

UDC 332

## ANALYSIS OF FACTORS AFFECTING INTEREST IN BUYING FOOD AND BEVERAGES THROUGH DIGITAL APPLICATIONS IN THE CITY OF DENPASAR

**Bhagawintara Buana Gede\***, **Suyana Utama Made**

Faculty of Economics and Business, University of Udayana, Bali, Indonesia

\*E-mail: [bhagawintara85@gmail.com](mailto:bhagawintara85@gmail.com)

### ABSTRACT

The purpose of this study is 1) To determine the effect of consumer income on buying interest through digital applications. 2) To find out the effect of price on buying interest through digital applications. 3) To determine the effect of promotion on buying interest through digital applications. 4) To determine the effect of the use of benefits on buying interest through digital applications. 5) To determine the effect of ease of use on buying interest through digital applications. The location of this research in Denpasar City with a sample of 200 respondents. Data collection methods used were questionnaires and in-depth interviews. This study uses descriptive analysis and structural equation analysis (SEM) with the alternative partial least square PLS. The results of the analysis show that: 1) The consumer income factor has a significant effect on people's buying interest through digital applications in Denpasar City; 2) The price factor has a significant influence on people's buying interest through digital applications in Denpasar City; 3) Promotional factors have no significant effect on buying interest through digital applications in Denpasar City; 4) The use benefit factor has a significant effect on the use of digital applications as a medium for consumption in Denpasar City; 5) The ease of use factor has no significant effect on people's buying interest through digital applications in Denpasar City. Grab has been well known by the public for a long time.

### KEY WORDS

Interests, digital applications, consumer income, price, promotion, benefits of use, ease of use.

As an indicator of economic growth, household consumption is currently contracting due to the impact of the Covid-19 pandemic. Household consumption decreased from the first quarter to the fourth quarter of 2020, namely 2.8 percent, -5.5 percent, -4.0 percent and -3.6 percent (YoY) (Rifa'i, Achmad et al. 2021). One of the causes of the decline in household consumption during the Covid-19 pandemic was due to restrictions on activity or community mobility in order to reduce the spread of Covid-19. So there needs to be a solution for this, one of which is consumption through online shopping.

Ordering food is one of the most widely used online expenses, according to a report released by Momentum Work, from a total transaction of US\$ 3.7 billion or equivalent to 52 trillion rupiah, the most widely used food ordering application by the Indonesian people is Grab with a market share 53 percent (Momentum Works, 2020). Grab is a Singapore-based company that has been operating in Indonesia since 2014. From a report from We Are Social 2020-Digital 2020 Indonesia as of January 2020, Grab users in Indonesia have reached 21.7 million people. However, this number is still relatively low when compared to the number of smartphone users in Indonesia which reached 160.23 million users (Astutik, Yuni, 2020).

One of the locations or areas that have been able to access food and beverage shopping services through Grab is Denpasar City. The number of mobile phone users and internet access in Denpasar is the highest compared to other areas in Bali. 90.96 percent in 2019 and 92 percent in 2020 Denpasar City people have used cell phones, while 74.04 percent in 2019 and 81.55 percent in 2020 have obtained internet access (Central Bureau of Statistics, 2021) .

Although there are no data or reports that state the exact number of smartphone users and food and beverage shopping services with Grab in Denpasar City. However, looking at

the comparison of the number of Grab application users and smartphone users nationally in Indonesia, it can be seen that the use of these services is still relatively low. Even though during the current Covid-19 pandemic, this digital application-based service can help increase household consumption, especially in Denpasar City. Based on the background of this problem, the authors are interested in conducting research on the analysis of the factors that influence the interest in buying food and beverages through digital applications in Denpasar City.

## METHODS OF RESEARCH

The location of this research is in the city of Denpasar, which is located in the province of Bali. The methods used to collect data in this study, including questionnaires and interviews

The population in this study are people who live in Denpasar City who use the Grabfood service from the Grab application. The number of samples in this study was determined based on the Factor Analysis module (Bendesa, 2017), the sample used in the analysis was a minimum of 5 times the number of variables and would be better with a ratio of 1:10. The comparison refers to the comparison of the number of variables studied with the number of samples used, in which 10 research samples are required for each 1 variable. In accordance with the operational definition of variables, there were 18 observed variables. By using a ratio of 1:10, the number of samples used is 180 respondents. However, in this study, the number of respondents was rounded up to 200 respondents who are Grab users, especially the food and beverage shopping service or Grabfood in Denpasar City.

Sampling was carried out using an accidental sampling technique by using Grabfood service users from the Grab application as samples. In addition, this study also uses in-depth interviews in which the sample is taken using a non-probability sampling method. The analytical technique used in this research is using the Structural Equation Model (SEM) with Partial Least Square (PLS).

## RESULTS AND DISCUSSION

The results of the validity of the research variables as indicated by the value of the Average Variance Extracted (AVE) of this research variable can be seen in Table 5.2.

Table 1-Average Variance Extracted (AVE) Value

Variable	AVE Value	Information
Consumer Income (X1)	0,697	Valid
Price (X2)	0,785	Valid
Promotion (X3)	0,801	Valid
Benefits of Use (X4)	0,793	Valid
Ease of Use (X5)	0,904	Valid
Purchase Intention Through Digital Applications (Y)	0,818	Valid

Source: Data processed, 2022.

The data in Table 4 shows that all construct variables have an AVE value above 0.5. Consumer Income (X1) has an AVE value of 0.697. The Price Construct (X2) has an AVE value of 0.785. Promotional construct (X3) has a construct of 0.801. The Use Benefit construct (X4) has an AVE value of 0.793. The Ease of Use (X5) construct has an AVE value of 0.904. The construct of Purchase Interest Through Digital Applications (Y) has an AVE value of 0.818. The magnitude of the AVE value from the test results shows that each variable can construct constructs validly, so that there are no variables or constructs that need to be omitted.

The Consumer Income variable shows a cronbach alpha value of 0.781, the Price variable is 0.863, the Promotion variable is 0.875, the Use Benefit variable shows a cronbach alpha value of 0.869, and for the Ease of Use variable shows a cronbach alpha value of

0.947 and the variable Purchase Interest Through Digital Applications has a value cronbach's alpha of 0.889. Therefore, it can be concluded that the research instrument can be said to be reliable.

Table 2 – Reliability Test Results for Each Variable

No Construct	Cronbach's Alpha	N of Items	information
1 Consumer Income (X1)	0, 781	3	Reliabel
2 Price (X2)	0, 863	3	Reliabel
3 Promotion (X3)	0, 875	3	Reliabel
4 Benefits of Use (X4)	0, 869	3	Reliabel
5 Ease of Use (X5)	0, 947	3	Reliabel
6 Purchase Intention Through Digital Applications (Y)	0, 889	3	Reliabel

Source: Data processed, 2022.

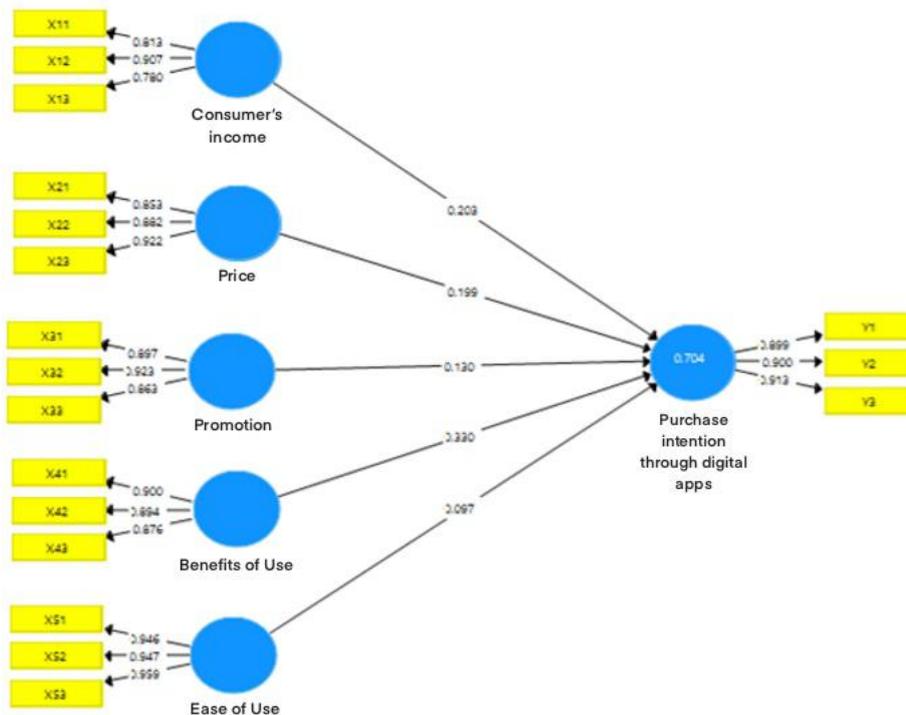


Figure 1 – Full Model Relationship of Consumer Income Variables, Prices, Promotions, Benefits of Use and Ease of Use to Interest in Buying Through Digital Applications

Based on the validity test performed, it shows that all valid indicators form the construct or variable because it has a loading factor above 0.6 for the intended construct. The measurement of discriminant validity from the measurement model can be assessed based on the cross loading of the measurement indicators with their constructs. If the correlation indicator construct has a higher value than the correlation of the indicator with other constructs, it can be said that the construct has high discriminatory validity and can be said to be valid. Based on the analysis carried out, it can be seen that discriminant validity has been fulfilled properly because the indicator has a higher crossloading on the construct compared to other constructs.

The feasibility of the constructs made can also be seen from the discriminant validity (DV) through the Average Variance Extracted (AVE), composite reliability, and Cronbach Alpha. Cronbach Alpha measures the lower limit of the reliability value of a construct, whereas Composite Reliability measures the actual value of the reliability of a construct (Chin and Gopal in Salisbury et al, 2002). Role of thumb the Cronbach Alpha or Composite Reliability value must be greater than 0.7, but if the results obtained are close to 0.7 (such as 0.6), then it is still acceptable in exploratory studies (Hair et al, 2006). The results of the

construct reliability tests obtained in this study are that each construct has a value greater than 0.60 for the Cronbach Alpha and Composite Reliability values, so it can be said that the gauge used in this study is reliable. In addition, it can also be seen that the three variables have an AVE value above 0.5 and the AVE root is higher than the correlation variable so that it can be said that all variables are valid according to the discriminant validity test criteria with the AVE root.

Table 3 – Rho Alpha, Composite Reliability, and Average Variance Extracted (AVE) Determinant Constructs of Buying Interest through Digital Applications

Construct	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Consumer Income (X1)	0.781	0.873	0.697
Price (X2)	0.863	0.916	0.785
Promotion (X3)	0.875	0.923	0.801
Benefits of Use (X4)	0.869	0.920	0.793
Ease of Use (X5)	0.947	0.966	0.904
Purchase Intention Through Digital Applications (Y)	0.889	0.931	0.818

Source: Data processed, 2022.

Table 4 – R Square Value of the Determinant Construct Interest in Buying Through Digital Applications

Variable	R-Square	Information
Purchase Intention Through Digital Applications (Y)	0.704	Tinggi

Source: Data processed, 2022.

Table 4 shows an R-Square value of 0.704 which means that the variability of people's buying interest through digital applications can be explained by the variables of consumer income, price, promotion, benefits of use and ease of use by 70.4 percent, while the rest is influenced by other variables that are not in the model.

Table 5 – Direct Inter-construct Effects of Consumer Income, Prices, Promotions, Benefits of Use and Ease of Use on Purchase Intentions Through Digital Applications

Path	Original Sample	Standard Deviation	T. Statistic	P. Value	Information
X1 > Y1	0.203	0.067	3.046	0.002	Sign.
X2 > Y1	0.199	0.069	2.903	0.004	Sign.
X3 > Y1	0.130	0.085	1.522	0.129	Non sign.
X4 > Y1	0.330	0.101	3.258	0.001	Sign
X5 > Y1	0.097	0.093	1.044	0.297	Non sign.

Source: Data processed, 2022. Information: X1 = Consumer Income X4 = Usage Benefits; X2 = Price X5 = Ease of Use; X3 = Promotion Y = Purchase Intention Through Digital Applications.

To find out the direct influence between variables, it can be seen from the results of the analysis of the path coefficients values as shown in the table above. Based on the table, it can be explained that only the variables of consumer income (X1), price (X2), and benefits of use (X4) have a significant effect, while the promotion variable (X3) and ease of use (X5) are not significant at the five percent significance level.

The consumer income variable (X1) has a significant effect on buying interest through digital applications (Y1) with a path coefficient value of 0.203 and a p-value of 0.002. The path coefficient value shows a positive number which means that there is a positive influence of consumer income (X1) on buying interest through digital applications (Y1). Thus, it can be interpreted that the greater the income of consumers, the more interest in buying through digital applications.

The price variable (X2) significantly influences buying interest through digital applications (Y1) with a path coefficient value of 0.199 and a p-value of 0.004. The path coefficient value shows a positive number which means that there is a positive influence of price (X2) on buying interest through digital applications (Y1). Thus, it can be interpreted that

the better the price offered, the more people will consume through digital applications.

The use benefit variable (X4) has a significant effect on buying interest through digital applications (Y1) with a path coefficient value of 0.097 and a p-value of 0.001. The path coefficient value shows a positive number which means that there is a positive influence from the benefits of using (X4) buying interest through digital applications (Y1). Thus, it can be interpreted that the greater the benefits felt by the community, the more people consume through digital applications.

Promotional variables (X3) and ease of use (X5) have no significant effect on buying interest through digital applications (Y1) with path coefficient values of 0.130 and 0.097 respectively and p-values of 0.129 and 0.297, respectively. Thus, it can be interpreted that the two variables do not significantly affect people's buying interest through digital applications (Y1).

The results of data processing and analysis using the SMART-PLS model in this study indicate that there is a positive influence of consumer income on public consumption through digital applications. These results are slightly different from the research conducted by Vaala, et al (2020). In this study, it was concluded that the consumer income factor had a positive but not significant effect on the demand for online transportation services through digital applications.

Based on this research, it can be concluded that consumer income has a significant influence on buying interest through digital applications by 20.3 percent. This is reinforced by the results of an in-depth interview with Nirmala, a private employee, who said: "I usually use grabfood to buy food at lunch time. The food choices I buy are usually monotonous, there are only 3 or 4 variations of food that are often purchased in rotation. These foods are foods that I really like with a price range that is still in accordance with the salary I get. This is so that the food budget that I have prepared can meet my needs every month."

The opinion of Eka Malinda, an entrepreneur, also stated as follows: "As a trader, I realize that the income I get is uncertain. When using Grabfood to buy food, I have to estimate with the money I have at the time. So the number and frequency of food purchase transactions through the Grab application will vary, sometimes often or buying rather expensive food and then sometimes having to save money so you just buy cheap food."

The opinions of respondents from in-depth interviews are in line with Keynes's theory which states that current consumption depends on disposable income. Various respondents' answers stated that purchasing food through the digital application, namely Grab, would be in accordance with the income they received. The income they receive also determines the frequency level of using the digital application. For respondents who have a fixed income each month, they have allocated a certain amount of money to buy food and drinks. So the respondent already has an estimate of the funds that can be used to transact through the digital application. On the other hand, for those with fluctuating income, the amount of food purchased at Grabfood will be adjusted to the income earned at that time.

In this study, what is meant by price is the fee paid by application users when making food and beverage purchases, including ordering fees or order fees and delivery fees. Slightly different from the results of a study conducted in 2020 by Vaala, et al, which stated that price did have a positive effect on demand for online transportation services but had no significant effect. This is in line with the results of an in-depth interview with one of the respondents, namely Arya Utama, a Civil Servant, who revealed that: "So far I feel that the postage (shipping fee) set by Grab is still affordable. To minimize postage in using the application, I use the application more often to buy food from favorite restaurants that are close to my office and home. The pricing for ordering and delivery of this food I value is also very in accordance with the satisfaction I receive. Because I no longer need to leave the house or office during a pandemic like now, but my needs for food and drink can still be met. Moreover, the quality of service provided is very optimal, such as responsive applications, diverse food choices and friendly drivers, making the costs I spend worthy of the benefits I receive from the Grab application."

From the results of these in-depth interviews, the researchers also found that the price set by the Grab application is indeed in accordance with the quality and benefits received by

its consumers. From the results of research and data analysis, the benefits of using have a positive and significant effect on buying interest through digital applications. There are benefits that have a positive impact on consumers by using this application, it can encourage the number of users and the emergence of new users.

The results of an interview with Ariestiani Puja, one of the respondents who works as an entrepreneur, said: "Grab has given me a lot of benefits as a user. The process of buying food and drinks feels faster, starting from the process of choosing a destination restaurant, you can just check in the application. Then the travel process or the distance is shorter, because the driver who delivers the order usually comes from a location near a restaurant. Moreover, I usually see on Grab that our orders have been informed to the restaurant directly through the application without waiting for the driver to arrive at the restaurant location, so orders can be processed earlier."

Another opinion from a respondent named Anik Prabandari, a private employee added that: "Buying food and drinks through the Grabfood service makes it very easy for me. It's easy to find food according to my will to reduce boredom because I can buy a variety of food and drinks. I also find it easier with the payment process offered by Grab. There are cash and non-cash payments which give me a sense of relief, because when I don't carry cash, I can still transact with non-cash payments. So this makes my shopping process very efficient, I don't have to bother anymore when I want to buy food and drinks for consumption. This application also provides a sense of security in transactions. That's because all my order history is recorded in the application. So when the order that was delivered came, I simply double-checked whether it was in accordance with what I input or not. Then to reduce the risk, if the driver uses counterfeit money as change, I can use a non-cash payment facility. Moreover, during this pandemic period, the use of this digital application can prevent us from direct contact with many people when buying food and drinks conventionally, namely coming directly to restaurants." The statements from the respondents add to the reference that the benefits of using the Grabfood service have a significant effect on people's buying interest through the application.

Furthermore, the results of this study indicate that there is no significant effect between the promotion of buying interest through digital applications. This means that the higher the promotion offered to consumers does not affect the interest in using digital applications to buy food and beverages. The opinion of Ananda Nartapradnyana, a civil servant and as one of the respondents in the study stated that: "One of the things that attracted me to using Grab was because of the many discounts offered by the application, which of course made me feel lucky and I checked promos quite often. especially for the discounts on food and drinks that are being offered by them. It's just that sometimes the promos given by Grab can't always be used for all registered outlets or restaurants. This discount promo is usually only for certain outlets. Then there are promos that are determined by Grab, and more often outside meal times. So in the end, I often use Grab even without any promotions."

Another respondent, Puspita, an entrepreneur, stated that: "I have known and used this application for a long time, because of the many advertisements on TV, billboards and on social media. And it is undeniable that when I first used it, the application often gave favorable discounts, even the price of the food or drink I wanted to buy could be cut by more than half. Over time, maybe because I'm used to it, so when I don't have food at home, I tend to use the app to buy food instead of cooking it myself. Right now, having a discount is quite helpful, but even if it doesn't exist I don't really have a problem."

The ease of use of the application also has no significant effect on buying interest through digital applications. A respondent named Ayu Lisna, a private employee, said that: "This application is very easy to get, just by downloading it on the Play Store for Android phone users or the App Store for iOS cellphone owners. The use of this application is not a challenge that makes it difficult for me. I have known the use of each button in the application for a long time. In my opinion, the Grab application is very user friendly, so there is no need for more effort to understand how to use it. Although this application is very easy to use, this is not an advantage because every digital application like this should have this convenience. Especially for old users like me, so they are quite proficient in operating the Grab

application.”

Ease of use according to Davis (1989) is defined as a level where a person believes that the use of a particular system, is able to reduce the burden of his own effort in doing something. The consumers in this study consider that the ease of use of this application should indeed be presented by Grab. The ease of use presented by this company in providing a food and beverage shopping experience through their services is not a privilege that is felt by its users.

## CONCLUSION

Based on the results of research and discussion on the analysis of factors that influence the interest in buying food and beverages through digital applications in Denpasar City, it can be concluded as follows: Consumer income factors significantly influence buying interest through digital applications in Denpasar City; The price factor has a significant influence on people's buying interest through digital applications in Denpasar City; Promotional factors have no significant effect on people's buying interest through digital applications in Denpasar City; The use benefit factor has a significant effect on the interest in using digital applications as a medium for consumption in Denpasar City; The ease of use factor has no significant effect on people's buying interest through digital applications in Denpasar City.

As for some suggestions that can be put forward by researchers related to the results of research conducted, among others: The government can also be expected to pay attention to the current condition of people's income and help provide employment opportunities for those affected by the Covid-19 pandemic; It is hoped that the government can focus more on technology development like this, in order to help smooth public consumption activities which will have an impact on improving Indonesia's economic conditions.

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