



# Analysis of User Satisfaction of Fintech OVO Using Delone and Mclean Information System Success Model in Denpasar City

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Article Info	Abstract
<b>Article History</b> Received: 2023-02-26 Revised: 2023-03-13 Published: 2023-04-04	This study aims to find out how the influence of information quality, system quality, service quality, and security, on user satisfaction in the OVO application in Denpasar. This study uses a quantitative approach, data processing methods using SEM-PLS. used is SmartPLS 3.0. The population of this study are users of the OVO digital payment system in Denpasar. The sample was determined based on cluster sampling technique and random sampling, with a sample of 96 respondents. The results of this study prove that of the 10 hypotheses made there are 7 hypotheses that are accepted, namely the relationship between system quality and use, the relationship between system quality and user satisfaction, information quality and user satisfaction, service quality and use, service quality and user satisfaction, the relationship between use and net benefit and user satisfaction relationship to net benefit, and 3 hypotheses with results rejected namely information quality to use, security relationship to use and security relationship to user satisfaction.
<b>Keywords:</b> <i>Financial Thecnology; Delone and Mclean Information System Success Model; Structural Equation Model Partial Leates Square (SEM-PLS).</i>	

Artikel Info	Abstrak
<b>Sejarah Artikel</b> Diterima: 2023-02-26 Direvisi: 2023-03-13 Dipublikasi: 2023-04-04	Penelitian ini bertujuan untuk mengetahui bagaimana pengaruh kualitas informasi, kualitas sistem, kualitas layanan, dan keamanan, terhadap kepuasan pengguna pada aplikasi OVO di Denpasar. Penelitian ini menggunakan jenis pendekatan kuantitatif, metode pengolahan data dengan menggunakan SEM-PLS, Pada penelitian ini menggunakan SEM karena SEM adalah alat statistik yang dipergunakan untuk menyelesaikan model bertingkat secara serempak, SEM dapat dipergunakan untuk menyelesaikan model persamaan dengan variabel terikat lebih dari satu, program yang digunakan adalah SmartPLS 3.0. Populasi dari penelitian ini adalah para pengguna sistem pembayaran digital OVO di Denpasar. Sampel ditentukan berdasarkan metode teknik cluster sampling dan random sampling, dengan sampel sebanyak 96 responden. Hasil dari penelitian ini membuktikan bahwa dari 10 hipotesis yang dibuat terdapat 7 hipotesis yang diterima yaitu hubungan sistem quality terhadap use, hubungan system quality terhadap user satisfation, information quality terhadap user satisfaction, service quality terhadap use, service quality terhadap user satisfaction, hubungan use terhadap net benefit dan hubungan user satisfaction terhadap net benefit, dan 3 hipotesis dengan hasil ditolak yaitu information quality terhadap use, hubungan security terhadap use dan hubungan security terhadap user satisfaction.
<b>Kata kunci:</b> <i>Financial Thecnology; Delone and Mclean Information System Success Model; Structural Equation Model Partial Leates Square (SEM-PLS).</i>	

## I. INTRODUCTION

Technology has advanced in many areas of life thanks to the rapid growth experienced in today's globalization era. Various technologies currently under development will help us in our daily work in various fields such as entertainment, business, health, education and finance. Fintech is the financial service that citizens and governments are waiting for to help increase the number of users who have access to financial services. One of the most popular financial technologies in Indonesian society is OVO. The name OVO comes from the words "rOVolution in Payment" and OVO is a subsidiary of the Lippo Group. The OVO application was developed by his PT. Visionet International he launched in

March 2016 and 2017. OVO has been named the most popular digital payment platform in Indonesia. According to a 2021 survey by Kadence International, respondents rated OVO as the most popular digital wallet (ewallet). OVO's brand recognition is 96%. OVO also has the most active users with his score of 71%, with 31% of respondents making his OVO the most used brand.

Despite the high interest of OVO users, there are still some OVO users who are dissatisfied with this fintech application. Fintech OVO is rated 3.7 on Google Play Store. There are still OVO fintech users giving 1-star ratings with various user complaints. Compared to Go-Pay, DANA and LinkAja are rated higher than OVO, with Go-Pay

at 4.6 stars, DANA at 4.1 stars and LinkAja at 4.2 stars. Based on this description, we can conclude that OVO is a better and more popular digital payment method compared to Go-Pay, DANA, and LinkAja in the face of fierce competition. Despite the large number of users, there are still many OVO users who are dissatisfied with the OVO fintech application, as indicated by the Google Play Store ratings. OVO has the lowest rating. The six components of the Delone and Mclean Information System Success Model, namely system quality, information quality, service quality, use, user satisfaction, and net benefits, can be linked to the problems mentioned above Delone and Mclean Information System Success Model or abbreviated as D&M IS Success The model is the method used to evaluate the level of success of an information system. This model was developed by DeLone and Mclean in 2003. In a similar study, the effect of management information systems on user satisfaction at the pharmacy installation of Cirebon "X" Hospital used the DeLone & McLean Model by Supriyatin, Ediati Sasmito, and Elina Endang Sulistyowati (2021), shows the significance of the relationship between system quality and user satisfaction of the e-PPGBM application.

In addition to the six variables from the Delone and Mclean Information System Success Model, researchers add security variables based on previous research by Taufan Adi Kurniawan (2011) which shows that security and confidentiality have a positive relationship with user satisfaction. This research took place in the city of Denpasar, which consists of 4 sub-districts, namely North Denpasar, East Denpasar, West Denpasar and South Denpasar because according to the Head of the Bali Bank Indonesia (BI) Representative Office, Trisno Nugroho, Denpasar has great opportunities as a place for the development of the financial industry. technology (fintech) because there are many business potentials that can be worked on, so that the data needed by researchers is more available in the city of Denpasar.

## II. METHOD

The data in this study were analyzed using the SEM-PLS technique with the SmrtPLS 3.0 program, this study used a survey method with data collection techniques in the form of a questionnaire. the type of data used is quantitative and the source of data used in this study is primary data.

## III. RESULT AND DISCUSSION

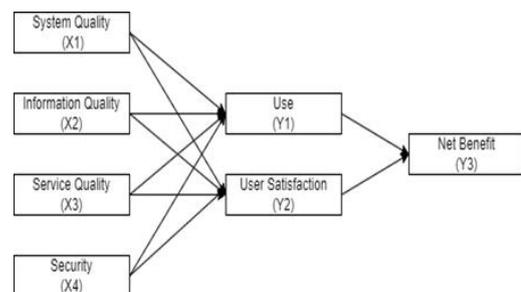
### A. Result

Researchers added safety as an independent variable in this study. This is based on previous research by Taufan Adi Kurniawan (2011) which showed that security and confidentiality have a positive relationship with user satisfaction, besides that according to Jin and Park (2006) in a previous study showing that customer satisfaction in online stores on e-commerce tailer depends primarily on the evaluation of various performance attributes, among which is the security aspect. the security variable is also added because it is based on a review from one of the OVO users below:



Picture 1. Review OVO Users

One of the OVO users above revealed that the balance owned suddenly decreased and there was a transaction history that was never done by the OVO user. Therefore, the factors used in this study include information quality, system quality, service quality, security, usability, user satisfaction, and net benefits.



Picture 2. Conceptual Framework

In this study, because of the pululation due to the pululation of OVO fintech users in Denpasar city, the exact number of them was not known, the researchers decided to use the Lemeshow formula. The characteristics of respondents were used to determine the diversity of respondents based on gender, age and region of residence. In this study, researchers distributed questionnaires to 96 respondents. This is expected to provide a fairly clear picture of the condition of the respondents and their relation to the problem

and the purpose of the study. The characteristics of the respondents are shown in the following table:

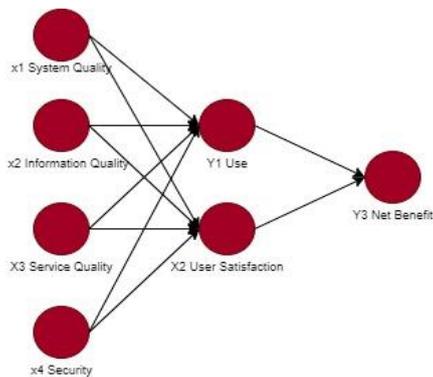
**Table 1.** Respondents' Demographic Data

Category	Ket.	Frequency	Presented
Age	18-21 Years	15	17%
	22-24 Years	39	40%
	25-27 Years	40	41%
	28-35 Years	2	2%
Gender	Man	53	55,2%
	Woman	43	44,8%
Region	North	24	25%
	Denpasar		
	East	24	25%
	Denpasar		
	West	24	25%
Denpasar	South	24	25%
	Denpasar		
Length of Use of the Application	<1 Year	43	44,8%
	>1 Year	52	54,2%
OVO	>5 Years	1	1,0%

The data in this study were analyzed using the Structural Equation Model Partial Leates Square (SEM-PLS) method. Because SEM-PLS is more predictive and explains latent variables. The program used is SmartPLS 3.0, which has 5 stages as follows:

1. Inner Model Design

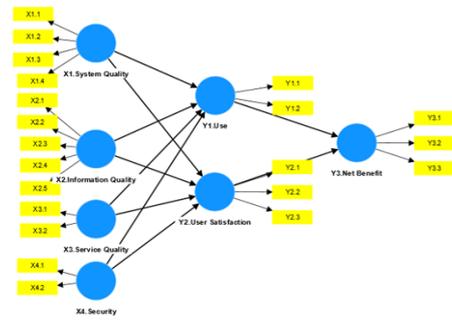
Inner model design is a picture of the relationship between latent variables and those based on research hypotheses.



**Picture 3.** Inner Model Design

2. Outer Model Design

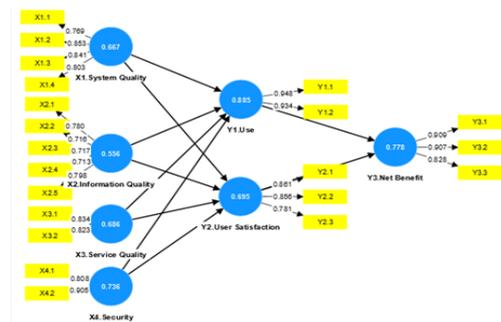
In the outer model design latent variables are reflected by observed variables. This happens because in the design of the outer model, a picture of the relationship between the latent variables and the observed variables that flow is shown. In designing the outer model, researchers use smartPLS 3.0



**Picture 4.** Outer Model Design

3. Evaluation of the Outer Model

Outer model testing is used to determine the specification of the relationship between latent variables and their indicators, these tests include convergent validity, discriminant validity and composite reliability.



**Picture 5.** Evaluation of the Outer Model

**Table 2.** Evaluation of the Outer Model

Variable	Indicator	Outer Loading	Composite Reliability	AVE
System Quality	X1.1	0.769	0.889	0.667
	X1.2	0.853		
	X1.3	0.841		
	X1.4	0.803		
Information Quality	X2.1	0.780	0.862	0.556
	X2.2	0.716		
	X2.3	0.717		
	X2.4	0.713		
	X2.5	0.798		
Service Quality	X3.1	0.834	0.814	0.686
	X3.2	0.823		
Scurity	X4.1	0.808	0.847	0.736
	X4.2	0.905		
Use	Y1.1	0.948	0.939	0.885
	Y1.2	0.934		
User Satisfaction	Y2.1	0.861	0.872	0.695
	Y2.2	0.856		
	Y2.3	0.781		
Net Benefit	Y3.1	0.909	0.913	0.778
	Y3.2	0.907		
	Y3.3	0.828		

The measurement of the convergent validity value can be seen from the correlation between the indicator score and the receipt score (loading factor) with the criteria that the loading factor value of each indicator greater than 0.70 can be said to be valid. Based on the data above all outer loading values above 0.70, it can be concluded that all indicators in this study are valid. The validity of the discriminant can be done by looking at the results of the AVE. variable can be declared valid if the value of AVE is above 0.5. Based on the data above the AVE value of all variables above 0.5. Then all the variables in this study are declared valid. Composite reliability is a part used to test the reliability value of indicators on a variable, a variable can be declared to meet composite reliability if it has a composite reliability value of > 0.7. It can be seen that each of the variable indicators of this study all have an outer loading value of > 0.7, so it can be concluded that the composite reliability of all variables meets the requirements, namely > 0.7.

4. Inner Model Evaluation

The inner model is a structural model that connects between variables, both latent variables and variables that cannot be measured directly. In the inner model test, it is evaluated using the R-square value where the higher the R-square value, the better the proposed research model. Below is the R-square output from the inner model test:

**Table 3.** Ouput R-Square Values

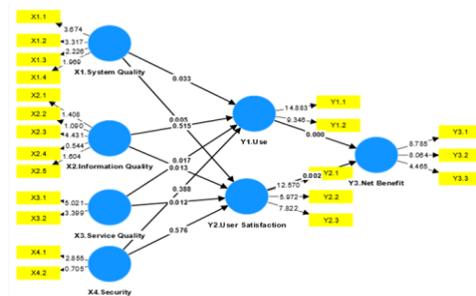
R - Square	
Y1 (Use)	0,654
Y2 (user satisfaction)	0,454
Y3 (Net Benefit)	0.461

Based on the 4.6 output table above, it is known that the R-Square value for Use is 0.654. This means that the presentation of the Use variable only affects 65.4% and the remaining 34.6% is influenced by other variables. The R-Square value for user satisfaction is 0.454 which means that the presentation of the variable only affects 45.4% while the remaining 54.6% is influenced by other variables. The R-Square value for net benefit is 0.461 which means that the presentation of the variable only

affects 46.1% while the remaining 53.9% is influenced by other variables.

5. Hypothesis Test

After the researcher has processed the data, the results can be used to answer the hypothesis in this study. In the statistics of the T test, it is known that if the statistical t value > ttable (1.96) then the hypothesis is accepted and vice versa The following are the hypothesis test results obtained in this study:



**Picture 6.** Hypothesis Test

**Table 4.** T-Statistics and P-Values

Hypothesis	T statistics ( O/STDEV )	P values	Result
System Quality (X1) -> Use (Y1)	2.129	0.033	Accepted
System Quality (X1) -> User Satisfaction (Y2)	2.789	0.005	Accepted
Information Quality (X2) -> Use (Y1)	0.651	0.515	Rejected
Information Quality (X2) -> User Satisfaction (Y2)	2.493	0.013	Accepted
Service Quality (X3) -> Use (Y1)	2.394	0.017	Accepted
Service Quality (X3) -> User Satisfaction (Y2)	2.528	0.012	Accepted
Scurity (X4) -> Use (Y1)	0.863	0.388	Rejected
Scurity (X4) -> User Satisfaction (Y2)	0.560	0.576	Rejected
Use (Y1) -> Net Benefit (Y3)	4.962	0.000	Accepted
User Satisfaction (Y2) -> Net Benefit (Y3)	3.065	0.002	Accepted

## B. Discussion

### 1. Hypothesis 1

H1: System Quality positively affects Use

Based on table 4 T-Statistics and P-Value shows the results of the statistical t test >1.96 which is 2.129 So it can be concluded that **H1 is acceptable**. Variabel system quality positively affects use in the satisfaction of the use of OVO fintech, and shows a significant relationship. Which means that the system quality variable affects the use of using the OVO fintech application, where the more reliable the quality of the system owned by OVO, the more the level of use of the OVO application increases. This is in line with the results of research conducted by McGill (2003), Roldan and Lean (2003), Purwanto (2007) which shows that the quality of the system affects the intention to use the system

### 2. Hypothesis 2

H2: System Quality positively affects Satisfaction Users

Based on table 4 T-Statistics and P-Value shows the results of the statistical t test >1.96 which is 2.789 So it can be concluded that **H2 is acceptable**. System Quality variables have a positive effect on user satisfaction, and have a significant influence on the relationship between variables. This shows that the quality of the system affects user satisfaction in using OVO fintech. Good system quality such as access speed, easy-to-use applications and not frequent errors also support user satisfaction in using this application. The better the quality of the system itself, the more user satisfaction will also increase. According to the research of Delone and McLean (2003), the quality of the system can affect user satisfaction. The statement is in line with the research of Seddon and Kiew (1995), Livari (2005) and Subramanian (2005).

### 3. Hypothesis 3

H3: Information Quality positively affects Use

Based on table 4 T-Statistic and P-Value shows the statistical t test result <1.96 which is 0.651 So it can be concluded that **H3 is rejected**. The results of this test are contrary to the success model of the DeLone and McLean information systems. The level of use is not influenced by the

quality of information, the results of this study provide an explanation that information that is accurate, complete, relevant and that is presented in an easy-to-understand format, will not encourage users to use OVO more often. The results of this study are in line with the research conducted by Hudin and Riana (2016)

### 4. Hypothesis 4

H4: Information Quality positively affects User Satisfaction

Based on table 4 T-Statistics and P-Value shows the results of the statistical t test >1.96 which is 2,493 sso that it can be concluded that **H4 is acceptable**. Hypothesis four (H4) states that the quality of information has a positive influence on user satisfaction indicates that good quality of information will increase user satisfaction. Vice versa, if the quality of information generated by the OVO application is low, then the level of user satisfaction will be low. This is in accordance with the results of research conducted by Delone and McLean (2003) which states that the quality of information of a system can affect user satisfaction. The results of this study are also similar to those conducted by Livari (2005), Seddon and Kiew (1995) that system user satisfaction is influenced by the quality of information.

### 5. Hypothesis 5

H5: Service Quality positively affects Use

Based on table 4 T-Statistics and P-Value shows the results of the statistical t test >1.96 which is 2,394 So it can be concluded that **H5 is acceptable**. service quality variables have a positive effect on use, and have a significant relationship between variables, a good quality of service will affect the intensity of using the OVO application. If the quality of service is good, users will feel comfortable using the OVO application and will increase the intention to use the OVO application. In addition, good service quality will make users reuse the OVO application continuously. This statement is similar to the results of the research of Livari (2005).

### 6. Hypothesis 6

H5: Service Quality positively affects User Satisfaction

Based on table 4 T-Statistics and P-Value shows the results of the statistical t test

>1.96 which is 2,528 So it can be concluded that **H6 is acceptable**. The acceptance of hypothesis six (H6) which states that the quality of service has a positive effect on user satisfaction indicates that the influence of good service quality will affect the increase in user satisfaction. If the quality of service proves to be good then users will feel comfortable using the OVO application which will increase user satisfaction. According to the research of Delone and McLean (2003), the quality of service can affect user satisfaction. The statement is similar to the research results of Seddon and Kiew (1995), Livari (2005) and Subramanian (2005).

### 7. Hypothesis 7

H7: Security positively affects Use

Based on table 4 T-Statistics and P-Value shows that the results are rejected or have no significant effect on the use of the OVO application. it can be seen from the results of the *statistical t test* < 1.96, which is 0.863 So it can be concluded that **H7 is rejected**. this shows that a good level of security cannot affect users to use the OVO application. The results of this study are best compared to the results of a study conducted by Taufan Adi Kurniawan (2011) which shows that safety has a positive relationship with use.

### 8. Hypothesis 8

H8: Security positively affects User Satisfaction

Based on table 4 T-Statistics and P-Value shows that the results are rejected or have no significant effect on user satisfaction of the OVO application. it can be seen from the results of the *statistical t test* <1.96 which is 0.560 So it can be concluded that **H8 is rejected**. this shows that a good level of security cannot affect the satisfaction of OVO application users. The results of this study are best compared to the results of a study conducted by Candra Gunawan (2018) which shows that security has a positive relationship with user satisfaction

### 9. Hypothesis 9

H9: Use positively affects Net Benefit

Based on table 4 T-Statistics and P-Value shows the results of the *statistical t test* >1.96 which is 4,962 So it can be concluded that **H9 is acceptable**. The use variable positively affects the net benefit

in the use of the OVO fintech application, and provides a significant relationship. This shows that there is a positive relationship between Y1 and Y3 and influences between its variables. The results of this study are in accordance with the research of Delone and Mclean (2003) which shows that the intention of use is a significant predictor of net benefits. Similar results were also shown by Livari (2005).

### 10. Hypothesis 10

H9: User Satisfaction positively affects Net Benefit

Based on table 4 T-Statistics and P-Value shows the results of the *statistical t test* >1.96 which is 3,065 So it can be concluded that **H10 can be observed**. the user satisfaction variable positively affects the net benefit in the use of the OVO fintech application, and provides a significant relationship. If user satisfaction is high, the net benefit obtained by users is also high. The results of this study are in accordance with the results of Delone and Mclean's research which shows that user satisfaction is a significant predictor of net benefits. Similar results were also shown by Livari (2005).

## IV. CONCLUSION AND SUGGESTION

### A. Conclusion

This research is a study developed based on the phenomenon oftartup growth in Indonesia which does not always go well. The OVO application is one of the startups that has continuously experienced development since its establishment. In this study, it aims to test the success of the existing information system in the OVO application by using the DeLone model and the McLean IS Model. The results of this study prove that out of the 10 hypotheses made, there are 7 hypotheses that are accepted, namely the relationship of the quality system to use, the relationship of system quality to user satisfaction, information quality to user satisfaction, service quality to use, service quality to user satisfaction, the relationship of use to net benefit and the relationship of user satisfaction to net benefit, and 3 hypotheses with rejected results, namely information quality to use, the relationship between security and the relationship between use and the relationship between user satisfaction.

## **B. Suggestion**

The advice that can be given by researchers is as follows:

1. Furthermore, researchers can increase the number of samples taken considering the large number of OVO fintech users in Denpasar city to get results that are wider in reach. Or it can add other variables that can support the course of its research
2. For the management of the OVO application in order to improve system quality, information quality, service quality, and security so as to increase OVO user satisfaction.

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