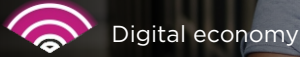


HOW NEW TECHNOLOGIES  
ARE TRANSFORMING  
**TELECOMMUNICATIONS**  
IN LATIN AMERICA AND THE CARIBBEAN



Digital economy

## CONTEXT: CONNECTIVITY AND CHALLENGES

The COVID-19 lockdown increased demand for connectivity in LAC by 34% between 2019 and 2020, emphasizing the key role of the telecommunications industry in the digital age. This increase creates both an opportunity and a challenge for the sector, which needs to provide greater capacity, quality, and coverage of services while maintaining profitable margins after high investments in infrastructure.

Although telecommunications networks have reached 97% of the population in terms of mobile network coverage in 2021, 35% of the population still does not connect to the internet via a mobile device. This is due to barriers such as high costs, both the service and the device, lack of coverage, and digital illiteracy.

Furthermore, fixed broadband networks are predominantly concentrated in urban areas, limiting access to information for many and making it difficult to integrate them into educational and professional systems.

**"The telecommunications industry plays a crucial role in LAC's social development and industrial competitiveness. Digitalization furthers educational and professional inclusion while also being critical for corporate digital transformation."**



## INDUSTRY TRENDS

The telecommunications industry sits at a crucial phase of change, driven by the digital revolution and the widespread of new technologies. These factors are reshaping the way telecom operators conduct business, leading to new opportunities and challenges.



### THE OPEN RAN REVOLUTION



The current trend in the industry is the disaggregation of vendors, allowing software to be independent of hardware and increasing competition in the market. This provides significant benefits for operators, including reduced costs and improved efficiency.

### CONSOLIDATION OF INFRASTRUCTURE PROVIDERS



The telecommunications industry is undergoing a process of specialization, where niche infrastructure providers are emerging in areas such as wireless connectivity, fiber optics, and IoT. This phenomenon is encouraging greater collaboration between these providers and telecom operators.

### SEARCH FOR NEW REVENUE STREAMS



In the digital age, telecommunications companies are not only innovating in search of new ways to capitalize on connectivity, such as integrating third-party services into their supply and providing financial products to their consumers but they are also witnessing a process of specialization in the industry. Niche infrastructure providers are emerging in areas such as wireless connectivity, fiber optics, and IoT, driving greater collaboration between these providers and telecom operators.

### TRANSITION TO DATA-DRIVEN MODELS



With the increase in data traffic and the number of connected devices, telcos are taking advantage of the opportunity to collect and analyze large volumes of information, which can help streamline processes and make informed decisions.



## THE INDUSTRY AS AN ENABLER OF NEW BUSINESS MODELS

Telecommunications emerge as a capital pillar in the implementation and development of emerging technologies in a variety of productive sectors, facilitating the incorporation of advances such as AI and 5G connectivity, as well as providing the infrastructure required for their operation.

**The same technology, with different applications in different sectors, the example of 5G.**



Farmers in Mexico are refining their crops by monitoring crop needs in real-time.



The government of Rio de Janeiro is deploying a network of cameras connected through AI to strengthen security at major events, such as carnival.



## Transforming the area through Artificial Intelligence



Artificial Intelligence (AI) is transforming the telecommunications industry in LAC, offering opportunities to improve customer experience, reduce operating costs, and generate new businesses.

Compound Annual Growth until 2025

**46%**

Increased Private Investment in AI

**x2**

LAC Adoption Growth 2020 - 2021

**15%**

## SUCCESS STORY: IPT Peru

IDB Invest made a capital investment of 15.5 million dollars in Internet Para Todos (IPT), an active operator in rural mobile infrastructure. This is part of a 156 million dollars investment round, in which Telefónica acts as the main shareholder, with the support of other institutions such as Meta (Facebook) and CAF. This financial backing boosts IPT in its mission to implement an innovative and sustainable rural connectivity business model.



Launched in 2018, the IPT project has proven to be an innovative and sustainable way to overcome geographical and economic challenges, providing connectivity and mobile internet to rural areas of LAC. In a strategic alliance with Telefónica, IDB Invest, Facebook (Meta), and CAF, IPT has set out to connect over 3 million Peruvians in rural areas and boost 4G infrastructure in the region.

**USD 15.5  
Million**  
IDB  
Investment

**2019**  
Date of  
Approval



**Internet para Todos is a collaborative initiative founded on the belief that Internet access can help people develop and transform their lives**

**2.2** MILLION

Users with  
Internet access

**12,500**

Rural communities  
in Peru

**+ 240%**

Rural areas with  
access to 4G



If you want to know more about how technologies are impacting telecommunications, click the link to see the details of the report.

[Click here](#)