

## The Effect of Digitalization Banking Services on Customer Satisfaction at BCA Syariah KCP Kranji

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### Abstract:

*A quantitative research that aims to understand the effect of digitizing syariah banking services on customer satisfaction in services that are fast, easy, and can be controlled by customers. The population chosen in this study is people who have or already know the use of mobile banking by distributing questionnaires to 100 respondents. The sampling technique used purposive sampling technique with a Likert scale. This analysis uses IBM SPSS Statistics Version 25.0 software. The results of this study indicate that the Digital Banking System, Service, Easiness, Comfort variable has a positive linear relationship to Customer Satisfaction, namely an increase in Digital Banking System, Service, Easiness, and Comfort will increase Customer Satisfaction as well. Digital Banking System is the only variable that has no significant effect on Customer Satisfaction, while Service, Easiness, and Comfort has a significant influence on BCA Syariah Customer Satisfaction due to the rapid development of today's technology that accommodates banking industry services in Indonesia.*

### Introduction

The increasing needs of customers make it possible that they are starting to move to fast or instant services, namely simple and simple services that can be controlled by customers. In this case, banks must be able to serve their customers through end-to-end digital. This means that the service system in banking, including services in customer service and back office services, moves and processes quickly, and is systematized with payment collection done digitally (Kholis, 2018). Service quality is an important aspect in Islamic banking but on the other hand there are also religious motives that are no less important for banking. Banking institutions also play an equally important role in proving their existence in Islamic banking (Handayani, Darwini, Agustini, 2018).

The digitization of banking services such as electronic banking symbolizes technological advances brought by banks that use data and correspondence innovations that are tailored to the needs of their customers. Islamic banking is a sector that was able to pass and stand firmly during the economic crisis, namely in 1998 and 2008, especially in Islamic banks. This happens because Islamic banks do not adhere to an interest system, but with an understanding of a profit-sharing system that is in accordance with profit sharing, namely by dividing net income or net profits from business results or from ongoing investment activities.

One of the banks that has transformed towards digitalization is PT Bank Central Asia, Tbk. (Bank BCA and Bank BCA Syariah). Its main focus is on customer needs which is one of its efforts in implementing its strategic policies. Bank BCA Syariah (BCAS) understands that the needs of its customers will be increasingly diverse and their customer preferences have shifted towards digital transactions that lead to easier, more practical

and efficient ways. The development of BCAS information technology is always aligned with its strategies and policies. BCAS continues to strive to integrate information technology into each of its service products, as well as the bank's operational processes (Dan, 2019). This increase in digital banking services is due to Bank BCA responding to the development of the digital banking era by multiplying and improving its products, services, and applications that use the internet system in order to reach the huge market potential of the millennial generation. It is known that the millennial generation likes high mobility so that convenience and speed in transactions are the main priorities of this generation. In line with the development of this generation, of course, customer satisfaction is a top priority to be able to keep customers from moving to other banks.

In upholding the new normal order of life, BCA Syariah continues to improve e-channel features to provide ease and convenience of transactions for its customers. At this time, BCA Syariah Mobile banking users increased by 50%, as many as 47 thousand users compared to the same period in the previous year which recorded around 35 thousand users, while internet banking users clicked BCA Syariah increased by 128% to 10 thousand users compared to last year's range of 4 thousand users. Transactions through e-channels dominate the number of BCA Syariah transactions during 2020 (VirtualMediaUpdates, 2021).

Based on the phenomenon described above, banks are required to be able to innovate to provide the best service for their customers. In this industry the advantages of banks are demonstrated by various types of administrative qualities, including offices that make exchanges simpler for clients, such as ATM, multipurpose banking, web banking, and individual administration for workers (Berlian, 2017). Banks need their own creativity to introduce the latest products and services to their customers to support their success in competing and in line with the development of the digitalization era in the banking sector in Indonesia which is increasingly sophisticated and the increasing interest of customers to make it easier and want practicality in its use and because it is not yet widespread and crowded. There are previous studies that specifically discuss the effect of digitalization of banking services on customer satisfaction, so it is deemed necessary for researchers to review in order to determine the significance of each variable and the reasons that influence the preference for the influence of digitalization of banking services on customer satisfaction.

This is certainly related in everyday life, where financial activities are applied in all aspects of life, including in the Islamic economic aspect. Which aims to leave a positive impact on the surrounding community while still being guided by the provisions and principles of sharia. Based on this background, the formulation of the problem can be formulated, namely how is the influence of the digital banking system, service, easiness and comfort both partially and simultaneously on customer satisfaction?

The purpose of this study is to determine the effect of the digital banking system, service, easiness and comfort both partially and simultan on customer satisfaction.

## Literature Reviews

### Customer satisfaction

Customer satisfaction is related to the understanding and perception that has been understood by each individual. So that customer satisfaction, both customers with one another, is not something similar. However, customer satisfaction can arise from good quality products and services as well as the facilities offered by the bank. Service quality is also an important supporting element and is part of a marketing management strategy. Good and excellent quality of assistance has become a major factor in the achievement of an organization. Customer satisfaction is an important target for every company that targets satisfaction to be the key to its success in a business (Dharmadi & Bernadin Dwi, 2015). Participation satisfaction dominates in reflecting one's assessment of the capacity of a product or service related to expectations (Nurdin et al., 2020).

The development of its quality is largely determined by the state of competition between companies, technological developments as well as the stages of economic improvement and socio-cultural phenomena that exist around the community. The approach to creating quality service quality for the bank itself is to show customers that the bank has differences and demonstrate consistency in delivering quality to a higher level than its competitors. as a control and reject the proportion of reject measures in achievement (Ramilton et al., 2020).

### Digital banking system

Utilization of electronic or digital facilities owned by banks, where bank customers can carry out banking activities independently, freely and have a guarantee of security offered by the bank. Through mobile banking, customers will be treated with various advantages and can be executed like an ATM, including transferring financial assets, paying bills, buying credit vouchers, paying credit and so on. In a different case, digital banking can also allow customers to carry out banking activities that are usually carried out at branch offices such as opening new accounts, creating deposit accounts, investing, top up electronic cards and so on (Skinner, 2014).

**Table 1: Electronic Money Transactions**

Period	2015's	2016's	2017's	2018's
<b>Volume</b>	535,579,528	683,133,352	943,319,933	2,992,698,905
<b>Nominal</b>	5,283,018	7,063,689	12,375,469	47,198,616

Source: Bank Indonesia

Based on information from Bank Indonesia (BI), the value of advances for exchange for instalments or electronic money reached Rp 47.19 trillion during 2018. This figure increased several times compared to the previous year's exchange rate of Rp 12.37 trillion (Putra, 2019). Innovation and correspondence should be leveraged to make it easier to use. The benefits of using banking are increasingly more modern and versatile, which can be reached by clients 24 hours a day. There are various purposes behind clients to utilize mobile banking in their daily life, more specifically because of the need that makes clients not need to go to the bank or ATM, exchange is faster, makes it easier to check adjustments with mobile phones, and can make it easier to finding data about bank items and how to use them, is not too troublesome and fast to understand.

### Service

Represents assistance or administration provided to a buyer identified with a particular item. For example, the administration answers the address presented by the customer, looks for orders, resolves objections, fixes repairs that serve buyers in stores for sales representatives, and so on (Alma, 2011);

1. Service quality is a work method for organizations that seek to make consistent quality improvements in cycles, items and administration delivered by the organization.
2. The service quality dimension, which is administrative quality, is mostly not found in other countries, but overall where individual measures are included to obtain general assistance quality.

According to (Tjiptono, 2009) there are five basic elements of administrative quality (as requested for their relative significance), in particular:

1. Reliability
2. Responsiveness
3. Affirmation
4. Considerations
5. Physical evidence

### Easiness

The level of individual confidence that to use a program does not require great effort. Although each individual interprets the effort differently, but in general to avoid a bad response from the user a program must be easy to operate. Ease of use can be defined as the level of individual belief that no effort is needed to use technology (Hartono, E., Santhanam, R., & Holsapple, 2007).

If it is difficult, individuals will choose not to do it (Pratama, 2019). There are factors that influence individual perceptions of ease of use. The first factor is to have a sense that technology makes it easy to achieve something that is intended without the need for a lot of effort. There are several indicators of ease of use, namely:

1. Time efficiency
2. Ability to make transactions
3. Ease of operation
4. Flexible

Other convenience indicators are (Andriyano, 2014):

1. Can be easily understood
2. Easy to use
3. Simple

### Comfort

An assessment of individuals regarding the surrounding environment, where a person will assess environmental conditions based on what is experienced. The brain will respond whether the condition can be said to be comfortable or not (Prasasto Satwiko, 2009). Convenience (Comfort) can be created through the consumer's impression of the time, effort and cost in making a decision, the dimensions of the comfort variable include:

1. Access convenience  
A person's understanding of the cost and time of delivering a service.
2. Transaction Convenience  
Understanding a person or customer in conducting a transaction.
3. Convenience Benefits

Understanding someone to get a benefit obtained. In this case, the service provider must pay attention to the benefits that a person receives when using the service. If consumers can feel the benefits, then the thought will arise that consumers are served well so that this has an impact on customer satisfaction.

4. Convenience after getting benefits

Obtained when someone uses the service, does it get the expected benefits. This is closely related to consumer factors in submitting a complaint. If consumers get the benefits as desired then consumers will be happy and this certainly has a positive impact on the company. There are four comfort indicators that can be used, that is:

- a. Can be accessed anytime and anywhere
- b. No queues
- c. Saving time
- d. Low bank interest

### Digitization

Providing new opportunities that generate value is one of the uses of digital technology (Gartner, 2016). The digitalization of banking has greatly affected the bank and its clients. An exchange that is not, at this point constrained by place and time makes it a good thing as well as a critical advantage for its clients, whereas for the bank, a salary increase starting from a feebased salary and a decrease in labor costs are among the good effects it feels (Salmah & Murti, 2020).

The success of a bank is not only focused on the number of customers it has acquired, but banks must also contribute in keeping customers from moving to other banks, modifications in information and communication technology have brought advances in banking technology, as well as building an information society. Banks must pay attention to advances in information technology so that they can continue to coexist in the global market.

As is known, in this modern era many new banking services have emerged such as ATMs, Clearing Houses, Internet Banking in the 1900s. Also in the 2000s there was PayPal, Apple Pay, Samsung Pay, Smile to Pay (Alibaba). In Indonesia, there are also those issued by financial institutions such as E-Money, Flazz, E-cash, T-Cash, as well as those launched by fintech start-ups such as GoPay and Ovo, which are models of technological developments that drive the emergence of new FinTech-style company ideas that arise. increasing and growing the level of rivalry between banks to find ways to protect customer satisfaction (Susilawaty & Nicola, 2020).

So it tends to be considered that financial digitalization is currently impossible, but it has become a necessity if banks continue to look for something that is considered important and which has become a primary need that can be accessed easily, safely, and practically (Salmah & Murti, 2020).

### Research Model, Hypotheses, and Method

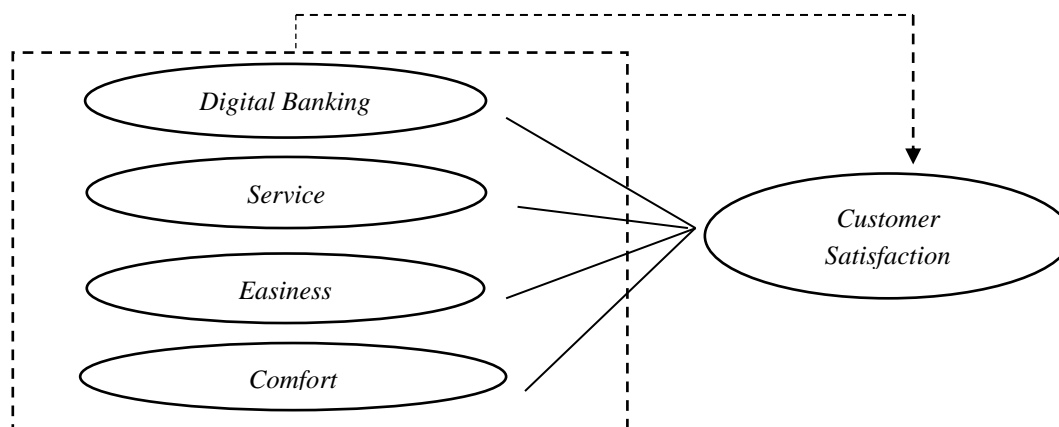


Figure 1. Research Model

The research method used in this research is quantitative method. The data obtained by the sample is taken specifically or using purposive sampling with the aim of understanding a particular population or sample (Sugiyono, 2017). The research was conducted by distributing questionnaires via Google Form and found 100 respondents. The sample of this study carried out with purposive sampling by having criteria for citizens who use the digital banking application or mobile banking. This study will analyze 4 variables determine. The

variables in this study were measured based on indicators that had been taken from literature review of each independent and dependent variable. The measurement of each variable is as follows:

**Table 2: Variable Measurement**

Variable Elements	Indicator	Scale
Digital Banking System (X1)	1. Convenience	Likert
	2. 24 hours service	Likert
	3. Display	Likert
	4. Service view	Likert
	5. Practicality	Likert
Service (X2)	1. Reliability	Likert
	2. Responsiveness	Likert
	3. Security	Likert
	4. Guarantee	Likert
Easiness (X3)	1. Easy to understand	Likert
	2. Easy to use	Likert
	3. It doesn't take much effort	Likert
	4. Fast and precise process	Likert
Comfort (X4)	1. Attention	Likert
	2. Quick response	Likert
	3. Save time	Likert
	4. Profit Sharing Terms	Likert
Customer Satisfaction (Y)	1. Confidence	Likert
	2. Trust	Likert
	3. Hope	Likert
	4. Satisfaction	Likert
	5. Save time	Likert
	6. Facilities offered	Likert

Source: Processed Data (2021)

Sources of data used in this study is primary data obtained directly from the respondents by having criteria regarding the problem to be studied by the researcher. Secondly, the secondary data obtained through websites and other resident data data which are related to the subject matter of research. The data collection will be taken through a questionnaire using a likert scale is a type of scale that is widely used in research to assess attitude, opinions, perceptions or other social phenomena (Sugiyono, 2017).

Data analysis begins with disturbing questionnaires to the respondents who want to be addressed. After getting the results of the questionnaire, the researcher reviewed the validity dan reliability of the questionnaire data and analyzed the data using multiple linear regression. Testing the hypothesis using multiple regression to test the effect of the independent variable on the dependent variable. This research uses SPSS 25 and Microsoft Excel 2010 programs to process the data.

## Result and Discussion

### Result

#### Description of respondent data

Sources of data obtained with primary data through questionnaires / questionnaires that have been distributed in accordance with the number of provisions of respondents who are domiciled in Bintara, Kranji, West Bekasi and surrounding areas who are / have been customers at Bank BCA Syariah offices. Using a Likert scale to 100 respondents with purposive sampling technique with the following criteria:

1. Female and male
2. Age 15-65 years old
3. Someone who has used internet banking or someone has or has had a digital banking application (m-banking)
4. Someone who is or has been a customer at BCA Syariah
5. Have done m-banking transactions.

The determination of the length of the interval class (distance, determined at the beginning using the formula according to (Sudjana, 2012) is as follows:

$$P = \frac{\text{Range}}{\text{many classes}}$$

$$P = \frac{4 - 1}{4} = 0,75$$

Information

P : Interval class length  
Range : Highest score – Lowest score  
Number of classes : 4

**Table 3: Likert Scale Rating Category**

Scale	Category
1,00 – 1,75	Strongly Disagree
1,75 – 2,50	Do not agree
2,50 – 3,25	Agree
3,25 – 4,00	Strongly agree

Sumber: Processed Data

## Descriptive statistical analysis

### 1. Customer satisfaction (Y)

**Table 4: Descriptive Analysis of Respondents Answers for Customer Satisfaction Variables (Y)**

	Range	Minimum	Maximal	Mean	Varian
Y1	3	1	4	3.44	0.653
Y2	3	1	4	3.45	0.634
Y3	3	1	4	3.53	0.474
Y4	3	1	4	3.60	0.323
Y5	3	1	4	3.69	0.297
Y6	3	1	4	3.48	0.575

Source: Data Processed in SPSS 2021

From the output results above, it can be noted that all items on the customer satisfaction variable have an average value of around 3.5, with the highest average at Y5 of 3.69, with the answers of respondents who prefer to transact via m-banking rather than coming directly to the branch office. The closest indicator that indicates the highest customer satisfaction variable that the respondents have chosen lies in transaction activities through the m-banking application from Bank BCA Syariah. The lowest average value at Y1 is 3.44, with the respondent's answer choices being very minimal in choosing to be satisfied with the security of the m-banking application service from Bank BCA Syariah which means that on this item the respondents are less satisfied with the security of the m-banking service. banking. For each item, the highest value is 4 and the lowest value is 1, so it can be stated that the range for each item is 3 (4-1).

The highest variance is found in item Y1 of 0.653, namely with the answers of respondents who are satisfied with the security of the m-banking service from Bank BCA Syariah which indicates that the value given by respondents varies the most on this item when compared to other items on the customer satisfaction variable.

### 2. Digital banking system (X1)

**Table 5: Descriptive Analysis of Respondents Answers for Digital Banking System Variables (X1)**

	Range	Minimum	Maximal	Mean	Varian
X1.1	2	2	4	3.83	0.163
X1.2	3	1	4	3.64	0.394
X1.3	3	1	4	3.50	0.414
X1.4	3	1	4	3.58	0.327
X1.5	3	1	4	3.60	0.444

Source: Data Processed in SPSS 2021

From the output results above, it can be noted that all items in the Digital Banking System variable have an average value of around 3.6, with the highest average at X1.1 of 3.83, namely with the answers of respondents who prefer digital m-banking services that make it easier for respondents in transactions and can be processed quickly, which indicates that the highest digital banking system variable that the respondent has chosen lies in the digital

banking system service that makes it easier for respondents to transact. The lowest value on X1.3 is 3.5, namely with very minimal respondents' answers, choosing a service display that is clearly designed, interesting and informative which indicates that in this item the respondent is less interested in the display/design problem that already exists in the m-banking application from Bank BCA Syariah for each item, the highest value is 4 and the lowest value is 1, except for item X1.1 which is 2, which is with the answer of respondents who prefer that m-banking digital services can make it easier for respondents to transact and can be processed quickly with the lowest value

The highest variance is found in item X1.5 of 0.444, namely with respondents' answers that can carry out transactions simultaneously in terms of mutation, transfer, and balance checks with one display so that it can make it easier for respondents which indicates that the value given by respondents varies the most on this item if compared to other items in the Digital Banking System variable.

### 3. Service (X2)

**Table 6: Descriptive Analysis of Respondents Answers to Service Variables (X2)**

	Range	Minimum	Maximal	Mean	Varian
X2.1	3	1	4	3.76	0.245
X2.2	3	1	4	3.64	0.354
X2.3	3	1	4	3.27	0.583
X2.4	3	1	4	3.42	0.448

Source: Data Processed in SPSS 2021

From the output results above, it can be noted that all items in the Service variable have an average value of around 3.5, with the highest average at X2.1 of 3.76, namely with respondents' answers that prefer the existence of m-banking services that offer ease of doing business. The transaction that indicates the highest service variable that the respondent has chosen lies in the m-banking application service from Bank BCA Syariah which offers ease of transaction. The lowest value on X2.3 is 3.27, with the respondent's answer choices being very minimal in choosing not to experience interference when accessing the m-banking application from Bank BCA Syariah. For each item, the highest value is 4 and the lowest value is 1, so it can be stated that the range for each item is 3 (4-1).

The highest variance is found in item X2.3 of 0.583, which is the answer of respondents who choose not to experience obstacles when accessing the m-banking application from Bank BCA Syariah which indicates that the value given by respondents varies the most on this item when compared to other items in the Service variable.

### 4. Easiness (X3)

**Table 7: Descriptive Analysis of Respondents Answers to Ease Variable (X3)**

	Range	Minimum	Maximal	Mean	Varian
X3.1	3	1	4	3.39	0.624
X3.2	3	1	4	3.50	0.576
X3.3	3	1	4	3.42	0.509
X3.4	3	1	4	3.57	0.409

Source: Data Processed in SPSS 2021

From the output results above, it can be noted that all items in the Ease of Service variable have an average value of around 3.5, with the highest average at X3.4 of 3.57, namely with the answers of respondents who prefer m-banking services to provide convenience in processing each transaction. quickly and precisely, which indicates the highest convenience variable that respondents have chosen lies in the ease of service and the fast and precise transaction processing provided by the m-banking application from Bank BCA Syariah. The lowest value in X3.1 is 3.39. that is, with a very minimal choice of respondents' answers in choosing services that are easy to understand from the m-banking application from Bank BCA Syariah. For each item, the highest value is 4 and the lowest value is 1, so it can be stated that the range for each item is 3 (4-1).

The highest variance is found in item X3.1 of 0.624, namely with the answers of respondents who choose services that are easy to understand from the m-banking application from Bank BCA Syariah which indicates that the value given by respondents varies the most on this item when compared to other items in the Ease variable.

### 5. Comfort (X4)

**Table 8: Descriptive Analysis of Respondents Answers Convenience Variable (X4)**

	Range	Minimum	Maximal	Mean	Varian
X4.1	3	1	4	3.78	0.234
X4.2	3	1	4	3.29	0.471
X4.4	3	1	4	3.27	0.684

Source: Data Processed in SPSS 2021

From the output results above, it can be noted that all items on the convenience variable have an average value of around 3.3, then there are 3.7, with the highest average at X4.1 of 3.78, with the answers of respondents who prefer the convenience of accessing m-services. banking anywhere and anytime which indicates the highest convenience variable that respondents have chosen lies in the ease of accessing the m-banking application from Bank BCA Syariah. The lowest value on X4.4 is 3.27, with respondents' answers that are very minimal in choosing the existence of profitsharing provisions that convince respondents to answer questions from the questionnaire given. For each item, the highest value is 4 and the lowest value is 1, so it can be stated that the range for each item is 3 (4-1)

The highest variance is found in item X4.4 of 0.684, namely with the answers of respondents who choose the provision for profit sharing that convinces respondents to answer questions from the questionnaire given and indicates that the value given by respondents varies the most on this item when compared to other items on the variable. comfort.

## Validity test

### 1. Customer satisfaction (Y)

Validity testing will be seen by comparing the correlation between each item (Y1, Y2, Y3, Y4, Y5, Y6) with the total value of each item (Y) [remarks:  $Y = Y1 + Y2 + Y3 + Y4 + Y5 + Y6$ ]. If the item correlation is significant (Sig. < 0.05) then the item is declared valid. The correlation seen is the Spearman correlation because the data is ordinal data.

**Table 9: Customer Variable Validity Test (Y)**

Item	Component Matrix	Keterangan
Y1	0.713	Valid
Y2	0.788	Valid
Y3	0.724	Valid
Y4	0.658	Valid
Y5	0.575	Valid
Y6	0.686	Valid

Source: Data Processed in SPSS 2021

It can be seen that all items in the Customer Satisfaction variable have a p-value of Sig. < 0.05 so it can be stated that all items in the Customer Satisfaction variable are valid items.

### 2. Digital banking system (X1)

Validity testing will be seen by comparing the correlation between each item (X1.1, X1.2, X1.3, X1.4, X1.5) with the total value of each item (X1) [remarks:  $X1 = X1.1 + X1.2 + X1.3 + X1.4 + X1.5$ ]. If the item correlation is significant (Sig. < 0.05) then the item is declared valid. The correlation seen is the Spearman correlation because the data is ordinal data.

**Table 10: Testing the Validity of Digital Banking System Variables (X1)**

Item	Component Matrix	Keterangan
X1.1	0.482	Valid
X1.2	0.625	Valid
X1.3	0.787	Valid
X1.4	0.725	Valid
X1.5	0.693	Valid

Source: Data Processed in SPSS 2021

It can be seen that all items in the Digital Banking System variable have a p-value of Sig. < 0.05 so it can be stated that all items in the Digital Banking System variable are valid items.

### 3. Service (X2)

Validity testing will be seen by comparing the correlation between each item (X2.1, X2.2, X2.3, X2.4) with the sum of the values of each item (X2) [remarks:  $X2 = X2.1 + X2.2 + X2.3 + X2.4$ ]. If the item correlation is significant (Sig. < 0.05) then the item is declared valid. The correlation seen is the Spearman correlation because the data is ordinal data.

**Table 11: Testing the Validity of Service Variables (X2)**

Item	Component Matrix	Keterangan
X2.1	0.534	Valid
X2.2	0.647	Valid
X2.3	0.845	Valid
X2.4	0.836	Valid

Source: Data Processed in SPSS 2021



It can be seen that all items in the Service variable have a p-value of Sig. < 0.05 so that it can be stated that all items in the Service variable are valid items.

#### 4. Easiness (X3)

Validity testing will be seen by comparing the correlation between each item (X3.1, X3.2, X3.3, X3.4) with the sum of the values of each item (X3) [remarks:  $X3 = X3.1 + X3.2 + X3.3 + X3.4$ ]. If the item correlation is significant (Sig. < 0.05) then the item is declared valid. The correlation seen is the Spearman correlation because the data is ordinal data.

**Table 12: Testing the Validity of Service Variables (X3)**

Item	Component Matrix	Keterangan
X3.1	0.864	Valid
X3.2	0.788	Valid
X3.3	0.696	Valid
X3.4	0.700	Valid

Source: Data Processed in SPSS 2021

It can be seen that all items in the Convenience variable have a p-value of Sig. < 0.05 so it can be stated that all items in the Convenience variable are valid items.

#### 5. Comfort (X4)

Validity testing will be seen by comparing the correlation between each item (X4.1, X4.2, X4.3, X4.4) with the sum of the values of each item (X4) [remarks:  $X4 = X4.1 + X4.2 + X4.3 + X4.4$ ]. If the item correlation is significant (Sig. < 0.05) then the item is declared valid. The correlation seen is the Spearman correlation because the data is ordinal data.

**Table 13: Convenience Variable Validity Test (X4)**

Item	Component Matrix	Keterangan
X4.1	0.479	Valid
X4.2	0.817	Valid
X4.3	0.601	Valid
X4.4	0.817	Valid

Source: Data Processed in SPSS 2021

It can be seen that all items in the Comfort variable have a p-value of Sig. < 0.05 so it can be stated that all items in the Comfort variable are valid items.

#### Reliability test

Validity testing will be seen by see the cronbach's Alpha ( $\alpha$ ) value, If Cronbach's Alpha ( $\alpha$ ) > 0.6 then the variable are reliable or consistent. If Cronbach's Alpha ( $\alpha$ ) < 0.6 then the variable are not reliable or not consistent.

**Table 14: Reliability Test**

Variable	Cronbach's Alpha ( $\alpha$ )	Benchmark	Statement
Customer Satisfaction (Y)	0.808	0.6	Reliabel
Digital Banking System (X1)	0.774	0.6	Reliabel
Service (X2)	0.761	0.6	Reliabel
Easiness (X3)	0.824	0.6	Reliabel
Comfort (X4)	0.72	0.6	Reliabel

Source: Data Processed in SPSS 2021

Based on the table above, Customer satisfaction (Y) have Cronbach's Alpha ( $\alpha$ ) = 0.808, Digital banking system (X1) have Cronbach's Alpha ( $\alpha$ ) = 0.774, Service (X2) have Cronbach's Alpha ( $\alpha$ ) = 0.761, Easiness (X3) have Cronbach's Alpha ( $\alpha$ ) = 0.824, and Comfort (X4) have Cronbach's Alpha ( $\alpha$ ) = 0.72. So all variables have Cronbach's Alpha ( $\alpha$ ) > 0.6, then all variables are declared reliable or consistent.

#### Classic assumption test results

##### Normality test

The normality test of the data uses the Normally Kolmogrov-Smirnov Test based on probability (Asymptotic Significant), namely (Santoso, 2012);

- If the probability > 0.05 then the distribution of the regression model is normal,
- If the probability < 0.05 then the distribution of the regression model is not normal.

**Table 15: Kolmogorov-Smirnov Normality Test**

Test Statistics	p-value
0.100	0.016

Source: Data Processed in SPSS 2021

The result p-value of 0.016 where  $> 0.05$  so that  $H_0$  is accepted and it is stated that the residual model is normally distributed and the assumption of normality is met.

### Multicollinearity test

Testing this assumption will see the VIF value. Multicollinearity will occur if there is a VIF value  $> 10$ ;

**Table 16: Multicollinearity Test**

Model	Collinearity Statistics	
	Tolerance	VIF
Digital Banking System (X1)	0.606	1.650
Service (X2)	0.519	1.925
Easiness (X3)	0.551	1.816
Comfort (X4)	0.417	2.396

Source: Data Processed in SPSS 2021

The table above shows that none of the variables has a VIF value  $> 10$ , so it is stated that the assumption is fulfilled, namely that there is no multicollinearity.

### Heteroscedasticity test

If the variance of the residual from one observation to another observation remains, it is called homoscedasticity and if it is different it is called heteroscedasticity.

**Table 17: Heteroscedasticity Test**

Model	Sig.
Digital Banking System (X1)	0.359
Service (X2)	0.496
Easiness (X3)	0.004
Comfort (X4)	0.735

Source: Data Processed in SPSS 2021

Table 17 shows that all predictor variable correlations are not significant to the absolute value of the residual which has a p-value  $> 0.05$ . Therefore, it can be concluded that there are no symptoms of heteroscedasticity in the data (constant variance).

### Hypothesis testing

#### T test (partial)

If the magnitude of significance  $< 0.05$ , then the conclusion that can be drawn is that  $H_0$  is rejected and  $H$  is accepted. Vice versa if the magnitude of the significance value  $> 0.05$ , then the decision taken is  $H_0$  is accepted and  $H$  is rejected.

**Table 18. Partial Test (T Test)**

Variable	P-Value	Decision	Interpretation
Digital Banking System (X1)	0.484	$H_0$ accepted	The Digital Banking System does not affect the Customer Satisfaction indicator
Service (X2)	0.020	$H_0$ rejected	Service affects Customer Satisfaction indicators
Easiness (X3)	0.000	$H_0$ rejected	Easiness of influencing Customer Satisfaction indicators
Comfort (X4)	0.002	$H_0$ rejected	Comfort affects Customer Satisfaction indicators

Source: Data Processed in SPSS 2021

### F test (simultaneous)

It is said that there is a joint influence between the independent variable and the dependent variable if the value of  $f_{count} > f_{table}$ . Testing according to the terms and test criteria, namely:

- If  $f_{count} < f_{table}$ , then the independent variable has no significant effect on the dependent variable,
- If  $f_{count} > f_{table}$ , then the independent variable has a significant relationship according to the dependent variable

**Table 19: Simultaneous Test**

Statistik Uji	P – Value
56.468	0.000

Source: Data Processed in SPSS 2021

The calculated F value is 56,468 with p-value = 0.000 < 0.05 so that H0 is rejected and it is stated that all predictor variables affect the response variable together (the effect is significant).

### Linear regression model test

**Table 20: Regression Model Coefficient Estimation**

Parameter	Koefisien $\beta$	p-value
(Intercept) $\beta_0$	1.445	0.356
$\beta_1$	0.071	0.484
$\beta_2$	0.284	0.020
$\beta_3$	0.603	0.000
$\beta_4$	0.434	0.002

Source: Data Processed in SPSS 2021

Based on the table, it is found that the multiple linear regression equation is;

$$Y = 1.445 + 0.071 X_1 + 0.284 X_2 + 0.603 X_3 + 0.434 X_4 + E$$

From these equations it can be explained that:

- A positive constant of 1.445 states that the digital banking system, service, convenience and comfort variables are considered constant on customer satisfaction without the influence of these four variables at 1.445.
- The regression coefficient value of the digital banking system variable (X1) is 0.071, which means that if the digital banking system is getting better with the assumption that other variables are fixed, the customer satisfaction variable will increase.
- The regression coefficient value of the service variable (X2) is 0.284, which means that if the service is getting better with the assumption that other variables are fixed, then the customer satisfaction variable has increased.
- The regression coefficient value of the convenience variable (X3) is 0.603, which means that if the convenience is getting better with the assumption that other variables are fixed, then the customer satisfaction variable has increased.
- The regression coefficient value of the convenience variable (X4) is 0.434, which means if the comfort is getting better with the assumption that other variables are fixed, then the customer satisfaction variable has increased.

### Coefficient of determination test

**Table 21: Coefficient of Determination Test ( $R^2$ )**

$R^2$	$R^2$ adj.
0.704	0.691

Source: Data Processed in SPSS 2021

Obtained an R2 value of 0.691, this indicates that the dependent variable (Customer Satisfaction) can be explained by 69% by the predictor variables (Digital Banking System, Service, Ease, Convenience) in the model. The remaining 31% is influenced by other variables

### Discussion

- The Effect of Digital Banking System on Customer Satisfaction

Based on the statistical results of the t test and the results of the multiple linear regression model, it is known that the digital banking system variable has a regression coefficient value of 0.071, which means that the digital banking system variable is positive/real and constructive towards customer satisfaction. The p value of the digital banking system variable is 0.484, greater than 0.05 so that the digital banking system variable has no effect on customer satisfaction.

This research is in line with the research that has been tried (Susilawaty & Nicola, 2020) the results report that digital banking service quality has no effect on customer satisfaction because there is an important role in the interaction between customers and tellers or customer service directly, so the

role of branch offices has not been able to replace by digital services. This causes digital banking service quality in influencing customer satisfaction to be less pronounced or less significant.

2. The Effect of service on customer satisfaction

Based on the statistical results of the t test and the results of the multiple linear regression model, it is known that the service variable has a regression coefficient value of 0.284, which means that the service variable is positive/real and constructive on customer satisfaction. The p value of the service variable is 0.020, less than 0.05 so that the service variable has an influence on customer satisfaction.

The results of this research are in line with research from (Dharmadi & Bernadin Dwi, 2015) and research (Pratiwi & Seminari, 2015) which report that service variables have an important role in terms of customer satisfaction.

3. The Effect of Easiness on Customer Satisfaction

Based on the statistical results of the t test and the results of the multiple linear regression model, it is known that the convenience variable has a regression coefficient value of 0.603, which means that the convenience variable is positive/real and constructive on customer satisfaction. The p value of the service variable is 0.000, less than 0.05 so that the convenience variable has an influence on customer satisfaction.

The results of this research are in line with research from (Wahyuningsih & Janah, 2018). Reported that the convenience variable has an important role in terms of customer satisfaction.

4. The Effect of Comfort on Customer Satisfaction

Based on the statistical results of the t test and the results of the multiple linear regression model, it is known that the convenience variable has a regression coefficient value of 0.434, which means that the convenience variable is positive/real and constructive on customer satisfaction. The p value of the service variable is 0.002, less than 0.05 so that the convenience variable has an influence on customer satisfaction.

The results of this research are in line with research from (Susilawaty & Nicola, 2020) reports that the convenience variable has an important role in terms of customer satisfaction.

## Conclusion and Recommendations

Based on the results of the research that has been carried out, in order to provide an overview of the perception of how the quality of BCA Syariah digital services which consists of a digital banking system, service, convenience, and comfort affects the satisfaction of BCA Syariah customers for the rapid development of today's technology that accommodates banking industry services in Indonesia.

By testing the validity and reliability for the variables Digital Banking System (X1), Service (X2), Comfort (X3), Convenience (X4), Customer Satisfaction (Y) obtained valid and reliable items for each of these variables. All variables X (Digital Banking System, Service, Easiness, Comfort) have a positive linear relationship to Customer Satisfaction, namely an increase in Digital Banking System, Service, Easiness, and Comfort will increase Customer Satisfaction as well. Digital Banking System is the only predictor variable that has no significant effect on Customer Satisfaction, while Service, Easiness, Comfort has a significant effect on Customer Satisfaction. The regression equation obtained with the predictor variables of Digital Banking System, Service, Easiness, Comfort is able to explain 69% of variations in customer satisfaction, while the other 31% is explained by other predictor variables not examined in the model.

The recommendation that the researcher can convey is that further researchers are expected to be able to examine the focus of the core research problem with variables related to the influence of digital banking **services** on customer satisfaction and use more complete and accurate test methods and tools so that conclusions are more valid and able to improve and be further improved in the dimensional aspect of the customer satisfaction variable.

## Limitations and Future Research

### Limitations

1. This study only takes 100 respondents who are customers or people who have used m-banking
2. Limited access to information desired by researchers, considering the Covid-19 situation.
3. Researchers cannot control respondents who fill out questionnaires in order to get balanced results on respondent data because the research was carried out during the Covid-19 pandemic, thus requiring researchers to distribute questionnaires via Google Form.

### Future research

1. In the theoretical aspect, it is recommended in the future to be able to examine the focus of the core research problem with variables related to the effect of digital banking services on customer satisfaction and use more complete and accurate test methods and tools in order to obtain more valid conclusions.
2. In terms of practitioners, it is suggested that the company should be able to improve and further improve the dimensions of the customer satisfaction variable.

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