

STUDENT PREFERENCE TOWARDS OVO AS A CASHLESS PAYMENT FACILITY (STUDY AT STUDENTS OF FACULTY OF BUSINESS IN SURABAYA CITY)

JAM

18, 3

Received, March '20

Revised, June '20

July '20

August '20

Accepted, August '20

Liestya Padmawidjaja

Timotius F. C. W. Sutrisno

Nisa Setiani

Universitas Ciputra Surabaya

Abstract: This study was used to determine the acceptance preferences of OVO technology in business faculty students in Surabaya using the TAM theory model (Technology Acceptance Model) that focuses on Perceived Efficacy Factors, Perceived Ease of Use, Perceived Usage that is Easy to Use, and Perceptions of Use that are Perceived and Behavior Intentions for Use. OVO service is a mobile application that allows users to transact using electronic money. There is a trend of using electronic money payments using transitions to make transactions easier, more effective, and efficient, but still safe. Survey data were collected from 160 OVO users and analyzed using quantitative methods with multiple linear regression analysis. The results of this study indicate that the Perceived Risks and TAM core constructs such as Perceived Usability and Perceived Ease of Use have been proven to be both partially and simultaneously significant for the Behavior of Intention to Use. This study explains the significant relationship between constructs and discussing this information can be used to increase OVO acceptance among Surabaya students. This research is based on primary data collection and interpretation. This provides comprehensive insights about OVO acceptance to students in the city of Surabaya.

Keywords: Technology Acceptance Model, Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Behavioral Intention to Use, OVO.



Journal of Applied
Management (JAM)
Volume 18 Number 3,
September 2020
Indexed in Google Scholar

Cite this article as: Padmawidjaja, Liestya, Timotius F. C. W. Sutrisno, and Nisa Setiani. 2020. Student Preference towards OVO as A Cashless Payment Facility (Study at Students of Faculty of Business in Surabaya City). *Jurnal Aplikasi Manajemen*, Volume 18, Number 3, Pages 548–554. Malang: Universitas Brawijaya. <http://dx.doi.org/10.21776/ub.jam.2020.018.03.15>

Year by year, the payment system continues to innovate and brings Indonesia into the digital or information age. One of the impacts of the advances in information technology is the progress of digitalization systems on pay-

ment instruments and financial services. Payment systems innovate from conventional payment systems to ATM/ debit cards or credit cards, and now they are transformed with the latest innovations (digitalization of payment systems), namely electronic money (Manik, 2019). The use of electronic money is growing very significantly. Until February 2019, the use of electronic money (e-money) increased

Corresponding Author:
Liestya Padmawidjaja, Universitas
Ciputra Surabaya, DOI:
[http://dx.doi.org/10.21776/
ub.jam.2020.018.03.15](http://dx.doi.org/10.21776/ub.jam.2020.018.03.15)

by 77.6% (Kompas, 2019). This data was also supported by a survey which was conducted by the Indonesian Internet Service Provider Association that the number of internet users has increased by 64.8%, from 171 million people to 264 million people (APJII, 2019). It is also supported by the data of Bank Indonesia (2019), showing that electronic money transactions will increase up to 5.226 billion in 2019. It was an almost two-fold increase from the previous year. There are various electronic money issuers or providers, such as E-money, *Brizzi*, *Tapcash*, *Flazz*, *Go-pay*, Funds, OVO, etc. (Pratama and Suputra, 2019). Kata Data (2019), showed that OVO is the largest digital wallet platform in Indonesia. OVO market share reached 37% of total digital wallet transactions in Indonesia. In 2019, OVO recorded a growth in the transaction value by 55%. OVO conducts an open ecosystem strategy; the result showed that this strategy can expand the adoption and growth of the number of merchants significantly. OVO is proven to be able to help MSMEs who were not yet familiar with the modern financial system. (Kontan, 2020).

According to Juhri and Dewi (2017), a cashless society enables technology to facilitate the community in doing daily activities; however, not all new technologies can be easily accepted by the community. The community cannot accept technology directly; they require time and adjustment. A cashless system can facilitate the users in conducting various types of transactions via smartphones, for example in online shopping (both goods and services) and other services.

The use of electronic cashless services can provide many benefits to users. According to the Technology Acceptance Model theory, it can be categorized into Perceived Usefulness. This has become the researcher's interest regarding public trust in new technology and technology acceptance using the Technology Acceptance Model (TAM) theory which was developed by Fred Davis (1989). TAM was originally established to measure the determinants of technology use. The model states that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) affect Behavioral Intention to use (BI). Negative perceptions arising from risks perceived

by users are considered as obstacles in conducting online transactions. According to Wiradinata (2018), the risk of an unauthorized transaction, the possibility of losing money, low privacy, and potential errors can be categorized into Perceived Risk.

The Director of OVO, Johnny Widodo, stated that the young generation is a very important target market for OVO (Berita Satu, 2018). OVO conducts strategies to catalyze non-cash transactions by offering and providing the product in various universities and crowded places, especially students. Technology acceptance should be noted, namely how much the desire of people in adopting new transaction technology. When someone has accepted technology, then he is ready for something new, such as learning how to operate the device and using it in daily activities.

Based on the research background, the research problem is whether Perceived Usefulness, Perceived Ease of Use, and Perceived Risk have a significant effect on Behavioral Intention to Use on OVO users in Surabaya, especially students. Therefore, the purpose of this study was to determine the effect of Perceived Usefulness, Perceived Ease of Use and Perceived Risk on Behavioral Intention to Use on students using OVO in Surabaya.

LITERATURE REVIEW

The theoretical umbrella of this research is the Technology Acceptance Model (TAM), a model of the acceptance of information technology systems. TAM is a suitable theoretical foundation to form a conceptual model in this study because it can depict technology acceptance accurately. TAM theory is a formidable model applied in various studies about technology because it shows empirical and substantial evidence. This study provides a comprehensive and critical review of the study about cashless acceptance among students using the OVO electronic wallet. TAM theory consists of several variables used in this study, namely Perceived Usefulness, Perceived Ease of Use, Perceived Risk, and Behavioral Intention to Use.

Syahril and Rikumahu (2019), presented empirical evidence that perceived risk variables can be added in the TAM model to explain the way to

avoid losses on online services. The addition of the Perceived Risk variable to the TAM model can strengthen previous suggestions to consider negative factors as studying technology acceptance. Perceived Risk is defined as the perception of potential negative results that might occur due to technology adoption.

Perceived Usefulness

Perceived Usefulness is the extent to which a person believes that using technology will improve his performance (Yani et al., 2018). Dalcher and Shine (2003) stated that Perceived Usefulness is the construct of one's belief that particular technology will be able to improve their performance. Based on the research which was conducted by Chauhan (2015), there are several indicators of Perceived Usefulness, that are Reduce Turnaround Time is the period required in doing something that can be shortened by the use of technology, Useful is the perception of users who feel the benefits of technology, Low Cost is the perception of users who find that technology can lower their cost, and Easy Transaction is the perception of users who find that technology facilitates the transaction process.

Perceived Ease of Use

Perceived Ease of Use is defined as how far the user expects the target system is easy to implement. In other words, users do not expect high difficulty to learn and implement technologies (Chuttur, 2009; Surendran, 2012). This definition is supported by Wibowo's statement in Tileng (2015), that the perception of ease of use of technology is defined as a measure by which a person believes that the technology can be easily understood and used. Based on the research which was conducted by Chauhan (2015), there are 3 indicators of Perceived of Ease Use (PEOU), that are Easy to Use (the ease of operation of technology), Simple and Understandable (technology that is simple and easy to understand), and Trouble-Free (technology can reduce problems).

Perceived Risk

Wiradinata (2018), stated that Perceived Risk is the extent to which traders, owners, or managers believe in the potential for uncertain negative returns from cellular payment transactions. Risk-taking is not only the willingness to take risks but also the organization's ability to minimize the potential risks (Teofilus et al., 2020). Based on research which was conducted by Giovanis et al., (2019), there are 5 Perceived Risk indicators. Those indicators are Performance Risk is the user's perception of the possibility of a system not functioning as expected, Privacy Risk is the potential loss of control over personal information, Financial Risk is the user's perception of the possibility of money loss caused by the system, Psychological Risk reflects the user's perception of the possibility of a loss of self-perception caused by anxiety due to the system, and Time Risk refers to the long time spent to use the services.

Behavioral Intention to Use

Behavioral Intention to Use is one's desire or interest to perform a certain behavior. Interest is related to behaviors or actions, yet interest can change with time, the wider the time interval, the more possible changes in one's interest (Yani et al., 2018). Chauhan (2015), defines Behavioral Intention to Use as the level of how strong a person's desire or drive to perform certain behaviors. According to a research which was conducted by Chauhan (2015), Behavioral Intention can be measured by three indicators. Those are Willingness to Use is the user's desire to use technology, Favorable Opinion is (users use the product due to some benefits), and Intention to Use is the user's perception of continuous use of technology.

Intervariable Relationship

Pratama and Suputra (2019), stated that the perception of benefits, perceived ease of use, and level of trust had a positive and significant effect on the interest of *Udayana University* students (af-

ternoon class 2015) to use electronic money. This is supported by research which was conducted by Syahril and Rikumahu (2019), showing that the perception of benefits, both partially and simultaneously, has a positive and significant effect on one's interest in using non-cash payment instruments. Some of these studies show that Perceived Usefulness might affect Behavior Intention to Use. Therefore, a hypothesis is developed as follows:

H1: Perceived Usefulness (PU) significantly influences Behavior Intention to Use (BI) on students using OVO in Surabaya

Based on the research of a result which was conducted by Setiawan and Sulistiowati (2017), it can be concluded that Perceived Ease of Use (PEOU) has a significant effect on Behavior Intention to Use (BI) on the use of e-business by entrepreneurs in Cirebon. It is in line with the finding of a study which was conducted by Tobbin and Kuwornu (2011), that Perceived Ease of Use (PEOU) is the most important determinant of Behavior Intention

to Use (BI) in using mobile money transfers in Ghana, India. Based on some of these studies, there is a possibility that Perceived Ease of Use (PEOU) affects Behavior Intention to Use. Therefore, a hypothesis is developed as follows:

H2: Perceived Ease of Use (PEOU) has a significant effect on Behavior Intention to Use (BI) on students using OVO in Surabaya

Syahril and Rikumahu (2019), stated that Perceived Risk had a significant positive effect on Behavior Intention to Use e-money among Telkom University students. Based on this research, Perceived Risk (PR) may have an influence on Behavior Intention to Use. Therefore, a hypothesis is developed as follows:

H3: Perceived Risk (PR) significantly influences Behavior Intention to Use (BI) on students using OVO in Surabaya

The research model used in this study is illustrated in Figure 1 below:

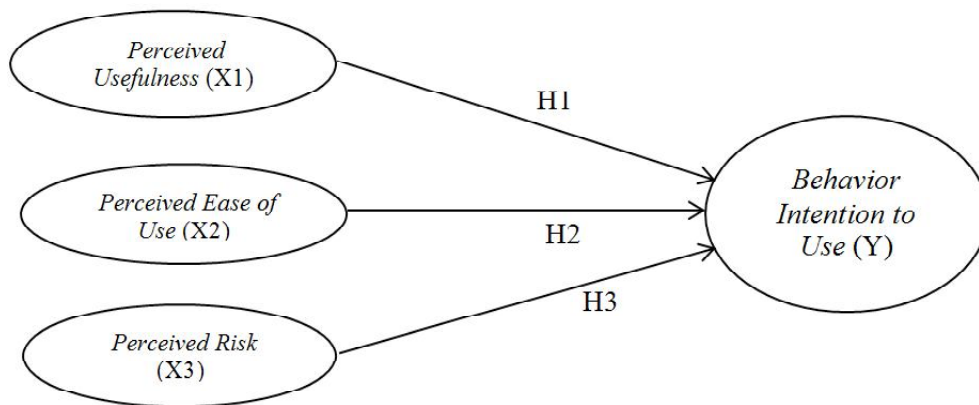


Figure 1 Analysis Model

METHOD

The type of this research is quantitative research. The population studied in this research was all students of Faculty of Business Management at private universities in Surabaya which are accredited A. The respondents who were taken as the sample in this study are Students of Faculty of Busi-

ness Management at private universities in Surabaya which are accredited A and OVO users for at least six months. The number of samples used was 160 respondents. The sampling method used in this study was purposive sampling technique, while the data was collected using a questionnaire. The measurement scale used in the research questionnaire was

a five-point *Likert* scale. The *Likert* scales used in this study start from (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree. The data collected was then analyzed by multiple linear regressions using the SPSS software.

RESULTS

Validity and Reliability Testing

The results of validity and reliability testing are presented in the following Table 1.

Each statement in each variable shows a significance value of 0,000; because it is <0.05, it can be concluded that each statement on each variable was declared valid. The consistency in this study was measured using *Cronbach's alpha*. The results are as follows: Perceived Usefulness (0.796), Perceived Ease of Use (0.813), Perceived Risk (0.800), and Behavioral Intention to Use (0.821). An indicator of an instrument is declared reliable if *Cronbach's alpha* > 0.6. Therefore, it can be concluded that each variable is consistent and reliable.

Table 1 Results of Validity Testing

Variable	Pearson Correlation	Sig. 2 (tailed)	Cronbach's Alpha
X1.a	1	0.000	
X1.b	0.521	0.000	
X1.c	0.282	0.000	
X1.d	0.527	0.000	
X1	0.788	0.000	0.796
X2.a	1	0.000	
X2.b	0.506	0.000	
X2.c	0.282	0.000	
X2	0.732	0.000	0.813
X3.a	1	0.000	
X3.b	0.612	0.000	
X3.c	0.512	0.000	
X3.d	0.495	0.000	
X3.e	0.392	0.000	
X3	0.788	0.000	0.800
Ya	1	0.000	
Yb	0.439	0.000	
Yc	0.447	0.000	
Y	0.820	0.000	0.821

Source: Processed data

Classical Assumption Test

The results of the classical assumption test in this research are presented in the following Table 2.

Table 2 Classical Assumption Test

Variable	Sig. (2-tailed)	Tolerance	VIF
Perceived Usefulness	0.696	0.477	2.097
Perceived Ease of Use	0.600	0.472	2.119
Perceived Risk	0.441	0.980	1.021
Unstandardized Residual	0.200	-	-

Source: Processed data

Based on the results of the classical assumption test, all of those values are significant, thus the data can be analyzed further using multiple regression analysis. The results are presented in Table 3.

Table 3 Multiple Regression Analysis

F-test		
Model	F	Sig.
Regression	25888	0.000
Coefficient of Correlation and Determination (R ²)		
Model	R	R Square
1	0.577	0.322
T-test		
Model	t	Sig.
X1	3.734	0.000
X2	2.129	0.035
X3	2.933	0.04

Source: Processed data

Table 3 above indicates that the significant value of the F-test is 0.000. because it is smaller than 0.05, this indicates that variable Perceived Usefulness, Perceived Ease of Use, and Perceived Risk tend to influence the Behavioral Intention to Use. Besides F-value, the table above also shows the coefficient of correlation in this study amounted to 0.577. It indicates that this research has a strong positive correlation because the value is above 0.5 and be-

low 1, while the r-square value is 0.322, which means that the independent variable can affect the dependent variable by 32.2 percent. The significant values of Perceived Usefulness, Perceived Ease of Use, and Perceived Risk are below 0.05. This shows that Perceived Usefulness, Perceived Ease of Use, and Perceived Risk partially affect Behavioral Intention to Use. This explains that Perceived Usefulness, Perceived Ease of Use, and Perceived Risk individually tend to influence Behavioral Intention to Use.

DISCUSSION

There are various phenomena about digital payment and its acceptance in Indonesia; it is already summarized in this study. The change of payment system from conventional to digital brings many benefits to the community. The technology can facilitate daily activities. The use of technology is also increasing from year to year. However, some people are not ready for new technology and changes. According to Hastomo and Aras (2018), the development of electronic money is constrained because many people are not ready to be a cashless society, and the implementation of the cashless system in the field is not easy. Fintech (financial technology) producers continue to encourage the public to switch to using digital-based payments.

The sample which was taken in this study is the young generation and technology literate; therefore, they can accept changes easily. There were 160 students included in this study. The respondents are adults, so they consider the pros and cons before using a new, thus this study also discussed the risk of new technology. Several previous studies showed that people consider the risk or negative effect of new technology; one of which is a study conducted by Wiradinata (2018). He included more experienced respondents who are more likely to be careful about using new technology and not to rush to use it. This research is in line with a study by Syahril and Rikumahu (2019), which was conducted at Telkom University. It showed that Perceived Risk has a positive effect on Behavioral Intention to Use. This shows that there are similarities in behavior in the scope of the university. Fintech producers can

grab more users' interest by providing a more detailed explanation of the user's risk, especially technology security.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the results, it can be concluded that several variables studied in this research (Perceived Usefulness, Perceived Ease of Use, Perceived Risk) affect Behavioral Intention to Use partially or simultaneously.

Recommendations

To improve performance, OVO should simplify symbols so that they are easy to understand and guarantee secured service. Further researchers are suggested to use a different research model and add more variables so that they can find other factors or independent variables, besides variables already examined in this study, for example, social influence, self-efficacy, individual mobility, and perceived enjoyment of OVO payment system and the like.

REFERENCES

- APJII. 2019. *Penetrasi & Profil Perilaku Pengguna Internet Indonesia Tahun 2018*. In Apjii.www.apjii.or.id.
- Bank Indonesia. 2019. *Jumlah Uang Elektronik Beredar (Nomor 11)*. [https://www.bi.go.id/id/statistik/sistem-pembayaran/uang-elektronik/Contents/Jumlah Uang Elektronik.aspx](https://www.bi.go.id/id/statistik/sistem-pembayaran/uang-elektronik/Contents/Jumlah%20Uang%20Elektronik.aspx).
- Berita Satu. 2018. *OVO Tingkatkan Penetrasi di Universitas*. Berita Satu. <https://www.beritasatu.com/digital/527595-ovo-tingkatkan-penetrasi-di-universitas>.
- Chauhan, S. 2015. *Acceptance of mobile money by poor citizens of India: Integrating trust into the technology acceptance model*. Info, 17(3), 58–68. <https://doi.org/10.1108/info-02-2015-0018>.
- Chuttur, M. 2009. *Overview of the Technology Acceptance Model: Origins, Developments and Future Directions*. Working Papers on Information Systems, 9(37), 1–23.
- Dalcher, I. and Shine, J. 2003. *Extending the new technology acceptance model to measure the end user information systems satisfaction in a mandatory*

- environment: A Bank's Treasury*. Technology Analysis and Strategic Management, 15(4), 441–455. <https://doi.org/10.1080/095373203000136033>.
- Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., and Sarmaniotis, C. 2019. *Adoption of mobile banking services: A comparative analysis of four competing theoretical models*. International Journal of Bank Marketing, 37(5), 1165–1189. <https://doi.org/10.1108/IJBM-08-2018-0200>.
- Hastomo, A. D. and Aras, M. 2018. *Influence of Cashless Society Socialization toward Trust Transaction Culture in Jakarta, Indonesia*. Humaniora, 9(1), 1–13. <https://doi.org/10.21512/humaniora.v9i1.4174>.
- Juhri, K. and Dewi, C. K. 2017. *Kepercayaan Dan Penerimaan Layanan Mobile Money T-Cash Di Bandung Dengan Pendekatan Technology Acceptance Model (Tam)*. Jurnal Pro Bisnis, 10(1), 36–51.
- Kata Data. 2019. *OVO Jadi Dompot Digital Terbesar di Indonesia Berkat Ekosistem Grab*. In Kata Data. <https://katadata.co.id/berita/2019/09/25/ovo-jadi-dompot-digital-terbesar-di-indonesia-berkat-ekosistem-grab>.
- Kompas. 2019. *Penggunaan Uang Elektronik Melonjak 77,6 Persen*. <https://money.kompas.com/read/2019/04/25/171509826/penggunaan-uang-elektronik-melonjak-776-persen>.
- Kontan. 2020. *Sepanjang 2019 OVO catat 1 miliar transaksi*. [kontan.co.id, 1–5. https://keuangan.kontan.co.id/news/sepanjang-2019-ovo-catat-1-miliar-transaksi?page=all](https://keuangan.kontan.co.id/news/sepanjang-2019-ovo-catat-1-miliar-transaksi?page=all).
- Manik, T. 2019. *Analisis Pengaruh Transaksi Digitalisasi Uang Elektronik terhadap Cashless Society dan Infrastruktur Uang Elektronik sebagai Variabel Pemoderasi*. Jurnal Ilmiah Akuntansi dan Finansial Indonesia, 2(2), 27–40.
- Pratama, A. B. and Suputra, I. D. G. D. 2019. *Pengaruh Persepsi Manfaat, Persepsi Kemudahan Penggunaan, dan Tingkat Kepercayaan Pada Minat Menggunakan Uang Elektronik*. E-Jurnal Akun-tansi, 27(2), 927–953. <https://doi.org/10.24843/eja.2019.v27.i02.p04>.
- Setiawan, A. and Sulistiowati, L. H. 2017. *Penerapan Modifikasi Technology Acceptance Model (TAM) dalam E-Business*. Jurnal Manajemen dan Pemasaran Jasa, 10(2), 171–186. <https://doi.org/10.25105/jmpj.v10i2.2277>.
- Surendran, P. 2012. *Technology Acceptance Model: A Survey of Literature*. International Journal of Business and Social Research (IJBSR), 2(3), 175–178. <https://doi.org/10.1016/j.biortech.2015.06.132>.
- Syahril, W. N. and Rikumahu, B. 2019. *Penggunaan Technology Acceptance Model (TAM) dalam Analisis Minat Perilaku Penggunaan E-Money pada Mahasiswa Universitas Telkom*. Jurnal Mitra Manajemen (JMM Online), 3(2), 201–214.
- Teofilus, Sanju Kumar Singh, Timotius FCW Sutrisno, and Anthony Kurniawan. 2020. *Analyzing Entrepreneurial Marketing On Innovative Performance*. Jurnal Ilmiah Manajemen, 10(1), 78–90. <https://doi.org/10.22441/mix.2020.v10i1.006>.
- Tileng, K. G. 2015. *Penerapan Technology Acceptance Model pada Aplikasi Edmodo di Universitas Ciputra Surabaya menggunakan Analisis Jalur*. Jurnal Informatika dan Sistem Informasi, 01(01), 28–37. <https://journal.uc.ac.id/index.php/JUISI/article/view/26>.
- Tobbin, P. and Kuwornu, J. K. M. 2011. *Adoption of Mobile Money Transfer Technology: Structural Equation Modeling Approach*. In European Journal of Business and Management www.iiste.org ISSN (Vol. 3, Nomor 7). Online.
- Wiradinata, T. 2018. *Mobile Payment Services Adoption: The Role of Perceived Technology Risk*.
- Yani, E., Lestari, A. F., Amalia, H., and Puspita, A. 2018. *Pengaruh Internet Banking Terhadap Minat Nasabah Dalam Bertransaksi Dengan Technology Acceptance Model*. Jurnal Informatika, 5(1), 34–42. <https://doi.org/10.31311/ji.v5i1.2717>.