# A Study on the Sustainability and the Scalability of Digital Banks in Pakistan

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A thesis submitted to the National University of Sciences and Technology, Islamabad,

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Supervisor: Ms. Kishwar Sameen Gulzar

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It is Certified that final copy of EMBA Business Project written by Mohsin Ashfaque Khan Registration No. 327415 of EMBA 2K20 has been vetted by undersigned, found complete in all aspects as per NUST Statutes/Regulations/MS Policy, is free of errors, and mistakes and is accepted as fulfillment for award of EMBA degree. It is further certified that necessary amendments as pointed out by GEC members of the scholar have also been incorporated in the said business project.

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# AUTHOR'S DECLARATION

I Mohsin Ashfaque Khan hereby state that my MS thesis titled "A Study on the Sustainability and the Scalability of Digital Banks in Pakistan" is my own work and has not been submitted previously by me for taking any degree from National University of Sciences and Technology, Islamabad or anywhere else in the country/ world.

At any time if my statement is found to be incorrect even after I graduate, the university has the right to withdraw my MS degree.

Name of Student: Mohsin Ashfaque Khan

Date: Monday, 6th May, 2024

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| | |
|---|---|
| DFB | Digital Full Bank |
| DRB | Digital Retail Bank |
| EMI | Electronic Money Institution |
| IPA | In-Principal Approval |
| MCR | Minimum Capital Ratio |
| MM | Mobile Money |
| MSE | Micro-Small Enterprise |
| NBFC | Non-Banking Financial Company |
| NOC | No Objection Certificate |
| PTA | Pakistan Telecommunication Authority |
| SBP | State Bank of Pakistan |
| SDG | Sustainable Development Goals |
| SME | Small-Medium Enterprise |

# ABSTRACT

The following is an independent study conducted by Mohsin Ashfaque Khan (an MBA student of NUST Business School) on the digital banking landscape of Pakistan. The State Bank of Pakistan (SBP) provided digital banking licenses to five entities in Pakistan to set up operations of a virtual bank and to provide all banking services through digital means. The following are the five entities who received the digital banking license:

1. HugoBank Limited,
2. KT Bank Pakistan Limited,
3. Mashreq Bank Pakistan Limited,
4. Raqami Islamic Digital Bank,
5. Telenor Microfinance Bank/easypaisa Digital Bank.

This document aims to shed light on what exactly digital banks are and what their scope of services is. Additionally, all five digital banks, including their sponsors, will be scanned in detail. Furthermore, challenges in the sustainability and scalability of the operations of these digital banks will be analyzed in the context of Pakistan's current digital landscape, the sponsors of these digital banks, and Pakistan's cultural and societal fabric. Lastly, keeping all the discussion and arguments in the background, it will be concluded whether

these digital banks will be a success or a learning curve for Pakistan's digital revolution. This document is intended to be viewed and used by the defense committee of NUST Business School. It is stressed that the information inside this document, especially the stage at which each digital bank is, the different products they aim to provide, and information pertaining to each bank's technology stack and structural changes, be kept **strictly confidential**.

**Keywords:** Digital banking; financial inclusion, socio-economic factors, digital landscape, scalability.

# CHAPTER 1: INTRODUCTION

In January, 2023, the State Bank of Pakistan (SBP) issued Non-Objection Certificates (NOC) to five successful applicants for establishing digital banks in Pakistan. The process for issuing these NOCs included SBP receiving applications from interested companies, assessing each applicant on the basis of the impact they have had on the digital landscape of Pakistan, and analyzing their ability to execute operations pertaining to a digital bank. The process of selecting successful applicants spanned over a year. A total of 20 companies in Pakistan applied for the digital banking license. The list of applicants was quite diverse and included everyone from existing banks like UBL to telco-backed JazzCash. Current Electronic Money Institution (EMI) contenders, such as Finja (in partnership with its investor HBL), and former Special Adviser to Prime Minister Tania Aidrus-led dBank were in the race too, as were a few international players, namely South Africa-headquartered Tyme Bank and Tajik Alif Bank.

After a highly competitive process, the SBP issued digital banking licenses to the following entities:

1. HugoBank Limited,
2. KT Bank Pakistan Limited,
3. Mashreq Bank Pakistan Limited,
4. Raqami Islamic Digital Bank,
5. Telenor Microfinance Bank/easypaisa Digital Bank.

These institutions were selected after a thorough and rigorous evaluation process based on a comprehensive set of parameters including fitness and propriety, experience and financial strength; business plan; implementation plan; funding and capital plan; IT and cybersecurity strategy and outsourcing arrangements.

There were mixed reactions within the fintech industry on the names of the companies who were given the digital banking license as major players were unable to receive the NOC (such as Tyme Bank, D-bank, and Finja). Additionally, the five digital banks who did receive the license had strong presence in the business sector and limited-to-none experience in fintechs (such as City School backing KT bank or Hugobank being sponsored by M&P, a courier company). What was more shocking was that none of the existing commercial banks received the digital banking license.

However, majority of the community still has their doubts over the actual sustainability of these digital banks, with a huge segment of Pakistan's population still confused about what the buzz behind these digital banks is even about. For a lot of people, the confusion behind the difference between these five entities and companies such as JazzCash, Barwaqt, Tez Financials, PayMax, FirstPay, and numerous other players, is at its peak.

This document aims to alleviate these confusions and provide clarity on the core differential points which makes these five digital banks stand out amongst a sea of digital financial services providers. However, the author of this document is also quite skeptical on the future of these digital banks in the context of Pakistan's digital and social/cultural landscape. Challenges regarding the establishment and expansion of these digital banks

will be presented in detail, and their effects will be analyzed, which will all be geared towards the conclusion: will these five digital banks scale up and survive in Pakistan?

# CHAPTER 2: WHAT ARE DIGITAL BANKS?

In the ever-evolving landscape of finance, the emergence of digital banks has redefined the traditional banking experience. Digital banks, often referred to as online banks or neobanks, represent a transformative force in the financial industry by harnessing the power of technology to provide a wide range of banking services in a virtual environment. These are financial institutions that operate exclusively in the digital realm, without the presence of physical branches. Unlike traditional banks, these entities rely heavily on advanced technologies to facilitate customer interactions, manage transactions, and deliver financial services.

Several key characteristics distinguish digital banks from their brick-and-mortar counterparts:

- **Online-Only Presence:** The hallmark of digital banks is their absence of physical branches. Instead, they leverage web and mobile platforms as the primary channels for customer interactions, creating a virtual banking environment that is accessible anytime and anywhere.

- **Technology-Driven Operations:** Digital banks leverage technologies, such as artificial intelligence, machine learning, blockchain, and cloud computing, to streamline their operations. Automation is a key component, allowing for efficient and cost-effective management of various banking processes.

- **Agile Infrastructure:** Unlike the complex infrastructures of traditional banks, digital banks often boast agile and scalable systems. This flexibility allows them to

respond rapidly to market changes, adapt to evolving customer needs, and scale their operations efficiently.

- **Customer-Centric Approach:** Digital banks prioritize the customer experience, aiming for user-friendly interfaces, seamless transactions, and personalized services. The absence of physical branches places a heightened emphasis on digital interfaces, necessitating an intuitive and responsive design.

Digital banks offer a range of deposit and savings accounts, often with competitive interest rates. Customers can open and manage their accounts entirely online, with account information accessible through web or mobile applications. Additionally, digital banks facilitate various types of transactions, including fund transfers, bill payments, and international transfers. These transactions are executed in real-time, providing customers with speed and convenience.

Customer support in digital banks is often provided through online channels, such as chatbots, email, or phone support. The use of artificial intelligence enables quick issue resolution, and the absence of physical locations is compensated by efficient digital communication.

Furthermore, digital banks prioritize the security of customer information and transactions. Multi-factor authentication, encryption, and biometric verification are common security measures employed to safeguard the digital banking experience.

Digital banks offer a broad spectrum of financial services, extending beyond traditional banking. Some of the key services include:

- **Loans and Credit Products:** Digital banks provide loans and credit products, often with streamlined application processes and quick approvals. The evaluation of creditworthiness may incorporate alternative data sources and innovative scoring models.

- **Investment and Wealth Management:** Many digital banks offer investment products and wealth management services, allowing customers to invest in various financial instruments through user-friendly platforms.

- **Innovative Features:** Digital banks often introduce innovative features, such as real-time budgeting tools, expense tracking, and personalized financial advice powered by artificial intelligence. These features enhance the overall financial management experience for customers.

## 2.1 Impact on the Financial Landscape and Conventional Banking Industry

The rise of digital banks has significant implications for the broader financial industry. The emergence and rapid evolution of digital banks have brought about a transformative shift in the financial landscape, challenging traditional banking models and prompting significant changes in the industry. Some of the key impacts of digital banks on the conventional banking industry include:

- **Increased Competition:** The entry of digital banks has intensified competition in the banking industry. Traditional banks are now compelled to rethink their business strategies, exploring partnerships, collaborations, and technology investments to stay relevant. The competitive landscape is evolving, with both digital and

traditional banks seeking to differentiate themselves through a combination of technology, customer service, and product innovation.

- **Financial Inclusion:** Digital banks have the potential to enhance financial inclusion by providing services to individuals who may be underserved by traditional banking institutions, particularly in regions with limited access to physical branches. The mission and vision of most digital banking institutions is to meet the SDG (Sustainable Development Goal) of financial inclusion through connecting populace with financial products and services through their smartphone. Thus, the need for physical presence has been replaced by network coverage.

- **Collaboration with Fintech:** Many digital banks collaborate with fintech companies to enhance their offerings. This collaboration often leads to the introduction of innovative financial products and services. The same is also true for government organizations who are now open to partnerships with financial institutions who specialize in digital payments such as BISP partnering with FirstPay to tap into their mobile wallet coverage for disbursement of BISP funds.

- **Changing Customer Behavior:** Digital banks have profoundly influenced customer behavior and expectations. With user-friendly interfaces, 24/7 accessibility, and seamless transaction experiences, digital banks offer a level of convenience that traditional banks struggle to match. Customers, particularly the tech-savvy younger generation, increasingly prefer the speed and accessibility provided by digital banking platforms. As a result, traditional banks face the challenge of adapting their services to meet evolving customer demands.

- **Operational Efficiency and Cost Reduction:** Digital banks are inherently more efficient than their traditional counterparts. By eliminating the need for physical branches and automating many processes, digital banks can operate with lower overhead costs. This efficiency allows them to offer competitive interest rates, lower fees, and innovative financial products. Traditional banks, burdened by legacy systems and extensive brick-and-mortar infrastructure, must invest in digital transformation to enhance operational efficiency and remain competitive.

- **Innovation in Financial Products and Services:** Digital banks have been at the forefront of financial innovation, introducing novel products and services that cater to specific customer needs. From budgeting tools and investment platforms to customizable savings options, these neobanks provide a diverse range of offerings. Traditional banks must adapt and innovate to keep pace with these developments, fostering a more dynamic and competitive financial services landscape.

- **Regulatory Challenges:** The rise of digital banks has prompted regulatory bodies to reassess and adapt their frameworks to ensure consumer protection, financial stability, and fair competition. Striking the right balance between fostering innovation and maintaining regulatory standards poses a significant challenge. Traditional banks, with established regulatory compliance processes, may find it challenging to navigate the evolving regulatory landscape, while digital banks need to ensure they comply with traditional banking regulations as they expand their services.

- **Enhanced Customer Experience:** Digital banks prioritize customer experience through intuitive interfaces, personalized services, and real-time insights into financial activities. This heightened focus on customer-centricity puts pressure on traditional banks to enhance their own customer service offerings. The traditional banking sector is increasingly investing in digital channels and user interfaces to improve the overall customer experience, bridging the gap between the advantages offered by digital and conventional banks.

Digital banks represent a paradigm shift in the banking industry, leveraging technology to create a modern and efficient banking experience. The absence of physical branches does not hinder their ability to provide a comprehensive suite of financial services, and their customer-centric approach and agility set them apart in a dynamic financial landscape. As digital banks continue to shape the future of banking, traditional institutions must navigate this evolving terrain by embracing technological innovations to remain competitive and relevant.

# CHAPTER 2: DIGITAL BANKING LICENSES IN PAKISTAN

The digital banking licenses are conferred to organizations/entities by the State Bank of Pakistan (SBP). In the Licensing and Regulatory Framework for Digital Banks published in January 2022 by SBP, SBP states that digital banks are required to contribute to delivering the following prime objectives:

- Promote financial inclusion.
- Provide credit access to unserved and underserved.
- Provide affordable/cost effective digital financial services.
- Encourage application of financial technology and innovation in banking.
- Foster new set of customer experience.
- Further develop digital eco-system.

Within the same document, SBP also defines the types of digital banking licenses currently being offered to organizations and the applicability of these digital banking licenses. Although globally, there are more than five different digital banking licenses, within the context of Pakistan, SBP is providing the following two licenses:

a) Digital Retail Banking (DRB) License: Through this license, retail customer segments can be catered to through digital financial services,

b) Digital Full Banking (DFB) License: DFBs can cater to corporate, commercial, and retail segments.

As mentioned in the introduction, SBP has awarded five organizations the Digital Retail Banking (DRB) license. According to the license, the following segments can be served:

- Individual customers,
- Micro to Small Enterprises (MSEs).

Deposits can be taken from these customers and savings and lending products can be offered to these segments. It is pertinent to mention that these DRBs may request SBP to convert their license to a DFB. However, these entities will still have to apply for the conversion to a full digital bank and would have to meet the regulatory and applicant requirements as detailed in the Framework for Digital Banks.

It is pertinent to mention that the said Framework (published in January 2022) provides very comprehensive and rigid applicability guidelines and the minimum requirements to become a digital bank. The framework also provides the different stages that these organizations will have to check-off in order to commence digital operations commercially. These stages are:

a) **Provision of the No Objection Certificate (NOC):** SBP issues a NOC, which may be subject to certain terms and conditions and may be used for incorporation of the proposed DRB as a public limited company with Securities and Exchange Commission of Pakistan (SECP).

b) **In-Principal Approval (IPA):** After incorporation of the company and complying with all the other terms and conditions stated in the NOC, the applicant shall apply to SBP for IPA within six months of the issuance of NOC. If SBP considers the

application satisfactory, SBP may grant an IPA laying out terms and conditions required to be fulfilled prior to the commencement of pilot operations. Please note that the IPA will be valid for 12 months since the date of issuance.

c) **Operational Readiness:** Once the applicant attains operational readiness and complies with all the terms and conditions under the IPA, it shall apply to SBP within the IPA validity for a restricted license to commence pilot operations. SBP shall assess the operational readiness and compliance with all the terms and conditions of IPA through on-site inspection. If deemed appropriate, SBP may also advise the applicant to submit third party assessment report from a reputable expert as acceptable to SBP.

d) **Pilot Stage:** After all the SBP requirements have been met including assessment of operational readiness to the satisfaction of SBP, the applicant may be awarded a restricted license authorizing commencement of pilot operations. The pilot stage will be for a duration of 3 months.

e) **Commencement of Commercial Operations:** After the conclusion of pilot operations and compliance with all the terms and conditions under the restricted license for pilot stage, the applicant shall apply to SBP, within the time stipulated under the restricted license, for a license to commence commercial operations. SBP shall assess through on-site inspection, DRB's readiness for commercial launch including performance during pilot operations and compliance with all the terms and conditions of restricted license for pilot stage. If deemed appropriate, SBP may also advise the applicant to submit a third-party assessment report from a reputable

expert as acceptable to SBP. After all the SBP requirements have been complied within the validity period of the restricted license, SBP may grant a license to commence commercial operations under transition phase, with new terms and conditions.

As evident from the steps outlined, the time period from the NOC to the actual commencement of commercial operations is excessively long. However, they are deemed to be adequate in order for these five DRBs to complete the rigorous requirements laid out by SBP. Currently, only two of the five DRBs have been provided the IPA (easypaisa Digital Bank and Raqami Islamic Digital Bank). The others have sought extension in the completion of the minimum requirements to receive an IPA.

However, at this stage of the document, it would be wise to delve deeper into the five organizations that have been granted the DRB license. The background of the companies is essential in building the argument of this document.

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# CHAPTER 3: THE FIVE DIGITAL RETAIL BANKS (DRBS) OF PAKISTAN

This section dives deeper into the company profiles of the five digital banks of Pakistan. This information is important factor in understanding whether these banks will be able to survive in the short-to-medium run in Pakistan in the context of the country's digital landscape and socio-economic fabric.

### a) easypaisa Digital Bank

easypaisa is Telenor Microfinance Bank's (TMB) digital arm. All branchless banking operations of TMB fall under the ambit of easypaisa. These include money transfers, savings products, digital nano-lending to consumers, and insurance products. Over the years, the term "easypaisa" has become synonymous with money transfer, where if any individual needs to transfer money to someone, regardless of whether they are an easypaisa user, they use the term easypaisa to define the money transfer.

Easypaisa or TMB is jointly owned by Telenor Group and Ant Group, which is a subsidiary of Alibaba Group. It is important to mention here that Telenor Group owns minority shareholding in TMB (at 49%) and should not be confused with Telenor Pakistan, who owns no shares in TMB. Even though TMB has nothing to do with Telenor Pakistan, the masses have easily confused Telenor Group with Telenor Pakistan. The recent acquisition of Telenor Pakistan by Etisalat Group has caused negative speculation against TMB. Social media has been fluttered with posts about Etisalat Group also acquiring easypaisa through their acquisition of Telenor Pakistan, and false news about TMB shutting down. As a result,

easypaisa has seen an 11% decline in their total deposits in the last ten days of December 2023 alone. When taken into context with the fact that easypaisa has been incurring heavy losses since 2018, these false rumors become highly problematic. Nevertheless, in 2022, Ant Group, the major shareholder in easypaisa, bailed out easypaisa after another year of heavy losses and injected $15 million for easypaisa to stay afloat.

**b) HugoBank**

HugoBank is a consortium between Getz Bros Group (a major player in the pharma industry), Muller & Phipps (M&P), and Atlas Consolidate who launched the Singapore-based fintech Hugosave. HugoBank is starting their operations from scratch and have only been advertising about their products and services on social media platforms liked LinkedIn and Instagram. From their outreach posts, it seems that their target market is primarily young individuals between the age of 17-25 (typically categorized as Gen-Zs). Most of the inspiration behind their products and services come from the services offered by Hugosave in Singapore. However, even Hugosave is relatively in its infancy and has only started its operations in late 2019. Additionally, the only sponsor with any financial and technological expertise is Atlas Consolidate. The other two partners (Getz Bros and M&P) have no experience in financial services, even though the news in the market is that HugoBank will leverage M&P vast network of brick-and-mortar shops and use them as cash-in/cash-out points for the public.

**c) KT Bank**

KT Bank is a joint venture between Fatima Fertilizer, The City School, and Nigeria-based fintech KudaBank (primarily operating in Nigeria and the UK). Amongst all the companies

which have been awarded a digital banking licenses, KT Bank seems the most odd, given their partners. Both Fatima Fertilizer and City School are major players in their respective domains, they have absolutely no experience in the provision of financial services. Meanwhile, KudaBank has raised $90M+ and boasts more than four million customers. However, the bank is yet to be profitable posting losses of more than $14 million in 2021 alone. Additionally, as with Hugosave, KudaBank is also in its infancy and has only been around since 2019.

Ambiguity is further heightened by the fact that out of all the digital banks, KT has been the quietest in terms of outreach and advertising. Additionally, through PRs conducted by KT Bank, use cases for education and agriculture will be the primary target with Kuda leveraging their expertise in tech to power these use cases.

**d) Mashreq Bank**

Amongst all the digital banks, Mashreq has the most experience in the digital financial sphere. Founded in 1967, and majorly owned by UAE's wealthy Al-Ghurair family, Mashreq Bank is the oldest privately owned bank in the UAE and one of the oldest banking institutions in the Middle East. As of Jan 13th, it had a market cap of AED 19.5 billion and reported net profit of AED 2.6 billion in 2022. However, Mashreq is primary a legacy bank and has never really dabbled in digital financial services. Thus, this industry is still quite new to them. Even though Mashreq has been hiring people from Pakistan quite rigorously, their communications and outreach has not showed any light on Mashreq's digital offerings and services.

**e) Raqami Islamic Digital Bank**

Raqami Islamic Digital Bank is a joint venture between Pak-Kuwait Investment Company and Enertech Holding, both of whom are owned by Kuwait Investment Authority (KIA). KIA is a sovereign wealth fund with $738 billion of assets under management while PKIC reported an estimated profit of PKR 7 billion in profit during 2022. It is safe to say that all partners are quite wealthy and will be able to inject a lot of cash into the operations of Raqami.

KIA is no stranger to the tech industry, as it has invested heavily in companies such as Careem and Indiamart to name a few. Additionally, Raqami is headed by Mr. Nadeem Husain, the founder of Tameer Bank and the brainchild behind Easypaisa. Nadeem Hussain also owns and operates a Venture Capital firm called Planet N and lists Raqami under the many businesses under its portfolio.

What is most interesting is that Raqami is the only digital bank who has listed itself as an Islamic bank and has been marketing and positioning itself as the first Islamic digital bank. As imposing a religious sentiment has always worked as a marketing strategy (tried multiple times by successful desensitized companies), Raqami seems adequately geared to make a breakthrough in the financial landscape.

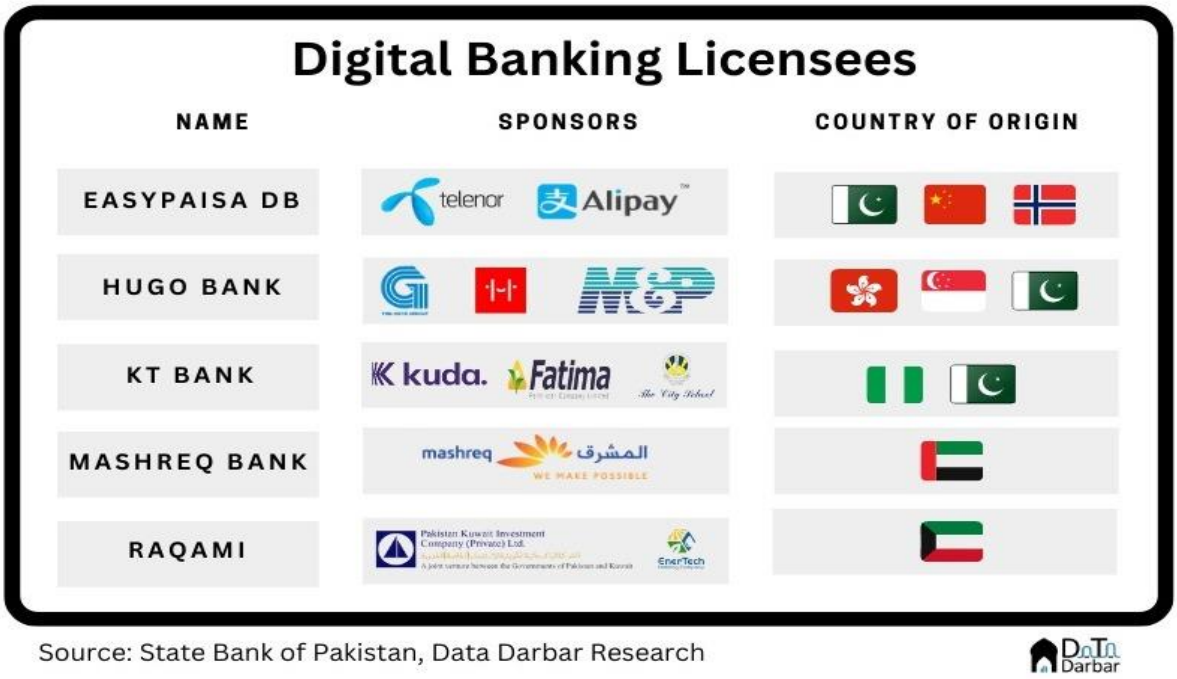


**Figure 1: The Digital Banks of Pakistan**

# CHAPTER 4: PAKISTAN'S DIGITAL AND SOCIO-ECONOMIC LANDSCAPE

We have mentioned in the previous sections that we aim to determine whether these five digital retail banks of Pakistan will be able to operate, sustain, and scale up their operations given the digital and socio-economic landscape of Pakistan. In this section, we will shed light on Pakistan's digitization efforts and provide brief but key highlights.

According to Pakistan Bureau of Statistics, Pakistan's population as per the latest digital consensus in 2023 was around 240 million with majority of the population residing in Punjab and Sindh. If considering the split of the population, the following are key insights:

- Around 61% of Pakistan's population resides in rural areas whereas 39% resides in urban areas.
- Around 51% of Pakistan's population is male while 49% is female.
- Pakistan's literacy rate was 59.3% (which is actually lower than 2022's literacy rate which was actually around 63%).

In the context of financial services, the following are certain key insights of Pakistan's banking sector:

- Pakistan has over 40 banks (including commercial and microfinance) who lent almost PKR 12 trillion domestically and overseas,

- Out of the total, only PKR 430 billion was lent to SMEs and PKR 813 billion to consumers,

- Majority of Pakistan's population relies on informal sources of financing.

To shed more light on the last point (regarding Pakistani's relying on informal sources of financing), according to World Bank's Global Findex database, more than half of the world's unbanked adults live in seven countries, which include Pakistan where the unbanked adults make up 55% of the entire adult population, majority of which are females. The unbanked population, as a result, either prefer to use informal sources of credit or are propelled into the informal market for any financing.

According to a survey conducted by Access to Finance (A2F) with a sample size of around 10,000 respondents, the incidence of borrowing is largely skewed towards the informal market – over 95% of borrowers were borrowing through informal channels. This is both a result and cause of low penetration of formal financial services. The low incidence of borrowing from formal channels and a large unbanked population reinforces each other. On the demand side, top reasons cited for borrowing informally included buying food (34.2%), life cycle events such as wedding and dowry (14.2%) and unforeseen and emergency situations (12.0%) such as medical bills and funeral. Majority of the borrowing respondents quoted three major reasons for using informal credit:

- Convenient location of the informal lender,

- Easier overall access (informal money lenders do not require excessive documentation and heavy collaterals) and

- ❖ An easy process to obtain money (processing times are significantly short compared to the formal market).

On the point of interest rates, 20% of the borrowing respondents mentioned low interest rate as one of the reasons to borrow from the informal market. This is a major misconception among informal borrowers as interest rates are generally higher in the informal market, ranging from 62% to 80%. However, in most instances, the interest rate is packaged as processing fee or an additional loan instalment within the principal amount.

It can also be seen that among borrowers captured within the formal financial system, majority is the male population while in case of informal lending, though the proportion of male borrowers is high, the male/female split does not vary significantly. This potentially points to difficulties women face in accessing formal credit. Additionally, more than half of the informal borrowers reported getting the loan in less than 5 days. 35% declared that they face no difficulties at all, 45% said the process is "somewhat easy" and less than 1% stated that it was very difficult. 78% of the informal borrowers mentioned that either no documents were needed, or the requisite documentation was not difficult to provide. Surprising, only 9% mentioned to have been asked about the proof of formal ID. With respect to provision of collateral, 78% of respondents stated that no security was requested against the loan.

While it is important to understand why people borrow, it is equally useful to explore the reasons that inhibit potential borrowers from borrowing. This part of the behavioral attribute completes the demand side credit dynamic. A2F data set reveals some interesting information in this regard. One key reason for not borrowing (irrespective of the gender)

is lack of a credible credit history. The other two major reasons quoted by male respondents for not accessing loans (from the formal market or informal market) are high interest rates and religious beliefs that prohibit taking interest bearing loans. In case of females, 23% stated that they are not even allowed to borrow. This highlights the prevalence of a societal encumbrance, as females are not allowed to participate in the economic decisions within a household. This also negatively impacts their inclusivity within the formal financial system.

These issues relating to the access to finance is exactly what the digital banks aim to resolve. In the framework of Digital Banks published by SBP in January 2023, SBP outlines that one of the core reasons for providing five organizations digital banking licenses was to improve Pakistan's population's access to finance and financial inclusion in its entirety. The basic hypothesis is that through the provision of digital financial services, financial inclusion can increase in Pakistan.

Let's dive deeper into Pakistan's digital landscape. The following are certain key insights on the digitization in Pakistan:

- As of 2023, 75 % of Pakistan's population had active cellular mobile connections,
- From this, 59% of the mobile users had smartphones whereas 41% had feature phones,
- Pakistan's internet penetration stood at 54.5% of the total population in 2023.
- Out of the 80.5% of the population that had active cellular mobile connections, mobile broadband penetration was 53.2%.

These are key figures as most digital financial services offered by companies are provided mobile broadband or through internet access. However, currently, other players exist in the digital financial services industry who are already providing services such as deposits, fund transfers, savings products, digital loans, and even insurances. These include big players such as JazzCash (with the most market share), easypaisa (already providing digital services even before being provided the DRB license), HBL Konnect, FirstPay, Barwaqt, Sadapay, Nayapay, etc.

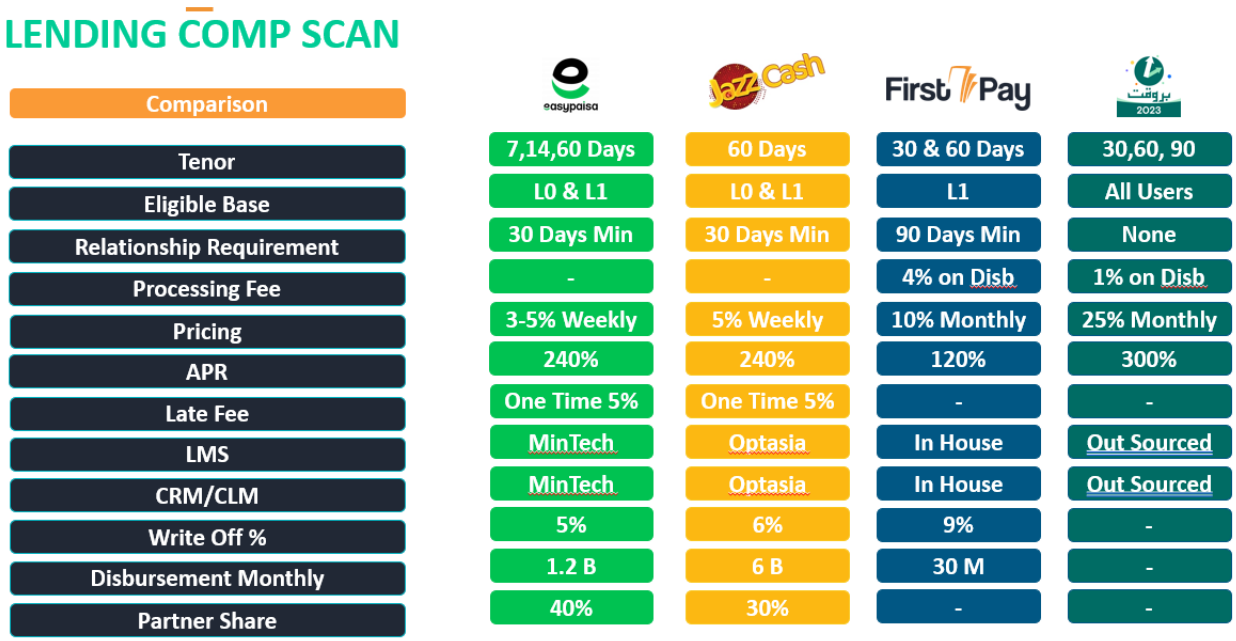


**Figure 2: Digital Lending Competition Scan**

Additionally, almost all commercial banks of Pakistan have their own banking app on major phone platforms where most of these functions can be executed. These banking apps increased in frequency and boosted the services they provided during the Covid-19 pandemic, when majority of the population of Pakistan were under a lockdown and were advised not to visit banks. Seizing the opportunity, these commercial banks focused heavily

on digital banking and developed banking applications which could mimic the activities that customers would perform in branches. Due to the pandemic, we saw a burst of many Electronic Money Institutions (EMIs) which offered customers mobile wallets for digital payments.

The latest Access to Finance survey by Karandaaz Pakistan showed that mobile money wallet registrations increased substantially from 9% in 2020 to 19% in 2022. Urban mobile money wallet registrations saw an even sharper increase from 11% - 26% in the last two years. Meanwhile rural mobile wallet registrations increased more modestly from 11% - 16%.

How do these banks and companies differ from a digital bank? It is important to draw this distinction before we continue any further.

- **Commercial Banks**: This is a financial institution registered with SBP that accepts deposits, offers checking account services, makes various loans, and offers basic financial products like certificates of deposit (CDs) and savings accounts to individuals and businesses. Commercial banks may have digital apps for their customers but these only supplement the vast network of branches that these banks have. Thus, instead of focusing on digital means to reach their customers, these commercial banks focus on building physical branches to reach their customers. Commercial banks may be full banks or microfinance banks (with the only differential points between these two being their target audience and their lending limits),

- **Non-Banking Financial Company (NBFC)**: These are entities that provide financial services similar to banks but do not hold a banking license. In simple words, NBFCs can provide financial services but cannot take deposits from customers. Thus, NBFCs are not regulated by SBP, rather they fall under SECP's Company's Act 2017. Examples of NBFCs include mutual funds, leasing companies, investment finance companies, pension funds, insurance companies, private equity funds, venture capital funds, etc.

- **Electronic Money Institutions (EMI)**: These are entities that offer innovative, user-friendly and cost-effective low value digital payment instruments like wallets, prepaid cards, and contactless payment instruments. Simply put, these entities provide an electronic wallet platform for customers so that they can make digital payments or digital fund transfers only. Examples of EMIs in Pakistan include SadaPay, NayaPay, CareemPay, etc. These companies cannot directly take deposits from customers. In order to provide services, these customers must be linked to a bank who will take the deposits that customers place in their mobile wallets.

Compared with the above, Digital Banks are financial institutions that operate primarily or exclusively through digital channels, such as websites, mobile apps, and other online platforms. Unlike traditional brick-and-mortar banks, digital banks don't have physical branches. Instead, they leverage technology to provide banking services and interact with customers remotely. These companies provide all services that any other commercial bank can provide. However, as commercial banks reach their customers through physical branches, digital banks only provide services through digital mediums.

| Commercial Banks | Non-Banking Financial Company (NBFC) | Electronic Money Institution (EMI) | Digital Bank |
|---|---|---|---|
| • Accepts customer deposits,<br>• Allow for payments through various instruments,<br>• Offers lending products,<br>• Provide investment options,<br>• Provide savings products,<br>• Extensive physical presence with supplementing digital presence. | • Do not hold banking license,<br>• Cannot accept customer deposits,<br>• Provide loans,<br>• Provide investment opportunities. | • Do not hold banking license,<br>• Cannot directly accept customer deposits,<br>• Primarily provide payment and digital fund transfer options. | • Accepts customer deposits,<br>• Allow for payments through various instruments,<br>• Offers lending products,<br>• Provide investment options,<br>• Provide savings products,<br>• Primarily a digital presence. |

**Table 1: Different Financial Licenses**

# CHAPTER 5: WILL THESE FIVE DIGITAL BANKS SUSTAIN & SCALE IN PAKISTAN?

The discussion above primarily builds the basis of are argument. We have dug deep in the digital landscape of Pakistan, the social fabric of the population when it comes to financial services, and have defined what digital banks are and how they differ from other financial companies like commercial banks, NBFCs, and EMIs. We have also gone into detail regarding the five companies who have been awarded the digital banking license by the SBP. However, the question over their sustainability and their scalability persists.

Digital financial services (DFS) have gained momentum in Pakistan. The number of mobile app banking users has reached 15.3 million, and internet banking users have reached 9.3 million. Mobile banking transactions have grown by 77 percent, while internet banking transactions increased from 38.3 million to 40.8 million during FY 22-23. Additionally, branchless banking accounts have reached 103.1 million, with total deposits reported at PKR 95.6 billion. However, what is evident is that digital financial services (DFS) in Pakistan primarily focus on payment systems. In contrast, consumer finance and financial intermediation, such as lending and borrowing, have not experienced the same level of digitization-driven disruption, despite their significant potential.

Moreover, the payment process between digital service providers and banks remains far from seamless and convenient in Pakistan. Many banks and financial service providers in the country still rely on legacy systems and outdated technology. These systems may not be fully integrated or compatible with each other, leading to issues in integrations, data

transfer, and transaction processing. Additionally, the lack of standardized protocols and communication interfaces hinders interoperability between different financial institutions and digital service providers.

Limited access to finance is a significant issue for SMEs and individuals in Pakistan. Traditional banks are often cautious when it comes to lending to SMEs and retail businesses. The majority of credit is directed towards large businesses and government bonds, leaving limited growth opportunities for smaller players. One crucial aspect of credit provision involves enhancing risk management through financial technology.

Globally, the fintech market has made substantial progress in this regard. It has harnessed artificial intelligence and machine learning technologies to improve risk assessments by using alternative data and managing regulatory compliance for complex sectors. However, in Pakistan, addressing the issues of information asymmetry, and financial data inaccessibility is the first step.

In the realm of retail lending, Pakistan has witnessed the emergence of nano-loans, with an estimated 2.3 million borrowers. Additionally, Buy-now-pay-later (BNPL) services have recently been introduced in the country. Nevertheless, financial institutions and their associated service providers are grappling with a high default ratio, while interest charges on these credit facilities remain elevated due to lending institutions pricing loans based on the overall portfolio risk in the absence of individual credit scoring capabilities.

Although the fintech ecosystem in Pakistan holds significant promise for innovative product offerings, it faces challenges that hinder the growth of emerging startups. The market is largely controlled by established banks, which frequently resist innovation and

collaboration. These banks also have most of the available funding and user base. Furthermore, fintech startups encounter difficulties in competing with established banks that can access lower-cost capital through deposit-raising mechanisms. Moreover, the regulatory design in Pakistan has leaned towards a rigid, rules-based institutional approach, resulting in a framework that is not easily adaptable to new technologies, emerging businesses, and innovative models.

In recent years, there has been progress in financial inclusion in Pakistan, with the latest KFIS (Karandaaz Financial Inclusion Survey) reporting a 30% inclusion rate, marking a 9-percentage point increase from the previous survey. However, despite this improvement, Pakistan still falls behind the regional average of 68% for South Asia, especially when examining rural financial inclusion. Microfinance institutions have made significant strides in providing basic financial services and credit facilities to rural populations. However, these communities still lack access to financial products with favorable channel, pricing or value. Additionally, digital transactions are nearly non-existent in these areas due to inadequate infrastructure and the reluctance of local service providers to innovate.

The above discussion provides a brief on why I believe digital banks will not be able to sustain and scale in Pakistan. However, let us dive deeper into this argument. The following points justify my hypothesis on the future of digital banks in Pakistan. These points are details of the some of the highlights mentioned in the above discussion and represent primarily my own reasons based on my knowledge and understanding.

a) **Broadband & Network Coverage in Pakistan:**

As defined above, digital banks are financial institutions which deliver financial services to customers through websites, mobile data, and other online platforms. Thus, the delivery of all services relies solely on digital platforms and mediums. This means that SBP's provision of digital banking licenses to five companies in Pakistan is based on one core assumption: Pakistan has a thriving and vastly connected broadband and mobile service network. It is primarily on the basis of this assumption alone that all these digital banks are developing their product offerings. However, this assumption seems quite ambitious and almost fallacious as Pakistan's cellular and internet networks both have glaring weaknesses.

Pakistan has witnessed significant advancements in the field of telecommunications over the years, with the proliferation of broadband and cellular networks playing a crucial role in connecting people across the country. However, like many developing nations, Pakistan faces several weaknesses and challenges in the deployment and maintenance of these networks.

- Infrastructure Limitations: One of the primary weaknesses in Pakistan's broadband and cellular networks is the inadequacy of infrastructure, particularly in remote and rural areas. Despite progress in urban centers, many regions still lack the necessary infrastructure for robust network connectivity. The installation of cell towers, fiber-optic cables, and other network components faces challenges in areas with difficult terrains, hampering the extension of services to underserved communities. Moreover, the rapid urbanization and population growth in some regions may outpace infrastructure development, leading to congestion, slower

network speeds, and dropped connections. The country needs substantial investments in infrastructure to ensure a seamless and widespread network experience for all citizens.

- Regulatory Hurdles: Another critical weakness lies in the regulatory framework governing the telecommunications sector. Delays in obtaining permits and approvals for the installation of new cell towers and the allocation of spectrum can hinder the expansion and improvement of broadband and cellular networks. Bureaucratic red tape and a lack of streamlined processes contribute to sluggish progress, affecting the overall quality of services. Efficient spectrum management is crucial for optimizing network performance, but challenges in spectrum allocation and availability can lead to overcrowded frequencies, causing interference and degraded service quality.

- Geographical Constraints: Pakistan's diverse geographical terrain, which includes mountains, deserts, and remote rural areas, poses a significant challenge for network coverage. The difficult landscape makes it challenging to establish a comprehensive and uniform network infrastructure across the country. Remote and underserved areas often suffer from limited or no cellular coverage, hindering connectivity and access to essential services. Moreover, security concerns in border regions and areas affected by unrest can further impede the installation and maintenance of cellular infrastructure. Striking a balance between security measures and the

expansion of network coverage remains a complex challenge for the authorities.

- Quality of Service Issues: The quality of service provided by broadband and cellular networks in Pakistan is often marred by issues such as dropped calls, slow data speeds, and inconsistent connectivity. Power supply problems in certain regions can lead to disruptions in service, affecting the reliability of the networks. Ensuring a stable power supply for cell towers and network equipment is essential to mitigate these issues and provide a seamless user experience.

- Inconsistency in Services: Pakistan has a total of 4-6 telecom providers and almost 3-4 big names in internet service providers. This lack of competition affects the provision of quality services. Indeed, all major players have degraded connectivity services with high customer complaints. In addition, regulatory censorship also plays a huge role in the lack of customer satisfaction as blocking services for hours or even up to days (both cellular and broadband) is quite common in Pakistan. As these digital banks require a consistent level of services for the provision of digital banking products, any inconsistency in network coverage can have severely negative consequences for these banks.

**b) Pakistan's Low Smartphone Penetration:**

With financial inclusion being the primary mission of the five digital retail banks, these DRBs will be relying solely on digital mediums for the provision of financial services to

reach a wider audience. The primary medium these digital banks will rely on is the cellphone. As mentioned earlier, almost 75% of Pakistan's entire documented population owns a mobile phone. However, it is also pertinent to mention that only 59% of these people owned a smartphone. When compared with the smartphone penetration statistic in other neighboring countries, this is quite low.

Even though multiple fintechs and EMIs offer digital financial services to customers on feature phones (using USSD strings), majority of the products that will be offered to customers by digital banks will on smartphones (via mobile apps). This can be seen with easypaisa's offerings as well as HugoBank's waitlist for their banking app. Even major commercial banks target their digital customers through mobile apps which run on smartphones.

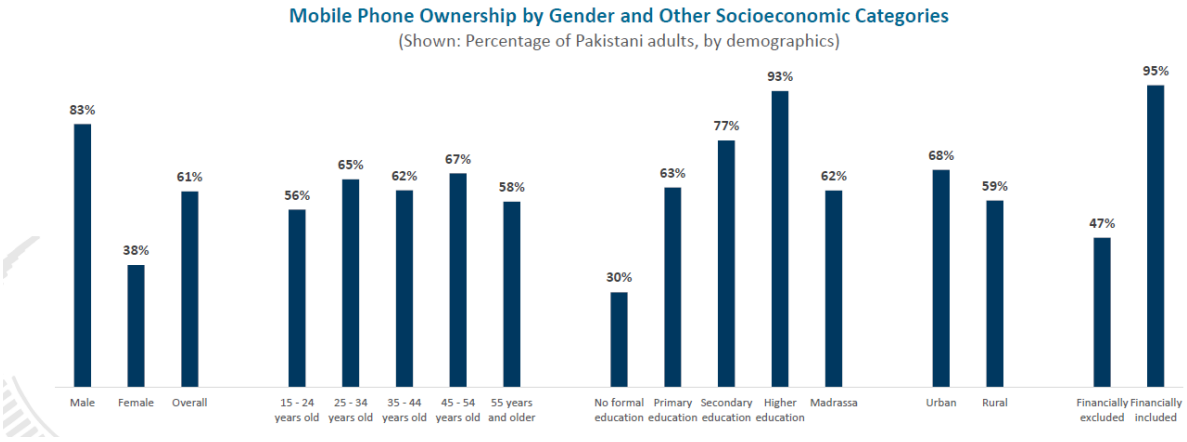


**Table 2: Mobile Phone Ownership Statistics**

Even though Pakistan's mobile phone penetration has increased since 2012 (from almost 60% to 75% in 2023), 25% of adult Pakistanis still do not use a mobile phone. Among

men, 12% do not have their own phone and neither do they have access to someone else's phone. In comparison, 39% of Pakistani women do not have access to a mobile phone. For women, the biggest reason for not using a phone is that they do not have permission to do so from their spouse/parents or other relatives. The second biggest reason is the inability to use a phone (20%). For men the leading reason is the inability to use a phone (43%).

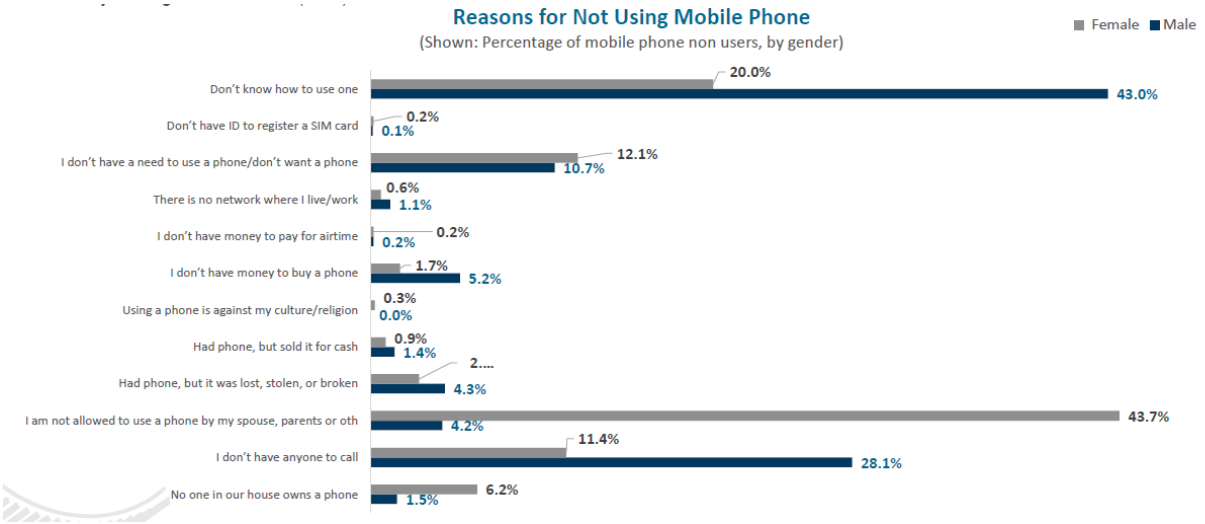


**Table 3: Reasons for Not Using Mobile Phone**

This highlights a very crucial issue which is inhibiting Pakistan's smartphone penetration. Even though Pakistan has an abundance of budget mobile phones (phones offered by brands such as Q Mobile, Techno, Infinix, Realme, etc.) which range from PKR 12,000 to PKR 25,000, all with specifications that rival offerings by more expensive mobile phone providers, the uptake of these phones is still slow primarily because of the low digital literacy in majority of Pakistan's population. Even with a thriving pre-used mobile phone market, these phones are still inaccessible to the masses as people are unaware to use these phones. A literacy rate of just 59% and an even lower digital literacy poses another significant hurdle to the sustainability of digital banks in Pakistan. Many individuals,

particularly in rural areas, may not possess the necessary skills to navigate and utilize smartphones effectively. Educational barriers contribute to a digital divide, restricting access to the benefits of smartphones, such as online education and skill development, for a substantial portion of the population.

### c) Social Challenges Impeding Digitization of Financial Services:

The social fabric of Pakistan also poses a challenge to the adoption of digital financial services in the country. In a country where the majority of the population is predominantly female (51%) and resides in rural areas (around 63%), resistance towards adopting new ways to make transactions is natural. What makes matters worse is the low literacy rate in the country, and even that the percentage of the population which is categorized as literate has only finished primary education. All these factors contribute significantly to a low digitization rate in Pakistan.

It is also crucial to know that even though the literacy rate in Pakistan is low, the rate of financial literacy and digital literacy is even lower. This makes it difficult for any digital financial services provider to sell their products to the masses, as majority of the population cannot understand the different product offerings and the terms and conditions of these products. Terms such as APR, interest rates, compounding interest, cashbacks, etc. are difficult for these service providers to explain, especially in a language native to the population. What is worse is that a survey by Karandaaz Pakistan showed that the majority of the population which does not have a bank account (or is financially excluded, which is around 81% of the population) do not possess the readiness to adopt financial literacy.

Indeed, the lowest scores on indicators of readiness were for financial literacy (19%), and ability to send or receive a text message (34%).

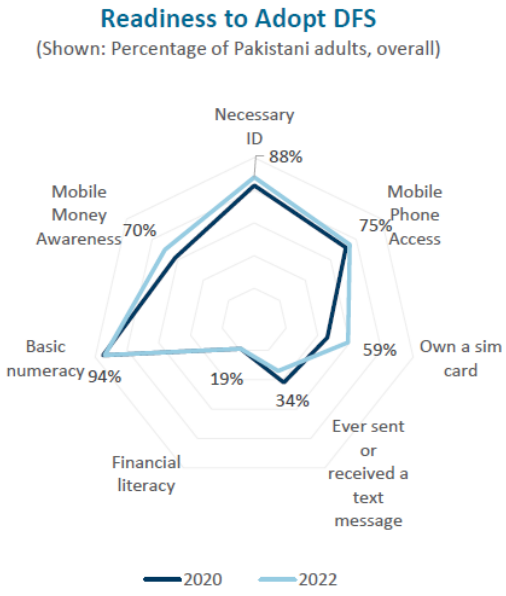


**Figure 3: Readiness to Adopt DFS**

The same survey also reported that 81% of Pakistanis do not have a bank account. The leading reason for not having a bank account is “Do not need one and have never thought of using one”. This reason was followed by “Lack of money to use the account” which forms basis of the socio-economic fabric of Pakistan where almost 40% of the country’s population lies below the poverty line.

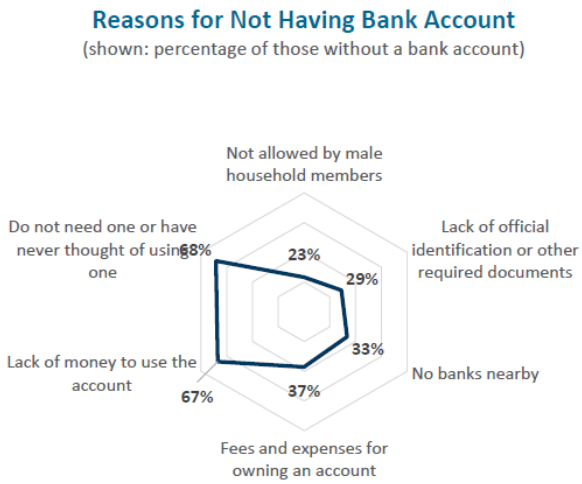


**Figure 4: Reasons for Not Having a Bank Account**

When considering alternate avenues of financial services, such as mobile wallets, the results yielded by the survey also painted a bleak picture. 63% of Pakistani adults were not using mobile money despite being aware of the existence of at least one mobile money service. The main reason for not doing so was a lack of need (53%) followed by being unaware of the use of mobile money and 42%. The first reason corresponds to the resistance of adopting digital financial services, where the masses are still more comfortable using cash for transactions. The second reason reiterates our discussion that not only is the digital and financial literacy rate extremely low in the country, but there is also a dearth of readiness to adopt new technologies for financial services.

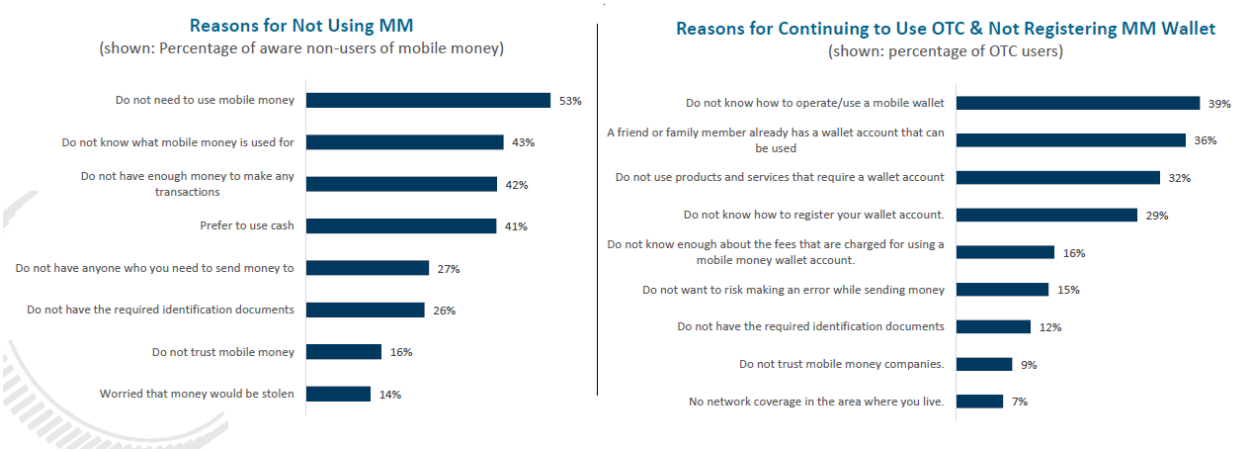


**Table 4: Mobile Money Segmentation Overview**

Cultural norms and social considerations also play a role in the low smartphone penetration in Pakistan and the eventual scalability of digital banks. Resistance to change, particularly among older generations, can lead to hesitancy in adopting new technologies. Additionally, as evident from the graph above, females, especially those residing in the rural areas of the country, are not even allowed to keep a mobile phone due to the patriarchal fabric of Pakistan's society. Language barriers also limit the appeal of smartphones, as the availability of devices in local languages may be insufficient to cater to diverse linguistic preferences.

Pakistan also grapples with infrastructure challenges that impede the widespread adoption of smartphones. Limited network coverage in certain regions hinders the seamless use of these devices. Additionally, inadequate electricity supply, a prevalent issue in various parts of the country, poses a substantial barrier to smartphone usage. A reliable power supply is crucial for charging and utilizing smartphones effectively, and power shortages exacerbate the challenges faced by potential users.

When the focus is shifted towards the internet, the situation is even grimmer. As outlined earlier, Pakistan's internet penetration stands at almost 37%. This is an abysmal number when compared with neighboring countries. The reasons for this low internet penetration are the same as the low mobile network coverage (infrastructural challenges, regulatory issues, and economic challenges). However, another element which impedes internet penetration is the religious aspect. Majority of the families and individuals in Pakistan are against or opposed to internet access as they believe the vast information, or negative information, available on the internet is a cancer to society. These people regard the internet as the creation of the West to harm the spread of Islam and spread hate towards the Muslim community, citing instances of religious hate-speech and direct attacks on the Muslims.

Furthermore, as detailed above in the Digital Landscape of Pakistan, majority of the population relies on informal sources of financing, rather than obtaining financing from commercial banks or financial institutions. Since digital lending products are one of the core use-cases of these digital retail banks, this poses a huge problem for the five DRBs. As mentioned in our discussion above, people most rely on informal sources of financing due to:

- Convenient location of the informal lender,
- Easier overall access (informal money lenders do not require excessive documentation and heavy collaterals) and
- Lower interest rates and processing time.

This is the market that Fintechs such as easypaisa, JazzCash, and Barwaqt to name a few, have been trying to capture. However, all these companies have barely scratched the surface. The two biggest Fintechs namely JazzCash and easypaisa have a combined Monthly Active User (MAU) base of almost 35 million. As a percentage of the population, this is only around 14% even though both these companies are targeting the SEC A, B, C, D, and E, and have been around for the past 7-10 years. Since these companies can be considered as established players, excluding easypaisa, it will be quite challenging for the other four digital banks to break this market share and acquire these customers.

Another strong element which acts as a deterrent to any commercial bank or financial institution is a religious sentiment revolving around the principal of interest that is evident in banking. Muslims scholars have talked negatively against these commercial banks, calling their operations unislamic. A vast majority of the population of Pakistan therefore does not keep any relations with any banks and are actively against them. This too can impede scalability of digital banks. However, Raqami has played a very smart hand but pivoting itself as the first Islamic digital bank and have been advertising their product offerings as being Shariah compliant. However, the other four digital banks will have a challenging task to breakthrough this religious angst towards commercial banks to serve digital financial services. It seems like this problem has been widely ignored by some of the digital retail banks, particularly easypaisa and HugoBank, who, even though claim to target SEC A, B, C, D, and E, have been positioning themselves as a bank which serves a highly educated youth. This can be seen in how they are branding themselves and the themes through which they advertise. However, it is pertinent to mention that this class that these digital banks are targeting is quite niche when looking at the overall social fabric of

Pakistan. Acquiring these customers (who are quite comfortable with their existing financial institutions), ensuring their stickiness, and making money through selling products to them will only reap limited benefits. Additionally, if viewed in the context of SBP's primary objective of Financial Inclusion, targeting this segment seems oxymoronic, as these segments are already financially included and have had access to digital financial services for quite some time. The real challenge is financially including the rest of the base, which is native to Pakistan, which is (intentionally or unintentionally) being ignored by these digital banks.

Lastly, there is an increasing mistrust amongst the masses towards digital banking in Pakistan. This comes after multiple cases of frauds and scams that have been conducted where customers have been tricked into giving their ATM pin codes or approving online transactions. The debit card scam has resulted in many people losing enormous amounts of money and receiving no support from banks or from the judiciary in bringing them justice. Such cases are also common in fintechs such as easypaisa and Jazzcash, where hackers can access someone's mobile wallet account with relative ease. There have been multiple cases where hackers have taken over someone's mobile wallet account, taken a digital loan, and transferred the amount out to their (hacker's) account, leaving the victim to the responsibility to repay the loan. All of these instances, and many more cyber-attacks have led people to move away from digital mediums of banking and have resulted in them moving back to cash transactions and over the counter (OTC) payments. This is also evident in the fact that concepts that Buy Now Pay Later (BNPL), which are common and almost essential on South Asian and Global e-commerce website or platforms, has not seen a massive integration in Pakistan. BNPL is one of the major use-cases of fintech and Digital

Banks, and the fact that something so basic is yet to see a rise in Pakistan's digital payments, is alarming. Even if we neglect BNPL, many customers still focus on Cash on Delivery methods for online purchases made on websites or platforms such as FoodPanda. This shows the level of trust people have towards digital payments. It is because of this limited acceptance, security concerns, and lack of financial literacy, that people still prefer traditional modes of payment and are averse to digital mediums or currency, a factor which will definitely impede the scalability and sustainability of digital banks in Pakistan.

### d) Monetary & Regulatory Challenges Involved In Conversion to Digital Bank:

Lastly but certainly one of the most important challenges that these digital banks will face is the sheer monetary requirements of converting to a digital retail bank. Some of these monetary requirements are prerequisites laid out by the State Bank of Pakistan (SBP), and not meeting any of these requirements may jeopardize the license that has been issued to these five digital banks.

A little-known fact about the DRB license is that all applicants had to submit an application fee of PKR 1,000,000. This application fee was non-refundable. In addition to this, once the license has been provided and a soft launch of the pilot is granted, these digital banks will have to go public through an Initial Public Offering (IPO). This is also one of the requirements that have been laid out by SBP in their Framework for Digital Banks (January 2023). Even though launching an IPO is extremely costly, it is important to note that the cost of an IPO can vary significantly based on the specific circumstances of the company and the prevailing market conditions. Smaller companies may find the costs proportionally higher compared to larger, more established companies due to the fixed nature of certain

expenses. Thus, an assumption related to the cost of the IPO cannot be made confidently. However, it can be said with certainty that the cost of the IPO will be large.

The digital banks will also have the responsibility to meet the minimum capital requirement (MCR) that has been outlined in the Framework for Digital Banks. The MCR is the minimum paid up capital that a company must inject into the company and are put into place to ensure that these institutions do not take on excess leverage and risk becoming insolvent. The MCR for the five digital banks, as outlined in the framework, is the following:

| Bank | MCR at grant of restricted license for pilot stage/ DFB license (PKR Billions) | MCR at commercial launch (PKR Billions) | MCR during each financial year after the year of commercial launch/ DFB license (PKR Billions) | | |
|---|---|---|---|---|---|
| | | | Year 1 | Year 2 | Year 3 |
| DRB | 1.5 | 2 | 2.5 | 3 | 4 |
| DFB | 6.5 | N/A | 8 | 10 | - |

**Table 5: SBP Digital Banking MCR Requirements**

As evident from the table above, the minimum capital requirement for DRBs is set at PKR 1.5 billion during the pilot phase that will gradually increase to PKR 4 billion over a transition period of three years. That is a huge amount of capital.

Additionally, all of these five digital banks will have to structure their organizations in a way which reflects a financial institution. This means that more departments will need to be established in order to provide banking product offerings, to ensure compliance to SBP's regulations, to ensure risks are mitigated in accordance to the framework for digital banks and other regulations, etc. For this, many new hirings will have to be made and experts will have to be called. This may not be a problem for easypaisa, as it only needs to pivot its

organizational structure (and may actually need to let go of a lot of people since it will be shutting down its branches), but for newly established DRBs such as Raqami, HugoBank, and KT, this will involve a lot of money that will be spent on consultancies and hirings. Speaking of consultancies, all five DRBs have also hired one of the big four audit firms for consultancy and development for the DRB roadmap. This is essentially a forecast of what products will be offered during the DRB pilot and what the cost/revenue breakup will be. This roadmap is an essential requirement for the completion of the operational readiness and for the initiation of the pilot.

Notwithstanding all the personnel, consultancy, and regulatory costs, the sheer investment that will be required to procure, install, and operate all the systems essential to operate a digital bank will be way too high for some of the digital retail banks. Among other systems, these organizations will require a digital wallet platform, a loan management system, a credit scoring model based on artificial intelligence, and an extremely sophisticated and capable cyber security system. The latter will be essential as all personnel identifiable information (PII) will be digital, and thus, ensuring all information is secured from any breaches will be vital. Additionally, the storage of all this information will require an extensive hardware system if any organization decides to keep all this data on premises. If any company aims to keep this data on cloud, the digital bank will need to first solicit approval from the SBP and then set an arrangement with a cloud service provider, which again, will incur huge costs for the DRB.

Lastly, complying with all the regulatory requirements, which include the Framework for Digital Banks, Prudential Regulations, Data Protection Laws, and Framework for Cloud Outsourcing will also be a mammoth task for these DRBs. The issue arises from the fact

that apart from Mashreq Bank and, to some extent, easypaisa, the other three digital retail banks have no expertise in this specific industry. Additionally, the sponsors of these digital banks may not be keen enough to inject such heavy capital into a company for the sole purpose of digital disruption. These models have been highly successful in developed countries but have proven to be challenging (to say the least) in developing countries, and so the sponsors of the DRB may just withdraw their license if the return on investment does not seem positive. Indeed, the word in the market is that KT Bank (backed by The City School and Fatima Fertilizer, both of whom have no experience in the banking industry and their regulations) is planning to withdraw their digital retail banking license as they are not able to meet the financial requirements that have been set by the SBP. Additionally, it is rumored that their license will then be handed to another applicant who was unsuccessful in their DRB application initially. The same rumors are also true for Raqami Islamic Digital Bank, although slightly unlikely, as Raqami has been active on social media platforms, detailing their operations and strategies. However, it is said that Raqami is primarily operating on Mr. Nadeem Hussain's own cashflows as Raqami's investors have not yet injected any capital into the company. This also supported by another rumor that Mr. Nadeem Hussain aims to sell Raqami (for a profit) to other interested parties and has no intentions to actually operate the digital bank (supported by the fact that their ex-CEO joined from Mobilink Microfinance Bank and resigned from Raqami within a month of his employment in Raqami, citing differences in opinions). Even though these are mere rumors, this negatively impacts the public sentiment regarding the digital retail banks.

# CHAPTER 6: CONCLUSION

This document provides a very holistic picture of the current digital and socio-economic landscape of Pakistan, and details what digital banks are, and how they are different from other financial institutions. We have also discussed in detail the five digital retail banks of Pakistan, looking closely at their operations, their target market, and their sponsors.

The basis of this document is that contrary to media reports and PRs that are running rampant on news platforms and social media, the future of these digital retail banks looks very bleak. There are multiple challenges that will impede the sustainability and scalability of these five digital banks, enough so that these banks may withdraw their license, or completely botch their commercial operations. These challenges have also been detailed in this document and attempt to play the devil's advocate towards the statement "Pakistan's future is digital". These challenges stem from the socio-economic fabric of the country and is also deeply rooted in the health and the vision of the digital banks themselves. Even if these digital banks sustain themselves, I believe the actual objective of financial inclusion will be completely ignored as converting the financially excluded masses to digital financial services is highly costly and not something which is particularly in the scope of these five digital banks.

This, in no way, suggests that digital banking will never work in Pakistan. However, I believe Pakistan has not yet reached the maturity level required to access digital financial services. The current infrastructure, the lack of cyber-security, and dearth of credible players who have truly developed, launched, and successfully served innovative digital financial services does not simply support the advent and scale-up of these digital retail

banks. Even though digital payments in Pakistan have increased by around 80% in 2023 (Tribune, 2023), financial inclusion has reached to 30% (Karandaaz, 2023), and the number of mobile wallets has increased by 10% (PTA, 2023), there has also been an increased in cyber threats, loss of customer money through digital security breaches, and major depreciation in current infrastructures needed to support digital financial services. Additionally, the sheer investment required by to initiate operations as a digital bank is also a deterrent to scalability, one which may result in withdrawal of digital retail banking licenses even before the commercial launch.

Even though the hype around these digital banks is high, it seems that the population of Pakistan still lacks the knowledge of how these digital banks differ from a normal commercial bank or a fintech such as Jazzcash or SadaPay. The consensus behind these digital banks is grim and not something which the public considers to be innovative. What makes matters worse is the tedious requirements of the regulator whose compliance will result in the commercial launch of these digital banks in 2025 or 2026.

The solutions are required at a macro level. In addition to addressing the challenges laid out in the document, the public needs to be educated on the benefits of digital financial services, both personally and for the betterment of the country. The salient features of these digital banks need to be heavily advertised to the masses before the commercial launch and these banks should be pivoted as a gamechanger in reducing corruption (as everything is document via caches), delivering convenience and easy in operations to customers, vast network of connectivity to include the financially excluded especially in the rural areas, and a sophisticated and highly effective cyber-security system ensuring the safety of a

customer's personal and financial assets. Unless these challenges are not resolved and the masses are not educated, the future of these five digital banks seem highly grim.

However, history has taught us that every innovative disruption that has taken place has required time for maturity. In these formative years, players have entered, set a benchmark, and have crashed, paving the way for other players to enter and perfect. Although I believe that these five digital banks will not be able to make a significant dent and will continue as the run of the mill JazzCash/SadaPays offering nothing highly innovative, I also truly believe that the advent of the digital banking licenses will attract other players (both locally and internationally) to enter this industry and try to disrupt it through innovative offerings. The potential for digital service providers in Pakistan is huge. Pakistan could be the next Africa, Sri Lanka, or India, who have seen a major boom in digital financial markets. However, these shifts take time as years of cultural entanglements must be unwoven to adjust to the changing landscape and major infrastructural upgrades are needed to support the demand for digital financial services. We may reach that stage in the next 5-10 years but for now, we must address challenges impeding this shift.

# REFERENCES


1. https://www.sbp.org.pk/dfs/Digital-Bank-Regulatory.html
2. https://www.sbp.org.pk/press/2023/Pr1-13-Jan-2023.pdf
3. https://karandaaz.com.pk/karandaaz-research/karandaaz-financial-inclusion-survey/
4. https://portal.karandaaz.com.pk/dataset/financial-digital-inclusion/1038
5. https://www.pta.gov.pk/category/telecom-indicators
6. https://www.pbs.gov.pk/
7. https://insights.datadarbar.io/how-digital-are-pakistans-top-big-banks/
8. https://insights.datadarbar.io/all-you-need-to-know-about-the-new-digital-banking-licensees/
9. https://www.hugobank.com.pk/
10. https://www.sbp.org.pk/70/sup-11.asp

# APPENDIX A: LICENSING & REGULATORY FRAMEWORK FOR DIGITAL BANKS

https://www.sbp.org.pk/dfs/Digital-Bank-Regulatory.html