GSMA

The Mobile Economy Latin America 2025

GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

We invite you to find out more at **gsma.com**

GSMA Intelligence

GSMA Intelligence is the definitive source of global mobile operator data, analysis and forecasts, and publisher of authoritative industry reports and research. Our data covers every operator group, network and MVNO in every country worldwide – from Afghanistan to Zimbabwe. It is the most accurate and complete set of industry metrics available, comprising tens of millions of individual data points, updated daily.

GSMA Intelligence is relied on by leading operators, vendors, regulators, financial institutions and third-party industry players, to support strategic decision-making and long-term investment planning. The data is used as an industry reference point and is frequently cited by the media and by the industry itself.

Our team of analysts and experts produce regular thought-leading research reports across a range of industry topics.

www.gsmaintelligence.com

info@gsmaintelligence.com

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Executive summary

Mobile connectivity is at the heart of Latin America's digital transformation. With more than 450 million unique mobile subscribers and growing demand for faster and more reliable networks, the region is making steady progress expanding 5G coverage and adoption. More than 30 operators across 13 countries in Latin America have already deployed commercial 5G mobile services, while a further 18 operators have announced 5G launch plans for the coming years. This progression is expected to fuel adoption, with 5G forecast to account for a quarter of mobile connections in Latin America by the end of 2027, before reaching more than 50% by the end of the decade.

Advancements in mobile technology are a significant driver of economic growth in Latin America, contributing significantly to gross domestic product (GDP) and generating employment across the region. Mobile technologies and services now account for more than 8% of Latin America's GDP, resulting in $550 billion of economic value added in 2024. The most significant benefits come from the productivity enhancements enabled by mobile technology, amounting to $440 billion in 2024. The mobile ecosystem in Latin America also supports around 2 million jobs.

Note: $ refers to US dollars throughout this report.

Key trends shaping the mobile ecosystem

5G standalone lays the foundation for advanced 5G networks

Realising 5G's potential involves the development and mass adoption of new use cases that can support the long-term financial sustainability of the mobile industry. In this context, operators and other 5G ecosystem players (particularly in pioneering markets) have shifted their focus to deploying advanced 5G networks, with a view to delivering enhanced services. In Latin America, Brazil stands out as a primary hub for 5G standalone (5G SA), with operators looking to fully realise the capabilities of the technology – particularly in terms of network performance and new applications.

AI offers new opportunities to serve enterprises

The telecoms industry has been at the forefront of AI adoption, with applications in areas such as network operations, energy optimisation, customer call centres and retail operations. Early deployments have focused on internal solutions to improve network performance and customer service. However, there is a growing shift towards developing AI solutions for external customers, particularly in the enterprise segment, as a means to generate new revenue opportunities.

Renewable energy rises up the agenda

Increasing the share of energy derived from renewable sources is a growing strategic priority in telecoms. Operators in Latin America are positioning themselves as global leaders in the adoption of renewable energy solutions. This trend is driven by a combination of abundant natural resources, rising energy demand, the need for energy independence, environmental commitments, cost optimisation and regulatory pressures.

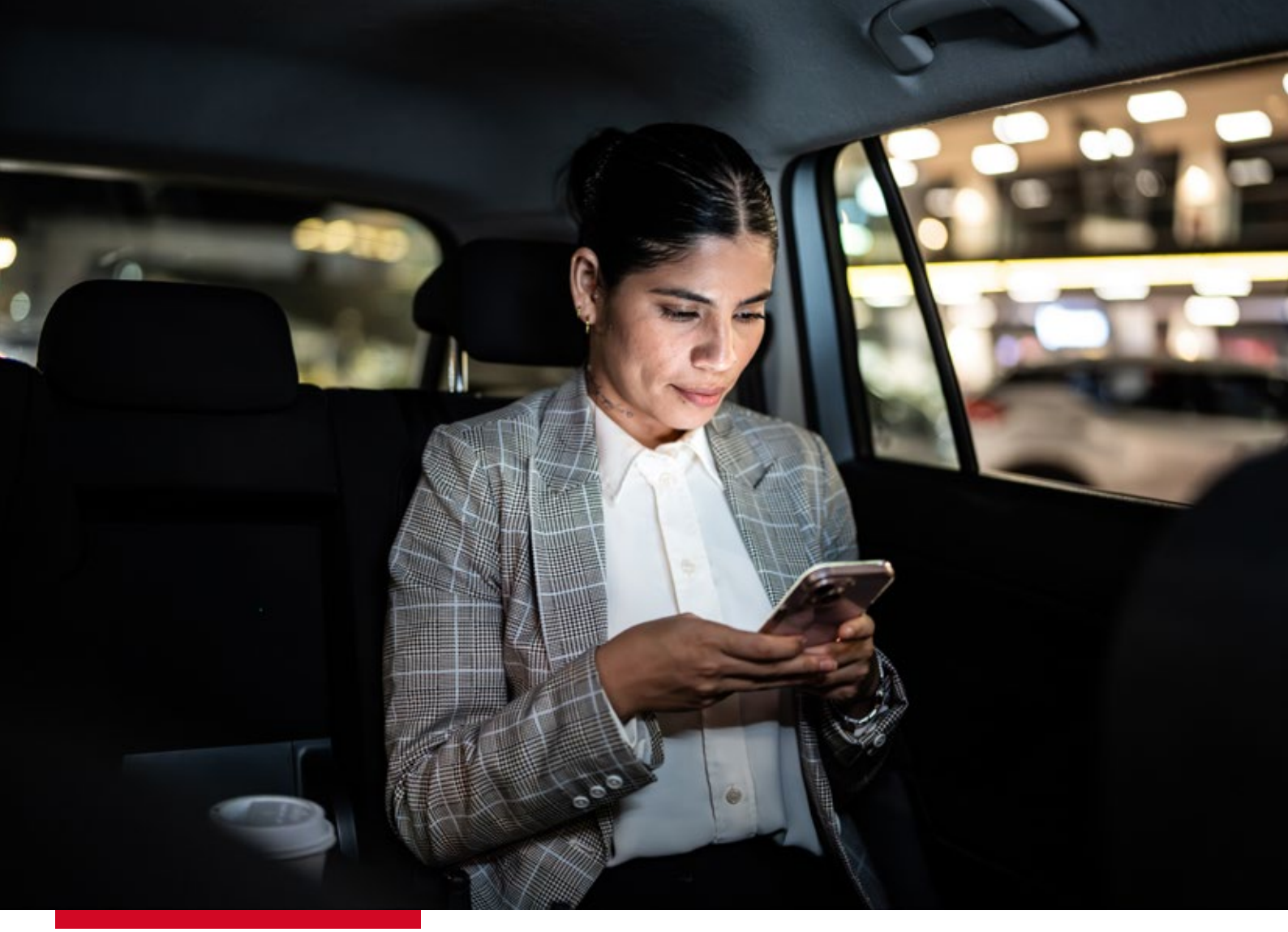
User behaviour is shifting in ways that offer opportunities and challenges for the mobile ecosystem

Enterprises set their sights on digital transformation

In 2024, GSMA Intelligence surveyed around 500 enterprises from Latin America (covering Argentina, Brazil and Mexico) to gain insight into their digital transformation. Enhancing customer experience and increasing business agility ranked among the top three most popular digital transformation objectives in Argentina, Brazil and Mexico. Improving security is also a priority across all three countries, ranking first in Argentina, third in Brazil and fifth in Mexico. This reflects the expanded attack surface facing enterprises, as well as the threat posed from new forms of AI and rapid digitisation.

Operators adapt to changing consumer trends

As connectivity improves and digital services expand, user behaviour is shifting in ways that offer opportunities and challenges for the mobile ecosystem. Mobile operators are responding by establishing new partnerships with content providers, while also launching their own solutions to tap into changing consumer preferences and growing demand for improved user experiences. One example is the integration of network APIs into consumer apps and services. This is driving enhanced convenience and security while opening up revenue opportunities for operators.



Policies for success

Pro-investment policies and evidence-based reform – including spectrum pricing and fiscal policy – can accelerate digitalisation, innovation and inclusion across Latin America. Simplifying regulatory frameworks and reducing the regulatory burden can enhance investment and the affordability of digital services. Effective spectrum policies, particularly for the availability of mid-band spectrum at affordable prices, are crucial to the success of 5G. Furthermore, creating a sustainable infrastructure funding model must consider platforms that generate high levels of network traffic.

Simplifying regulatory frameworks and reducing the regulatory burden can enhance investment

The Mobile Economy Latin America

Unique mobile subscribers

2024 **456m**

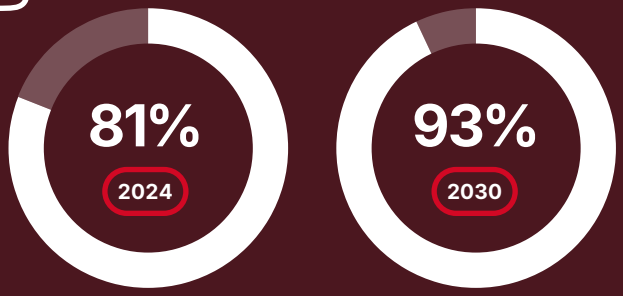
70% penetration rate*

2030 **531m**

79% penetration rate*

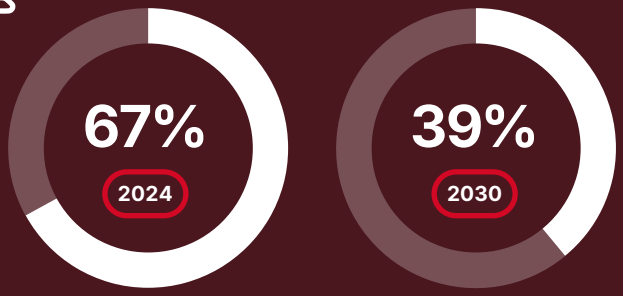
**Percentage of population*

Smartphones (percentage of connections)



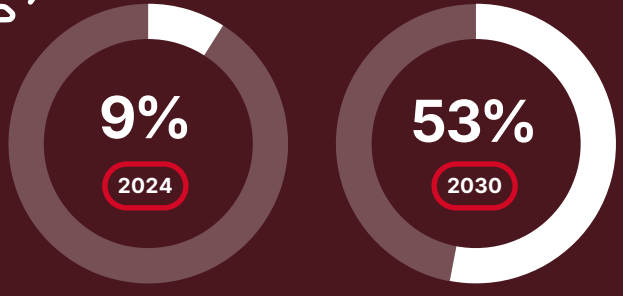
Excluding licensed cellular IoT

4G (percentage of connections)



Excluding licensed cellular IoT

5G (percentage of connections)



Excluding licensed cellular IoT

Mobile internet users

2024 **413m**

64% penetration rate*

2030 **496m**

74% penetration rate*

**Percentage of population*

Operator revenues and investment

2024 **$68bn**

2030 **$81bn** in revenues

Operator capex of **$86 billion** for the period 2024–2030

Mobile's contribution to GDP

2024 **$550bn**

8.2% of GDP

2030 **$680bn**

8.6% of GDP

Public funding

2024 **$50bn**

Mobile ecosystem contribution to public funding (before regulatory and spectrum fees)

Employment

2024 **1.1m** jobs directly supported by the mobile ecosystem

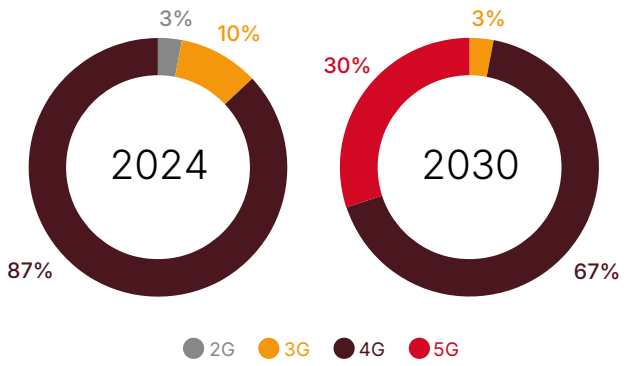
1.0m jobs indirectly supported

Note: $ refers to US dollars throughout this report.

Subscriber and technology trends in key markets

Argentina

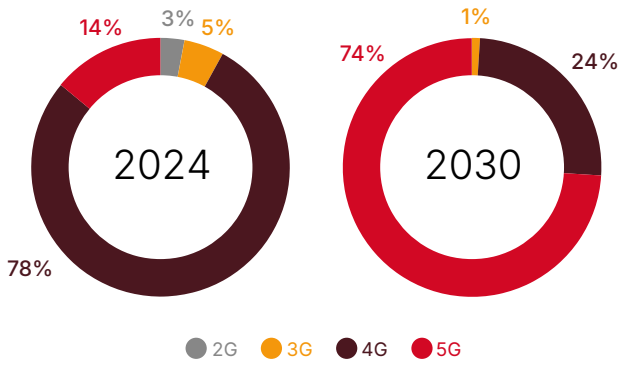
Technology mix*



Subscriber penetration		Smartphone adoption*	
2024	71%	2024	76%
2030	79%	2030	91%

Brazil

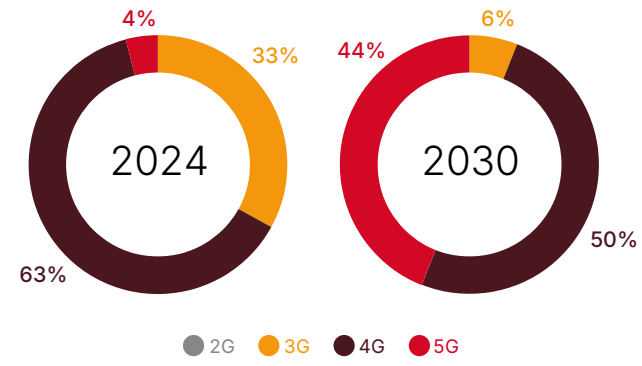
Technology mix*



Subscriber penetration		Smartphone adoption*	
2024	72%	2024	88%
2030	81%	2030	95%

Colombia

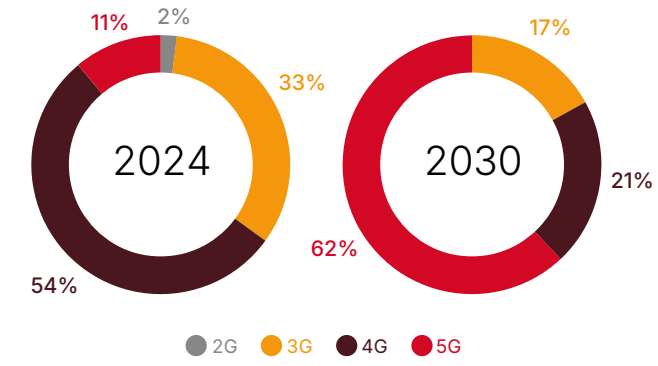
Technology mix*



Subscriber penetration		Smartphone adoption*	
2024	71%	2024	79%
2030	80%	2030	97%

Mexico

Technology mix*



Subscriber penetration		Smartphone adoption*	
2024	73%	2024	73%
2030	80%	2030	88%

* Percentage of total connections (excluding licensed cellular IoT)
Note: Totals may not add up due to rounding.

01

The mobile industry in numbers

1.1
Mobile market update

Nearly three quarters of the population in Latin America will subscribe to mobile internet services by 2030

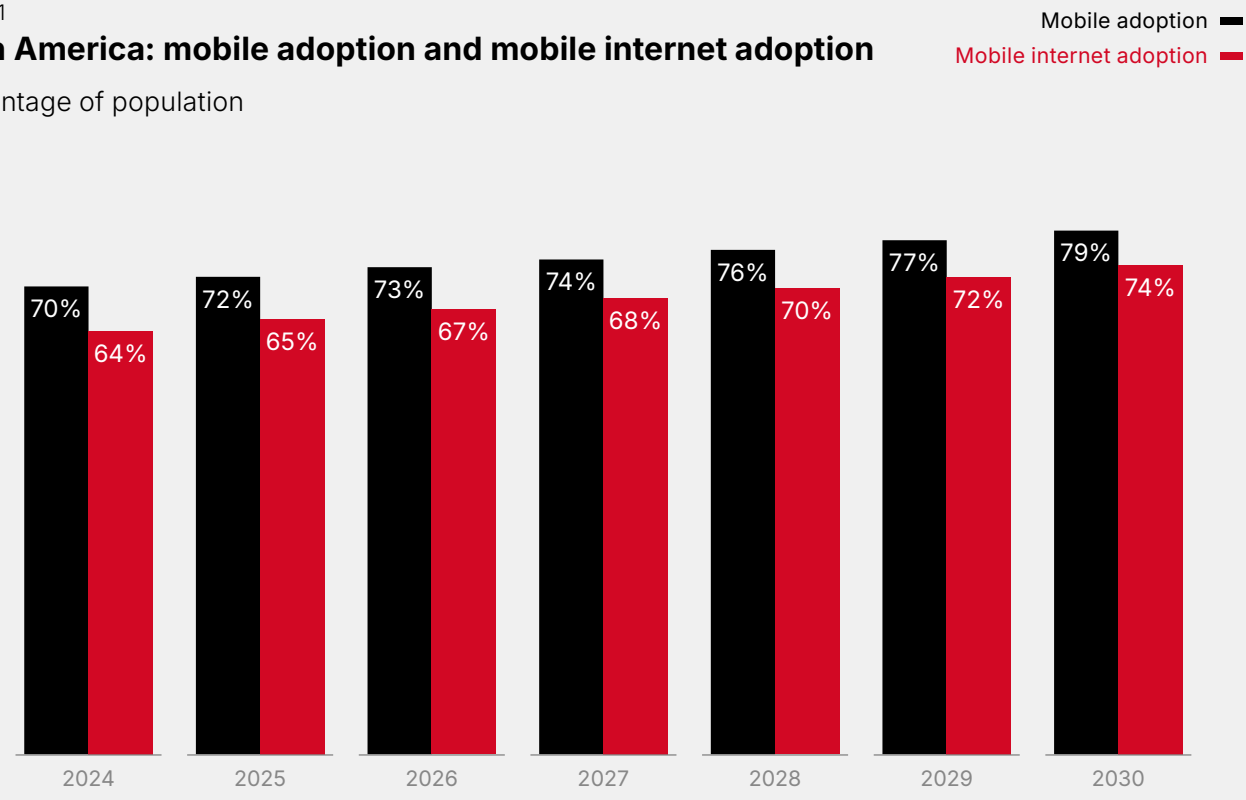
By the end of 2024, 64% of the population in Latin America used mobile internet, equating to 413 million users – an increase of 180 million since 2015. However, the growth rate at which people are adopting mobile internet has slowed in recent years. Only around 13 million people started using mobile internet in 2024, compared to an average of 23 million per year between 2015 and 2020.

Growth is expected to continue at a similar rate to the end of 2030. This trend highlights the need for reform aimed at accelerating take-up of mobile internet services, with a focus on overcoming key barriers to adoption such as affordability (particularly of devices), and literacy and digital skills.

Figure 1

Latin America: mobile adoption and mobile internet adoption

Percentage of population



Source: GSMA Intelligence

4G adoption reaches its peak

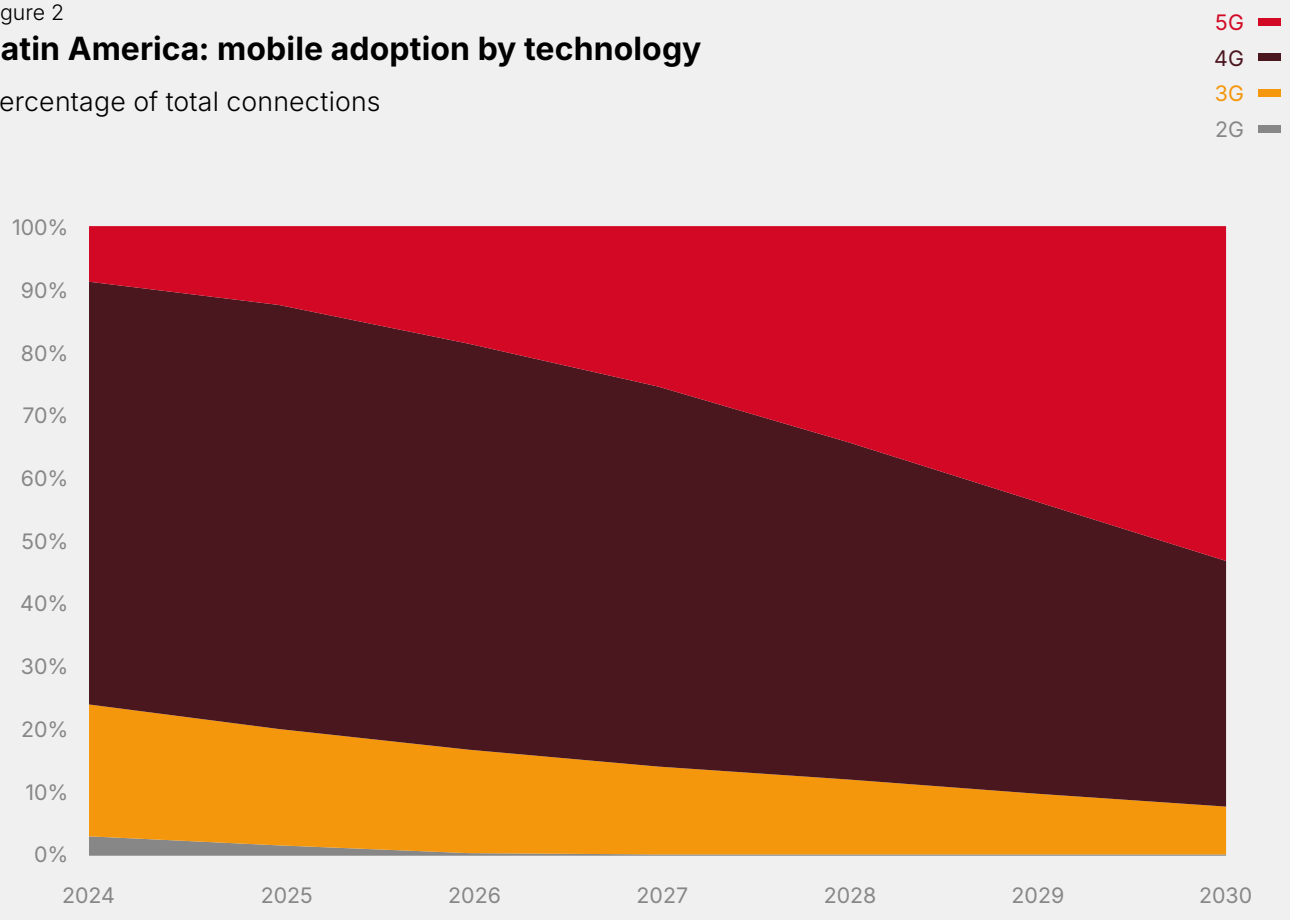
4G is the dominant mobile technology in Latin America, accounting for around two thirds of total mobile connections. 4G adoption is expected to peak in 2025 before gradually declining over the next few years as 5G deployments begin to gather speed.

2G and 3G still account for around a quarter of mobile connections in the region, with significant variation across countries. For example, 2G/3G networks represent less than 10% of connections in Brazil but account for more than a third in eight other Latin American countries.

Figure 2

Latin America: mobile adoption by technology

Percentage of total connections



Source: GSMA Intelligence

There will be more than 400 million 5G connections in Latin America by 2030

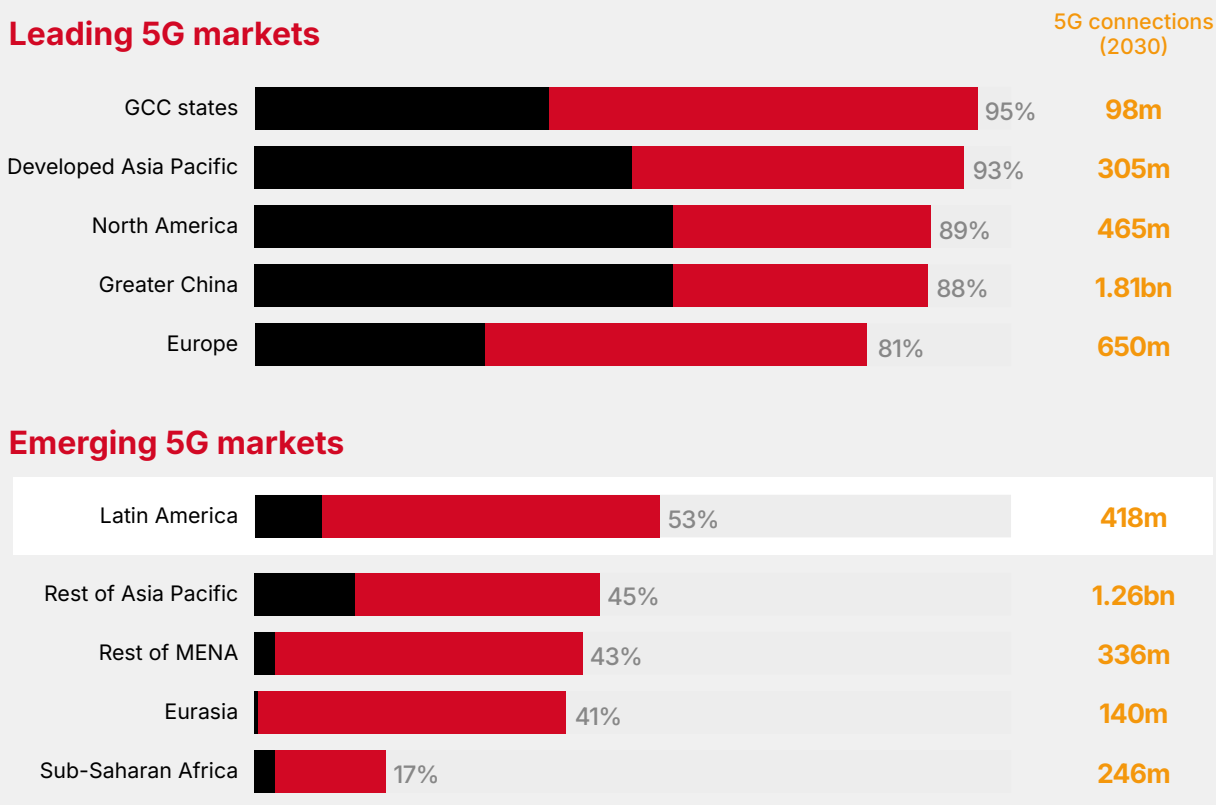
As of December 2024, 32 operators in 13 countries had deployed commercial 5G mobile services in Latin America. 5G already accounts for a double-digit share of mobile connections in four markets (Brazil, Chile, Mexico and Dominican Republic). Adoption remains at an early stage in other parts of the region.

5G adoption will accelerate over the next few years, as new 5G markets go live and existing 5G networks reach additional towns and cities. Eighteen operators in Latin America have announced 5G launch plans for the coming years, with Bolivia, El Salvador and Honduras among the next spate of 5G launches in the region. By the end of 2027, 5G is set to account for a quarter of mobile connections in Latin America, reaching more than 50% by the end of the decade.

Figure 3

5G adoption in leading and emerging 5G markets

Percentage of total connections



Note: Developed Asia Pacific – Australia, Japan, New Zealand, Singapore and South Korea
Source: GSMA Intelligence

Mobile data traffic is projected to grow threefold in Latin America

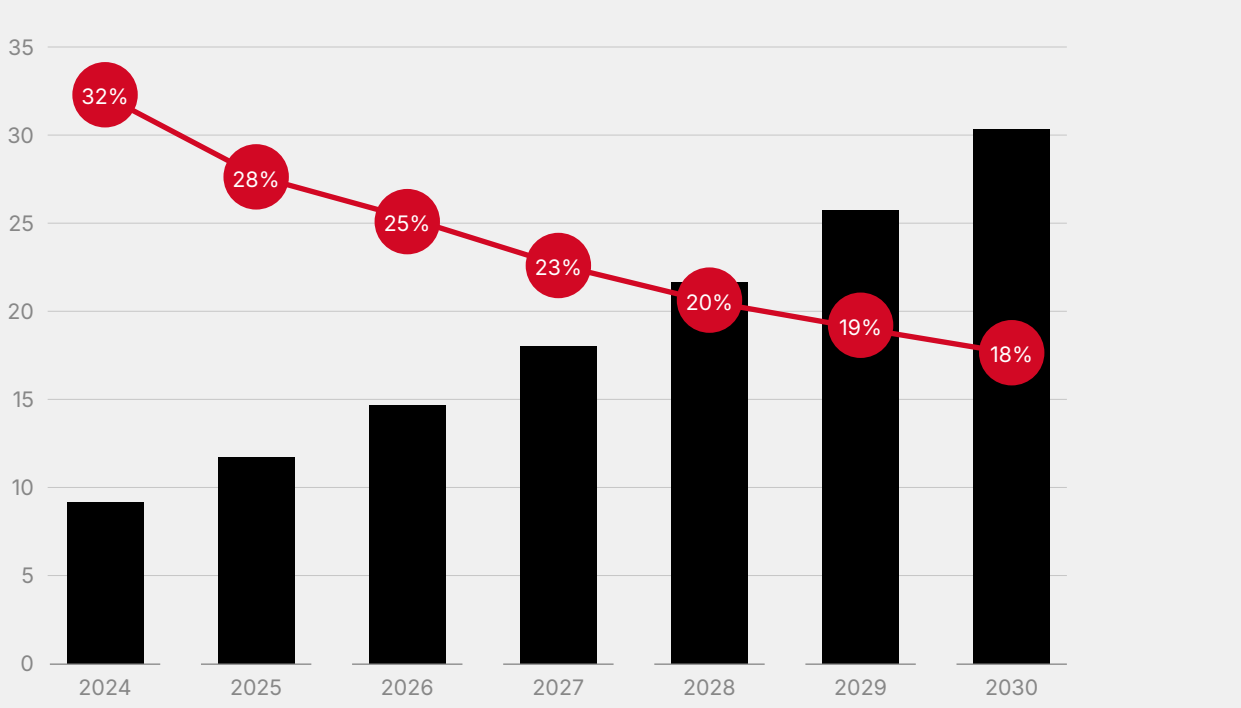
Average data traffic per mobile connection per month in Latin America reached 9 GB in 2024, up from 2 GB in 2019. Usage varies considerably by country, influenced by factors such as network availability, pricing and consumer behaviour. Usage is highest in countries where service plans offer high mobile data allowances (e.g. Brazil and Chile) and/or where fixed broadband access is limited or unaffordable.

While data growth rates are expected to moderate, mobile data traffic is expected to continue expanding at 20–30% per year until the end of the decade, driven by increased video consumption and the emergence of new AI-generated content and services.

Figure 4

Latin America: mobile data traffic per mobile connection

GB per month



Source: GSMA Intelligence

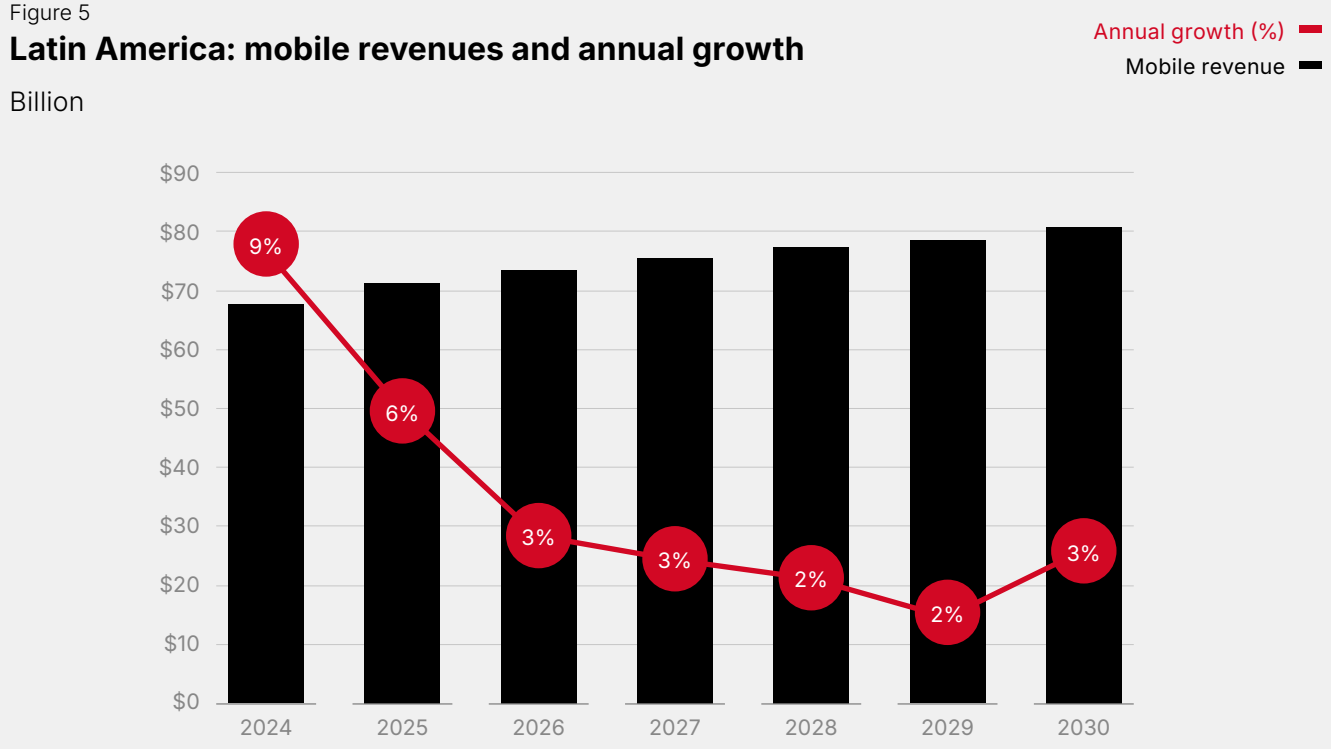
Mobile revenues will surpass $80 billion by 2030

The high inflation rates experienced by many countries in Latin America have put operators under pressure to increase revenues to cover rising costs. While annual mobile revenue growth accelerated in 2024, this is expected to moderate over the next few years as competition remains intense.

On the cost side, Latin American operators are forecast to invest almost $90 billion in mobile capex between 2024 and 2030, accounting for 7% of global spend. Capex-to-revenue ratios will increase slightly over the next few years, peaking in the late 2020s as 5G rollouts reach maturity.

Figure 5

Latin America: mobile revenues and annual growth



Source: GSMA Intelligence

GSMA Open Gateway gains traction in Latin America

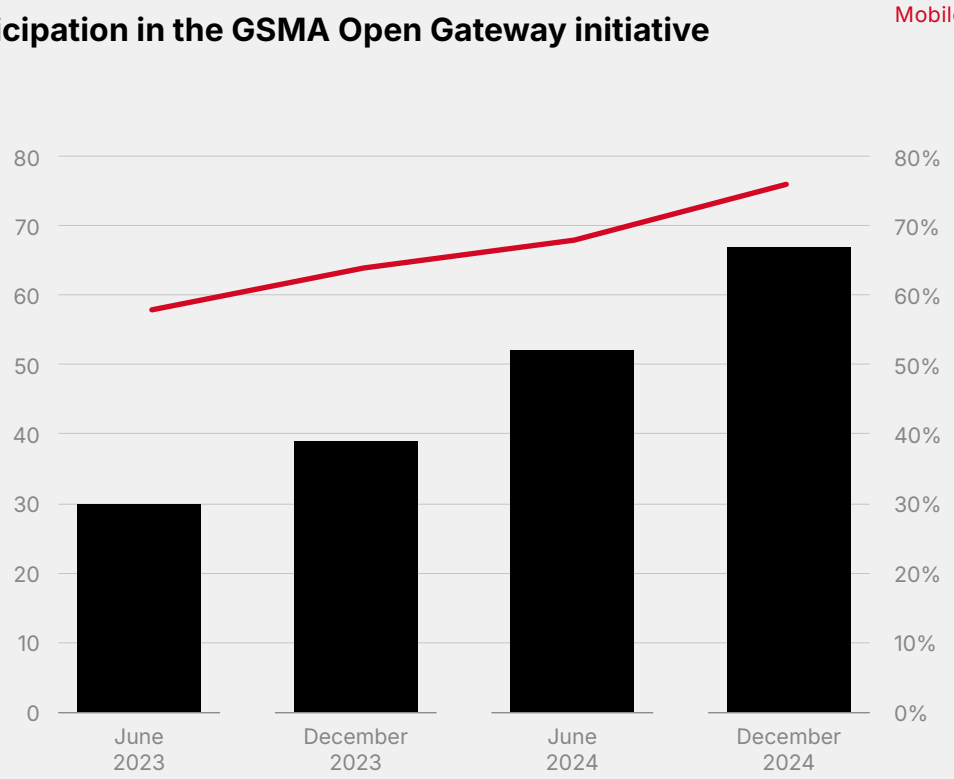
Pressure on connectivity revenues is driving efforts in new areas. One example is the GSMA Open Gateway initiative, which aims to leverage the power of mobile networks globally by opening up access to network capabilities through common application programming interfaces (APIs).

As of March 2025, 72 mobile operators had committed to Open Gateway APIs. These account for almost 80% of mobile market share by connections, up from just over 65% in June 2024. Signatories in Latin America include América Móvil, Entel Chile, Nuevatel, Telecom Argentina, Telefónica and TIM. GSMA Open Gateway covers more than 90% of connections in the region. The focus for 2025 will be translating these commitments into further commercial launches.

Much of the activity so far has been around deploying Open Gateway APIs to mitigate fraud and other security threats. There are a range of APIs in this domain, including SIM Swap, Number Verification and One Time Password (OTP) Validation.

Figure 6

Global participation in the GSMA Open Gateway initiative



Source: GSMA Intelligence

1.2
Economic impact of mobile

The mobile sector added $550 billion of economic value to the Latin American economy in 2024

In 2024, mobile technologies and services generated 8.2% of GDP across Latin America – a contribution that amounted to $550 billion of economic value added. The greatest benefits came from the productivity effects (reaching $440 billion) followed by the direct contribution, which generated $90 billion.

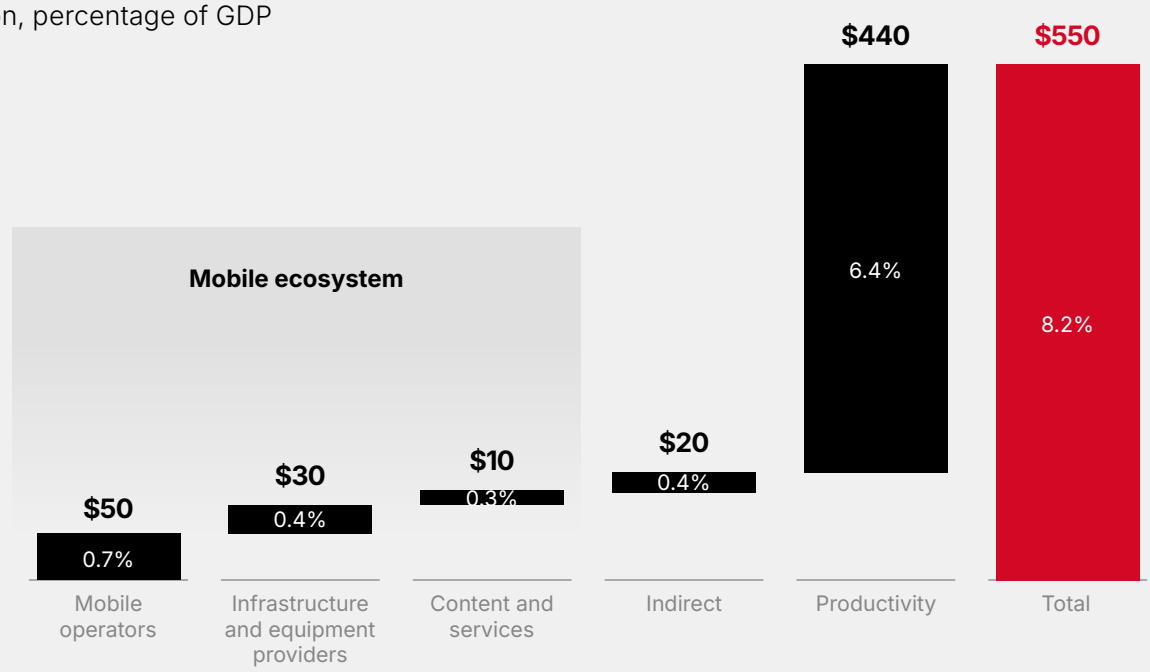
The impacts of mobile technologies include connectivity and digital transformation. The former refers to the use of mobile technologies. The latter involves the integration by enterprises of advanced mobile technologies such as 5G, IoT and AI.

The mobile ecosystem comprises three categories: mobile operators, infrastructure and equipment, and content and services. The 'infrastructure and equipment' category encompasses network equipment providers, device manufacturers, and IoT companies. Meanwhile, 'content and services' encompasses content, mobile application and service providers, distributors and retailers, and mobile cloud services.

Figure 7

Latin America: total economic contribution of the mobile industry, 2024

Billion, percentage of GDP



Note: Totals may not add up due to rounding.
Source: GSMA Intelligence

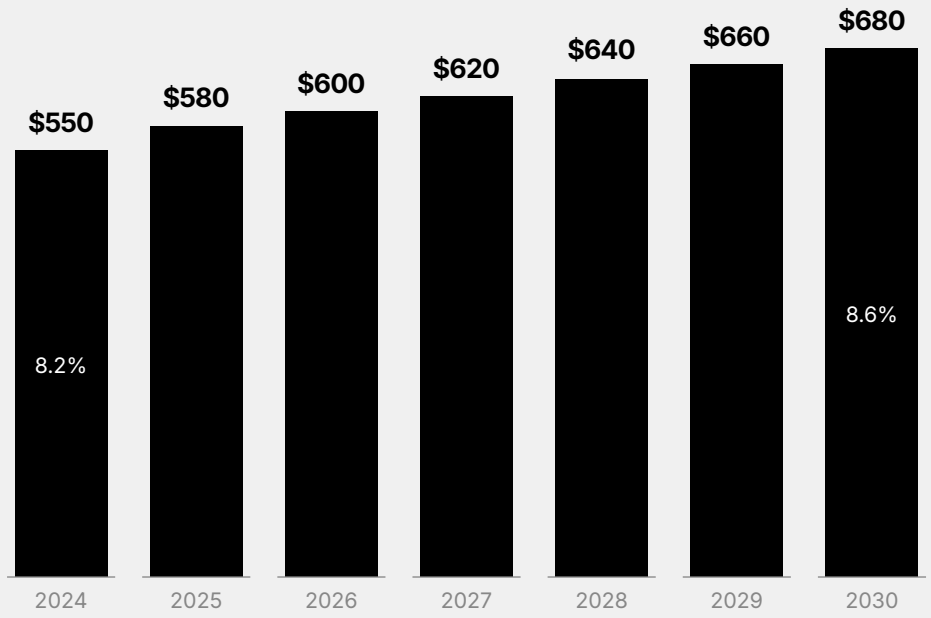
Mobile technologies' economic contribution in Latin America will reach $680 billion by 2030

By 2030, mobile's contribution in Latin America is expected to reach approximately $680 billion, or 8.6% of GDP, driven by the improvements in productivity and efficiency brought about by the continued expansion of mobile services and the growing adoption of digital technologies, including 5G, IoT and AI.

Figure 8

Latin America: economic impact of mobile

Billion, percentage of GDP



Source: GSMA Intelligence

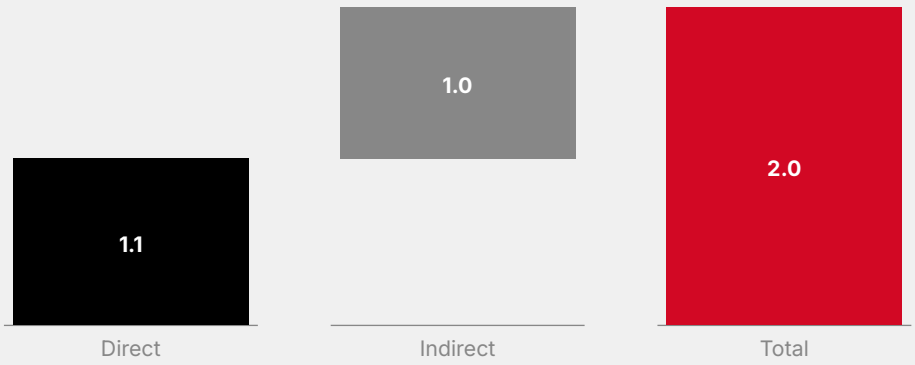
The mobile ecosystem in Latin America supported around 2 million jobs in 2024

Mobile operators and the wider mobile ecosystem provided direct employment to approximately 1.1 million people in Latin America in 2024. In addition, economic activity in the ecosystem generated around 1 million jobs in other sectors, meaning that around 2 million jobs were directly or indirectly supported.

Figure 9

Latin America: employment impact of the mobile industry, 2024

Jobs (million)



Note: Totals may not add up due to rounding.
Source: GSMA Intelligence

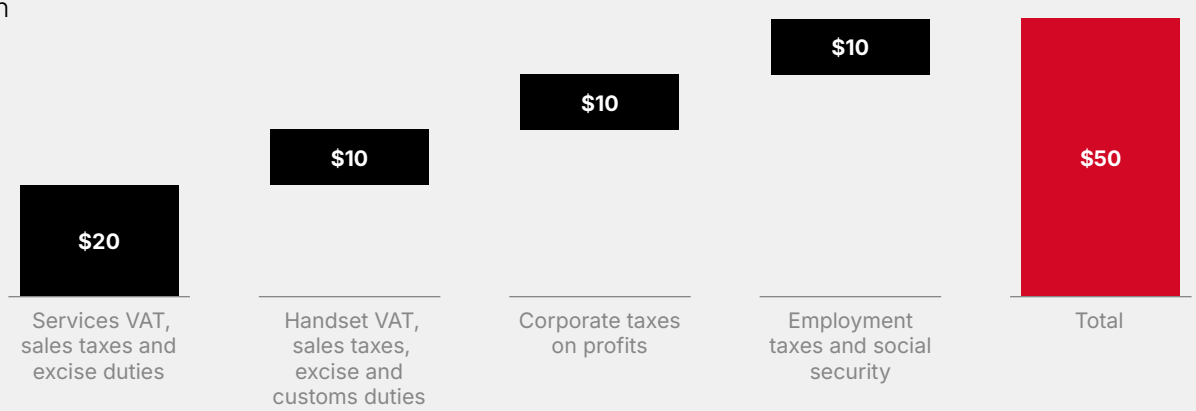
The fiscal contribution of the mobile ecosystem in Latin America reached $50 billion in 2024

In 2024, the mobile sector in Latin America made a substantial contribution to the funding of the public sector, with more than $50 billion raised through taxes. A large contribution was driven by services VAT, sales taxes and excise duties ($20 billion).

Figure 10

Latin America: fiscal contribution of the mobile ecosystem, 2024

Billion



Source: GSMA Intelligence

5G will significantly boost GDP in Latin America by the end of the decade

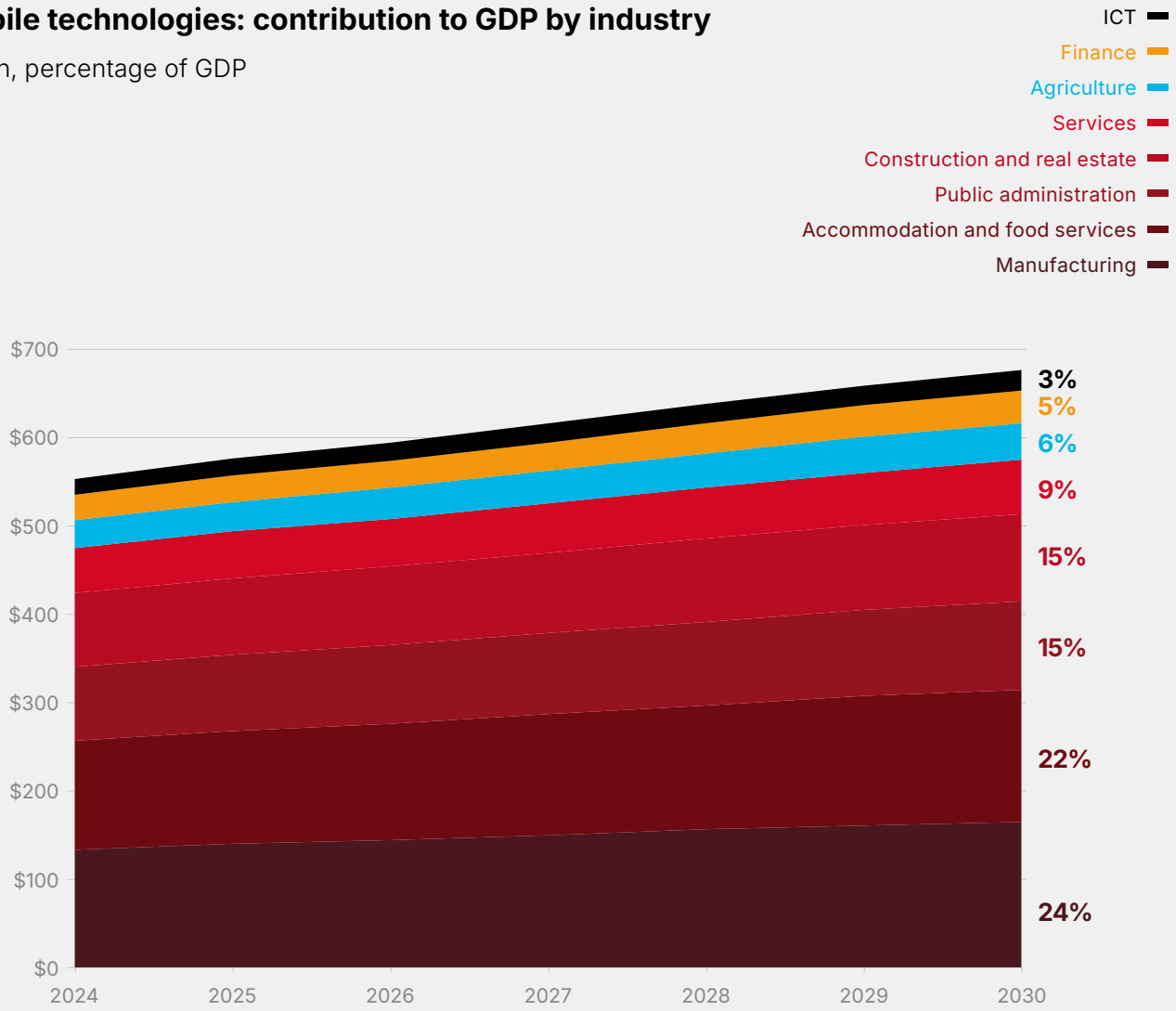
Mobile technologies and the ensuing digital transformation are expected to benefit the Latin American economy by $680 billion in 2030. Many of the benefits will materialise over 2024–2030, fuelled by the rapid adoption of advanced mobile technologies.

Mobile technologies are expected to benefit all sectors of the Latin American economy, though some industries will benefit more than others due to their ability to incorporate the latest wave of digital technologies, including 5G, IoT and AI. The gains will stem from new revenue streams and improvements in productivity and efficiency enabled by the growing adoption of digital technologies. During 2024–2030, 24% of the benefits are expected to originate from the manufacturing sector.

Figure 11

Mobile technologies: contribution to GDP by industry

Billion, percentage of GDP



Source: GSMA Intelligence

02

Mobile industry trends

2.1
5G: industry focus shifts to realising 5G's full potential

5G is now in its sixth year since launch and commercially available in more than 120 countries, underlining the technology's growing maturity and reach. By the end of 2025, 5G connections will account for nearly a third of global mobile connections. For comparison, 3G and 4G accounted for 10% and 15% of total connections, respectively, at the same point in their deployment cycles. The rapid uptake of 5G has been driven by a combination of factors. These include the availability of more affordable devices (especially in lower-income markets), increased demand from consumers and businesses seeking faster speeds, and operator investment in spectrum and infrastructure upgrades.

5G adoption is also progressing quickly across Latin America, though at varying speeds. By the end of 2024, adoption reached double digits in four countries – Chile (25%), Brazil (14%), Dominican Republic (11%) and Mexico (11%). The latter half of this decade will see 5G adoption become more widespread across the region, with the technology accounting for more than half of total mobile connections by 2030. 5G adoption in Latin America is being driven by a combination of factors, including government initiatives, consumer demand, and the potential for economic and social benefits, particularly in areas such as digital transformation.

Investments from operators in network infrastructure are also playing a crucial role. In Brazil, for example, operators had deployed nearly 32,000 5G base stations as of the end of 2024. In August 2024, Nokia announced a deal with Claro Argentina to deploy 5G infrastructure in the country, including the deployment of the technology across the country's largest cities.

Advanced networks remain a long-term prospect

5G has revolutionised mobile technology, with consumers and businesses benefiting from key features such as faster speeds. Despite the progress, the consensus among industry players is that 5G still has a long way to go to reach its full potential. Realising the technology's potential involves the development and mass adoption of new use cases that can have a transformational impact on consumers and businesses, and support the long-term financial sustainability of the mobile industry. Digital innovation across verticals and a network that enables advanced 5G features and capabilities are two critical factors required to realise the technology's potential.

In this context, operators and other 5G ecosystem players (especially in pioneering markets) have shifted their focus to deploying advanced 5G networks, with a view to delivering enhanced services. In Latin America, Brazil stands out as a primary hub for 5G SA, with operators looking to fully realise the capabilities of the technology, particularly in terms of network performance and new applications. The country's large-scale spectrum auction in 2021, which allocated the 3.5 GHz band among other frequencies, was instrumental to this process, enabling Claro, TIM and Vivo to deploy 5G SA relatively quickly.

5G SA is an important step towards 5G-Advanced, which has risen to the top of operators' technology priorities. 5G-Advanced builds on existing 5G networks with enhancements such as improved energy efficiency, greater capacity, lower latency and support for advanced use cases. Globally, around 80% of operators surveyed by GSMA Intelligence intend to launch 5G-Advanced within two years of the release of 5G-Advanced standards. More than 90% intend to launch three or four years after the release of standards. While this may seem rather optimistic, it emphasises the confidence in the potential of the technology to support B2B revenue goals – ahead of other, much-discussed technologies such as AI, network API exposure and private networks, according to the GSMA Intelligence Network Transformation Survey.

In Latin America, 5G-Advanced is still at a nascent stage, with operators prioritising foundational 5G deployments. However, the deployment of 5G SA and other recent developments suggest that operators are beginning to lay the groundwork for 5G-Advanced. For example, Claro Brazil has explored advanced 5G capabilities, such as network slicing and ultra-low latency applications, in collaboration with vendors.

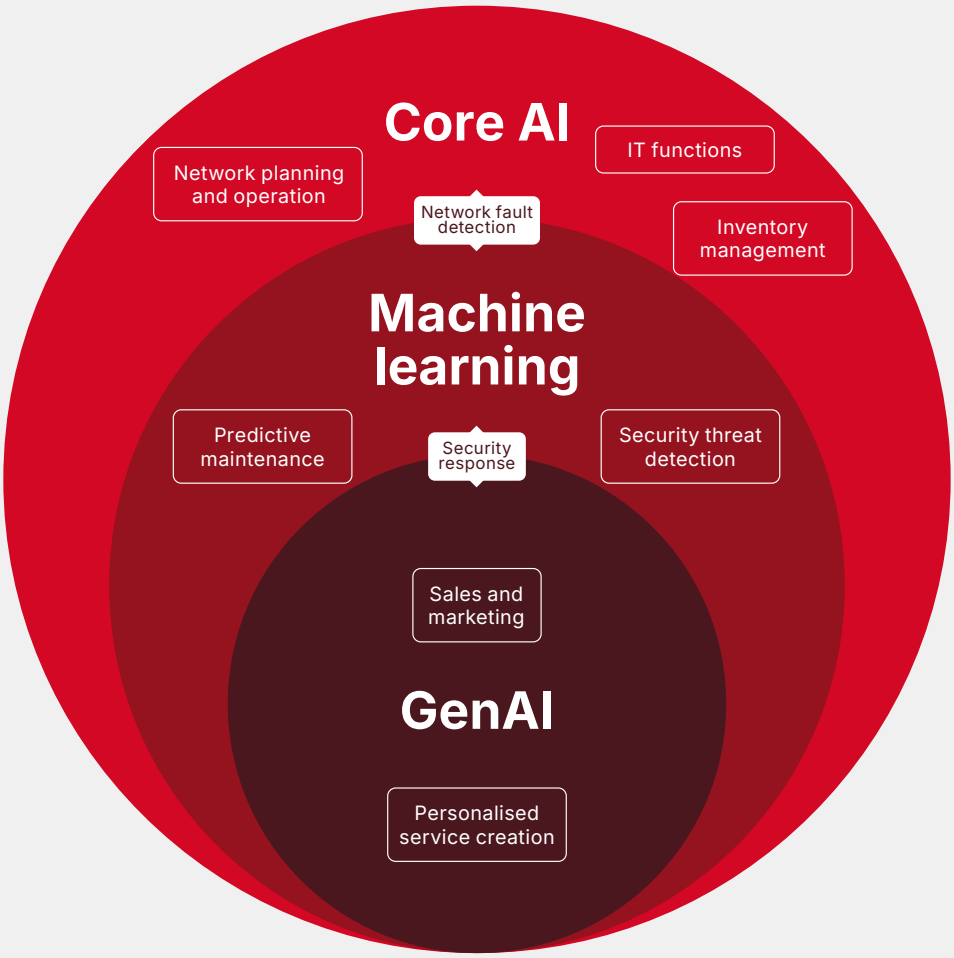
2.2
AI: new opportunities to serve enterprises

The telecoms industry has been at the forefront of AI adoption, with applications in areas such as network operations, energy optimisation, customer call centres and retail operations. In recent years, operators have explored solutions to improve operational efficiency, tackle emerging and sophisticated threats and meet evolving customer expectations. The AI landscape continues to evolve, with new developments and innovations from operators, network vendors, cloud providers and the broader digital ecosystem.

Each advancing level of AI offers different capabilities and/or deeper intelligence. At its simplest, core AI is the application of intelligence in machines. Machine learning extends this by working with larger datasets. Generative AI (genAI) goes further to enable content creation without the need for defined input parameters. Given the plethora of options, the value of AI for operators is a function of selecting the right approach and technology for the right use case.

Figure 12

Examples of telco-specific use cases for AI



Source: GSMA Intelligence

Early deployments have focused on internal solutions to improve performance across the layers of the telecoms value chain, such as network fault detection and automating more of the functions used in customer-care centres. For example, Claro has integrated AI to optimise network performance and enable intelligent customer-support systems.

However, there is a growing shift to developing solutions for the enterprise segment to generate new revenue opportunities from AI capabilities. Operators in Latin America are increasingly integrating AI into their offerings for enterprises and leveraging 5G SA and 5G-Advanced networks to deliver tailored, intelligent solutions across industries:

- **Claro** offers AI-powered chatbots and virtual assistants that handle customer queries, helping to reduce operational costs and improve response times.
- **Vivo's** Aura AI platform, originally designed for customer support, has been adapted to assist enterprise clients with automated troubleshooting and resource management.
- **Tigo** implemented AI to enhance its Tigo Business portfolio, offering enterprises cloud-based AI solutions for data analytics and customer-relationship management.
- **Entel** has incorporated AI into enterprise services, particularly for network management and smart-city initiatives.
- **TIM** targets SMEs with affordable AI-driven tools.

2.3
Renewable energy: powering the future

Increasing the share of energy that comes from renewable sources is a growing priority in telecoms. Operators in Latin America are positioning themselves as global leaders in the adoption of renewable energy solutions. This is being driven by a combination of abundant natural resources, rising energy demand, the need for energy independence, environmental commitments, cost optimisation and regulatory pressures.

Many telcos in the region operate in remote or underserved areas where access to reliable grid electricity is limited or does not exist. In these areas, renewable energy solutions, particularly solar, have become essential to power off-grid base stations. Using renewables improves operational sustainability and can ensure more reliable telecoms services in remote areas.

In addition to using renewables to power infrastructure in remote regions, some operators are integrating renewables into their networks and corporate facilities. This includes the use of solar panels on data-centre rooftops, energy-efficient cooling systems, and participation in renewable energy purchase agreements where available. Energy markets in countries such as Argentina, Brazil and Chile offer enabling conditions for corporate sourcing of green electricity or power purchase agreements (PPAs).

Many mobile operators in Latin America have made significant investments in renewables, especially solar. Expanding the use of renewable energy and energy-efficient solutions will be key to achieving long-term economic and environmental benefits in the region's telecoms sector.

Telecom Argentina strengthens its environmental commitment with new solar agreement

Telecom Argentina has taken a further step in its energy transition strategy, with an agreement for the supply of 60,000 MWh of solar energy annually over the next 10 years. The agreement increases the share of renewable energy in Telecom Argentina's energy mix, enabling it to move towards its goal of achieving 50% renewable energy supply by 2030.

Solar energy is generated at the Pampa del Infierno solar farm, the third largest in Argentina. The farm began operating in August 2024 and has an installed capacity of 130 MW, with 220,300 solar panels spread across 320 hectares. The farm has led to the reduction of 147,600 tonnes of CO_2 emissions per year.

Telefónica Colombia: energy consumption comes mostly from renewable sources

Telefónica Colombia has successfully reduced its carbon emissions (Scopes 1 and 2) by 71% over the past eight years by implementing energy-efficiency policies and using clean, renewable energy sources. Some 89% of the company's total energy consumption now comes from renewable sources – a figure that has doubled since 2019. This has been made possible through more than 1,500 energy-efficiency projects since 2010, and securing 84% of global electricity consumption from renewable sources, with Telefónica in Brazil, Chile, Peru and Europe achieving 100% renewable usage. The company aims to achieve 100% renewable energy across all its operations by 2030.

Measuring energy efficiency

Energy efficiency plays a critical role, but effectively measuring it remains a complex challenge due to the diverse nature of networks, varying traffic patterns and the interplay of different energy sources. Recognising the significance of this issue, the GSMA Intelligence Energy Efficiency Analysis and Benchmarking project helps operators measure and compare energy efficiency across their networks.[1] The initiative provides a standardised framework for assessing energy performance, allowing operators to identify areas for improvement and implement best practices.

1. Going green: measuring the energy efficiency of mobile networks (fourth edition), GSMA Intelligence, 2025

2.4
Global digital transformation survey: enterprise needs and supplier opportunities

Between June and August 2024, GSMA Intelligence surveyed nearly 4,200 enterprises across 21 countries and 10 verticals to gain insight into their digital transformation. The survey included more than 500 enterprises from Latin America (covering Argentina, Brazil and Mexico), providing insight into their strategic objectives, investment plans and priorities, deployment challenges and supplier decisions. The survey also asked enterprises for their views on a range of technologies enabling digital transformation, including 5G, private networks, AI, cloud, edge, IoT, eSIM, cybersecurity and network APIs. Key findings from the survey and the implications for mobile operators include the following:[2]

- **Brazil leads in digital transformation, with Argentina and Mexico in pursuit**

  An assessment of three key aspects of digital transformation (objectives, current use of technologies and projected spend for 2024–2030) ranks Brazil as the leading nation among the 11 low- and middle-income countries (LMICs) surveyed. Argentina and Mexico were ranked seventh and eighth, respectively. While Argentina ranks 10th for digital transformation objectives and the use of technologies, it has one of the highest projected spends on digital transformation. Mexico performs well in both objectives and technology use, but enterprises in the country expect to be more constrained in terms of their digital transformation spend compared to others surveyed.

- **Enterprises aim to enhance customer experience and accelerate decision-making**

  Enhancing customer experience and increasing business agility rank among the top three most popular digital transformation objectives in each of Argentina, Brazil and Mexico. Additionally, improving security is a significant priority across all three countries, ranking first in Argentina, third in Brazil and fifth in Mexico. This reflects the expanded attack surface facing enterprises, as well as the threat posed from new forms of AI and rapid digitisation.

- **5G is seen as highly important to digital transformation**

  In Brazil, 87% of enterprises rated 5G as important to their digital transformation (51% rated it as extremely important), compared to 79% in Argentina and 71% in Mexico. These differences likely result from Brazil's more extensive deployment of 5G networks, which has increased awareness of the technology's benefits. 5G's ability to provide enhanced security and connectivity is the top 5G benefit expected by enterprises in Brazil, along with the ability to introduce private 5G networks, which have begun to gain traction in various sectors, including agriculture, logistics and manufacturing.

- **Brazil and Mexico lead the way on cloud adoption**

  More than half of enterprises in Brazil and Mexico claim to be making advanced use of cloud services – a higher share than in any other low- or medium-income country surveyed. Around 10% of enterprises in both countries report collaborating with operators on cloud services, which is consistent with the share of enterprises that say they work with operators on other major technologies such as cybersecurity, edge computing and IoT.

- **Latin American enterprises explore the potential of genAI**

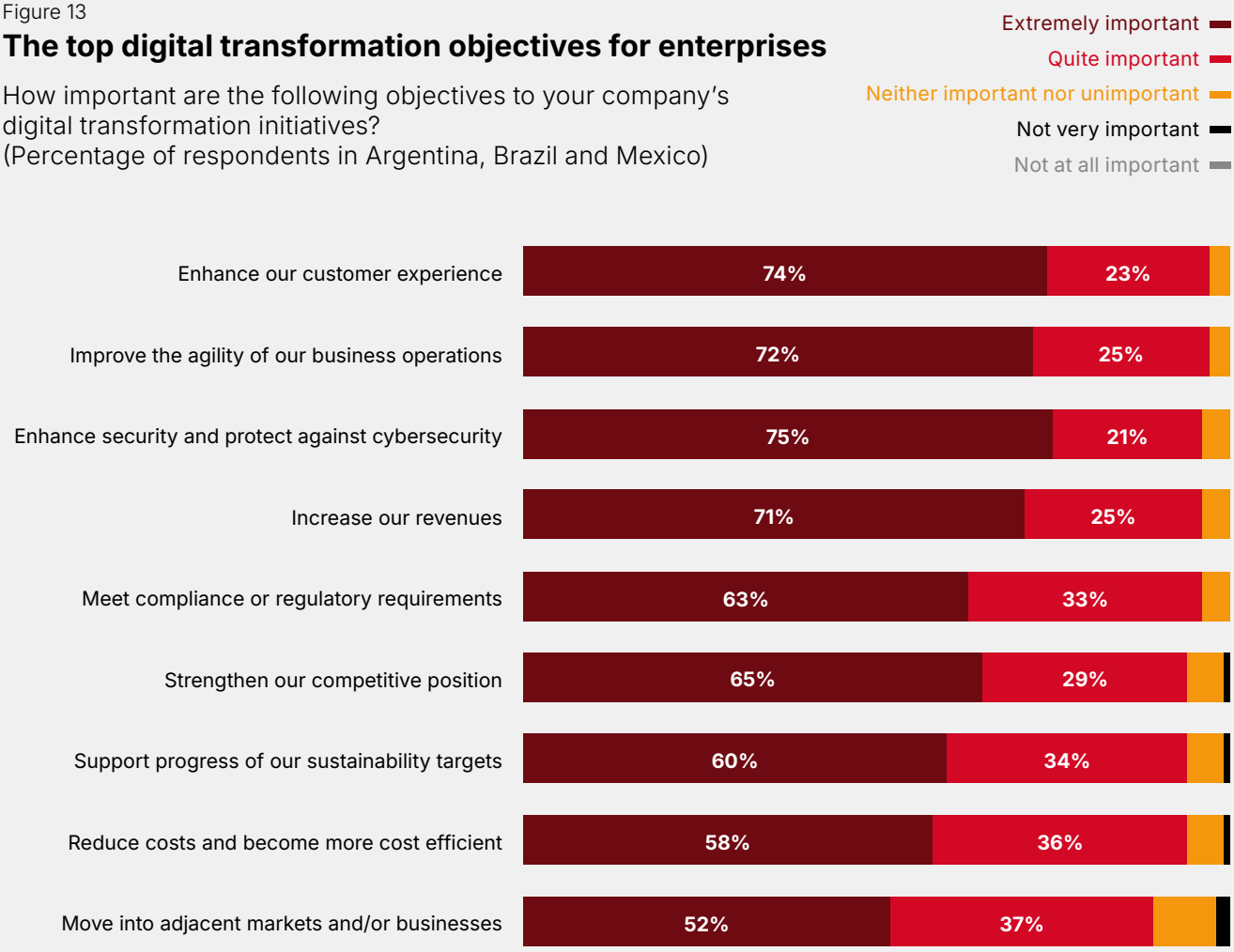
  Around a third of enterprises in Argentina and Mexico are currently making advanced use of genAI services, while this figure rises to 40% in Brazil. The adoption of genAI in all three countries matches or exceeds that of broader AI technology, highlighting the rapid uptake of tools such as ChatGPT across enterprises. When asked about key AI challenges, cost of implementation came out on top in all three countries, with technology integration, security risks and ethical AI concerns also featuring prominently.

2. The rise of digital industries: navigating enterprise needs, investments and supplier decisions, GSMA Intelligence, 2024

Figure 13

The top digital transformation objectives for enterprises

How important are the following objectives to your company's digital transformation initiatives?
(Percentage of respondents in Argentina, Brazil and Mexico)



Source: GSMA Intelligence Enterprise in Focus: Global Digital Transformation Survey 2024

B2B offers significant growth opportunities for mobile operators

Operator strategies continue to evolve as the mobile industry seeks to capture new growth opportunities in the enterprise market. Operators are increasingly pursuing dual strategies: leveraging enhanced, high-speed connectivity (5G, fibre, 5G FWA) to provide incremental value to enterprise customers while ramping up diversification efforts in non-connectivity services.

One potential strategy for operators is to play a technology orchestration role. Enterprises that took part in the survey highlighted operators' expertise in technology integration and working with different ecosystem stakeholders (network vendors, hyperscalers, IoT companies, governments) as two of the top reasons for working with them, alongside their expertise in managing connectivity networks and providing secure solutions. Operators that can combine these skills should be well-positioned to generate new enterprise revenues and build long-term relationships with suppliers and enterprise customers undertaking digital transformation.

2.5
Consumer insights: prospects and challenges for operators

Latin America's digital landscape is evolving quickly, with mobile playing a central role in how consumers connect, communicate and access content. As connectivity improves and digital services expand, user behaviour is shifting in ways that offer opportunities and challenges for the ecosystem. Key consumer insights and implications for mobile operators include the following:

- **Mobile data traffic is rising rapidly**

  Between 2016 and 2023, total mobile network traffic in Latin America increased 14-fold, with an average annual growth rate of 46%. The main contributors to traffic were social media, web browsing and streaming. Research indicates that Meta, Alphabet and TikTok are the primary sources of download traffic in Latin America, generating more than 70% of the total. Recent years have seen significant growth in TikTok's and Meta's shares of traffic.[3]

- **Video consumption to drive increase in mobile data traffic**

  Almost 90% of internet users in Latin America choose mobile as their preferred device for video consumption.[4] This is driving operators to form new partnerships to adapt their pay-TV services to changing consumer preferences in video consumption. For example, Claro Brasil offers three major streaming services (Max, Netflix, Globoplay) alongside its traditional pay-TV channels. Consumers' preference for mobile video consumption will underpin the significant growth in data traffic that is forecast over the next few years (see Figure 4).

3. Mobile network usage in Latin America, GSMA, 2024
4. Panorama del Streaming y tendencias de consumo en América Latina, Comscore, 2024

- **Enhanced convenience with secure applications and onboarding processes**

  Companies in Latin America are increasingly turning to mobile operators to streamline the onboarding process and bolster the security of their mobile apps and services for users. For example, Telefónica recently announced a strategic agreement with ride-hailing app Cabify, which has more than 50 million users across Spain and Latin America.[5] The partnership will see Cabify leverage the Number Verification API to sign up new users in fewer steps. Operators in Latin America have API partnerships with several other companies in the region, including TikTok, Itaú and Daycoval. This highlights the growing role of network APIs in offering enhanced convenience and security features, providing new revenue opportunities for operators.

- **Advances in AI play a growing role in mobile apps and services**

  AI is increasingly widespread in apps used by consumers in Latin America. For example, it was announced in October 2024 that Meta AI will be rolling out in Brazil, Bolivia, Guatemala and Paraguay. The solution helps people get answers to their questions and brainstorm content ideas across Meta's apps, while allowing users to share the results with their networks. TikTok has also introduced a content-generating tool for users in parts of Latin America. The introduction of new AI tools will lead to growth in upload and download traffic across networks.

Operators target new revenue opportunities

Despite increasing adoption of 5G technology and rising levels of user satisfaction, large-scale monetisation continues to pose a challenge for the mobile industry. To achieve faster revenue growth, operators are diversifying their service offerings, bundling services from partners while also introducing their own value-added digital services.

Gaming is a prime example. For instance, Telefónica partnered with Epic Games to pre-install the Epic Games Store on compatible Android devices sold through its networks in Mexico and other markets in Latin America. The partnership enables users to directly access popular games without relying on traditional app stores. Meanwhile, Entel recently launched its own 5G cloud gaming services (Fuze Forge). The service allows users to play and stream games in real time on any device without the need for specific hardware. Such examples demonstrate the different approaches available to operators looking to generate new revenue from consumers services. Finding the right path will be critical to long-term growth and competitiveness.

5. "Cabify integrates our network APIs to streamline its onboarding processes", Telefónica, March 2025

03

Mobile industry impact

Mobile operators have contributed to achieving the UN's Sustainable Development Goals (SDGs), demonstrating their potential to transform communities worldwide.[6] Their efforts reflect how mobile technology can be harnessed for the greater good in building inclusive, sustainable and connected communities.

In Latin America, operators play a critical role in connecting individuals to essential services, including healthcare, education and emergency services.

Operators are also advancing the development of smart cities by using AI and IoT technologies to enhance resource optimisation and efficiency.

Operators make significant contributions to sustainable development by incorporating sustainable practices into their operations while using technology to support broader environmental objectives and make progress with net-zero commitments.

Figure 14

Examples of operator initiatives

Area of impact	Country	Operator initiative
Education	Multiple	**Millicom** (Tigo) launched its educational digital platform in 2024. The platform combines its Conectadas and Maestr@s Conectad@s initiatives in one place, enabling users to access free educational tools and resources. It aims to improve digital literacy, support learning and help bridge the digital divide. The initiative aligns with Broadband Advocacy Target 4 of the UN Broadband Commission, which focuses on promoting digital skills and literacy.[7]
Emergency services	Chile	**Movistar** has launched a portable, private 4G network solution for emergency use. The 4G emergency communications backpack, X4, provides a private network for use in mining, crisis situations and remote areas. The solution is designed to operate in adverse conditions, such as forest fires and earthquakes. In situations where natural disasters cause disruption to existing communication networks, the Movistar solution's LTE/satellite connection can connect up to 100 devices in real time, via radio (VHF, UHF), cellular telephony, and data and video transmission – with the reliability of a 4G network. It establishes a mobile signal known as a "bubble" for critical communications, with a range of 5–72 kilometres (depending on terrain) and 1 kilometre high. It also has a sustainable charge, with a battery life running to approximately 48 hours and connection for solar panels.
Smart cities	Brazil	In partnership with Nouvenn, **TIM** has launched a smart-city solution for real-time remote monitoring of water and gas consumption. Using IoT and NB-IoT devices, the system transmits data to a centralised platform, helping to optimise resource management and reduce waste. It allows users to view devices on a map, receive automatic alerts about failures and leaks, and generate detailed reports for analysis and auditing.
Sustainability	Argentina	**Personal** has signed a 10-year agreement with MSU Green Energy for 60,000 MWh of solar power annually, covering 17.5% of its energy consumption. The operator aims to source 50% of its energy from renewables by 2030. The solar energy provided by MSU from its solar farm in Chaco province will power more than 100 operational telecoms buildings distributed across its network.

Source: operator announcements

6. 2024 Mobile Industry Impact Report: Sustainable Development Goals, GSMA, 2024
7. "Guest article by Millicom shares launch of new Educacion conTigo platform", Broadband Commission for Sustainable Development, June 2024

04

Mobile industry enablers

4.1
Policy decisions today for a sustainable future ahead

Mobile continues to be the main tool democratising access to communications. The mobile industry creates opportunities and jobs. It enables production and innovation, impacting the broader economy. Its development therefore requires coordinated policy across different levels of government and in consultation with the sectors concerned.

Over the years, recommendations on public policy and regulation for the mobile sector have focused on the future of communication networks. The development we envisioned decades ago is a reality now, with 64% of the population using mobile internet in 2024, for example. However, further progress will not happen without continued work by governments and regulators on investment-friendly policies.

Assessing the efficiency of existing regulations and balancing asymmetries

A key aspect of regulation in support of innovation is to base it on principles that allow for *ex-post* action, providing the flexibility to ensure legal certainty without obstructing progress. Reducing the regulatory burden, in partnership with the private sector, can improve the efficiency and coordination of the entire value chain – from infrastructure and connectivity, to services, applications and content.

A comprehensive, strategic approach to policy can significantly enhance the digital ecosystem's influence on economic development, inclusion and opportunities for individuals, businesses and regions. A further best practice is to conduct regulatory cost-benefit analysis using efficiency criteria, eliminating outdated regulations and simplifying those that impede access to communications.

Reforming tax policy to boost mobile adoption

Rethinking tax policy to align with the goal of universal connectivity will help promote investment and increase the adoption of mobile services. This can spur economic growth and digital inclusion. Reducing sector-specific taxes and fees can help overcome affordability barriers and support increasing demand for mobile services.

Avoiding excessive regulatory fees on companies and reducing contributions such as universal service funds (USFs) – which are currently underused and lack impact metrics – can make funds available for operators to keep up with the significant challenges around infrastructure investment.

Poorly designed tax policy has several direct impacts. It reduces operators' ability to invest, increases the cost of access to technology for users, and delays the deployment of new networks.

> **Reducing sector-specific taxes and fees can help overcome affordability barriers**

Planning spectrum policy to underpin connectivity

Spectrum policy is crucial to unlocking the socioeconomic benefits of digital transformation. Key aspects include long-term spectrum roadmaps, the availability of strategic bands for mobile growth, fair pricing, and dialogue with the private sector.

A key reason for the imbalance between spectrum costs and operators' revenues is the design of public policy, which often includes factors that prevent the value of spectrum resources from adapting to market realities. Spectrum pricing should be a tool for efficient assignments. When spectrum costs are set above their true market value, there are negative consequences and distorted investment incentives. Empirical evidence has demonstrated that the total cost of spectrum impacts investment conditions, network deployment and, ultimately, the quality of connectivity experienced by end users.[8]

Timely and adequate access to mid-band spectrum is essential to the development of 5G networks. It provides city-wide capacity. Approximately 65% of the forecast global GDP impact from 5G will come from mid-band spectrum. 5G's total contribution to the global economy is projected to reach $960 billion by 2030, with $610 billion from the mid-bands. In Latin America, the expected GDP contribution from these bands is $41 billion.

Mid-bands are essential to provide the capacity needed by various 5G applications. Securing the 3.5 GHz range is necessary but not enough. It is estimated that 5G will need 2 GHz of mid-band spectrum over the next decade to meet the IMT-2020 (5G) specifications set by the ITU. To keep up with demand, additional bands such as the 6 GHz band will be required.

5G also needs low-band (sub-1 GHz, such as 600 MHz) and high-band spectrum (above 24 GHz). These support different use cases but are critical to 5G success. Only countries with effective spectrum policies will be able to unlock the transformative potential of this new technology and position themselves as leaders in the evolving digital economy.[9]

Ensuring network sustainability: each part of the value chain has a role to play

Between 2016 and 2023, mobile data traffic in Latin America increased 14-fold. Looking ahead, between 2024 and 2030, traffic is forecast to triple.[10] Each year, the volume of mobile traffic will surpass that of the previous year. Exponential growth in traffic jeopardises the sustainability of the current network financing model. GSMA Intelligence research estimates that three companies – Meta, Google and TikTok – generated 70% of the total download traffic in Latin America in 2024, with Meta alone accounting for nearly 50%.[11]

It is time to make decisions that ensure the sustainability of infrastructure networks. The 'fair share' proposal involves creating a regulatory or policy framework that enables agreements between mobile operators and large traffic generators (LTGs) to ensure networks are used efficiently. Due to significant regulatory asymmetries, imbalances in market power and a lack of adequate incentives, such negotiations – which would secure the digital future – are not currently possible.

Negotiations could result in direct monetary compensation or technical agreements for traffic delivery, among other potential options. An agreement that allows network operators to anticipate traffic volumes and secure the necessary investment to deploy, upgrade and maintain the infrastructure that connects millions of people would be a step forward.

8. Spectrum management in Latin America, GSMA, 2023
9. 3.5 GHz: 7 pasos para liberar un rango clave para el éxito del 5G, GSMA, 2022
10. Large traffic generators and efficient network use: myths and realities, GSMA, 2024; Mobile network usage in Latin America, GSMA, 2024
11. See www.gsma.com/about-us/regions/latin-america/fair-share/

Figure 15

Myths and realities of fair share

Amount of traffic does not affect network costs.	Investment in base stations, spectrum and technology upgrades depends on the amount of traffic to be managed.
Charging platforms directly is equivalent to charging users twice for a single service.	Networks are a two-sided market. While users pay to access content, major platforms should also pay to transmit and monetise that content, as they rely on networks to reach users.
Fair share undermines net neutrality.	Payments are in line with the principles of non-discrimination and the openness of the internet, as they can be applied by unit of data to large-scale providers, rather than by type of traffic or specific provider.
Major traffic generators already invest in infrastructure.	Platforms invest in transmitting their content between their servers, but mobile operators finance access networks, which account for 85% of the infrastructure investment required.
Operators could charge end users for the traffic volume they generate.	Users do not control the number of ads they see or the quality of online videos. Platforms have the ability to streamline the traffic they transmit and make more efficient use of networks.
Direct payments for network usage are rare because the current model is accepted by the market.	The possibility of operators and major platforms entering into agreements is limited by existing regulations or power asymmetries that favour platforms.

Source: GSMA

Bold decisions are needed today to ensure an equitable and resilient future. Modern, flexible and evidence-based regulatory frameworks will be key to unlocking the full potential of the mobile sector and accelerating digitalisation for the benefit of people across Latin America.

GSMA Head Office
1 Angel Lane
London
EC4R 3AB
United Kingdom