

# Enabling Pakistan's **Digital Public Infrastructure Through the Private Sector**



## Introduction

This white paper presents the key insights and recommendations emerging from the HBL P@SHA Policy Roundtable, titled **“Enabling Pakistan’s Digital Public Infrastructure Through the Private Sector.”** The roundtable is based on the Asian Development Bank’s report on “Country Digital Ecosystem Diagnostic Report for Pakistan,” and it brought together industry leaders, policymakers, International organizations and key stakeholders to discuss how the private sector can drive the development of Pakistan’s digital infrastructure and economy. Focusing on two critical pillars—Digital Infrastructure and Digital Economy—the discussions addressed the challenges, opportunities, and policy interventions needed to unlock Pakistan’s digital potential.

The paper is structured into two main sections. The first explores the foundational role of Digital Infrastructure, addressing issues such as technologies, and the creation of a predictable policy environment to attract investment. The second section examines the Digital Economy, offering strategic recommendations to stimulate growth through regulatory reforms, tax incentives, and the digitization of small and medium-sized enterprises (SMEs). These sections outline a roadmap for promoting a digitally inclusive and economically vibrant future for Pakistan.



## Digital infrastructure

### Top three recommendations

The following three recommendations were prioritized by participants during the live poll at the Roundtable. The discussion highlighted critical issues and potential solutions in the realm of digital infrastructure. Participants engaged in a focused debate on policies, challenges, and opportunities that can pave the way for a robust digital ecosystem. The crux of the discourse around these recommendations will be further discussed below

01



Establish a predictable policy framework that encourages private investments in digital public infrastructure (DPI). The Rules/Regulations that operationalize policies and regulate digital businesses need to support innovation and competition.

02



Rationalize all digital infrastructure taxes, both direct and indirect, making them competitive against a basket of countries, and fix sector tax rates for at least 10 years.

03



Expand internet access and device ownership for citizens, especially women, work with local actors and global partners to design tailored PPP programs and provide low-cost (or easy instalment based) smartphone choices.

## Telecommunication Policies and Infrastructure Challenges

A key challenge raised was the management of defaults in the telecommunications sector, specifically addressing the financial obligations of end-users rather than service providers. Participants noted that existing policies often fail to address the impact on users effectively, especially when services are disrupted due to defaults. To avoid unnecessary service interruptions, particularly for business-critical functions like One-Time Password (OTP) authentication, the Pakistan Telecommunication Authority (PTA) is reviewing policies to streamline commercial agreements and develop mechanisms for managing defaults.

These policies aim to introduce a clear escalation process, including warnings and legal notices prior to SIM blocking due to default. This step-by-step approach would prevent disruptions while allowing users continued access to essential services. To align with international standards, the policy would ensure that OTP and emergency services remain accessible, irrespective of a user's balance or default status, including on numbers enabled through portability. This approach reflects practices in global telecommunications, where OTP and emergency services are provided continuously to avoid undue disruptions.

Participants also discussed smartphone affordability, particularly for low-income populations in Pakistan. Affordability remains a significant barrier to digital access, with rural regions suffering from limited infrastructure. Women are especially affected, facing a digital divide due to economic constraints. Most consumers opt for budget-friendly smartphones such as Xiaomi, Samsung's A-series, and Realme, as the high cost of premium brands like Apple puts them out of reach. Managing phone defaults, particularly for those purchasing devices on installment plans, is crucial. Suggestions included gradually escalating actions to limit cross-network SIM use for defaulters without affecting data access. However, concerns were raised that individuals might bypass restrictions by acquiring new SIMs, underlining the need for the National Database and Registration Authority (NADRA) to play a role in SIM registration and financial default management.

## Harmonization of Infrastructure Costs

The discussion also brought attention to the inconsistencies in infrastructure costs, particularly for fiber optic usage, across different regions. Agencies like the National Highway Authority and DHA impose varying rates, creating financial strain for businesses and hampering infrastructure development. Efforts are now being made to harmonize these rates, ensuring a fairer and more consistent pricing structure nationwide. The high costs of infrastructure usage imposed by some public sector entities, such as the telecommunications and railway authorities, have also been a major bottleneck for the sector's expansion.

In terms of broadband access, the cost of services in Pakistan remains significantly higher than in neighboring countries like India and Bangladesh, which further restricts access to underserved regions. Legal and financial challenges, particularly for initiating ISP services in remote areas, have hampered efforts to expand broadband connectivity. Laying fiber-optic cables in these areas is both expensive and fraught with legal hurdles, adding to the already high startup costs for ISPs. Addressing these cost disparities and infrastructure challenges is vital to boost digital inclusion, especially in rural areas.

## Emerging Technologies for Economic and Security Progress

Participants emphasized the transformative potential of emerging technologies like AI, blockchain, and advanced data analytics. These technologies offer solutions to some of Pakistan's most pressing economic and security challenges. AI-powered analytics and blockchain technology could streamline supply chains, reduce operational costs, and enhance transparency, thereby improving Pakistan's export competitiveness. Financial tools driven by AI, combined with mobile banking platforms, can provide cost-effective solutions to the unbanked population, particularly women who face affordability challenges.

In this context, empowering women through digital access was highlighted as a key priority. Women in Pakistan and India face significant hurdles in accessing technology, particularly smartphones, due to affordability issues.

By offering tech-related courses in local languages and developing financial programs targeting smartphone affordability, women could be equipped with the skills and tools needed to generate income online, turning



affordability, women could be equipped with the skills and tools needed to generate income online, turning smartphones into a tool for productivity and entrepreneurship.

Additionally, the registration process poses specific barriers for women entrepreneurs. A significant number of women have mobile numbers registered under their guardian's CNIC (usually a father or husband), which can complicate the business registration process and lead to issues in establishing ownership of business communications. This challenge highlights the need for policy adjustments to allow easier ownership transfer or registration of phone numbers to the actual user, empowering more women to register businesses independently. In Pakistan, barriers like this are compounded by the high gender gap in CNIC registration, influenced by social and logistical constraints, particularly in rural and socio-economically disadvantaged areas.

## **Streamlining Policies for Public-Private Partnerships**

Participants stressed the importance of streamlining investment policies and public-private partnerships to foster the development of digital infrastructure. Simplified policies that make it easier for investors to enter the market and invest locally are crucial. Public infrastructure projects, especially in the digital realm, should follow standardized and sustainable frameworks. A recurring issue is that the responsibility for technical aspects of these projects is often left to individuals who lack the necessary expertise, leading to inefficiencies and delays. In terms of data management and cybersecurity, participants pointed out that monopolization by various government agencies has hindered progress. Additionally, they underscored the urgency of implementing the Personal Data Protection Bill to establish a robust legal framework for data privacy and security, essential for building trust in digital systems.

By addressing these issues through collaboration between the public and private sectors, Pakistan can create a more stable and prosperous future. Rationalizing taxes on digital services and infrastructure was also identified as key to encouraging investment.

## Digital Economy

### Strengthening Pakistan's Digital Economy

The following five recommendations were prioritized by participants during the live poll at the Roundtable. Pakistan's digital economy holds immense potential, but various structural and regulatory challenges have stifled its growth. This policy paper outlines key strategic interventions to accelerate digital transformation, encourage foreign investment, and enhance the tech ecosystem. These recommendations target crucial areas like tax policy, regulatory simplification, digital infrastructure, and business ease, positioning Pakistan as a competitive player in the global digital landscape. The crux of the discourse around these recommendations will be further discussed below.

#### Top Five Recommendations

01

Implement a uniform 5% GST on all digital transactions with a 5-year input tax credit to boost digital payments, reduce cash-related inefficiencies, and document the economy.

02

Reduce corporate income tax and business costs for SMEs by 10% for 10 years, conditional on registration and use of digital platforms.

03

Simplify tax and foreign exchange rules for IT export companies to attract more global captive offices to Pakistan.



04

Establish a Data Exchange Layer and adopt the Pakistan Digital Stack to digitize governance, regulation, and the economy.

05

Cap payroll taxes for IT export employees at 15% of their income and provide tax credits for hiring local talent.

## **Incentivizing Digital Payments and Reducing Corporate Tax**

A central recommendation to drive digital transformation is the implementation of a 5% General Sales Tax (GST) on all digital transactions, compared to the current 18% tax on cash transactions. This lower tax rate for digital payments would not only reduce operational costs but also formalize the economy, enhance transparency, and improve tax collection.

Additionally, reducing Pakistan's corporate tax rate from 29% to below 20%—especially for digital and non-digital enterprises—will make the country more attractive to investors. Currently, Pakistan's tax burden is disproportionately high compared to other developing nations. A lower tax regime would encourage business expansion, foster innovation, and make Pakistan more competitive regionally, driving job creation and foreign direct investment (FDI).

## **Simplifying Foreign Exchange and Reducing Payroll Taxes**

Foreign exchange regulations continue to present a significant hurdle for international companies operating in Pakistan. Simplifying these processes, particularly for IT firms, would attract more multinational tech companies to establish operations, hire local talent, and contribute to economic growth. This, paired with proposals to cap payroll taxes for IT companies at 6-8% (down from the current 24-25%), would further boost the sector's competitiveness. The resulting financial relief would allow companies to reinvest in talent and infrastructure, making Pakistan a more attractive destination compared to regional competitors like India.

## **Building Digital Infrastructure and Data Sharing**

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## **Legal Reforms and Capital Gains Tax Exemption for Startups**

To promote investor confidence, specialized commercial courts and Alternate Dispute Resolution (ADR) tribunals should be established to expedite the resolution of disputes involving international companies, particularly in competition and financial matters. Swift and reliable legal mechanisms will make Pakistan a more predictable and appealing environment for foreign investment.

Moreover, implementing a 20-year capital gains tax exemption for tech startups will encourage greater venture capital inflows. With Pakistan's current capital gains tax at 15%, reducing or eliminating this tax would position the country as a more attractive destination for international investors, making it competitive with global hubs like Singapore.

## **Digitizing SMEs and Enhancing Competitiveness**

A major thrust in driving Pakistan's digital economy forward is empowering SMEs, which form the backbone of the economy. By developing an industry-led digital framework that offers API-integrated software solutions, SMEs can incrementally adopt digital tools for finance, HR, and supply chain management. This will enhance their operational efficiency, improve competitiveness, and allow the formal economy to expand. Organizations like P@SHA can play a pivotal role in leading this transformation and facilitating collaboration between the government and private sector to digitize SMEs.

## **Crux of Key Policy Recommendations**

The following key recommendations emerged from the HBL P@SHA Policy Roundtable on "Enabling Pakistan's Digital Public Infrastructure Through The Private Sector." These recommendations reflect the collective insights of industry leaders, policymakers, and stakeholders, aimed at addressing the critical challenges and opportunities in Pakistan's digital infrastructure and economy. Focused on promoting a digitally inclusive environment and encouraging private sector investment, these recommendations outline actionable steps to unlock Pakistan's digital potential and support sustainable economic growth.

- Streamline telecommunication policies for handling financial defaults and improve smartphone affordability to enhance digital access, especially in underserved areas.
- Infrastructure Cost Harmonization shall be carried out. Standardize infrastructure costs nationwide to remove financial barriers for businesses, particularly for expanding fiber-optic networks in rural areas.
- Build secure data-sharing platforms, like the Pakistan Stack, and enhance digital payment systems to support sustainable economic growth.
- Introduce commercial courts and ADR tribunals for efficient dispute resolution to create a stable investment climate. Such legal reforms will boost investor confidence.
- Incentivizing Emerging Technologies is a key to bringing in new investments. Promote AI, blockchain, and advanced analytics to strengthen economic and security initiatives, with a focus on improving women's digital inclusion.
- Develop API-based digital tools for SMEs to enhance operational efficiency and bring more businesses into the formal economy, supported by collaborative efforts from P@SHA and government.
- Establish a stable policy framework for private sector investment, supporting long-term digital infrastructure growth and reducing foreign exchange outflows.
- Simplify investment and partnership policies to encourage private sector involvement in digital projects, emphasizing sustainable frameworks and efficient project management, streamlining the Public-private partnership.
- Lower taxes on digital payments to boost formal economic participation and reduce corporate tax rates to attract foreign investment and encourage business growth.
- Ease foreign exchange regulations and reduce payroll taxes for tech companies to foster a more competitive and business-friendly environment.
- Provide long-term tax exemptions for tech startups to attract venture capital and position Pakistan as a competitive investment destination.

# Conclusion

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The HBL P@SHA Policy Roundtable on "Enabling Pakistan's Digital Public Infrastructure Through the Private Sector" provided valuable insights into the potential of the private sector to accelerate Pakistan's digital transformation. The roundtable emphasized the need for reforms in both digital infrastructure and the digital economy to overcome existing barriers and promote sustainable growth. Key challenges such as high infrastructure costs, regulatory complexities, smartphone affordability, and taxation were identified as major hurdles. In response, the participants highlighted the necessity for harmonized policies, investment incentives, and the integration of emerging technologies to ensure digital inclusivity and economic progress.

Achieving the full potential of Pakistan's digital infrastructure and economy will require coordinated efforts from both the public and private sectors. Streamlined policies, a predictable investment environment, and support for emerging technologies can serve as catalysts for progress. By addressing these issues, Pakistan can position itself as a regional leader in digital transformation, fostering economic growth, enhancing competitiveness, and promoting a digitally inclusive society.



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