



# Pathways to profitability for CSPs



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# Industry shifts and trends

Communications service providers (CSPs) have an opportunity to drive revenue growth, deliver products and services that delight their customers and improve profitability and margins—all while elevating their role in tomorrow's digital ecosystem. Those leading the pack are charting transformative pathways to profitability.





# Overview

**The communications industry and ecosystem are rapidly evolving. The next several years are critical.**

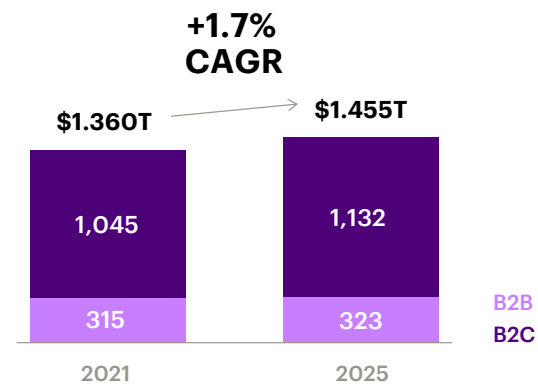
Over the past two years, there has been a significant shift in how we connect and are entertained, in the way we work and conduct business, and in the way our social, economic and government institutions are run. Disruptive forces, like the pandemic, global conflicts, supply chain disruptions and now broad-based inflation, have upended the economy and all industries. These forces are redefining the rules for how communications service providers (CSPs) approach both their consumer and business customer segments, as well as their own business operations, technologies, products and networks. At the same time, we live in an increasingly digital and connected world. Data traffic is increasing 24% per year, rising to 1.8 million petabytes by 2026.<sup>1</sup> In 2022, smartphone penetration reached 81%<sup>2</sup> and Internet of Things (IoT) connections hit 2.5 trillion.<sup>3</sup> This same year, the e-commerce market reached a value of \$5.5 trillion.<sup>4</sup>

Despite this growth in traffic and usage, CSPs are trapped in often hypercompetitive markets where they lack pricing power, and in which their traditional sources of growth are under increasing pressure. CSP revenues are only expected to grow at a compound annual growth rate (CAGR) of 1.7% from 2021 to 2025.<sup>5</sup> Returns on capital globally are in a multi-year decline and debt loads are approaching their limits. Communications industry valuations are underperforming the broader market.

On top of the competitive markets and falling ARPU, inflation is driving operating costs higher with wages and other input costs rising in most markets. This lack of revenue growth, paired with rapidly rising costs, is creating a classic margin squeeze across the industry. To make matters worse, an investment cycle is underway in which telecoms are required to invest in 5G and fiber to maintain competitive parity with their rivals. These builds are driving substantial capital expenditures and supply chain pressure as telcos race to deploy more advanced networks.

### Traditional connectivity services show moderate growth

B2B and B2C connectivity show slow annual growth

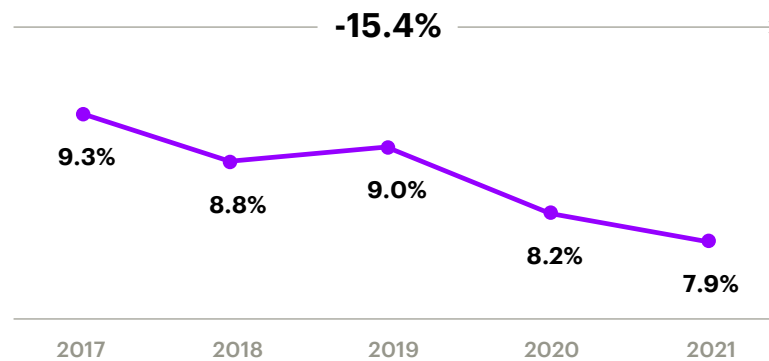


Source: Analysys Mason DataHub (Business); Gartner, Forecast: Communications Services, Worldwide 1Q22 (Consumer)

### Returns on investment for Comms companies are declining

Returns on capital globally are in a multi-year decline

#### Average Comms Pre-Tax ROIC

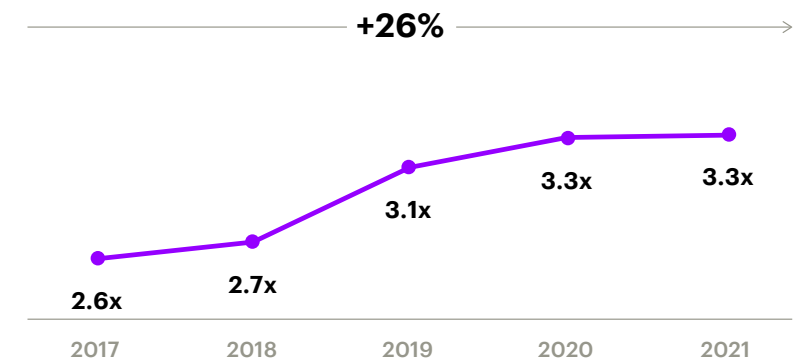


Source: CAPIQ, based on 36 largest Comms companies worldwide, Accenture analysis, [Link](#)

### Debt reaches new heights

Increasing debt loads to mask lackluster growth is quickly approaching its limits

#### Net Debt / EBITDA



Source: CAPIQ, based on 36 largest Comms companies worldwide, Accenture analysis, [Link](#)

# The window of opportunity

**The communications industry has reached an inflection point.**

There is a window of opportunity for CSPs to digitize their businesses in a way that delights their customers and employees while enabling them to reduce their operating expenses and improve their margins.

The connectivity provided by CSPs connects all elements of our economy and society—something we become acutely aware of when there are network outages (such as the one that struck Canadian consumers in the Summer of 2022). Telecommunications networks have become something that we expect to be always on and always available to connect our devices, our apps, our cars, our homes and enable multiple critical services (e.g., healthcare).

**The irony of the situation is that even though CSPs provide us the networks we need to live our modern lives, their own business models and operations are often hampered by legacy systems and processes anchored in a different era.** We see this disparity when we order a meal from UberEats and track the order from inception through to completion on our mobile phones, but often struggle to get an 8-hour window in which a technician will come to our home to install or repair an internet connection.

Fortunately, we've reached an inflection point in the industry in which modern technology and ways of working can be deployed to enable CSPs to better run their businesses—a trend that has helped leading companies improve their fiber and 5G deployment with analytics and cloud technologies, to better run their network and device supply chains, to deploy AI into their operations and customer care centers and to better segment and target their customers with products and offers that will delight them. **The journey is far from over, but there is a path for CSPs to transform their businesses to be agile, digital and customer centric in order to improve the efficiency of their business and to drive improved margins.**

Trend #1

# New business models, products and services

**Growth can only come from innovation.  
Partnerships can accelerate progress.**

Increased digitization is a strategy that many CSPs are employing to improve margins and efficiency, but it's often not enough in a multi-competitor market. Typically, market dynamics allow for one major low-priced digital competitor... it's not a path that all can follow. The question becomes: what core, adjacent and net new products and offers can the CSP bring to market to create competitive differentiation and attract a profitable customer base?

One path that a number of CSPs are currently following involves engaging with ecosystem partners to develop non-core offers and move into new and adjacent spaces. The hypothesis is that new go-to-market ecosystems will drive growth beyond connectivity, propelled by partnership with a shift from vertical integration to open ecosystems. CSPs will adopt user-centric and data-driven open platform architectures to onboard ecosystem services.

Importantly, talent becomes a critical enabler of these new capabilities and services, and CSPs will need to develop new skills and talent pools to meet the demands of this new era. As an example, a representative from TELUS recently noted at an industry conference<sup>6</sup> that they were in the process of building a software development team to specifically support their home services offerings, which include TV, Security, Health and products not yet announced.

Telcos that partner with players in adjacent industries are designing next-generation use cases for greater long-term value: over the last two years, CSPs have established more than 200 partnerships with cloud providers,<sup>7</sup> of which 80% sell or resell B2B services and applications.

# CSPs selected collaborations with MAAGS on strategic cloud edge initiatives



Edge solutions for IoT, AI, AR/VR on Verizon 5G network.



Wavelength at the Edge of Vodafone's 5G network



Analytics solutions for cybersecurity threat intelligence



Leveraging Telefonica's infrastructure for 5G, Edge and Industry 4.0



Solutions for voice, collaboration, conferencing, cybersecurity, Edge computing, IoT and public safety



Go-to-market hybrid Cloud and Edge computing



Enabling AWS for IOT, VR, Autonomous vehicles



Trend #2

# Evolving customer expectations

## Connectivity has never been more important.

The metaverse is emerging as the next version of the internet. Consumers expect privacy, security and sustainable practices from their providers. Over the past two years, connectivity has soared to mission critical status for both consumers and businesses. Home is central to personal and professional interaction, and digital continues to become the new default for sales and service. B2C home devices and services revenues have a growth opportunity of 18.5% CAGR between 2021 and 2025, globally,<sup>8</sup> with 36% of consumers expected to work at home more in the future.<sup>9</sup>

Changes in consumer behavior and expectations have been accelerated by the pandemic, while key technologies including artificial intelligence, virtual reality (VR), augmented reality (AR), 5G and blockchain are converging and maturing. This, along with IoT and extended reality (XR), is expected to drive substantial growth in data traffic over the next five years. The metaverse is rapidly evolving as the next version of the internet and is expected to drive a 20x increase in consumption of data over the next 10 years.<sup>10</sup>

Expectations are also increasing around the privacy, security and sustainability<sup>11</sup> of technology applications. Two-thirds of global consumers (67%) expect companies to use technologies to solve society's large complex problems because it will benefit them and their communities.<sup>12</sup> Global CSP executives report concern over deepfakes and/or disinformation attacks. Among the top concerns are IT/security breaches, fraud, scams, reputational threats and damage.<sup>13</sup> Consumers and employees alike expect companies to implement comprehensive environmental, social and governance (ESG) strategies and practices.

## ESG practices are top of mind for consumers and employees

**76%** of the reimagined consumers are attracted to doing business with brands that source services and materials in highly ethical ways.

**40%** of millennials have taken a job because of the company's sustainability.

**70%** of customers are concerned about data privacy and commercial tracking associated with online activities.

**66%** of customers are concerned about the commercial use of personal data for personalization purposes as they are about security threats and hackers.



Trend #3

# Technology revolution

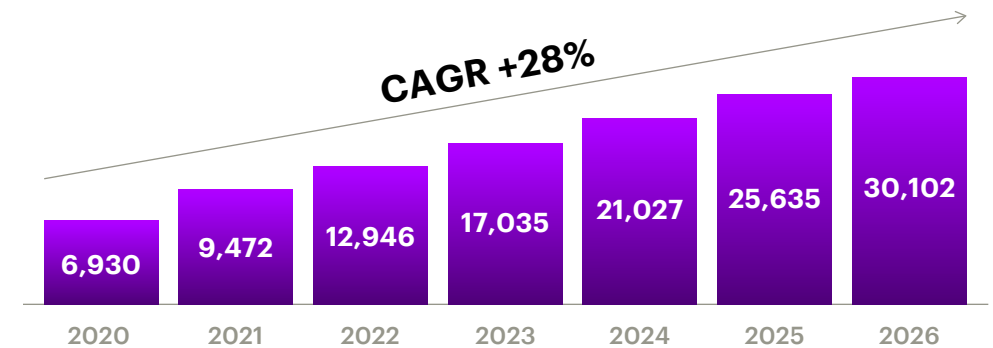
## Advanced technologies create new opportunities. Competitive advantages will only be achieved through wise deployment.

From cloud to AI, creative and innovative players in the market are incubating new possibilities.

Numerous CSPs are embracing cloud data platforms to drive their data-driven reinvention. Cloud and edge are emerging as the key control points to open new business opportunities for the market. Multi-access edge cloud revenue is expected to grow from \$3.5 billion in 2020 to \$16.7 billion in 2025, CAGR 20-25: 37%).<sup>14</sup> IoT deployments at the edge are growing 11% annually.<sup>15</sup>

The network cloud infrastructure market is projected to grow by 28% to \$30 billion by 2026 with virtual Radio Access Network (vRAN) as the biggest driver of growth with a CAGR of 58% between 2021 and 2026.<sup>16</sup> The value of the network automation and orchestration market will reach \$16 billion by 2027, growing at a CAGR of 9.3% 2022 to 2027.<sup>17</sup>

Network cloud infrastructure total market (\$M), 2022-2026



As CSPs continue to push toward Open RAN and cloud networks, the possibility exists that they will enable a new set of business opportunities and transformation challenges. Reaping the benefits involves stepping out of the role of a delivery system and into the role of an end-to-end solution orchestrator.

# Our point of view: pathways to profitability

**We have identified five paths that can guide CSPs through the transformation and business reinvention processes. These pathways to profitability are accelerators for growth and value, which can guide CSPs on their journey to deliver products and services that delight customers, improve profitability and capture the window of opportunity to elevate the CSP role in tomorrow's digital economy.**

The pathways to profitability capitalize on the strong foundations of the communications industry's business, the opportunities that are emerging and the urgency with which telcos must capitalize on those opportunities.

Our pathways to profitability run along the core, platform and infrastructure-based continuum and across B2C and B2B. They are complementary and enable CSPs to build capabilities in a modular way.

# The future of networks

Establish the foundation for a new era of connectivity, leveraging cloud, AI and analytics for speed and value.



# A new network opportunity

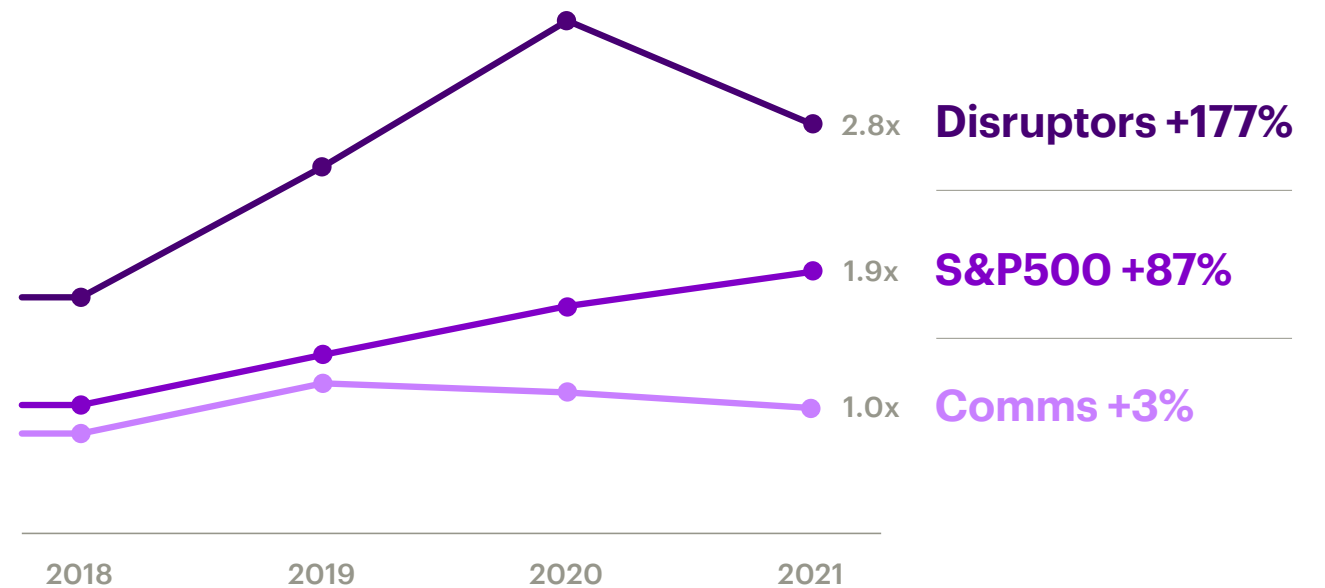
**The communications industry, as a whole, is underperforming compared to the broader market.**

New technology frontiers are emerging for CSP networks, but adoption of new cloud-based network infrastructure varies widely.

Virtualization, cloudification, disaggregation and open interfaces are driving significant shifts in how networks are designed, deployed and operated.

For instance, Open RAN is generating a new supply chain where disaggregated network components are supplied by diverse partners versus a single integrated network stack from a vendor in the past.<sup>18</sup> Open RAN activity is growing in different regions and by April 2022 there were 33 deployments in total,<sup>19</sup> with Europe and Asia-Pacific accounting for the largest proportion of Open RAN and vRAN deployments in commercial networks.

Market capital index



# The enterprise network landscape is shifting

## CSPs are exposed as nascent competitors are capturing share.

As enterprise-sized companies shift their technology platforms to the cloud and their models allow for more virtual engagement, their telecom needs—and expectations—are changing. Enterprises today are just as likely to purchase connectivity to the cloud or a private network and then have a third party deploy the technology to interconnect their systems.

As enterprises shift, new models like Network as a Service (NaaS) create customer value by moving from a perpetual capex model to a flexible consumption model. IDC estimates overall enterprise network infrastructure spending will hit \$45 billion in the next four years, with NaaS accounting for \$15 billion—a full third of the total.<sup>20</sup> CSPs that can tap into the demand for NaaS are more likely to outperform peers across the business services space.

Private networks are emerging as customized and fit-for-purpose networks. Worldwide revenue attributable to the sales of private LTE/5G infrastructure will grow from an estimated \$2.8 billion in 2022 to an estimated \$8.3 billion in 2026. LTE RAN kit will comprise the bulk of spending over the period, with 5G radios seeing stronger adoption toward the latter portion of the forecast.<sup>21</sup>

CSPs' operating models need to be harmonized with new network architectures, and will require a workforce with modern network engineering expertise. This may entail reskilling, hiring or working with a partner. Telcos must transform and build capabilities across customer experience, technology stacks and network, plus have operating models capable of supporting cloud-native public networks, NaaS, private network deployments and new edge services.



# The connected consumer

Use data and consumer trust to become the ecosystem control point for the “connected life.”



# Finding new growth

## **CSPs face core business stagnation and loyalty pressures in consumer markets. Competition is accelerating as challengers employ innovation and new tech.**

Fixed and mobile average revenue per user (ARPU) has declined 27% in the past ten years<sup>22</sup> and 88% of operators feel mobile data has already reached commodity status.<sup>23</sup> Digital giants and device manufacturers are firmly entrenched, while innovation-first new entrants are seeking a piece of the environment where entertainment, commerce and people's digital lives play out.

With customers and segments already saturated, finding new growth remains challenging. New customers spend only a third of established customers, but retaining loyalty is an uphill struggle and net promoter scores (NPS) are low. Churn rate in the telecom industry appears high still, with low barriers to churn and increasing non-contract device ownership.

## **For those willing to adapt, opportunity abounds in non-traditional digital services. Telcos are positioned to capitalize, but time is of the essence.**

The traditional B2C model may be commoditized, but an opportunity exists in adjacent and new digital services. Global smart home revenue is expected to reach \$184 billion by 2025,<sup>24</sup> and the digital health market will reach \$256 billion by 2027.<sup>25</sup> The potential global metaverse addressable market could be as high as \$13 trillion by 2030.<sup>26</sup>

CSPs can rely on a strong set of inherent strengths and capabilities including customer data, trust (especially earned during the pandemic) and extensive networks and distribution presence. They may be able to capitalize on control points like consumer identity, billing relationships and physical hardware. These control points are the main interaction points with customers and present an opportunity to continuously collect and correlate customer data and preferences.

Lastly, 5G is a critical component to realizing the metaverse opportunity, sitting at the intersection of always-on 5G devices, edge, AI and IoT, and linking these disparate features. This highlights CSPs' critical part in the current \$630 million (2020) XR opportunity—expected to grow to \$4.84 billion by 2024.<sup>27</sup>

Global smart home revenue is expected to reach

**\$184 billion**

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The potential global metaverse addressable market could be as high as

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# A connected consumer platform

**CSPs must dive deeper into the consumer market and expand their offerings. Telcos are well positioned to increase consumer relevance and engagement.**

Two strategic options exist for CSPs to overcome commoditization—playing the role of a B2C services aggregator or delivering a connected consumer platform—but it is the platform proposition that allows CSPs to maximize reach through a connected ecosystem of partners and customers.

A connected consumer platform approach would offer consumers personalized experiences through a deep understanding of customer preferences. Offerings could easily be coupled and decoupled on the platform, including highly personalized and integrated self-owned and third-party services beyond core telco connectivity. These offerings could penetrate the consumer's daily digital routine, leveraging the control points, data and ecosystem partnerships.

**Connected consumer platforms play to telco strengths. CSPs must develop their talent and an ecosystem mindset.**

With an ecosystem mindset, CSPs can explore use cases in the home, health-tech, gaming or financial services, to name a few. Initiatives like Smarthome combine the benefits of a platform environment with the strengths of a CSP. With the network as a control point, Smarthome can monitor, automate and measure (MAM). The MAM features are generic and adaptable enough to create multiple new business lines acting as a flywheel of invention—generating new opportunities as momentum builds and perpetuating the cycle of invention.

Telco innovation that starts in the home can become a creature comfort everywhere. By delivering new and engaging services in consumers' daily life, CSPs can expand their consumer reach into new horizons. These new services not only contribute to revenue growth, but also increase engagement and the uptake of core connectivity services. It is a win-win scenario. The realm of the consumer market is expanding, and CSPs' diversified offerings can be as valuable as they're willing to make it.

## Case study

# A connected home platform

A North American Communications provider understood that connectivity to the home was not enough; consumers expect connected and personalized experiences within and beyond the home as well.

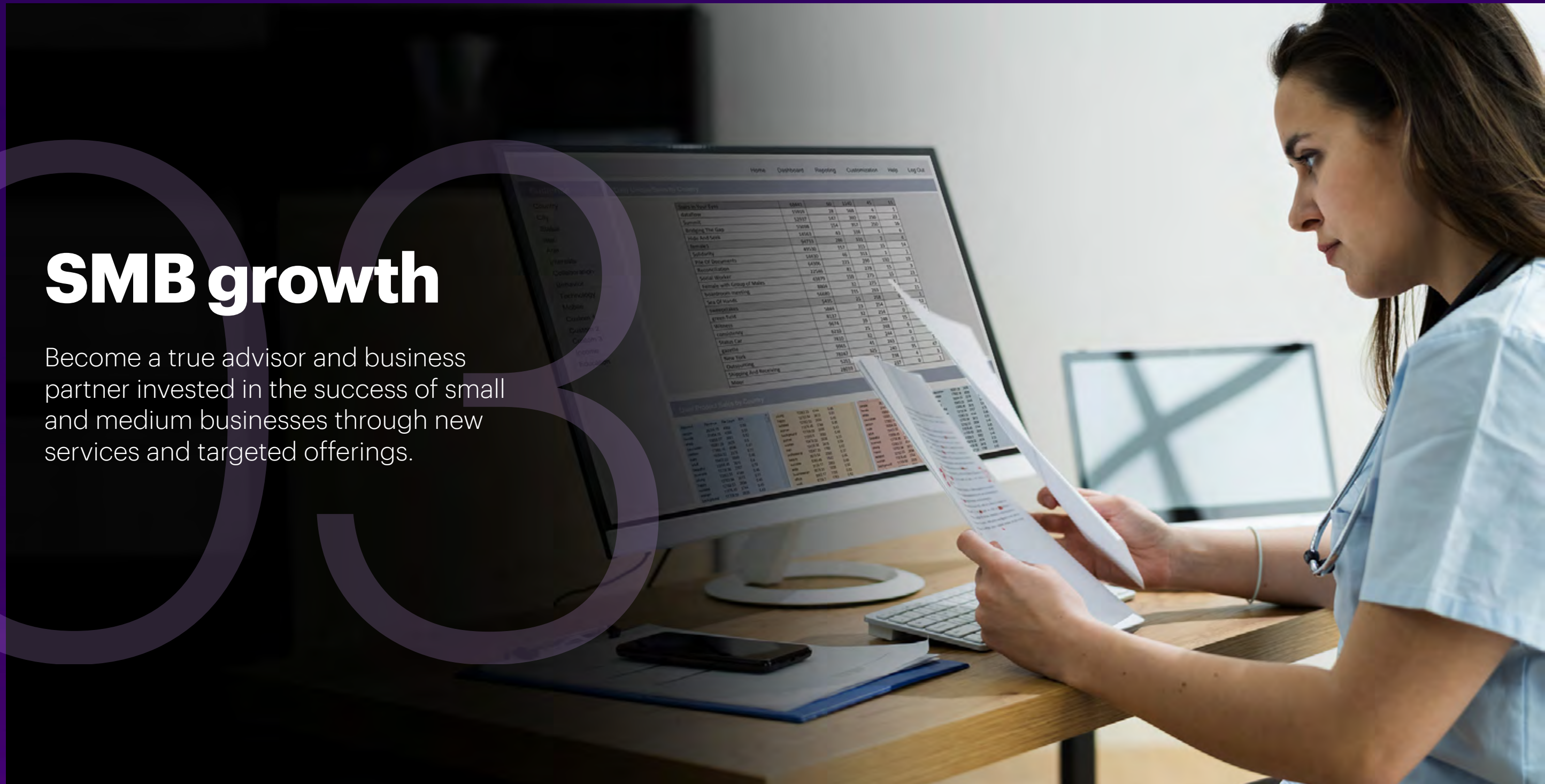
Collaborating with the ecosystem through partnerships and acquisitions the CSP has been able to venture into various part of the Home automation value chain including security & safety, entertainment and utilities management.

It has made it easy for its consumers to experience these different services through a single Integrated Home App, that is also capable of onboarding other compatible devices.



# SMB growth

Become a true advisor and business partner invested in the success of small and medium businesses through new services and targeted offerings.



# SMB growth in connectivity and IT solutions

**Small and medium-sized businesses (SMBs) are an economic engine driving sustainable growth and social impact. They are fundamentally changing the way they operate in the wake of the pandemic.**

SMBs represent a crucial part of the global economy, by some estimates contributing up to 70% of global employment and 55% of GDP in developed countries.<sup>28</sup> The COVID-19 crisis had a significant financial impact on SMBs worldwide in 2020. However, about 60% reported improved performance during 2021 and got back to functioning “more normally,” albeit in a changed environment.<sup>29</sup>

SMBs anticipate that approximately 41% of their employees<sup>30</sup> will work remotely, at least some of the time. This means that many SMBs expect to increase their spending on improved connectivity for remote employees and both cloud-based and on-premises infrastructure solutions to support business expansion, security and remote working.

**Telcos are well-positioned to assume the trusted partner role for SMBs.** CSPs are among the top three providers SMBs rely on to implement information and communications technology (ICT) solutions. With 45%<sup>31</sup> of SMBs reporting increased trust in their CSPs, telcos can build on these strengthened relationships to bundle new ICT services.

SMBs expect to increase their reliance on channel partners for strategic help beyond just IT support. But 30–40% reported switching their IT services partners in the last year.<sup>32</sup> This should be a concern for vendors and providers, as it suggests the need to improve their performance in satisfying SMB requirements.

60% of SMBs prefer to purchase their cybersecurity solutions in conjunction with other services (such as connectivity or IT services), and this tendency increases with the size of the company.<sup>33</sup> This gives providers and operators a strong opportunity to upsell security services to customers that take other solutions.

SMBs are looking for vendors and partners that can offer a mix of automation tools, self-service, rich communications and support. Telcos need to leverage automation, AI, data and analytics to enhance marketing, sales and support.

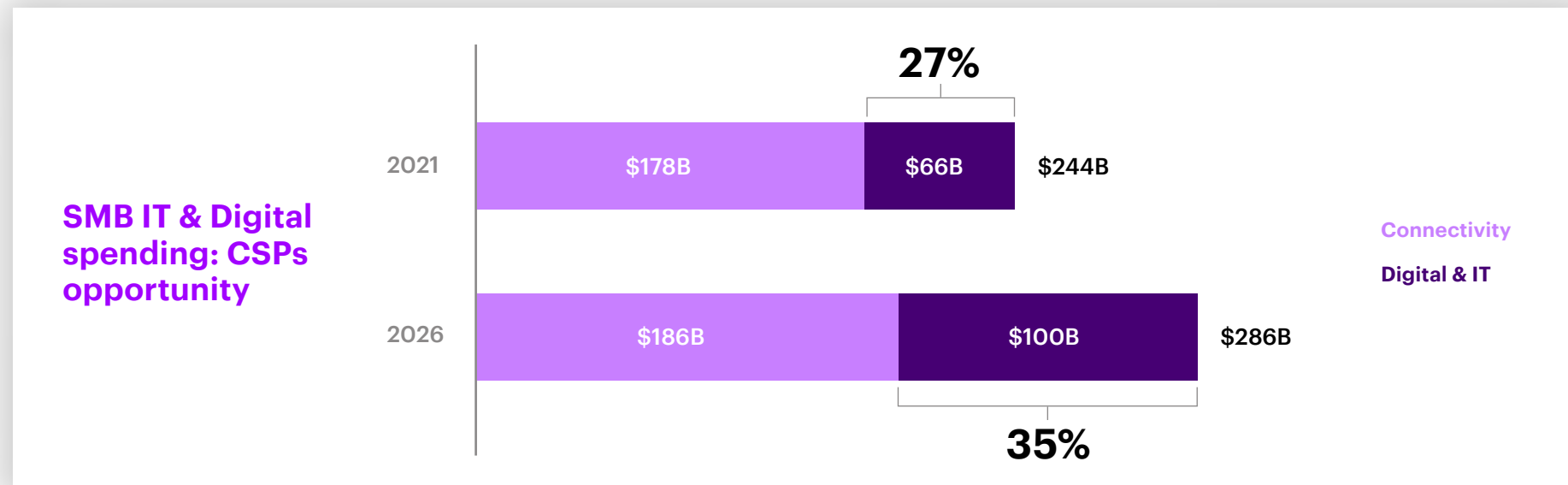
**60%**  
of SMBs prefer to purchase their cybersecurity solutions in conjunction with other services (such as connectivity or IT services), and this tendency increases with the size of the company.

## IT services represent a growth opportunity

While traditional connectivity is expected to grow by only 0.9% in the next five years, in the same timeframe Analysys Mason estimates that CSPs' SMB digital and IT services could grow by 8.7%, from \$65 billion in 2021 to about \$100 billion<sup>34</sup> in 2026. However, CSPs have just 5.5% of the global market for SMB IT.

Telcos are investing in solutions such as e-commerce, touchless transactions and digital marketing solutions to facilitate sales. Many SMBs reported that their current IT budgets are higher than prior to the start of the pandemic, and over 70% of the SMBs surveyed<sup>35</sup> plan to increase their IT budgets in the coming year.

SMBs are also expected to invest in financial and front-office apps, networking, storage and infrastructure solutions (cloud, on-premises and managed services) and solutions that manage security and devices. Spending will include IT and managed services, unified communications, security, devices, digital marketing, advertising and cloud—with significant increases on collaboration solutions, Software as a Service (SaaS), Infrastructure as a Service (IaaS), Platform as a Service (PaaS), co-location and hosting, with some categories showing double-digit growth.<sup>36</sup>



**CAGR + 16.6%**

IaaS

**CAGR + 13%**

Cloud applications

**CAGR + 13.6%**

Mobile security

**CAGR + 12%**

Collaboration solutions

**CAGR + 10%**

Digital marketing



# The new SMB relationship

**SMBs need solutions that support remote work, improved efficiency and data security while powering sales acceleration. Telcos are well-positioned, with personalized solutions at the right price.**

CSPs can address the dramatic shift in the SMB landscape but have to be able to develop the necessary offerings. SMB service providers understand most of their needs, but struggle to execute, with only 41% of enterprise companies having a centralized team to support SMBs.<sup>37</sup>

There is an opportunity for CSPs to create new value propositions and provide access to digital services such as security, edge computing and cloud storage. Stepping away from traditional linear sales models, they can instead build a service marketplace model and be an orchestrator bringing providers together in a partnership ecosystem platform for SMBs.

To manage their own customers and to engage with them digitally, SMBs are prioritizing the digitalization of their operations.

Claiming the value of ICT services in a market that represents more than half of the GDP of developed countries is enticing but not easy. Making headway in this market will require that CSPs capitalize on their relationship of trust with SMBs, provide differentiated and guided experiences, and power customer service experiences with AI. They need to enhance customer relationships and expand both channels (like metaverse) and impacts. Partnership models are critical and must evolve to an ecosystem partnership model for new services.

## Case study

# Managed security services for SMBs

A European CSP wanted to elevate its relationship with its SMB customers, to become a trusted partner for their business resilience and growth.

The CSP partnered with Accenture to bring world-class managed security services to SMBs. Accenture and the CSP have also been jointly investing in security innovation to help keep organizations safe as new threats emerge.

The services will help SMBs be more resilient to cyber threats, providing leading cybersecurity talent and industry expertise to organizations that do not have the capacity, time or resources to keep up with this rapidly evolving space.





# Large enterprise orchestration

Build horizontal and vertical end-to-end solutions that demonstrate the power of 5G, connectivity, edge and security.



# The 5G, edge and enhanced connectivity opportunity

**Enterprises are becoming more distributed and expanding to edge computing use cases. Digital transformation means CSPs need to accelerate the acquisition of edge capabilities.**

Large traditional connectivity services are expected to continue to decline over the next four years, whereas digital and IT services are expected to grow between 8% and 14% in the same period.<sup>38</sup> 5G, edge and enhanced connectivity could open new revenue streams. By 2024, 60% of enterprises will have implemented SD-WANs to enhance agility and support for cloud applications, up from more than 20% in 2020.<sup>39</sup> Private connectivity to the cloud will grow steadily with a 17.3% CAGR coupled with the need for guaranteed performance and security for mission-critical workloads in distributed cloud architectures.<sup>40</sup>

Private connectivity to the cloud will grow steadily with a 17.3% CAGR<sup>41</sup> coupled with the need for guaranteed performance and security for mission-critical workloads in distributed cloud architectures.

Driven by 5G, IoT communication services will grow by 7% to \$62 billion<sup>42</sup> in 2025. The expansion of 5G services will be one of the core drivers of revenue growth for CSPs, as operators begin capitalizing on advanced use cases in industrial IoT. Apart from vertical (x-industry) use cases, CSPs can capture additional revenue streams on IoT from high-growth segments like software platforms (real-time analytics and IoT platforms) as well as security and IT services reaching a total market of \$115 billion in 2025<sup>43</sup> and a total CAGR of 29%.

Apart from vertical use cases, CSPs can capture additional revenue streams on IoT from high-growth segments like software platforms as well as security and IT services reaching a total market of

**\$115B**

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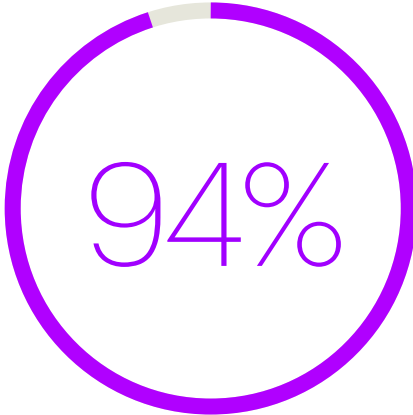
# Importance of 5G on specific use prioritized by Enterprises



## Natural Resources

### Environmental monitoring direction

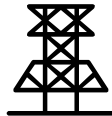
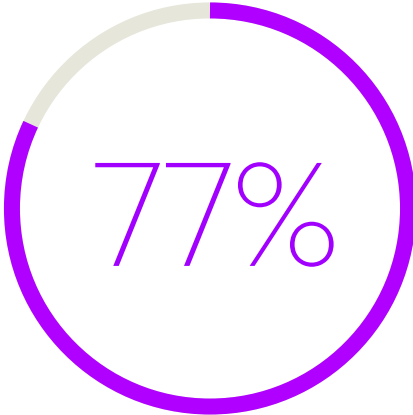
5G network could offer more transparency that lets enterprises avoid environmental disasters.



## Manufacturing

### Waste identification and management

Monitor, reduce and manage waster of raw resources and production output.



## Utilities

### Intelligent grids

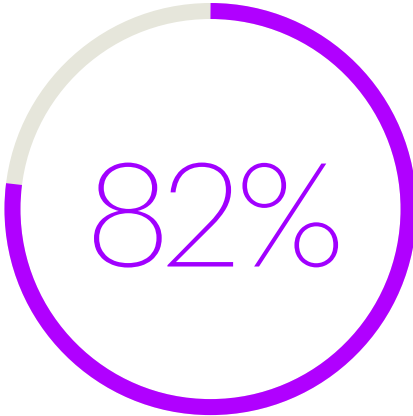
Enhanced and real-time connected grids, which includes automated infrastructure inspection, remote monitoring and distributed energy management.



## Retail

### Supply chain optimization

Create visibility and transparency within the retail supply chain to work towards zero-waste goals and optimizing demand forecasting use cases.



Digital business solutions increasingly demand faster data distribution and reduced latency, requiring more data management and processing outside of cloud and traditional data center environments. IoT deployments at the edge are growing 11% annually, and data production at the edge will continue to grow even faster. By 2027, machine learning in the form of deep learning will be included in over 65% of edge use cases, up from less than 10% in 2021.<sup>44</sup>

## **Telcos have not yet been able to exploit B2B and enterprise market potential. IT and connected industries are an opportunity to unlock new revenue streams.**

Telcos have not been able to fully exploit B2B and connected industries market potential for a number of reasons:

# 01

Their front line lacks the skills and abilities to effectively sell these new solutions.

# 02

It's unclear whether CSPs have brand permission from enterprises to transform their businesses.

# 03

CSPs often lack clearly defined, repeatable solutions that leverage 5G to transform the business.

Still, many CSPs are forging ahead into this space as they seek to both replace declining enterprise revenue and to monetize their 5G investments.

# Horizontal and vertical use cases

## Discover new use cases. Capitalize on existing operations and infrastructure.

Connected industry solutions offer the best opportunities for growth. CSPs can power the next connected industrial revolution through the mesh of 5G, cloud and edge computing. To expand the horizons of Industrial IoT for digital manufacturing, smart cities, smart buildings and beyond, while also monetizing horizontal services on the platform.

Building on their existing infrastructure, customer intimacy, operations and skilled B2B workforce, telcos are best suited to plant their flag as the connected industries orchestrators. The journey could include cloud-based portfolio extension and edge cloud monetization services.

Large enterprise orchestration is fully dependent on cloud and/or dedicated networks. Telcos are already entrenched and are well positioned, but orchestration capabilities can only come from new technologies. An enterprise-based pathway to profitability could include an ongoing process of building the connected-cloud foundation, creating the connected-cloud platform, onboarding and innovating with the ecosystem and finally becoming the vertical industry technology partner.



# Case study

## 5G, cloud, and AI-powered smart manufacturing

A large CSP with multi country operations and Accenture are working with a global Automotive manufacturing company, to increase productivity, safety and business agility of its operations by integrating video analytics, AI, cloud computing and Internet of Things into its manufacturing processes.

In addition, the low latency and high data threshold of the 5G network, real-time transmission allows for immediate quality inspection of their products.

This will allow the company to better address quality, safety, compliance and production efficiencies now and in the future, transforming it into a digitally enabled manufacturing company.



# Industry restructuring

Create innovative business structures to focus on core and differentiating capabilities and streamline investments.

Telcos have unlocked value by re-structuring their businesses—spinning off parts to drive increased shareholder value.

# The parts vs the whole

**Integrated CSPs underperform relative to wider market returns. Infrastructure companies achieve 3-4x CSP valuation multiples.**

Given the substantial investment pressures occurring as margins are squeezed, some CSPs have launched efforts to structurally separate parts of their businesses using the working hypothesis that the parts may be more valuable than the whole. Efforts have varied from the spinouts of tower assets, to more fundamental changes in which Telecoms have undertaken splits of their network and services business into NetCo/ServCo. Alternatively, businesses may go the route of consolidating their digital service business and pruning out non-core activities into separate businesses, or eliminating them entirely. Benefits include higher asset utilization, opportunities to attract investors and increased management focus.

While there are market specific variances, there does appear to be an opportunity to create a step-change in value by separating infrastructure from services, pursue new uses of third parties, and to accelerate growth-related investments. For example, higher valuations of network assets make structural separation an attractive strategic option for CSPs, as Network Companies' (NetCos) EV/EBITDA multiples are 3-4x higher than for CSPs.<sup>45</sup>

For many, the question of separation is not "if" but "when." In this new environment, where separation is no longer a novelty, CSPs must consider new business models and use cases to differentiate and grow their customer base and drive ARPU.

Higher valuations of network assets make structural separation an attractive strategic option for CSPs, as network companies' (NetCos) EV/EBITDA multiples are

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## The telco industry is poised for restructuring. Execution is key.

CSPs that don't restructure risk maintaining underperforming networks, limiting their options to create new revenue streams from wholesaling network, tower leasing and managed service models. Signaling the merits of restructuring has been a significant inflow of private equity capital in telco infrastructure assets. Global infrastructure deals involving telecoms witness growth from 3% to 10% (2017-21).<sup>46</sup>

While CSPs have been involved in different restructuring exercises, the impact has been industry wide.

Higher asset utilization, new revenue streams and reduced weight of low performing and under-invested assets, greater opportunities to attract investors and lower cost of capital and increased management focus due to a simplified and focused business, compared to the traditionally integrated telco, has led CSPs to consider viable restructuring options as a key part of their transformation strategy.



# Your position: an approach to execution

# Charting transformative pathways to profitability

CSPs around the globe are recognizing that business as usual will not suffice as the industry prepares for growth in the new era of connectivity. There is a window of opportunity, but time is of the essence.

CSPs must combine optimization with discovery to realize their potential, but financial pressures are limiting their ability to invest in new revenue opportunities. Telcos are also challenged by technology debt, operational complexity and organizational rigidity.

To overcome these challenges, successful CSPs are unlocking growth with a deliberate focus on four key fundamentals. The journey will be different for each telco, but the foundations of these actions are similar:



Build advanced networks and deploy them with speed to gain competitive advantage (best case) or to maintain parity (worst).



Create new offers and transform go-to-market to find growth.



Reduce costs to improve margins and fund the required innovation.



Execute on necessary structural changes to unlock value and capital.

A CSP's current position and future strategy can help determine the most appropriate paths to growth, but there are critical foundational capabilities that every telco needs. CSPs must understand their end-customer's businesses to develop vertical industry depth, while building ecosystem strength to serve their customers' needs. This could take the form of business and tech strategy joining together. Bridging the ongoing innovation skills gap will require upskilling, development and hiring of future-ready talent.

Despite the momentous change over the past two years, CSPs remain in an enviable position to capitalize on the new era of connectivity. Sweeping changes in the way we connect, the way we live, the way we work and the way we conduct business are ultimately congruent with telco strengths and aspirations. Telcos have faced disruptive forces before and have readily acquired the fluency to adapt to new rules defining the business approach to both consumer and business segments, as well as their own operations. CSPs are also not strangers to competitive pressures from outside the traditional telco business. Telcos will thrive based on the richness of their customer relationships, a commitment to technological reinvention and business transformation, combined with the talent and energy to visualize and create new products and services as well as the networks and platforms to deliver them.

# Resources

- 1 Analysys Mason Datahub based on a sample of 27 countries
- 2 GSMA intelligence
- 3 GSMA Intelligence
- 4 eMarketer
- 5 Analysys Mason DataHub, Gartner forecast - Communications Services, Worldwide 1Q22
- 6 [TELUS International announces agreement to acquire WillowTree, a full-service digital product provider](#)
- 7 Analysys Mason public cloud provider and CSP partnership tracker
- 8 Smart Home Devices and Services Forecast: 2020–25 Omdia
- 9 Accenture research
- 10 Credit Suisse: Metaverse – A guide to the Next Gen Internet
- 11 Accenture case study “Swisscom raises its environment ambition”
- 12 Accenture Tech Vision
- 13 Accenture Tech Vision
- 14 IDC Worldwide Carrier Multi-Access Edge Cloud Software Forecast, 2021-2025
- 15 Gartner
- 16 Analysys Mason – Network Cloud Infrastructure Worldwide Forecast 2021-2026
- 17 Analysys Mason – Network Automation and Orchestration Worldwide Forecast 2022-2027
- 18 Analysys Mason - Network cloud infrastructure: worldwide forecast 2021–2026 (October 2021)
- 19 STL Partners - Telco Cloud Deployment Tracker: Open RAN deep dive (April 2022)
- 20 <https://www.nokia.com/networks/insights/network-as-a-service/business-insights/>
- 21 IDC Worldwide Private LTE/5G Wireless Infrastructure Forecast, 2022–2026 (Mar 2022)
- 22 Analysys Mason
- 23 Analysys Mason
- 24 Omdia Smart Home Devices and Services Forecast 2020-2025
- 25 Statista Digital Market Outlook 2022
- 26 Citi GPS - “Metaverse and Money, Decrypting the Future”
- 27 [ABI Research](#)
- 28 IFAC
- 29 Analysys Mason
- 30 Analysys Mason SMB Survey 2022
- 31 Accenture SMB proprietary survey
- 32 Analysys Mason
- 33 Analysys Mason
- 34 Analysys Mason SMB Technology Forecaster
- 35 Analysys Mason SMB survey
- 36 SMB Tech Forecaster
- 37 Accenture SMB – Enterprise Dynamics Survey
- 38 Analysys Mason Technology Forecaster
- 39 Gartner, Market Trends: SD-WAN and NFV Enable Shift to Internet and Cloud-Centric Enterprise Networks
- 40 Gartner, Forecast Analysis: Enterprise Networking Connectivity Growth Trends
- 41 Gartner
- 42 Gartner, Forecast: IoT Market Opportunity by Technology Segment, 2020-2025, April 2022
- 43 Accenture analysis based on TBR data
- 44 Gartner
- 45 Capital IQ, Accenture analysis
- 46 Prequin, Private Equity News

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