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# **Effectiveness of Using Mobile Banking Indonesian Sharia Bank**

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#### Abstract

Mobile banking is a service that enables bank customers to conduct financial transactions via their mobile phones or smartphones. Mobile banking services can be accessed through menus that are already accessible via smartphone applications that customers can download and install. This study intends to describe the effectiveness of mobile banking at Bank Syariah Indonesia KCP Lombok.

This study employs descriptive quantitative research with a population of all BSI KCP Lombok customers using BSI mobile banking after the 2021 merger, totaling 15,400 customers, and a sample size of 99 respondents determined using the Slovin formula. Observation, questionnaires, and documentation of BSI KCP Lombok customers who utilize BSI mobile banking were employed as research instruments. The sampling method is non-probability sampling, the data analysis method is descriptive analysis of effectiveness, and the data were processed with Microsoft Office Excel 2010 and the formula from Research and Development Dapdagri (Ministry of Home Affairs) to measure effectiveness. The findings of this study indicate that the impact of mobile banking on customer satisfaction at BSI KCP Lombok bank achieves a high level of effectiveness, as measured by R&D Dapdagri's standard table.

Based on the calculation results obtained from data analysis, the percentage of each indicator in this study is 88.09%; based on standard measures of effectiveness in accordance with the standards for measuring effectiveness according to Research and Development of Dapdagri, a very effective achievement level is obtained.

**Keyword**: Effectiveness, Mobile Banking, Sharia Bank

#### Introduction

Bank Syariah Indonesia in Lombok provides services in the field of technology so that it makes it easier for customers to make transactions wherever they are without having to wait in long queues just to make transactions, with the current technological sophistication, namely transacting through applicationsmobile banking (Melfi Adela, 2021). Mobile banking is a facility from a bank in this modern era that keeps abreast of developments in technology and communication, the services available onmobile banking including payments, transfers, history, and so forth. The use of mobile banking services on cellular phones allows customers to carry out their banking activities more easily without space and time limits. With service mobile banking it is hoped that this will provide convenience and benefits for bank customers without having to come directly to the bank (Adinda Siti syhmir Silawane, 2021). Banks provide servicesmobile banking to meet the demands and needs of customers as an alternative to conducting banking transactions, throughmobile banking customers can access banking products and services by using smartphone. Transaction mobile banking can be done anywhere and anytime for 24 hours without having the customer come to the bank or Automated Teller Machine (ATM), except for cash deposit and withdrawal transactions (Citra Dian Sari, 2021). However on usabilitymobile banking you can see the quality of the security is not as safe as imagined, because of usemobile banking also has limitations such as when there is a network interruption, so access passesmobile banking will be hampered.

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Based on the results of the pre-survey, it is known that the number of customers using the applicationmobile banking at BSI KCP Lombok after the merger in 2021 of 15,400 (people). Based on a related complaint or grievancemobile banking This. According to interviews conducted by researchers with several BSI KCP Lombok customers, as for customers using applicationsmobile banking BSI on behalf of Riska, he stated that when accessing the servicemobile banking must have a strong signal because if the internet connection and signal are not good, then the service will automaticallymobile banking can not be accessed so we can not transact.

#### Method

The type of research used in this research is quantitative research (Sugiyono, 2014) with a descriptive approach, where this quantitative descriptive explains the phenomena as they are. This quantitative descriptive research is a type, design, or research design that is commonly used to examine natural research objects or in real conditions and not set up like an experiment (Ghozali, 2015). Descriptive itself means that the results of the research will be truly described based on the research that has been done without drawing conclusions based on conclusions.

The sampling technique (Harianto, 2018) used in this research is technique non probability sampling, by using the calculation proposed by Slovin, namely:

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

Description: n = Number of Samples N = Number of Population e = Percentage of allowance due to sampling errors that are still being torered (inaccuracy) In this study

N = 15.400 and e = 0.1 (10%) maka:

$$n = \frac{15.400}{1 + 15.400(0,1)^2}$$
= 15.400 / (1 + (15.400 × 0,01))  
= 15.400 / 1 + 154 = 155  
= 15.400 / 155  
= 99.354 or 99 Costumers

So in this study the number of samples was 99 people / customers of Bank Syariah Indonesia. In order to obtain precise and accurate information, this research instrument uses a research instrument measuring instrument called the Likert scale which is carried out in order to test how strongly a subject agrees and disagrees on statements on a scale using points 1-5 with the following guidelines:

**Table 3.2 Research Scale** 

NO	Rating Level	Skor
1.	Strongly Agree (SS)	5

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2.	Agree (S)	4
3.	Disagree (KS)	3
4.	Not Agreed (TS)	2
5.	Strongly Disagree (STS)	1

Validity Test and Reliability Test Validity Test Instrument This study uses the statistical Package for Social Science (SPSS) application to measure validity tests and reliability tests (ghozali, 2015) Validity tests are carried out by comparing the results of realculate with rtabel, where df = n-2 with sig 5% if realculate> rtabel then the question item is declared valid. Reliability Test Reliability test is a tool to measure a questionnaire which is an indicator of variables or constructs (Sugiono, 2014). A questionnaire is said to be reliable if a person's answers to questions are consistent or stable over time. SPSS provides facilities to measure reliability with the Cronbach Alpha ( $\alpha$ ) statistical test. A variable is said to be reliable if it gives a value of  $\alpha > 0.6$ .

## **Result and Discussion**

**Table. 3.3 Validity Test Results** 

Variabel	Item	Rhitung	R <sub>tebal</sub>	Keterangan
Customer	1	0,619	0,197	Valid
Satisfaction	2	0,603	0,197	Valid
	3	0,537	0,197	Valid
	4	0,399	0,197	Valid
	5	0,352	0,197	Valid
	6	0,410	0,197	Valid
	7	0,453	0,197	Valid
	8	0,428	0,197	Valid
	9	0,387	0,197	Valid
	10	0,331	0,197	Valid
	11	0,386	0,197	Valid
	12	0,447	0,197	Valid
	13	0,463	0,197	Valid
	14	0,457	0,197	Valid
	15	0,534	0,197	Valid
	16	0,439	0,197	Valid
	17	0,512	0,197	Valid
	18	0,395	0,197	Valid

Source: Data processed in SPSS

The table above states that all outputs of the rtable test> rtable using the condition rtable = 0.197 then it can be concluded that all statement items used in the mobile banking user variable are declared valid.

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**Table 3.4 Reliability Test Results** 

		Nilai	
No.	Variabel	Cronbach Alpha	Information
1	Mobile Banking (X)	0,749	Reliabel

Sumber: Data diola di SPSS 20

Characteristics of Respondents, Respondents in this case are customers of Bank BSI KCP Lombok. This study used 99 samples where respondents were encountered while the research was being conducted. Respondents by Age The characteristics of respondents by age can be seen in the following table:

Table 4.1 Characteristics of Respondents by Age

No.	IIaia	Respondents' Responses		
NO.	Usia	Costumers	Persentase %	
1	20 tahun	3	03,0%	
2	21-30 tahun	60	60,6%	
3	31-49 tahun	26	26,3%	
4	> 50 tahun	10	10,1%	
	Total	99	100%	

Source: Processed primary data, 2022

Based on table 4.1 data processing results regarding the characteristics of respondents based on age: 20 years old as 3 people or 03.0% 21-30 years old as 60 people or 60.6% 31-49 years old as 26 people or 26.3% > 50 years old as 10 or 10.1% It can be concluded that the average customer who uses BSI mobile banking at BSI KCP Lombok is on average 21-30 years old. Respondent Gender The characteristics of respondents based on gender can be seen in the following table:

Table 4.2 Characteristics of respondents by sex

No.	Gender	Responde	ents' Responses
		Costumers	Persentase %
1	Female	54	54,5%
2	Male	45	45,5%
	Total	99	100%

Source: Processed primary data, 2022

Based on table 4.2 data processing results regarding the characteristics of respondents based on gender: men amounted to 45 people or 45.5% women, namely 54 people or 54.5% It can be concluded that the average customer who uses mobile banking at BSI KCP Lombok is on average female. The characteristics of respondents based on the last education can be seen in this table:

Table 4.3 Characteristics of respondents based on recent education

No.	Recent Education	Respondents' Responses		
110.	Recent Education	Costumers	Persentase %	

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1	Tidak Sekolah	0	0%
2	SD/MI	3	03,0%
3	SMP/MTS	6	06,1%
4	SMA/MA	63	63,6%
5	Perguruan Tinggi	27	27,3%
	Total	99	100%

Source: Processed primary data, 2022

Based on table 4.3 of data processing results regarding respondents' characteristics based on recent education: No school amounted to 0 or 0% Elementary / MI numbered 3 people or 03.0% Junior High School / MTS numbered 6 people or 06.1% Senior High School / MA numbered 63 people or 63.6% Higher education amounted to 27 people or 27.3% It can be concluded that the average customer who uses mobile banking at Sharia Bank in Lombok has the last average education of SMA / MA. Respondent's Occupation/Profession The characteristics of respondents based on occupation/profession can be seen in the following table.

Tabel 4.4 Karakteristik Responden Berdasarkan Pekerjaan/Profesi

No.	Occupation/Profession	Respondents' Responses			
110.	Occupation/F101ess1011	Person	Persentase %		
1	Teacher	10	10,1%		
2	Civil Servants	5	05,1%		
3	Merchant	15	15,2%		
4	Student	44	44,4%		
5	Private Employees	14	14,1%		
6	Self employed	11	11,1%		
	Total	99	100%		

Source: Processed primary data, 2022

Based on table 4.4 of respondents' data processing based on occupation / profession: Teachers as many as 10 people or 10.1% Civil servants as many as 5 people or 05.1% Traders as many as 15 people or 15.2% Students / students as many as 44 people or 44.4% Private employees as many as 14 people or 14.1% Entrepreneurs namely 11 people or 11.1% It can be concluded that the average customer who uses mobile banking at BSI KCP Lombok is a student / student. Respondents' Income The characteristics of respondents based on income can be seen in the following table:

Table 4.5 Characteristics of Respondents Based on Income

No	Inaoma	Respondents' Responses			
No.	Income	Costumers	Persentase %		
1	Kurang dari RP.1.000.000	39	39,4%		
2	Rp. 1.000.000 - Rp. 2.000.000	16	16,1%		
3	Rp. 3.000.000 - Rp. 4.000.000	39	39,4%		
4	> Rp. 5.000.000	5	05,1%		
	Total	99	100%		

Source: Processed primary data, 2022

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a. Based on table 4.5 data processing results regarding respondents' characteristics based on income: Less than Rp. 1,000,000 as many as 39 people or 39.4% Rp. 1,000,000 – Rp. 2,000,000 as many as 16 people or 16.1% Rp. 3,000,000 – Rp. 4,000,000 as many as 39 people or 39.4% More than Rp. 5,000,000 as many as 5 people or 05.1%. It can be concluded that the average customer who uses mobile banking at BSI KCP Lombok earns an average of Rp. 3,000,000 – Rp. 4,000,000, and less than 1,000,000. Respondents' opinions regarding the effectiveness of using mobile banking on Bank BSI customer satisfaction. Effectiveness of Mobile Banking Use BSI KCP Lombok. The statements in the questionnaire, the results of the Respondent's answers include the choices strongly agree, agree, disagree, and strongly disagree. Ease of Users in Using BSI Mobile Banking. I use BSI mobile banking because it is very easy to learn how to use it

Table 4.6 Respondents' answers about me using BSI mobile banking because it is very easy to learn how to use it

Respondents' Answers	Weig ht	Sum	Sko r	Persentase (%)
Totally agree	5	47	235	47,5%
Agree	4	52	208	52,5%
Disagree less	3	-	-	-
Disagree	2	-	-	-
Strongly disagree	1	-	-	-
Total		99	443	100%
Total respondent responses		8	89,49%	

Sumber: data primer, kuesioner diolah 2022

Based on table 4.6, it can be seen that with a sample of 99 people, respondents who answered strongly agreed as many as 47 people, who answered affirmatively as many as 52 people, who answered less agree as much as 0, who answered disagree as much as 0, and who answered strongly disagree as much as 0, with a total score value of 443.

$$\frac{Total\ score\ of\ respondents'\ answers}{Highest\ score} \times 100\%$$

$$= \frac{443}{5 \times 99} \times 100$$

$$= \frac{443}{495} \times 100$$

$$= 89,49\%$$

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I use BSI mobile banking because it is easy to use to transact
Table 4.7 Respondents' answers about me using BSI mobile banking because it is
easy to use to transact

Respondents' Answers	Weig ht	Sum	Skor	Persentase (%)
Totally agree	5	47	235	47,5%
Agree	4	51	204	51,5%
Disagree less	3	1	3	01,0%
Disagree	2	-	-	-
Strongly disagree	1	-	-	-
Total		99	442	100%
<b>Total respondent responses</b>			89,29%	

Source: primary data, questionnaire processed 2022

Based on table 4.7, it can be seen that with a sample of 99 people, respondents who answered strongly agreed as many as 47 people, who answered affirmatively as many as 51 people, who answered less agree as much as 1, who answered disagree as much as 0, and who answered strongly disagree as much as 0, with a total score value of 442.

$$\frac{\textit{Total score of respondents' answers}}{\textit{Highest score}} \times 100\%$$

$$=\frac{442}{5\times99}\times100\%$$

$$=\frac{442}{495} \times 100\%$$

= 89.29%

I use BSI Mobile Banking because it can be used anywhere and anytime. Table 4.8 Respondents' answers about me using BSI mobile banking because it can be used anywhere and anytime.

Respondents' Answers	Weight	Sum	Skor	Persentase (%)
Totally agree	5	47	235	47,5%
Agree	4	51	204	51,5%
Disagree less	3	1	3	01,0%

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<b>Total respondent responses</b>		89,29%		
Total		99	442	100%
Strongly disagree	1	-	-	-
Disagree	2	-	-	-

Source: primary data, questionnaire processed 2022

Based on table 4.8, it can be seen that with a sample of 99 people, respondents who answered strongly agreed as many as 47 people, who answered affirmatively as many as 51 people, who answered less agree as much as 1, who answered disagree as much as 0, and who answered strongly disagree as much as 0, with a total score value of 442.

$$\frac{\textit{Total score of respondents' answers}}{\textit{Highest score}} \times 100\%$$

$$= \frac{442}{5 \times 99} \times 100\%$$

$$=\frac{442}{495}\times100\%$$

Ease of access I feel that the BSI mobile banking service application system is very easy to reach anywhere.

Table 4.9 Respondents' answers about me feel that BSI's mobile banking service application system is very easy to reach anywhere.

Respondents' Answers	Weig ht	Sum	Sko r	Persentase (%)
Totally agree	5	47	235	47,5%
Agree	4	51	204	51,5%
Disagree less	3	1	3	01,0%
Disagree	2	-	-	-
Strongly disagree	1	-	-	-
Total		99	442	100%
<b>Total respondent responses</b>	89,29%			

Source: primary data, questionnaire processed 2022

Based on table 4.9, it can be seen that with a sample of 99 people, respondents who answered disagree as many as 47 people, who answered in agreement as many

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as 51 people, who answered less agree as many as 1 person, who answered disagree as much as 0, and who answered strongly disagree as much as 0, with a total score value of 442.

$$\frac{\textit{Total score of respondents' answers}}{\textit{Highest score}} \times 100\%$$

$$=\frac{442}{5\times99}\times100\%$$

$$= \frac{442}{495} \times 100\%$$

Based on the results of research and discussion regarding the Effectiveness of Using Bank BSI's mobile banking through questionnaires to customers by distributing these questionnaires to customers who use BSI mobile banking. Then it is processed using Microsoft Excel 2010, then calculated and measured using the Dapdakri Research and Development (1991) measurement method, namely:

The results of the analysis regarding the effectiveness of using mobile banking on customer satisfaction at Bank BSI KCP Lombok stated that the average obtained from the 7 indicators analyzed was 88.71%. And based on the results of calculations using descriptive analysis regarding the effectiveness of using BSI mobile banking, it is known that the results obtained are 88.09%, which means that according to the standard table for measuring the effectiveness of R&D Dapdagri obtains a very effective achievement level. Where if the customer is satisfied with the use of mobile banking, the level of effectiveness will be better.

According to Adinda Siti Syahmira Silawane, stated that the effectiveness of using mobile makes it easier for customers to make any transactions and anywhere, in this case customers feel satisfied in using mobile banking because some customers state that some of the customer's daily needs can be fulfilled while using mobile banking. . So if the customer is satisfied with the use of mobile banking, say that the use of mobile banking is effective in its use.

## Conclusion

The conclusion from the results of research on the effectiveness of using mobile banking has a very effective level of customer satisfaction in using BSI's mobile banking application services. This condition is supported by a questionnaire (questionnaire) that has been given by researchers to respondents in which respondents gave answers agreeing or not to several statements.

### Reference

Adinda Siti syhmir Silawane, (2021). "Efektivitas Penggunaan Mobile Banking BCA". Skripsi Universitas Pakuan Bogor.

DOI : 10.24256



- Ady Muliadi, (2021). "Efektivitas Sistem Layanan Mobile Banking Dalam Merespon Kebutuhan Nasabah di Era Pandemic Covid-19 (Studi Kasus Nasabah PT Bank Syariah Indonesia, Tbk KCP Bulukumba Sam Ratulani)". Skripsi Universitas Islam Negeri Makassar.
- Andika Febriananta, (2020). "Pengaruh Kualitas Layanan Mobile Banking Terhadap Kepuasan Nasabah Bank BCA di Kota Bandung". Skripsi Universitas Telkom.
- Asfiriqi Machfiroh, (2019). "Efektivitas Nasional Pemberdayaan Masyarakat Mandiri Perkoaan (PNPM-MP) Dikota Palu". Jurnal Katalogis, Vol, No. 2.
- Ali, Zaenuddin, eds.1. (2018), Hukum Perbankan Syariah". Jakarta: Sinar Grafika.
- Agus Tri Basuki, eds.1. "Pengamtar Ekonometrika Di Lengkapi Penggunaan Eviews". Yogyakarta: Katalog Dalam Terbitan.
- Bill Stinnet., eds.2. "Think Like Your Customer". Jakarta: Alex Media Komputindo.
- Citra Dian Sari, (2021). "Penerapan Sistem Mobile Banking Pada Bank Syariah Indonesia Kantor KAS Yogyakarta Universitas Islam Indonesia". Jurnal Laporan Magang, vol.4, No.2. Universitas Indonesia.
- Fandy Tjiptono, eds.3. (2012). Service ManagementMewujudkan Layanan Prima, Yogyakarta: Andi.
- Hoffman & Bateson,ed.4.(2011). "Service Marketing, International Edition". Colorado State University: Cengage Learn8kkuking.
- Hanif Astika Kurniawati, Wahyu Agus Winarno, dan Alfi Arif, (2017). "Analisis Minat Penggunaan Mobile Banking Dengan Pendekatan Technology Acceptance Model (TAM) Yang Telah Dimodifikas". Jurnal Perbankan,vol 4.No.1.
- Irawan, (2019). "Persepsi nasabah dalam menggunakanbank". Jurnal Eknomi, Vol.2, No.3. Universitas Indonesia.
- James F. Engel, et.al,ed.5. (1992). "Perilaku Konsumenahli bahasa FX Budiyanto". Jakarta:Binarupa Aksara.
- Jonathan Sarwono, eds.6. (2006). "Metode Penelitian Kuantitatif dan Kualitatif" Yogyakarta: Graha Ilmu.
- Lesti, (2019). "pengaruh kemanfaatan, kemudahan pengguna dan risiko terhadap minat masyarakat menggunakan mobile banking". Skripsi Institut Agama Islam Negeri LOMBOK.
- Melfi Adela, (2021). "Pengaruh Layanan Mobile Banking Terhadap Kepuasan Nasabah Pada Bank Syariah KCP Rajabasa". Skripsi Institut Agama Islam Negeri Metro.
- Muasaroh, (2010). "Aspek-Aspek Efektivitas Studi Tentang Efektivitas Pelaksanaan Program Pelaksanaan PNPM-PM". jurnal PNPM-PM, vol.10,No 2.Universitas Brawijaya Malang.
- More D kenneth, eds 1 (2005). "Efektivitas Instructional Strategies From Theory to Practice". London: Sage Publication.
- Mukhtisar,et,al, (2021). "Pengaruh Efisiensi, Keamanan Dan Kemudahan Terhadap Minat Nasabah Bertransaksi menggunakan Mobile Banking (Studi Pada Nasabah Bank Syariah Mandiri Ulee Kareng Banda Aceh)". Jurnal Global Journal Of Islamic Banking And Financ, Vol 3. No1.
- M.Nur Rianto Al Arif, eds.3. (2010). "Dasar-Dasar Pemasaran Bank Syariah" Bandung: Alfabeta.

DOI : 10.24256



M. Nur Rianto Al Arif, eds.1. (2010). "Dasar-Dasar Pemasaran Bank Syariah" Bandung: Alfabeta.

Mts.Arief,eds.3. (2007). "*Pemasaran Jasa dan Kualitas Layanan*". Jakarta: Bayu Media Publishing.

M Tasya, (2021). "Gambaran Umum Bank Syariah Indonesia". Universitas Islam Negeri Banten.

Priyono, eds.4.(2016). "*Metode Penelitian Kuantitatif*". Surabaya: ZifatamaPublishing. Philip Kotler, ed.2. *Manajemen Pemasaran*. Jakarta: Indeks.

Philip Kotler, eds.4. (2000). "Marketing Manajemen". New Jersey: Prentice Hall.

Philip Kotler, ed.4. "Marketing Manajemen". New Jersey:Prentice Hall.

Riduan, (2014). "Dasar-Dasar Statistika". Bandung: Alfabeta.

Soematri, Andri, eds.4. (2014). "Bank Syariah dan Lembaga Keuangan Islam, Jakarta: Kencana Prenadamedia Group.

Sugiyono, eds.4. "Metode Penelitian Bisnis (Pendekatan Kuantitatif, Kualitatif, dan R&D)". Bandung: CV Alfabeta.

Sugiono, Cet.20. "metode penelitian kuantitatif, kualitatif, dan R&D". Bandung:Alfabeta.

Syofian Siregar, eds.3. "Statistik Parametrik untuk Penelitian Kuantitatif". Jakarta: PT Bumi Aksara.

Suyono, eds.3. "Analisis Regresi untuk Penelitian". Yogyakarta: Deepublis.

Imamghozali, (2013). "Aplikasi Analisis Multivariatedengan Program SPSS". Semarang: Badan penerbit Universitas Dipenogoro.

Yusman, Muammar Arafat, eds.1 .(2018) "Buku Pintar Perbankan, ed1(Yogyakarta: Deepublis, 2018), h.81.

Zakaria Harahap, (2018). " Pengaruh Pelayanan M-Banking Terhadap Kepuasan Nasabah Pada Bank Syariah Mandiri Kota Prabumilih". Journal Pemikiran Dan Pengembangan Perbankan Syariah. Vol. 6, No. 1.

Zulfikar,(2016). "Pengaruh Pasar Modal dengan Pendekatan Statistika". Yogyakarta: Depublish.