



**RESEARCH PAPER**

**The Impact of Fintech on Banks with Historical, Contemporary and Future Perspective with Legal Perception**

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**ABSTRACT**

Even before the advent of the financial technology innovation known as FinTech, financial technology had extensively been used by banking and financial sectors. According to FinTech's development up to this point, FinTech has an impact on the Bank's operations in historical, contemporary and future perspectives. These facts form the basis of this research, which uses Pakistan as a case study to attempt to provide an evocative analysis of banks and fintech from the historical, contemporary and future perspectives along with legal perception. This research employs both qualitative method techniques and a descriptive-analytic research methodology. To conduct this descriptive study, we critically analyse a number of pertinent scientific publications, information about the FinTech phenomena in Pakistan, and supporting documents from banking organisations. What occurred to banks and FinTech from the historical, contemporary and future perspectives is revealed by the analysis findings.

**KEYWORDS** Banks, FinTech, Past-Present-Future, Legal

**Introduction**

Financial technology (Fintech) means the delivery of financial services with innovation and new technology to compete with traditional financial methods. Fintech is a new concept to improve financial activities through the use of technology. The use of cryptocurrency, investing service and use of cellular phones for mobile banking are some examples of technologies which are useful to make financial services available to the general public at large. Fintech companies are consisting of established technology companies, as well as, startups. In the 1950s, the introduction and use of a computer by banks increased efficiency and automation. In the modern era, a consumer even from Nairobi can online purchase products through a mobile phone.

The financial and banking sector is now paying special attention to FinTech regulators as it has become an extensive trend caused by innovators and closely followed by researchers (Mention, 2019). Currently, the FinTech sector makes use of Information Technology (IT), primarily focused on smartphones to increase the effectiveness of the financial scheme. The technology associated with the Internet, like mobile internet or cloud computing, will support enterprises in the sector of financial services that are already established, like banking activities (Gomber et al., 2017). In Pakistan, a mobile payment (m-payment) product is often referred to as FinTech. Major E-Commerce platforms and platforms for online shopping have a customised payment method integrated into them for the Fintech invention (Teja, 2017). Additionally, FinTech has evolved as a technology banking sector innovation (Prawirasasra, 2018; Thakor, 2019). In fact, by integrating FinTech digital platforms into the banking sector, the general people might receive cost-effective financial services (Jakšič & Marinč, 2019). The financial and banking services industry's adoption of infrastructure technology (FinTech) is influenced by business factors (Rabhi, 2016). Technology innovation in banking and financial services is influenced by

fintech (Gomber et al.,2018). One opinion that develops is that Fintech may put traditional monetary institutions in danger of dying out. The financial services industry is being disrupted by fintech, according to several practitioners' and scholars' perspectives (Prawirasasra, 2018; Dermine, 2017). The financial services authorities in Pakistan created a number of banking regulations in response to the practice of FinTech. The banking services sector in Pakistan is now concerned about the trouble of the Fintech business. As a result, there will be much thought given to how FinTech may affect Pakistani banks in the future.

## **Literature Review**

### **Fintech**

Digitalization in the banking industry nowadays shows the growth of FinTech (Prawirasasra, 2018). Zvolokina et al. (2016) claimed that a business model's creation, modification, or improvement provides insight into a FinTech's workings. FinTech also has a tool for collaboration or disruption (Prawirasasra, 2018). The use of IT in the finance industry is a true indicator of fintech (Wulan, 2017).

The World Economic Forum (WEF) also noted that Fintech firms can alter and innovate the financial services industry's business model (WEF, 2015). But according to this study's findings based on bank preferences for FinTech, FinTech identifies a new technology advancement that seeks to enhance the Bank's financial service automation. FinTech has evolved in the financial and banking sectors in line with its development, in fact (Thakor, 2019).

### **Banks**

Institutions like banks play important roles in the economy of a nation. The distance between the lenders and the borrowers is widened by the money it lends, take, and deposit (Prabhavathi & Dinesh, 2018). Banks are often distinguished from other forms of financial companies by the availability of deposit and lending products. Trbacz (2019) asserts that the term "bank" is also connected to mediaeval transactions and that it is derived from the Italian word "banco," which means bench or counter Bank activities that have been carried out by money merchants.

As a result of this comprehension, it was determined that the banking industry consists of three activities: fund-raising, fund circulation, and supply of other financial facilities. Previously, banks were frequently known as "Traditional Banks". The terms "virtual banking," "digital banking," and "modern banking" are now commonly used to describe banks. Future Banking is the term used to describe the state of banking activities that are anticipated to differ from those that exist today.

## **Material and Methods**

Descriptive analysis using a qualitative approach is the research methodology employed in this study. All sorts of studies can benefit from descriptive analysis, according to Loeb et al. (2017)'s discussion. It might serve as a standalone piece of study or addition to causal analysis. To conduct this descriptive study, data were gathered from a number of pertinent scientific journals, as well as information about the FinTech phenomena in Pakistan and supporting documents from banking institutions. Using the secondary data gathered, a descriptive technique was employed to analyse the data. The paper discusses how the development of fintech has affected the activities of the Bank the historical, contemporary and future perspectives.

## **Results and Discussion**

FinTech in a historic era: In this age, we can now begin discussing financial globalisation. The telegraph, along with railroads and steamships, were the first

technologies to make it possible to quickly transmit financial information across international borders.

The two significant turning points on this timeline are the Fedwire in the USA (1918) and first transatlantic cable (1866) the first electronic fund transfer system that relied on now-retrograde technologies like the Morse and telegraph code. In this period, the switch from analogue to digital occurred. In the 1950s, credit cards were developed to make carrying cash simpler. The first to provide one was Diner's Club in 1950, and American Express Company followed in 1958.

In summary, the development of enabling technology has historically been strongly linked to the growth of fintech. ATMs were first presented to the public during this time period, marking the industry's move from analogue to digital (Prawirasasra, 2018). The delivery of information across borders, especially financial information, has historically been facilitated by technology (Thakor, 2019). The businessman should use the telephone to place orders for goods and should have no trouble travelling with his wealth wherever in the world. Along with that, Thakor (Thakor, 2019) noted the first transatlantic cable installation etc.

**Banks in the Past:** Traditional banks are those that still perform the role of offering savings and lending service products, which typically sets them apart from other forms of financial institutions (Mishra, 2012). Additionally, Mishra (2012) mentioned the following technical developments in banks during this time: Mechanical banking was first established in 1960, computer-based banking was first offered in 1970, and computer-based banking communication was first made available in 1980.

### **FinTech and Banks in contemporary era**

**FinTech in contemporary era:** In this timeframe, Traditional Banks began to develop Digital Financial Services. This shift from analogue to digital is being driven by conventional financial institutions. Online banking became quite popular in the 1990s as a result of the development of the Internet and e-commerce business models. Online banking has significantly altered people's views on money and their interactions with financial organisations (Thakor, 2019).

By the beginning of the twenty-first century, all aspects of banks' internal operations, interactions with other parties, and relationships with retail consumers had been totally digitalized. This time period came to an end in 2008 with the Global Financial Crisis. As more individuals became aware of the reasons behind the Global Financial Disaster, which swiftly expanded into a larger economic catastrophe, they began to distrust the old financial system. Another important factor that has changed the face of fintech is the growing use of smartphones, which has enabled internet access for millions of individuals globally.

**Bank in the contemporary era:** Commercial banks are currently transitioning quickly to simulated banking. Simulated banks are branchless financial institutions that offer financial services via electronic devices like personal computers, telephones, ATMs, and cyber space (Mishra, 2012). Additionally, numerous individuals today refer to the existence of modern banks as covering a variety of technological applications, including ATMs, and mobile banking (Hamzaee & Hughs, 2011).

### **FinTech and Banks in Future perspective**

**FinTech in the future perspective:** The global financial crisis of 2008 occurred and had an effect on the finance and banking sectors (Prawirasasra, 2018). In advancement stage, about 95% of FinTech corporations will fail without a collaborative framework. For some tasks, banks and fintech startups will always be in competition. Future financial technology products will include Bitcoin, distributed ledger technology known as Blockchain (Frame et al., 2018).

Banks in future perspective: Additionally, FinTech banks and BigTech companies will be present in the banking industry in the future (Stulz, 2019). A fintech company called FinTech Bank carries out commercial operations including internet banking. A FinTech business that interacts and synergizes with conventional banks is called FinTech Bank. In the US, Amazon serves as an illustration of this, and Alibaba is BigTech in China. Because of their distinct advantages, BigTech Company can take over traditional bank operations. Banking is where BigTech really excels.

Prior research on banks and fintech (Mention, 2019; Jaki & Marin, 2019; Stulz, 2019; Mutiara et al., 2019; Legowo et al., 2020) is all in favour of our study. The banking sector can use the practical recommendations from this study to use FinTech in their operations going forward.

## **Contemporary Regulatory Framework of Fintech in Pakistan**

### **PSO's and PSPs to act as platforms for FinTech in Pakistan**

The State Bank of Pakistan (S) published the rules governing Payment System Operators (PSOs) and Payment Service Providers (PSPs) in 2014, and they are applicable to any businesses seeking to get a licence to operate Payment Systems in Pakistan.

Licenses to create an electronic platform for the clearing, processing, routing, and switching of electronic transactions have been issued to PSPs and PSOs. A PSP/PSO may enter into agreements with banks and other financial institutions, other PSOs and PSPs, e-commerce service providers, retailers, and other businesses for the purpose of providing the services required of them by these laws. PSOs and PSPs are therefore anticipated to serve as platforms for FinTech.

Additionally, going forward, the SBP can support healthy competition by lowering entry barriers, which will boost innovation in the payments sector, by lowering the capital requirements for PSP/PSO licences.

### **Focus of the State Bank of Pakistan (SBP)**

Through a number of initiatives, SBP is actively contributing to greater financial inclusion. The regulation that permitted the provision of financial services without first establishing a vast branch network was known as 'Branchless Banking'. It took advantage of telecom operators' broad distribution networks. There are currently nine players with branchless banking licences using various business models in commercial operations or in pilot stages. The adaptability of this rule has made it possible to implement several variations.

SBP recently published a new policy to expand prospects for financial inclusion through the introduction of the Asaan Account, a new banking product. This rule enables banks to add lesser value accounts with streamlined due diligence to their portfolios. It encourages opening bank accounts at financial institutions because it is convenient and accessible. To open a bank account, people simply need their CNICs (Computerized National Identity Cards) and a PKR 100 opening deposit.

It is anticipated that the lowered account opening requirements will promote financial inclusion and encourage those in the lowest social strata to seek out banking services. If they see the necessity, banks can potentially offer extra services to these accounts. Paper-based account opening requirements will be reduced thanks to Asaan Accounts. To enable them to retain bigger deposit balances than are currently possible under the branchless banking framework, this category should be expanded to include merchant and branchless banking customers.

The benefits and drawbacks of the various regulatory actions taken by SBP are listed in Table 1.1.

### Regulations facilitate financial institutions but restrict small companies

Pakistan has worked hard to establish robust regulatory frameworks for financial services as a result of its socioeconomic circumstances. As a result, its regulations are fairly established and offer robust controls and parameters within which financial institutions can function (see Table 1.1).

But these rules also present barriers to entry for small businesses in the financial services industry.

An example of an entry barrier for small players is the high capital requirement for payment licenses - minimum paid-up capital requirement for all those entities that seek to become a PSP or PSO stands at PKR 200 million. Moreover, FinTechs trying to register independently in Pakistan, face problems in registration. Currently, FinTechs are registering as technology and service providers as there is no separate category for FinTechs.

Table 1  
Advantages and Disadvantages of Regulatory Initiatives in Pakistan.

Regulation	Pros	Cons
<b>BRANCHLESS BANKING</b>	Elaborate framework Clearly defined product options Definition of each player's role For all product types, there are strong AML and risk requirements with well-defined KYCs	Mandatory banking license does not permit the use of cloud services; physical servers on bank property are required.  slow adoption compared to Pakistan's rapid mobile growth  high resistance to onboarding
<b>PSP/PSO</b>	creates opportunities for new businesses to enter the banking sector and provide payment services via digital channels  allows for the evolution of business models by allowing multiple companies to approach the market from diverse perspectives	For new companies and FinTechs, the high capital requirement (USD 2 million) for licence acquisition presents a barrier to entrance. restricts banks' ability to hold consumer funds; PSPs aren't allowed to offer stored value services
<b>ASAAN ACCOUNT</b>	KYCs for bank accounts are more lax Allow NADRA to use its bio-verisys facilities to enable the opening of entirely digital accounts.  instant pleasure for customers	overlaps with branchless banking's offerings, particularly level 1 wallets, which have identical KYC standards but far higher usage.  One bank branch visit is required for chequebook

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pickup and the initial  
deposit.

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Source: FinSurgents research and analysis.

## **Conclusion**

In conclusion, this study's goal is to give a descriptive analysis of the relationship between banks and fintech in the historical, contemporary and future perspective, with a focus on Pakistan as area of study.

Traditional banks in Pakistan still employ ATMs as a sort of fintech application. The current collaboration between the modern bank and the fintech sector is anticipated to broaden financial inclusion in banking. The Future Bank must give careful regard to the forthcoming existence of BigTech and FinTech enterprises. Research is required to fully understand the influence of FinTech on banks in Pakistan and banking systems in order to inform future ideas.

## **Recommendations**

### **Banks acting as platforms take the regulatory burden while FinTechs innovate**

In Pakistan, where 85% of the population lacks access to a bank, there are large disparities. Although it was conceivable for telecom companies to disrupt the financial services industry, non-financial institutions find it challenging to seek financial services because of Pakistan's stringent laws due to geopolitical considerations. According to the market research, the established businesses believe that FinTechs are not hindered by the current regulations. FinTechs, technology, and startup industries do, however, take current rules into consideration

Unfavorable to smaller players because to high capital expenditures for licences like PSO/PSP. Similar to this, as FinTechs are not recognised as a distinct category, they must register as IT service provider businesses.

Given Pakistan's pervasive compliance environment and the fledgling FinTech ecosystem, FinTechs operating on top of banks and banks acting as platforms are more likely to produce the desired results. The banks will relieve FinTechs of their regulatory load while also offering them a sophisticated compliance environment. FinTechs may use both large and small banks, insurance companies, and PSO and PSP licence holders as platforms. Because the regulator only has to oversee licence holders, the platform model will avoid the supervisory burden on the regulator from rising proportionally with a growth in FinTechs.

### **Clear directives for the two types of FinTech models**

FinTechs can either compete directly with banks for customers' business by going to them directly or they can work together with banks to take use of their compliance and money management systems while concentrating only on value creation. The regulator must specify the terms and conditions for FinTechs who wish to use either of these two models, nevertheless. Since FinTechs are not yet acknowledged anywhere inside the regulatory scope, Pakistan lacks a framework that is applicable. The State Bank has a number of measures to control FinTechs:

1. FinTechs can either approach clients directly to compete with banks for their business or they can collaborate with banks to use existing compliance and money management systems while focusing solely on value creation. However, the terms and conditions for FinTechs who seek to employ either of these two models must be specified by the regulator. Pakistan lacks an appropriate framework because FinTechs are not yet acknowledged anywhere inside the regulatory system. The State Bank has several strategies to manage FinTechs, including:

2. Establishing a distinct direction for FinTechs aiming to engage with consumers The establishment of clear norms is also necessary for consumer-facing FinTechs who wish to operate independently. In comparison to FinTechs working with banks, the minimal standards for customer-facing FinTechs may be higher. FinTechs with a focus on customers may carry more risk.

### **Creating a dedicated FinTech Regulatory wing**

According to global trends, all forward-thinking regulators have established specialised FinTech wings that collaborate closely with the rest of the regulatory framework (such as NADRA, PTA, and SECP) while being flexible enough to meet the demands of nimble businesses. A specialised FinTech division should be established at the State Bank of Pakistan, a forward-thinking regulator, to oversee the two categories of FinTechs described above. A leader of this division should be in direct communication with the State Bank governor. The following are the numerous duties that this dedicated FinTech wing can perform:

#### Functions of a dedicated FinTech Wing

1. Creating and upholding a regulatory framework for FinTech companies operating in Pakistan.
2. Offering walk-in and scheduled consultations for FinTechs to provide assistance and advisory services.
3. Planning frequent SBP-led conferences, roundtable talks, seminars, and certifications.
4. Continuing regular interactions between SBP resource people and forward-thinking regulators.
5. Establishing a rotating group of regional and international advisors to advise the SBP on rules and the state of the FinTech industry worldwide.
6. Encouraging industry feedback.
7. Establishing a legal sandbox.
8. Establishing an educational arm for FinTech promotion.

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