Journal of Artificial Intelligence and Engineering Applications

Website: https://ioinformatic.org/

15th October 2025. Vol. 5. No. 1; e-ISSN: 2808-4519

Comparative Analysis of Food Delivery Application Using User Experience Questionnaire (UEQ) Method

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Abstract

Online Food Delivery (OFD) services have become one of the practical solutions in meeting the consumption needs of modern society, especially for individuals with high mobility, limited access, or other situational constraints. In choosing a food delivery application, ease of use and user experience (UX) become crucial factors that influence consumer satisfaction. Competition between applications does not only depend on price and menu variety, but also on interface quality, response speed, and navigation comfort. This study uses User Experience Questionnaire (UEQ) method to compare the UX between two popular food delivery applications, GoFood and GrabFood. The UEQ measure six main dimensions: Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty. This method will be applied to assess the user experience of these two applications from the user's perspective. The analysis result show that GoFood excels in the dimensions of Attractiveness, Dependability, and Stimulation with a Good category, while GrabFood displays stable and consistent performance across all dimensions with an Above Average category. These findings indicate that GoFood stands out in certain aspects, while GrabFood has strengths in overall UX

Keywords: *Food Delivery Application, GoFood, GrabFood, UEQ Method, User Experience*

1. Introduction

In the midst of this digital era, internet access has evolved from a mere facility to a basic need that is inherent in the daily routine of the population. The development of information technology also encourages consumptive patterns, where people tend to want everything to be easier and more practical. Technological advances in Indonesia have made it easier for people to fulfill their daily needs, such as making transactions, shopping, and paying bills online [1]. Online food delivery service or commonly referred to as Online Food Delivery (OFD) is an intermediary technology that facilitates the meeting between food sellers and buyers in a digital space. This system is designed to display information on the nearest restaurants from the consumer's position. The entire transaction process, from menu selection to payment, can be done in an integrated manner through one digital platform. In its implementation, this platform provides a wide selection of restaurants and various types of food, making it easier for consumers to access and enjoy their preferred dishes without the need to make a physical visit to the restaurant location concerned. The presence of this online food delivery system is a strategic solution in fulfilling consumption needs, especially for individuals with high levels of mobility, limited access caused by unfavorable weather conditions, and various other situational constraints [2]. In choosing a Food Delivery Application (FDA), the ease of use factor is an important consideration, as it relates to the ordering process. Consumers often experience difficulties during transactions because they do not understand how to use the application [3]. Food delivery applications not only compete in terms of price and food menu offerings, but also in terms of user experience. Differences in interface design, response speed, and ease of navigation can influence consumers' decisions in choosing a particular app. Therefore, a comparative analysis of food delivery apps using the UEQ method becomes very relevant to identify factors that affect user experience and how these apps can improve their services to identify factors that affect user experience and how these apps can improve their services. The User Experience Questionnaire (UEQ) is a questionnaire-based evaluative method designed to measure the level of user experience of a digital product or system. This instrument consists of 26 statement items grouped into 6 main dimensions, namely Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty [4].

In this research, 100 respondents were conducted and the UEQ method will be used to assess the quality of user experience on two online food ordering application services, namely GoFood and GrabFood, based on perceptions and direct assessments from users of the application. The selection of GoFood and GrabFood applications as the object of research is based on their dominance in the online food delivery service industry in Indonesia. By surveying active users of apps such as GoFood and GrabFood, this study will explore how users rate their experience in usingthese apps.

2. Literature Review

2.1. Food Delivery Application

Food Delivery Application (FDA) is a technology-based system that allows users to order food from various restaurants through digital devices such as smart phones or computers. This application is designed to make it easier for consumers to choose, order, and receive food without having to physically visit the restaurant location [5]. Food delivery applications fall into the ecommerce category, where the service provided is the delivery of goods in the form of food. There are several FDAs in Indonesia, including [6]:

a. GoFood
   GoFood is a food delivery service provided by Gojek, an Indonesia-based technology company that provides ondemand services. GoFood allows users to order food from various restaurants through the Gojek application. This service is designed to provide convenience in ordering food, as well as supporting culinary businesses to market their services.
b. GrabFood
   GrabFood is one of the food delivery services operated by Grab, a multinational technology company based in Singapore. This service makes it easy for users to order food from a wide selection of restaurants available through the Grab application. After the order is placed, the food will be delivered directly to the user's location by Grab driver partners connected through the application system.

2.2. User Experience (UX)

User Experience (UX) is a very important aspect in mobile application development [7]. UX can be defined as the perceptions and reactions of users that arise as a result of their interaction with a product, system, or digital service. This aspect encompasses various important dimensions, such as ease of use, functional effectiveness, and the level of user satisfaction during interaction with a particular application or system [8]. UX plays a very important role in digital application development, as it can influence users' decisions in choosing and using the application [9].

2.3. User Experience Questionnaire (UEQ)

User Experience Questionnaire (UEQ) is one of the measurement instruments that are widely used in the usability testing process to assess user experience of a product quickly and efficiently. This questionnaire can be accessed and downloaded through the official website www.ueqonline.org. UEQ consists of 6 assessment dimensions that include a total of 26 statement items, where each dimension represents important aspects in evaluating user experience. The following is a brief explanation of each scale [10]:

a. Attractiveness

   Describes the overall impression of a product. This dimension assesses whether users feel happy or not when using the product, and the extent to which the product is attractive to them. For example: attractive or unattractive, good or bad.

b. Efficiency

   Measures the extent to which users can complete their tasks quickly and without significant obstacles. Efficiency reflects how practical and time-saving a product is when used. For example: fast or slow, efficient or inefficient.

c. Perspicuity

   Assesses the level of ease with which users can understand and start using the product. This dimension also includes how easily users adjust and get used to the features available. For example: is easy to understand or confusing.

d. Dependability

   Relates to the user's feeling of security and control while interacting with the product. This dimension evaluates whether the system is predictable and whether users feel supported by the system. For example: reliable or unreliable, controlling or limiting.

e. Stimulation

   Assesses the extent to which the product provides a pleasant experience and piques the user's interest. This dimension reflects whether users feel encouraged or motivated to continue using the product because of its benefits and interest. For example: fun or boring, useful or not useful, interesting or not interesting.

f. Novelty

   Describes the level of innovation and creativity in product design. This aspect assesses whether the product appears unique, different, and able to attract the attention of users because of a fresh and original impression. Examples: innovative or conventional , creative or boring.

3. Research Methods

3.1. Analysis of Methods Used

User Experience Questionnaire (UEQ) is one of the evaluation instruments used in usability testing to measure the level of user experience of a product in a fast and structured manner. In the following, a flowchart is shown in Figure 1 in the form of an analysis of the methods used, namely the implementation of the UEQ method in this study.

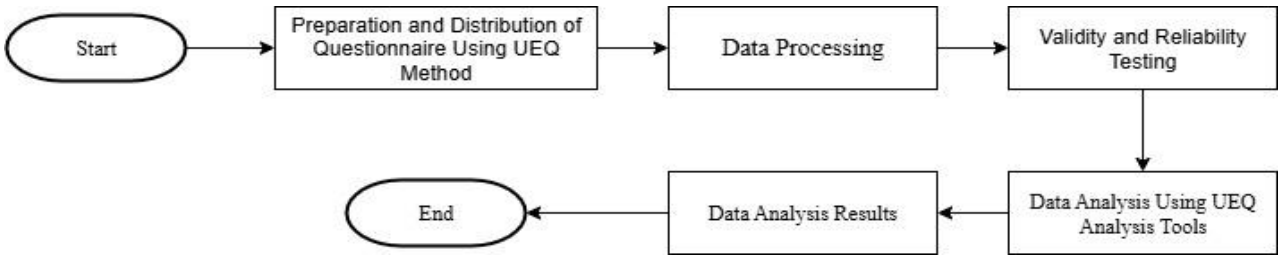

Fig. 1: Flowchart of Analysis of Methods Used

1. Preparation and Distribution of Questionnaire Using the UEQ Method
   The first stage is to design and distribute questionnaires to analyze the comparison between user experience on the GoFood and GrabFood applications. This questionnaire was compiled based on the User Experience Questionnaire (UEQ) method to collect data on the six main dimensions in measuring user experience using the UEQ method, namely Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty. The main questionnaire design using the UEQ method is shown in Table 1 below

Table 1: Questionnaire Arrangement

1	What is your impression of using this application?	Attractiveness
2	Are the features in the application easy to understand?	Perspicuity
3	Does the application design appear creative?	Novelty
4	Are the menus and features easy to use?	Perspicuity
5	Does this application assist you effectively?	Stimulation
6	Does the experience of using the application feel fresh and enjoyable?	Stimulation
7	Is the application's appearance visually appealing?	Stimulation
8	To what extent does the application understand your needs?	Dependability
9	Does the ordering process in the application feel fast?	Efficiency
10	Does the application provide flexibility for creativity in order selection?	Novelty
11	Do the features in the application support your needs?	Dependability
12	What is your overall impression of this application?	Attractiveness
13	Is the application's interface designed simply?	Perspicuity
14	Do you enjoy using this application?	Attractiveness
15	Does this application feel superior to similar applications?	Novelty
16	Do you feel comfortable using this application?	Attractiveness
17	Do the transactions in the application feel secure?	Dependability
18	Does this application motivate you to keep using it?	Stimulation
19	Does this application meet your expectations as a user?	Dependability
20	Is the application efficient in its usage?	Efficiency
21	Is the information provided by the application clear and easy to understand?	Perspicuity
22	Do the features in the application feel practical?	Efficiency
23	Is the application well-organized?	Efficiency
24	Does the application look attractive and appealing?	Attractiveness
25	Is the application designed with a user-friendly concept?	Attractiveness
26	Is this application innovative in delivering its services?	Novelty

2. Data Processing
   After the questionnaires were collected, the next step was to process the data that had been obtained. Data processing includes data cleaning (e.g., removing incomplete or invalid data), as well as data preparation for further analysis. The cleaned data will be prepared for more in-depth statistical analysis.After the data collection process is completed, the next step is to process the data by first transforming the scale values of each statement item in the UEQ questionnaire. The values are then converted into a scale range of -3 to +3, in accordance with the provisions listed in Table 2 below.

Table 2: Data Transformation Value

Value	Transformation
1	-3
2	-2
3	-1
4	0
5	1
6	2
7	3

Based on Table 2, the responses of the 26 statement items in the UEQ questionnaire were converted into a numerical scale as part of the data processing process. Each initial response was given in a scale range of 1 to 7, which was then transformed into a scale of -3 to +3. Statements that had negative formulations (semantically negative nuances), namely in item numbers 1, 2, 6, 7, 8, 11, 13, 14, 15, 16, 20, 22, and 26, were converted according to the following order: 1 to +3, 2 to +2, ..., up to 7 to -3. Conversely, statements with positive formulations (positive nuances), namely item numbers 3, 4, 5, 9, 10, 12, 17, 18, 19, 21, 23, 24, and 25, were converted in the opposite direction, namely: 1 becomes -3, 2 becomes -2, ..., and 7 becomes +3.

3. Validity and Reliability Testing
   The validity test is used to determine the extent to which each statement item in the research instrument is able to measure the variable in question accurately and in accordance with the measurement objectives. The analysis technique used in this test is Pearson Product Moment correlation, where the correlation value between each item and the total score (item-total correlation) is compared with the r table value to determine whether the item is valid or not.
   The reliability test aims to measure the extent to which the research instrument is able to produce consistent data when used repeatedly to measure the same variable. In this study, reliability testing was carried out using the Cronbach's Alpha method, which is a statistical technique for assessing the level of internal consistency between items in one construct. An instrument is declared reliable if the Cronbach's Alpha value is> 0.70, which indicates that the instrument has a good level of reliability in measuring the variable under study.
4. Data Analysis Using UEQ Analysis Tools
   After the process of collecting and processing data through distributing questionnaires is completed, the next stage is data analysis. Based on the assessment results that have been obtained, the analysis will be carried out using the User Experience Questionnaire Analysis Tools (UEQ Tools). This tool is used to calculate and evaluate the score of each dimension of user experience, so that the level of quality of User Experience can be known when users access the food delivery service application.
5. Data Analysis Results
   The results obtained from the analysis process are compiled into reports or visualized in the form of charts and graphs. These results represent the overall quality of the user experience for each application being evaluated. The output includes average scores across the six UEQ dimensions: Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty.

3.2. Proposed System Analysis

The proposed system analysis describes the available features that are modeled using the Use Case Diagram system modeling tool. Figure 2 shows the Use Case Diagram of the application delivery food comparison analysis system using the User Experience Questionnaire (UEQ) method

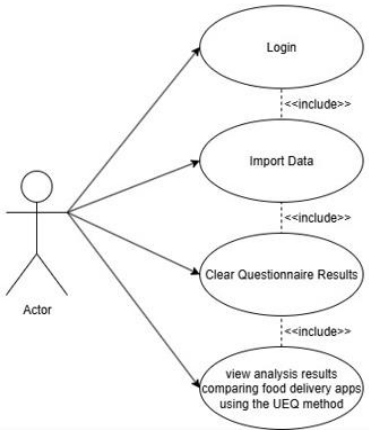

Fig 2: Use Case Diagram of the Proposed System

In the use case diagram above, there is one actor, namely the Administrator. The process flow of the Food Delivery Application Comparison Analysis website includes the administrator needing to log in first using their email and password. After the data is successfully entered, the administrator will be directly redirected to the dashboard page, which displays graphs regarding respondent characteristics along with the number of survey results from respondents recorded in the system. On the dashboard page, the administrator can also import questionnaire data and view the analysis results of the imported questionnaires, such as validity and reliability test results, data transformation results, and results from the UEQ analysis tools.

4. Results

The result of the research is the construction of a food delivery application comparison application using the Use Experience Questionnaire (UEQ) method. The following are the overall results of the application display, among others:.

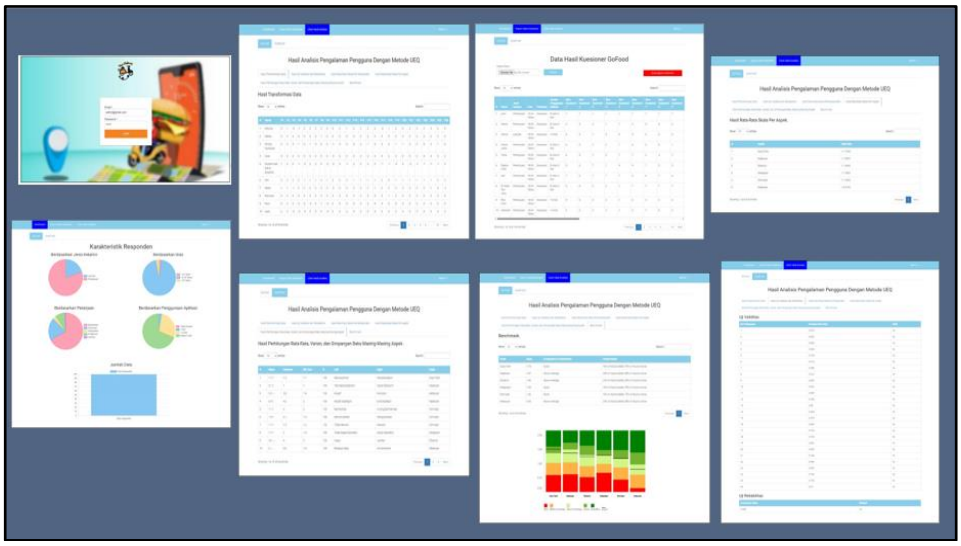

Fig. 3: Overall Application Display Results

Once the collected data had met the target, it was processed before analysis. First, the data was standardized because some questions had reversed values (left positive, right negative). This was done to select participants who answered randomly, which could reduce the Dependability of the desired UEQ data. The data is then grouped based on its scale, and the scale values for each participant are obtained. The results of the processing stages are shown in Figures 4 and 5:

Items																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
0	1	-2	-1	2	2	2	2	3	3	3	1	2	2	2	2	-2	1	2	3	2	2	2	3	2	2
3	3	2	3	3	2	2	1	3	0	2	2	2	3	2	2	3	3	2	2	2	2	2	2	2	2
3	3	3	1	3	1	3	0	2	-1	3	3	0	3	1	3	2	3	1	1	3	2	3	2	1	0
3	3	2	3	3	2	3	3	3	-2	3	3	3	3	2	2	3	2	3	3	3	2	3	3	3	2
1	2	0	-1	-2	2	2	0	-2	-2	3	-1	2	2	2	2	-1	-1	-2	3	-2	-1	-1	-1	-1	3
2	2	2	2	1	1	1	2	1	2	2	2	1	1	1	1	2	0	1	1	1	1	1	1	2	2
1	1	-1	2	2	2	2	2	3	-2	2	3	2	3	2	1	2	2	2	2	2	2	2	1	3	-1
3	3	2	3	2	2	3	3	2	3	3	3	2	3	2	3	3	1	2	2	3	2	3	2	3	3
2	2	2	3	3	-2	3	1	-2	2	3	3	3	3	3	3	2	3	3	3	3	3	3	3	2	3
2	3	-2	-3	-3	2	2	3	-2	2	2	2	3	3	2	3	2	2	3	2	3	3	2	3	2	3
2	3	2	2	1	2	1	2	2	2	2	3	1	2	2	3	1	2	1	2	3	3	3	3	2	-2
3	2	3	3	3	2	3	3	3	2	3	3	3	3	3	3	3	3	1	3	3	3	3	3	3	3
1	3	2	3	3	2	3	3	1	2	2	2	3	2	2	2	0	2	2	2	2	3	3	2	3	2
1	2	-3	-2	-2	2	3	1	0	-1	2	-2	3	1	2	1	-2	0	-1	2	-1	2	-1	-2	-1	2
2	2	0	2	1	2	1	1	2	1	2	2	2	2	1	1	3	0	0	2	2	2	2	2	2	2
2	2	1	1	2	3	2	3	0	0	1	0	1	1	1	2	0	2	1	1	1	1	1	2	1	2
2	1	-1	-1	-2	1	2	1	-2	-1	2	-1	2	2	1	1	-2	-1	-1	0	-1	1	-1	-1	-1	0
3	1	-3	-3	-3	3	3	2	-3	-1	3	-2	1	2	3	2	-3	-3	-3	3	-2	2	-3	-3	-3	2
3	3	3	3	3	3	3	3	3	-3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1	3	2	3	3	2	3	1	-3	3	1	3	2	3	1	2	3	0	1	3	-1	0	0	-1	3	-1
3	3	-3	-1	3	3	2	3	3	1	3	3	3	3	3	3	3	3	1	3	3	3	3	3	3	3
3	3	2	3	2	3	2	2	3	2	3	3	2	3	3	3	2	2	3	3	3	2	3	3	3	3
1	2	-3	3	2	3	3	1	-1	3	2	3	2	2	2	2	-3	-3	3	2	3	2	3	3	3	3
2	3	2	2	3	2	3	3	-2	1	3	1	2	2	0	2	3	2	3	2	3	3	2	3	3	3
3	2	-1	1	0	3	-2	3	1	-2	1	-3	1	-3	2	1	-1	-2	1	1	-3	1	-1	-1	-1	1
3	2	1	1	3	3	2	3	2	3	3	2	2	3	3	2	2	3	2	3	2	3	2	2	3	3
3	1	-1	-1	-2	3	2	3	3	-1	3	3	2	2	3	2	-2	3	1	3	1	1	-2	1	1	-1
2	2	1	2	3	3	3	2	1	1	3	3	2	3	-1	2	-2	1	2	2	2	2	2	2	2	-2
1	3	-3	-3	-3	2	3	2	-1	-3	3	3	1	2	3	3	3	-1	3	3	3	3	3	3	3	3

Fig 4: GoFood's adjusted UEQ value

Items																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
-1	2	0	0	2	0	0	2	2	3	3	0	1	2	1	-1	-2	1	2	1	2	2	2	0	1	2
1	3	1	3	2	1	1	-2	3	0	1	2	0	1	0	1	3	1	1	1	0	2	2	1	0	1
2	2	3	1	1	1	3	0	2	-1	3	3	0	3	1	3	2	3	1	1	3	2	3	2	1	0
3	3	2	3	3	3	3	3	2	-2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1	1	-1	-2	-1	2	1	0	-2	-2	3	-2	1	1	1	1	-2	-1	-2	3	-1	0	-1	-1	-1	3
1	2	2	3	2	1	2	3	2	2	3	3	2	2	2	2	3	2	2	2	2	2	2	2	3	3
2	2	0	3	3	3	3	3	2	-1	1	2	2	2	1	2	3	3	2	1	3	1	3	2	3	-2
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2	0	-2	0	1	1	0	1	-2	-1	2	-3	0	0	1	2	-1	1	0	-2	2	-1	0	2	2	2
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2	3	-2	-2	-1	3	3	2	2	-2	2	3	3	3	2	3	-1	3	2	2	2	3	-3	3	2	-2
2	3	2	2	3	3	3	2	1	1	3	3	2	3	-1	2	-2	1	1	2	2	2	2	2	1	-2
1	0	0	0	-1	0	0	1	0	-2	2	1	0	1	0	1	3	-3	0	0	-1	0	0	0	2	2

Fig 5: GrabFood's adjusted UEQ value

Then, the average score for each question from all participants was obtained, so that it was possible to see more clearly which aspects had the greatest influence on the UEQ score. Figures 6 and 7 show the average scores for each aspect of the UEQ for the GoFood and GrabFood apps:

Item	Mean	Variance	Std. Dev.	No.	Left	Right	Scale
1	2,0	1,1	1,0	100	annoying	enjoyable	Attractiveness
2	2,2	1,0	1,0	100	not understandable	understandable	Perspicuity
3	0,5	4,7	2,2	100	creative	dull	Novelty
4	1,0	4,9	2,2	100	easy to learn	difficult to learn	Perspicuity
5	1,2	4,9	2,2	100	valuable	inferior	Stimulation
6	1,5	2,1	1,5	100	boring	exciting	Stimulation
7	2,0	1,5	1,2	100	not interesting	interesting	Stimulation
8	1,8	1,8	1,3	100	unpredictable	predictable	Dependability
9	0,6	4,5	2,1	100	fast	slow	Efficiency
10	0,2	3,8	1,9	100	inventive	conventional	Novelty
11	2,1	1,3	1,1	100	obstructive	supportive	Dependability
12	1,4	3,7	1,9	100	good	bad	Attractiveness
13	1,8	1,6	1,3	100	complicated	easy	Perspicuity
14	2,1	1,6	1,3	100	unlikable	pleasing	Attractiveness
15	1,7	1,6	1,3	100	usual	leading edge	Novelty
16	2,0	1,4	1,2	100	unpleasant	pleasant	Attractiveness
17	0,8	5,4	2,3	100	secure	not secure	Dependability
18	0,9	3,8	1,9	100	motivating	demotivating	Stimulation
19	1,3	3,1	1,8	100	meets expectations	does not meet expectations	Dependability
20	2,0	1,4	1,2	100	inefficient	efficient	Efficiency
21	1,4	3,5	1,9	100	clear	confusing	Perspicuity
22	1,9	1,8	1,3	100	impractical	practical	Efficiency
23	1,2	4,0	2,0	100	organized	cluttered	Efficiency
24	1,4	3,4	1,9	100	attractive	unattractive	Attractiveness
25	1,6	3,2	1,8	100	friendly	unfriendly	Attractiveness
26	1,4	3,0	1,7	100	conservative	innovative	Novelty

Fig 6: Calculation Results for Average Value, Variance, and Standard Deviation of GoFood Application Evaluation

Item	Mean	Variance	Std. Dev.	No.	Left	Right	Scale
1	1,7	1,2	1,1	100	annoying	enjoyable	Attractiveness
2	2,1	1,0	1,0	100	not understandable	understandable	Perspicuity
3	0,3	3,8	1,9	100	creative	dull	Novelty
4	0,9	4,2	2,0	100	easy to learn	difficult to learn	Perspicuity
5	1,1	4,0	2,0	100	valuable	inferior	Stimulation
6	1,4	2,1	1,4	100	boring	exciting	Stimulation
7	1,7	1,5	1,2	100	not interesting	interesting	Stimulation
8	1,7	2,0	1,4	100	unpredictable	predictable	Dependability
9	0,6	4,0	2,0	100	fast	slow	Efficiency
10	0,0	3,8	1,9	100	inventive	conventional	Novelty
11	2,0	1,3	1,1	100	obstructive	supportive	Dependability
12	1,2	3,4	1,8	100	good	bad	Attractiveness
13	1,6	1,6	1,3	100	complicated	easy	Perspicuity
14	1,9	1,2	1,1	100	unlikable	pleasing	Attractiveness
15	1,4	1,5	1,2	100	usual	leading edge	Novelty
16	1,9	1,3	1,1	100	unpleasant	pleasant	Attractiveness
17	0,7	5,1	2,3	100	secure	not secure	Dependability
18	0,8	3,4	1,8	100	motivating	demotivating	Stimulation
19	1,1	2,9	1,7	100	meets expectations	does not meet expectations	Dependability
20	1,7	1,5	1,2	100	inefficient	efficient	Efficiency
21	1,3	3,5	1,9	100	clear	confusing	Perspicuity
22	1,8	1,5	1,2	100	impractical	practical	Efficiency
23	1,0	3,4	1,9	100	organized	cluttered	Efficiency
24	1,1	3,2	1,8	100	attractive	unattractive	Attractiveness
25	1,4	2,9	1,7	100	friendly	unfriendly	Attractiveness
26	1,3	2,5	1,6	100	conservative	innovative	Novelty

Fig 7: Calculation Results for Average Value, Variance, and Standard Deviation of GrabFood Application Evaluation

Based on the results of calculating the mean, variance, and standard deviation for the GoFood and GrabFood applications using the User Experience Questionnaire (UEQ) method, an overview of the quality of user experience on both applications was obtained. For the GoFood application, the aspect with the highest mean value was on the Perspicuity scale with a value of 2.2, indicating a very positive user perception of the Perspicuity of information and the application interface. Conversely, the lowest value was in the Novelty aspect with a value of 0.2, indicating a neutral perception of the innovations offered by the application. Overall, the six main aspects, namely Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty, showed average values above the threshold, indicating that the GoFood application generally provides a very good user experience. Meanwhile, the evaluation results for the GrabFood app show that the highest average score is also on the Perspicuity scale with a score of 2.1, indicating that users find the app easy to understand. The lowest score is in the Novelty aspect with a score of 0.0, reflecting a neutral perception of the creativity and innovation of this app. However, five out of six UEQ aspects showed positive results with average scores above the threshold, with only the Novelty aspect being neutral. Therefore, it can be concluded that both apps provide a good user experience, but GoFood is slightly superior in terms of perceived novelty and overall impression compared to GrabFood.

From this data, it was then grouped based on each scale, then the average value of each scale was obtained and displayed in a benchmark as shown in Figure 8, Figure 9 and Figure 10.

UEQ Scales (Mean and Variance)		
Attractiveness	1,740	1,13
Perspicuity	1,580	1,13
Efficiency	1,433	1,28
Dependability	1,493	1,17
Stimulation	1,380	1,24
Novelty	0,928	1,23

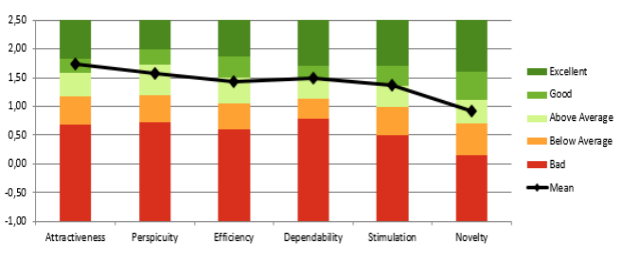

Fig 8: Final score on a scale of 6 and GoFood benchmark display

UEQ Scales (Mean and Variance)		
Attractiveness	1,517	1,07
Perspicuity	1,473	0,97
Efficiency	1,268	1,14
Dependability	1,348	1,16
Stimulation	1,233	1,14
Novelty	0,763	1,10

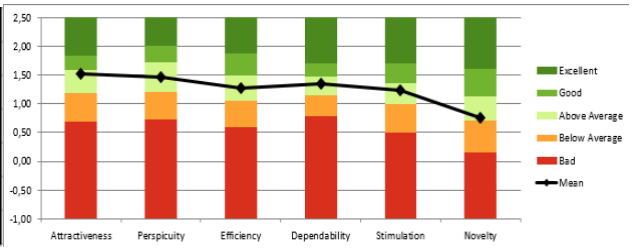

Fig 9: Final score on a scale of 6 and GrabFood benchmark display

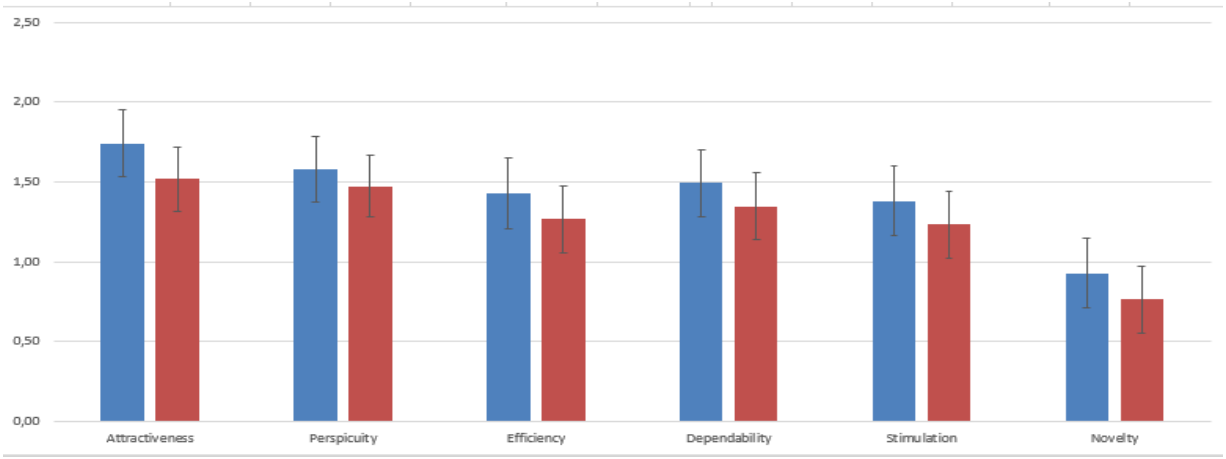

Fig 10: Comparison of final scores for GoFood and GrabFood UEQ

From 100 respondent data, it was found that based on the benchmarking results for the GoFood and GrabFood applications, it can be concluded that both have fairly good performance in terms of User Experience (UX), but show different strengths in certain dimensions. The GoFood app scored higher on several key aspects, such as Appeal, Dependability, and Stimulation, which fall into the "good" category. This indicates that users find GoFood appealing, accurate, and capable of providing a motivating experience. Meanwhile, the dimensions of Perspicuity, Efficiency, and Novelty are in the "above average" category, indicating that although it has not yet reached the best level, GoFood is still capable of providing a clear, efficient, and relatively new user experience. On the other hand, the GrabFood app shows consistent performance across all UX aspects, with all dimensions falling into the "above average" category. This indicates stability in the quality of the user experience offered, although none of the dimensions reach the "good" category. Thus, it can be concluded that GoFood is superior in several key UX aspects that are crucial in shaping positive user perceptions, while GrabFood shows consistency and good potential for future development. Both apps have their own strengths, and GoFood's advantages in certain dimensions provide more prominent added value in the context of user experience.

5. Conclusion

Based on the results of research that has been conducted regarding the evaluation of user experience in the GoFood and GrabFood applications using the UEQ (User Experience Questionnaire) method, several conclusions are obtained that are directly related to the formulation of the problem as follows:

1. The application of the UEQ method to the GoFood and GrabFood applications can be done effectively to measure the quality of user experience. The use of the six main dimensions of UEQ (Attractiveness, Perspicuity, Efficiency, Dependability, Stimulation, and Novelty) allows for a systematic and objective evaluation of both applications.
2. The comparative analysis of UX between GoFood and GrabFood shows that GoFood excels in several key dimensions, namely Attractiveness, Dependability, and Stimulation which fall into the "good" category. Meanwhile, GrabFood showed consistent performance on all dimensions with the "above average" category. This shows that GoFood has advantages in certain aspects that are more prominent, while GrabFood has consistency and potential for overall UX development.

Based on the limitations found during the research, here are some suggestions that are expected to be taken into consideration for further research:

1. The expansion of the research object should include more than two applications, such as ShopeeFood, or other similar services so that the analysis results are more comprehensive and generalizations to various platforms can be made.
2. The dimensions of UX evaluation should be added, not only limited to the six dimensions of UEQ, but also include aspects such as user loyalty, long-term satisfaction, technical performance, and service reliability, in order to obtain more in-depth results.
3. The number of respondents should be increased to represent a wider user population. Increasing the number of respondents will also increase the validity and reliability of the UX analysis results.
4. Data collection should be carried out with more varied methods, such as direct interviews or field observations, as well as expanding the age of respondents so that the results are more in-depth field observations, as well as expanding the age of respondents to reflect various segments of application users.

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