The Effect of Perceived Ease of Use, Usefulness and Risk on Intention to Use the Go-Food Application in Surabaya and Sidoarjo

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Abstract
This study aimed to determine the effect of perceived ease of use (X₁), perceived usefulness (X₂) and perceived risk (X₃) on the behavioral intention (Z) to use (Y) the Go-Food applications in Mr. Bre’s Geprek Chicken and other similar businesses. This research was quantitative descriptive. Purposive sampling was used and the sample included 100 respondents. An online questionnaire was used for data collection using Google Form and the data were analysed using partial least squares through SmartPLS 3 Software. Perceived usefulness, perceived risk and attitude towards had a significant effect on intention; however, perceived ease of use did not have a significant effect.

Keywords: perceived ease of use, perceived usefulness, perceived risk, behavioral intention, attitude toward using

1. Introduction

With technological developments, the fast food sale has progressed. One that is very helpful is the Go-Food application. The food business has considerable opportunities in East Java Province because according to the East Java Central Bureau Of Statistics the population of East Java in 2020 is 39,886,288 people.

Go-Jek is a company that has an online food application that will be discussed and it interests the public, especially in Surabaya and Sidoarjo.

The ease of using various services found in this online applications, especially food, with this Go-Food application, from Go-Jek company. There are several factors that cause consumers to be interested in making transactions on the Go-Food application. Affordable costs, quality of food types, trustworthiness, perceived benefits, ease of transaction facilities, and ease of use of applications are some of those factors. No exception to business in serving food online, which started small as Mr. Bre that
sells geprek chicken and other similar businesses that use the Go-Food application in Surabaya and Sidoarjo.

This Go-Food application activity rests on three core values: speed, innovation and social impact. Along with the development of food services through the Go-Food application, and the interests from people in Surabaya and Sidoarjo are in buying Mr. Bre’s geprek chicken, the researcher is eager to examine how perceived usefulness, perceived ease of use, perceived risk towards behavioral intention with attitude toward using by consumers through the Go-Food application in Mr Bre’s food business and similar businesses that use the Go-Food application.

Geprek chicken is an innovation that comes from fried chicken which is rolled with flour and then processed with spices and ingredients, especially chili, through rough mashing. Geprek chicken starts become a favorite food choice for people in Surabaya and Sidoarjo, especially students and factory employees, because it has low range prices. The tight competition between geprek chicken food stalls makes geprek chicken entrepreneurs have to be innovative. The culinary business field is classified as favorite, especially if there is a viral product so that many people start a business because it is considered a business opportunity.

The results of the research can be used to bring various practical benefits such as suggestions and feedbacks for GoJek company to find out why consumers buy Mr. Bre’s geprek chicken and similar businesses through the Go-Food application, also provide suggestions and feedbacks to improve and increase the application’s use, according to the consumer’s need ordering Mr. Bre’s geprek chicken and similar businesses. And this research can be used for those who are willing to open similar food business like Mr. Bre’s geprek chicken.

Based on Table 1 above, the researcher wants to increase the sales turnover of Mr Bre’s geprek chicken through the Go-Food application, because all sales through online have decreased from March 1 to May 30, 2020. In Table 1, you can see the sales of Mr Bre’s geprek chicken in March was Rp 4,116,960, then in April the amount was Rp 3,097,840 decreased by Rp 1,019,120. Then in May it decreased from the previous month Rp 221,200 with a total value of Rp 2,876,640.

Based on this background, this study seeks to identify and analyze perceived ease of use, perceived usefulness, and perceived risk that affect behavioral intention with attitude toward using through the Go-Food application in Mr. Bre’s geprek chicken food business and other similar businesses that use the Go-Food application that consumers experience. The power of interest from someone to do certain activities is the definition
TABLE 1: Sales table of Mr. Bre’s geprek chicken from March 1 to May 30, 2020

| No | March ’20 | April ’20 | May ’20 |
|----|-----------|-----------|---------|
| 1  | Rp 2,951,120 | Rp 3,819,200 | Rp 3,750,000 |
| 2  | Rp 1,688,160 | Rp 1,216,000 | Rp 1,888,000 |
| 3  | Rp 515,120 | Rp 512,000 | Rp 510,000 |
| 4  | Rp 1,113,390 | Rp 77,000 | Rp 187,200 |
| 5  | Rp 1,857,760 | Rp 145,760 | Rp 102,080 |
| 6  | Rp 2,051,200 | Rp 1,422,000 | Rp 78,400 |
| 7  | Rp 1,941,200 | Rp 1,584,000 | Rp 12,000 |
| 8  | Rp 1,714,900 | Rp 119,290 | Rp 50,000 |
| 9  | Rp 1,673,300 | Rp 70,200 | Rp 54,400 |
| 10 | Rp - | Rp 187,440 | Rp 24,000 |
| 11 | Rp - | Rp 105,440 | Rp 85,220 |
| 12 | Rp 99,120 | Rp 59,120 | Rp 36,000 |
| 13 | Rp - | Rp 90,000 | Rp 30,400 |
| 14 | Rp - | Rp 38,000 | Rp 36,000 |
| 15 | Rp 2,742,900 | Rp - | Rp 158,590 |
| 16 | Rp 478,400 | Rp 93,800 | Rp 240,180 |
| 17 | Rp 2,186,600 | Rp 40,800 | Rp 220,000 |
| 18 | Rp 1,500,800 | Rp 56,240 | Rp 84,720 |
| 19 | Rp - | Rp 29,000 | Rp 85,600 |
| 20 | Rp - | Rp 81,600 | Rp 80,000 |
| 21 | Rp - | Rp 36,000 | Rp 68,000 |
| 22 | Rp 1,796,800 | Rp 113,880 | Rp 276,500 |
| 23 | Rp 80,720 | Rp 29,600 | Rp 50,400 |
| 24 | Rp 1,186,630 | Rp 107,120 | Rp - |
| 25 | Rp 1,941,200 | Rp 24,800 | Rp - |
| 26 | Rp 94,400 | Rp 50,000 | Rp 210,000 |
| 27 | Rp 2,123,800 | Rp 500,000 | Rp 87,280 |
| 28 | Rp 1,394,640 | Rp 124,000 | Rp 245,760 |
| 29 | Rp 2,124,200 | Rp 80,000 | Rp 41,000 |
| 30 | Rp 56,000 | Rp 104,000 | Rp 56,000 |
| 31 | Rp 95,000 | Rp - | Rp 54,000 |
| **TOTAL** | **Rp 8,116,460** | **Rp 3,007,830** | **Rp 3,776,650** |

of behavioral intention. Behavioral intention is very important because it is the core of the variables that are connected to form 7 hypotheses.

Based on the problem identification above, the problems in this study can be formulated as follows:

1. Does perceived usefulness affect behavioral intention with attitude toward using as an intervening variable through the Go-Food application?
2. Does perceived ease of use affect behavioral intention with attitude toward using as an intervening variable through the Go-Food application?
3. Does perceived risk affect behavioral intention with attitude toward using as an intervening variable in the Go-Food application?
4. Does perceived risk affect behavioral intention through the Go-Food application?
5. Does perceived usefulness affect behavioral intention through the Go-Food application?
6. Does perceived ease of use affect behavioral intention through the Go-Food application?
7. Does attitude toward using affect behavioral intention through the Go-Food application?

2. Literature Review

The factors that influence online shopping behavior in Kalimantan consist of perceived usefulness (perceived usefulness), perceived ease of use, perceived risk (perceived risk), attitudes toward use (attitudes toward use) and behavioral intention. The method used is the primary data survey method by means of a questionnaire through Google Docs. The results showed that perceived usefulness and perceived ease of use had a positive and significant effect on perceived usefulness. Perceived usefulness (perceived usefulness) and attitude toward using (attitudes toward use) have a positive and significant effect on behavioral intention (behavioral interest) online shopping in Kalimantan [2].

Research conducted by Cho [3] aims to focus on investigative factors that influence customer online purchasing behavior. The data collection method was collected online and offline, analyzed by factor and regression and structural equation modeling. The results of this study prove that perceived usefulness, perceived ease of use and perceived risk have a statistically significant effect on the intention of shopping behavior on the internet.

Research conducted by Ferdira [4] aims to determine the factors that affect the perceived usefulness as well as the perceived ease of the technology acceptance model (TAM) research model on the use of the MatahariMall.com mobile application by users which have an impact on the level of tendency to use the application. The results of the analysis show that the perceived ease of use factor has a positive impact on the perceived usefulness and also has a positive impact on the users’ usage trends.

2.1. Technology Acceptance Model (TAM)

TAM was adapted from the theory reasoned action and was modified three times. Perceived ease of use and perceived usefulness influence behavioral intention by eliminating attitude toward using in 2000 when TAM 2 was launched [5]. TAM is still considered relevant in translating the readiness of users to utilize information technology.
2.2. Perceived Usefulness (PU)

Perceived usefulness is a person’s belief in using technology-based information so that one’s work is getting better. Perceived usefulness is the use of a structured system which results in an increase in the performance ability of an individual with a good level of trust [5].

2.3. Perceived Ease of Use (PEoU)

Technology is getting more difficult, the less desires a person is in terms of usefulness, as well as being left behind by individuals and groups that use [5].

2.4. Perceived Risk (PR)

Perceived risk is the consumer’s perception of uncertainty and possible negative consequences for purchasing a product or service [6].

2.5. Behavioral Intention (BI)

Behavioral intention is a dimension of a person using the application [5].

2.6. Attitude Toward Using

Attitude toward using is conceptualized as an attitude towards the use of a system in the form of acceptance or rejection as an impact when someone uses technology in their work [7].

2.7. The effect of perceived usefulness affects behavioral intention with attitude toward using as an intervening variable

Consumer interest can be influenced by perceived usefulness with attitude toward using as an intervening variable [8] stated that attitudes toward using mobile banking intervened in the relationship between perceived usefulness and behavioral interest in using mobile banking in Malaysia.
2.8. The effect of perceived ease of use affects behavioral intention with attitude toward using as an intervening variable

Perceived ease of use has a positive effect on attitudes and use of technology [8]. Consumer interest can be built by perceived ease of use and behavioral interest in using mobile banking in Malaysia.

2.9. The effect of perceived risk has an effect on behavioral intention with attitude toward using as an intervening variable

More experienced online consumers are likely to continue to use the internet as a shopping channel even though risk perceptions remain unclear. The effect of perceived risk has an effect on behavioral intention [9].

2.10. The effect of perceived usefulness affects behavioral intention

On the use of the e-library states that if students feel that the system is useful, then its use will increase [8].

2.11. The effect of perceived ease of use has an effect on behavioral intention

Perceived Ease of Use has a positive and significant effect on Behavioral Intention to Use, namely the benefits felt by Go-Jek users can have a direct impact on attitudes from users of the application [10].

2.12. The effect of attitude toward using affects behavioral intention

Attitudes have a positive effect on behavioral [11].

3. Data Analysis Model

Based on the framework above, it can be concluded that there are exogenous variables in this study with sub variables, namely perceived ease of use (X1), perceived usefulness (X2) and perceived risk (X3). Meanwhile, the intervening variable in this
Figure 1: Analysis Model

study was attitude toward using (Y). Then for the endogenous variable in this study is behavioral intention (Z). In this study, we will examine whether the exogenous variables affect behavioral intention as an endogenous variable with attitude toward using as an intervening variable.

4. Research Method

This research is quantitative descriptive. This research has been done online on Go-Food application during the period March 1 to May 30, 2020.

The population used for this study were consumers who bought food through the Go-Food application used by the infinite population. The population of geprek chicken products at Go-Food in Surabaya and Sidoarjo regions on an unlimited number of population in the Go-Food application, so the sample to be taken is limited by the following criteria:

1. Geprek chicken products that use Go-Food application in Surabaya and Sidoarjo with a rating of 1000+.

2. Geprek chicken products that use Go-Food application in Surabaya and Sidoarjo with opening times every day.

3. Geprek chicken products that use Go-Food application in Surabaya and Sidoarjo with an online promo, a discount of one food item of at least 25% or a Go-Jek driver delivery fee of Rp 5,000.

4. Geprek chicken food products that use the Go-Food application in the Surabaya and Sidoarjo regions with the original Geprek chili sauce chicken variant, and the Geprek bonus drink package.
5. Geprek chicken products that use Go-Food application in Surabaya and Sidoarjo with price range from Rp. 10,000 to Rp. 30,250.

6. Consumers who have bought Mr. Bre’s geprek chicken at least twice and other similar businesses (Geprek Bensu, Mr. Suprek and Kakkk Ayam Geprek) using the Go-Food application domiciled in Surabaya and Sidoarjo from March 1 to May 30.

7. Age 16-55 years old.

The measurement of the sample size in this study uses the formula: 

\[ n = \frac{(z^2 p(1-p)}{d^2} \]

Information:

- \( n \) = number of samples
- \( z \) = standard value = 1.96
- \( p \) = Maximum estimate 50% = 0.5
- \( d \) = alpha (0.10) or sampling error = 10%

Then the results obtained from the minimum number of samples needed in this study are 96 respondents who will be rounded up by the researcher to be 100 respondents. The reason the researcher used the formula is because the target population is too large with changing numbers.

4.1. Data Collection

The type of data in this research uses quantitative data, which data can be measured on a numerical scale. This study uses a questionnaire as primary data and internal data of Mr. Bre and external data obtained from books, journals and other sources as secondary data.

4.2. Variables

The variables in this study are perceived ease of use (X1), perceived usefulness (X2), perceived risk (X3), attitude toward using (Y), and behavioral intention (Z).

4.3. Data Analysis Method

Data analysis in this study used the SEM-PLS (Partial Least Square Path Modeling) analysis method to test the predictive relationship between constructs by seeing whether there is a relationship or influence between constructs. This method of analysis has the
advantage that it can be carried out without a strong theoretical basis, ignores several assumptions (non-parametric), and the parameters of the prediction model accuracy are seen from the coefficient of determination (R-square). The number of samples used in this study is small, 100 respondents. This research has been done using the SmartPLS 3.0 program.

5. Results

The sampling method in this study is a non-probability sampling method, purposive sampling technique. Data was collected using google form, distributed online to the entire population in the Go- Food application in the form of a questionnaire. The sample used in this study were consumers who had already bought Mr. Bre's geprek chicken products at least twice and buy one of the same type of food at other similar businesses using the Go-Food application in Surabaya and Sidoarjo. From 100 respondents who were asked to fill out the questionnaire, all of them filled out the questionnaire completely.

5.1. Variable Description Perceived Ease of Use (X1)

Obtained the average value of answers from 100 respondents for all questions related to the variable Perceived Ease of Use (X1) is 4.41 which indicates that respondents tend to agree. The respondent's highest answer was on the indicator “Easy to understand the appearance of the Go-Food application in ordering Mr. Bre's geprek chicken and other similar businesses” (average 4.50) while the lowest respondent's answer was on the indicator “I find it easier to get information on Mr Bre's Geprek chicken and other similar businesses on the Go-Food application compared to other application” (average 4.27).

5.2. Variable Description of Perceived Usefulness (X2)

Obtained the average value of answers from 100 respondents for all questions related to the variable Perceived Usefulness (X2) is 4.40 which indicates that respondents tend to agree. The respondent's highest answer was on the indicator “Through the Go-Food application, it allows me to be more practical in ordering Mr. Bre's geprek chicken and other similar businesses” (average 4.51) while the lowest respondent's answer was on the indicator “Through the Go-Food application I can save costs in making transactions with the Mr. Bre's geprek chicken and other similar businesses” (average 4.23).
5.3. Description of Perceived Risk (X3) Variables

Obtained the average value of answers from 100 respondents for all questions related to the Perceived Risk (X3) variable is 4.00 which indicates that respondents tend to agree. The respondent's highest answer is on the indicator “The Go-Food application has responsibility for the delivery of Mr. Bre's geprek chicken and other similar businesses arrive at consumers on time” (average 4.30), while the lowest respondent's answer is on the indicator “I believe Mr. Bre's geprek chicken and other similar businesses through the Go-Food application have a risk of food that is not suitable for the application” (average 3.48).

5.4. Variable Description Attitude Toward Using (Y)

Obtained the average value of answers from 100 respondents for all questions related to the variable Attitude Toward Using (Y) is 4.29 which indicates that respondents tend to agree. The respondent's highest answer was on the indicator “The Go-Food application motivates me to order geprek chicken using promos very well” (on average 4.31) while the lowest answer of the respondent is on the indicator “Using the Go-Food application in ordering geprek chicken and other similar businesses are very pleasant” (average 4.24).

5.5. Variable Description Behavioral Intention (Z)

Obtained the average value of answers from 100 respondents for all questions related to the Behavioral Intention (Z) variable was 4.09 which indicates that respondents tended to answer in agreement. The respondent's highest answer is on the indicator “I would say positive things about ordering Mr. Bre's geprek chicken and other similar businesses through the Go-Food application to other consumers” (average 4.20) while the lowest respondent's answer was on the indicator “I predict that I will place an order for Mr. Bre's geprek chicken and other similar businesses through the Go-Food application at the end of the month” (average 3.93).

From Table 2 it can be seen that the research results are as follows:

1. The results support the first hypothesis (H1) which states that perceived usefulness affects behavioral intention with attitude toward using as an intervening variable through the Go-Food application.
2. The results reject the second hypothesis (H2) which states that perceived ease of use affects behavioral intention with attitude toward using as an intervening variable through the Go-Food application.

3. The results of the study support the first hypothesis (H3) which states that perceived risk has an effect on behavioral intention with attitude toward using as an intervening variable through the Go-Food application.

4. The results of this study support the fourth hypothesis (H4) that perceived risk affects behavioral intention through the Go-Food application

5. The results of this study support the fourth hypothesis (H5) that perceived usefulness affects behavioral intention through the Go-Food application.

6. The results of this study reject the fourth hypothesis (H6) that perceived ease of use affects behavioral intention through the Go-Food application

7. The results of this study support the fourth hypothesis (H7) that attitude toward using affects behavioral intention through the Go-Food application

6. Managerial Implications

The results of the managerial implications of this study are as follows:

1. The results of the analysis shows that the level of behavioral intention is the basis for Mr. Bre’s geprek chicken business to maintain relationships with customers who use the Go-Food application and other similar businesses.
2. The results of the study give a positive influence carried out by customers through online questionnaires that have been distributed by Mr. Bre’s geprek chicken, which makes customers happy using the Go-Food application so that it can affect the increase in turnover of Mr. Bre’s geprek chicken business going forward.

3. The Go-Food application can increase the conveniences of the Go-Food application so that it can make it easier for consumers to use it without experiencing difficulties from all groups and ages, so that perceived ease of use can be felt in this Go-Food application going forward.

4. Mr. Bre’s geprek chicken seller and other similar businesses that use the Go-Food application can maximize each program held as well as existing facilities from the Go-Food application, especially Go-Food online vouchers.

5. The results of this study provide a good and useful message for consumers who bought Mr. Bre’s geprek chicken and other similar businesses that use the Go-Food application from online questionnaires through variables from perceived ease of use, perceived usefulness, perceived risk, attitude toward using, and behavioral intention.

6. Go-Food application always houses Mr. Bre’s geprek chicken and other similar businesses in the future with interesting programs from the application so can make Mr. Bre’s geprek chicken customers and other similar businesses customers that use the Go-Food application are always loyal because they feel many benefits, the perceived convenience, the small risks, the attitude towards using the application, and the intention to behave, so that customers will spread to others to become consumers using Go-Food application later, and the future sales turnover for Mr. Bre’s geprek chicken business and other similar businesses can increase even better.

7. Discussion

1. Future research can use variables other than those in this study, namely perceived usefulness, perceived ease of use, perceived risk, attitude toward using, and behavioral intention, such as promotional, advertising, and location variables, so that in future studies the results can be a reference measure in researching consumer desires for business in the company.

2. Future research in the future could use the same variables, but for different applications such as in- Driver, Uber, and Grab.
3. The results of this research can be used as a theoretical reference which is classified in the culinary category of the Go-Food application

8. Conclusion

Based on the results of data analysis, it is concluded that:

1. Perceived usefulness has a significant effect on behavioral intention with attitude toward using as an intervening variable. Therefore, the first hypothesis (H1) is accepted.

2. Perceived ease of use has no significant effect on behavioral intention with attitude toward use as an intervening variable. Therefore, the second hypothesis (H2) is rejected.

3. Perceived risk has a significant effect on behavioral intention with attitude toward using as an intervening variable. Therefore, the third hypothesis (H3) is accepted.

4. Perceived risk has a significant effect on behavioral intention. Therefore, hypothesis four (H4) is accepted.

5. Perceived usefulness has a significant effect on behavioral intention. Therefore, the fifth hypothesis (H5) is accepted.

6. Perceived ease of use does not have a significant effect on behavioral intention. Therefore, the sixth hypothesis (H6) is rejected.

7. Attitude toward use has a significant effect on behavioral intention. Therefore, the seventh hypothesis (H7) is accepted.

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References

[1] Jatim.bps. (October 2019). Penduduk, Laju Pertumbuhan Penduduk, Distribusi Persentase Penduduk, Kepadatan Penduduk, Rasio Jenis Kelamin Penduduk
Menurut Kabupaten/Kota di Provinsi Jawa Timur, 2000, 2010 dan 2018. Retrieved on October 9 from https://jatim.bps.go.id/statictable/2019/10/09/1614/penduduk-laju-pertumbuhan-penduduk-distribusi-persentase-penduduk-kepadatan-penduduk-rasio-jenis-kelamin-penduduk-menurut-kabupaten-kota-di-provinsi-jawa-timur-2000-2010-dan-2018.html.

[2] Fuad, S., et al. (2018). Pendekatan Technology Acceptance Model (TAM) Dan Perceived Risk Untuk Mengidentifikasi Faktor-Faktor Yang Mempengaruhi Perilaku Belanja Online Di Kalimantan. *Jurnal Wawasan Manajemen*, vol. 6, issue 3, pp. 310-328.

[3] Cho, Y. C. (2015). Exploring Factors That Affect Usefulness, Ease of Use, Trust, And Purchase Intention In The Online Environment. *International Journal of Management and Information Systems-First Quarter 2015*, vol. 19, issue 1, pp. 21-36.

[4] Ferdira, B. G., et al. (2018). Analisis Perilaku Pengguna Aplikasi Mobile Matahari-mall.com Menggunakan Technology Acceptance Model (TAM). *Jurnal SITECH*, vol. 1, issue 2, pp. 107-116.

[5] Setiawan, A. and Sulistiowati, H. L. (2017). Penerapan Modifikasi Technology Acceptance Model (TAM) dalam E-Business. *Jurnal Manajemen dan Pemasaran Jasa*, vol. 10, issue 2, pp. 171-186.

[6] Fitra, Y. M. (2016). *Pengaruh Kepercayaan, Persepsi Risiko, Dan Keamanan Terhadap Minat Beli Konsumen Pada Toko Online (Studi Pada Toko Online Olx.Co.Id)*. S1 thesis: Fakultas Ekonomi.

[7] Widyapraba, E. (2016). Analisis Faktor-Faktor yang mempengaruhi Niat Pengguna Untuk Menggunakan Aplikasi Daftar Online Rumah Sakit (Studi Kasus: RSUD Gambiran Kediri). Presented at *Seminar Nasional Sistem Informasi Indonesia. November, Surabaya: Departemen Sistem Informasi, Institut Teknologi Sepuluh November*.

[8] Bangkara, R. P. (2016). Pengaruh Perceived Usefulness dan Perceived Ease of Use Pada Minat Penggunaan Internet Banking Dengan Attitude Toward Using Sebagai Variabel Intervening. *E-Jurnal Akuntansi Universitas Udayana*, vol.16, issue 3, pp. 2408-2434.

[9] Park, J. and Stoel, L. (2005). On-line Product Presentation: Effects on Mood, Perceived Risk, and Purchase Intention. *Psychology and Marketing*, vol. 22, issue 9, pp. 695-719.

[10] Suryani, W. (2019). Pengaruh Perceived Ease of Use, Perceived Enjoyment, Dan Perceived Trust Terhadap Behavioral Intention to Use Pada Penggunaan E-Money Card. *Jurnal Ekonomi Bisnis dan Kewirausahaan 2015*, vol. 4, issue 1, pp. 140-156.
[11] Suhendro, S. (2009). Pengaruh Perceived Usefulness dan Perceived Ease of Use Dalam Penggunaan Sistem Informasi Keuangan Daerah. *Jurnal Sains Pemasaran Indonesia*, vol. 11, issue 2, pp. 51-75.