THE INFLUENCE OF SYSTEM QUALITY, PERCEPTION OF BENEFITS, AND CUSTOMERS CONVENIENCE OF USING INTERNET BANKING ON LOYALTY

(Case Studies on Customers of PT. Bank BCA, Tbk. KCU Gajah Mada)

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Abstract - The purpose of this research was to analyze the influence system quality, perceived of usefulness and ease of use on customer loyalty. This research was conducted based on quantitative approach with descriptive statistic analysis. Calculation on research was used by SPSS 22.00.

Population on research were customers of PT BCA, Tbk KCU Gajah Mada who were using internet banking. Purposive random sampling was used a sampling method for 180 people total sample. Data was collected through questionnaire which validity and reliability that already verified. Hypothesis testing by using t-test and F-test.

Result have show that: (1) System quality had effect and related on customer loyalty by t-count = 25,918, with significance value of 0,000 < 0,05 and partial correlation value 52,41% (2) Perceived of usefulness had effect and related on customer loyalty by t-count = 4,356, with significance value of 0,042 < 0,05 and partial correlation value 9,79% (3) Perceived ease of use had effect and related on customer loyalty by t-count = 2,053, with significance value of 0,000 < 0,05 and partial correlation value 2,34% (4) System quality, perceived of usefulness, and perceived ease of use had effect and related on customer loyalty by F-count 357,07 > F-table 2,66.

Keywords: System quality, perceived of usefulness, perceived ease of use, and customer loyalty.

Abstrak - Penelitian ini bertujuan untuk menganalisis pengaruh kualitas sistem, persepsi manfaat, dan kemudahan penggunaan internet banking terhadap loyalitas nasabah. Penelitian ini menggunakan pendekatan kuantitatif dengan analisis statistik

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deskriptif. Perhitungan dalam penelitian menggunakan SPSS 22.00.

Populasi pada penelitian adalah nasabah PT BCA, Tbk KCU Gajah Mada yang menggunakan internet banking. Sampel ditentukan berdasarkan metoda purposive random sampling, jumlah sampel sebanyak 180 orang. Teknik pengumpulan data menggunakan metoda survei, dengan kuesioner yang telah diuji validitas dan reabilitasnya. Pengujian hipotesis dilakukan dengan menggunakan uji t dan uji F.

Hasil penelitian menunjukkan bahwa: (1) Kualitas sistem mempunyai pengaruh dan memiliki keterkaitan terhadap tingkat loyalitas nasabah, dibuktikan dari nilai t hitung sebesar 25,918, signfikansi 0,000 < 0,05 dan nilai korelasi parsial 62,41% (2) Persepsi manfaat mempunyai pengaruh dan memiliki keterkaitan terhadap tingkat loyalitas nasabah, dibuktikan dari nilai t hitung sebesar 4,367, signifikansi 0,042 < 0,05 dan nilai korelasi parsial 9,79% (3) Persepsi kemudahan penggunaan mempunyai pengaruh dan memiliki keterkaitan terhadap tingkat loyalitas nasabah, dibuktikan dari nilai t hitung 2,053, signifikansi 0,000 < 0,05 dan nilai korelasi parsial 2,34% (4) Kualitas sistem, persepsi manfaat, dan persepsi kemudahan penggunaan mempunyai pengaruh dan memiliki keterkaitan terhadap tingkat loyalitas nasabah, dibuktikan dari nilai F hitung 357,079 > F tabel 2,66.

Kata Kunci *: Kualitas sistem, persepsi manfaat, persepsi kemudahan penggunaan, dan loyalitas nasabah*

I. INTRODUCTION

The number of banking industries in Indonesia is quite large. Based on banking statistical data, it is known that there are 4 State-Owned Banks, 42 National Private Commercial Banks (BUSN) and 21 Non-Foreign Exchange BUSNs, then 27 Regional Development Banks, 12 Joint Foreign Banks, and 9 Foreign Banks (Financial Services Authority (OJK), 2019). The existence of a large number of banks is expected to increase in meeting the needs of society in banking services. The increasing need for services in the banking sector goes hand in hand with the development of technology, particularly information technology. The rate of development of information technology has created intense competition in the struggle for market share.

The use of information technology is important, one of which is indicated by the support of the Financial Services Authority (OJK) as a state institution that oversees banking activities. OJK established regulations and made its latest changes regarding the Implementation of Risk Management in the Use of Information Technology by Commercial Banks in OJK Regulation Number 13 / POJK.03 / 2020 (Financial Services Authority (OJK), 2020). There are various forms of application of the use of information technology in the banking sector. Whatever form there is, of course, has the aim of maximizing the fulfillment of community needs by providing the best service. One of the banking services that uses information technology is customer service or customer service. In meeting customer needs, the customer service program provided by the bank seeks to help customers make transactions and facilitate customers in submitting complaints about difficulties they are facing while using the facilities, accompanied by providing the best solutions. Customer service systems that utilize Information and Communication Technology (ICT) are known as electronic service systems or E-services (E-services). Electronic services (E-service) is a very generic term, usually referring to the provision of services via the internet, so electronic

services can also include internet commerce, may also include non-commercial services (online) (Taufiqurokhman & Satispi, 2018, p. 232). In this research, customer service is meant as services that use information technology or electronic services, namely the use of internet banking. Various benefits of internet banking services include making financial transactions with the internet network, for example transferring funds to other banks or banks, paying telephone bills, electricity, credit cards, account mutation facilities to information about foreign exchange rates. Another advantage of internet banking services is that the service can be accessed 24 hours, this makes it easier for customers to make transactions without having to come to a bank or ATM nearby (Aziz, 2012).

It turns out that the ongoing use of internet banking needs to be identified and assessed on the response and perception of customers as service users, and the quality of internet banking services, as a product provided by the bank to serve the needs of its customers. The importance of assessing customer perceptions of technology-based bank product services is believed to be of importance because there have been various previous studies which have similar topics with various differences in research variables and research methods used. The following describes findings related to customer responses in using electronic services.

Some of these previous studies include research (Winnie, et al., 2019), researchers found that the variables of security, privacy, and customer trust are positively related to customer loyalty, this means that trust takes an important role as a mediator with the use of electronic services. Research (Ajimon, 2018) states that perceived ease of use of internet banking has a direct effect on the use of its services, and dimensions of service quality such as fulfillment, efficiency, reliability, website attributes, responsiveness, and privacy have an indirect effect on internet banking use. Then there is also research (Mohammed, et al., 2017) which found that trust in online banking services increases if users find online banking useful and easy to use. Therefore, it can be concluded that research related to customer perception and loyalty in using electronic services is important as an evaluation to improve the quality of electronic-based banking service systems, especially internet banking.

Figure 1.1 Internet and Smartphone Usage Penetration from 2014 to 2018 (Jenius & Indonesia, 2018)

The data above shows the high use of digital banking which has increased in the past five years. This is one of the reasons for the need for banks to carry out various service product innovations in accordance with developments. Meanwhile, the determination of the quality variable of the internet banking service system in the study (Yusnaini, 2010) was stated to have an effect on customer satisfaction, which was assessed based on three significant dimensions, namely the

tangible dimension, the responsiveness dimension, and the empathy dimension, and two insignificant dimensions, namely the reliability dimension and the assurance dimension. The quality of internet banking services is the efforts of producers to be able to meet the needs and desires of customers as well as the accuracy of its delivery to match customer expectations regarding internet banking services (Yusnaini, 2010).

The application of technology in the banking sector shapes various aspects of the customer. One of them is loyalty. Loyalty is something that various companies want to achieve, especially in the service sector, in addition to the satisfaction aspect. Loyalty will have an impact on increasing the use of services and company profits. Loyalty is defined as a deeply held commitment to buy or support a preferred product or service in the future even though the influence of the situation and marketing efforts has the potential to cause customers to switch (Medha & AK, 2012).

Information technology that is able to accommodate all customer needs, creates a close, even personal relationship between the banking industry and customers (Sudirman & Gede, 2018). Customer satisfaction has a positive relationship with customer loyalty. When the information technology used by banks supports improved performance and facilitates the completion of their customers' jobs, it will certainly generate loyalty from their customers. This is like a study (Amin, et al., 2014) which states that usage perceptions have a significant effect on mobile website users in Malaysia. This reinforces the rules of the value and usefulness of technology in gaining customer loyalty.

In addition, in relation to the variables of the benefits and ease of use of internet banking, research (Evi, et al., 2018) shows that the perception variable of the benefits of using the internet has a direct influence on the perception of ease of use of the internet in transactions for bank customers. The more benefits that customers feel, the more convenience it will be for customers to make transactions using internet banking. Therefore, it can be concluded that, in this study the author raises the topic of the use of internet banking with several variables, namely the quality of the service system, the benefit and ease of use of services, and the loyalty of bank customers. The object of this research is PT BCA, Tbk KCU Gajah Mada, which has internet banking service products.

BCA or also known as PT Bank Central Asia Tbk (BCA) is the largest private bank in Indonesia, with a growing number of customers every year. In total as of 2018, BCA has reached 18 million customer accounts, supported by 1,241 branch offices, 17,565 ATMs and more than 490,000 electronic data capture (EDC) machines as well as transactions via internet and mobile banking services. From the transaction chart alone, currently BCA has recorded 90% of customer transaction volume through digital channels, while 10% still use conventional methods, or through branch offices. BCA's application of digital banking technology through internet banking makes it easy for customers to manage and carry out their financial transactions. The high utilization and use of internet banking will build BCA customer loyalty if the internet banking system implemented by BCA is of valuable quality and can be easily used by customers of all walks of life. The following is data on customers of PT BCA, Tbk KCU Gajah Mada who use internet banking products and services.

Table 1.1 Internet Banking User Customers at PT BCA, Tbk KCU Gajah Mada in 2017-2019

Customer Data for Internet Banking Users at PT BCA, Tbk KCU Gajah Mada			
Years	**2017**	**2018**	**2019**
Total	**617**	**993**	**1252**

Source: Data Archives of PT BCA, Tbk KCU Gajah Mada, (2020)

Based on the table above, it is known that there was an increase in the number of customers using internet banking at PT BCA, Tbk KCU Gajah Mada from 2017 to 2019. The percentage increase from 2017 to 2018 was 37.8% and an increase from 2018 to in 2019 amounted to 20.6%. This data is proof that customers have a high enough interest and interest in technology-based

products and services. Therefore, it is important for PT BCA, Tbk KCU Gajah Mada to maintain or maintain, as well as make improvements to the services provided through internet banking products to fulfill the needs of its customers optimally and optimally. Therefore, the authors are interested in conducting research with the title: Effect of System Quality, Perceptions of Benefit and Ease of Use of Internet Banking on Loyalty (Study on Customers of PT BCA, Tbk KCU Gajah Mada).

Problem Formulation

The number of banks in Indonesia is quite large. Therefore, banks in Indonesia need to pay attention to the rapid development of technology that affects market demand. This is indicated by the increasing number of internet and smartphone users from year to year. So that, indirectly, banks are required to innovate and evaluate the provision of information technology-based banking service products. Based on various previous studies, it is also known that the assessment and evaluation of internet banking banking services is also influenced by the quality of the system and the perception of customers as service users. This is expected to create customer satisfaction and loyalty to long-term banks and internet banking services. From the background and problem formulation, the research questions are as follows:

1. Does the quality of the system have an influence on customer loyalty of PT BCA, Tbk KCU Gajah Mada?

2. Does the perceived usefulness have an influence on customer loyalty at PT BCA, Tbk KCU Gajah Mada?

3. Does the perceived ease of use of internet banking have an influence on customer loyalty at PT BCA, Tbk KCU Gajah Mada?

4. Do system quality, perceived usefulness and perceived convenience have a collective influence on customer loyalty of PT BCA, Tbk KCU Gajah Mada?

II. BASIS THEORY
Definition of Internet Banking

Internet banking is a product and service that is specifically designed as a new distribution medium in which banks generally offer services through direct contact with their customers at existing branch offices (Aziz, 2012). The use of internet banking for customers is increasingly widespread because it provides enormous benefits for the smooth operation of transaction processes, such as transfer, withdrawal, and payment processes, transactions made via internet banking will simplify and speed up transaction completion (Evi, et al., 2018).

Definition of System Quality

According to DeLone and McLean in (Bejjar & Boujelbene, 2013), system quality is an explanation to identify measures of system quality from the success of the programs served by the system. System quality can be measured through several indicators.

Definition of Perception of Benefits

According to Davis et al's ideas cited by (Natalia & Ginting, 2018) defines perceived usefulness as a belief in expediency, namely the level at which users believe that the use of system

technology will improve their performance at work. Davis also revealed that perceived usefulness is the level where someone believes that using a certain system can improve performance.

Definition of Customers Loyalty

Customer loyalty is a deeply held commitment to buy or support a preferred product or service in the future, even if the influence of the situation and marketing efforts have the potential to cause customers to switch.

Customer loyalty can be formed when customers are satisfied with them or the level of service received, and intend to continue the relationship. Customer loyalty is developed through brand awareness and brand trust with service organizations to improve the perceived quality among the minds of customers which can only be created in the long term through well-designed marketing investments (Tuan & Rajagopal, 2017).

Relationship between Variables

The Influence of System Quality on Customers Loyalty

System quality is used to measure the extent to which the quality of the use of information technology systems presented to customers. As the opinion of DeLone and McLean which states that system quality is an explanation to identify the measure of the success of the program served by the system.

Measuring the quality of the system is a way to find out how users perceive the system it uses. In the banking service industry in this study is BCA, the quality of the system that is meant is the quality of the internet banking application system developed by the banking company PT BCA Tbk.

System quality has a relationship with customer loyalty, this can be seen from the reliability of the system that is able to provide security for data owned by customers, as research (Fendini, 2013), (Dwijaya & Siagian, 2018), and (Yusnaini, 2010) with the use of different dimensions, states that the quality of the system has an effect and there is a relationship with customer satisfaction and customer loyalty.

The Influence of Perception of Benefits on Customers Loyalty

Perceived benefits are defined as perceptions from users that the technology used will improve their performance (Natalia & Ginting, 2018). Perceived benefits explain the impact felt by users after using technology. Perceptions of benefits have a bearing on customer loyalty. In the banking industry, this is reciprocal, if there are benefits that are considered by users to be helpful and in accordance with their needs, then users will be loyal to the products they use. The use of the product also no longer exists without encouragement because it has created a relationship of loyalty because of the benefits the product provides and the service that meets the needs. Banks that apply a digital system in their banking transactions will provide the best service efforts, so that the benefits of the system are achieved and accepted by their customers. As is the case with research from (Natalia & Ginting, 2018) and (Wu, et al., 2010) which links perceived benefits with user loyalty.

The Influence of Consumer Convenience Perception on Customers Loyalty

Perceived ease is a result of the user experience of the technology it uses. This experience gives users a feeling, for example technology is easy to operate, or technology makes it easier for them to complete their work. According to Davis in (Amin, et al., 2014) defines ease of use as the extent to which someone believes that using a technology will be free of effort. The banking sector

that applies information technology in its service products must adjust to the level of satisfaction in the use of its customers, to achieve target customers who are loyal to the bank. For example in research (Tsai & Yeh, 2010) and (Dewi, 2016) which take different dimensions related to perceived ease of use, and state that there is a relationship between ease of use and customer loyalty.

The Effect of System Quality, Perceptions of Benefits, and Perceptions of Ease of Use on Customer Loyalty

There are several attributes that shape and increase customer loyalty, in this study the attributes or components used include system quality as a measure of the quality of the system applied to internet banking, perceived ease of use as the user's experience of the system and technology it uses, and perceived benefits as a system. experience the benefits that users feel from the technology they use.

Hypothesis Development

Based on the theoretical framework and the relationship between variables that have been described, this study wants to prove the hypothesis of the study, namely:

H_1: It is suspected that there is a relationship with the quality of the system towards customer loyalty at Bank BCA.

H_2: It is suspected that there is a connection to the perceived usefulness of customer loyalty at Bank BCA.
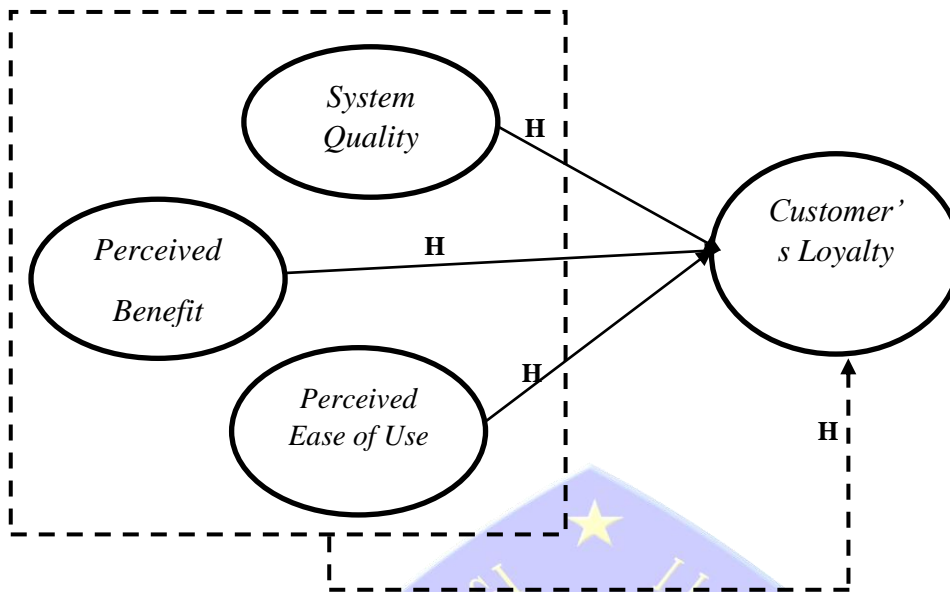
H_3: It is suspected that there is a connection to the perceived ease of use of customer loyalty at Bank BCA.

H_4: It is suspected that there is a relationship with system quality, perceived usefulness and perceived ease of use towards customer loyalty of Bank BCA.
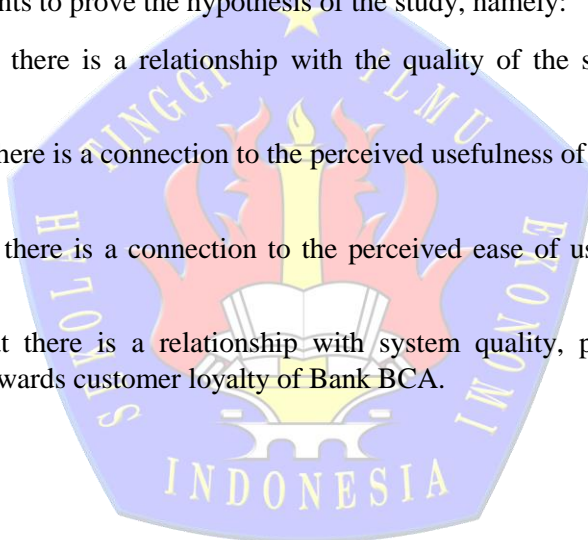
Research Conceptual Framework

Figure 2.1 Research Conceptual Framework

Source: Developed for this research, 2020

III. RESEARCH METHODS
Research Strategy

The method used in this research is quantitative method. The quantitative research method can be defined as a research method based on the philosophy of positivism, used to examine certain populations or samples, sampling techniques are generally carried out randomly, data collection uses research instruments, data analysis is quantitative / statistical in order to test existing hypotheses. determined (Sugiyono, 2017, p. 15). The reason for using the quantitative method is because this study will look at the correlation or relationship between variables.

From the above understanding, the strategy in this study is to use quantitative research because the purpose of this study is to find out the linkages and effects of system quality, perceived usefulness and perceived ease of use on PT BCA Tbk customer loyalty.

Population and Sample

Research Population
1. The general population is the coverage of all research subjects, in this study all customers of BCA Bank Gajah Mada branch, Central Jakarta.
2. The target population is the coverage of subjects that are the target of the conclusion of the study. In this study, the target population includes customers of BCA Bank Gajah Mada branch, Central Jakarta who use BCA internet banking.

Sample

According to (Sugiyono, 2017, p. 118), the meaning of the sample is part of the number and characteristics of the population. So the sample in this study was obtained or taken from the representative elements of the study population. The sample selection method used in this research is purposive sampling method. The purposive sampling method is a sampling technique in which certain considerations are determined or assigned to the selection of subjects or sample members (Sugiyono, 2017, p. 85). Sampling with a purposive sampling technique was carried out based on

certain considerations such as population characteristics or previously known characteristics (Notoatmodjo, 2010, p. 130). The advantages of purposive sampling are that the selected sample can best provide information according to the needs of the researcher, because it has been determined based on the special considerations and provisions of the researcher, while the weakness of this technique is that the level of generalization is questionable. In this study, the considerations or provisions set against the selected respondents were respondents who were customers of Bank BCA KCU Gajah Mada, Central Jakarta, especially customers who own and use BCA internet banking.

In this study, the sample size uses the concept of mutivariate research (including multiple regression analysis) which states that the sample size should be 10x larger than the number of variables in the study. In this study, the number of variables is four, so the minimum sample is 40. However, according to (Arikunto, 2010, p. 112) regarding the sample size in the study, if the subject is less than 100 people, all of them should be taken, if the subject is large or more than 100 people can be taken 10-15% or 20-25% or more. Therefore, in this study, which refers to the number of customers using BCA internet banking in 2019 as many as 1,200 people, the sample size was set at 15% x 1200 = 180 respondents.

Data and Data Collection Methods
Data
1. Primary Data

   Primary data is the source or document material collected or used by the parties present at the time the event described took place (Arikunto, 2010, p. 64). In simple terms, primary data is understood as data obtained directly from the research location, primary data collection can be done using observation, interviews, personal documentation, questionnaires, and field surveys. In this study, the primary data required is the perception data of BCA Bank customers at the Gajah Mada branch in Central Jakarta who use internet banking, and the identity of the customer is recorded in the data archive of the BCA KCU Gajah Mada Annual Report for the period 2019, based on the latest bank annual report. The data source is obtained through a questionnaire containing questions and statements related to the indicators in the research variables answered by selected respondents.

2. Secondary Data

   Secondary data is the source or document material presented or described by non-parties present at the time the described event took place (Arikunto, 2010, p. 64). Secondary data is understood as data obtained from outside the research location, such as information, data, reading material, and others from company archives, literature studies or previous studies. The secondary data needed in the research is in the form of supporting data from the BCA KCU Gajah Mada Central Jakarta bank data archive for the period 2019, reading material or literature as well as previous studies in the last 10 years, considering that science has experienced shrinkage as well as development. The information and data used are related to the problems analyzed in the study.

Data Analysis Techniques

The data processing of the results of the answers to the questionnaire by the respondents is processed in the form of a weighted score in the form of the number of numbers, which shows the scale calculation of the respondent's answer. Data processing in this study is statistical data processing in order to obtain descriptive value results in accordance with quantitative research with the help of SPSS 22 software. The results of statistical calculations are described and described.

The purpose of processing data using SPSS 22 software is to facilitate calculations and grouping based on the answers of each indicator on the research variables.

Validity Test
    The validity test stage aims to test the extent to which the questionnaire items are valid and invalid for research use (Priyatno, 2014, p. 51). The validity test in this study uses the person's product moment correlation test, which is one of several types of correlation tests used to determine the degree of closeness of the relationship between 2 variables on an interval or ratio scale. The validity test criteria are:
1. If r count > r table, then the instrument or statement item has a significant correlation to the total score (declared valid).
2. If r count < r table, then the instrument or statement item does not have a significant correlation to the total score (declared invalid).

Reliability Test
    Reliability test is used to test the reliability of the questionnaire items used (Priyatno, 2014, p. 64). For more than two alternative answers using the Cronbach's alpha test, whose value will be compared with the minimum acceptable value of the reliability coefficient. Reliability less than 0.6 is not good, while 0.7 is acceptable, and more than 0.8 is good. The test criteria are as follows:
1. If the value of Cronbach's alpha > 0.6, the research instrument is reliable.
2. If the value of Cronbach's alpha < 0.6, then the research instrument is not reliable.

Coefficients of Determination
    The specific objectives to be achieved from this study are to determine which factors among the quality of the system, perceived ease of use, and perceived usefulness greatly affect the loyalty of BCA Bank customers. To obtain these results, a correlation coefficient analysis or test (r) was conducted to obtain the amount of contribution of variable X (perceived usefulness and perceived ease of use) to variable Y (BCA Bank customer loyalty), using the formula:
KD = x 100%

Information :
KD = coefficient of determination
R = correlation coefficient

T-Test
    Partial regression coefficient test (t test) is used to partially see the effect of each independent variable on the dependent variable with the following procedure:
a. Determine the hypothesis of each group:
   H_0 = The independent variable partially or individually has no effect on the dependent variable
   H_1 = The independent variable partially or individually has an influence on the dependent variable
b. Comparing the value of t count with t table with the following criteria:
   If t-count < t-table, then the independent variable individually has no effect on the dependent variable (H_0 is rejected).
   If t-count > t-table, then the independent variable individually affects the dependent variable (H_0 is accepted)
c. Determining the level of significance, namely α = 0.05 (5%)
   The test criteria:
   If the level of significance > 0.05, H_1 is rejected, meaning that there is no relationship between the independent variable and the dependent variable.

If the level of significance < 0.05 then H_1 is accepted, it means that there is a relationship between the independent variable and the dependent variable.

F-Test

The F test aims to determine whether the independent (independent) variables jointly affect the dependent variable (Ghozali, 2016). The procedures that can be used are as follows:

1. Formulate a hypothesis

   H_0: X_1, X_2, and X_3 simultaneously do not have a significant effect on Y

   H_a: X_1, X_2, and X_3 simultaneously have a significant effect on Y

2. Determine the level of significance

   The level of significance used a = 5% (0.05). Significance of 5% or 0.05 is a standard measure often used in research

3. Determine F-count

   The value of F-count can be found using SPSS calculations

   a. Determining the F-table: The value of the Ftable can be found using SPSS calculations

   b. Determine the significance value

   c. The significance value can be determined using SPSS calculations

   d. Basis for decision making. There are two bases for decision making in this test, namely:

   If Fcount $\leq$ F-table, then H_0 is rejected

   If Fcount> F-table, then H_0 is accepted

   If the significance value is $\geq$ 0.05, then H_0 is rejected

   If the significance value < 0.05, then H_0 is accepted

IV. RESULTS AND DISCUSSION

Company Profile Description

BCA was officially established on February 21, 1957 under the name Bank Central Asia NV. Many things have been passed since its inception, and perhaps the most significant is the monetary crisis that occurred in 1997. This crisis had a tremendous impact on the entire banking system in Indonesia. However, in particular, this condition affected the flow of cash in BCA and even threatened its continuation. Many customers panic and then rush to withdraw their funds. As a result, the bank was forced to request assistance from the Indonesian government. The Indonesian Bank Restructuring Agency (IBRA) then took over BCA in 1998.

Thanks to business policies and wise decision-making, BCA managed to recover in the same year. By December 1998, third party funds had returned to pre-crisis levels. BCA's assets reached Rp. 67.93 trillion, whereas in December 1997 it was only Rp. 53.36 trillion. Public trust in BCA has fully recovered, and BCA was handed over by IBRA to Bank Indonesia in 2000. Subsequently, BCA took a big step by becoming a public company. The Initial Public Offering took place in 2000, by selling 22.55% shares from IBRA divestment. After the Initial Public Offering, IBRA still controlled 70.30% of all BCA shares. The second share offering was held in June and July 2001, with IBRA divesting another 10% of its shares in BCA. In 2002, IBRA sold 51% of its shares in BCA through a strategic private placement tender. Farindo Investment, Ltd., based in Mauritius, won the tender.

Related to banking products and services provided by Bank Central Asia (BCA), including savings (Tahapan BCA, Tahapan Gold, Tapres Giro BCA, and Time Deposit), banking credit (KPR BCA, KPR BCAXtra, Refinancing, KPA BCA, and KKB BCA), Debit BCA, BCA credit card (BCA Card, JCB BCA, BCA Visa, BCA Mastercard), BCA by Phone, m-BCA, KlikBCA (Internet Banking), BCA Remittance, and Inkaso BCA.

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Respondent Descriptions

This study, which aims to determine the effect of System Quality, Perceptions of Benefits, and Perceptions of Ease of Use on Customer Loyalty, used 180 respondents who came from BCA customers at the Gajah Mada branch office, Central Jakarta. The results of distributing questionnaires that have been carried out by researchers to the respondents are as follows:

1. Respondent data by age type

Figure 4.1 Description of Respondents by Type (Research Data processed by researchers with Excel, 2020)
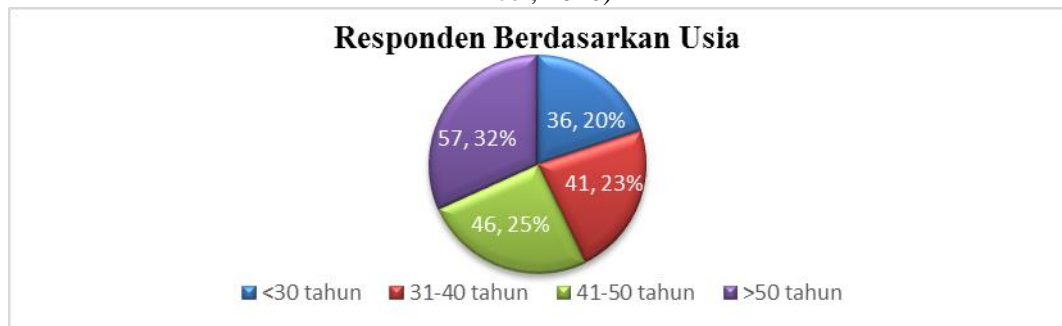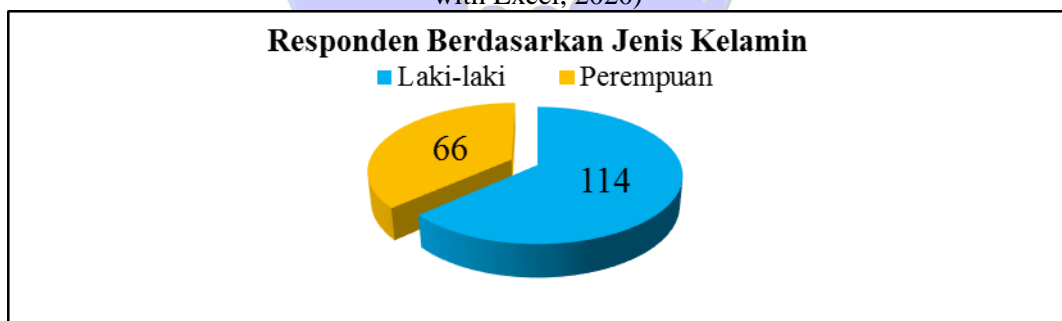

Source: Processed data, 2020

Figure 4.1 above is a description of the demographics of respondents by age. It is known that 36 respondents aged <30 years, 41 people aged 31-40 years, as many as 46 people aged 41-50 years and as many as 57 people aged> 50 years. It can be concluded that the majority of research respondents are customers over 50 years of age. This can be accepted as a reasonable condition, because based on the standards of the Central Statistics Agency (BPS), the population of productive age is the population between the ages of 15-64 years, so that from the data on the age of BCA internet banking users above it can be concluded that it consists of the population aged productive.

2. Respondent data by gender

Figure 4.2 Description of Respondents by Gender (Research Data processed by researchers with Excel, 2020)
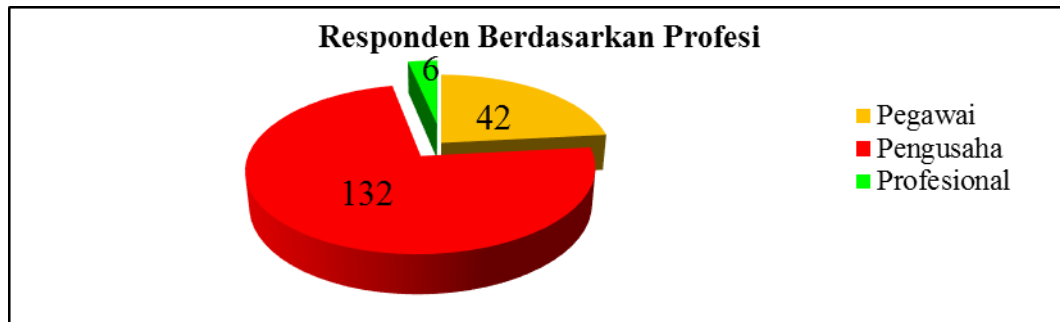

Source: Processed data, 2020

In Figure 4.2 above is a demographic description of the respondents based on their gender. It is known that as many as 114 respondents were male, and as many as 66 respondents were female. It can be concluded that the majority of the study respondents were male. This can be related to the culture in Indonesia where men act as head of the household, who support the family, so that the flow of family finances is dominated by the head of the family. In addition, based on BPS standards and data, the head of household in Indonesia is dominated by the population.

3. Respondent data by profession

Figure 4.3 Description of Respondents by Profession (Research Data processed by researchers with Excel, 2020)

Responden Berdasarkan Profesi

- Pegawai
- Pengusaha
- Profesional

Source: Processed data, 2020

In Figure 4.3 above is a demographic description of the respondents by profession. It is known that 42 respondents work as private employees, as many as 132 are entrepreneurs, and 6 are professionals. It can be concluded that the majority of research respondents are customers with a professional background in entrepreneurship. This is in line with BCA's first mission, which is to build a leading institution in the field of payment settlement and financial solutions for business customers (entrepreneurs) and individuals.

4. Respondent data based on the type of BCA service

Figure 4.4 Description of Respondents based on the type of BCA service (Research Data processed by researchers with Excel, 2020)

Responden Berdasarkan Jenis Layanan BCA

- Tabungan
- Tabungan dan Kartu Kredit
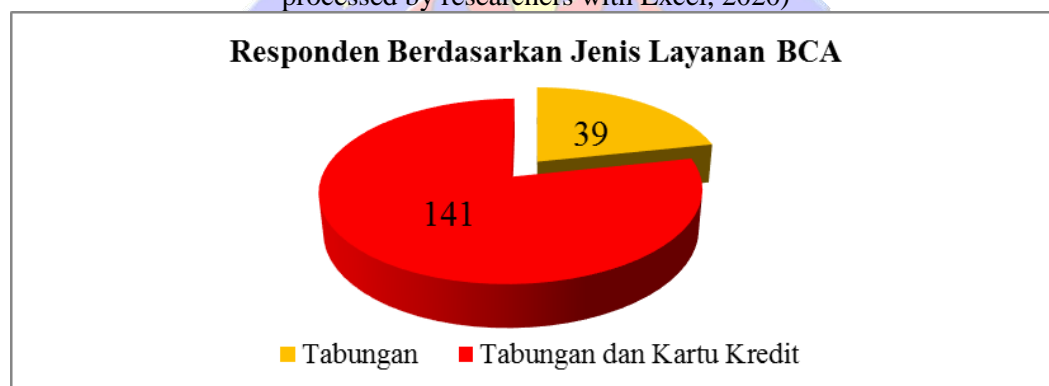
Source: Processed data, 2020

Figure 4.4 above shows the demographic descriptions of the respondents based on the type of BCA service used. It is known that 39 respondents only use savings products, and as many as 141 respondents use savings products and BCA credit cards. It can be concluded that the majority of research respondents are customers using BCA savings and credit card products. This is sustainable with the influence of the functional package that can be enjoyed on the service products that BCA provides, so the number of respondents who use more than one service can be said to be appropriate.

Validity Test

In this study, the validity test of the research data was carried out on the research questionnaire instrument with a total of 36 items that were tested on 30 people. The results of the research data validity test are described in the following table:

Yuningsih Effendi [1], Imelda Aprileny, S.E., M.E. [2]

Table 4.1. Results of System Quality Validity Test

System Quality (X_1)			
No	**r$_{-count}$**	**r$_{table}$**	**Result**
1	0,563	0,361	*Valid*
2	0,785	0,361	*Valid*
3	0,722	0,361	*Valid*
4	0,816	0,361	*Valid*
5	0,689	0,361	*Valid*
6	0,723	0,361	*Valid*
7	0,854	0,361	*Valid*
8	0,438	0,361	*Valid*
9	0,513	0,361	*Valid*
10	0,661	0,361	*Valid*
11	0,494	0,361	*Valid*
12	0,495	0,361	*Valid*

Source: Research data processed by researchers with SPSS, 2020

Table 4.1 is a recapitulation of the test results for the validity of the system quality variable (X_1). Researchers used the Correlate Bivariate formula using SPSS for Windows version 20.0. The rtabel value with N = 30 and a significance level of 5% is 0.361. The questionnaire item is declared valid if rcount is more than rtable or if rcount> 0.361. Based on the table above, the rcount value on the 12 items of the system quality variable (X_1) is greater than the r table so it can be concluded that all question items or indicators are declared valid.

Table 4.2. Results of the Perception of Benefits Validity Test

Perception of Benefits (X_2)			
No	**R$_{count}$**	**r$_{table}$**	**Result**
1	0,683	0,361	*Valid*
2	0,706	0,361	*Valid*
3	0,561	0,361	*Valid*
4	0,520	0,361	*Valid*
5	0,716	0,361	*Valid*
6	0,368	0,361	*Valid*
7	0,697	0,361	*Valid*
8	0,471	0,361	*Valid*
9	0,716	0,361	*Valid*

Source: Research data processed by researchers with SPSS, 2020

Table 4.2 is a recapitulation of the validity test results of the perceived benefit variable (X_2). Researchers used the Correlate Bivariate formula using SPSS for Windows version 20.0. The rtabel value with N = 30 and a significance level of 5% is 0.361. The questionnaire item is declared valid if rcount is more than rtable or if rcount> 0.361. Based on the table above, it is obtained that the value of r count on the 9 items of the perceived benefit variable (X_2) is greater than the r table so it can be concluded that all question items or indicators are declared valid.

Table 4.3. Results of the Perception Validity Ease of Use Test Results

Perceived Ease of Use (X_3)			
No	**R$_{count}$**	**r$_{table}$**	**Result**
1	0,788	0,361	*Valid*
2	0,610	0,361	*Valid*
3	0,820	0,361	*Valid*

4	0,644	0,361	*Valid*
5	0,754	0,361	*Valid*
6	0,866	0,361	*Valid*
7	0,857	0,361	*Valid*
8	0,676	0,361	*Valid*
9	0,507	0,361	*Valid*

Source: Research data processed by researchers with SPSS, 2020

Table 4.3 is a recapitulation of the validity test results of the perceived ease of use variable (X_3). Researchers used the Correlate Bivariate formula using SPSS for Windows version 20.0. The rtabel value with N = 30 and a significance level of 5% is 0.361. The questionnaire item is declared valid if r-count is more than rtable or if rcount > 0.361. Based on the table above, it is obtained that the value of r count on the 9 items of the perceived ease of use variable (X_3) is greater than the r-table so it can be concluded that all question items or indicators are declared valid.

Table 4.4. Results of Customer Loyalty Validity Test

Customer's Loyality (Y)			
No	**R_{count}**	**r_{table}**	**Keterangan**
1	0,543	0,361	*Valid*
2	0,756	0,361	*Valid*
3	0,764	0,361	*Valid*
4	0,812	0,361	*Valid*
5	0,797	0,361	*Valid*
6	0,749	0,361	*Valid*

Source: Research data processed by researchers with SPSS, 2020

Table 4.4 is a recapitulation of the validity test results of the customer loyalty variable (Y). Researchers used the Correlate Bivariate formula using SPSS for Windows version 20.0. The rtabel value with N = 30 and a significance level of 5% is 0.361. The questionnaire item is declared valid if rcount is more than rtable or if rcount> 0.361. Based on the table above, it is obtained that the value of rcount on the 6 items of the customer loyalty variable (Y) is greater than the r table so that it can be concluded that all question items or indicators are declared valid.

Reliability Test

Table 4.5. Results of the Research Instrument Reliability Test

Variable	*Alpha*	*Cronbach's Alpha*	**Result**
System Quality (X_1)	0,913	0,6	Reliable
Perceived Benefit (X_2)	0,861	0,6	Reliable
Perceived of Use (X_3)	0,923	0,6	Reliable
Customer's Loyality (Y)	0, 901	0,6	Reliable

Source: Research data processed by researchers with SPSS, 2020

Table 4.5 is a recapitulation of the reliability test results of the system quality variable (X1), perceived benefits (X2), perceived ease of use (X3), and customer loyalty (Y). Using the basis of decision making where a construct or variable is declared reliable if it provides a Cronbach Alpha value> 0.6. Based on the table above, it is known that the variables X1, X2, X3 and Y have Alpha values greater than Cronbach's Alpha (Alpha> Cronbach's Alpha), so it can be concluded that all variables are declared reliable.

Partial Determination Coefficient Analysis

Based on the calculation of the partial determination coefficient using SPSS 22.0 software, the following values are obtained:

1. Quality system for customer loyalty

The partial correlation value is 0.790, then; 0.790^2 x 100% = 0.6241 or 62.41%. The results of the partial determination coefficient analysis show that the percentage of the influence of system quality on BCA customer loyalty is 62.41%. This figure shows that the high level of customer perception of the quality of the internet banking system is that it can be said that the quality of the system with this value contributes greatly to customer loyalty.

2. Perceived benefits of customer loyalty

The partial correlation value is 0.313, then; 0.313^2 x 100% = 9.79 or 9.79%. The result of the partial determination coefficient analysis shows that the percentage contribution of the effect of perceived benefits on BCA customer loyalty is 9.79%. This figure shows that 9.79% of customer loyalty using internet banking is influenced by perceived benefits, while the rest is influenced by other variables that are not mentioned.

3. Perception Ease of use of customer loyalty

The partial correlation value is 0.153, then; 0.153^2 x 100% = 2.34 or 2.34%. The result of the partial determination coefficient analysis shows that the percentage of contribution to the influence of the ease of use perspective on BCA customer loyalty is 2.34%. This figure shows that 2.34% of customer loyalty using internet banking is influenced by the perception of the ease of use of internet banking, while the rest is influenced by other variables that are not mentioned. This figure is very small compared to the two other variable figures (system quality and perceived benefits), so it tends to be concluded that ease of use has little effect in shaping customer loyalty. This may be due to the fact that customers are accustomed to operating their smartphones, or internet banking in general has provided services that are easy to use.

Based on the results of the above calculations, it can be seen that the determination coefficient partially shows the system quality variable with a higher determination coefficient value than the perceived benefits and perceived ease of use variables, thus the customer assumes that the quality of the system is the biggest contribution to the formation of customer loyalty in this study. The quality of the system includes the ease of use of the system, the security and reliability of the internet banking system.

Multiple Determination Coefficient Analysis

Based on the results of multiple linear regression calculations using SPSS 22.0 software, the correlation value is 0.856 which indicates a strong relationship. The analysis of the multiple coefficient of determination shows that the percentage of the contribution of the influence of system quality, perceived benefits and perceived ease of use on BCA customer loyalty is 85.6%. While the remaining 15% is the influence of other variables that are not studied.

F-test

The F test is performed to determine whether the variable has a significance value to prove the hypothesis. The table above shows the calculated F value obtained by 357.079 with a p-value (sig) of 0.000. With $\alpha = 0.05$, the F table is 2.66. Due to the calculated F value> F table (357,079> 2.66) then H0 is accepted. By looking at the p-value, from the output above, the p-value is 0.000 <0.05, so that H0 is accepted. Thus, it can be concluded that the variables of system quality, perceived benefits and perceived ease of use have a collective influence on BCA customer loyalty.

Discussion

1. In the system quality variable, seen from the tcount for system quality (X1) of 25.918. By taking the significant level $\alpha = 0.05$, then the t table is 0.123. Due to the value of tcount> ttable (25.918> 0.123), H0 is accepted. Based on the results of this analysis, it is known that there is no direct relationship between system quality and BCA customer loyalty. System quality is the quality characteristic that users want the technology they use. The relationship with customer loyalty to banking companies is the system quality of the financial transaction technology used, such as the BCA internet banking in this study. When the quality of the internet banking system developed by BCA is very easy to operate by customers from all walks of life, reliable access speed, reliability and adequate system security, customers will feel that the internet banking facilities provided do not make it difficult for them because it is easy to operate, benefits directly they get, a very trustworthy and secure system. These aspects will shape their loyalty to the product and product attributes used by the company. The results of this study contradict the results of research (Natalia & Ginting, 2018) which states that the system quality of technology is proven to be influential in shaping customer loyalty.

2. Regarding the perceived benefit variable, the results of the study prove that there is an effect of perceived benefits on BCA customer loyalty. The perceived benefit in the construct of the technology acceptance model (TAM) is a condition when BCA customers subjectively feel that using the BCA internet banking system will increase their productivity and performance (Christina, et al., 2018). So that with internet banking that is able to provide benefits to the performance of customers, loyalty will automatically be formed and increased in customers. This result is consistent with research from (Mandasari, 2017) and (Rasyid & Erica, 2018) which found that perceived benefits have a significant effect on loyalty. Research also supports the results (Daud, et al., 2018).

3. Regarding the perceived ease of use variable, the results of the study prove that there is an influence of perceived ease of use on BCA customer loyalty. According to the construct on the technology acceptance model (TAM), according to Davis et al. (Christina, et al., 2018), perceived ease of use refers to the extent to which consumers believe that they do not require more effort to use the system. So that when internet banking is easy to operate, can be applied to various types of smartphones used by customers, and provides complaint services when customers experience usage problems, then customer loyalty will be formed and increased. The results of the study are in line with research (Vinerean, 2013) and (Tuan & Rajagopal, 2017) that the perception of ease has an influence in forming loyalty.

4. Then the results of the joint effect test (F test), the calculation results obtained the calculated F value of 357.079 with a p-value (sig) of 0.000. With $\alpha = 0.05$, the F table is 2.66. Due to the calculated F value> F table (357,079> 2.66) then H0 is accepted. By looking at the p-value, from the output above, the p-value is 0.000 <0.05 so that H0 is accepted. Thus, it can be concluded that the variables of system quality, perceived benefits and perceived ease of use have no effect or are not jointly and significantly related to BCA customer loyalty. The analysis of the multiple coefficient of determination shows that the percentage of the contribution of the influence of system quality, perceived benefits and perceived ease of use on BCA customer loyalty is 85%. While the remaining 15% is the influence of other variables that are not studied. Meanwhile, from the results of the analysis of the partial determination coefficient, it was found that the value of the system quality on customer loyalty was 0.7902 x 100% = 0.6241 or 62.41%, the perceived benefits of customer loyalty were 0.313 x 100% = 9.7969 or 9.79%, and perceived ease of use of customer loyalty 0.153 x 100% = 2.3409 or 2.34%. These results indicate that the quality of the system is the variable which, according to respondents, has the most contribution in shaping BCA customer loyalty.

V. CONCLUSIONS AND SUGGESTIONS

Conclusions

The conclusions of this study answer four questions to formulate the research problem, namely as follows:

1. The quality of the system has an influence on customer loyalty at PT BCA, Tbk KCU Gajah Mada. It is shown from the partial correlation value of 62.41% and the value of t count 25.918 > t table 0.123 with a significance level of < 0.05, then H_0 is rejected / H_1 is accepted. The results of the partial determination coefficient analysis state that system quality is the variable that most contributes to customer loyalty. The quality of the internet banking system that has adequate reliability and security creates customer loyalty.
2. Perceptions of benefit have an influence on customer loyalty of PT BCA, Tbk KCU Gajah Mada. It is shown from the partial correlation value of 9.79% and t count 4.367 > t table 0.123 with a significance level < 0.05, then H_0 is rejected / H_1 is accepted. The benefits of internet banking will increase customer productivity and performance, as well as build customer loyalty.
3. Perception of ease of use of internet banking has an influence on customer loyalty of PT BCA, Tbk KCU Gajah Mada. It is shown from the partial correlation value of 2.34% and t count 2.053 > t table 0.123 with a significance level <0.05, then H0 is rejected / H_1 is accepted. Internet banking is easy to operate and can be applied to various types of smartphones used by customers, thus forming customer loyalty.
4. System quality, perceived usefulness and convenience have a collective influence on BCA customer loyalty. It is shown from the partial correlation value of 85.6%, which means that the remaining 14.4% is the influence of other variables outside of the set. The results of the F test show F count 357.079 > F table 2.66 with a significance value < 0.05 then H_0 is rejected / H_1 is accepted, it is concluded that the three variables simultaneously have a significant effect on customer loyalty, or it can be said that there is a relationship between the independent variables and the dependent variable.

Suggestions

Some suggestions and steps that can be taken, are as follows:

1. Academic Advice
   a. Conducting similar research or developing further research considering the importance of customer loyalty to the success of banking products with a note that the sample period used is longer.
   b. To test the validity of the various research variables and look for other methods for the accuracy of the analysis.
   c. Conduct various tests for the selection of independent variables and obtain higher accuracy, and are most relevant to the relationship between variables.
2. Company or Banking Operational Advice
   a. Considering to immediately develop a sustainable internet banking product.
   b. Creating innovations for service development that have convenience value, a variety of useful service features.
   c. Increasing various efforts to increase the equity of its products, especially with a number of disloyal customers. It is better if companies also improve perceived ease of use, because some still find it easy to use services.
   d. Select product service technical features in order to reach the target.
   e. Implement product promotion programs with prizes / bonuses for loyal customers, tailored to target market conditions.

f. Increase the active role of technicians in connection operations and technology transactions, and customer service officers to socialize products.

g. Providing trainings for employees who are programmed to keep them updated with technological advances, as well as excellent service standards to customers.

h. Focusing on the value treatment side, which technically implements the program in the form of periodic surveys with product users.

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