November 2022

Digital Pakistan is the flagship initiative of the government of Pakistan to expand the knowledge-based economy and spur socioeconomic growth using digital technologies. The mobile industry plays a crucial role in driving digital transformation and is well placed to support the realisation of Digital Pakistan.

To continue on this path, mobile industry players must be able to roll out the required digital infrastructure and innovative services to bridge the digital divide and accelerate the adoption of digital solutions. However, this requires a whole-of-government approach (WGA) to tackle the headwinds that could undermine the economic health of industry players and their ability to contribute to socioeconomic progress.

Analysis

Progress on the digital transformation journey

Pakistan has made considerable progress in its digital transformation journey, with the rapid expansion of mobile broadband networks over the last decade. Today, nearly 80% of the adult population live in areas served by a mobile broadband (3G or 4G) network, compared to 15% in 2010. Smartphone adoption is also rising; by the end of 2022, 63% of mobile connections will be based on smartphones, while 22% of the population now subscribe to and use the mobile internet regularly.

In Pakistan, mobile has become a vital platform for citizens to interact with society and for government and businesses to deliver services. Mobile underpins the State Bank of Pakistan (SBP)'s digital financial services strategy, with more than 12 million mobile banking users to date. Meanwhile, more than 1.4 million children have benefitted from the mobile-based Digital Birth Registration project.

Pakistan's mobile operators – Telenor Pakistan, Jazz, Zong and Ufone – have expanded access to digital connectivity and rolled out digital solutions across key sectors such as agriculture, education, health and utilities. These have helped extend essential services to citizens across the country, including those in vulnerable groups, such as women, rural communities and disabled people.

Headwinds that could challenge progress

The above developments notwithstanding, there is a significant risk of Digital Pakistan not being realised in the current policy and regulatory environment, together with the exacerbating impact of recent macroeconomic developments. Aggregate mobile ARPU is now below \$1 in Pakistan – one of the lowest in the world (the global average is \$8). Meanwhile, annual inflation in Pakistan rose to more than 27% in August 2022 (the highest level in 47 years) on

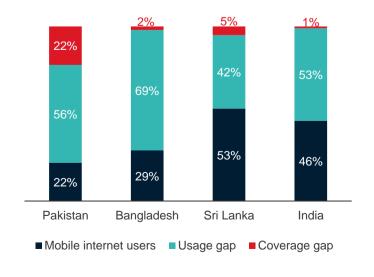
the back of flood-related disruptions to food supply chains and challenging global monetary conditions.

The negative impact of inflation on consumer spend (including on telecoms services) and rising operating costs (partly due to currency depreciation and higher energy prices) has implications for the economic health of the industry. According to publicly available data, two mobile operators reported a combined loss of around PKR 50 billion (\$226 million) during H1 2022, while Jazz has reported four consecutive quarters of negative growth for foreign investors in US dollar terms.

These headwinds come as Pakistan still lags its peers in South Asia on several indicators for mobile internet adoption and usage. The country has a much wider coverage gap than its peers and a significant usage gap, highlighting the scale of non-infrastructure barriers to mobile internet adoption and usage.

Source: GSMA Intelligence

Figure 1: Mobile internet connectivity in South Asian countries, 2021 Percentage of population



¹ https://www.sbp.org.pk/dfs/index.html



Call to action

Realising the Digital Pakistan initiative is a priority for the government of Pakistan and other stakeholders, especially as digital technologies and services have become so integral to how society functions following the Covid-19 pandemic. With the direct correlation between mobile broadband penetration and GDP growth, there is no better time for policy reform to support the financial sustainability of the mobile industry and unlock

investments in modern infrastructure in preparation for the 5G era.

As the challenges faced by the mobile industry cut across different areas of policymaking, a WGA – underpinned by cross-ministry collaboration with industry – is necessary to streamline efforts and realise efficiencies in the formulation and implementation of policy reform.

Learnings from the region

Countries in South Asia have recently implemented reform to support the sustainability of the mobile industry and accelerate the adoption and use of mobile internet services. Examples include the following:

- In September 2021, the government of India adopted a number of reforms designed to reinvigorate the economic health and stability of the country's telecoms sector. These included: a moratorium on statutory dues and rationalisation of bank guarantees to provide a short-term boost to liquidity; a revised definition of adjusted gross revenue (AGR) to provide financial stability; and the removal of the additional charge for spectrum sharing. The success of the 5G auctions in July 2022 and the rapid rollout and adoption of 5G services have been attributed to the reforms.
- In March 2022, Bangladesh auctioned 2.3 and 2.6 GHz spectrum to operators with a fixed base price and a spectrum licence term of 15 years. The fee payments are staggered over 10 years, giving operators flexibility with long-term financial planning.
- To support operators, spectrum fees are charged annually by the Bhutan InfoComm & Media Authority (BICMA), rather than issuing upfront assignment fees.

Policymakers in Pakistan have an opportunity to accelerate progress with Digital Pakistan and lay a strong foundation for 5G. This can be done by implementing vital reforms, using a WGA, to improve the financial health of the overall telecoms sector and the ability of industry players to invest and innovate. The following areas in particular require urgent attention.

1) Taxation on telecoms providers and services

Taxes on service providers, consumer devices and services in Pakistan are among the highest in the world. These taxes, some of which are sector-specific, often impact network investment affordability and have a disproportionate impact on the most vulnerable. Policymakers should gradually eliminate the 15% Advance Income Tax (AIT or withholding tax) on essential telecoms services and the 19.5% sales tax on mobile services, which create additional barriers to digital inclusion for low-income households.

2) Cash margin and duties on imports

Cash margins essentially increase the cost of imports in terms of the opportunity cost of the amount deposited. As such, the 100% cash margin requirement on imports imposed by the SBP should be removed for telecoms equipment to avoid jeopardising current and future network rollout. Customs duties should also be reduced on batteries used for renewable energy and optical fibre equipment. The increase in regulatory duty on optical fibre imports from 10% to 20% in the Finance Bill 2022 should be reversed to help sustain investment in fibre rollout.



3) Spectrum licencing and roadmap

In 2020, policymakers unveiled a three-year spectrum strategy to 2023. However, the short duration does not provide the necessary visibility to investors. A clear, longterm roadmap of at least five years would provide greater certainty for the industry to attract capital for infrastructure rollout. Additionally, denominating spectrum costs in US dollars exposes the operators to significant currency devaluation risk, given that the depreciation of the local currency adds to higher spectrum fees paid in US dollars. The unpredictable currency value impacts business plans and eventually affects company revenues and the retail price for consumers. As a result, policymakers should consider denominating spectrum payments in local currency, which would provide greater certainty for operators, given that revenue is also earned in local currency.

4) 'Industry' status on energy tariffs for operators

Policymakers should look to implement the 'industry' status granted to the telecoms sector in terms of energy tariffs, considering the services a necessity rather than luxury. Lower energy costs could help operators channel savings into investing in network infrastructure and providing better services. Implementing the 'industry' status as approved in the Finance Bill 2021 will also go a long way to strengthening investor confidence in local policies.

5) A framework for financing smartphones for all

Smartphone uptake across and within regions and markets is uneven, which risks leaving large population groups without the means to get online. Smartphones are one of the most used devices to access the internet but are not affordable to everyone. Beyond income levels, several supply and demand factors can influence smartphone affordability, including manufacturing costs influenced by factors such as import duties, taxes and transportation charges, and inadequate distribution channels in rural areas. A policy and regulatory environment that supports offerings, on a wide scale, based on instalment plans from operators and other third parties (with due protection against defaults) can present a viable solution to transitioning those at the bottom of the socioeconomic pyramid to the internet age. To promote smartphone adoption early on, instalment-based financing options must be made available to improve buying capacity.

6) Measures to ease short-term pressures

In view of the challenging operational environment, including forex and inflationary headwinds, policymakers should consider the following measures to mitigate economic pressures and spur long-term planning:

- Review and freeze the forex rate for licence-fee payment to mitigate currency risk and remove uncertainty in business planning.
- Stagger licence-fee instalments over 10 years to provide the much-needed fiscal space and ease cash-flow pressures.
- Review policy-mandated levies, such as universal service funds (USFs) and research and development (R&D) contributions, and consider a moratorium on rollout and quality-of-service obligations.

Related reading

Digital societies in Asia Pacific: progressing towards digital nations

Authors

Sayali Borole, Senior Analyst

Kenechi Okeleke, Director, Regional, Social and Policy Research

The impact of spectrum prices on consumers