

***THE EFFECT OF PERCEIVED EASE OF USE AND PERCEIVED USEFULNESS ON CUSTOMER LOYALTY MEDIATED BY CUSTOMER SATISFACTION: A STUDY OF OVO USERS IN BANDUNG, INDONESIA***

**PENGARUH KEMUDAHAN PENGGUNAAN YANG DIRASAKAN DAN KEGUNAAN YANG DIRASAKAN TERHADAP LOYALITAS PELANGGAN YANG DIMEDIASI OLEH KEPUASAN PELANGGAN: STUDI TENTANG PENGGUNA OVO DI BANDUNG, INDONESIA**

**Alif Fajar Suhendar<sup>1</sup>, Hariyadi Triwahyu Putra<sup>2</sup>**

Fakultas Ekonomi dan Bisnis, Universitas Jenderal Achmad Yani<sup>1,2</sup>

[Aliffajarr\\_21p198@mn.unjani.ac.id](mailto:Aliffajarr_21p198@mn.unjani.ac.id)<sup>1</sup>, [hariyaditriwahyu@mn.unjani.ac.id](mailto:hariyaditriwahyu@mn.unjani.ac.id)<sup>2</sup>

**ABSTRACT**

*The results of a survey by Insight Asia (2023) on digital wallets in Indonesia in 2023 reported that as many as 71% of respondents are actively using digital wallets. GoPay is the highest digital wallet ever used by respondents at 71% with a loyalty rate of 58% in the last three months, while the second place is OVO at 70% with a loyalty level in the last three months of 53%. The data shows that the percentage of OVO user loyalty is lower compared to GoPay users. The purpose of this study is to examine the effect of perceived ease of use and perceived usefulness on customer loyalty mediated by OVO customer satisfaction in the city of Bandung. By using a quantitative approach with data obtained through a questionnaire to 120 ovo users in the city of Bandung who were selected using the convenience sampling technique. The research variables include perceived ease of use and perceived usefulness as independent variables, and customer loyalty as dependent variables and customer satisfaction as mediating variables. The data was analyzed using SPSS Statistic 27. Research shows that perceived ease of use and perceived usefulness have an effect on customer loyalty. However, only perceived ease of use has an effect on customer satisfaction, while customer satisfaction does not show a significant influence as a mediator. This research recommends to the application manager to continue to improve the quality of service so that consumers are satisfied and loyal.*

**Kata Kunci:** *Perceived ease of use, perceived usefulness, customer satisfaction, customer loyalty*

**ABSTRAK**

Hasil survei Insight Asia (2023) tentang dompet digital di Indonesia pada tahun 2023 menunjukkan bahwa sebanyak 71% responden aktif menggunakan dompet digital. GoPay merupakan dompet digital yang paling banyak digunakan oleh responden dengan persentase 71% dan tingkat loyalitas 58% dalam tiga bulan terakhir, sementara posisi kedua ditempati oleh OVO dengan persentase 70% dan tingkat loyalitas 53% dalam tiga bulan terakhir. Data menunjukkan bahwa persentase loyalitas pengguna OVO lebih rendah dibandingkan dengan pengguna GoPay. Tujuan studi ini adalah untuk menganalisis pengaruh persepsi kemudahan penggunaan dan persepsi kegunaan terhadap loyalitas pelanggan yang dimediasi oleh kepuasan pelanggan OVO di Kota Bandung. Studi ini menggunakan pendekatan kuantitatif dengan data yang diperoleh melalui kuesioner kepada 120 pengguna OVO di Kota Bandung yang dipilih menggunakan teknik sampling kenyamanan. Variabel penelitian meliputi persepsi kemudahan penggunaan dan persepsi kegunaan sebagai variabel independen, loyalitas pelanggan sebagai variabel dependen, dan kepuasan pelanggan sebagai variabel mediasi. Data dianalisis menggunakan SPSS Statistics 27. Hasil penelitian menunjukkan bahwa persepsi kemudahan penggunaan dan persepsi kegunaan memiliki pengaruh terhadap loyalitas pelanggan. Namun, hanya persepsi kemudahan penggunaan yang memiliki pengaruh terhadap kepuasan pelanggan, sementara kepuasan pelanggan tidak menunjukkan pengaruh yang signifikan sebagai variabel mediasi. Penelitian ini merekomendasikan kepada manajer aplikasi untuk terus meningkatkan kualitas layanan agar konsumen merasa puas dan loyal.

**Kata Kunci:** Persepsi kemudahan penggunaan, persepsi kegunaan, kepuasan pelanggan, loyalitas pelanggan

**INTRODUCTION**

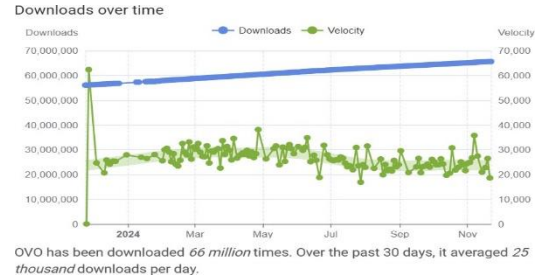
Financial Technology or fintech is a technological development in the

financial sector, fintech is different from bank innovations in general but in the form of services provided by fintech

companies that help people make financial transactions quickly and practically (Rahma, 2015). According to Bank Indonesia (BI) (2018), fintech is an integration of technology and financial services with the aim of making traditional business models more modern. The growth of fintech is closely related to the norms of a society that continues to evolve, where people are increasingly dependent on technology to meet needs quickly. One of the digital wallet applications that offers attractive promos for its users is OVO. Launched by Lippo Group in 2017, OVO making it easier for users to transact and providing double points when transacting at merchants that collaborate with OVO (Nopy et al., 2022). From Figure 1, it can be seen that the number of OVO application downloaders continues to increase every month, showing that OVO is increasingly in demand and relied on by many users for daily transactions. However, this increase in the number of downloads is not always in line with user satisfaction. Based on the ratings obtained on various download platforms, the OVO application received a low rating compared to other digital wallet applications.

Some users also expressed dissatisfaction with the customer report service response which was considered slow and unhelpful. There are also complaints about data security that raise concerns about personal data protection (Novitasari & Supriyanto, 2020). In addition, some users feel objected and disadvantaged by the existence of additional fees or deductions that are not transparent in some transactions. Expected features, such as cashback or rewards, are often not the same as promised (Rachman et al., 2023).

The results of a survey by Insight Asia (2023) on digital wallets in Indonesia in 2023 reported that as many as 71% of respondents are actively using digital wallets. GoPay is the highest digital wallet ever used by respondents at 71% with a loyalty rate of 58% in the last three months, while the second place is OVO at 70% with a loyalty level in the last three months of 53%.



**Figure 1. Number of downloaders**

**Table 1. App ratings**

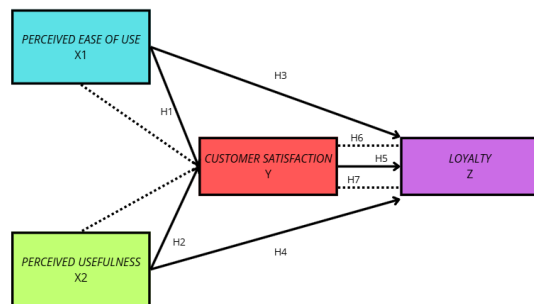
Digital Wallet	Google PlayStore Indonesia		AppStore Indonesia	
	Number of Assessments	Assessment Figures	Number of Assessments	Assessment Figures
OVO	1.123.084	3,9	46.276	4,1
GoPay*	574.448	4,6	31.434	4,7
Dana	7.264.621	4,6	806.650	4,8
ShopeePay*	261.865	4,8	34.520	4,9

Some users also expressed dissatisfaction with the customer report service response which was considered slow and unhelpful. There are also complaints about data security that raise concerns about personal data protection (Novitasari & Supriyanto, 2020). In addition, some users feel that objections and disadvantages due to the existence of additional fees or deductions that are not transparent in some transactions. Expected features, such as cashback or rewards, are often not the same as promised (Rachman et al., 2023).

The results of a survey by Insight Asia (2023) on digital wallets in Indonesia in 2023 reported that as many as 71% of respondents are actively using digital wallets. GoPay is the highest digital wallet ever used by respondents at

71% with a loyalty rate of 58% in the last three months, while the second place is OVO at 70% with a loyalty level in the last three months of 53%. The data shows that the percentage of OVO user loyalty is lower compared to GoPay users. The challenge for developers is to not only attract more users, but also ensure that the quality of the application is maintained and meets user expectations. Thus, this explanation can show that there are problems in meeting customer satisfaction in using the OVO application which ultimately causes a decrease in OVO customer loyalty.

Based on the background that has been described regarding the problem of satisfaction and loyalty of OVO application users. The following research paradigm can be proposed:



**Figure 3. Conceptual Model**

## THEORETICAL FOUNDATION

According to Davis (1989), perceived ease of use is defined as a level or state where when using a system does not require high skills or extensive knowledge to be able to operate it. Perception of convenience use will affect behavior, meaning that the more a person realizes the ease of use of the system, the higher the level of technology use, (Alma, 2018). According to Davis (1989), indicators that can measure ease of use are 1) Easy to learn. 2) Controllable. 3) Flexible. 4) Easy to use. 5) Clear and understandable. Supported by previous research, the perceived ease of use variable has a positive effect on

customer satisfaction in e-wallet users (Phuong et al., 2020). Then Oktafiani, (2021) also found that the perceived ease of use variable has a positive effect on customer satisfaction in the DANA application.

Tjiptono & Chandra, (2016) customer satisfaction is a situation shown by consumers when they realize that their needs and desires are in accordance with expectations and are well met. According to Reynaldi & Wuisan, (2023) customer satisfaction is a consumer's assessment of a product or service based on its effectiveness in meeting their expectations so that it results in a positive or negative assessment. Zeithaml et al, (2009) customer satisfaction is a feeling of joy or disappointment for customers in this case assessing whether the product or service has met customer needs and expectations. The customer satisfaction indicators according to Zeithaml et al, (2009), 1) Feeling satisfied, 2) Fulfillment of expectations, 3) Accuracy of purchase decisions.

Based on the description above, the following hypothesis can be formulated:

**H1: Perceived ease of use has a positive and significant effect on customer satisfaction**

Wilson et al (2021) define perceived usefulness as the consumer's feeling about whether the new technology being used will improve the effectiveness and performance of the tasks performed or not. According to Tyas and Darma (2017), the perceived benefits are interpreted as the level of confidence of users that the use of a system or technology can support the improvement of their performance and work results. Davis (1989) the perceived benefit is a person's level of confidence that the use of technology will improve their performance at work. Indicators of perceived usefulness according to Davis

(1989) include 1) Job performance. 2) Work more quickly. 3) Effectiveness. 4) Increase productivity. 5) Makes job easier. 6) Useful.

Based on the description above, the following hypothesis can be formulated:

**H2: Perceived usefulness has a positive and significant effect on customer satisfaction**

Griffin (2002) customer loyalty to a brand is reflected in several positive behaviors, such as buying the products offered and consistently making repeated purchases, even they still choose their favorite products even though there are alternative products. Loyalty indicators according to Griffin (2002) include purchase across product are service lines, makes regular repeat purchased, refers other, and demonstrates immunity to the pull of the competition. Then perceived ease of use has a positive effect on customer loyalty, according to Purwitasari et al., (2019) the perception of ease has a positive and significant influence on OVO application customer loyalty. Based on the description above, the following hypothesis can be formulated:

**H3: Perceived ease of use has a positive and significant effect on customer loyalty**

Then according to research conducted by Natalia & Ginting, (2018) that perceived usefulness has a positive impact on consumer loyalty of the viu application. It is also supported that the perceived usefulness variable affects loyalty in smart shop applications (Faizah & Sanaji, 2022). From the explanation above, it can be concluded that perceived usefulness affects customer loyalty on mobile applications. OVO as the object assessed in this study is part of the mobile phone application. Berdasarkan uraian diatas, maka dapat dirumuskan hipotesis sebagai berikut :

**H4: Perceived usefulness has a positive and significant effect on customer loyalty**

Customer satisfaction affects loyalty, Suroso & Wahjudi (2021) stated that customer satisfaction with digital bank users has a positive effect on loyalty. Research conducted by Esmaeili et al. (2021) that satisfaction is important to build long-term relationships with customers, which then results in loyalty. OVO as the object assessed in this study is part of fintech applications. So it can be concluded that customer satisfaction is suspected to have an effect on customer loyalty in the OVO application. Based on the description above, the following hypothesis can be formulated:

**H5: Customer satisfaction has a positive and significant effect on customer loyalty**

Perceived usefulness has an effect on loyalty mediated by customer satisfaction (Saniyyah et al., 2024). This is supported by research conducted by Dewi, (2021) where perceived ease of use and perceived usefulness affect loyalty through customer satisfaction. However, Nur'aeni & Evangelista, (2022) stated that customer satisfaction does not play a role in mediating perceived ease of use over customer loyalty.

The above statement is used as the basis for determining the hypothesis as follows:

**H6: Perceived ease of use affects customer loyalty mediated by customer satisfaction**

**H7: Perceived usefulness affects customer loyalty mediated by customer satisfaction**

## RESEARCH METHODS

The method used in this study is a survey. According to Effendi & Tukiran (2012), the survey method is a research method that takes data from samples

using questionnaires that aim to explain causality relationships and conduct hypothesis tests.

This study is designed to test hypotheses, there are seven steps that must be taken, including: operationalization of variables, design of survey tools in the form of questionnaire formats, test the validity and reliability of research instruments, collect data from respondents, process data, analyze data, and finally test hypotheses.

The sample determination technique used in this study is convenience sampling which is included in nonprobability sampling. Convenience sampling is to take respondents as a sample based on chance, that is, anyone who meets by chance can be used as a sample with the main factor being the people of the city of Bandung who have used the OVO application (Sanusi, 2014).

This study will involve a sample of the population of vulnerable respondents aged 15-35 years who have used the OVO application where a sample of 120 people will be analyzed using the SPSS version 27 application.

### Respondent Profile

**Table 2. Respondent Profile**

Information	Sum	(%)
<b>Age / Age</b>		
15-20	37	31%
21-30	63	52%
31-35	20	17%
<b>Gender</b>		
Man	83	69%
Woman	37	31%
<b>Domicile of Bandung City</b>		
Yes	120	100%
Not	0	0%
<b>Work</b>		
Student	19	16%
Student	43	36%
Entrepreneurial	23	19%

Employee	26	22%
Government employees	9	7%

From the results of table 2, it can be seen that 69% or 83 respondents are of the gender of practice. Then 52% or 63 respondents were between 21-30 years old. The results of the table above can be seen as 36% or 43 respondents as students. This shows that in this study, the majority of respondents are students.

### Validity test

**Table 3. Validity Test Results**

Variable	Indicators	r calculate	r table	Sig (1-tailed)	Ket
PEOU (X1)	X1.1	0,643	0,2638	0,000	VALID
	X1.2	0,651		0,000	VALID
	X1.3	0,674		0,000	VALID
	X1.4	0,610		0,000	VALID
	X1.5	0,614		0,000	VALID
	X1.6	0,708		0,000	VALID
PU (X2)	X2.1	0,747	0,2638	0,000	VALID
	X2.2	0,679		0,000	VALID
	X2.3	0,718		0,000	VALID
	X2.4	0,507		0,000	VALID
	X2.5	0,660		0,000	VALID
	X2.6	0,518		0,000	VALID
CS (Y)	Y1.1	0,899	0,2638	0,000	VALID
	Y1.2	0,838		0,000	VALID
	Y1.3	0,873		0,000	VALID
CL (Z)	Z1.1	0,788	0,2638	0,000	VALID
	Z1.2	0,861		0,000	VALID
	Z1.3	0,814		0,000	VALID
	Z1.4	0,767		0,000	VALID

Based on the results of table 3, it shows that all the indicators used to measure the variables in this study are said to be valid with the number of respondents (N) 120 people. It was found that all the results of r calculated on the variable indicator > from r table 0.2638, then by using the significance level of  $\alpha = 5\%$  or 0.05% all variable indicators were said to be valid with a sig value of  $0.000 < 0.05$ .

### Reliability Test

**Table 4. Reliability Test**

Variable	Cronbach's Alpha Results	Information
Perceived ease of use (X1)	0,724	Reliabel
Perceived usefulness (X2)	0,711	Reliabel
Customer Satisfaction (Y)	0,835	Reliabel
Customer Loyalty (Z)	0,819	Reliabel

Based on the results of table 4, the reliability test shows that all variables of

this study have a Cronbach's alpha value above 0.70 so that it can be explained that the instruments in this study are reliable and suitable for use. In other words, this questionnaire has consistent results.

### Normality Test

**Table 5. Normality Test. Equation Normality Test I & II**

Equation	N	Asymp. Sig. (1-tailed)
Equation I	120	0,054
Equation II	120	0,200

Based on the results of the normality test in Equation I and Equation II, the Asymp value. Asymp Value. Sig. The (1-tailed) for Equation I and Equation II is 0.054 to 0.200, greater than 0.05, indicating that the residual values in both equations have been distributed normally. This suggests that the assumption of normality in the regression analysis is full.

$$Y = 6,657 + 0,068X_1 + 0,162X_2$$

### Multikolinearitas Test

**Table 6. Multikolinearitas Test**

Equation	Variabel	Tolerance	VIF
Equation I	X1	0,974	1,026
	X2	0,974	1,026
Equation II	X1	0,923	1,073
	X2	0,964	1,037
	Y	0,939	1,066

Based on the results of the multicollinearity test in Equation I and Equation II, the variables tested (Price, Service Quality, and Customer Satisfaction) showed a tolerance value greater than 0.10 and a VIF smaller than 10. Therefore, it can be concluded that there is no multicollinearity between these variables, both in equations I and II

### Heteroskedastisitas Test

**Tabel 7. Uji Heteroskedastisitas**

Equation	Variabel	Sig.	Critical Value
Equation I	X1	0,727	0,05

	X2	0,149	0,05
Equation II	X1	0,508	0,05
	X2	0,127	0,05
	Y	0,458	0,05

Based on the results of the heteroscedasticity test, both in equation I and equation II, it shows a level of significance higher than 0.05. So, there are no symptoms. heteroscedasticity in both equations, which suggests that the regression model is free from heteroscedasticity problems.

**Multiple Regression Analysis and T Test Table 8. Multiple Regression Test Results I**

MODE L	UNSTANDARDIZED COEFFICIENTS	STANDARDIZED COEFFICIENTS	T VAL UE	SIG .
	B	STD.ERRO R	BETA	
l(Consta nt)	6.657	2.162		
	7		3.080	.03
X2	.016	0.70	.210	.022
X2	.068	0.60	.103	.161

a. Dependent Variable: Y

Based on table 8, the first multiple regression equation can be obtained as follows:

Referring to the first multiple regression equation, it can be seen that the constant value of 6.657 shows that if all variables are zero, then customer satisfaction will be worth 6.657 units. It is known that X2 has a positive and significant effect on Y which can be seen from the value of the coefficient ( $\beta$ ) of 0.162 and with a tcal value of 2.314 which is greater than the table which is 1.97993.

**Tabel 9. Multiple Regression Test Results II**

MODE L	UNSTANDARDIZED COEFFICIENTS	STANDARDIZED COEFFICIENTS	T VAL UE	SIG .
	B	STD.ERRO R	BETA	
l(Consta nt)	5.142	2.517		
			2.043	.043
X1	.225	.080	.248	.006
X2	.145	.067	.187	.033



Y	.165	.104	.141	1.595	.113
a.	Dependent Variable: Y				

Based on table 9, the first multiple regression equation can be obtained as follows:

$$Z = 5,142 + 0,145X_1 + 0,225X_2 + 0,165Y$$

It is known that the constant value of 5.142 shows that if all variables are zero, then customer loyalty will be worth 5.142 units. In addition, from the equation, it is known that  $X_1$  and  $X_2$  have a positive and significant effect on customer loyalty which can be seen from the coefficient ( $\beta$ ) values of 0.142 and 0.225 and with tcal values of 2.156 and 2.809 greater than the table which is 1.6580.

### SOBEL TEST

Input:	Test statistic:	Std. Error:	p-value:
a .162	Sobel test: 1.30856961	0.02042688	0.19068018
b .165	Aroian test: 1.23262731	0.02168539	0.21771484
s <sub>a</sub> .070	Goodman test: 1.40053411	0.01908558	0.16135344
s <sub>b</sub> .104	Reset all	Calculate	

**Figure 3. Sobel Test Calculator for the Significance of Mediation**

After conducting a sobel test for the first equation, it was obtained that the t-value of the role of customer satisfaction in mediating the influence of perceived ease of use on customer loyalty was  $1.301 < \text{table}$ , then, customer satisfaction did not play a mediating role.

Input:	Test statistic:	Std. Error:	p-value:
a .068	Sobel test: 0.82846587	0.0135431	0.40740672
b .165	Aroian test: 0.72971989	0.01537576	0.46556142
s <sub>a</sub> .070	Goodman test: 0.98248354	0.01142004	0.32586169
s <sub>b</sub> .104	Reset all	Calculate	

**Figure 3. Sobel Test Calculator for the Significance of Mediation**

Then the equation of the two roles of customer satisfaction in mediating the influence of perceived usefulness on customer loyalty was obtained by a tcal of  $0.0823 < \text{table}$ , then, customer satisfaction does not play a mediating role.

### Hypothesis Test

**Table 10. Hypothesis Test**

Hypothesis	Relationship Between Variables	T count	Significant	Interpretation of Hypothesis Test Results
H1	Perceived ease of use - > Customer satisfaction	2,314	0,022	H0 successfully rejected Work hypothesis supported by empirical data
H2	Perceived usefulness - > Customer satisfaction	1,131	0,261	H0 failed to be rejected Hypothesis not supported by empirical data
H3	Perceived ease of use - > Customer loyalty	2,809	0,006	H0 successfully rejected Work hypothesis supported by empirical data
H4	Perceived usefulness - > Customer loyalty	2,156	0,033	H0 successfully rejected Work hypothesis supported by empirical data
H5	Customer satisfaction - > Customer loyalty	1,595	0,113	H0 failed to be rejected Hypothesis not supported by empirical data
H6	Perceived ease of use - > Customer satisfaction - > Customer loyalty	1,301	-	H0 failed to be rejected Hypothesis not supported by empirical data
H7	Perceived usefulness - > Customer satisfaction - > Customer loyalty	0,823	-	H0 failed to be rejected Hypothesis not supported by empirical data

### CONCLUSIONS AND SUGGESTIONS

1. The results of the perceived ease of use test of 2.314 show that the variable has a positive effect on customer satisfaction
2. The results of the t perceived usefulness test of 1.131 showed that the variable had no effect on customer satisfaction
3. The results of the perceived ease of use test of 2.809 showed that the variable had a positive effect on customer loyalty
4. The results of the t-perceived usefulness test of 2.156 showed that the variable had a positive effect on customer loyalty
5. The results of the customer satisfaction t test of 1.595 showed that the variable had no effect on customer loyalty

6. The results of the sobel test obtained a t-value of the role of customer satisfaction in mediating the influence of perceived ease of use on customer loyalty of  $1,301 < t_{table}$ , therefore, customer satisfaction does not play a mediating role.
7. The results of the sobel test obtained a value of t calculating the role of customer satisfaction in mediating the influence of perceived usefulness on customer loyalty.

### 1. Scientific Implications

Based on the results of a survey by Insight Asia (2023), OVO user loyalty in the last three months is 53%, which is smaller than a similar application, namely GoPay. With this phenomenon, it can identify a decrease in user loyalty and is a problem in this study. Customer loyalty is positively influenced by customer satisfaction, perceived ease of use and perceived usefulness (Saniyyah et al., 2024).

Then customer satisfaction is positively influenced by perceived ease of use and perceived usefulness (Oktafiani, 2021), (Tyas and Darma (2017). Therefore, it can be assumed that customer satisfaction mediates the influence of perceived ease of use and perceived usefulness on customer loyalty. Thus, the instrument used in this study can measure what should be measured and is consistent. In this discovery, it is known that perceived ease of use has an effect on customer satisfaction and perceived ease of use, usefulness has an effect on customer loyalty.

### 2. Managerial Implications

To improve customer satisfaction, companies must simplify the user interface and provide responsive tutorials and support. Additionally, ensuring the product or service provides

clear and relevant benefits is essential for strengthening customer loyalty. User experience and the development of features that support customer performance can also strengthen their loyalty. Combining ease of use with high usability will create a more satisfying experience, which ultimately increases customer satisfaction and loyalty. Finally, companies must continuously monitor customer experience, innovate, and clearly communicate product benefits to maintain their appeal and ensure customers remain loyal.

### REFERENCES

- Alma, B. (2018). *Manajemen Pemasaran dan Pemasaran Jasa*. Edisi Revisi. Cetakan Ketujuh. Bandung : Alfabeta
- Davis, Fred D. (1989). 'Perceived usefulness, perceived ease of use, and user acceptance of information technology.' *MIS Quarterly*, 13(3): 319-340. <http://www.jstor.org/stable/249008>
- Duy Phuong, N. N., Luan, L. T., Van Dong, V., & Le Nhat Khanh, N. (2020). Examining customers' continuance intentions towards e-wallet usage: The emergence of mobile payment acceptance in Vietnam. *Journal of Asian Finance, Economics and Business*, 7(9), 505–516. <https://doi.org/10.13106/JAFEB.2020.VOL7.NO9.505>
- Esmaili, A., Haghgoo, I., Davidaviciene, V., & Meidute-Kavaliauskiene, I. (2021). Customer loyalty in mobile banking: Evaluation of perceived risk, relative advantages, and usability factors. *Engineering Economics*, 32(1), 70–81. <https://doi.org/10.5755/j01.ee.32.1.25286>



- Faizah, N., & Sanaji, S. (2022). Pengaruh Perceived Ease Of Use Dan Perceived Usefulness Terhadap Loyalitas Dengan Trust Sebagai Variabel Intervening Terhadap Penggunaan Aplikasi Warung Pintar. *Jurnal Ilmu Manajemen*, 10(3), 946–959. <https://doi.org/10.26740/jim.v10n3.p946-959>
- Fandy, Tjiptono. 2016. *Service, Quality & Satisfaction*. Yogyakarta : Andi.
- Griffin, Jill. (2002). *Customer Loyalty: How to Earn it, How to Keep it*. New York: Simon and Chuster, In
- Kumala, Imtinan Widhah, Saefudin Saefudin, and Suko Rina Adibatunabillah. 2023. “Pemodelan Loyalitas Pengguna Aplikasi Ovo Di Kota Malang: Peran Kualitas Layanan Dan Citra Merek Dengan Kepuasan Sebagai Pemediasi.” *Jurnal MD: Jurnal Manajemen Dakwah UIN Sunan Kalijaga Yogyakarta* 09(1):132–54.
- Natalia, J., & Br Ginting, D. (2018). Analisis Pengaruh Kelengkapan Fitur, Persepsi Kemudahan Penggunaan, Kualitas Informasi, Kualitas Sistem, Persepsi Manfaat terhadap Kepuasan Penggunaan serta Dampaknya terhadap Loyalitas Pengguna Aplikasi Viu. *Media Informatika*, 17(3), 148–164. <https://doi.org/10.37595/mediainf.v17i3.19>
- Nopy Ernawati. Lina Noersanti. (2022). Pengaruh Persepsi Manfaat, Kemudahan Penggunaan dan Kepercayaan terhadap Minat Penggunaan pada Aplikasi OVO. *Jurnal Impresi Indonesia*, 1(6), 694–700. <https://doi.org/10.58344/jii.v1i6.90>
- Novitasari, R., & Supriyanto, S. (2020). Faktor-Faktor Yang Mempengaruhi Keputusan Penggunaan Ovo Pada Mahasiswa Fakultas Ekonomi Universitas Negeri Yogyakarta. *Jurnal Ekonomi Dan Pendidikan*, 17(1), 28–36. <https://doi.org/10.21831/jep.v17i1.33542>
- Oktafiani, H. (2021). Pengaruh Perceived Ease of Use dan Perceived Usefulness terhadap Customer Satisfaction E-Wallet X. *Jurnal Bisnis, Manajemen, Dan Keuangan*, 2(2), 5–24. <https://journal.unj.ac.id/unj/index.php/jbmk/article/view/30140/13368>
- Purwitasari, Reni. Endah, B., Bu, & Diarti. (2019). pengaruh persepsi kemudahan, nilai pelanggan, dan promosi penjualan terhadap loyalitas pelanggan (Studi Kasus Pengguna Aplikasi OVO Pada Mahasiswa Fakultas Ekonomi Dan Bisnis Di Universitas 17 Agustus 1945 Surabaya). *JEM17: Jurnal Ekonomi dan Manajemen* <http://dx.doi.org/10.30996/jem17.v4i2.3027>
- Rachman, A., Hidayat, R., & Malang, U. N. (2023). Pengaruh persepsi kegunaan terhadap loyalitas konsumen melalui kepuasan konsumen di indonesia. 36(2), 143–159. *Modus* <http://dx.doi.org/10.24002/modus.v36i2.7766>
- Reynaldi, Dewi Wuisan. (2023). Pengaruh service quality, perceived value, customer satisfaction terhadap post-purchase intention pada apple di Indonesia. *Indonesian Marketing Journal*. <https://ojs.uph.edu/index.php/IMJ/article/view/7020>
- Suroso, J. S., & Wahjudi, Y. (2021). Analysis of factors affecting

satisfaction and loyalty of digital loan customer at pt bank xyz. *Journal of Theoretical and Applied Information Technology*, 99(11), 2617–2631.

<https://www.jatit.org/volumes/ninety-nine11.php>

Tri Inda Fadhila Rahma. (2015). persepsi masyarakat kota medan terhadap penggunaan financial technology (fintech). 6.At-Tawassuth: Jurnal Ekonomi Islam  
<http://dx.doi.org/10.30821/ajei.v3i1.1704>

Tyas, E. I., & Darma, E. S. (2017). Pengaruh Perceived Usefulness, Perceived Ease of Use, Perceived Enjoyment, dan Actual Usage Terhadap Penerimaan Teknologi Informasi: Studi Empiris Pada Karyawan Bagian Akuntansi dan Keuangan Baitul Maal Wa Tamwil Wilayah Daerah Istimewa Yogyakarta. *Reviu Akuntansi Dan Bisnis Indonesia*, 1(1), 25–35.  
<https://doi.org/10.18196/rab.010103>

Wilson, N., Keni, K., & Tan, P. H. P. (2021a). The role of perceived usefulness and perceived ease-of-use toward satisfaction and trust which influence computer consumers' loyalty in china. *Gadjah Mada International Journal of Business*, 23(3), 262–294.  
<https://doi.org/10.22146/gamaijb.32106>

Zeithaml, Bitner, M. J., & Gremlen, D. (2009). *Services Marketing: Integrating Customer Focus Across the Firm* (5<sup>th</sup> ed). Singapore: McGraw-Hill