

# Assessing User Experience of a Mobile Application Using Usability Questionnaire Method

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**Abstract**—Eden Farm application is an application system used by customers to order vegetables and fruits. Eden Farm collaborates with hundreds of local farmers and dozens of raw material suppliers to provide all the culinary business needs of thousands of Eden Farm customers. However, there are still many who do not understand the usability of the Eden Farm application. In building a good system, one important part is good usability. Usability is closely related to user experience. User experience plays an important role in the development of a system, especially in the Eden Farm application, because user experience can show the ease that users feel and efficiency through user experience in using the system. The author tries to use the USE Questionnaire to 100 respondents. The analysis resulted in an average value of the Usefulness parameter of 85%. Then the parameter Ease of Learning with 82%, and Ease of Use with 80%, and the smallest is Satisfaction with 79%. These results indicate that the Eden Farm application is good. The results of measuring the usability of Eden Farm application with the classification "Very Appropriate" to use, with a usability value of 84.18%. The results of usability measurement are expected to help the development and improvement of the Eden Farm application in the future.

**Keywords**—Eden Farm Application, User Experience, Usability, USE Questionnaire

## I. INTRODUCTION

Eden Farm is a fruit and vegetable supplier startup from farmers to B2B consumers throughout Jakarta and provides distribution services for fresh vegetable products in restaurants and cafes. Founded in 2017 by David Gunawan. The platform built connects farmers directly with business owners. Eden Farm collaborates with hundreds of local farmers and dozens of raw material suppliers to provide all the culinary business needs of thousands of Eden Farm customers. Several well-known restaurants such as OldTown White Coffee, Crunhaus Salads, The Duck King, Gyu-Kaku, and Crystal Jade have become customers of this startup. In addition, there are around 60 farmers who have become suppliers of several products to Eden Farm. Regarding strategies to ensure price stability, apart from taking goods directly from farmers, Eden Farm also applies wholesale product purchases. Quality control is always applied, before sending the team will check and wash the product.

Eden Farm startup has an application that is used by customers to order vegetables and fruits, but there are still many who do not understand the usability of the Eden Farm application. In building a good system, one important part is good usability. Usability is closely related to user experience. User experience plays an important role in the development of a system, especially in the Eden Farm application, because user experience can show the ease that users feel and efficiency through user experience in using the system.

There are several previous studies conducted, from the results of the Usability Analysis in User Experience at the UMM KRS Online System using the USE Questionnaire, the analysis results show that the usability measurement produces a percentage value of 73.312 which means the usability of the KRS-Online system has a "decent" value. On the other hand, it is proven that there is a significant influence between the variables usefulness, ease of use, and ease of learning on the satisfaction variable simultaneously. In addition, partially the usefulness and ease of use variables have a significant effect on the satisfaction variable, while the ease of learning variable does not significantly influence the satisfaction variable [1]. In the next research, the level of usability of the system was measured based on the USE Questionnaire method. The questionnaire made based on this method was tested for its validity and reliability. Based on the results of the validity test, 2 invalid question items must be deleted. These two questions can be represented by other questions in the questionnaire. From the results of the usability test, it can be concluded that the Gekulang Lective System is feasible because it has a value of 72.8% [2]. Research on Analysis and Improvement of Usability of KAI Access Mobile Application Using Usability Testing and Use Questionnaire Methods. The results of this study indicate that the test will be carried out twice, namely the initial test and the final test. Initial testing is carried out to analyze the level of usability before being given a recommendation. Then the final test is carried out to get the usability value after making recommendations for improvements. Improvements will use design guidelines for good results. The results of the usability value of the usability measurement before the recommendation for improvement was 47.58% with a sufficient predicate and the usability value after

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the recommendation for display improvement was 78.27% with a good predicate [3]. In addition, there is also research based on data processing, the results show that of the 5 usability variables used in the questionnaire, only 1 significant variable is used to analyze the usability of the application, namely memorability. Of these 5 variables, the Android application has not met the other 4 variables so it can be concluded that the Android application has not met the usability criteria, but the results of the evaluation/testing show that the value of acceptance of usability by the user is above 3 (above the middle value) on a scale of 5. The most dominant factor affecting the increase in the level of usability is easy to remember and at the same time has a positive effect in increasing the acceptability level of Android applications [4]. As well as research with the results of the questionnaire, measurements were made using the Likert scale. From the measurement results, it can be concluded that the google classroom application which is used as e-learning in the study program has a poor usability value [5].

One method that can be used to measure the level of usability is the USE Questionnaire. The USE Questionnaire is a non-commercial question package developed by Arnold Lund and colleagues at Ameritech. The abbreviation USE consists of Usefulness, Satisfaction, and Ease of Use. The Ease of Use factor can be divided into 2 factors, Ease of learning and Ease of Use [6].

## II. METHODOLOGY

### A. Object of research

The object of research to be measured for usability level is Eden Farm Application. Eden Farm application is an application system used by customers to order vegetables and fruits. Eden Farm collaborates with hundreds of local farmers and dozens of raw material suppliers to provide all the culinary business needs of thousands of Eden Farm customers.

This app connects Indonesian restaurants with local farmers, delivering them every day. Since 2017, Eden Farm has been supporting local farmers and bringing their best fresh produce to more than 20,000 restaurants and food stalls in Indonesia. As one of the fastest-growing agricultural companies, Eden Farm has a mission to provide a big social impact for farmers and various Indonesian culinary businesses.

### B. Research Stages

The stages of this research were made using diagrams to make it easy to read or understand. The research stages can be seen in Fig. 1.

### C. Method of collecting data

In completing this report, relatively complete data and information are needed for material that can support the correctness of the material for the description and discussion of the research. With that, before the writing of this report was carried out, the authors conducted research or research first to obtain related data and information. The data collection methods carried out by the author are as follows:

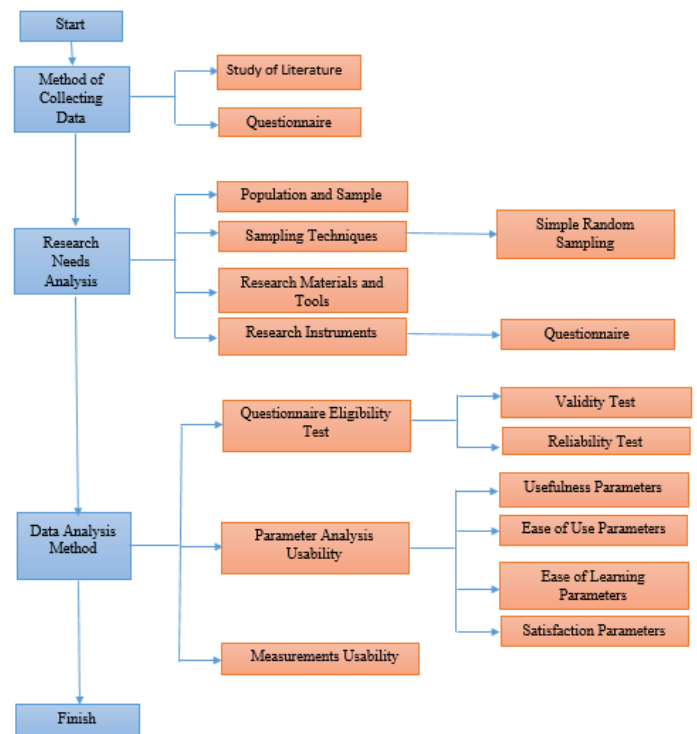


Fig. 1. Stage of Research

#### 1) Study of literature

The literature study method is a series of activities related to the method of collecting library data, reading and taking notes, and managing research materials. This literature study is carried out before researching references based on the results of previous similar studies to get a theoretical basis for the problem to be studied.

Researchers read and study books, articles from the internet related to usability measurement using the USE Questionnaire.

#### 2) Questionnaire

The questionnaire is a data collection technique that is done by giving a set of questions or written statements to the respondent to answer. The questionnaire is an efficient data collection mechanism if the researcher wants to know exactly what is needed and how to measure the research variables. This questionnaire can be administered in person or distributed electronically [7].

The questionnaire in this study uses a Likert scale with a scale of 1-5 which is described in Table II. The Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social events or symptoms. In social phenomenon research, the researcher has specified the scale and hereinafter referred to as the research variable. Likert scale is a scale that has two forms of statement models, namely the form of positive statements used to measure positive attitudes and negative statements used to measure negative attitudes [8]. The answer to each instrument item that uses a Likert scale has a gradient from very positive to very negative which can be the words described in Table 1 and 2.

Table 1.  
Likert Scale Statement

Strongly Agree (SS)
Agree (S)
Doubt (RR)
Disagree (TS)
Strongly Disagree (STS)

For quantitative analysis, the answers to the statements or questions can be scored in Table 2.

Table 2.

Likert Scale Declaration Scale

Declaration Scale	Likert Scale
Strongly Agree Always / Very Positive a score	5
Agree / Often / Positive is scored	4
Hesitant / Occasional / Neutral is scored	3
Disagree / Rarely / Negative is scored	2
Strongly Disagree / Never / Very Positive are scored	1

Researchers also collected data by distributing questionnaires to respondents. The questionnaire package chosen is the USE Questionnaire which has 30 statements divided into 4 parameters, namely Usefulness, Satisfaction, Ease of Use, and Ease of Learning. The Ease-of-use factor can be divided into 2 factors, namely Ease of Learning (ease of learning) and Ease of Use (ease of use). The question template can be seen in Table 3. In this study, the question template was adjusted to the object of research, namely the Eden Farm Application.

Table 3.

Use Questionnaire Package

Usefulness	
1	It helps me be more effective
2	It helps me be more productive
3	It is useful
4	It gives me more control over the activities in my life
5	It makes the things I want to accomplish easier to get done
6	It saves me time when I use it
7	It meets my needs
8	It does everything I would expect it to do
Ease of Use	
9	It is easy to use
10	It is simple to use
11	It is user friendly
12	It requires the fewest steps possible to accomplish what I want to do with it
13	It is flexible
14	Using it is effortless
15	I can use it without written instructions
16	I don't notice any inconsistencies as I use it
17	Both occasional and regular users would like it
18	I can recover from mistakes quickly and easily
19	I can use it successfully every time
Ease of Learning	
20	I learned to use it quickly
21	I easily remember how to use it
22	It is easy to learn to use it
23	I quickly became skillful with it
Satisfaction	
24	I am satisfied with it
25	I would recommend it to a friend
26	It is fun to use

27	It works the way I want it to work
28	It is wonderful
29	I feel I need to have it
30	It is pleasant to use

#### D. Research Needs Analysis

This stage is the stage where the process of preparation for the implementation of research needs to run well. Before conducting data analysis, it is necessary to conduct a research needs analysis which includes:

##### 1) Population and Sample

Population relates to all groups of people, events, or objects that are the center of research attention for research. The sample is a part of the population. This includes a selected number of members of the population.

The sample is part of the number and characteristics of the population. If the population is large, and it is impossible for the researcher to study everything in the population, for example, because of limited funds, energy and time, the researcher can use a sample taken from that population [9]. The population in this research is Eden Farm application users, both old and new users. From the entire population, several samples were taken to be respondents. The sample size is determined using the Slovin formula as shown below.

$$n = \frac{N}{1 + N(e)^2} \tag{1}$$

Referring to the Slovin formula, the number of samples with a known population (N) according to usage on Google Playstore for the Eden Farm application is 1000 downloads (there are about 1000 users). The error tolerance limit (e) in this study is 10% or 0.1.

$$n = 1000 / (1 + 1000 (0.1)^2) = 91$$

Based on the calculation results, the sample size is at least 91 people.

##### 2) Sampling Techniques

The sampling technique is a sampling technique. The sampling technique is a way to determine a sample whose number corresponds to the sample size that will be determined as the actual data source, by taking into account the characteristics and distribution of the population to obtain a representative sample [10]. To determine the sample that will be used in the research, there are various kinds of sampling techniques used.

The sampling technique in this study used a simple random sampling method, namely, sampling was carried out randomly so that all members of the population did not pay attention to the strata contained in the population.

Then each sampling unit as the smallest population element has the same opportunity to be sampled or to represent that population. So that with this method, all users of the Eden Farm application are entitled to become respondents, both old and new users.

##### 3) Research Materials and Tools

The tools used in this study are SPSS for performing statistical calculations on the validity and reliability of questionnaires, Google Forms for creating and distributing questionnaires online, Mendeley for citation writing reports, Microsoft Excel for managing questionnaire data, and Microsoft Word for writing reports. The material of this research is the respondents chosen in the study, namely all Eden Farm application users, both old and new users.

#### 4) Research Instruments

An instrument is a tool that meets academic requirements so that it can be used as a tool to measure a measuring object or collect data about a variable [11]. The data collection instrument is a tool selected and used by researchers in collecting activities so that these activities become systematic and made easier by them [12]. An instrument is a measuring tool used to objectively use quantitative information about the variation in the characteristics of a variable [13].

The instrument used was a questionnaire. The questionnaire was used in measuring *usability*. This is a series of questionnaires that can process data related to effectiveness, efficiency, and satisfaction in using the Eden Farm application. The use of questionnaires makes it easier for respondents to understand and answer the questions being asked well. Usability measurement uses the USE Questionnaire because the questionnaire package includes three usability measurements according to ISO 9241-11, namely efficiency, effectiveness, and satisfaction.

#### E. Data analysis method

In interpreting the data that has been obtained, as well as analyzing the data for usability measurement in the user experience of using the Eden Farm application, the researcher takes the following steps.

##### 1) Questionnaire Eligibility Test

Ensure that the results of the questionnaire data collection are suitable for further analysis. An instrument to be used in research must be valid and reliable so that it is suitable for use for a research instrument. The questionnaire's feasibility test was conducted by two methods, namely the validity test and the reliability test.

- Validity test

Validity comes from the word validity which means the extent to which the accuracy and accuracy of a measuring instrument in carrying out its function... "[14]. Validity is a measure that shows the level of validity of a test. The test has high validity if the results match the criteria, in the sense that it has a parallel between the test and the criteria. To test the validity of the instrument, the product-moment correlation formula is used with rough numbers, which are as follows:

$$r_{xy} = \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{N(\sum X^2 - (\sum X)^2)N(\sum Y^2 - (\sum Y)^2)}} \quad (2)$$

where:

$r_{xy}$  = correlation coefficient between X and Y

N = Number of respondents (sample)

X = Score the specified item number

Y = total score

And the product-moment correlation with the deviation is as follows:

$$r_{xy} = \frac{(\sum XY)}{\sqrt{(\sum X^2)(\sum Y^2)}} \quad (3)$$

where:

t = the value of the coefficient of validity or reliability

$r_{xy}$  = Value of validity correlation coefficient

X = Variable x

Y = Variable y

The benchmarks for interpreting the degree of validity of the instrument obtained are following Table 4.

Table 4.  
Interpretation of Validity

Correlation coefficient	Validity Criteria
0.81 < r ≤ 1.00	Very high
0.61 < r ≤ 0.80	High
0.41 < r ≤ 0.60	Enough
0.21 < r ≤ 0.40	Low
0.00 < r ≤ 0.21	Very low

Next the price of  $r_{xy}$  consulted with r product moment table with a significant level of 5%. If  $r_{xy} > r$  table then the research instrument is declared valid and if  $r_{xy} < r$  table then the research instrument is declared invalid.

- Reliability Test

*Reliability*(reliability) comes from the word rely which means trust and reliable which means trustworthy. To get the reliability of the test, you can use the alpha formula, which is as follows:

$$r_{11} = \left(\frac{n}{n-1}\right) \left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2}\right) \quad (4)$$

where:

$r_{11}$  = instrument reliability

n = number of questions or number of questions.

$\sum \sigma_i^2$  = number of item variables.  $\sigma_t^2$  = total variance.

The benchmarks for interpreting the degree of instrument reliability obtained are in accordance with Table 5.

Table 5.  
Interpretation of Reliability

Correlation coefficient	Reliability Criteria
0.81 <math>r \leq 1.00</math>	Very high
0.61 <math>r \leq 0.80</math>	High
0.41 <math>r \leq 0.60</math>	Enough
0.21 <math>r \leq 0.40</math>	Low
0.00 <math>r \leq 0.21</math>	Very low

If  $r_{II} > r$  instrument table then it is declared reliable and if  $r_{II} < r$  table then it is declared that the instrument is not reliable.

## 2) Parameter Analysis Usability

4 usability parameters will be measured and analyzed, namely Usefulness, Satisfaction, Ease of Use, and Ease of Learning. This parameter has 30 statements represented for each parameter. And the process of calculating the parameter attributes uses a 5-point Likert scale.

## 3) Measurements Usability

Usability measurement has the following stages:

- Questionnaire Selection
- Choose a questionnaire package to use for usability measurements. Each package has a different research framework and approach. This study uses the USE Questionnaire package.
- Selecting Participants.
- Determining participants according to the services offered, and dividing groups such as age, gender, and so on.
- Determining Sample Size.
- Determine participants who can represent the population of users of a service, to be used as data collection objects in usability measurement.
- Process and interpret data according to the characteristics of the research data.

Data obtained from the results of measurement research *usability* can be divided into 4 types, namely nominal (based on category), ordinal (ranking), interval, and ratio. Nominal data is in the form of unordered (random) data, such as the number of male or female respondents, application users, and so on. Meanwhile, ordinal data has been sorted based on ranking, such as very bad, bad, good, very good. For interval data, differences in data values will usually mean a lot in the interpretation of the data, such as a scale from very bad to very good. Ratio data is numerical data such as the time and age it takes to complete a task.

Usability measurement in this study was carried out by calculating the percentage of respondents' answers to the

filled questionnaire. Usability measurement results use the following formula:

$$\text{Percentage of Eligibility (\%)} = \frac{\text{Observed score}}{\text{Expected score}} \times 100\%$$

The data obtained will then be converted based on the feasibility category table of a system as shown in Table 6.

Table 6.  
Eligibility Categories

Number%	Classification
<2	Very Unworthy
21-40	Not feasible
41-60	Enough
61-80	Well worth it
81-100	Very Worth it

## III. RESULTS AND DISCUSSION

### A. Research Analysis Results

Eden Farm application is an application system used by customers to order vegetables and fruits. Eden Farm collaborates with hundreds of local farmers and dozens of raw material suppliers to provide all the culinary business needs of thousands of Eden Farm customers.

Eden Farm startup has an application that is used by customers to order vegetables and fruits, but there are still many who do not understand the usability of the Eden Farm application. In building a good system, one important part is good usability. Usability is closely related to user experience. User experience plays an important role in the development of a system, especially in the Eden Farm application, because user experience can show the ease that users feel and efficiency through user experience in using the system.

Usability measurement parameters use the USE Questionnaire, which consists of a total of 30 questions including Usefulness, Satisfaction, Ease of Use, and Ease of Learning.

The results of this study are expected to provide information related to the usability of using the Eden Farm application which can define the application according to user needs so that the system can provide satisfaction to its users or not.

Measurements are carried out by distributing questionnaires to 100 respondents. Then the research questionnaire was tested through a questionnaire feasibility test so that the questionnaire used had met the requirements well or not before carrying out the further analysis as a research instrument. The research instrument can be said to be good if it meets valid and reliable properties. Then the questionnaire feasibility test consists of a validity test and a reliability test. After carrying out the feasibility test, an analysis was carried out on the 4 measured usability parameters, namely Usefulness, Ease of Use, Ease of Learning, and Satisfaction. The final stage is to measure usability to determine the feasibility of a system.

### B. Characteristics of Respondents

The characteristics of the respondents used in this study were classified based on gender, age, and other aspects related to the study, namely the length of time using a system.

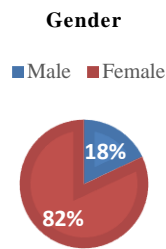


Fig. 2. Gender of Respondent

Based on the data in Figure. 2, namely the gender of the respondent, it can be seen that the male respondents are 18 people with a percentage of 18%, while the female respondents are 82 people with a percentage of 82% of the total number of respondents as many as 100 people. The gender of Eden Farm application users is dominated by women.

Based on the age of the respondent, it can be seen through the graph in Fig. 3.

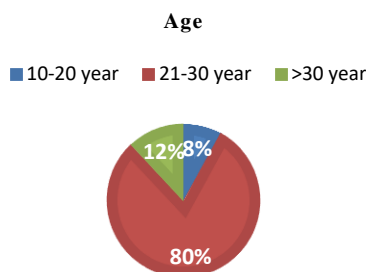


Fig. 3. Age of Respondents

Based on the data in Figure. 3, namely the age of the respondents, it can be seen that the age of the most respondents is 21-30 years with a total of 80 respondents, with a percentage of 80%. Then with the respondent's age, 10-20 years with a total of 8 respondents, with a percentage of 8%, and respondents aged > 30 years with a total of 12 respondents.

Based on the length of time using the Eden Farm application, it can be seen through the graph in Fig. 4.

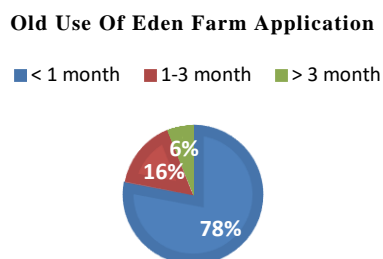


Fig. 4. Old Use of Eden Farm Application

Based on the data in Figure. 4, namely the length of time using the Eden Farm application, it can be seen that the longest use of the Eden Farm application is <1 month as many as 78 respondents, with a percentage of 78%. Then the duration of use for 1-3 months was 16 respondents, with a percentage of 16%, and duration of use > 3 months for 6 respondents, with a percentage of 6%.

### C. Questionnaire Feasibility Test

The feasibility test is measured using validity and reliability tests. To prove that the questionnaire has met the requirements as a good measuring tool, a feasibility analysis is needed on the questionnaire. If the research instrument has been declared valid and reliable, it means that it meets the requirements. The valid instrument states that the respondent's data is proven valid and can measure the variables to be measured in the study. Reliable instruments state that they can be trusted and provide the right results in data retrieval.

#### 1) Validity test

The validity test is carried out to ensure that the questionnaire used to measure the research variables is proven valid or not. To test the validity of the study used Pearson Correlate Bivariate and r table was significant with 5%. The validity test was carried out with a total of 100 respondents, it can be seen that the value of the r table is 0.197, which means that the measuring instrument can be said to be valid if  $r_{count} > r_{table}$  and vice versa if  $r_{count} < r_{table}$  then the measuring instrument is declared invalid. The results of the validation test using SPSS software can be seen in Table 7.

Table 7.  
Questionnaire Validity Test Results

No. Statement	Value of r Count	Terms	Information
1.	0.381	> 0.197	Valid
2.	0.367	> 0.197	Valid
3.	0.345	> 0.197	Valid
4.	0.280	> 0.197	Valid
5.	0.507	> 0.197	Valid
6.	0.373	> 0.197	Valid
7.	0.337	> 0.197	Valid
8.	0.528	> 0.197	Valid
9.	0.658	> 0.197	Valid
10.	0.403	> 0.197	Valid
11.	0.306	> 0.197	Valid
12.	0.382	> 0.197	Valid
13.	0.120	> 0.197	Invalid
14.	0.343	> 0.197	Valid
15.	0.517	> 0.197	Valid

16.	0.239	> 0.197	Valid
17.	0.366	> 0.197	Valid
18.	0.549	> 0.197	Valid
19.	0.614	> 0.197	Valid
20.	0.541	> 0.197	Valid
21.	0.548	> 0.197	Valid
22.	0.592	> 0.197	Valid
23.	0.497	> 0.197	Valid
24.	0.280	> 0.197	Valid
25.	0.530	> 0.197	Valid
26.	0.369	> 0.197	Valid
27.	0.254	> 0.197	Valid
28.	0.287	> 0.197	Valid
29.	0.554	> 0.197	Valid
30.	0.335	> 0.197	Valid

In Table 7, there is 1 invalid questionnaire statement. The causes of invalid statements are due to the user's lack of understanding of the statements given, different perceptions from the core of the statements given, and inconsistent answers to respondents.

Invalid statements cannot be used in the questionnaire or must be replaced with another statement. Statement 13 which is invalid is deleted and represented by statement 11 because it relates to the ease of using the system.

Table 8.

The Statements That are Deleted and The Statements That Represent Them

Removed statement		Representative statement	
No.	Statement	No.	Statement
13.	Eden Farm application is very flexible	11.	Eden Farm application is user friendly

2) Reliability Test

Reliability tests are carried out to know the measuring instrument is consistent, so that it can be relied on and used when making repeated measurements or not in a study. This test is also carried out to find out the results of the respondent's answers which can be used for the next processing stage or cannot be used. An instrument is declared reliable if it can be trusted as a measuring instrument.

In this study, the reliability test was carried out by calculating the value of the Cronbach's Alpha coefficient. From the analysis of calculations using SPSS software, the results of the Cronbach's Alpha coefficient are obtained.

Then the value is interpreted by the standard reliability values in Table 5.

The following are the results of the interpretation of the reliability value in this study.

Table 9.  
Questionnaire Reliability Test Results

Cronbach's Alpha	Reliability Interval	Category
0.830	29	Very high

This reliability test is carried out by entering all the answers from all valid statements, namely 29 items, and producing a Cronbach's Alpha value of 0.830. Based on the reliability level of Cronbach's Alpha which has been described in Table V, the value of 0.830 is in the range  $0.81 < r \leq 1.00$  so that the results of the test can be concluded that the reliability of the questionnaire is very high. So, the components of the statements and answers from the questionnaire are declared reliable so that further data processing can be carried out.

D. Parameter Analysis Usability

There are 4 parameters tested in this study, namely the parameters Usefulness, Ease of Use, Ease of Learning, and Satisfaction. This parameter has 30 statements represented by each parameter. The process of calculating parameter attributes uses a 5-point Likert scale, namely Strongly Disagree (value 1), Disagree (value 2), Neutral (value 3), Agree (value 4), Strongly Agree (value 5).

Fig. 5 shows the percentage result of each usability parameter from the Eden Farm application.

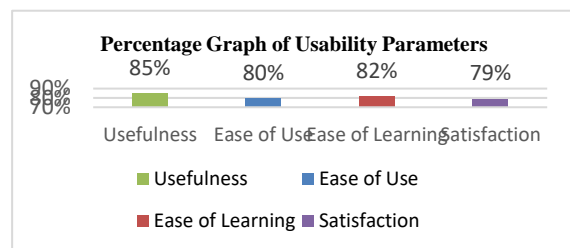


Fig. 5. Comparison of the Percentage of Usability Parameters

Fig. 5 is the result of the comparison of the percentage of each usability parameter. These results are obtained from the calculation of the value of each parameter average divided by the maximum scale of the assessment, namely 5, then multiplied by 100%. From Fig. 5 the greatest percentage is in the Usefulness parameter with 85%. Then the parameter Ease of Learning with 82%, and Ease of Use with 80%, and the smallest is Satisfaction with 79%.

- Usefulness parameter

The Usefulness parameter has 8 statements. Table 10. shows the Usefulness statement asked of the respondents of this study.

Table 10.  
Usefulness Parameter Statement

No.	Usefulness
1.	Eden Farm application helps me to be more effective in ordering products
2.	Eden Farm application helps me to be more productive in ordering products
3.	Eden Farm application is useful for me in placing product orders
4.	Eden Farm application makes it easier for me to order products
5.	The Eden Farm app makes my ordering easier to do
6.	Eden Farm application saves my time in ordering products
7.	Eden Farm application fulfils my needs in ordering products
8.	Eden Farm application does everything I expect in ordering products

Parameter analysis is carried out by calculating the average value of each statement on the Usefulness parameter. Fig. 6 shows the result of calculating the average value of the Usefulness parameter.

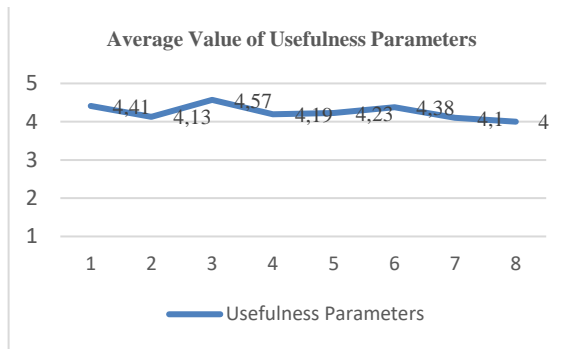


Fig. 6. Average Value of Usefulness Parameters

The average value on the Usefulness parameter reaches 4.57, or 85%, which can be said to be high because it is close to the maximum value. These results imply that the Eden Farm application has a high usability value in the usefulness parameter. Of the 8 statements in Figure 6, it has a scale from 4 and above, and the highest average value is in statement 3, namely 4.57.

- Ease of Use parameter

The Ease-of-Use parameter has 11 statements. However, there is 1 invalid statement, then the statements that are analyzed further amount to 10. Table 11 shows the Ease-of-Use statement that was asked of the respondents of this study.

Table 11.  
Statement of Ease Of Use Parameters

No.	Ease of Use
9.	Eden Farm application is easy to use for ordering products
10.	Eden Farm application is practically used for ordering products
11.	Eden Farm application is user friendly
12.	Using Eden Farm Application only takes a few steps to achieve what I want
14.	Using the Eden Farm application does not require effort

15.	I can use Eden Farm Application without written instructions
16.	I did not encounter any inconsistencies when using the Eden Farm Application
17.	Regular users or those who only occasionally use the Eden Farm application will love it
18.	I can solve errors in using Eden Farm Application easily
19.	I successfully use Eden Farm Application to order products every time

Parameter analysis is carried out by calculating the average value of each statement on the Ease-of-Use parameter. Fig. 7 shows the result of calculating the average value of the Ease-of-Use parameter.

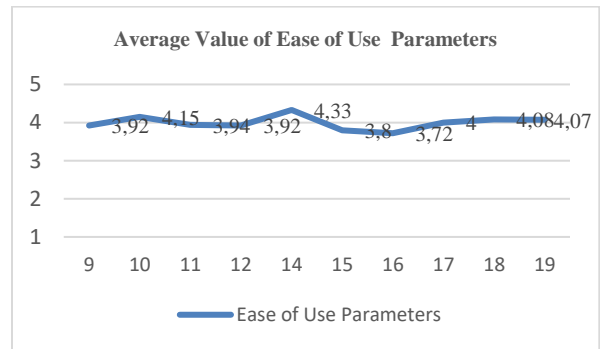


Fig. 7. Average Value of Ease-of-Use Parameters

The average value on the Ease of Use parameter reaches 4.33 or 80%, which can be said to be high because it is almost close to the maximum value. These results mean that the Eden Farm application has a high usability value on the Ease of Use parameter. From Fig. 7, there are 5 statements on a scale of 3, and the highest average value is in statement 14, namely 4.33.

- Ease of Learning Parameters

The Ease of Learning parameter has 4 statements. Table 12. shows the Ease of Learning statement that was asked of the respondents of this study.

Table 12.  
Ease of Learning Parameter Statement

No.	Ease of Learning
20.	I quickly learned the Eden Farm Application for ordering products
21.	I can remember how to use the Eden Farm Application for ordering products
22.	Eden Farm application is easy to learn
23.	I quickly became proficient in using the Eden Farm application for ordering products

Parameter analysis is carried out by calculating the average value of each statement on the Ease of Learning parameter. Fig. 8 is the result of calculating the average value of the Ease of Learning parameter.



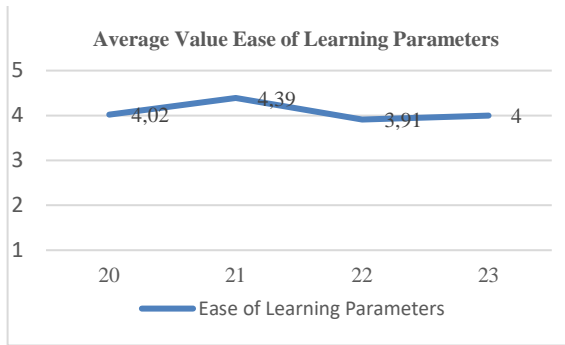


Fig. 8. Average Value Ease of Learning Parameters

The average value on the Ease of Learning parameter reaches 4.39 or 82%, which can be said to be high because it is almost close to the maximum value. These results mean that the Eden Farm application has a high usability value on the Ease of Learning parameter. Of the 4 statements in Fig. 8, the 3 attributes of this parameter are consistent with being on a scale from 4 upwards, 1 statement being on a scale of 3, and the highest average value is in statement 21, namely 4.39.

- Satisfaction Parameters

The satisfaction parameter has 7 statements. Table 13 shows the satisfaction statement asked by the respondents of this study.

Table 13.  
Statement of Satisfaction Parameters

No.	Satisfaction
24.	I am satisfied with the Eden Farm Application
25.	I will recommend Eden Farm Application to my friends
26.	Eden Farm application is fun to use in ordering products
27.	Eden Farm application works as it should
28.	Eden Farm application has an attractive appearance
29.	I feel that I have to use the Eden Farm Application to order products
30.	Eden Farm application is convenient to use for ordering products

Parameter analysis is carried out by calculating the average value of each statement in the Satisfaction parameter. Fig. 9 shows the result of calculating the average value of the Satisfaction parameter.

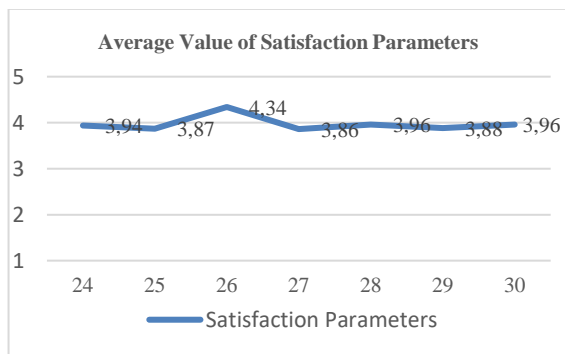


Fig. 9. Average Value of Satisfaction Parameters

The average value on the Satisfaction parameter reaches 4.34 or 79%, which can be said to be quite high because it leads to a positive assessment. These results mean that the Eden Farm application has a fairly high usability value on the Satisfaction parameter. From the 7 statements in Fig. 9, there are 6 attributes in this parameter that are on a 3 scale, and 1 statement is on a scale of 4, and the highest average value is found. in statement 26 that is 4.34.

E. Measurement Usability

Level *usability* In using the Eden Farm application, it can be calculated using the following formula based on the answers from respondents.

$$\text{Percentage of Eligibility (\%)} = (\text{Observed score}) / (\text{Expected score}) \times 100\%$$

The data obtained will then be converted based on the feasibility category table of a system in Table VI. The observed score is obtained from the total score of 100 respondents' answers, namely 12206, while the expected score is obtained from the maximum score of the rating scale, namely 5 multiplied by the number of statements, namely 29, with the expected score is 145, then multiplied by 100%.

Table 14.  
Results of Usability Measurement of Eden Farm Application

Usability	Number (%)	Classification
84.18%	81-100	Very Worth it

In Table 14 shows the measurement results *usability* Eden Farm application with the classification "Very Appropriate". This means that the Eden Farm application already has a very good usability value.

IV. CONCLUSION

Eden Farm application is an application system used by customers to order vegetables and fruits. Eden Farm collaborates with hundreds of local farmers and dozens of raw material suppliers to provide all the culinary business needs of thousands of Eden Farm customers. In this study, the usability level of the Eden Farm application was measured using the USE Questionnaire by distributing it to 100 respondents. Characteristics of respondents for gender were 18 men and 82 women. Most of the respondents were aged 21-30 years with a total of 80 respondents, with a percentage of 80%. Then with the respondents age 10-20 years with a total of 8 respondents, with a percentage of 8%, and respondents aged > 30 years with a total of 12 respondents with a percentage of 12%.

In the duration of using the Eden Farm application, it can be seen that the longest use of the Eden Farm application is <1 month as many as 78 respondents, with a percentage of 78%. Then the duration of use for 1-3 months was 16 respondents, with a percentage of 16%, and duration of use > 3 months for 6 respondents, with a percentage of 6%.

Before further analysis, a validity and reliability test was conducted on the questionnaire. The result is that there is 1

statement that does not pass the test out of 30 statements. 1 statement is deleted and then represented by another statement in the questionnaire. The analysis resulted in an average value of the Usefulness parameter of 85%. Then the parameter Ease of Learning with 82%, and Ease of Use with 80%, and the smallest is Satisfaction with 79%. These results indicate that the Eden Farm application is good. The results of measuring the usability of Eden Farm application with the classification "Very Appropriate" to use, with a usability value of 84.18%.

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