



# Digitalization Role of the Front Office in the Banking Business, Impact and Implementation

Paisal Paisal<sup>1</sup>(✉), Afrizawati Afrizawati<sup>1</sup>, Fernando Africano<sup>1</sup>, M. Riska Maulana<sup>1</sup>,  
and Habsah Binti Mohammad Sabli<sup>2</sup>

<sup>1</sup> Bussiness AdminstrationState Polytechnic State of SriwijayaPalembang, Palembang,  
Indonesia

Paisal@polsri.ac.id

<sup>2</sup> Polytechnic Mukah Sarawak, Mukah, Malaysia

**Abstract.** This study was conducted to see the impact of banking digitalization on the role of the front office (teller and customer service) in the banking business activities, as well as the implementation in the banking business. The data for this study used primary data collected through distributed of questionnaires, as well as secondary data taken from references and published data's. Meanwhile, the population used are all employees of BNI 46 in the Palembang area who work as a front office including tellers and customer service. The results of this study show that the partial test data (t test) has a significant correlation with the role of the front office BNI 46 Palembang area with a significance level of 0.032, the t-test value for X1 is 2.194, beta value is 0.184 and X2 the significance value is 0.191, t-value is -1.321., beta value -0.165 its mean digitalization has a positive influence on the role of the front office and according to the results of calculated F value of 3.269 with a significant value. 0.044. it indicated the F value was greater than F table 3.126 and the signification.0.044 value is smaller than 0.05. Thus H0 was rejected and the other side Ha is accepted. So it can be said the variables of the impact of digitalization and the implementation of digitalization are together significant influence on the role of the front office (teller, customer service).

**Keywords:** Digitalization · Front Office · Banking Business

## 1 Introduction

Banking digitalization is something that is an unavoidable in many parts of the world. (1) in his writings on digitalization in the banking sector in India concludes due to the adoption of this digitalization, banking sectors in India face some remarkable changes as well as hurdles. Now we are in the digital era, it is not possible to avoid the growth and services or digital banking. Everyone uses the modern mobile device, which is smartphone, phone cells and other communication to access digital banking services. Even digital banking is the place of inevitable today but its also can make every help for banking service. So it can be concluded that the current digitalization of banking is

not an option, but has become a must if banks want to continue to compete for available market share.

The existence of digitalization in banking is believed to increase efficiency, one of which is using the latest applied technology in running its business. The seriousness of banks in working on digital banking to improve services and quality in order to remain competitive in a competitive business environment, raises new issues or concerns in terms of Human Resources (HR). The use of technology in some banking services results in a reduction in the work done by humans. The application of banking digitalization cuts down the complicated and time-consuming bank administration process while also cutting or eliminating a number of jobs that are usually done by humans, especially front office work.

Indonesia is one of the countries with a low level of penetration of banking services. Compared to other developing countries, Indonesia is lagging behind in terms of financial inclusion. According to a World Bank (2), only 36 percent population of adult has account with formal financial institution. This point is lower than the average for East Asia and Pacific countries (69 percent), the average for lower-middle income countries (42 percent). In Southeast Asia, Indonesia even lags far behind Thailand, where 78 percent of the population has a bank account (3).

Currently, Indonesia is heading for a digital transformation in the operational implementation of its system. The Financial Services Authority (OJK) was noted that the new digital penetration rate covers 39.2 percent of the Indonesian people, so that there is still quite a lot of room for improvement in Digital Banking, especially since the potential for economic development and people's behavior is increasingly digitized. So far, the banking industry has tried to develop several parts of the transformation related to Digital Banking. The era of banking digitalization make more simple for customers to get access financial banking services, only through their hands customers can do transactions via phones cell usage diverse strategies starting from from sms banking to internet banking. The presence of utility offerings for every financial institution permits to get admission freely, while not having to return back to the branch office.

Based on from above conditions, this research need the real impact of digitalization of banking on the role of tellers and customer service in banking business activities as the front line in providing services to customers. The study will be conducted on the role of tellers and customer service at the BNI 46 bank in the Palembang area so that it can show the impact and implementation of the use of banking digitalization in the position of teller and customer service in bank business activities.

## **2 Literature Review**

### **Digitalization**

Digitalization is a digital communication and digital media on contemporary social life. Then, according to Gartner.com's dictionary of terms defines, digitalization as "the use of digital technology to transform a business model and provide new revenue and value-generating opportunities; this is a process of moving to digital business. And in fact, the digitization process cannot occur without digitization. Digitization is the use of digital

technology and digitized data, to influence the way jobs are completed, change the way company-customers interact, and create new (digitally) revenue streams.

Research conducted by (5) shows that the banking industry in providing services must adapt to technological developments to provide the convenience desired by customers for banking services. The development of Financial Technology or known as FinTech since 2015 has made banks have to be aware of its developments if they do not want to be abandoned by their customers who can switch to other financial institutions.

### **Banking Digitalization**

Banking digitalization is something that is unavoidable in many parts of the world. (1) In his writings on digitalization in the banking sector in India concludes "Due to the adoption of this digitalization, the banking digitalization certainly has a positive impact on banks and their customers. Transactions that are no longer limited by place and time are a significant advantage for customers, while for banks the increase in income from fee-based income and a decrease in labor costs are among other positive impacts. Banking digitalization also has several challenges in its development. (6) writes about several shortcomings of banking digitalization, namely Personal relationship between the bank officials and the customers has been minimized due to access from one place. As everything has been mobilized the security in protecting transactions has been reduced in such a case issues regarding transactions have been increased. There is a high risk in making transactions because identification of theft of encrypted software.

With the advancement of technology that causes changes in analog information into digital information, people prefer to use digital information for the following reasons:

1. Easy to search, browse, access and use according to user needs.
2. Easy to produce, send, receive, filter, update based on user's ability.
3. The format of writing and the content of the message sent is the same as the format of writing and the content of the message received.
4. Not hampered by long distances, language differences and time differences.
5. Sending and receiving messages is very fast and cheap.
6. Easy to store and process so it does not require large storage space.
7. Easy to apply in various media because the format of the content of digital information will be the same, between one device and another (7).

### **Front Office**

Front office at a bank are employees assigned to the front line to serve the banking needs of customers either face to face or through other communication tools such as telephone or email. This task is closely related to the Teller and Customer Service functions. (8) in their research said that Tellers and Customer Service are frontliners at Bank Negara Indonesia who teller is a bank employee at the counter whose main task is to serve customers such as serving cash receipts or payments, deposits accept, checks, provide other bank services to public, cashier the signature authorization is required as a valid sign of a transaction document; in financial institutions and has great responsibility for his work play an active role in serving customers with 3S, namely smile, greet, and greeting. Tellers whose role is to transact cash deposits and withdrawals, serve BPJS deposits, serve payments and

open overbooking of blocked customer account numbers, while Customer Service has a role to serve customers in opening the first account to make savings at the bank, serving customers with a friendly smile and full of patience.

### Customer Service

Customer Service is an activity that is intended or intended to offer pleasure clients, through services which could meet customer activities and needs (9). Customer Service performs a completely vital position in organizations and banks. Therefore, the undertaking of Customer Service is spine of the operational activities of the banking world. So it could be concluded that the position of Customer Service is to maintain loyal customers so that they stay dependable to be our clients via fostering nearer relationship with clients. And additionally looking to get new clients to undergo numerous strategies and additionally persuade customers approximately the high satisfactory of the goods they have.

### Teller

Teller is bank officer who is responsible for deposits accepts, cashing cheque, and provide other banking services to public, the authorize teller signature is a valid sign of a transaction document; In financial institutions, teller generally work behind the counter, in large banks the duties and functions of the cashier have been assigned as a job descriptions, for example, a teller processes deposits by mail, stores, and records all proof of deposit payments from each bank. Customer. Tellers can also be categorized as bank employees who are responsible for cash traffic. Teller is bank employee at the counter whose main task is to serve customers such as serving cash receipts or payments, deposits accept, cashing, provide other banking services to the public, the signature of the teller authorization is required as a valid sign of a transaction document; and has great responsibility for his work.

## 3 Results and Discussion

Validity test is used to determine the feasibility of the items in a list of questions in defining a variable. This questionnaire generally supports a certain group of variables. The validity test should be carried out on each question item in the validity test. We compare the results of r count with r table, df score = n-2 sig 5%. If r table r count then it is valid (10).

In the Table 1, it is seen that the significant value (2-tailed) 0.000 less than 0.05 then it is valid and r count (Pearson Correlation) is greater than r table (0.1966) so that the item or valid question. Valid if the value of r count > r table, R count = correlation of total corrected item (CITC). R count = 0.2303 Reliable if the Cronbach's value is negligible > 0.6, i.e. 0.928 (Table 2).

From Table 2, it is seen that the value of Sig. (2-tailed) 0.000 is less than 0.05 then it is valid and r count (Pearson Correlation) is greater than r table (0.1966) so that the item or question was valid. Valid if the r count > r table, R count = correlation total corrected item (CITC) R table = 0.915 Reliable if Cronbach's value is negligible > 0.6

From Table 3, it can be seen that the value of Sig. (2-tailed) 0.000 is less than 0.05 then it is valid and r count (Pearson Correlation) is more high than r table (0.1966) so

**Table 1.** Test Validity and reliable X1 (*front Office*)

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X11	63.15	68.685	.645	.923
X12	63.03	67.666	.722	.921
X13	62.90	66.810	.789	.919
X14	63.10	68.755	.729	.921
X15	63.00	69.222	.659	.923
X16	63.27	70.896	.503	.927
X17	63.12	67.637	.736	.921
X18	63.32	69.552	.491	.928
X19	63.11	67.571	.817	.919
X110	63.07	67.481	.748	.920
X111	63.14	69.009	.748	.921
X112	63.25	71.661	.334	.933
X113	63.14	69.009	.748	.921
X114	63.19	66.518	.734	.921
X115	63.14	69.009	.748	.921
X116	63.22	72.757	.329	.932

**Table 2.** Validity Test and reliability X2 (Banking Business) Statistics Total Item

	Mean Scale if Deleted Item	Variance Scale if Deleted Item	Total Item Corrected-Total Correlation	Cronbach's Alpha if Deleted Item
X21	32.96	29.262	.597	.912
X22	32.97	29.083	.551	.915
X23	32.93	26.426	.806	.897
X24	32.96	28.457	.741	.903
X25	33.07	27.065	.754	.901
X26	33.16	27.834	.712	.904
X27	33.10	27.199	.706	.905
X28	32.99	28.486	.709	.905
X29	33.07	27.870	.757	.901

**Table 3.** Validity Test and Reability Y variabel

	Mean Scale if Delete Item	Variance Scale if Deleted Item	Corrected Item-Total Correlation	Cronbach's Alpha if Deleted Item
Y1	42.16	34.278	.585	.904
Y2	42.04	33.596	.668	.900
Y3	41.99	32.458	.798	.893
Y4	42.12	35.165	.514	.908
Y5	42.10	34.088	.707	.899
Y6	42.03	33.721	.689	.899
Y7	42.21	34.082	.687	.900
Y8	42.12	33.304	.728	.897
Y9	42.55	31.973	.622	.905
Y10	42.60	31.271	.665	.902
Y11	41.92	34.188	.656	.901

**Table 4.** Partial Test Y (Role of Front Office) and X1 (Impact of Digitization)

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.022	7.347		5.311	.000
	X1	.184	.084	.251	2.194	.032

a. Dependent Variable: Y

that the item or question was valid. Valid if  $r_{count} > r_{table}$   $R_{count} = \text{corrected item total correlation (CITC)}$   $R_{table} = 0.909$  Reliable if Cronbach's value is negligible  $> 0.6$

Partial testing is used to determine whether there is an influence between digitalization on the role of the front office in the banking business at Bank BNI 46 Palembang area. Partial Testing by conducting a one-on-one test between the dependent variable and the independent variable. Based on the results of SPSS 25 can be seen in the Table 4.

The data results from processing above (Table 4), it can be seen that the impact of digitalization has a significant correlation to the role of the front office of BNI 46 Palembang area with a significance of 0.032 with a t-test value for X1 which is 2.194 and beta 0.184. Means the impact of digitalization has a positive affect on the role of the front office, so it can be assumed that digitalization can indirectly take over some of the roles and tasks of the front office (teller and customer service) in the future, tellers

**Table 5.** Y Partial Test (front office role) and X2 (digitization implementation)

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.022	7.347		5.311	.000
	X2	-.165	.125	-.151	-1.321	.191

a. Dependent Variable: Y

**Table 6.** Simultaneous Test (Simultaneous Variables Y, X1 and X2)

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	258.736	2	129.368	3.269	.044 <sup>b</sup>
	Residual	2769.785	70	39.568		
	Total	3028.521	72			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

and customer service must adaption the technology according banking digitalization (mobile banking, sms banking, online banking and so on), and continue their skills so they can contend and contribute to the banking business side by side with digitalization that continues to grow in the banking world. at the moment.

The data results from processing in Table 5, it can be seen that the implementation of digitalization has a significant correlation with the role of the front office (teller and customer service) at BNI 46 Palembang area with a significance of 0.191, a t-value of -1.321 and a beta value of -0.165. Means more service features in bank digital technology will make it easier for customers access transactions without having to go through the front office which has been done so far, it is not impossible if the front office does not upgrade its professional skills as a front office, then gradually the role of the front office office will be replaced by existing digitization technology.

The F test show an analysis the effect of the independent variables simultaneously (simultaneously) test on the dependent variable. So in this study the F test serves to prove effect between the X1 variable and the X2 digitization impact variable on the front office (Y) role variable in the banking business of BNI 46 Palembang Area. Based on the estimation results of these factors (Table 6).

Based on the table above, the calculated F value is 3.269 with a sig value. of 0.044. This indicates that the calculated F value is greater than F table 3.126 and the sig.0.044 value is smaller than 0.05. Thus, H<sub>0</sub> is rejected and H<sub>a</sub> is accepted. So it can be concluded that the variables of the impact of digitization and the implementation of digitization together have a significant influence on the role of the front office (teller, customer

service). This happens because the results of the F test show that  $F_{count}$  is greater than  $F_{table}$ .

### **Implementation of digitization on the role of the front office in the banking business at Bank Negara Indonesia 46 Palembang area**

The seriousness of banks in working on digital banking to improve services and quality so that in practice they can still compete in a competitive banking business environment, digitalization in the banking sector is expected to provide one solution to improve business between commercial banks in Indonesia. The implementation of banking digitalization raises new issues or concerns in terms of Human Resources (HR). The use of technology in some banking services results in a reduction in the work done by humans. The application of banking digitalization cuts down the complicated and time-consuming bank administration process while also cutting or eliminating a number of jobs that are usually done by humans, especially front office work.

The implementation of digitalization in the banking sector has a positive influence on the role of the front office in the banking business, meaning that digitalization in every banking business process and in providing services to customers directly has a significant impact on the function of the front office, namely tellers and customer service which are the front line of the service system. Bank. In the future, this will have an impact on the number of front offices because some of the tasks of tellers and customer service can already be replaced with technology through machines and applications.

## **4 Conclusion**

From partial data results show (t test) and F test seen that the impact of digitization has a significant correlation with the role of the front office of BNI 46 Palembang Area. means that the impact of digitization has a positive influence on the role of the front office, so that it can indirectly take over some of the roles and tasks of the front office because the digital technology services offered have the features needed for customers to transact simple banking sector services without have to go through the front office which has been done so far.

The implementation of digitalization in the banking business has a good role for the progress of the banking business where the banking business, especially for non-cash transactions, is a necessity for customers, no longer just a complementary product but has also become a lifestyle for customers to get convenience in transacting at the bank. Along with various developments in the banking business that are engaged in digital business strategies, there needs to be an accelerated transformation in the banking business. One of the acceleration developments is banking digitalization, the implementation of banking digitalization is expected to provide innovation and provide a more concrete reference for banking digitalization in the future in order to acceleration of digital transformation, as well as a policy response to mitigate various challenges and risks from banking digital transformation.



## References

1. Golden AR. An Overview of Digitization in Indian Banking Sector. *Indo-Iranian Journal of Scientific Research (IIJSR)* [Internet]. 2017 Nov 27 [cited 2022 Sep 30];1(1):209–12. Available from: <http://iijsr.com/data/uploads/1025.pdf>
2. World B. The World Bank Annual Report 2014 [Internet]. 2014 [cited 2022 Sep 30]. Available from: <https://openknowledge.worldbank.org/handle/10986/20093>
3. DBS.com. Meningkatkan Finansial Inklusi Melalui Digitalisasi Perbankan [Internet]. [cited 2022 Sep 30]. Available from: [https://www.dbs.com/spark/index/id\\_id/dbs-yes-asset/files/\(Risat%203\)%20Meningkatkan%20Finansial%20Inklusi%20Melalui%20Digitalisasi%20Perbankan.pdf](https://www.dbs.com/spark/index/id_id/dbs-yes-asset/files/(Risat%203)%20Meningkatkan%20Finansial%20Inklusi%20Melalui%20Digitalisasi%20Perbankan.pdf)
4. OJK. Ringkasan Peraturan Otoritas Jasa Keuangan Nomor 14/POJK.03/2021 Tentang Perubahan atas Peraturan Otoritas Jasa Keuangan Nomor 34/POJK.03/2018 Tentang Penilaian Kembali Pihak Utama Lembaga Jasa Keuangan [Internet]. 2021 [cited 2022 Sep 30]. Available from: <https://www.ojk.go.id/id/regulasi/Documents/Pages/Penilaian-Kembali-bagi-Pihak-Utama-Lembaga-Jasa-Kuangan-/Summary%20-%20POJK%2014%20-%2003%20-%202021.pdf>
5. Kholis N. Perbankan Dalam Era Digital Baru. *Economicus* [Internet]. 2018 [cited 2022 Sep 30];12(1):80–8. Available from: <file:///C:/Users/ferna/Downloads/149-Article%20Text-394-1-10-20201112.pdf>
6. Sujana SVM. Digitalization in Banking Sector. *International Journal of Research and Analytical Reviews (IJRAR)* [www.ijrar.org](http://www.ijrar.org) [Internet]. 2018;5(3):333–7. Available from: <https://ssrn.com/abstract=3897629>
7. Marlina A, Bimo WA. Digitalisasasi Bank Terhadap Peningkatan Pelayanan Dan Kepuasan Nasabah Bank. *Jurnal Ilmiah Inovator*. 2018;7(1):14–34.
8. Rahareng VJ, Relawan N. The Influence of The Academic Service Quality Toward Student Satisfaction (Study on Students of Business Administration of Telkom University). *Jurnal Ad Bisprenneur* [Internet]. 2017 [cited 2022 Sep 30]; 2(2):125–33. Available from: <http://jurnal.unpad.ac.id/adbisprenneur/article/view/13164>
9. Kasmir. *Dasar-dasar perbankan edisi revisi*. Jakarta: Rajawali Pers; 2012.
10. Sujarweni VW. *Metodologi Penelitian Bisnis Dan Ekonomi*. Yogyakarta: Pustaka Baru Press; 2015.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

