CHAPTER III
RESEARCH METHODS

3.1 Overview of Research Object

DANA is a digital banking service which headquarters is based in the city of Jakarta, Indonesia. Founded back in the year of 2018, DANA aims to replace conventional wallets with digital payments. Since the year of debut, DANA was registered and supervised by Kominfo - Indonesian Ministry of Communication and Information along with Bank Indonesia with four licenses which are digital wallet/E-Wallet, electronic money, money transfer, and digital financial liquidity. Hence, DANA E-Wallet was designed to facilitate digital non-cash and non-card transactions, both online and offline (Dana.id).

Figure 3.1 DANA E-Wallet Logo

Source: Dana.id

PT Espay Debit Indonesia Koe is a financial technology (fintech) company in Indonesia that enables easy access to payment and financial services for the Indonesian people, that is better known with the trademark "DANA". The DANA E-Wallet logo is shown in Figure 3.1 above. DANA as a digital wallet was founded by Vincent Henry Iswaratioso, who also plays the role as the current Chief Executive Officer. Before getting approval to operate as a fintech firm throughout Indonesia on December 5, 2018, DANA was created by a startup company that is an Indonesian legal entity. The major investor of DANA is PT Elang Sejahtera Mandiri, a subsidiary of PT Elang Mahkota

Teknologi Tbk (EMTEK). From there, EMTEK worked together with Ant Financial, the owner of Alipay, to provide technological support for DANA.

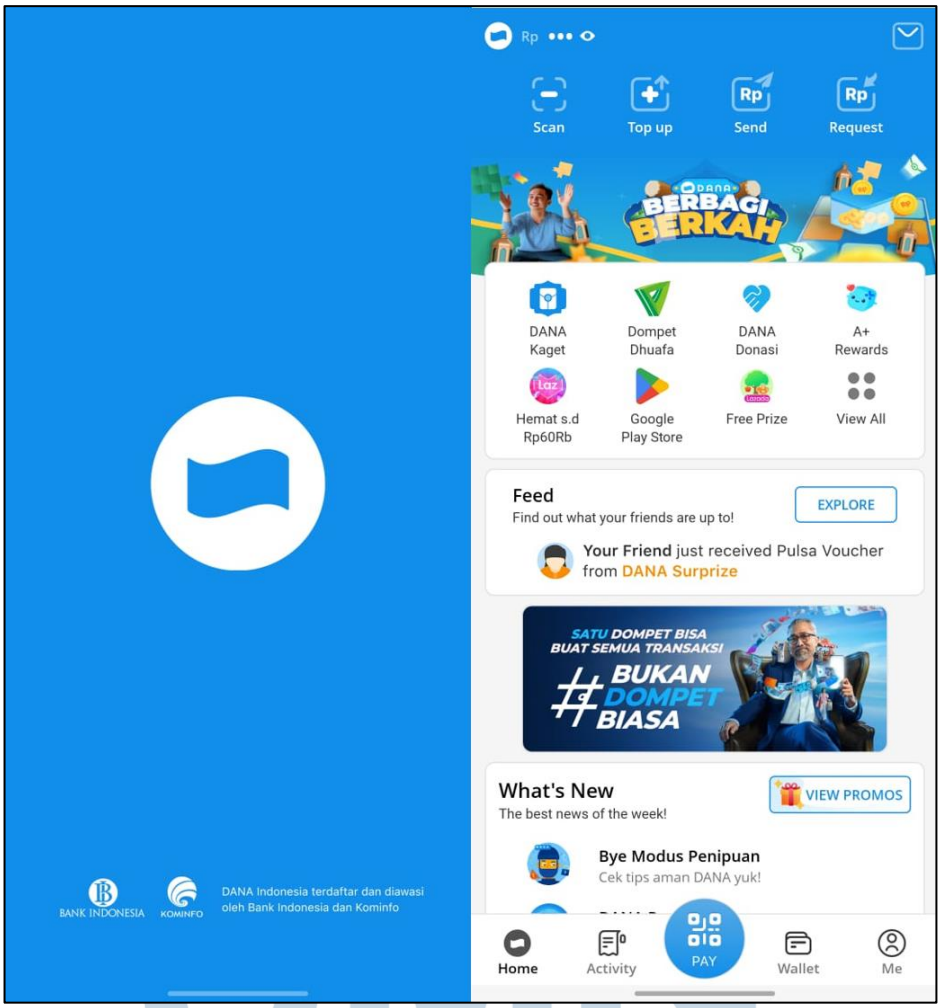

Figure 3.2 DANA Application Interface

Source: Researcher's Personal Documentation

Figure 3.2 above pictures the interface on DANA E-Wallet application. Speaking about application, DANA has several features that can make it easier for users to carry out digital transactions, including: 1) Request Money – A feature where users can request a nominal amount of money from other DANA users by scanning a QR, sending a QR or by sending a request link for the nominal amount requested via chat/messaging media. 2) Save Card – A feature where users can save information related to debit cards and/or credit cards

issued by banks collaborating with DANA into the user's account, which can be used to carry out transactions. 3) Manage – A feature that allows users to manage their bills where DANA will provide them reminder notifications for bill payments. 4) The availability of the feature which allows users to make a purchase of pulsa refill and payment of bills. 5) Referral Code - A feature where users can provide references to other potential users or user relations to register for DANA by sharing a referral link to get rewards 6) DANA Business Account – An account to help meet business/individual business payment needs.

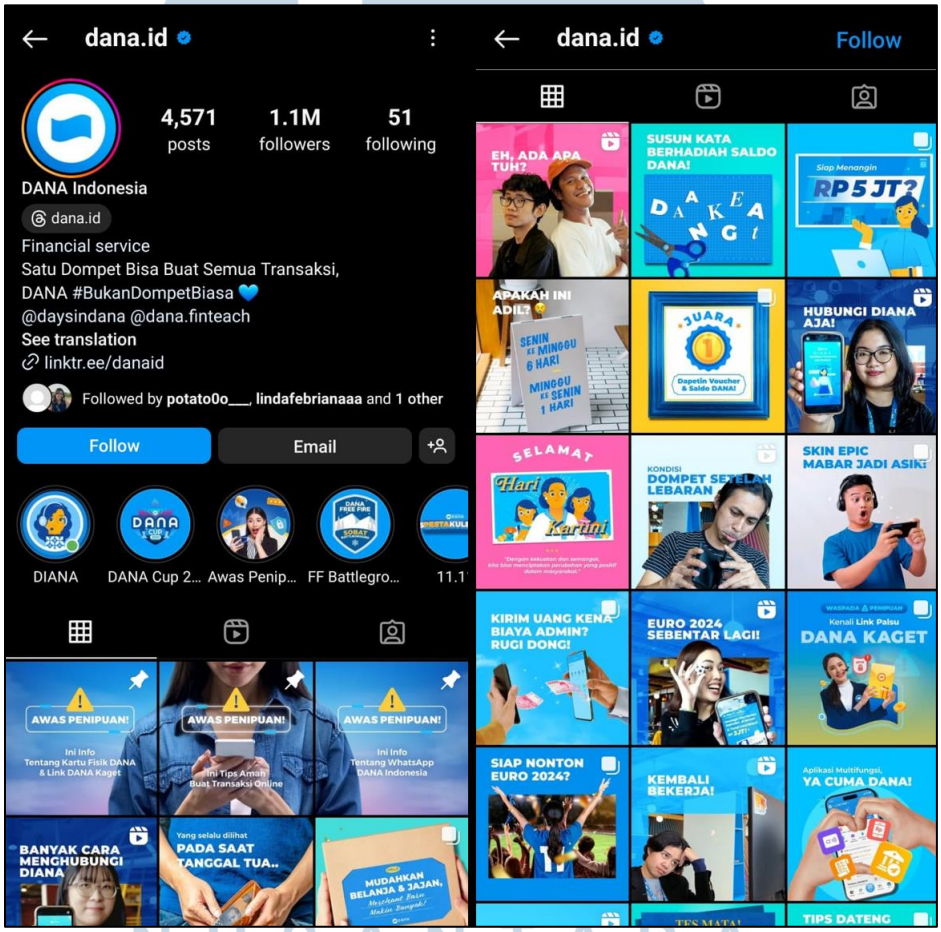

Figure 3.3 DANA Instagram Profile

Source: Researcher's Personal Documentation

DANA's Instagram profile can be seen in Figure 3.3. The content provided in their profile includes information about DANA's features, products, promotions, tips & tricks, fintech news, and many more content that is related

with the brand's industry. Besides from that, DANA also facilitate its user with a hyperlink that is used to connect to all other DANA features available, making it easier for users to access and navigate.

3.2 Research Method

According to Malhotra (2020), there are 2 classifications of research methods:

1. **Qualitative Research**

   Qualitative research can be defined as an unstructured research method that is often used in exploratory research, which grounds on small samples to gain insights, information, and understanding regarding the problem being investigated/researched. The data analysis being used are identified as nonstatistical data.

2. **Quantitative Research**

   Quantitative research can be defined as a structured research method that is used to quantify the data and generalize the results from the sample to the population of interest by applying some form of statistical analysis to be able to produce recommendations and final course of actions that can be done as the outcome. The data analysis being used here are statistical data.

As an approach for this research, the researcher used the quantitative research method by distributing online questionnaires/surveys and collecting data digitally.

3.3 Research Design

A research design can be described as a framework or a construct for executing a research that carries out essential details of procedures needed to obtain all information necessary to determine and solve research problems (Malhotra, 2020). Just like a building construction that requires a blueprint, the research design is needed to ensure the execution of a proper research, knowing that a well-designed study is not only important for generating efficiency, but

also creating trustworthy knowledge (Ali Khan et al., 2023). For that reason, a good research design itself is vital as it will help researchers get important insights while avoiding potential problems.

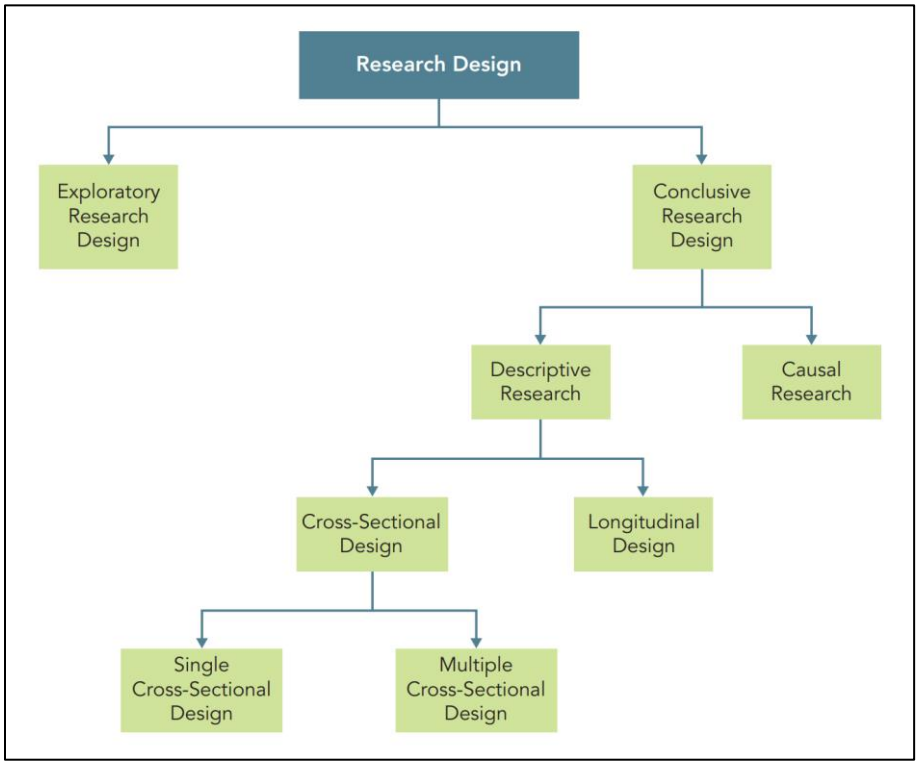

Figure 3.4 Classification of Research Designs

Source: Malhotra (2020)

Based on Figure 3.3 above, research design is divided into two classifications, namely, the exploratory research design and conclusive research design.

1. **Exploratory Research Design**

   Exploratory research design aims to provide insight into the problem being researched. This design is used when the problem must be defined in more depth and obtain relevant information so as to obtain additional insight for further development. Therefore, this research design typically has the tendency to be more flexible and requires qualitative data and this too results findings that are

temporary and usually followed by subsequent exploratory or conclusive research (Malhotra, 2020).

2. Conclusive Research Design

Conclusive research design on the other hand is a research that is designed in order to aid the decision maker, in this case the researcher determine, evaluate, and choose the best course of action for a given situation. A conclusive research design aims to test hypotheses and knowledge regarding the relationship between one research variable to other research variables. It is worth noting that this research design uses quantitative data and is more structured and formal when compared to exploratory research (Malhotra, 2020). Furthermore, the conclusive research design consists of:

A. Descriptive Research

Descriptive research is used to explain something like a phenomenon that happens in the market, usually in the form of certain functions or characteristics. In this research design, researchers must have a lot or more knowledge regarding the problem being studied. Also, descriptive research is considered to be a research that is preplanned and structured, with a prior formulation of a certain hypothesis (Malhotra, 2020). The descriptive research is then divided into cross-sectional and longitudinal study.

1) Cross-sectional Design

Being one of the most frequently used study when conducting research, the cross-sectional design involves gathering information from a given sample of population elements only once. Cross-sectional design itself is divided into two, single cross-sectional design and multiple cross-sectional design. a) Single Cross-sectional Design: A design can be classified as single cross-sectional when the design takes respondents through the target population and obtains

information once, from only one sample. On the contrary, b) Multiple Cross-sectional Design: Is a design that obtains information only once, but from two or more samples (Malhotra, 2020).

2) **Longitudinal Design**

Longitudinal design is a type of research design that involves fixed sample population elements that are measured repeatedly on the same variables. In another sense, here, the researcher takes measurements on the same variables from time to time. This might then provide a clear illustration of the situation and changes that takes place over time when viewed together (Malhotra, 2020).

B. Causal Research

The causal research is used to determine the causal or cause-effect relationships of the object being studied. In this type of research, it can be seen that the "cause and effect" are represented by certain variables in a circumstance, as well as knowing the relationship between cause-and-effect variables. By doing causal research, the impact on the dependent variable was measured by conducting experiments (Malhotra, 2020).

Based on the explanation given above, this research uses the conclusive research through descriptive research, with a cross-sectional design which is the single cross-sectional design. This research uses conclusive research because the researcher wants to investigate the relationship between variables that influence usage intention on the DANA E-Wallet application. In addition, it has been stated in the previous sub-topic where the conclusive research design uses the quantitative data which is considered to be more formal and structured. Noting that the approach being used in this research is the quantitative research method, the research design being used will be the conclusive research design. The descriptive research design is used in this research to determine certain characteristics in the market. And finally, the

reason for using a cross-sectional design is because data collection from the sample is only carried out once through a single cross-sectional design, where the sample used is only one representative group of respondents who represent the target population.

3.3.1 Research Data

According to Malhotra (2020), there are two types of research data, namely the primary data and secondary data.

1. **Primary Data**

   Malhotra (2020) says that primary data is a series of data results collected by the researcher that are used specifically to solve the research problems. It is important to note that gathering primary data can be costly and time-consuming. Primary data can be obtained by distributing surveys, conducting focus group discussions, and in-depth interviews.

2. **Secondary Data**

   Malhotra (2020) says that secondary data is the data that is already available and accessible, which is then collected and used by the researcher to solve the research problems. These kinds of data can usually be acquired easily and affordably. Researchers can access the data needed form literatures, previous research or even databases provided by the company.

In this research, the data that the researcher will use as a reference is both primary data and secondary data. The primary data that will be used as the main data source is done through conducting surveys. Meanwhile, the secondary data used in this research comes from articles, journals and scientific works as the supporting data.

3.4 Research Population and Sample

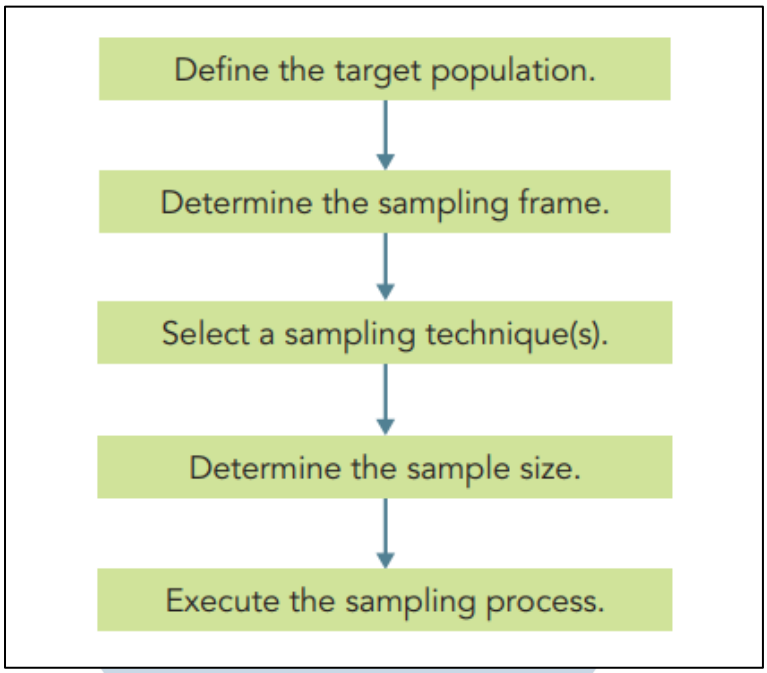

Figure 3.5 Sampling Design Process

Source: Malhotra (2020)

According to Malhotra (2020), the process of sampling design consists of five consecutive steps are shown in a sequential order in Figure 3.4 above. These five processes are inextricably linked and related to all area of the marketing research project, from the problem overview until the results presentation. Hence, decisions made with the sample design must be integrated with all other decisions taken in the research project starting from defining the target population, determining the sampling frame, selecting the sampling technique(s), determining the sample size, and finally executing the sampling process.

3.4.1 Population

In his book, Malhotra (2020) mentioned that all elements with similar characteristics are referred to as a population that represents the goals to be achieved from a marketing problem. A population parameter is a number that describes the characteristics of a population whose

information can be obtained through a census or sample, such as E-Wallet users in Indonesia for example. The population used in this research consisted of Indonesian society who knows and had used the DANA E-Wallet application.

3.4.2 Sample

The next thing to do after knowing the target population is determining the sample which is a representation of the elements of the target population which includes a list and instructions for determining the target population. In other words, a sample unit is a basis in which there are elements from a population to become a sample (Malhotra, 2020). The sample unit used in this research is Generation Z (15-27 years old) who knows the DANA E-Wallet, have used the DANA E-Wallet application as a media of payment, but no longer use it.

3.4.3 Sampling Frame

According to Sekaran & Bougie (2017), the sampling frame is a representation of the entire population elements of which the sample is collected. Also, in a sampling frame, there is a data lists that contains population element, along with the direction of the target population in a research/study. In this research, there is no specific list or direction for the target population which means that there is no sampling frame in this research. It should be underlined that the samples selected and used in this research were samples that met the criteria and assessments of the researchers, so the nonprobability sampling technique will be used.

3.4.4 Sampling Size

As stated by Malhotra (2020), sample size refers to the number of items or elements that will be included in the research/study. In this research, the researcher uses different sample size for the pre-test and main test which will be further explained below.

1. **Pre-test**

When conducting this research, the researcher used a sample size of 40 respondents to be tested in the pre-test. According to Perneger et al. (2015), a sample size of 30 will provide up to 80% of power which can be said to be a sufficient power to detect issues that take place in 5% of the population and also identify recurrent problems that effects 10% of the respondents. Simultaneously, if no problem is discovered for a specific question among 30 respondents, the maximum limit of two-sided 90% confidence in the problem's genuine occurrence is 10%. Hence, this finding signifies that 30 people or respondents is an appropriate default or starting point for pre-testing the indicators related whilst checking the questionnaire as a whole. On the grounds of the theory above and from the minimum limit of 30 respondents, 40 respondents obtained for the pre-test is considered to be a good starting number, since more respondents will produce a stronger and more accurate test results, giving the researcher a clearer image regarding the usability and function of the questionnaire being used.

2. **Main Test**

In order to determine the sample size for the main test, we need to understand the ratio of observations to variables, speaking of which we will refer to the theory owned by Hair et al. (2019). The theory explains that the general rule of research is to have a minimum of 5 multiplied to the number of observations to be analyzed. That being said, it means that we need to multiply the total number of indicators by 5 (N x 5). In this particular research, there are five variables with a total amount of 24 questions or indicators. The 24 indicators are then multiplied by 5 which results to 120 respondents. As the backup data, the researcher added 50 additional respondents which then produces a total of 170 respondents.

3.5 Data Collection Technique

3.5.1 Sampling Technique

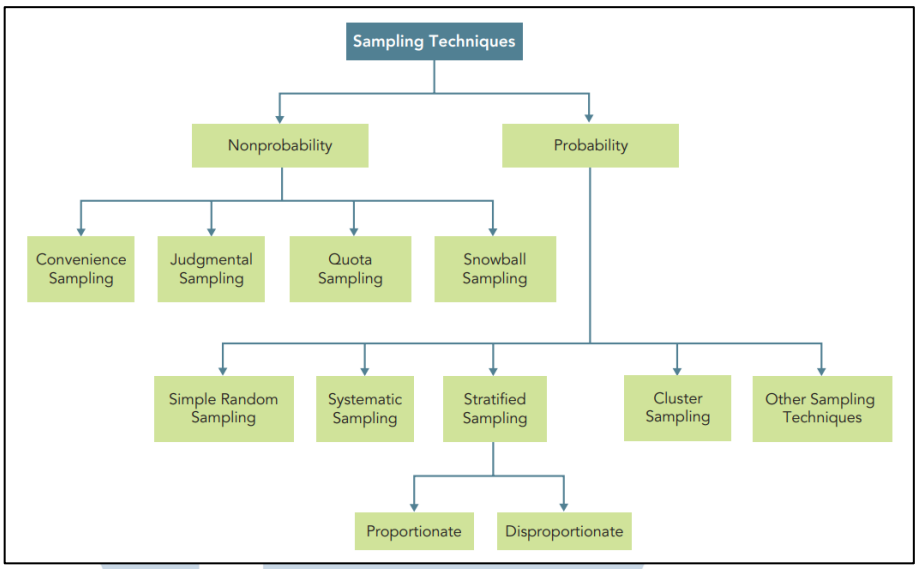

Figure 3.6 Classification of Sampling Techniques

Source: Malhotra (2020)

Referring to Malhotra (2020), there are two types of sampling techniques, namely the probability and nonprobability sampling which is illustrated in Figure 3.15.

1. **Probability Sampling**

   In probability sampling there is a definite chance for each element of the population to be selected as a sample because it has a sampling frame. This allows for precise estimation of the sample based on desired characteristics and drawing conclusions about the target population from the sample taken.

2. **Nonprobability Sampling**

   The non-probability sampling technique is a technique that focuses on the researcher's judgment rather than the selection of sample elements, where this technique does not have a sampling frame and does not evaluate the accuracy of the sample results objectively because there is no way to determine the probability

of selecting certain elements in the sample. So, the results obtained cannot be projected to the population statistically.

Based on the definition above, this research uses the nonprobability sampling technique. This is due to the sampling frame that explains the sample units used in this research does not exist. In addition, the opportunities that the sample selected in the research has, are not shared by everyone. Thus, respondents in this study did not have the same opportunity to become samples in this study, because respondents were selected based on criteria that the researcher had determined. Nonprobability sampling based on Malhotra (2020) consists of several types as follows:

1. **Convenience Sampling**

   Convenience sampling is a sampling technique to obtain elements easily. Where, this sampling technique is a technique that requires the least cost, and does not require time compared to all other sampling techniques.

2. **Judgmental Sampling**

   In this sampling technique, the population used in the research involves an assessment carried out by the researcher in advanced. In other words, there is more screening and respondents are selected based on criteria determined by the researcher.

3. **Quota Sampling**

   In quota sampling there are two stages which are limited to judgmental sampling. Developing control categories or population element quotas is the first stage, and selecting sample elements based on convenience or judgment is the second stage in quota sampling.

4. **Snowball Sampling**

Snowball sampling is a technique that selects an initial group of respondents in an unstructured manner. After that, the next respondent was obtained from the initial respondent through references or referral suggestions. Snowball sampling can be executed in waves through the obtained references.

In this research, the researcher will use the judgmental sampling technique. This is because the researcher have several assessments to carry out screening of samples from a predetermined population. Therefore, the samples that can be selected are samples that have the criteria and characteristics that have been determined by the researcher.

3.6 Research Period

Speaking about research period, according to Malhotra (2020), what is meant by time is the period of time that lasts for the implementation and collection of information and data required in research. The time period for compiling this research is approximately 4 months, starting from February 2024 to May 2024. The distribution of the questionnaire itself was carried out in April 2024.

3.7 Scale Measurement

According to Malhotra (2020), there are 2 scaling techniques that can be used as a criteria or benchmarks in creating questionnaires. First, is the comparative technique, the technique in which where a direct comparison between one stimulus object and another stimulus object is present. Second, is the noncomparative technique, where there is an independent comparison of one object with another stimulus. In this particular research, the researcher chose to use non-comparative as the scaling technique with an itemized rating scale. An itemized rating scale is a measurement scale that uses numbers and short descriptions for each category. The categories are then arranged based on scale position. For that, the researcher uses a Likert scale as a measuring tool. The Likert scale is a number-based scale that has 5 response categories ranging

1-5 from "1 = Strongly disagree"; “2 = Disagree”; “3 = Neutral”; “4 = Agree”; “5 = Strongly Agree".

3.8 Operationalization of Variable

In this research, definitions of variables are used to equalize perceptions and avoid misunderstandings. The research examines 5 variables, namely Perceived Usefulness, Perceived Ease of Use, Perceived Risk, Reward and Intention to Use. From the five indicators, there were 24 indicators or questions that the researcher used when collecting data. As said on the previous sub-topic, the scale used by the researcher to determine the measurement is a 1-5 Likert scale, where number 1 indicates "Strongly Disagree" number 5 indicates "Strongly Agree". A deeper explanation of independent and dependent variables used in this research is elaborated as follows:

3.8.1 Independent Variable

Also known as exogen variables, Malhotra (2020) defines independent variable as the variable whose influence or effect are being measured and compared. In other words, independent variable is the variable that influences the dependent variables. The independent variables in this research are Perceived Usefulness, Perceived Ease of Use, Perceived Risk, and Reward.

3.8.2 Dependent Variable

Also known as endogen variables, Malhotra (2020) defines dependent variable as the variable that are used to measure and asses the influence or effect of the independent variables on the test units being studied. Thus, it can be said that dependent variable is the variable that is given an influence by the independent variable. The dependent variable in this research is Intention to Use.

Below in Table 3.1 are the definitions and indicators used by the researcher in the research variables:

Table 3.1 Operationalization of Variable

No.	Variable	Definition	Code	English Original	Measurement Item	Reference	Scale
1.	Perceived Usefulness (PU)	Perceived usefulness is a perception that arises when someone believes that using a technology can improve performance in doing some sort of actions or in other words useful for them (Davis, 1989)	PU1	Using digital banking helps you save money.	Using DANA helps me save money.	Nguyen O, T. (2020)	Likert 1-5
			PU2	The use of digital banking saves you time.	The use of DANA saves my time.		
			PU3	Using digital banking gives you access to a wide range of services.	Using DANA gives me access to a wide range of services.		
			PU4	In general, you find it useful to use digital banking.	In general, I find it useful to use DANA.		
2.	Perceived Ease-of-Use (PEOU)	Perceived ease of use is considered as a perception that arises	PEOU1	Using E-Wallet is easy as using an actual payment card.	Using DANA is easy as using an actual payment card.	Venkatesh et al. (2012)	Likert 1-5

		when someone believes that using a technology can be done easily or is easy to use (Davis, 1989).	PEOU2	The usage on how to use the E-Wallet is clear and understandable.	The usage on how to use DANA is clear and understandable.		
			PEOU3	Using the E-Wallet would be easy.	Using DANA would be easy.		
			PEOU4	Learning to use the E-Wallet would be easy.	Learning to use DANA would be easy.		
3.	Perceived Risk (PR)	Perceived risk is seen as a perception of the possible disadvantages or loss that customers might encounter, and the damage that might occur or arise when a they utilize a particular service and/or technology (Nguyen, 2020).	PR1	E-Wallet applications may not perform well.	DANA application does not perform well.	Malik & Annuar (2021)	Likert 1-5
			PR2	E-Wallet applications may not able to process the payments correctly.	DANA application was not able to process the payments correctly.		
			PR3	Using E-Wallet applications would cause hesitation to make payment.	I think that using DANA application would cause hesitation to make payment.		

			PR4	There may be caused fraud or lost money when using E-Wallet.	There may be caused fraud or lost money when using DANA.		
			PR5	Unauthorized personal data may be accessed by hackers.	Unauthorized personal data may be accessed by hackers.		
			PR6	The security systems built into E-Wallet applications are not strong enough to protect my account.	I feel that the security system built into DANA application is not strong enough to protect my account.		
			PR7	My decision to use E-Wallet to perform payment involves higher risk.	My decision to use DANA to perform payment involves higher risk.		

4.	Reward (RWR)	Reward in considered as a benefit that a person might receive from the seller right after their use of service (Ming et al., 2020).	RWR1	I think that special offers/rewards provided by E-Wallet are important to me.	I think that special offers/rewards provided by DANA are important to me.	Malik & Annuar (2021)	Likert 1-5
			RWR2	I think that the availability to e-coupons' redemption by E-Wallet is important to me.	I think that the availability to e-coupons' redemption by DANA is important to me.		
			RWR3	I would like to gain benefit from any promotions offered by the E-Wallet.	I would like to gain benefit from any promotions offered by DANA.		
			RWR4	I would like to continue to use E-Wallet as long as promotions are being offered.	I would like to continue to use DANA as long as promotions are being offered.		

5.	Intention to Use (INT)	Intention to use can be described as the interest of consumers and their desire to try out and use services (Venkatesh et al., 2003).	INT1	I'm expecting my usage of E-Wallet to increase in the future.	I'm expecting my usage of DANA to increase in the future.	Venkatesh et al. (2012)	Likert 1-5
			INT2	I intend to use the E-Wallet in the future for payment purpose.	I intend to use DANA in the future for payment purpose.		
			INT3	I will recommend the use of the E-Wallet to others.	I will recommend the use of DANA to others.		
			INT4	I plan to use the E-Wallet frequently.	I plan to use DANA frequently.		
			INT5	I will always try to use the E-Wallet to make payment.	I will always try to use DANA to make payment.		

Source: Researcher's Primary Data (2024)

3.9 Pre-test Data Analysis Techniques

In this research, the researcher used IBM SPSS Statistics 29 to run the validity and reliability of each indicator. There are several techniques used by the researcher to analyze the data obtained in this research starting with the pre-test which will be elaborated as follows.

3.9.1 Validity Testing

Validity is the correctness of a measure as well as how much by which a score genuinely represents the subject matter (Zikmund et al., 2012). In addition, Malhotra (2020), states that testing relates to how well a research concept is defined through measurement. The measured data must be free from systematic errors.

Table 3.2 Validity Test Requirements

No.	Validity Measurement	Description
1.	**Keiser Meyer Olkin (KMO)** Keiser Meyer Olkin (KMO) measure of sampling adequacy is used to evaluate the suitability of factor analysis (Malhotra, 2020).	A KMO value ≥ 0.5 states that factor analysis is feasible and adequate.
2.	**Barlett's Test of Sphericity** Barlett's Test of Sphericity is used to indicate and assess for adequate correlation between variables (Hair et al., 2019).	Significance (Sig.) Value < 0.05 states a significant relationship between variables.
3.	**Anti-image Correlation Matrices** Anti-image Correlation Matrices is a matrix that is useful for predicting relationships between variables, as well as knowing how factors explain each other (Hair et al., 2019).	Measure of Sampling Adequacy (MSA) ≥ 0.5 as a requirement for variables to be suitable and predictable for further analysis.

4.	**Factor Loadings of Component Matrix** Factor Loadings of Component Matrix is a correlation between indicators which is useful for determining the validity of each indicator to build variables (Hair et al., 2019).	Factors Loading > 0.5 is a condition for an indicator to be considered valid.

3.9.2 Reliability Testing

According to Malhotra (2020), the reliability test is utilized to see the level of reliability of a study. The level of reliability of a study can be seen from the consistency of respondents' answers to a statement submitted in the questionnaire. An indicator is declared reliable through a reliability measurement tool called Coefficient Alpha or Cronbach's Alpha. A Cronbach's Alpha value of ≥ 0.6 is required to declare the indicator reliable.

3.10 Main Test Data Analysis Techniques

After completing the pre-test, the next test that needs to be carried out is the main test. It is essential to note that some test like the validity and reliability testing which all the criteria and requirements are explained in the previous sub-topic, must be fulfilled first before proceeding to the next test. The IBM SPSS Statistics 29 was used by the researcher to complete the main test. Several more techniques used by the researcher in the main test to analyze the data obtained in this research will be elaborated as follows.

3.10.1 Classic Assumption Test

3.10.1.1 Normality Test

According to Hair et al. (2019), normality is the extent to which the sample data being tested follows a normal distribution. For the normality test in this research,

histograms and normal P-P Plot were used. From the histogram, the data is considered to be distributed normally if it shows a normal distribution pattern. On the other hand, while using the Normal P-P Plot, the data is considered to represent a normal distribution or be normally distributed if the data values fall on the diagonal line with no significant or systematic deviations. The last normality test used in this research is the One-Sample Kolmogrov-Smirnov test. A research data is said to be normally distributed if the Sig. value is ≥ 0.05.

3.10.1.2 Multicollinearity Test

According to Hair et al. (2019), the test is used with the aim of testing whether or not there is a correlation between independent variables in a regression model is called a multicollinearity test. Multicollinearity generates a shared variance between variables, which reduces the ability to project the dependent measure and determine the relative responsibilities of each independent variable. Thus, a regression model is said to be good if multicollinearity does not occur. Indicators that can be seen to determine whether or not there is multicollinearity in the regression model are the variance inflation factor (VIF) and tolerance value. A regression model is said to have multicollinearity if it has a VIF value ≥ 10 and a tolerance value ≤ 0.10.

3.10.1.3 Heteroscedasticity Test

According to Hair et al. (2019), the test used to test whether or not there is inequality of variance in the residuals of one observation and other observations in a regression model is called the heteroscedasticity test. If the data values/residuals fall within a general and random pattern,

with no significant or systematic deviations, in other words not creating a specific pattern/shape, the residuals are considered to represent a normal distribution.

3.10.2 Model Testing

3.10.2.1 Determinant Coefficient (R^2)

According to Ghozali (2018), to explain the ability of a model to display variations in the dependent variable, the coefficient of determination (R^2) is used. The higher the coefficient of determination (R^2) value displayed, the more it shows that there are limitations in the independent variable explaining variations in the dependent variable. The greater the value of the coefficient of determination (R^2), the more information provided for prediction needs on variations in the dependent variable. Due to the weakness of using the R2 value, namely the bias in the large number of independent variables, the adjusted R-square value was used in this research. The adjusted R-square value will readjust if there are additional independent variables.

3.10.3 Hypothesis Testing

3.10.3.1 F Statistical Test

According to Ghozali (2018), the simultaneous significance test or also known as the F statistical test is a test utilized to examine whether there is an influence of all independent variables on the dependent variable in a simultaneous way. In the F statistical test, all independent variables are proven to simultaneously influence the dependent variable if the calculated f value is greater than the f-table. The other indicator that can be seen is from the ANOVA table to check whether the Significance is < 0.05.

3.10.3.2 T Statistical Test

According to Ghozali (2018), individual parameter significance test or also known as partial test and T statistical test is a test utilized to examine whether each independent variable individually has an influence on the dependent variable. In making decisions on individual parameter significance tests, the significance value is lower than 0.05. Comparison to the t-table value with the calculated t value can also be used for decision making.

3.10.4 Data Analysis with Multiple Linear Regression

According to Ghozali (2018), the test used to further analyze the research data, is the multiple linear regression test. The multiple linear regression test is used to test how much strength there is between 2 or more variables and the direction of the relationship between the independent and dependent variables. The multiple linear equations are elaborated in the following formula:

$$Y = a + b1.X1 + b2.X2 + \ldots$$

Description:

Y = Dependent Variable (DV)

a = Constant Coefficient

b1, 2 = Coefficient in regression

X1, 2 = Independent Variables (IV)