ANALYSIS OF THE EFFECT OF THE IMPLEMENTATION OF WEB-BASED E-MEMBERSHIP PROGRAM TOWARDS CUSTOMER LOYALTY (CASE STUDY, PT .DKB)

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ABSTRACT

PT.DKB is a company engaged in Fashion Retail sector, PT.DKB has a loyalty program which is designed to measure the loyalty of PT.DKB customers. At the beginning of 2019, the PT.DKB loyalty program changed from a physical membership card to an electronic membership card which support is provided via a website. This study is done to analyze the factors affecting the loyalty of PT.DKB customers with changes in the loyalty program to electronic membership with website-based usage. The factors analyzed in this study are Website Quality, E-Service Quality, Ease of Use, and Perceived Usefulness with the target Customer Loyalty variable. The study was conducted with a total sample of 155 respondents. The analysis is performed by testing validity using Item to Total Pearson Correlation with a correlation level ≥ 0.5, reliability testing using Cronbach's alpha with a minimum value of Cronbach's alpha ≥ 0.6, and hypothesis tests with the condition that a hypothesis is accepted if P-value ≤ 0.05. The test results performed with the SmartPLS application indicate that there are two indicators which correlation level is less than 0.5 both of those indicators are removed from the next step of the test. Reliability tests result in values above 0.6 for all variables. Hypothesis tests performed show that four of the six hypotheses were accepted in this study. The results of this study indicate that the Perceived Usefulness factor directly influences the loyalty of PT.DKB customers and indirectly that the loyalty of PT.DKB customers are influenced by Website Quality and E-Service Quality. From the results of this study, there are three factors which influenced the customers loyalty of PT.DKB. Those factors are: Website Quality, E-Service Quality, and Perceived Usefulness by increasing the function regarding these factors, PT.DKB could retain and increase their customers loyalty.

Keywords: *Customer Loyalty, Electronic Membership, SmartPLS, Website Based Membership, Affecting Factors*

1. INTRODUCTION

Customer loyalty has always been crucial for any business regarding any sector, loyal customers of a business have an essential role in sustaining the business itself and creating competitive advantages. The customer's loyalty could be measured in many ways; however, in PT.DKB their customer's loyalty is measured by the number of times the membership card is used for in transactions.

PT.DKB is a company engaged in Fashion Retail sector that has various sales facilities which are spread all over Indonesia, both offline and online. For each brand that its own, they have their websites and physical store and also collaborations with online marketplaces and department stores. At the moment, PT.DKB has more than 300 physical store (showrooms) and more than 1000 counters in department stores spread over different regions in Indonesia.

The loyalty program of PT.DKB was first launched in the form of a physical card to its customers. This form of membership card could only be obtained at their showrooms, where the store assistant proceeds to do the member registration—the Member of PT.DKB loyalty programs got more advantages than those who are not. Those advantages include being the first to know about a new promotion, discount and events sometimes these events are exclusively held for members only.

However, this physical membership card has its problems. The problem caused by this physical card affects both the company and their customers but

most importantly, the customers. The problems that arise from the physical membership card are:

✓ Wrong card activation when new member register, in this case, it means that the registered card number and the card given to the customers have a different number.
✓ The registration process of a new member took a long time that could take more than 24 hours or even a week.
✓ Member loss their membership card and it might be found or taken or used by an unauthorized person.
✓ Manufacturing fees for producing the card that got wasted because the card lost or wrong card registration and activation because those cards are less likely to be returned and even if it does return the card could no longer be used.
✓ And other problems

In order to resolve the problems arise from using a physical membership card, PT.DKB improved its loyalty program. The improvement done is to change the previously physical membership card into an electronic membership card. By implementing this change, the company wish to eliminates the existing problems and to increase their customer loyalty level. The implementation of the electronic membership began in early 2019 and done in two steps. The first step is to stop the physical card distribution and releasing membership card in electronic form; this step was done in February 2019. The second step is to release the website that will be used by the members to access their membership information including usage of the membership and for a new member to do self – registration the second step was done on April 2019. This change is also one of the parts of customer relationship management done by PT.DKB.

Although one of the purposes of changing physical card to electronic card was to increase customer loyalty, it has not shown any significant increase. The data used for the comparison in figure 1 are data between the year 2018 and February 2019 to October 2019. This comparison is made by considering the time of electronic membership implementation, which star in February 2019 and the start of data collection for this study (November 2019). The data comparison displayed in figure 1 shows that both new member registration and membership transaction in total show no significant increase.

Figure 1: Comparison Graph between 2018 and 2019

This study is done to find out and analyze what factors influence the loyalty of PT.DKB customers after changing membership from a physical card to an electronic membership (E-membership) that is used or accessed through the website. Where customer loyalty is one of the most important assets for the company [1] such as PT.DKB. because loyal customers could become ambassadors and help maintain business continuity[5][4]. Besides, technological developments and lifestyle changes could influence the level of customer loyalty [2]. Therefore, the results of the analysis performed are expected to identify what factors affect the loyalty of PT.DKB customers and whether the web-based electronic membership program (E-Membership) affects customer loyalty. As well as providing input on which factors should be maintained and improved.

2. LITERATURE REVIEW

This chapter explains the variables uses in this study and also regarding customer loyalty as part of customer relationship management.

2.1 Customer Loyalty

Customer loyalty is a vital asset to any company in the long term [1]. Customers who are loyal to a company are considered necessary no matter what sector the company engages in a competitive market. Studying and understanding customer loyalty is very important, especially in the current circumstances where there is a change in technology, context, and lifestyle. Loyalty is different attitudes, feelings, and behaviors of each different individual who creates a sense of interest in a product, service, and organization or if a customer of a product has an interest or intent to repurchase [2].

Loyal customers are indicated by the customer who desires to or repeatedly purchases products or services from the same source or brand [3]. Loyal

customers could also be identified as A customer who returns to a shop periodically in order to buy something to fulfil his/her desire [4]. Loyal customers could become an ambassador for the brand [5] and recommend it to other people in many different ways, and one of them is word of mouth [4]. While the concept of loyalty has been thoroughly researched, the factors influencing the creation of loyalty and the factors influencing it are very diverse and need to be re-examined [6].

2.2 Website Quality and Loyalty

Website Quality is one of the dimensions of e-Service Quality. If a company's website could guarantee safety, customers will trust the company more than before [3]. There are six factors of website quality, namely: information quality, security, website functionality, customer relationship, responsiveness and fulfilment, and visual appeal [7]. The quality of a website could be seen from two points of view: the programmer's point of view and the user's point of view. From the perspective of website users, the quality factors that are prioritized are usability, efficiency, and others [8]. The quality of the website is related to the ability and extent to which the website could provide the correct information and services to its users [9].

The quality of the website visited and used by customers is one of the crucial factors from the customer's point of view. Therefore, it is essential for any business who use a website to engage with their customers to develop a website that is easy to understand [10]. The quality of a website influences customer satisfaction and loyalty, both directly and indirectly [4]. A website with good quality reduces the risk perception that the customers have about a brand. The quality of the website also affects the attitude of the customers in inviting their colleagues to shop there [11]. A well-designed website that emphasizes the aspects of appearance, consistency, information and features customers need could impact customer confidence, satisfaction, and loyalty [12].

2.3 Ease of Use and Loyalty

Ease of use refers to the user's expectation level for the convenience of an information system or technology [13]. How simple the new system or technology could be used, the simpler and more convenient it is, the better. [14]. In this context, convenience also means that the system or technology is easy to operate and accessed [15]. A

useful technology or application could become useless if the mode of use is difficult to understand [16]. Therefore, Ease of use has a positive effect on a target in combination with Perceived Ease of Use [17].

Based on a survey about the effects of the Ease of use of a website for customer satisfaction in 2017, show that the Ease of use of a website or application has a significant impact on customer satisfaction [18]. Not only does Ease of use affect customer satisfaction, but it also affects customer loyalty, especially if customer loyalty is affected by the website [19]. The Ease of use of a system or technology heavily influenced customer satisfaction and loyalty [17].

2.4 Perceived Usefulness and Loyalty

Perceived Usefulness is defined as the ability of a user of a website, program, and application to assess that by using the system, it will improve their performance this assessment is performed by the user subjectively [13]. In this case, users also assess to what extent does the system benefits them [20]. Several previously conducted studies show that Perceived Usefulness has a positive impact, especially in the technological field. The Perceived Usefulness is supported and influenced by Perceived Ease of use or Ease of use. If the users of the technology do not know the Usefulness of the technology, they might not be encouraged to use it [21]. The perceived Usefulness also affects the user's desire to use a system or technology. The higher the user's desire to use the system, the better the use of technology [14].

Based on research conducted in 1989 by Davis et al., When customers realize or know that using an innovation could improve their performance, they will be more loyal to the innovation [22]. Research conducted in 2014 also found that perceived usefulness has a positive effect on customer loyalty [19]. Similarly, with research conducted in 2018, this study found that there was a link between perceived Usefulness and loyalty [23].

2.5 E-Service Quality and Loyalty

E-Service Quality has a significant impact on companies that use the internet base to connect with their customers. Website quality included as E-Service Quality plays a vital role in determining the quality of the customer experience [24]. Website quality, which is part of E-Service Quality, plays an essential role in determining the quality of the customer experience. There are five components of

E-Service Quality. Those components are trust, design, usability, information, and empathy. However, the basis of service quality is reliability, responsiveness, Ease of use, and security [3]. The influence of service quality on customer loyalty was investigated in 2013 for the offline aspect environment or condition, yet in the online aspect, service quality could have a different effect [11].

Customer loyalty is influenced by customer responses to the quality of online services [25]. The quality of online services has an impact that could determine the success of an online service. Good quality online services could affect increasing customer loyalty [24]. The four basic dimensions of E-Service Quality have a strong relationship with the quality of the customer. The content of the website and the security of a company website are the top priorities that determine customer loyalty [3].

2.6 Loyalty as Part of Customer Relationship Management

Customer Relationship Management (CRM) is an integrated methodology, software, or information system which generally uses the Internet to help companies manage business relationships with their customers in an organized manner [26]. Membership in CRM plays a role in assisting the company in collecting and providing data. These data are then analyzed in order to obtain specific information regarding the relationship between the company and customers [27]. The information gained from the analysis might be used in order to develop the company business further.

Membership as a form of a loyalty program is popular with buyers or customers of particular brands or products. CRM and loyalty have become essential in developments in the retail field [28]. Technological and organizational factors have a significant influence on CRM; in this case, mobile CRM (m - CRM). Technological innovation and business management strategies in developing CRM are crucial. There is a need for technical support that could help with the CRM strategy set by the management team [29].

3. RESEARCH METHODOLOGY

This section explains the theoretical framework used in the research and the research hypotheses. The research hypotheses are derived from the theoretical research framework. Also, this section will explain the techniques used to collect and analyze the data

3.1. Theoretical Framework

The framework used in this study is based on the two factors that originated from the early version of TAM (Technology Acceptance Model). Those two factors are Perceived Usefulness (PU) and Perceived Ease of Use (PEU). TAM was introduced and developed in 1986 by Fred Davis, which was perfected in 1996 [13]. These two factors were chosen because some previous studies have shown that perceived Usefulness and Ease of use are related to customer loyalists [19]. Other factors could influence these two factors of TAM.

TAM is widely used in various studies that explain and estimate the level of acceptance and use of something new, especially in the field of technology [14]. The concept of TAM itself is an information system theory, the model of which is used to explain whether or not a technology or system could be accepted by users using a behavioral theory [30].

These two factors have been chosen as the basis for determining the loyalty of PT.DKB customers due to the nature of the PT.DKB loyalty program currently based on website usage. Membership acceptance upon transition to using physical card membership to electronic cards accessible through the website might significantly affect their loyalty to PT.DKB. This effect on customer loyalty might be caused by the different way of membership usage, which could be said very different from it was before from no technology support to fully supported by technology, in this case, a website. Commonly, customer loyalty is related to customer satisfaction; however, this concept is less precise. Customer satisfaction is an assessment of the business service per the customer's standards. A positive satisfaction score is not enough to influence loyalty [31].
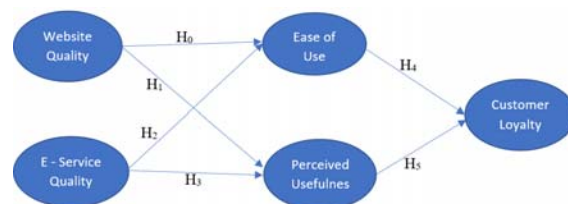

Figure 2: Research Framework

Figure 2 shows the framework and variables used in this study. The dependent variable (Y) is Customer Loyalty, and the independent variables are (X): Website Quality, E-Service Quality, Ease of Use, and Perceived Usefulness. Followings are the description of the hypotheses shown in figure 2 and used in this study:

- ✓ H_0: Website Quality has an indirect effect on customer loyalty through Ease of Use
- ✓ H_1: Website Quality has an indirect effect on customer loyalty through Perceived Usefulness
- ✓ H_2: E-Service Quality has an indirect effect on customer loyalty through Ease of use
- ✓ H_3: E-Service Quality has an indirect effect on customer loyalty through Perceived Usefulness
- ✓ H_4: Ease of use has a direct effect on Customer Loyalty
- ✓ H_5: Perceived Usefulness has a direct effect on Customer Loyalty

Table 1 below shows the indicators for each of the variables used in this study. These indicators are given a code for easier identification later.

Table 1: Variable and Indicator

Variable	Code	Indicator
Ease of Use	EoU1	Easy to understand the technology
	EoU2	Easy to use technology
	EoU3	Easy to Access
Perceived Usefulness	PU1	Improve services
	PU2	Improve Efficiency
	PU3	Increase usage
Website Quality	WQ1	information Quality
	WQ2	Security
	WQ3	Customer Relationship
	WQ4	Responsiveness and Fulfilment
E-Service Quality	EQ1	Reliability
	EQ2	Design
	EQ3	Usability
	EQ4	Trust
Customer Loyalty	CL1	Repeat purchase
	CL2	Purchase periodically
	CL3	Introduce to others

The data measurements used in this study for each indicator is done using the Likert Scale. Likert scale is commonly used in the questioner, survey, and research [32]. Using a Likert scale means that the respondent answer to a set of questions by choosing a level of agreement for each question. The scale used in this study could be seen in table 2.

Table 2: Likert Scale[32]

Scale	Score
Strongly Agree	5
Agree	4
Doubtful	3
Disagree	2
Strongly Disagree	1

3.2. Data Collection

The population in this study are active members of PT. DK loyalty program. From the population, some samples are calculated and taken using a simple random sampling technique. The technique used to calculate the sample in this study is the Slovin technique (figure 3), which confidence level of 95%. The active members of PT.DKB loyalty program used in this study are members who are doing some amount of transaction within two months before the data collection started. The data collection for this study started in November 2019, so the population accounted for this sample calculation are members who are active between September 2019 to October 2019.

$$n = \frac{N}{1+N.e^2}$$

Figure 3: Slovin Sampling Technique

For the Slovin technique calculation shown in figure 3, N is the population used in this study which is active members of the loyalty program. E is the margin of error used which is 0,08, and n is the sample resulted from this calculation. Figure 4 shows the calculation process of the Slovin technique for the sample used in this study.

$$n = \frac{14350}{1 + 14350 . \, 0,08^2}$$

$$n = \frac{14350}{1 + 14350 . \, 0,0064}$$

$$n = \frac{14350}{1 + 91,84}$$

$$n = \frac{14350}{92,84}$$

$$n = 154,567$$

Figure 4: Sample Calculation with Slovin Technique

The sample resulted from the calculation is 154,567; this number is rounded to 155 samples. Data collection for this study is done by distributing online questionnaires via Google Form. The question in the questionnaire was based on the indicators in the table. 1. Variables and indicators. In total, there were seventeen (17) questions for the five (5) variables used in this study. This Google Form questionnaire are distributed by chain mail from one person to another. With chain mail target

being the member of the loyalty program or the new member or some one who is interested in becoming a member.

3.3. Data Analysis

The data analysis in this study is separated into two parts. The first part is the measurement model, and the second part is the structural model.

3.3.1. Measurement Model

The variables listed in the theoretical framework of Figure 2 will be tested for validity and reliability. Testing the validity and reliability of the study variables addressed is done using the Smart PLS application. Validity measurements are performed using Item to Total Pearson Correlation (figure 5), with the assumption that an indicator has a high degree of validity if the correlation values are higher than 0,5 or ≥ 0.5 [33].

$$r_{xy} = \frac{N\Sigma xy_{-(\Sigma x)}(\Sigma y)}{\sqrt{(N\Sigma x^2 - (\Sigma x)^2(N\Sigma y^2 - (\Sigma y)^2)}}$$

Figure 5: Item to Total Pearson Correlation

As for reliability, the measurements are performed using Cronbach's Alpha (figure 6). it will be considered reliable if the value of the Cronbach's Alpha is higher 0, 6 than $\geq 0, 6$ [33].

$$r_{11} = \left(\frac{n}{n-1}\right)\left(1 - \frac{\Sigma \sigma_t^2}{\sigma_t^2}\right)$$

Figure 6: Cronbach's alpha

3.3.2. Structural Model

The second part of the analysis done in this study is performed using the regression model. The regression models for this study are made according to the research framework shown in figure 2.

$$Y = \beta_{10} + \beta_{11}.X3 + \beta_{12}.X4 + \epsilon 1 \qquad (1)$$

$$X3 = \beta_{20} + \beta_{21}.X1 + \beta_{22}.X2 + \epsilon 2 \qquad (2)$$

$$X4 = \beta_{30} + \beta_{31}.X1 + \beta_{32}.X2 + \epsilon 3 \qquad (3)$$

Information on the regression model of this study:

     Y = Customer Loyalty
     X1: Website Quality
     X2: E-Service Quality
     X3: Ease of Use

     X4: Perceived Usefulness

Based on the regression models above, the hypotheses testing used in this study are:

✓ H0: Website Quality has an indirect effect on customer loyalty through Ease of Use
$$H_0: \beta_{21} = 0$$
$$H_{a0}: \beta_{21} \neq 0$$

✓ H1: Website Quality has an indirect effect on customer loyalty through Perceived Usefulness
$$H_1: \beta_{31} = 0$$
$$H_{a1}: \beta_{31} \neq 0$$

✓ H2: E-Service Quality has an indirect effect on customer loyalty through Ease of use
$$H_2: \beta_{22} = 0$$
$$H_{a2}: \beta_{22} \neq 0$$

✓ H3: E-Service Quality has an indirect effect on customer loyalty through Perceived Usefulness
$$H_3: \beta_{32} = 0$$
$$H_{a3}: \beta_{32} \neq 0$$

✓ H4: Ease of use has a direct effect on Customer Loyalty
$$H_4: \beta_{11} = 0$$
$$H_{a4}: \beta_{11} \neq 0$$

✓ H5: Perceived Usefulness has a direct effect on Customer Loyalty
$$H_5: \beta_{12} = 0$$
$$H_{a5}: \beta_{12} \neq 0$$

Hypotheses testing is performed using the SmartPLS application. A hypothesis will be accepted if the p-value $\leq 0,05$ if greater than 0.05 than the hypothesis will be rejected.

4. RESULT AND DISCUSSION

This chapter discusses the result analysis of the collected research data. As previously stated, the research data were obtained from the questionnaire distribute via Google form.

4.1. Data Collection

The questionnaires distributed via Google form are downloaded and processed in excel form. As mentioned earlier, this questionnaire was intended for members of the PT.DKB membership program. The total number of respondents from the

distributed questionnaire are 187 respondents. After going through the screening or cleaning process, Of the total 187 questionnaires respond 155 questionnaires are deemed fit to be used. The questionnaires data are then saved in the form of CSV file to be processed in the SmartPLS application. Figure 7 shows the first version of the framework in the SmartPLS application.
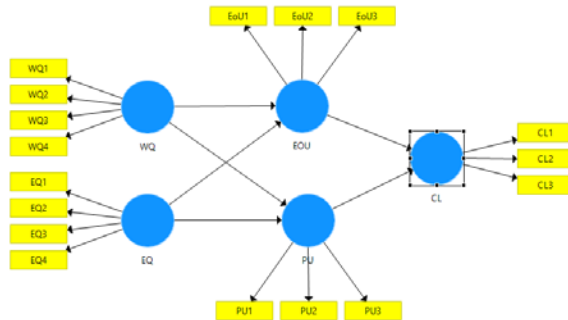

Figure 7: First Version of the SmartPLS Framework

4.2. Validity and Reliability Testing

As stated previously, the validity testing is done by using Item to Total Pearson with minimum correlation value ≥ 0.5. In case the value is lower than 0,5 than the indicator is not valid. This validity testing is done to find out the validity of the indicators and variables used in this study.

The validity testing results for the website quality indicators show that one of the indicators is not valid (WQ2), meaning the correlation value is below 0,5 (Table 3). This indicator is removed, and the variable website quality is retested to ensure that all the indicators are valid (Table 4). The result of retesting shown in table 4 shows that the remaining indicators are valid.

Table 3: The Validity Test of Website Quality Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
WQ1	0,624	0,5	VALID
WQ2	0,489	0,5	NOT VALID
WQ3	0,771	0,5	VALID
WQ4	0,849	0,5	VALID

Table 4: The Validity Re-Tests of Website Quality Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
WQ1	0.642	0.5	VALID
WQ3	0.799	0.5	VALID
WQ4	0.862	0.5	VALID

The results of the validity test done on variables E-Service Quality shows that one of the four indicators (EQ4) has the correlation value less than 0,5 (table 5). This indicator will be removed from the framework, and in order to ensure the other indictor are still valid, are testing is done (Table 6). The retesting result shows that the other indicators are still valid even after eliminating the EQ4 indicator.

Table 5: The Validity Test of E-Service Quality Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
EQ1	0.878	0.5	VALID
EQ2	0.876	0.5	VALID
EQ3	0.508	0.5	VALID
EQ4	0.312	0.5	NOT VALID

Table 6: The Validity Re-Tests of E-Service Quality Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
EQ1	0.898	0.5	VALID
EQ2	0.879	0.5	VALID
EQ3	0.510	0.5	VALID

As for the other variables, the testing result shows that every indicator of those variables is valid. Each indicator has a correlation value higher than 0,5. The test result for variable Ease of Use indicators could be seen in table 7, variable Perceived Usefulness indicators test result could be seen in table 8, and Table 9 shows the test result for variable Customer Loyalty indicators.

Table 7: The Validity Test of Ease of Use Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
EoU1	0.627	0.5	VALID
EoU2	0.773	0.5	VALID
EoU3	0.879	0.5	VALID

Table 8: The Validity Test of Perceived Usefulness Variable

Indicator	Item to	Correlati	Descripti

Code	Total Pearson Correlation	on Limits	on
PU1	0.631	0.5	VALID
PU2	0.743	0.5	VALID
PU3	0.922	0.5	VALID

Table 9: The Validity Test of Customer Loyalty Variable

Indicator Code	Item to Total Pearson Correlation	Correlation Limits	Description
CL1	0.889	0.5	VALID
CL2	0.873	0.5	VALID
CL3	0.763	0.5	VALID

The reliability test is done in order to find out the level of reliability and consistency of the variable indicators used in the study. The reliability testing is performed using the SmartPLS application as previously stated. It will be accepted or stated as reliable if the value of Cronbach's alpha is ≥ 0,06.

Table 10: The Results of Reliability Test (Cronbach's Alpha)

	Cronbach's Alpha	Cronbach's Alpha Limit
Website Quality	0,657	0,6
E-Service Quality	0,700	0,6
Ease of Use	0,672	0,6
Perceived Usefulness	0,643	0,6
Customer Loyalty	0,813	0,6

According to the reliability testing shown in figure 10. All variables used in this study are reliable as their value of Cronbach's alpha is higher than 0,6.

4.3. Structural Model Testing

From the results of the validity and reliability testing, two indicators are rejected and will not be used in the further analysis process. After removing the two rejected indicators (WQ2 and EQ4), the research framework is readjusted and changed. The final research framework for this study is shown in figure 8 below:
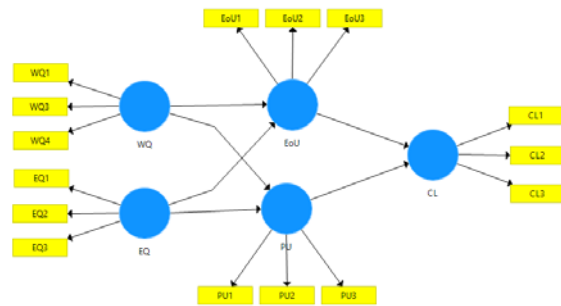

Figure 8: Finale Version of SmartPLS Framework

The adjusted research framework is then used for the next step of analysis in this study. Table 11 and figure 9 show the results of the path coefficient and p-value calculation performed using SmartPLS application as part of the structural model analysis.

Table 11: Path Coefficient and P-Value Results

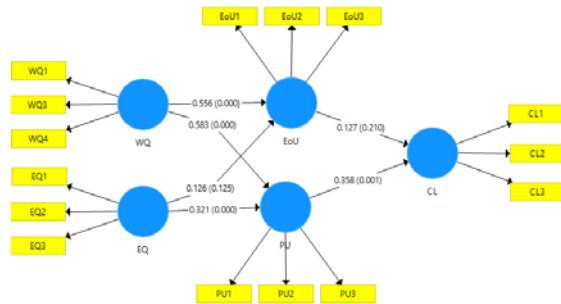| Variable	Path Coefficient	P-Value
EQ → EoU	0,126	0,125
EQ → PU	0,321	0,000
EoU → CL	0,127	0,210
PU → CL	0,358	0,001
WQ → EoU	0,556	0,000
WQ → PU	0,583	0,000

Figure 9: Path Coefficient and P – Value SmartPLS Framework

By referring to the results of the path coefficient in table 11, the regression model equation of this study could be explained as:

✓ The customer loyalty is affected by variable Perceived usefulness with the coefficient value 0,358 and by variable Ease of Use with the coefficient value of 0,127
$Y = \beta_{10} + \beta_{11}.X3 + \beta_{12}.X4 + \epsilon1$
$Y = 0,127$ EoU + 0,358 PU

✓ Ease of Use is affected by variable Website Quality with the coefficient value 0,556 and by variable E – Service Quality with the coefficient value of 0,126
$X3 = \beta_{20} + \beta_{21}.X1 + \beta_{22}.X2 + \epsilon2$
$X3 = 0,556$ WQ + 0,126 EQ

✓ Perceived usefulness is affected by variable Website Quality with the coefficient value 0,556 and by variable E – Service Quality with the coefficient value of 0,126

$X4 = \beta_{30} + \beta_{31}.X1 + \beta_{32}.X2 + \epsilon_3$

$X4 = 0,583\ WQ + 0,321\ EQ$

The result of the p-value calculation for this study is shown in table 11. Referring to the p-value results, the analysis of the hypotheses in this study are:

✓ H0: Website Quality has an indirect effect on customer loyalty through Ease of Use

The p-value between WQ (Website Quality) and EoU (Ease of Use) as shown in table 11 is 0.000, and this value is less than 0.05 (0,000 ≤ 0.05), so this hypothesis is **accepted**. It could also be concluded that the quality of the website indirectly influences customer loyalty with the presence of Ease of use intermediary.

The quality of the information and the responsiveness of information update in the electronic membership (E - membership) website might have caused it. The electronic membership (E - membership) website are easy to understand and could be trusted by members of the electronic membership (E - membership). Not only it might have been caused by the website information, though it might also be caused by the fast update of information on the website, which is considered sufficient and does not disturb the members in carrying out their transaction or website access.

✓ H₁: Website Quality has an indirect effect on customer loyalty through Perceived Usefulness

The p-value between WQ (Website Quality) and PU (Perceived Usefulness) as shown in table 11 is 0.000, and this value is less than 0.05 (0.000, ≤ 0.05), so this hypothesis is **accepted**. It can also be concluded that the quality of the website indirectly affects customer loyalty with the presence of intermediaries of perceived Usefulness.

The quality of the information displayed and the information updates that take place on the Electronic Membership (E-Membership) website help members of the Electronic Membership (E-Membership) in using use and monitoring their transaction. The information displayed on the Electronic Membership (E-Membership) website also feels quite convincing and can be trusted by members of the Electronic Membership (E-Membership).

✓ H₂: E-Service Quality has an indirect effect on customer loyalty through Ease of use

The p-value between the variables EQ (E-Service Quality) and EoU (Ease of Use) as shown in table 11 is 0.125, and this value is higher than 0.05 (0.125 > 0.05), so this hypothesis is **rejected**. It could also be concluded that E-Service Quality has no indirect influence on Customer Loyalty with the presence of an Ease of Use intermediary.

It might be caused by members' difficulty in understanding some of the information on the electronic membership (E - membership). Some words used to display information might feel unfamiliar o users who do not know and understand the meaning of those words might feel confused or hard to understand.

✓ H₃: E-Service Quality has an indirect effect on customer loyalty through Perceived Usefulness

The p-value between the variables EQ (E-Service Quality) and PU (Perceived Usefulness) as shown in table 11 is 0.000, and this value is less than 0.05 (0.000 ≤ 0.05), so this hypothesis is **accepted**. It could also be concluded that E-Service Quality indirectly influences customer loyalty with the presence of intermediaries Perceived Usefulness.

The members of the electronic membership (E-membership) considered the electronic membership (E-membership) website is useful for them. It helps them to verify their data which was inputted during registration and their transactional data. It meets the needs of members to ensure that their membership information is accurate and correct.

✓ H₄: Ease of use has a direct effect on Customer Loyalty

The p-value between the variables EoU (Ease of Use) and CL (Customer Loyalty as shown in table 11 is 0.210, and this value is higher than 0.05 (0.210 > 0.05), so this hypothesis is **rejected**. It could also be concluded that Ease of use does not affect customer loyalty.

The members might have found that the usage of their membership card through the Electronic Membership (E - Membership)

website is difficult. To use their membership card during a transaction, users must first enlarge the card image on the smartphone screen, and the membership card could not be downloaded or saved offline. Sometimes this could prevent or create trouble for members in using their electronic membership (E-membership).

✓ H_5: Perceived Usefulness has a direct effect on Customer Loyalty

The p-value b between the variables PU (Perceived Usefulness) and CL (Customer Loyalty) as shown in table 11 is 0.000, and this value is less than 0.05 (0.001 ≤ 0.05), so this hypothesis is **accepted**. It could also be concluded that that E-Service Quality has an influence on Customer Loyalty.

The opinion from members and prospective who used the electronic membership (E - membership) website might cause it. They believe that the website is essential and helpful. The appearance of this website helps members use and view their membership information, both personal information and transaction information. This website also helps potential members who want to register for membership.

The summary of the hypotheses analysis in this study is shown in table 12.

Table 12: Hypotheses Analysis Summary

Hypothesis	Description	P-Value	Results
H0	Website Quality has an indirect effect on customer loyalty through Ease of Use	0.000	Accepted
H1	Website Quality has an indirect effect on customer loyalty through Perceived Usefulness	0.000	Accepted
H2	E-Service Quality has an indirect effect on customer loyalty through Ease of use	0.125	Rejected
H3	E-Service Quality has an indirect effect on customer loyalty through Perceived	0.000	Accepted

	Usefulness		
H4	Ease of use has a direct effect on Customer Loyalty	0.210	Rejected
H5	Perceived Usefulness has a direct effect on Customer Loyalty	0.001	Accepted

5. CONCLUSION AND RECOMMENDATIONS

This chapter explains the conclusions and recommendations from the results of the study. The written conclusions and recommendation are based on an analysis of the results of the study.

5.1. Conclusion

This study analyzes the factors affecting PT.DKB Customer Loyalty after it changes to an electronic card supported by a website. The factors analyzed in this study are Website Quality, E-Service Quality, Ease of Use, Perceived Usefulness, and Customer Loyalty. From the previously analyzes of these five variables, the conclusion for this study are:

✓ The results from the hypothesis test performed shows that two of the six hypotheses in this study were rejected, and four other hypotheses were accepted.
- o Website quality has an indirect effect on Customer Loyalty PT.DKB, both through the Ease of use and through Perceived Usefulness intermediaries.
- o E-Service Quality indirectly impacts PT.DKB customer loyalty through the Perceived Usefulness intermediary, but not through the Ease of Use intermediary.
- o Directly experienced use influences PT.DKB customer loyalty. However, PT.DKB customer loyalty is not affected by Ease of use.
✓ Based on the results of the data processing and analysis, Website Quality influences the customer loyalty of the members of the PT.DKB membership. This is possible because of the quality of the information displayed and the information updates that take place on the electronic membership website are considered easy to understand, reliable and helpful.
✓ Based on the results of the data processing and analysis, E-Service Quality influences the customer loyalty of the members of the PT.DKB membership. This may be due to the presence of the electronic membership website,

which is considered useful and meet the necessities of its members in verifying data and using their membership cards.

✓ Based on the results of data processing and analysis, Perceived Usefulness impacts the customer loyalty of members of the PT.DKB membership. This is possible because the presence of the electronic membership website helps its members to use and view their data and makes it easier for future members to register as new members.

5.2. Recommendations

Based on the discussions and conclusions made, there are recommendations for both follow-up research and PT.DKB:

✓ PT.DKB should continue to maintain and increase the quality of the website, the quality of the e-service and the perceived Ease of use because these three factors have been proven to influence customer loyalty in the survey conducted.

✓ PT.DKB could further improve the quality of the website on its electronic membership website by displaying information on the website using words or phrases or terms that are easier to understand and through adding a Live Chat or Contact feature on the website.

✓ PT.DKB could further improve the E-Service Quality factor on its Electronic Membership website by adding a personal data renewal function on the website so that if there is an inaccuracy in the data entered during registration, users can fix it without having to go through a request to the PT.DKB headquarters. However, this data renewal function should be limited as not to affect important data related.

✓ PT.DKB could further improve the Perceived Usefulness factor on its electronic membership website by adding a notification feature on the website so that when members access their web pages they could immediately get the latest information on events/promotions or even special promotions designed for them. PT.DKB could also make the electronic membership website more adaptive in terms of interface.

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