



## Development of Online Banking Services in Pakistan: Applications of SWOT Analysis

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**Abstract:** The banking sector of Pakistan has been steered up a prominent transformation in its performance and services provided during the period of 2006-2021 parallel to the global shifts in technology. The prevailing wave of internet in the financial industry has driven the banking sector to implement technological advancements to offer its quality services electronically through online banking. So, this study aims to present the development of online banking in Pakistan by trend and growth analysis. Furthermore, the development of a SWOT strategic matrix is a core purpose of this study to enlighten a clear review of online banking which has not been witnessed yet in the literature of online banking in Pakistan. For data collection purposes, secondary reports published by private and public banks have been reviewed. So, this review found the opportunities are more over the threats because online banking services are at the growth stage as indicated in trend analysis during the period 2006-2021 of this review. So, this study has an additive value in the literature on online banking services to display more prominent, authentic, and updated facts and figures in terms of Strengths, Weaknesses, Opportunities, and Threats faced by the online banking industry in Pakistan as a developing country.

**Keywords:** SWOT Analysis, Trend Analysis, Online banking.

### Introduction

Gautam and Khare (2014) defined online banking in a wider term “It includes availing banking services in terms of online check and balance of accounts, funds transfer and buying or selling of products or services by using web sources online”. The transformation of virtual banking into e-banking reduced paper-based transactions to provide effective and efficient services to customers. In other words, we can conclude that E-banking is the broader term while online banking is the specific term. Before moving towards online banking, it is essential to describe the origin of E-banking from the perspective of Pakistan.

Nowadays, in the technological era, online banking has emerged as electronic banking in developing countries as compared to developed countries. In the current scenario, online banking users have been increasing gradually day by day all over the world. As per statistics of (Statista), in 2020, a total of 1903.2 million online banking users have been

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registered from all over the world. Although the Far East and China have been at the top of the ranking for having 805.1 million online banking users, Europe has 361.7 online banking users, North America shows the third highest online banking users as 240.1 million while Latin America lies at the fourth position having 109 million users and 387.3 million users are from rest of the world.

In 2021, a total of 2043 million online banking users have been recorded internationally. As Far East and China have been at the top-ranked having 844.4 million users, and Europe has 379.9 online banking users, and North America is at the third rank following the previous trend with 250.5 million online banking users. Following the above, Latin America has 126.4 million online banking users while 441.8 million users out of 2043 million users are from all over the world.

At present, total of 2196.7 million online banking users region-wise in 2022. Similarly, the Far East and China are again at the top possessing 885.6 million customers, and Europe at again at the second highest with 398.1 million users. Although, North America and Latin America have 261.4 million and 146.7 million users while the remaining 504.9 million users are from the rest of the world. In 2023 and 2024, projected online banking users will be 2366.9 million and 2196.7 million respectively. The Far East and China will be placed first ranked, Europe again at second highest, North America and Latin America will also track the previous trend while the rest of the world will have 578.5 million and 664.9 million online banking users in 2023 and 2024 respectively.

Insights from the evolution of E-banking in Pakistan, it was first initiated in 1987 when the first ATM was installed. In the 1990s, operational transactions were very low and slow because of a lack of information. After 1999, there had been a smooth growth witnessed in ATM card issuance and possession through the circular of the State bank of Pakistan (2002) by allotting two ATM links. Therefore, the State bank of Pakistan (SBP) has been called the "booster" of the flourishing E-banking system in Pakistan by providing risk-free and easy-to-operate ATM services (Hussain et al., 2017). Gradually, the State bank of Pakistan directed other commercial banks and financial intermediaries to provide access to the financial records of customers over ATMs by allotting single or multiple links.

Later on, the State bank of Pakistan directed the interconnectivity of two networks for cash withdrawing activities via ATMs throughout Pakistan (Roof, Yeh, Mizes, Haitao, & Yang, 2016). This initiative of SBP led the banking industry towards the concept of branchless banking which extended forms of cards such as ATMs, online banking transactions branches, plastic cards, and E-banking transactions and miscellaneous transactions in Pakistan. Here is the Glance at the E-Banking infrastructure in Pakistan as follows:

To evaluate the growth of the e-banking industry in Pakistan it is necessary to have a look over the infrastructure of e-banking since its origination. Generally, E-Banking infrastructure in Pakistan has been categorized into 7 compositions:

### **Real-time online branches transactions (RTOBs)**

Real-time online branch channels provide online banking facilities to customers in all the branches of the same bank all over the country. In Pakistan, the highest number of total RTOBs transactions are from cash deposit transactions as per the statement of Payment

Systems Review (2021-2022), real-time cash withdrawals, real-time account-to-account fund transfers, and real-time third-party account-to-account transfers are the other categories of RTOBs.

### **ATM transactions**

In Pakistan, customers usually rely on cash as a dominant mode for conducting transactions and making payments. According to the Statistical Supplement (2021-2022) issued by the State Bank of Pakistan, it is revealed that ATM is the broadly used payment channel throughout Pakistan specifically for cash withdrawal activities. ATM transactions include cash withdrawals, cash deposits, a deposit of payment utility bill payment account to account fund transfer, and third-party account fund transfer.

### **Point of sales transactions**

In Pakistan total number total 5 banks are providing open-loop point-of-sale acquiring while 4 banks are providing closed-loop service on point-of-sale (Payment Systems Review, Q2, 2021-2022). The inclination of POS transactions may be linked to the restoration of markets and shops after the lockdown on and off.

### **Online banking transactions**

Online banking transactions include a series of financial activities conducted by customers and banks such as intra bank and interbank funds transfer, scheduled fund transfers, utility bill payments, mobile air- time top ups, Intra Bank credit card payments, school fee payments, etc.

### **Mobile banking transactions**

In Pakistan total of 27 banks are offering mobile banking services (Payment Systems Review, 2022) intra-bank and interbank fund transfers are the main compositions of mobile banking transactions. Utility bill payment is the other huge category of mobile banking transactions.

### **Call Centre / IVR banking**

This channel of e-banking services in Pakistan provide both intra- inter Bank fund transfer. Most banks offer high-valued customer utility bill payments etc.

### **E-commerce**

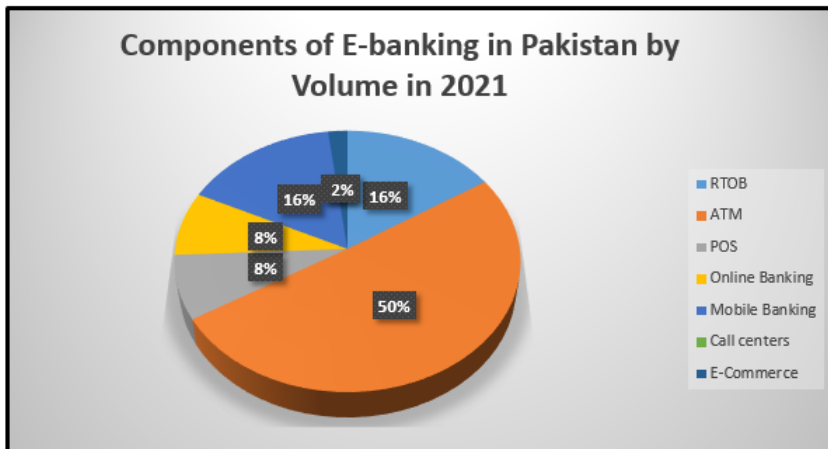
There were total of 3003 local registered E-Commerce Merchants having bank accounts in six banks with a growth rate of 75.9% as compared to the previous year as per Payment

Systems Review (2021-2022). In addition, debit credit and prepaid cards are the sources of conducting transactions of merchants through e-commerce.

Hence, E-Banking has been flourishing rapidly and at an emergent phase parallel to technological advancement in every field of life. According to the payment review system (2018-2019) of the State Bank of Pakistan, a total of 32 commercial banks were there to operate the e-banking system, 11 microfinance banks and two specialized banks and 8 Development Finance Financial Institutions are also there to conduct e- banking operational, financial and investment activities.

Concluding the all above in facts and figures, all statistics are extracted by Payment Review System (Q3, 2022) mentioned in the current paragraph. The expansion of branches of the banking industry in Pakistan, a total of 1493 branches of scheduled banks, and 1203 branches of microfinance banks while 89 branches have been operating e-banking services in foreign countries. As of Q3 2022, as per the payment review system of State Bank of Pakistan, the total number of installed ATMs reach 16897 with a 4.8 percent YoY growth rate from which 13897 were on-site while 2983 were off-site such as corporate offices, Hospitals, Shopping mall, etc. Furthermore, cash deposit machines (CDMs) have reached 218 with a growth of 60 machines as compared to the previous year. Moreover, the count of Point of sale machines (POS) have a growth rate of 46.5% during last year reached 96975. On the other hand, online banking and Mobile banking have been served by 28 banks with an increasing trend of conducted transactions. The number of payment cards issued by banks reached 47.1 million with a growth rate of 7.3% as compared to the previous year as indicated in the Payment review system (PRS) report during the fiscal year 2020-2021. The composition of total cards issued includes 65% of debit cards, 12.6% of ATM-only proprietor cards, 18.4%, Social welfare cards, 3.7% of credit cards, and the remaining 0.03% of pre-paid cards.

**Figure 1**  
Components of E-Banking in Pakistan by Volume



State Bank of Pakistan compiled the composition of E-Banking in Pakistan as of the

year ended 2021 in E-banking Statistics.

In diagram 1, Real-Time online banking (RTOB) has 16% composition in Electronic banking services same as online banking services and second highest in rank. Automated teller machines (ATMs) have the highest shares with 50% of the total share in offering E-banking services in Pakistan which shows that half of the E-Banking transactions take place through ATMs. Contrary to this, call center services have no contribution to proceeding with E-banking services in Pakistan. In addition, Point of Sale (POS) and online banking services are showing the same composition rate as 8% in flourishing E-banking services. E-Commerce, with the second lowest composite factor of E-banking in Pakistan with 2% of the total share.

In Pakistan, most of the literature comprises differences in performance, challenges and issues faced by digital banking such as studies by [Baloch, Ali, Kiani, Ahsan, and Mufty \(2010\)](#); [Aziz and Afaq \(2018\)](#); [Rahimuddin and Bukhari \(2010\)](#). Rapid Growth online banking services appeal to review the past, present, and future of online banking in Pakistan.

Concluding all the above, the current study is constructed to review and squeeze the present and past online banking development from the perspectives of Pakistan in terms of trend and growth analysis while SWOT analysis is a secondary purpose to predict the future of the same field. For this purpose, Payment Systems Review and Statistical supplements published by the State bank of Pakistan are utilized. In addition, a SWOT analysis is aimed to be conducted to enlighten deep insights into online banking in developing countries as well. To achieve the above- said objective, the next chapter comprises literature review which aims to support this review. The next chapter is labeled chapter 3 as research methodology which is aimed to describe source of data collection, After chapter 4, another chapter is included to explore the development of online banking services in terms of Trend analysis, Growth analysis , and SWOT matrix. Last but not least, the Conclusion is included at the bottom of this review consisting of extracted points from the review, limitations of the study and, direction for further studies.

## Literature Review

This chapter includes previous studies conducted on SWOT analysis of the online banking industry all over the world. The following studies are reviewed to support this review:

[Lu and Yadong \(2011\)](#) analyzed the SWOT of five rural banks in Heilongjiang province. The authors concluded that weaker earning capability, higher operating risk, and lack of rules and regulations are threats to the banking industry in rural areas. Competition threat is the main hurdle that weakens banks of rural areas due to the low supply of capital. Furthermore, customer expertise related to transaction convenience and security is the main concern for customers of online banking services.

Following the above, [Indiatsy, Mucheru, Mandere, Bichanga, and Gongera \(2014\)](#) created a study on co-operative banks of Kenya ltd to measure its performance through SWOT analysis. The main focus of their study was low performance due to fear of e-banking products among their customers. As Kenya is not a developed country in techno-

logical infrastructure, therefore authors suggested policymakers formulate risk-free transaction strategies at lower prices.

Connecting the above, [Wu, Song, and Kang \(2016\)](#) proposed a SWOT analysis related to the development of e-finance services in commercial banks. The central issue in their study was adoption rate of e-banking products is non-parallel to the revolution in the financial markets and relatively high-tech products. Authors extracted by SWOT matrix that pre-counter measurements are the key to increasing the adoption rate of e-banking services.

Supporting the above studies, [Chrismastianto \(2017\)](#) proposed in his study that service quality is the main issue affecting the adoption rate of online banking services in Indonesia. To address this issue, the researcher created a SWOT analysis from a management perspective to provide higher service quality in wider societies. The study concluded and recommended the formulation of strong and regulated policies based on excellent management expertise to cope with customers' satisfaction.

In addition, [Muchlis \(2018\)](#) conducted a SWOT analysis of the fin-tech industry of Indonesia. The main focus of the study was how to boost the fin-tech industry in Indonesia. The researcher evaluated that cyber-crime is the main resistance to disturbing performance of the fin-tech industry and suggested by SWOT analysis that Convenient and Security based transactions are the derivatives for the fin-tech industry. Following the above studies, [Arora \(2018\)](#) generated a review paper on e-banking services. The author highlighted SWOT from customers' and Management's points of view individually. Lack of infrastructure, cyber-attacks, lack of commutation, and ease of use are highlighted in SWOT from customers' perspectives. Contrarily, low-operational cost, increasing productivity, and using blockchain are among the main points of the SWOT matrix of the cited study.

Concluding all the above studies, [Zahir and Imtiaz \(2019\)](#) directed a SWOT analysis of the bank of Khyber. The study illuminated that concerned authorities play an imperative role to build trust in customers. Therefore, public banks are more familiar and reliable than private banks in customers' eyes. Corresponding to the strength, most of the public banks have to lack trained staff in the field of IT which acts as a barrier to enlarging online banking services. Introduction and formulation of brand and digital convergence are opportunities while political influence acts as a threat to the public banks.

## Research Methodology

To achieve the core purpose of this study is to provide an outline presenting the current state of online banking in Pakistan since it originated through Trend and SWOT analysis. So, this study is descriptive and broadly constructed by secondary data and reports followed by the studies of [Arora \(2018\)](#).

Therefore, SWOT analysis has been in-corporate by the raw data in research reports issued by public and private banks in Pakistan. Furthermore, database for trend analysis has been extracted from statistical supplements published by the State bank of Pakistan during 2006-2021.

## Development of Online banking in Pakistan

### Trend and Growth analysis

It is a fact that e-banking is a broad concept where online banking is related to a specific area under electronic banking services. Polatoglu and Ekin (2001) defined online banking service as a speedy mechanism in which E-Banking users access and operate their bank accounts in less time and at a low cost. Pakistani banks offer the following online banking services and products as mentioned below:

1. Inquiry about balances fixed deposits account statements and check statements.
2. Payments of credit card fund transfers, utility bill payments, and direct payments.
3. Request for cheque-book stop payment demand draft and new fixed deposit.
4. Downloading bank statements and access to customers' profile information about new products or services.

Pakistan has been counted in the list of late adapters of technological advancement. While, in the banking sector the scenario is the opposite and is counted among the early adopters in implementing technological advancement to its retail banking operations (Chandio, Abbasi, Nizamani, & Nizamani, 2013). Moreover, the online banking system in Pakistan has grown by 45% between 2005 and 2006. Although Online Banking is still at the introductory stage in some States it will have a considerable impact on the growth of the banking sector for these States in the future (Kesharwani & Singh Bisht, 2012). Coming toward Online banking services composition in Pakistan, Diagram 2 illuminates four major components named Intra-Bank fund transfer, Inter-Bank fund transfer, Utility bills, and miscellaneous activities as per the Payment review system of SBP (2021).

**Figure 2**  
Composition of Online Banking in Pakistan

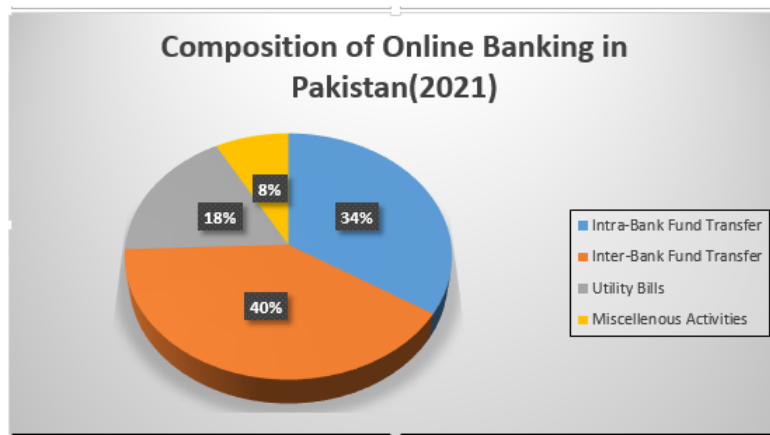


Diagram 2 Shows that Inter-bank fund transfer has the highest percentage in online banking transactions at 40% of the total. Furthermore, Intra-bank fund transfer has a 34% contribution achieving the second highest composition rank while utility bills have an 18% composition rate during the year 2021. Zakat payment, school fees, etc. have been included in miscellaneous activities which have an 8% share in online banking services.

State Bank of Pakistan has been taking care take care of online banking services in Pakistan. Therefore, the website of the State Bank of Pakistan is very useful and productive to extract and gather a database about online banking services from 2006 to 2021. Therefore, to examine the adoption rate of online banking services in Pakistan the following trend analysis and growth analysis have been conducted from the period of 2006-2021.

**Table 1**  
Number of Online banking transactions

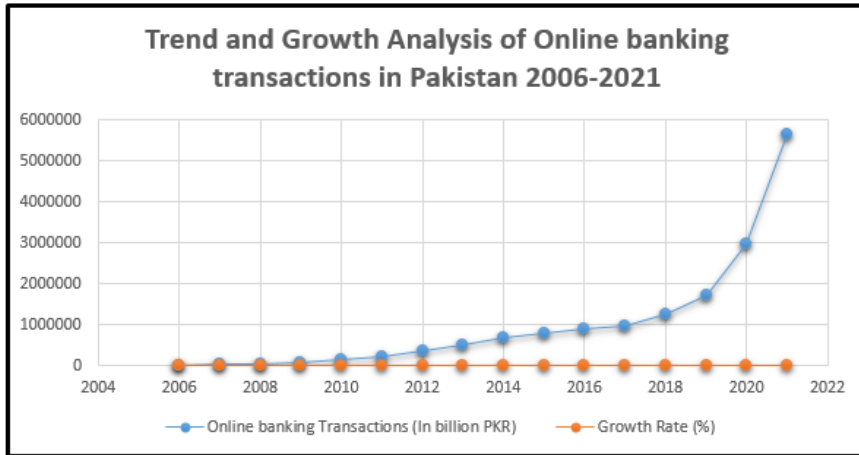
Year	Online banking Transactions (In billion PKR)	Growth Rate (%)
2006	9012	-
2007	34270	73.7
2008	43808	21.77
2009	68374	35.92
2010	141624	51.72
2011	212210	33.26
2012	365415	41.92
2013	498818	26.74
2014	675643	26.17
2015	797651	15.29
2016	881125	9.47
2017	968681	9.03
2018	1262385	23.26
2019	1722181	26.69
2020	2952690	41.67
2021	5661284	47.84

Table 1 illuminates the trend of online banking in Pakistan since its evolution such as in 2006 when total transactions were worth PKR. 9012 billion has been conducted. Since 2007, the number of transactions has been increasing gradually and a huge chunk of the adoption rate has been recorded in 2007, 2010, and then 2021. In 2007, the total number of transactions was worth PKR. 34270 billion the highest change while after the very next year, total of 43808 billion rupees in transactions were conducted. After 2017, again an increasing and sharp trend had been recorded worth 2952690 PKR billion and 5661284 PKR billion. It is concluded by the above trend analysis that during the early phase of online banking in Pakistan, the innovators adopted online banking services in starting 6 years i.e. 2006-2012. Then after the pandemic Covid-19, higher numbers of transactions have been witnessed resulting in the logo "Stay Home, Stay Safe".

Diagram 3 represents the growth analysis of online banking transactions during 2006-2021. The above linear graph shows an upward trend and an increase in growth rate during starting five years. After the mid of the 6th year of its origination in Pakistan graph shows a growth rate but slowly. In the last 3 years, the post-pandemic era was at the peak online banking adoption rate in Pakistan as per statistics.



**Figure 3**  
Growth of Online Banking Services



## SWOT Analysis

Online banking is based on virtual banking which not enables customers in depositing, transferring, and withdrawing money but also facilities them in paying their utility bills or school fees without visiting branch banks. Furthermore, the penetration of internal services established infrastructural leverages for online banking. Despite various opportunities, online banking has some challenges to face from organizational and customer perspectives as well. Literature proclaimed that online banking is abundant and affected by many other factors such as pointed out in the studies of [Rahimuddin and Bukhari \(2010\)](#). Hence, this chapter is going to highlight or conduct a SWOT analysis of online banking from the perspective of Pakistan.

**Table 2**  
SWOT Analysis of the Online banking Industry in Pakistan

SWOT Analysis Matrix	
Industry: Online Banking	
<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Competitive advantage</li> <li>• the High number of customers:</li> <li>• User-friendly for managerial and customers</li> <li>• No need to visit a branch</li> <li>• Integration</li> <li>• Cost Minimization for banks</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Ready-made customers</li> <li>• Access to financial records</li> <li>• Reduction in queues</li> <li>• Convenient for old-Age customers</li> <li>• Easy loan scheme</li> <li>• High demand for financial products</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Low literacy rate</li> <li>• Connection loses</li> <li>• Hackers</li> <li>• Poor Customer relationship management</li> <li>• Website Maintenance</li> <li>• Scalability</li> </ul> <p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Absence of regulatory bodies:</li> <li>• Security issues</li> <li>• Foreign bank Interference</li> <li>• Money laundering issues</li> <li>• Difficult to operate</li> <li>• IT infrastructure</li> </ul>

According to the management study guide, SWOT is an acronym for strengths weaknesses opportunities and threats. Strength and weaknesses are counted as uncontrollable factors and associated with diversified risk on the other hand opportunities and shares are external uncontrollable factors and connected with undiversified risk.

Therefore, the following SWOT matrix has been presented in table 2 to point out the Strength, Weaknesses, Opportunities, and Threats of online banking from the perspectives of Pakistan.

## **Description of SWOT Analysis Matrix**

### **Strengths**

- **Competitive advantage:** Innovation in any product or service is a creative method adopted by an organization to achieve a competitive advantage. Likewise, in other developing countries, Pakistan's banking industry is counted as an early adopter in the technological advancement of financial markets. Unlike traditional banking, online banking has a Competitive advantage over its innovative and virtual products.

- **The high number of customers:** In Pakistan, most of the banks offer traditional and virtual banking services parallel. By providing awareness to the customers, customers can move towards online banking services automatically from traditional banking. Therefore, online banking services have a high number of customers who already existed as customers of the same bank.

- **User-friendly for managers and customers:** Online banking services are easy to operate for customers and managerial levels of the organization. A whole transaction has come up with the single touch of your finger. Therefore in Pakistan, most of the 28 banks offer online banking services to customers rather than traditional banking (Payment Systems Review, 2021-2022).

- **No need to visit a branch:** During Covid-19, there has been a high growth in the adoption rate of online banking services witnessed in Pakistan. People avoided visiting the branch of banks and therefore switched from traditional banking to online banking services.

- **Integration:** Integration is the most important strength of online banking services over traditional banking. An Online banking service is an integrated form of the financial sector through technological emergence. In Pakistan, during the last 6 years, there is a high level of integration seen in the banking industry in terms of online banking services as shown in table 1 of this study.

- **Cost Minimization for banks:** In developing countries, where the corporate tax rate has been imposed on conventional banks by State Bank. In this case, every Bank from the banking industry aims to minimize their expenses to cover tax expenses. Online banking services provide low operational expenses than traditional banking such as printing bank statements replaced by the online view of bank statements through the customer's profile.

## **Weaknesses**

- **Low Literacy Rate:** Pakistan as a developing country, has a low literacy rate because most of the population of Pakistan lies in rural areas. The total population of Pakistan is 211.93 million as per the state bank of Pakistan payment review system (2021-2022) from which a total of 5239301 are registered online banking users. Therefore adoption rate of online banking services is very low due to no awareness of technology usage.
- **Connection loss:** In Pakistan, the internet connection problem is a very big hurdle in adopting internet banking services. Non-users of online banking services concluded that connection loss and high internet connection charges are negative factors for online banking services adoption rate.
- **Hackers:** Due to connectivity errors or closing the website without logging out leads hackers control customer profiles. Likewise other developed and developing countries, Pakistan is also facing the problem of hacking of systems or accounts of customers which develops a low level of trust of customers towards online banking services.
- **Poor Customer relationship management:** Due to poor customer relationship management of banks, customers do not rely on to use online banking services. In case of any query or complaints bank personnel do not respond quickly or positively on calls, therefore customers prefer traditional banking over online banking.
- **Website Maintenance:** Sometimes on logging in to the personal account, there is an error showing that the website is under maintenance. In case of emergency, payments are withdrawals, customers are stuck to perform the transaction and skip to using online banking services. Therefore, customers, sometimes prefer to use traditional banking more than online banking.
- **Scalability:** It refers to the efficiency of handling the increase in demand for any system resources. In Pakistan, technology is easy to access but designed basically for organizational purposes, not from the customer's point of view which is the biggest hurdle to its adoption in Pakistan.

## **Opportunities**

- **Ready-made customers:** In Pakistan, a total of 28 banks are offering online banking services. In these banks, the already existing customers can transform their traditional banking accounts into online banking accounts. Therefore, there is an opportunity for banks to transform their already existing customers which are non-users, towards online banking services by offering free campaigns about awareness of online banking services.
- **Access to financial records:** Easy access is one of the main features of online banking services. After conducting any transaction, every customer wants access to a financial record to check his balance. Although online provides quick access to financial records to customers and acts as an opportunity to attract users of traditional banking.
- **Reduction in queues:** In developing countries, queuing is a very big problem to attain any financial services such as queues in bills payments check deposits, and amount transfers. In Pakistan, most of the population has trust issues related to online banking services. It is an opportunity for the e-banking industry to expand its market shares by

providing these services at very low charges or free of cost which will minimize their cost of operation on the supply side as well.

- **Convenient for old-Aged customers:** In Pakistan, there is no special counter for old-aged customers who are not able to wait in a queue. By offering any specific discount and special online counters services to old-aged customers through banking services, bankers can drive the non-users old-aged customers to become users of online banking services.

- **Easy loan scheme:** A lot of documentation has been the biggest problem in accepting any loan scheme. Through online banking services, easy and paper-free loan schemes can be offered to customers by any collateral to prefer online banking services rather than traditional banking.

- **High demand for financial products:** Internet banking needs improvement in providing efficient services to its customers. In Pakistan, online banking is limited to specific products. Expansion in financial products such as stocks, bonds, or insurance information through online bank accounts can direct non-users toward online banking for investment purposes.

### **Threats**

- **Absence of regulatory bodies:** In the practice of online banking in Pakistan, laws, and regulations are not sufficient to support. The relative laws are not completed and lacking in compensating any losses of the customer. During the transaction of an online payment if any financial loss occurs there is no legal compensation by the state or banks as well.

- **Security issues:** Security issue has been one of the major threat to customers and the organization of online banking services. In case of any financial loss of customers, the bank's reputation is spoiled on one side and the personal information of customers may be hiked by the hackers for theft of other terrorism on illegal activities another side. Likewise, in other developing countries, Pakistan has also a security threat due to the low level of technological advancement to protect or pre-diagnose of any hacking activities.

- **Foreign banks Interference:** In case of foreign transfers through online banks, rules and regulations imposed by the foreign banks will have other transaction charges on banks and customers as well. In this scenario, the customer suffers in terms of high transaction charges. Furthermore, in the pace of globalization, most foreign banks are focusing on another geographic region for their business expansion. Access to foreign banks at Pakistan's financial market is a big threat to domestic banks. The main reason behind the threat is a robust operations system in terms of technicality and low financial literacy rate in Pakistan. The characteristic of high expertise in internet banking makes foreign banks different from domestic banks due to innovative financial products introduced by foreign banks at a lower cost.

- **Money laundering issues:** The loopholes of the banking industry in Pakistan lack checking and verifying transactions free from money laundering. This weakness of the online banking system helps money launders to float their black money without any fear. Therefore, it is considered a big threat to the online banking industry of Pakistan.

- **Difficult to operate:** In developing countries, where literacy rate is low and technological advancement is at the initial level of adoption from customers' perspectives. The

untrained staff of banks makes it more difficult to operate online banking for customers. So, the lack of awareness of the latest information is another shortfall and threat to the online banking industry in Pakistan.

- IT infrastructure: Infrastructure plays an important role in the flourishing of any industry. As online banking fully depends on IT and Telecommunication, but in Pakistan infrastructure of Telecommunication is not well developed as compared to developed countries. Therefore the growth of e-banking services needs to develop speedy and efficient infrastructure.

## **Conclusion**

Online Banking has been flourishing rapidly and at an emergent phase parallel to technological advancement in every field of life such as from utility bills to educational fee payments. Therefore, it was necessary to conduct SWOT and trend analysis on online banking services to highlight the growth and externalities as well. So, this study clarified that Pakistan as a developing country has more threats and weaknesses than developed countries. Therefore, trend analysis showed a linear trend slowly at the start but after the prevailing pandemic, it became a compulsion and life-protective way for customers to operate daily transactions. Hence, Online banking customers, managerial staff, and policymakers can utilize this study to make strategies for better understanding of applications of online banking in Pakistan. For this purpose, social media campaigns for customers, staff training programs, offering subsidies to domestic banks, and relaxation on operational taxes can be prioritized and introduced in the respective departments to cope-up with the SWOT of E-banking industry in Pakistan. Additively, this study can be helpful for regulators and policymakers to nullify associated risks from customers' perspectives such as financial risk as a threat in the growing online banking industry, especially for the population of rural areas.

Lastly, as a developing country, Pakistan is one step back in adopting technological advancement due to a lack of infrastructure, limited resources, and untrained staff for technology adoption to operation. Therefore, SWOT analysis leads to conducting TOWS analysis one step ahead to make strategies and set up goals.

Likewise other studies, this study has some limitations which call for further studies for researchers and academics in the field of digital banking such as meta-analysis on the SWOT applications in e-banking in Pakistan as compared to other developing countries. Furthermore, a comparative study on SWOT analysis between financial markets of developed and developing countries can be conducted to expand the literature on SWOT. Describing the SWOT of online banking services interrelated to SDGs is another broad idea to conduct further research for scholars.

## References

- Arora, N. (2018). A review paper on SWOT Analysis of E-Banking. *Journal of Emerging Technologies and Innovative Research*, 5(9), 551-553.
- Aziz, S., & Afaq, Z. (2018). Adoption of islamic banking in pakistan an empirical investigation. *Cogent Business & Management*, 5(1).
- Baloch, Q. B., Ali, N., Kiani, T. S., Ahsan, A., & Mufty, A. (2010). Relationship between HR Practices and Perceived Employees' Performance of Bankers in NWFP, Pakistan (An Empirical Evidence). *European Journal of Social Sciences*, 18(2), 210–214.
- Chandio, F. H., Abbasi, M. S., Nizamani, H. A., & Nizamani, Q. U. A. (2013). Online banking information systems acceptance: a structural equation modelling analysis. *International Journal of Business Information Systems*, 12(2), 177–193.
- Chrismastianto, I. A. W. (2017). Analisis swot implementasi teknologi finansial terhadap kualitas layanan perbankan di indonesia. *Jurnal Ekonomi dan Bisnis*, 20(1), 133–144.
- Gautam, L., & Khare, S. K. (2014). E-banking in india: Issues and challenges. *Scholar Journal of Economics, Business and Management*, 1(2), 54–56.
- Hussain, Z., Das, D., Bhutto, Z. A., Hammad-u Salam, M., Talpur, F., & Rai, G. (2017). E-banking challenges in pakistan: an empirical study. *Journal of Computer and Communications*, 5(2), 1–6.
- Indiatsy, C. M., Mucheru, S. M., Mandere, E. N., Bichanga, J. M., & Gongera, E. G. (2014). The application of Porter's five forces model on organization performance: A case of cooperative bank of Kenya Ltd.
- Kesharwani, A., & Singh Bisht, S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International Journal of Bank Marketing*, 30(4), 303–322.
- Lu, S., & Yadong, F. (2011). Swot analysis on the development of the rural banks in heilongjiang province. In *Proceedings of 2011 International Conference on Engineering and Information Management (ICEIM 2011)*.
- Muchlis, R. (2018). Analisis SWOT Financial Technology (Fintech) Pembiayaan Perbankan Syariah Di Indonesia (Studi Kasus 4 Bank Syariah Di Kota Medan). *AT-TAWASSUTH: Jurnal Ekonomi Islam*, 1(1), 335–357.
- Polatoglu, V. N., & Ekin, S. (2001). An empirical investigation of the Turkish consumers' acceptance of internet banking services. *International Journal of Bank Marketing*.
- Rahimuddin, M., & Bukhari, S. (2010). E-banking system in Pakistan. *Blekinge Institute of Technology, Sweden*.
- Roof, B. J., Yeh, A. S., Mizes, H. A., Haitao, D., & Yang, M. (2016). *Face recognition business model and method for identifying perpetrators of atm fraud*. Google Patents. (US Patent App. 14/529,399)
- Wu, F., Song, D., & Kang, L. S. (2016). The development of commercial bank e-commerce finance's SWOT analysis. *DEStech Transactions on Environment, Energy and Earth Sciences,(peee)*.
- Zahir, S., & Imtiaz, S. (2019). Towards the digitalized bank in the age of digital convergence: Focusing on Pakistan case. *Journal of Information Communication Technology and Digital Convergence*, 4(2), 1–12.