The Influence of Consumer Behavior After COVID-19 Pandemic on Use of Digital Wallets in Gorontalo

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Keywords:	ABSTRACT
Consumer Behavior, COVID-19, Digital Wallets	This research is a descriptive quantitative research type, with the aim of looking at the influence of consumer behavior during the COVID-19 pandemic on the use of digital wallets in Gorontalo. The variables used are cultural, social, personal, and psychological. The data used are primary data obtained through a questionnaire with a total of 50 respondents. The data are was processed using multiple linear regression through the Eviews program. From the results of this study it was found that personal and psychological variables had a significant influence on the dependent variable, namely the use of digital wallets. It is hoped that further researchers will be able to examine more deeply and take more samples so that the results obtained are more accurate.

INTRODUCTION

Covid-19 is a disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus. This virus was first reported to have appeared in Wuhan, China. Which in the end became an epidemic and spread throughout the world, including Indonesia. At the end of October 2021, there were 4.25 million cases of COVID-19 in Indonesia.

Its appearance in Indonesia for the first time in March 2020 had a broad impact on society. As a form of preventing the spread of the virus, the government is taking steps by implementing Large-Scale Social Restrictions (PSBB) to Imposing Restrictions on Community Activities (PPKM). This makes behavior changes in society. All activities are carried out starting from home, be it studying, working, to buying and selling.

There are social restrictions between people, making digital wallets a non-cash payment solution. Based on data obtained from Bank Indonesia, the amount of electronic money circulating in September 2021 was IDR 530.664.510. This figure experienced a growth of 34,72% on a yoy basis.

After the end of the Covid 19 pandemic, has the use of digital wallets become a habit for the community, especially the people in Gorontalo Province. Based on this, the problem

is formulated. Is there any effect of consumer behavior after the Covid-19 pandemic on the use of digital wallets?

LITERATURE REVIEW
Consumer Behavior

Consumer behavior includes an understanding of the direct actions taken by consumers in obtaining, consuming, and spending products and services, including the decision-making process before and after these actions (Engel et al, 1995). Consumer behavior includes decision-making processes and consumer activities when evaluating, obtaining, using or obtaining goods and services (Loudon and Bitta, 1995). According to Shiffman and Kanuk (2007), consumer behavior is study of how individuals decide to spend available and owned resources (time, money, and energy) to obtain goods or services that will be consumed later. Based on the understanding of the experts above, it can be said that consumer behavior is behavior carried out by individuals in terms of determining the goods or services to be used.

Consumer Behavior Factors

There are several factors that influence consumer behavior, such as cultural factors, social factors, personal factors, and psychological factors.

Cultural Factors

Cultural factors are the broadest and most profound factors regarding consumer behavior. In terms of cultural factors, there are several roles that have an influence including culture, subculture, and social class (Thamrin and Francis, 2012).

a. Culture is the most basic factor regarding a person's behavior and desires. According to the KBBI, culture is the knowledge of a person as a social being to understand his environment and make it a guide for behavior.
b. Subculture includes nationality, religion, race, and region. Many subcultures constitute important market segments, and marketers usually design products and marketing plans according to their needs.
c. Social class, stratification sometimes takes the form of a caste system. Just like in traditional Indian society, members of different castes are trained to perform certain roles and cannot change their caste membership.

Social Factors

A person's consumer behavior is also influenced by factors such as reference groups, family and social roles and status.

a. Reference groups include all groups that directly or indirectly influence a person's attitude or behavior. A group that has direct influence over a person is called a member group.

b. The family is the most influential primary reference group. The impact is more direct on everyday buying behavior, namely spouses in the form of husband - wife and their children.

c. One person participates in several groups during the process, be it family, community, organization. A person's position in each of these groups can be determined based on roles and status.

Personal Factors

In this personal factor, consumer behavior is influenced by age and life cycle stage, occupation, economic conditions, and lifestyle.

a. Age and life cycle stage, have an influence on consumer behavior. This can be seen in terms of the needs of a consumer. For example, the needs of a child are certainly different from adults.

b. One's job influences consumer patterns. As an office worker, of course, you will need clothes in the form of shirts or office shoes. It's different if the consumer's job is a doctor, engineer, technician and etc.

c. Economic conditions. Product choice is heavily influenced by personal economic conditions. Economic conditions include disposable income, savings and wealth, debt, borrowing capacity, and attitudes toward spending and saving.

d. Lifestyle. People from the same subculture, social class, and occupation may have different lifestyles.

Psychological Factors

According to Kotler and Armstrong (2008), consumer behavior is influenced by four psychological factors:

a. Motivation is a demand with strong pressure, which encourages people to try to meet these needs.

b. Perception is defined as the process of how a person selects, organizes, and interprets input information to create a meaningful overall picture.

c. Learning is a change in one's behavior because of the experience. Learning occurs through interaction, stimulation, marking, reaction and reinforcement.

d. Beliefs and attitudes are one's descriptive thoughts about something. Beliefs can be based on real knowledge, income, or beliefs, and may or may not be emotional. At the same time, attitude describes a person's relatively consistent evaluations, feelings, and tendencies toward an object or idea. Attitudes put people in a state of mind that likes or dislikes something in order to move toward or leave something.

Digital Wallet

Digital wallets or electronic wallets are one of the financial transaction tools that are widely used today, especially after the Covid-19 pandemic. According to Bank Indonesia, an electronic wallet is an electronic service that is used to store data on payment instruments, including payment instruments using cards and/or electronic money, which can collect funds for payments. E-wallet is a payment method that allows users to use smartphones or gadgets to make electronic payments instead of using a physical wallet (Nugroho, 2016). Furthermore, according to Hutami and Septyarini (2018) provide a definition that e-wallet refers to a temporary "wallet" or an account that contains funds in an online application, which is used to make it easy for consumers to make non-cash transactions.

According to Bank Indonesia regulation number 20/6/PBI/2018 what is meant by electronic money is a payment instrument that fulfills the elements: issued on the basis of a nominal amount of money deposited; the value of money stored electronically in a media server or chip; the value of electronic money managed by the issuer is not a deposit as referred to in the Act that regulates banking.

Thus, a digital wallet is a service in the form of an application which contains financial instruments that can be used as non-cash transactions. Where the financial instrument is based on the nominal money deposited.

METHOD

The type of this research is descriptive quantitative research and the data obtained is primary data. The population is all who use digital wallets. Because the population size using digital wallets is unknown, the researchers used the Lemmeshow equation in determining the sample size.

$$n = \frac{Z^2 . P(1-P)}{d^2}$$

with:

n : sample size

Z : confidence interval 95%

p : case focus

d : sampling error 5%

Based on the Lemmeshow equation, it was found that the value of $n = 38,416$, thus the sampling was rounded up to 50 people. Data will be obtained through a questionnaire with a Likert scale, which is distributed via the Google Form. The results of the questionnaire were analyzed using a validity test using the following equation:

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

with:

r : correlation coefficient

N : the number of pairs X and Y

$\sum XY$: the sum of the multiplication of X and Y

$\sum X$: the sum of X

$\sum Y$: the sum of Y

$\sum X^2$: the sum of the squares of X

$\sum Y^2$: the sum of the squares of Y

Then, for the Reliability Test use the following equation:

$$\alpha = \left(\frac{k}{k-1} \right) \left(1 - \frac{\sum S_n^2}{S_{X-tot}} \right)$$

with:

α : cronbach's alpha coefficient

k : the number of question items tested

$\sum S_n^2$: the number of item variants in the test

S_{X-tot} : total score variance

Then linear regression using the following equation:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

with:

Y : Use of digital wallets

X_1 : dimension of cultural factors

X_2 : dimension of social factors

X_3 : dimension of personal factors

X_4 : dimension of psychological factors

RESULT AND DISCUSSION

Validity test

Validity test is used to determine the accuracy and feasibility of each item in the proposed questionnaire, so that it can determine a variable.

Each statement in the questionnaire is valid if the value of $R_{count} > R_{table}$ with a confidence level of 95% means a significance of 5% or 0,05 based on the number of respondents. In this study, the number of respondents are 50 respondents with df = 50-2 = 48, so the R_{table} value for df = 48 with a significance of 0,05 is 0,284. The test results are obtained as follows.

Table 1

Validity Test Results

Question number	R_{count}	R_{table}	Result

1	0.699	0.284	Valid
2	0.538	0.284	Valid
3	0.612	0.284	Valid
4	0.510	0.284	Valid
5	0.747	0.284	Valid
6	0.692	0.284	Valid
7	0.794	0.284	Valid
8	0.711	0.284	Valid
9	0.645	0.284	Valid
10	0.648	0.284	Valid
11	0.766	0.284	Valid
12	0.642	0.284	Valid
13	0.576	0.284	Valid
14	0.778	0.284	Valid
15	0.671	0.284	Valid
16	0.693	0.284	Valid
17	0.657	0.284	Valid
18	0.827	0.284	Valid
19	0.733	0.284	Valid
20	0.865	0.284	Valid

Source: Data Processed in SPSS

The results of the validity test show that each statement variable in the questionnaire is declared valid.

Reliability Test

Reliability test is to see the stability and consistency of sources in answering matters relating to statements compiled in the form of a questionnaire. The results of this test will reflect whether the research instrument can be trusted according to the accuracy and stability of the measuring instrument.

Table 2
Reliability Test Result

| Reliability Statistics	
Cronbach's Alpha	N of Items
.939	20

Source: Data Processed in SPSS

The results of Table 2 show a Cronbach's Alpha value of 0.939, which is greater than 0.284 so it can be concluded that the research measuring instrument is reliable.

Normality test

Normality test is a procedure used to find out whether the data comes from a normally distributed or normally distributed population. The normal distribution is a symmetrical distribution centered on the mode, mean and median. The normal distribution is defined as a particular distribution that has a bell-shaped characteristic when forming a histogram.

From the results of the normality assumption test, the following results are obtained.
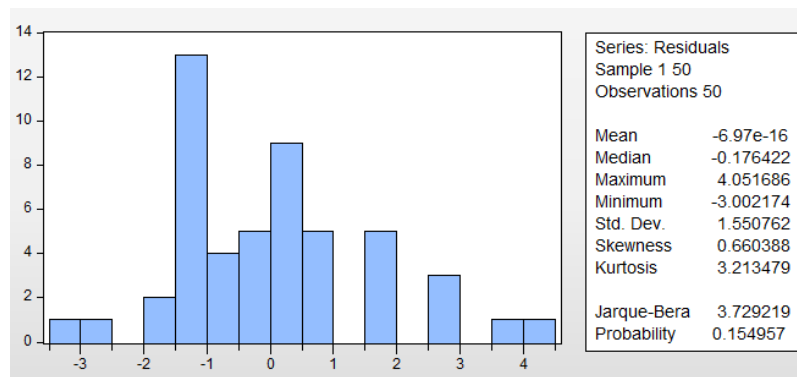
Figure 1

Normality Test Result

From Figure 1, we know that the magnitude of the probability number is 0.154 > 0.05 so that the results of the normality test indicate that the data is normally distributed.

Multiple Linear Regression Test

For regression analysis, this study used the Eviews 10 program with the regression results as below.

Table 3

Multiple Linear Regression Test Result

Dependent Variable: Y
Method: Least Squares
Date: 01/03/23   Time: 02:01
Sample: 1 50
Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.786	1.129409	1.581254	0.1208
X1	-0.074	0.113862	-0.649558	0.5193
X2	0.004	0.134516	0.026371	0.9791
X3	0.786	0.134806	5.828072	0.0000
X4	0.244	0.109605	2.229374	0.0308

R-squared	0.798112	Mean dependent var		15.92000
Adjusted R-squared	0.780166	S.D. dependent var		3.451353
S.E. of regression	1.618218	Akaike info criterion		3.895167
Sum squared resid	117.8383	Schwarz criterion		4.086369
Log likelihood	-92.37918	Hannan-Quinn criter.		3.967978
F-statistic	44.47383	Durbin-Watson stat		2.024897
Prob(F-statistic)	0.000000			

Source: Data Processed at Eviews

Based on the results of the linear regression test in Table 3, we found that personal factor variables (X3) and psychological factor variables (X4) had a significant influence. Thus the regression equation is obtained as follows:

$$Y = 1{,}786 - 0{,}074X_1 + 0{,}004X_2 + 0{,}786X_3 + 0{,}244X_4 + e$$

Constant 1,786 from an equation model can be concluded that if cultural, social, personal and psychological factors equals to 0 then it will have an influence on the use of digital wallets of 1,786.

Discussion

In this study, from a total of 50 respondents, there are 84% of female and 16% of male, with an age range of 12-25 years. From the type of work, it shows that digital wallet users are dominated by students with a percentage of 64% and an income of less than IDR 1.000.000.

Based on the results of the validity test, it shows that each statement in the questionnaire are valid. This is shown by the results of $R_{\text{count}} > R_{\text{table}}$. Furthermore, in the reliability test with a total of 20 statements, the Cronbach's Alpha value was 0,939. This value is greater than alpha 0.284, which means that every statement on the research measuring instrument is reliable.

From the results of the normality test it is significant because the alpha value = 0,05 which is greater than the probability value of 0,155, thus concluding that the data is normally distributed. The results of the linear regression test showed that the variables of cultural factors (X1), social (X2), personal (X3), and psychological (X4) of the four independent variables used showed that partially only personal variables (X3) and psychological (X4) which has an influence on the variable use of digital wallets (Y). These results are different from the results of research found by Mohammad, et al (2020), where the results of his research show that only psychological variables have an influence on the dependent variable. This could happen due to the different number of respondents and research locations as well as other influencing factors, which in this study were influenced by the situation and conditions after the COVID-19 pandemic.

Furthermore, when viewed simultaneously, Table 3 shows an F test value of 0.000 <0.05 so it can be concluded that cultural (X1), social (X2), personal (X3), and psychological (X4) variables together have a significant influence on the use of digital wallets (Y).

CONCLUSION AND RECOMMENDATION

From the results of this study it was concluded that there were an influence on consumer behavior after the COVID-19 pandemic on the use of digital wallets in Gorontalo. This is indicated by the results of the F test which has a value less than an alpha value of 0.05, so that simultaneously the variables used together have an influence on the dependent variable, namely the use of digital wallets.

REFERENCES

Ajuna, L. H., Dukalang, H. H., & Djou, S. R. (2023). Pengaruh Persepsi Kemudahan, Efektivitas Dan Keamanan Terhadap Minat Bertransaksi Menggunakan E-WALLET: Studi Pada Mahasiswa Di Provinsi Gorontalo. Gorontalo Management Research, 6 (1), 19-31.

Abdullah, Thamrin., dan Francis Tantri. 2012. Manajemen Pemasaran.Jakarta: Raja Grafindo Persada.

Adit, Mohammad., Rini Rahayu, dan Ratna Nikin. Pengaruh Perilaku Konsumen Terhadap Sistem Pembayaran Uang Digital. Jiagabi Vol.9 (2).

Dukalang, H. H., & Nugroho, M. A. (2022). Pengaruh Fdr, Bagi Hasil, Pembiayaan Jual Beli, Sewa Menyewa Dan Npf Terhadap Profitabilitas Bank Umum Syariah 2016-2020. Account: Jurnal Akuntansi, Keuangan dan Perbankan, 9(1)

Dukalang, Hendra. 2020. "Financial Performance Analysis for Return on Assets with a Multiple Linier Regression Approach.". EULER: Jurnal Ilmiah Matematika, Sains dan Teknologi 8(2): 42–50.

Edeh, Jumat Ogbu. 2021. *Impact of COVID-19 Pandemic on Consumer Behavior Towards the Intention to Use E-Wallet in Malaysia*. International Journal of Accounting & Finance in Asia Pacific. Vol.4 (3).

Firmansyah, Anang. 2018. Perilaku Konsumen (Sikap dan Pemasaran). Surabaya: Budi Utama

Kadir, R. D. & Ismail, J. (2022). Millennials Adopt Online Delivery: Analysis Using UTAUT2 Model During Pandemic Covid-19. *Journal of Principles Management and Business, 1(1),* pp. 18-26

Kadir, R. D. & Ismail, J. (2022). Multigroup Analisis Penggunaan Aplikasi Pengiriman Makanan saat Pandemik Covid-19. *Islamic Econonomics and Finance Journal, 1(2)*, pp. 135-153

Krismawintari, Ni Putu Dyah dkk. 2020. *Decision Model of Use E-Money in Covid-19 Pandemic Situation*. Technium social sciences journal. Vol.10

Kristina, Maria. 2020. Pengaruh Perilaku Konsumen Terhadap Penggunaan Uang Elektronik (Dompet Digital) Sebagai Alat Pembayaran Pada Masa Pandemi *Covid-19* di Kota Medan. Jurnal Ilmiah Magister Manajemen. Vol 4(1).

Maulida, Yasinta dan Nila Tristiarini. 2021. Pengaruh Sistem Pembayaran E-Money Dalam Era Digital Di Tengah Wabah Covid-19: Studi Kasus Pada Masyarakat Semarang. Jurnal Akuntansi Pajak. 22 (01).

Ningsih, S., & Dukalang, H. H. 2019. Penerapan Metode Suksesif Interval pada Analsis Regresi Linier Berganda. Jambura Journal of Mathematics, 1(1), 43.

Ningsih, S., Dukalang, H., Arsal A., (2022) Pemodelan Struktural Equation Model-Partial Least Square (SEM-PLS) Pada Minat Bertransaksi Menggunakan Aplikasi OVO. Jambura Journal of Probability and Statistics, 3(2), 171-178

Nuriyadi dkk. 2017. Dasar-Dasar Statistik Penelitian. Yogyakarta: Sibuku Media.

Suryani, Tatik. 2012. Perilaku Konsumen: Implikasi Pada Strategi Pemasaran. Yogyakarta: Graha Ilmu