



SPCRD GLOBAL
PUBLISHING
Sustainable Solutions

RAMSS Review of Applied Management
and Social Sciences

Journal homepage: <http://ramss.spcrd.org>

ISSN (Print): 2708-2024

ISSN (Online): 2708-3640

Influence of Digital Bank Services on the Financial Performance of the Commercial Banks

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ARTICLE DETAILS	ABSTRACT
<p>History: Accepted 21 January 2024 Available Online March 2024</p>	<p><i>It is anticipated that the adoption of digitalization in Pakistan's banking industry will have an impact on how banks formulate financial services and products as well as how well these banks operate. This paper attempted to analyse the impact of the digital banking on Pakistani commercial banks' financial performance in order to achieve this goal. Quantitative research approach was utilized. Commercial banks were the target population of this research. There were 200 responders from Pakistani commercial banks in the sample. The study employed multiple regression analysis to examine how digital banking affects financial performance. According to this research, Pakistan's commercial banks' growing profitability was mostly because of an increase in digital customer deposits made through digital banking platforms. The research findings indicate that there was an rising trend in the ratio of digital bank transactions to total assets over the chosen study period. The overall percentage of assets while growing due to a further increase in information technology expenses, fees, and commissions. The research findings indicated that an increase in online banking transactions was favourably and strongly correlated with profitability. To boost digital banking and boost commercial banks' financial performance, the report advises bank management to improve it.</i></p>
<p>Keywords: Digital Banking, Performance, Commercial Banks, Pakistan</p>	
<p>JEL Classification: G24</p>	
<p>DOI: 10.47067/ramss.v7i1.362</p>	

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1. Introduction

In the current era, digital banking services have emerged as the hot topic in the financial sector. According to Chikoko & Munongo (2015), Digital bank services are any financial services offered by the internet, mobile devices, or any other electronic media. These services include more traditional banking tasks like billing, paying bills, transferring money to other accounts, and checking balances, as well as more contemporary ones like the ability to electronically present and pay invoices without physically visiting a bank.

Online banking is the process of using communication networks as well as the internet to deliver a variety of financial services and goods to customers via a website or system that is managed by financial institutions. It is also referred to as digital banking, electronic banking, or fundamental banking. Steven provided this definition in 2002. E-banking is the process of directly delivering banking services and goods to customers using electronic and communication networks (Kriplani et al., 2004; Wadesango et al., 2016a).

All traditional banking services and programmes that were previously only available to customers who were physically present in a bank branch are being digitalized, or moved online (2014). Account services, bill payment, the management of checking and savings accounts, deposits, withdrawals, and transfers of funds are some of these services and programmes. Despite the many advantages of digital banking, adoption worldwide is still in its infancy, according to research (Desta, 2016; Wadesango et al., 2017a). Drehmann & Nikolaou (2013) claim that the industry has not yet reached its aspirations for the implementation of digital banking (Hussain, & Islam, 2022).

Sabi (2014) emphasised that customer acceptance as compared to seller offers energies the uptake of digital banking. The valuation and observation of business performance are not good understood. Corporate performance, as defined by Stephen & Sandeep (2015), is a comprehensive evaluation of an organization's performance in relation to its primary performance measures, which usually comprise financial, market, and shareholder performance. Financial performance metrics are employed to evaluate how effectively a business uses its investments to generate value for its owners (Al-Matari, Al-Swidi, & Fadzil, 2014). The most often exercised and recommended measures for the financial performance analysis are the profitability, liquidity, and the solvency (Zenios et al., 1989; Wadesango et al., 2017b; Hussain, Ahmad, & Mia, 2023).

Besides net revenues, other crucial profitability ratios and measures are the operational profit margin, return on equity (ROE), as well as ROA. According to Sathye (2005), the adoption of digital banking has not been well received. This suggests that customers are the main source of resistance to change, which is currently having a negative impact on commercial bank's return performance.

Even after commercial Bank made significant investments in their digital services, the number of online clients at the commercial bank branch is still very low when associated to offline consumers, according to internal statistics from commercial banks (2017). The lack of response to the launch of digital banking suggests that people are resistant to change. While commercial Bank has consistently endeavoured to lower operational costs, improve customer satisfaction, and cultivate customer loyalty via the provision of robust online banking services, the bank has persistently encountered obstacles regarding user acceptance of available digital service channels.

Sibanda (2014) states that although online bank services were generated a lot of actions, there is still a gap regarding the aspects that need further research. Banking organizations are constantly vying for market share in the digital financial services sector. Regarding the deployment of the digital bank systems, which is the institution's performance component, there is still a research gap. A few references to the issues with digital banking's performance are provided below:

Smartphones were barely starting to gain popularity five years ago. These days, a device's usefulness mostly determines its ownership. Individuals who travel for work on a regular basis rely on Apple and Android tablets, freelancers require high-end cameras as well as digital notebooks,

whereas those who follow a 9-5 schedule like sturdy laptops and powerful desktop computers. Products like Amazon Echo are also included in the mix to provide daily alerts and to liven up the lifestyle in general. It's not enough to just know which audience to target; it's also critical to understand who would utilise what device and when. This implies that banking and other financial organisations will need to make significant investments in developing their digital skills and creating winning digital strategies (Hussain et al., 2024).

The majority of banking and financial apps are most vulnerable to online threats. If not unwaveringly with money, there's always the chance that tainted data will result in subpar or low financial performance. Leading the industry with cutting-edge services is not only ideal, but also necessary to keep ahead of the curve and draw in a large clientele. It becomes crucial to set your business apart in the fiercely competitive and constantly expanding market, particularly if you have a sizable user base of younger people. Companies are hesitant to take the risk, though, because they know that things could go badly wrong and result in immediate blowback from angry clients.

Only synergy can ensure an organization's leadership sustainability. The organisational value will only reach a new height of success and stay there if the users recognise the worth of the good or service. The influence of social media is frequently undervalued in this setting. repeatedly positive evaluations help the company advance, but repeatedly negative ones have the power to bring down an entire empire.

Companies frequently choose to sacrifice quality in their haste to deliver goods and services more quickly. The problem with quality is that bugs are bugs, period. There's no such thing as a minor bug. Organisations have on multiple occasions deliberately ignored software and product flaws before they were released onto the market. In Zimbabwe, using digital banking on a daily basis has become commonplace. Although a lot of academics have studied digital banking, their research has mostly been on how adaptable it is and how well it can satisfy customers. Not much has been written about how well the institution performs when it comes to digital banking.

A portion of digital banking, mobile banking services, were the only focus of certain academics, such as Wadesango & Mhaka (2017) and Getahun (2015). The lack of response to the use of digital banking services suggests that people are resistant to change. In light of this, the purpose of this paper was to appraise how well digital banking services correlate with business performance.

These are following research questions of this study:

- Does online banking have a substantial effect on performance?
- Does using a mobile bank result in efficient performance?
- Do e-wallet services result in better financial performance?
- Does financial performance and digital banking have a connection?

2. Research Methodology

To obtain the fundamental information required to achieve its objective, this research carried out a cross-sectional survey. The bank's staff, in particular the upper and middle management, served as the study's unit of analysis. There are 22 commercial banks operating in Pakistan at the moment. However, the study only looked at five sizable and well-known banks Allied Bank Ltd., HBL, MCB, NBP, and UBL due to financial and scheduling constraints. (UBL). Furthermore, the combined 7,376 branches of these five banks account for more than half of all the branches of all the Pakistani

commercial banks (KPMG Taseer Hadi and Co., 2020).

An online survey was used to gather data from the chosen respondents, or bank managers. The respondents' email addresses and other contact information were gathered from the State Bank of Pakistan and bank officials' WhatsApp groups. A total of 350 respondents received the questionnaire over email, asking them to take part in the poll. A week later, the respondents received a reminder email asking them to return the completed form. Two hundred people responded to the study with comments. Thus, 200 bank managers made up the sample size for this investigation. The participants offered their objective viewpoints and answers.

3. Data Analysis and Results

Figure 2 displays the outer factor loadings for the study's whole measurement model. All of the items had values that were significantly bigger than the minimum threshold of 0.70, according to the analyses. The results show that the outer construct loadings are suitable to enable this study's model to fit within this framework (Figure 2). This means that the model can be used for the validity and reliability tests, which are the next stage of analysis. Reliability analyses were performed for the items for each variable in the study (Table 3). It ranged from 0.562 to 0.910 for each variable and was higher above the cut-off point of 0.7 (Sarstedt et al., 2019).

The results show that the variables' measurement scales for reliability are high. This implies that the scales met the requirements. Stated differently, every variable included in this study model is dependable. In order to ascertain the constructs' convergent validity, the study used AVE (Table 1). The findings showed that each variable's AVE score, which ranged from 0.508 to 0.787, was higher than the suggested cut off point of 0.50 (Hair et al., 2017). The findings demonstrated the constructs' convergent validity. Stated otherwise, the model's convergent validity is guaranteed because the scale meets the convergence value. Applying the Fornell-Larcker criterion, the constructs' discriminant validity was evaluated.

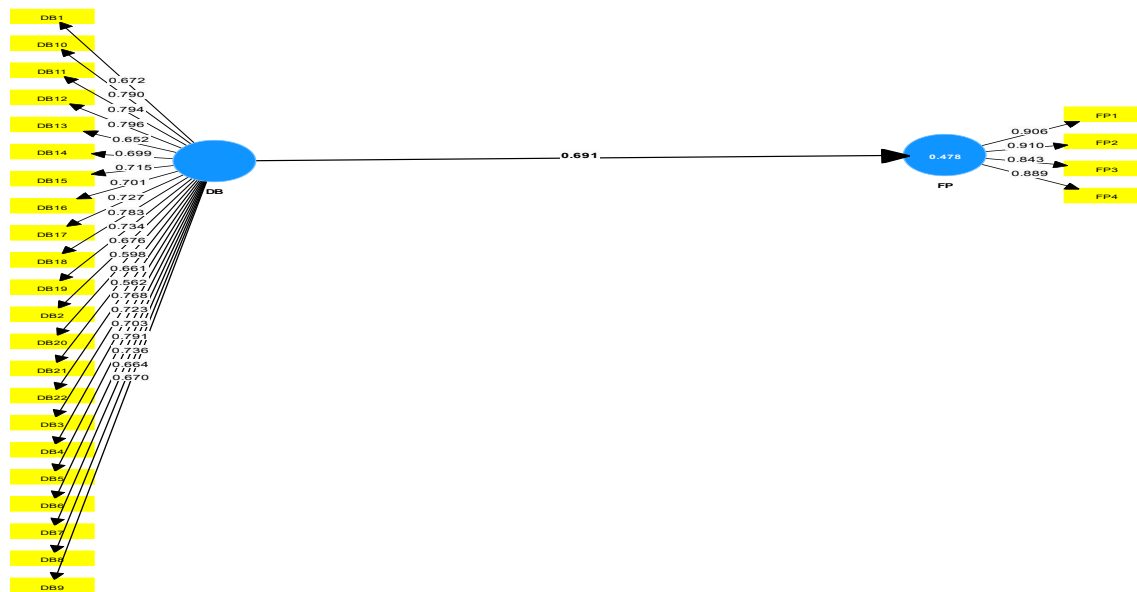


Figure1: PLS Algorithm Measurement Model

Table 1: Loadings of Factors, Internal Consistency Reliability, and Convergent Validity					
Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	Average Variance extracted
Financial Performance	FP 1	0.906	0.910	0.955	0.508
	FP 2	0.910			
	FP 3	0.843			
	FP 4	0.889			
Digital Banking	DB 1	0.676	0.910	0.910	0.787
	DB 2	0.676			
	DB 3	0.768			
	DB 4	0.723			
	DB 5	0.703			
	DB 6	0.791			
	DB 7	0.736			
	DB 8	0.664			
	DB 9	0.670			
	DB10	0.790			
	DB11	0.794			
	DB12	0.796			
	DB13	0.652			
	DB 14	0.699			
	DB 15	0.715			
	DB 16	0.701			
	DB 17	0.727			
	DB 18	0.783			
	DB 19	0.734			
	DB 20	0.598			
	DB 21	0.661			
	DB 22	0.562			

Table 2: Discriminant Validity Matrix using Fornell & Larcker Criterion				
	Digital Banking	Financial Performance		
Digital Banking	0.713			
Financial Performance	0.691	0.887		

The PLS-SEM algorithm as well as bootstrapping technique were used to evaluate the study's structural model. The correlations, or pathways, between the external and endogenous constructs are depicted in Figure 3. Every direct relationship, or direct hypothesis, was tested in this study's structural model assessment. This paper also evaluated the mediation and the moderation impact between the constructs, which are defined below. In order to examine the direct correlations

between the constructs, Smart PLS 4 employed the bootstrapping method, which involves 500 sub samples. Table 3 indicates the results of the hypothesis testing. The results establish that the hypothesis (H1) is accepted and that there is a positive and significant link (beta value = 0.691; t = 12.242; p = 0.000 and p < 0.05) between the financial performance and digital banking of Pakistan.

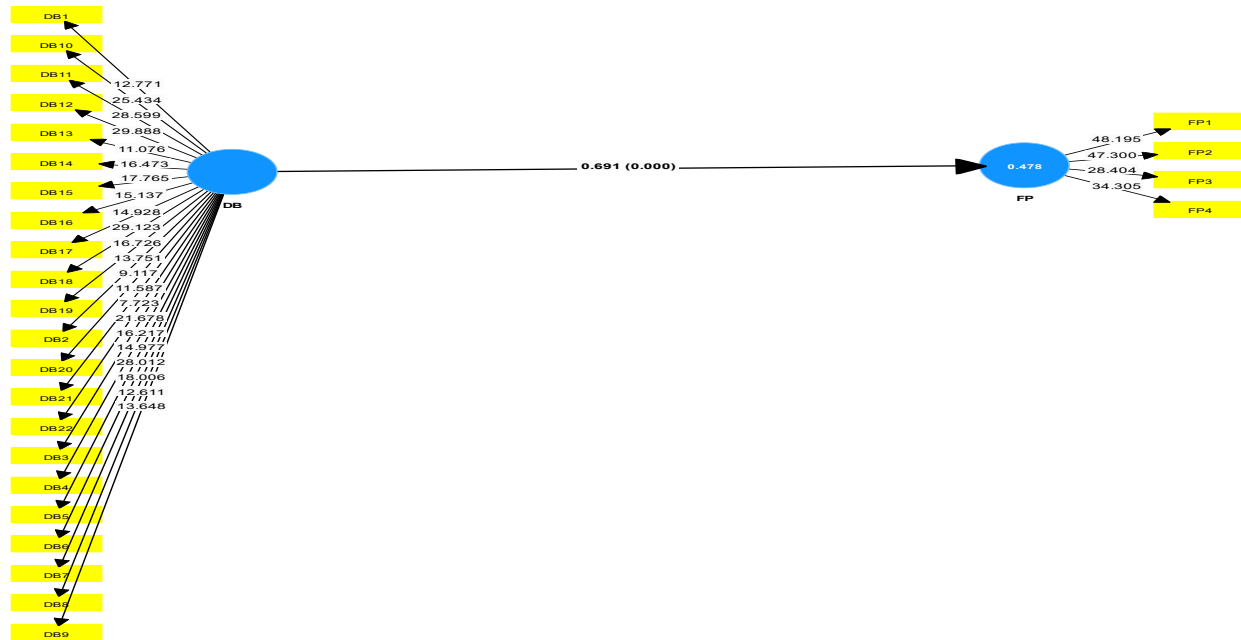


Figure 2: The structural model

Table 3: Summary of the Hypotheses testing and results							
No	Hypothesized Path		Path coefficient	Standard Error (STERR)	T Value	P Value	Decision
1	DB -> FP		0.691	0.056	12.242	0.000	Supported
***:p<0.001; **:P<0.01,* :P<0.05							

4. Findings

The study found that profits increased as a result of digital banking. Increased commercial bank online customer deposits, combined with an increase in online customer deposits, resulted in increased bank profitability. This paper found that the online bank transactions to the total asset ratio grew during the period of the study. Further increases in net banking charges, fees, & commission to the total asset ratio climbed over the period of the study, although the trend was unstable, oscillating as it decreased. The study found that internet banking expenditure has increased in relation to the total asset ratio. This research found a robust, substantial, and favourable association between online consumer deposits and financial performance. There is an adequate, substantial, and favourable relationship between internet banking transactions and financial performance. This paper, however, discovered a decent and negative association between digital transaction fees & commissions, and financial performance. This paper found a substantial, and negative link between net banking expenditure as well as performance. This paper also discovered that commercial banks and digital banking transactions have a substantial association with financial performance, however internet banking fees & commissions and expenditure had a negative correlation with financial performance in the commercial banks.

The results of the regression analysis demonstrated that the commercial banks were a strong predictor of financial performance, and that a rise in digital deposits would lead to a notable increase in the ROA of the commercial banks. The regression results showed that digital banking transactions substantially and positively predicted financial performance, and that increasing digital banking transactions resulted in an increase in profitability. However, internet banking fees & commissions calculated a negative and substantial effect on ROA in the commercial banks, so an increase in the internet fees & commissions indicated to a fall in ROA, whereas digital banking spending anticipated a substantial and negative impact on ROA in commercial banks. Increased digital banking expense resulted in a drop in banks' ROA.

5. Conclusions

This paper shows that online client deposits and digital banking transactions have a strong association with financial performance, however internet banking fees & commissions and spending have a negative relationship with commercial bank performance. Online customer deposits (OCD) were found to significantly predict bank ROA, and an upsurge in digital buyer deposits would effect in a sizable rise in ROA in Pakistani commercial banks. Digital banking transactions boost client banking transactions, like increased deposit volume, which certainly predicts profitability, and an increase in the digital banking transactions leads to an improvement in financial performance. Increased commercial banks digital customer deposits via net banking, as well as an increase in online customer deposits, resulted in increased bank profitability.

Fees & commissions on online banking expected a negative and large impact on the profit in commercial banks, therefore an increase in online fees and commissions resulted in a drop in financial performance. An increase in the digital banking expenses, as well as fees, & commissions reduces overall bank assets, limiting bank profitability. This paper revealed that online banking spending has a substantial and unfavourable impact on the profitability in the commercial banks. Increased online banking spending led to a fall in commercial banks ROA. The increased trend of digital banking expenditure resulted in decreased bank assets and profitability. Overall, the paper concluded that the adoption of digital banking and associated platforms had an impact on financial performance.

6. Recommendations

The study's recommendations are as follows: bank management should develop digital banking in order to increase commercial bank financial performance. The necessity for internet banking adoption in commercial banks is clear, as it provides the advantage of continuous access to the certain essential services, eliminating the requirement for many clients to involve with the bank staff and increasing banks' financial performance. The government, through the financial sector regulatory bodies, should inspire banks to strengthen digital banking while severely supervising such expenditure on the growth to ensure the reliability of, particularly payment systems. Online banking is the primary driver of increased performance in commercial banks. Faster and more frequent the financial service delivery promotes corporate growth and financial growth in all the sectors, moreover to facilitate the financial developing, boost the usage of online banking to boost bank profitability. The regression results revealed that online customer deposits (OCD) significantly predicted bank ROA, and that increasing online customer deposits would result in a large rise in ROA in commercial banks.

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