

VIS

Credit Rating Company Limited

TELECOMMUNICATION

Table of Contents

INTRODUCTION	3
ECONOMIC OVERVIEW	3
GLOBAL.....	3
PAKISTAN	4
TELECOMMUNICATION INDUSTRY.....	4
GLOBAL.....	4
PAKISTAN	5
SECTOR ISSUE	10
RECENT DEVELOPMENTS.....	10
SECTOR OUTLOOK.....	11
OVERALL ASSESSMENT/OUTLOOK: POSITIVE.....	11
RESEARCH & PUBLICATIONS.....	11



INTRODUCTION

Telecommunications involves transmitting data over distances using electronic means, utilizing technologies like phones, radios, computers, and the internet. This sector includes hardware such as smartphones, routers, and satellites, along with infrastructure such as communication towers and fiber optic cables. Its manufacturing requires design, assembly, and testing, demanding specialized components and skilled labor.

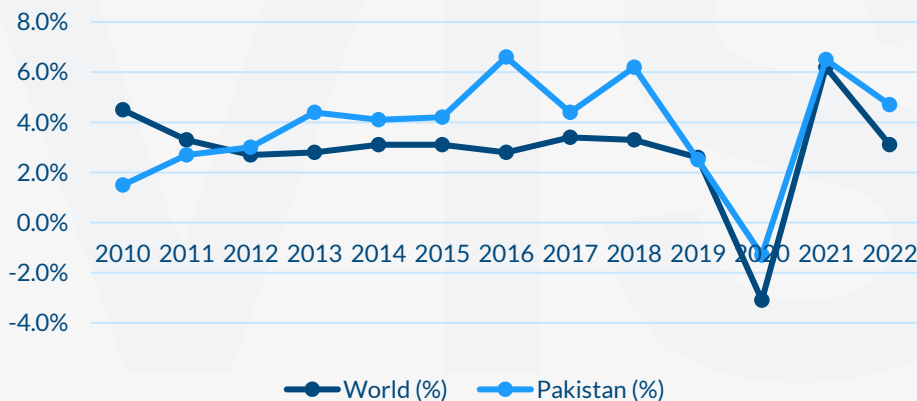
The telecom sector has become crucial for global and national economies, enabling efficient business operations, connecting individuals, and supporting sectors like finance, healthcare, and education. It is marked by continuous evolution, with current trends including the transition to 5G, the growth of Internet of Things (IoT) devices, the demand for high-speed internet, and the use of artificial intelligence in network and customer service management.

As demand for digital services rises, the sector's growth is influenced by regulatory policies, spectrum allocation, cybersecurity, geopolitical tensions, consumer preferences, market competition, and economic factors. The telecom industry is essential for economic growth, innovation, and addressing societal challenges through enhanced connectivity and digital services.

ECONOMIC OVERVIEW

GLOBAL

The global economy faces subdued growth amid heightened uncertainty. According to the IMF's latest World Economic Outlook (October 2022), global GDP growth is anticipated to decelerate from 3.4% in FY22 to 2.7% in FY23, with a slight recovery to 2.9% by FY2024. Various challenges persist, impacting economic activity worldwide. Central banks globally have raised interest rates significantly to counter inflation, leading to tightened financial conditions. Geopolitical tensions, such as the Russia-Ukraine war, have exacerbated supply chain disruptions, energy and food crises, and security concerns on a global scale. Lockdowns in China to manage new Covid-19 outbreaks have affected manufacturing and trade flows. Increasing living costs, segmented labor markets, weaker fiscal support, and elevated debt levels constrain consumer purchasing power and confidence, with limited government space for stimulus measures.



PAKISTAN

In FY23, Pakistan's economy faced a multitude of challenges. The war in Ukraine led to supply disruptions, while the country was still grappling with the aftermath of the previous year's floods. Political uncertainties further compounded these issues, along with inflation, currency depreciation, and dwindling forex reserves. In response, the State Bank of Pakistan raised interest rates, and the government implemented import restrictions, increased energy prices, and raised corporate taxes. However, these fiscal and monetary measures resulted in supply chain disruptions, contributing to a GDP contraction to 0.29% in FY23 compared to 5.7% in FY22.

Looking ahead, the World Bank has projected Pakistan's real GDP growth to recover to 1.7% in FY24¹ despite the country facing one of its worst crises due to poor policy choices combined with a series of shocks. The International Monetary Fund (IMF) also expects Pakistan to achieve a modest economic growth rate of 2.5 percent in FY24².

The World Bank suggests that Pakistan must address its human capital crisis and generate more fiscal space to finance improvements in service delivery and human capital development. However, political turmoil is expected to slow down growth in private demand. If inflationary pressure eases, growth is expected to pick up to 2.4% in FY25. These challenges call for deep, sustained reforms. The alternative of muddling through with short-term fixes and external financing is riskier and much harder to pull off.

TELECOMMUNICATION INDUSTRY

GLOBAL

The global telecom market is on a positive trajectory, with expectations to reach a value of \$3.8 trillion in 2026, growing at a CAGR of 7.4%. The lifeblood of this sector, data consumption, is projected to experience a threefold increase from 3.4 million petabytes in 2022 to an estimated 9.7 million petabytes by 2027. This surge is primarily driven by video traffic. However, the revenue growth from internet access is anticipated to be relatively modest, with a compound annual growth rate (CAGR) of 4%, culminating in a total of US\$922 billion by 2027.³

The telecom tower market is forecasted to grow at a CAGR of 6.04% over the period, resulting in a market size of US\$105.262 billion in 2026, up from US\$74.0 billion in 2020.⁴ In the business-to-consumer domain, the demand for telecom services is primarily driven by evolving consumer preferences and the advent of new devices with higher data requirements.

The COVID-19 pandemic has indubitably impacted the industry, causing disruptions in the supply chain, alterations in customer interactions, and delays in the launch of 5G. However, it has also underscored the critical importance of connectivity, with billions of individuals worldwide relying on wireless and broadband access.

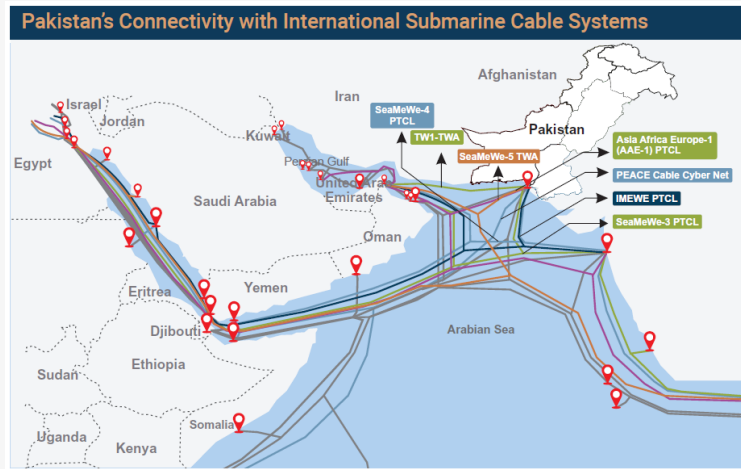
¹ <https://profit.pakistantoday.com.pk/2024/01/11/world-bank-projects-pakistans-economic-growth-at-1-7-for-fy24/>

² <https://propakistani.pk/2023/07/13/imf-expects-pakistans-economy-to-grow-in-fy2024/>

³ <https://www.pwc.com/gx/en/industries/tmt/telecom-outlook-perspectives.html>

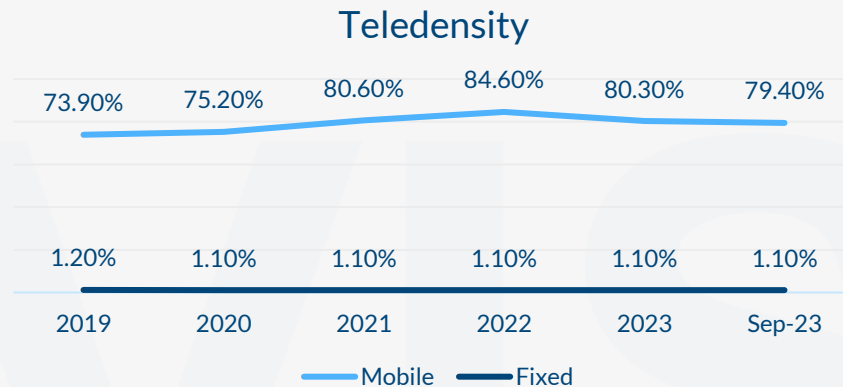
⁴ <https://www.businesswire.com/news/home/20210329005606/en/Global-Telecom-Tower-Market-2021-to-2026---Featuring-American-Tower-Reliance-Infratel-Viom-Networks-Among-Others---ResearchAndMarkets.com>

PAKISTAN



Source: www.pta.gov.pk

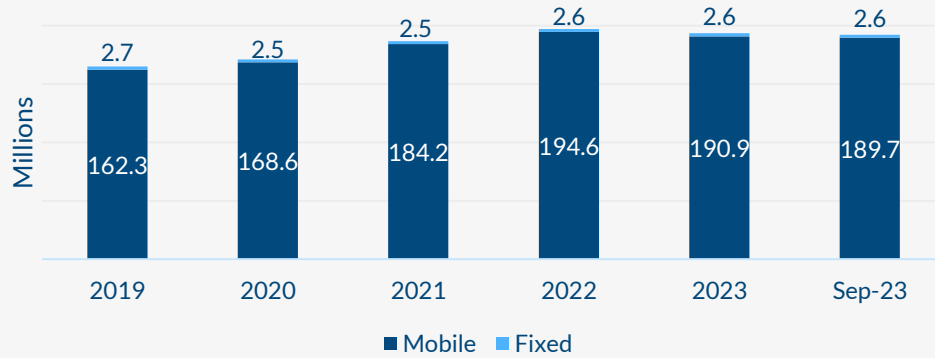
Pakistan's telecommunications infrastructure is interlinked via seven submarine cables and a singular land-based Optical Fiber Cable (OFC) system. This network facilitates access to international Internet bandwidth, boasting a cumulative capacity of 13.3 Terabits per second (Tbps), of which 7.7 Tbps are presently activated. This infrastructure has significantly enhanced the quality and accessibility of digital services, culminating in a noteworthy annual surge of 24.5% in both mobile and fixed network data utilization.



Source: Pakistan Telecommunication Authority Annual Report 2023

Tele-density, which represents the percentage of telecom connections per hundred individuals, exhibited a consistent upward trajectory until 2022, indicating a steady increase in connectivity. However, a slight decline since 2023 hints at a possible negative impact of adverse local economic conditions.

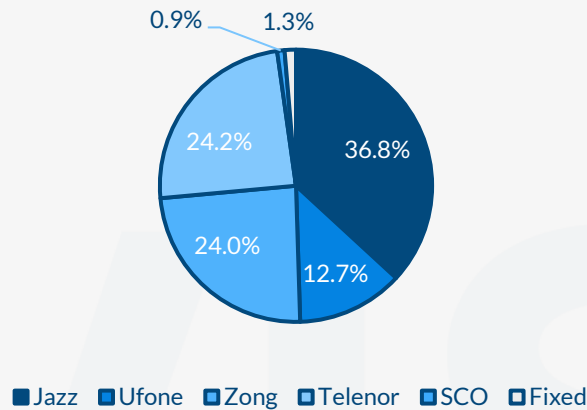
Telecom Subscribers



Source: Pakistan Telecommunication Authority Annual Report

The growth in tele-density was mirrored in the telecom subscriber counts, which displayed an ascent from 2019 to 2022. Specifically, mobile subscriptions showed significant growth, indicating a shift towards mobile-centric communication. Conversely, fixed subscriber numbers have remained relatively static. The modest decline in 2023, suggests a potential correlation between economic conditions.

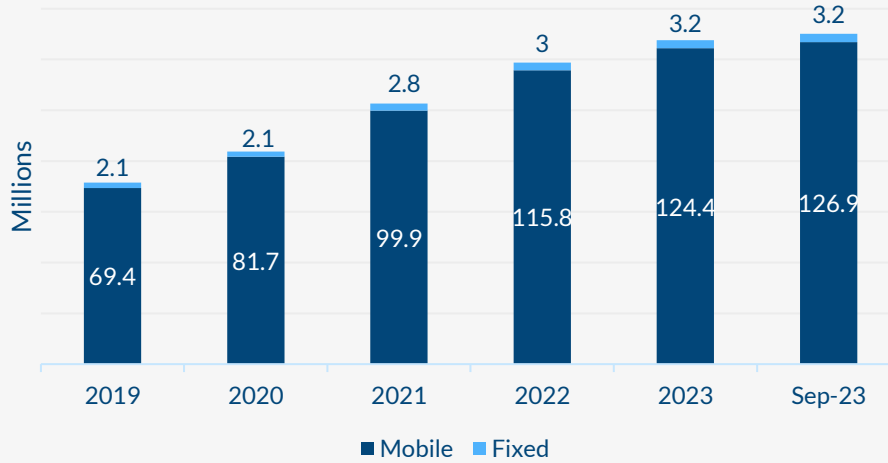
Telecom Market Share Jun'23



The telecom market in Pakistan reflects a diverse landscape dominated by key players. Jazz emerges as the leading operator, commanding a substantial market share of 36.8%. Close behind are Zong and Telenor, each holding approximately a quarter of the market share at 24.0% and 24.2%, respectively.

Of significance is the fact that Telenor is now owned by PTCL, which consolidates the market share of Ufone, Fixed, and Telenor under a unified entity. This consolidation underscores PTCL's strengthened position in the telecom sector, with a combined market share reflecting its expanded influence. Such a consolidation strategy likely offers synergies and operational efficiencies, enabling PTCL to compete more effectively in the dynamic telecom market.

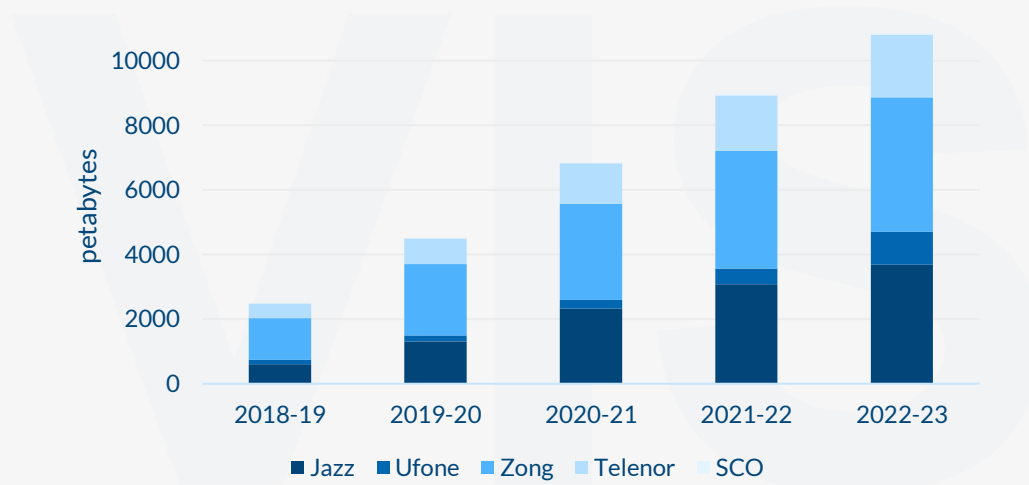
Broadband Subscribers



Over the observed period, both mobile and fixed subscriber numbers have shown growth, with mobile broadband subscriptions experiencing particularly notable expansion. This trend underscores a clear shift towards mobile-centric internet access.

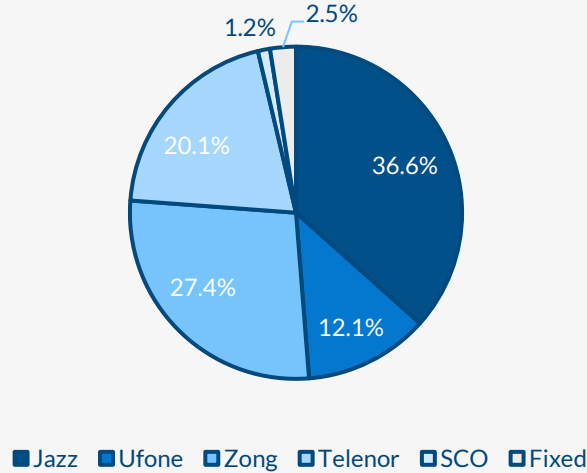
Regarding penetration rates, there has been a steady increase across both mobile and fixed categories, highlighting the increasing availability of high-speed internet services. Mobile broadband penetration has exhibited the most substantial growth, indicating a growing preference for mobile internet usage.

Mobile Data Usage



The consistent upward trend in mobile data usage reflects the rising demand for data-intensive applications and services. This surge is supported by the widespread adoption of smartphones and the expansion of high-speed mobile networks.

Broadband Market Share Jun'23

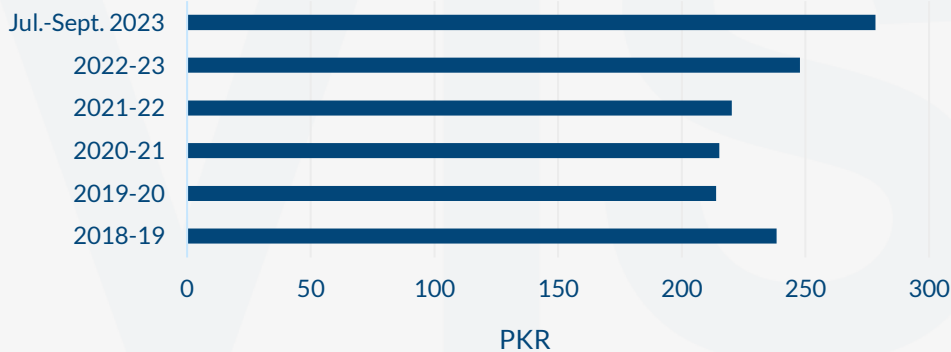


The broadband market share reveals a competitive landscape. Jazz leads the market with a significant share of 36.6%, followed closely by Zong at 27.4% and Telenor at 20.1%.

Even with the acquisition of Telenor by PTCL, Jazz maintains its position as the market leader in the broadband sector. However, the difference between Jazz and PTCL, now including Telenor's share, is not significant. Furthermore, the relatively small difference in market share between Jazz and PTCL indicates a closely contested market, with both players vying for dominance.

This competitive environment is beneficial for consumers as it encourages providers to innovate, improve services, and offer competitive pricing to attract and retain customers.

Mobile ARPU Per Month

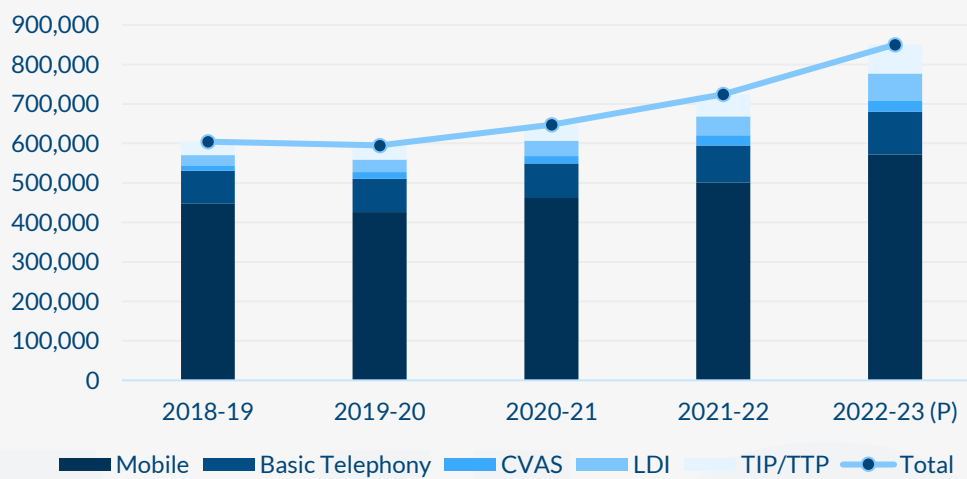


Despite fluctuations, the Average Revenue Per User (ARPU) has shown a noticeable upward trend, particularly in recent years, in Pakistan's telecom sector. Historically, the country maintained a relatively low ARPU compared to its neighbors, owing to its competitive telecom environment and reputation for providing some of the most affordable rates in the region.

The expansion of broadband services has been pivotal in driving this trend, offering higher-value services that command higher fees. Additionally, flexible pricing regulations for telecom operators, particularly amidst rising inflation, have allowed them to adjust their tariffs to better reflect the true value of their services, thus contributing to the rise in ARPU.

Furthermore, the decline in the multi-SIM phenomenon, where users maintain multiple SIM cards from different operators, has also played a role in the increased ARPU. With fewer users spreading their spending across multiple subscriptions, telecom companies can now capture a larger share of each user's spending, further boosting ARPU.

Telecom Revenues (PKR million)



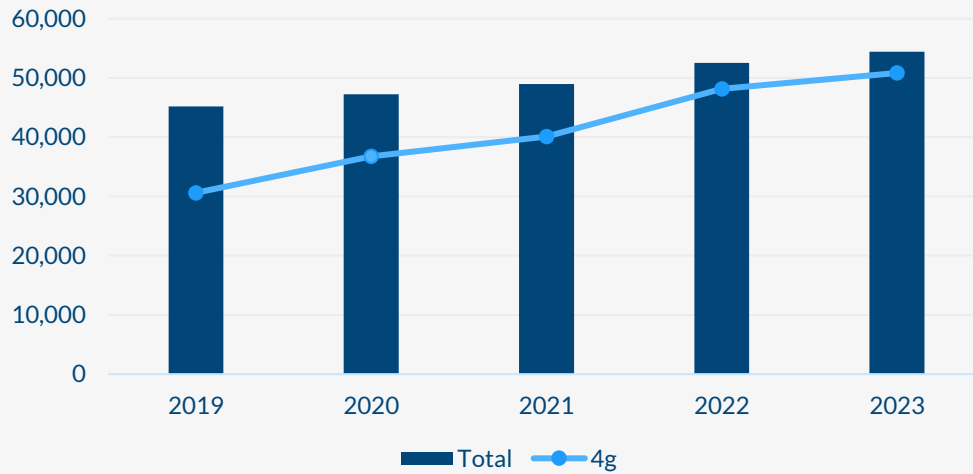
The telecom sector in Pakistan has experienced significant growth in total revenues over the observed period, rising from PKR 604.3 billion in 2018-19 to PKR 850.2 billion in 2022-23 (P).

Mobile services remain the primary revenue driver within the telecom industry, contributing the largest share to total revenues. Revenues from mobile services have shown steady growth, increasing from PKR 447.3 billion in 2018-19 to PKR 571.9 billion in 2022-23 (P).

Additionally, revenues from basic telephony services have exhibited consistent growth over the years, signaling sustained demand for traditional voice communication services. The rise in revenue from Class value-added services (CVAS) reflects new licenses and registration granted over the years.

Long distance and international (LDI) revenues have also experienced notable growth, indicating heightened usage of international calling and long-distance communication services. Furthermore, revenues from telecom infrastructure and tower services (TIP/TTP) have grown steadily, reflecting ongoing investments in network infrastructure expansion and maintenance.

Cellular Cell Sites



SECTOR ISSUE

Infrastructure sharing holds significant importance for Pakistan amidst various economic challenges such as inflation, low ARPU, escalating fuel prices, revenue constraints, and the substantial capital investment required for the integration of emerging technologies such as 5G. The imperative to extend connectivity to underserved regions, deploy cost-effective strategies to meet burgeoning capacity demands, deliver social benefits, and achieve nationwide coverage further underscores this necessity.

In response to these challenges, emerging strategies like active infrastructure sharing and spectrum sharing present pragmatic solutions. Passive sharing entails the mutual utilization of physical infrastructure such as towers, cables, electricity, and space, akin to neighbors sharing tools, to mitigate clutter and reduce costs. Active sharing takes this concept a step further by facilitating the joint use of both physical infrastructure and electronic equipment, thereby enhancing network efficiency and cost-effectiveness. Spectrum sharing, on the other hand, enables multiple networks to share radio frequencies, optimizing resource utilization and fostering coexistence.

By embracing these strategies, Pakistan stands to overcome financial hurdles, optimize infrastructure utilization, mitigate spectrum scarcity, and elevate the quality and accessibility of communication services.

RECENT DEVELOPMENTS

The telecommunications landscape is undergoing a significant transformation driven by the growing prevalence of Over-the-Top (OTT) services. These services deliver content or applications to users via the public Internet, independent of traditional network providers. Enabled by the widespread availability of broadband and smart devices, OTT providers now offer communication services that directly rival conventional licensed services such as voice, video, and messaging. This competitive dynamic has prompted concerns regarding the economic repercussions, competitive landscape, and regulatory considerations associated with OTT services. The appeal of OTT services lies in their cost-effectiveness and revenue models, which have led to a notable shift in the balance between traditional telecom services and emerging OTT offerings.

SECTOR OUTLOOK

OVERALL ASSESSMENT/OUTLOOK: POSITIVE

The telecommunications sector in Pakistan presents a multifaceted outlook, influenced by various factors including technological advancements, regulatory dynamics, and market competition.

Positive aspects include the consistent growth in tele-density and telecom subscribers, particularly in mobile services, reflecting an increasing demand for connectivity and communication services among the populace. Additionally, the rise in mobile data usage and broadband subscriptions underscores a shift towards digital connectivity, driven by the expanding availability of high-speed internet services. The telecom market, dominated by key players like Jazz, Zong, and PTCL, fosters healthy competition, which benefits consumers through innovation and competitive pricing. The upward trend in ARPU indicates an improving monetization of services, supported by the expansion of broadband offerings and regulatory flexibility in tariff adjustments.

However, stability concerns arise from fluctuations in tele-density and mobile data usage, potentially indicating sensitivity to economic conditions. Moreover, the emergence of OTT services presents both opportunities and challenges for traditional telecom operators. While OTT services enhance consumer choices and drive innovation, they also pose economic challenges and regulatory considerations, potentially disrupting the traditional revenue streams of telecom operators.

Addressing infrastructure challenges and embracing strategies like infrastructure sharing and spectrum sharing could mitigate financial constraints and enhance network efficiency, ensuring sustainable growth in the face of economic challenges and technological disruptions.

Overall, the outlook for Pakistan's telecommunications sector appears positive, with opportunities for growth driven by increasing demand for digital connectivity and evolving consumer preferences. However, navigating regulatory complexities, economic uncertainties, and technological disruptions will be crucial for sustaining this growth trajectory in the long term. With strategic investments and regulatory adaptations, the sector can capitalize on emerging opportunities while mitigating potential risks, fostering a strong and resilient telecommunications ecosystem.

RESEARCH & PUBLICATIONS

Musaddeq Ahmed – Assistant Manager | Ratings

musaddeq@vis.com.pk