, and users feel quite safe making transactions using this method. The hypothesis that has the greatest influence is the relationship between user habits (habits) and the intention to continue using (behavioral intention). This is because the features and terms and conditions that exist in Paylater are considered quite easy. The other hypothesis that has the greatest influence is the facilitating condition for the intention to continue using (behavioral intention). This is because, with the supporting infrastructure facilities, users find it easier to access Paylater. Factors that do not have enough effect on user satisfaction (satisfaction) are effort expectancy, social influence, and price value. So that these three variables indirectly do not affect the increase in the frequency of using Paylater. This is because the ease and influence of the people around are not enough to determine user satisfaction. In addition, the quality of service is not always commensurate with the costs incurred for using the service, which is also the reason for rejecting this hypothesis. The addition of the satisfaction and perceived trust variables has a significant effect because, based on the path test, it is accepted and has a significant effect. If the user feels satisfied, automatically the user's intention to continue using it also increases, and this significantly affects the user's habits. There is a feeling of satisfaction that is driven by the belief in personal data protection and security when using Paylater. The variables rejected in this study are effort expectancy, social influence, and price value. It is best if the developer can make a system that is easier to understand, especially regarding the problems found in the previous chapter that can be improved in terms of ease of bill settlement and payment transparency. In addition, e-commerce is also expected to carry out more promotions so that this Paylater payment method gets more attention, with the hope that this audience will recommend it to the people around them.

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