THE INFLUENCE OF FOOD DELIVERY APPLICATION TOWARDS PURCHASE INTENTION PREFERENCES IN THE FOOD AND BEVERAGES INDUSTRY

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ABSTRACT
This study is intended to discover the influence of the Food Delivery Application (FDA) on Purchase Intention Preferences in the Food and Beverages Industry (Restaurants, Cafés, etc.). After the FDA exists, the importance of Physical stores starts to shift as businesses could run without having a specific location for their restaurant, café, etc. In addition, with the emergence of Covid-19 social distancing, people are limited to going out hence the frequency of using the FDA increased leaving businesses that use the physical store to experience loss. The result of the study is in line with the previous research from Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021) also supported this study in accordance with the Influence of Food Delivery Applications on Purchase Intention Preferences. As quantitative and explanatory research, the data was gathered by a questionnaire from 100 people who ever bought a product from the same business through Physical Store and Food Delivery Application. FDA dimensions which are Core Value, Trust, and Price have an influence on Purchase Intention Preferences for 0.247. The FDA has an influence according to the processed data.

Keywords: Location, Physical Store, Food Delivery Application, Purchase Intention Preferences, Food and Beverages Industry

ABSTRAK
Studi ini bertujuan untuk menemukan pengaruh Aplikasi Pesan Antar Makanan terhadap Preferensi Niat Beli di Industri Makanan dan Minuman (Restoran, Kafe, dll.). Setelah aplikasi antar makanan ada, pentingnya Toko Fisik mulai bergeser karena bisnis dapat berjalan tanpa harus memiliki lokasi khusus untuk restoran, kafe, dll. Selain itu, dengan munculnya kebijakan Covid-19 untuk menjaga jarak, orang-orang dibatasi untuk keluar sehingga frekuensi penggunaan aplikasi antar makanan meningkat meninggalkan bisnis yang menggunakan toko fisik mengalami kerugian. Hasil penelitian
INFORMATION

Food and Beverages (F&B) Businesses are categorized as a market orientation industry that approaches and prioritizes the needs of consumers to develop products and services that might satisfy the customer’s (Kopp, 2021) which has great potential in Indonesia because of the high number of suppliers and consumers (Kementrian Perindustrian Republik Indonesia, 2019). The F&B industry contributes more than a third or 37.77% of the GDP of the non-oil and gas processing industry in the first quarter of 2022 (IDN Financials, 2022). Predicted by Chairman of Indonesia’s F&B, Adhi Lukman, the sector will contribute 23.199 USD to Gross Domestic Product (GDP) with 319 million population in Indonesia by 2045 (Investor Daily Summit, 2021). According to Statista Research Department (2023), The F&B segment in Indonesia is projected to grow by 8.91% (2022-2027), resulting in a market volume of US$2.25m in 2027 (Figure 1). Based on the report from Google, Temasek, and Bain & Co in 2021, online food delivery has become the key infrastructure in supporting the F & B ecosystem in which the demand of the service has increased significantly even when compared to the pre-pandemic level (East Ventures, 2022). Based on the context, this study is focusing on restaurants, cafeterias, cafés, catering, and food transportation services (Reynolds, 2019; Food and Beverage Industry, 2021).

INTRODUCTION

Food and Beverages (F&B) Businesses are categorized as a market orientation industry that approaches and prioritizes the needs of consumers to develop products and services that might satisfy the customer’s (Kopp, 2021) which has great potential in Indonesia because of the high number of suppliers and consumers (Kementrian Perindustrian Republik Indonesia, 2019). The F&B industry contributes more than a third or 37.77% of the GDP of the non-oil and gas processing industry in the first quarter of 2022 (IDN Financials, 2022). Predicted by Chairman of Indonesia’s F&B, Adhi Lukman, the sector will contribute 23.199 USD to Gross Domestic Product (GDP) with 319 million population in Indonesia by 2045 (Investor Daily Summit, 2021). According to Statista Research Department (2023), The F&B segment in Indonesia is projected to grow by 8.91% (2022-2027), resulting in a market volume of US$2.25m in 2027 (Figure 1). Based on the report from Google, Temasek, and Bain & Co in 2021, online food delivery has become the key infrastructure in supporting the F & B ecosystem in which the demand of the service has increased significantly even when compared to the pre-pandemic level (East Ventures, 2022). Based on the context, this study is focusing on restaurants, cafeterias, cafés, catering, and food transportation services (Reynolds, 2019; Food and Beverage Industry, 2021).

The location strategy for determining the physical store is one of the important factors that affect the success of the F&B business. However, it started to shift in the digital era in which people tend to choose easier things to be accessed (Pew Research Centre, 2018). This era is dominated by the Z Generation who are born between the 1990s – 2010s and consists of 27,94% of 270,20 million Indonesian people (Badan Pusat Statistik, 2021). As the largest population, this generation is called “digital natives” due to their unique character in using the internet and social media which tend to be more technology savvy and prioritize simplicity (Mone, 2021). As a new opportunity, business start to launch various kinds of applications to facilitate and fulfill their needs. Also, due to digital technology growth, all transactions may be completed over the internet, and goods deliveries now using logistics companies’ services, which will be performed remotely or via the internet, hence the location selection is now irrelevant (Mulia, 2018).
Before the Food Delivery Application (FDA) existed, people used to come right away to the restaurant, or through takeaway and delivery orders. However, consumer behavior has shifted to buying food through phones and applications (Zuhdi, 2021). As can be seen from several reports, show that Indonesian people choose to use FDA more because it helped to save more time and effort than having to queue and wait, offered promotions, convenient payment, and also a variety of food choices (Jayani, 2019), the limited time to cook, more efficient, and sometimes bored with home-cook food (Riadi, 2021). The advantages of using the FDA, bring the number of people using the FDA to 37,34 million with the total value of the online food delivery market at $1,95 billion (Kemp, 2021). Other than that, according to We Are Social, 74,4% of internet users in Indonesia used the FDA in January 2021, and this number is the highest in the world (Lidwina, 2021).

The preliminary research of this study shows respondents who ever do a transaction without knowing where the physical store is located. Their decision to buy came from the promotion (57,9%), Delivery Fee (57,9%), Location (6%), Food (89,5%), Review (5,3%), and Others (5,3%). This result validated that consumers have a changing behavior that is more concerned about promotions, ratings, or reviews, than the location of the physical stores.

At the beginning of 2020, the whole world experienced a pandemic that forced us to face a lot of uncertainty in all aspects of human life. To prevent and suppress the spread of Covid-19, Indonesia’s government carries out various policies (Permatasari, 2021) and this causes many F&B businesses to suffer (Sandi, 2020). Therefore, FDA has an increasing number of online food orders and affected the merchant to switch from offline to fully online selling (Setyowati, 2020).

In Operational Management, the location strategy used to be important to open a new physical store before running the business. However, this unpredicted online situation is the reason why the business does not need to consider investing big capital in physical stores anymore. Location strategy might be irrelevant to the current situation because the FDA has helped customers to order food from everywhere. This change determines that businesses should continuously adapt to changes in the economy, society, culture, and technology to compete in the market (Mulia & Marlencia, 2021).

**Framework Research**

In operations management, location is one of the 10 critical strategic decisions. According to preliminary research, consumer behavior has switched. Nowadays, people intend to order food by Food Delivery Application (FDA) due to all factors being more efficient. The influence of the FDA on purchase intention preferences is supported by previous research from Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021).

Figure 2. Framework Research

H1: There is an influence from Food Delivery Application (X) to Purchase Intention Preferences (Y)

**LITERATURE REVIEW**

**Location**

Location is one of the 10 critical strategic decisions used to consider the supply chain in operations management (Kettering Global, 2016). The book by Heizer, Render, and Munson (2017), entitled Operations Management, states that variables including purchasing power, competition, advertising and promotion, physical qualities, and operating policies of the organization need to be analyzed for location selection. The location has
influenced customers’ choice of restaurant (Bitner, 1990; Milliman & Turley, 2000).

**Food and Beverages Industry**

F&B in the Hospitality Industry usually consists of high-end restaurants, fast-food eateries, and also catering establishments (Reynolds, 2019). According to LinovHR (2020), the core business in F&B is processing, packaging, distributing, and serving foods and drinks to customers.

**Food Delivery Applications (FDA)**

According to Kaur, et al (2021), Online Food Delivery (OFD) services are divided into websites and applications. FDA-enabled process in the delivery of freshly prepared meals from restaurants to customers using online platforms (2021). In order to see further about FDA influenced the intention of food delivery apps, Table 2.2 has summarized the measurement from Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021).

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<tbody>
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<td>Trust</td>
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<td>Price</td>
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Further, FDA attributes to the purchase intention preferences are:

1. **Core Value** discusses how the performance expectancy, and effort expectancy (Pitchay, Ganesan, Zulkifli, & Khaliq, 2021); the ease of use and usefulness (Wen, Pookulangara, & Josiam, 2021); how affordability in the features and advantages (Kaur, Dhir, Talwar, & Ghuman, 2021)
2. **Trust** discussing food safety (Wen, Pookulangara, & Josiam, 2021); health consciousness, and food safety concern (Kaur, Dhir, Talwar, & Ghuman, 2021).
3. **Prices** discussing price saving orientation or the reasonable price for food orders (Pitchay, Ganesan, Zulkifli, & Khaliq, 2021); (Wen, Pookulangara, & Josiam, 2021) (Kaur, Dhir, Talwar, & Ghuman, 2021).

**Purchase Intention Preferences**

Purchase intention is defined as a specific behavior or decision taken to buy a product or service (Dadwal, 2019). In the buying process, purchase intention affected the customer’s motive to use or buy a product (Kotler, 2005). Purchase Intention Preferences in FDA means the user will have intention to use FDA on regular basis and continue, already decided to use FDA for the next order of food, feeling happy and will recommend others to use FDA (Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021)).

**RESEARCH METHOD**

This study used a descriptive method that describes the characteristic of the population, variables, or phenomenon studied (Voxco, 2021). The research’s type in this study is explanatory which defines the relationship and the influence between one variable and another (Sugiyono, 2017). This study presented the examination of primary and secondary data from a quantitative data-gathering method that uses a survey strategy (Sekaran & Bougie, 2016).

As Quantitative Research, this study developed a questionnaire that was adapted from the FDA influencing Purchase Intention Preferences. The Questionnaire is divided into 2 parts, such as:
1st Part – Food Delivery Application, measured by 12 questions concerning Core Value (five items); Trust (four items); Price (three items) in Food Delivery Application measurement that adapted from Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021).

2nd Part - The Purchase Intention Preferences, measured by 4 questions.

This study also used qualitative research to gather respondents’ data from the open-ended question in the questionnaire to describe the respondent’s answers to each variable. This research also gathered data from articles, journals, and also books that contain theories and sources of information as reference materials. Literature studies are used as supporting data and basic concepts in the development of this study.

The populations of this study are:
1. Domiciled in Indonesia
2. Age from 18-year-old.
3. Has been doing a transaction at Food Delivery Applications in Business Food and Beverages Industries (In this study will be called “X”)

Other characteristics of the population are open to all genders and professions with Socioeconomic status (SES) expense classification.

In this study, the number of samples is 100 respondents to anticipate errors and useless questionnaires in managing data (with a minimum number of samples are 96 respondents calculated by the mathematics model from Aaker (1997)).

Variables Operationalizations & Measurement

Independent Variables (X) will affect the dependent variable. In this study, the independent variable is Food Delivery Application Usage in Food and Beverages Industry (X).

Dependent Variables (Y) will be influenced by the independent variables. The largest independent variables. In this study, there is only one dependent variable, namely, Purchase Intention Preferences for Food and Beverages Industry (Y).

The measurement of the respondent’s answers is divided into 5 categories which used the Likert Scale as an interval that shows a certain degree such as:

<table>
<thead>
<tr>
<th>Value Weight or Score</th>
<th>Definitions</th>
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<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>3</td>
<td>Less agree</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>5</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

Source: Sekaran & Bougie (2016)

In this study, a validity test was carried out from 100 collected data and processed using the SPSS program. The result showed that the data are all valid. Therefore, the X variable is declared to have strong reliability, and the Y variable has medium reliability.

Data Analysis

This study uses 2 analysis methods, there are Descriptive Analysis and Linear Regression Analysis. Descriptive analysis is used to interpret the X/Food Delivery Application (FDA), and Y/Purchase Intention Preferences variables in Food and Beverages Industry.

RESULT AND DISCUSSION

Sample Characteristic & Classification Result

Based on the classification from 100 respondents, 71% are in the age range 19-24 years, 13% are in the age range 25-30 years, and the total of other age ranges contains 16%. The gender distributions are 56% women and 44% men. The top three professions of respondents are Students (53%), Employees (36%), Entrepreneurs (6%) and other professions consist of 5%. The Monthly Expense used classification called Socio-economic Status
In hence, the respondent mappings are:

- 23% in D Category with monthly expenses Rp 1,000,001 - Rp 1,500,000
- 20% in E Category with monthly expense ≤ Rp 1,000,000
- 15% in C2 Category with monthly expense Rp 1,500,001 - Rp 2,000,000
- 14% in C1 Category with monthly expense Rp 2,000,001 - Rp 3,000,000
- 11% in A1 Category with monthly expense > Rp 7,500,000
- 9% in B Category with monthly expense Rp 3,000,001 - Rp 5,000,000
- 8% in A2 Category with monthly expense Rp 5,000,001 - Rp 7,500,000

According to the FDA Usage Frequency, the respondents are 9% that use it every day; 33% use it 4-6 times a week; 28% use it 1-3 times a week; and 30% use it only 1-3 times a month. While based on the respondent’s domiciled distribution, they are from Bandung, Jakarta, and the other domiciled are from Bandar Lampung, Banyumas, Bekasi, Cibubur, Purwakarta, and other cities in Java.

Based on Age classification, the group consists of respondents who are below 18 years and aged between 31-36 years who are purchasing through both physical stores and FDA. Age between 19-30 years and 37-41 years are purchasing from FDA more than the physical store. The last group which only purchases through FDA only is those who age > 41 years. Based on Gender classification, the male and females are purchasing from the FDA more than the physical store. That means there are no different preferences from both genders regarding purchase intention.

Based on the Professions classification, the respondents who are students, employees, entrepreneurs, and other professions (consisting of household, non-job respondents, etc.) show the same preferences towards purchase intention.

Based on the Monthly Expense classification, the result shows the same preferences towards purchase intention, which are More Purchases through FDA and Fewer Purchases from Physical Store.

**Respondent’s Perception of The Food Delivery Application**

Respondent’s perception of the Food Delivery Application will be calculated in the average weight of each indicator statement used in measuring the dimension in the Food Delivery Application. The measurement result shows the total average weight for the Physical Store variable is 4.46 which means the respondent strongly agree or almost all of them have the same perception of buying food through the Food Delivery Application. The following is an explanation for each item:

1. “Ordering products on "X" through a Food Delivery Application is clear to understand.”

   The Food Delivery Application is clear to understand so that it supports customers to order products of “X”. The average weight of this statement is 4.60 which means the respondents strongly agree with the statement.

2. Ordering products on "X" through the Food Delivery Application is easy to understand.

   The Food Delivery Application is easy to understand so that it supports customers to order products of “X”. The average weight of this statement is 4.57 which means the respondent strongly agrees with the statement.

3. The food Delivery Application is useful for ordering products on "X".

   The Food Delivery Application is useful so that it supports customers to order products of “X”. The average weight of this statement is 4.61 which means the respondent strongly agrees with the statement.

4. The food Delivery Application is Easy-to-use to order products on "X".

   The Food Delivery Application is easy-to-use so that it supports customers to order...
products of “X”. The average weight of this statement is 4.59 which means the respondents strongly agree with the statement.

5. Ordering products on "X" through the Food Delivery Application increases productivity.
   The Food Delivery Application is increasing productivity so that it supports customers to order products of “X”. The average weight of this statement is 4.30 which means the respondents strongly agree with the statement.

6. The quality of the product "X" supports ordering through the Food Delivery Application.
   The product “X” has the quality to support customers in ordering through the Food Delivery Application. The average weight of this statement is 4.44 which means the respondents strongly agree with the statement.

7. The safety of the product "X" supports ordering through the Food Delivery Application.
   The product “X” is safe to support customers in ordering through the Food Delivery Application. The average weight of this statement is 4.52 which means the respondents strongly agree with the statement.

8. I feel safe ordering products "X" through the Food Delivery Application.
   The customers feel safe in ordering product “X” through the Food Delivery Application. The average weight of this statement is 4.57 which means the respondents strongly agree with the statement.

9. Information of "X" in the Food Delivery Application is trusted.
   The information of “X” is trusted so that it supports customers to order through Food Delivery Application. The average weight of this statement is 4.57 which means the respondents strongly agree with the statement.

10. The price of the product on “X” in the Food Delivery Application is reasonable.
    The price of “X” is reasonable so that it supports customers to order through Food Delivery Application. The average weight of this statement is 4.39 which means the respondents strongly agree with the statement.

11. The price of the product on “X” in the Food Delivery Application is economical.
    The price of “X” is economical so that it supports customers to order through Food Delivery Application. The average weight of this statement is 4.02 which means the respondents agree with the statement.

12. Food Delivery Application offers good value on "X".
    The Food Delivery Application has offered “X” a good value that supports customers to order through the Food Delivery Application. The average weight of this statement is 4.39 which means the respondents strongly agree with the statement.

Respondent Perception of Purchase Intention Preferences in the Food and Beverages Industry

Respondent’s perception of the Purchase Intention will be calculated in the average weight of each indicator statement used in Purchase Intention The measurement result shows the total average weight for the Physical Store variable is 4.06 which means the respondent do more purchases through Food Delivery Application and less purchase from Physical Store. In other words, the respondent most likely ordered through a Food Delivery Application rather than coming to visit the Physical Store. The following is an explanation for each item:

1. I will buy product “X” again in the future through the FDA.
   The average weight of this statement is 4.02 which means the respondent agree that they will buy the product “X” in the future through Food Delivery Application.
2. I plan to buy the next "X" product through the FDA. 
   The average weight of this statement is 4.10 which means the respondent agree that they will plan to buy the next “X” product through Food Delivery Application.
3. I would recommend others order product "X" through FDA. 
   The average weight of this statement is 3.93 which means the respondents agree that they will recommend others to order the product “X” through Food Delivery Application.
4. I am happy to buy product "X" through the FDA. 
   The average weight of this statement is 4.19 which means the respondent agreed that they feel happy to buy product “X” through Food Delivery Application.

The Influence Food Delivery Application Towards Purchase Intention Preferences in Food and Beverages Industry

This section will show how the influence of Food Delivery Applications on Purchase Intention Preferences in the Food and Beverages Industry is processed by a simple linear regression method. The result shows the equation $Y = a + bX$, with the coefficient:

$$a = 3.032$$
$$b = 0.247$$

Hence, the formulation is $Y = 3.032 + 0.247X$, where $Y$ means Purchase Intention Preference and $X$ means Food Delivery Application. If using assumption $X = 0$, then $Y = 3.032$ which means if there is no FDA usage, then purchase intention preference on F&B is 3.032. Also, if there is an enhancement on FDA as an amount of 1%, then purchase intention will increase by 0.247. FDA has a positive influence on purchase intention preference, which means if there is an enhancement on FDA, then purchase intention preference will increase (and vice versa).

Another test in this study used a significant level, with hypotheses are:

- **H0**: There is no influence from FDA (X) to purchase intention preference (Y)
- **H1**: There is influence of FDA (X) to intention preference (Y)

If the significant level < 0.05; then there is an influence from X to Y. The result of the significant level in this study is 0.000; then there is a significant influence of X (Food Delivery Application) to Y (Intention to Purchase).

Another test is using the T-table. If T-count is bigger than the T-table, then there is an influence from X to Y. The result of the T-count is 5.866 with T-table being 1.985. The T-count is bigger than the T-table, and there is an influence from X to Y.

To assess the influence from X to Y, it used R-square. The result of the R-square is 0.260 or 26%. This means X has an influence on Y for 26% and the other 74% is influenced by other factors that are not included in this study.

CONCLUSIONS & SUGGESTIONS

Conclusions

This study aims to find out the Influence of Food Delivery Application (X) on Purchase Intention Preferences (Y) in the Food and Beverages Industry. The conclusions of this study are:

1. **The respondent’s perception of Food Delivery Application (X)**

The previous research from Pitchay, et al. (2021); Wen, Pookulangara, & Josiam (2021); and Kaur et al. (2021) has supported this study in accordance with the Influence of Food Delivery Applications on Purchase Intention Preferences. Respondents also strongly agreed with all the Food Delivery Application statements. Based on the descriptive analysis, the Food Delivery Application has an influence on the Purchase Intention Preferences in Food and Beverages Industry. According to the Simple Linear Regression result, Food Delivery Application (Core Value, Trust,
and Price) has an influence on Purchase Intention Preferences for 0.247.

2. **The Purchase Intention Preferences of the Respondent in the Food and Beverages Industry (Y)**

   Furthermore, for Purchase Intention Preferences, respondents agree that they are likely to order products through Food Delivery Application. Based on the descriptive analysis the respondent prefers the Food Delivery Application to the Physical Store. This proves that consumer behavior has shifted from offline to online. The equation formulated in this study is \( Y = 3.032 + 0.247(X) \). According to the R Square result, X influenced Y for 26% and 74% is influenced by other factors which are not included in this study.

**Suggestions**

The businesses in the Food and Beverages Industry should start to utilize the Food Delivery Application and optimize all the tools indeed. For example, having a good picture of the products, businesses could invest in a good photo by working with food photographer services. The use of product descriptions will increase the trust of the customers, also creating several promotions in applications like discounts or cashback will give the customer consideration to buy more products. The consistency of pushing online media marketing (social media) is also important to make the business seem operate actively. Nowadays, there is a lot of management who offer to handle this assignment. However, it also can be handled by its own management system which hires a new team for taking care of the online (From social media and the applications).

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