Future of telco

Foreword

Today's market conditions are creating challenging times for telco players. Even though consumer revenue has been historically high, margins are being squeezed because of the massive infrastructure investment telcos made in 5G to meet the COVID-19 spike in broadband demand and anticipated explosion in demand driven by various 5G use cases. Competition has been heating up from both traditional and non-traditional players. Customer expectations and the market have been shifting. And a looming recession and regulatory pressures have been creating uncertainty.

To address these significant concerns, leading global telco players have been taking big steps to redefine their business and operating models. This report discusses what they've been doing and how they've been doing it.

This report describes four future telecoms business models that are currently emerging around the world. It identifies some of the key capabilities that we believe are required to succeed in each model. And it offers practical steps to help today's telecoms leaders envision — and create — the future.

Supported by case studies and based on KPMG professionals' experience working with leaders in the field, this report lays out paths that can help with future growth for telcos and clearly articulates the risks and rewards that can be expected along the way.

We hope this report provides telco leaders and decision-makers with a clear vision of the future, a greater understanding of the journey, and practical steps to help accelerate and sustain the transformation.

To learn more about the ideas raised in this report — or to discuss your organization's unique transformation journey — we encourage you to contact your local KPMG firm or any of the authors listed at the end of this report.

The future of telco is upon us. We look forward to exploring it together.

Mark Gibson
Global Head of Technology,
Media & Telecoms,
KPMG International & Principal,
KPMG in the US

Contents

Signals of change

While change is constant in the telco business, the factors driving change are constantly shifting. In this section, we identify and drill down into some of the most significant market factors that should currently be on telco leaders' minds.

1. Traditional business models are being challenged

Traditionally, telcos have made their money by moving bits through the air and across wires in their networks. And while doing so is still central to their mission, telcos need to figure out ways to diversify and make their businesses more profitable, because continually investing in infrastructure can limit profitability.

Telcos have been trying to break into higher value-added services for years, including through massive investments in areas such as professional services, media/content, and digital advertising. But the track record for such investments has been decidedly mixed. Now, other options are emerging. For example, some in the industry believe there is much potential for telcos to offer private 5G networks for small and medium-sized businesses (SMBs), like car dealerships and hospitals. The telcos could then monetize different aspects of that system — from apps to cybersecurity to hardware maintenance. A primary concern with this idea is that hyperscalers could decide to do the private networks on their own given their deep pockets.

Telcos could also double down on their fiber play, possibly even taking control of tier 2 and tier 3 players that could bring more agility and local market knowledge to accelerate their growth and penetration in the SMB market. Again, the primary obstacle is that hyperscalers could decide to make the investment and crowd the telcos out.

2. Escalating customer expectations

Expectations for both consumer and commercial customers have been intensifying. For consumers, that means wanting better and more flexible service, greater transparency in billing, and enhanced ease of use. On the commercial/B2B side, clients are looking for increasingly sophisticated connectivity and data solutions without the traditional requirement to contact a call center or a sales rep.

Recognizing these customer signals, many telcos are focusing on the quality of experience. For example, they are creating more automated and intentional experiences. In our view, this means simplicity of choice and the ability to seamlessly transact are becoming paramount. Virtual self-care models can provide a rapid response to emerging network issues and preempt outages. Self-care can also give carriers greater reliability and lower legacy array cost structures because humans aren't responding to calls about network quality. Indeed, our research shows that 56 percent of telcos globally have invested in creating robust virtual self-care models.[1]

Which [customer-related] factor has the greatest potential to change the landscape for the telecommunications industry? (Select one.)
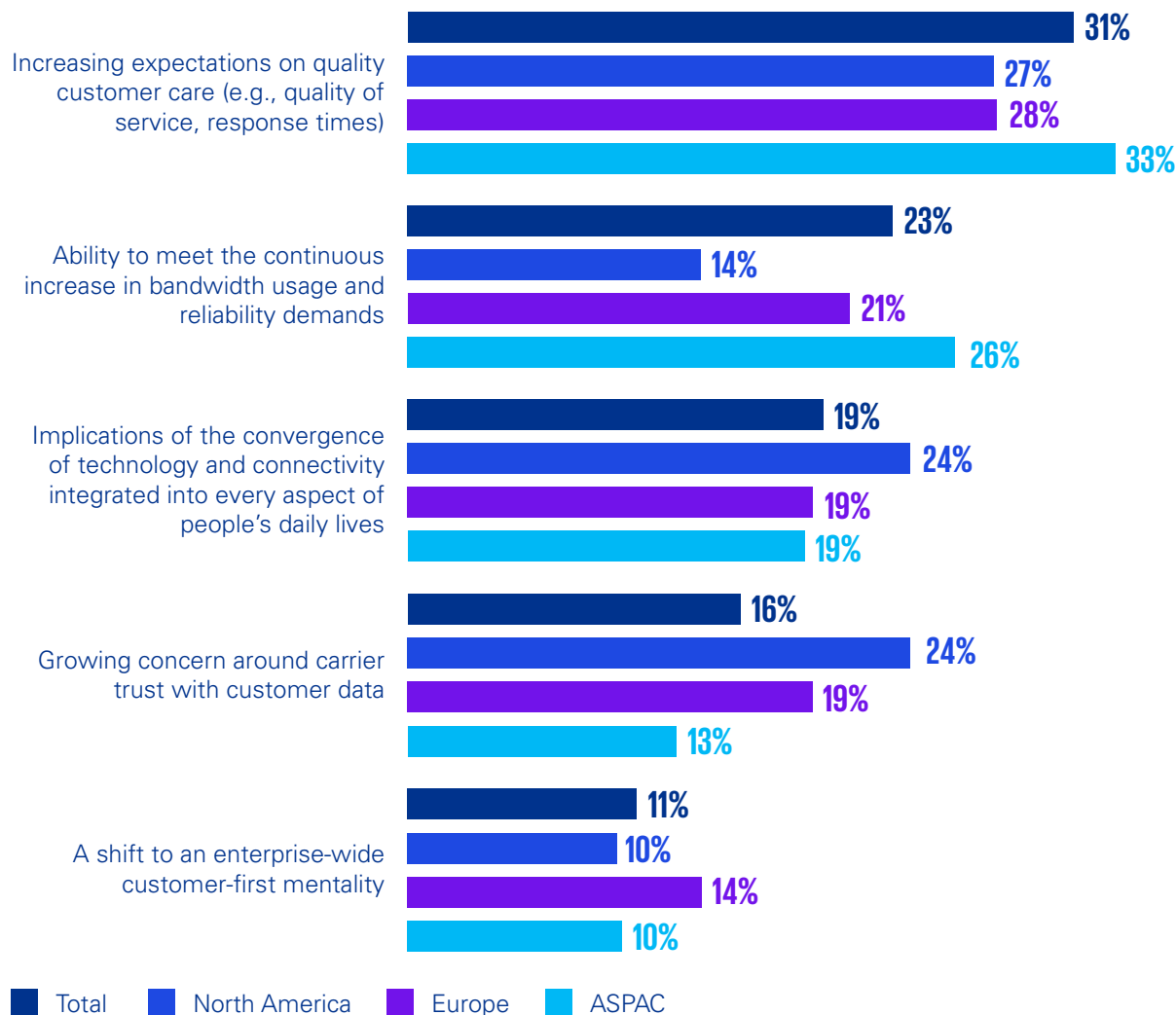
Base: 308 customer-centric strategy decision-makers at telecommunications organizations; 51 at organizations in North America, 58 at organizations in Europe, and 199 at organizations in ASPAC
Source: A commissioned study conducted by Forrester Consulting, April 2022

---

[1] Connected Enterprise Telco Survey 2022, a commissioned study conducted by Forrester Consulting on behalf of KPMG

3. Hyper-competitive hyperscalers

As the landscape evolves, there will likely be more direct competition between telcos and hyperscalers. This should be a severe concern to telcos given how much money these hyperscalers spend, their in-house talent, and their outsized ambitions.

The competitive dynamic between hyperscalers and telcos is changing quickly. To address this change, some telcos are forming partnerships with hyperscalers to help get the most out of their networks and services, as when Microsoft and AT&T came together to unite their 5G and edge computing efforts.

Which [competitive] factor has the greatest potential to change the landscape for the telecommunications industry? (Select one.)

Expansion of service offerings into non-connectivity services (e.g., over-the-top [OTT])
- Total: 20%
- North America: 21%
- Europe: 16%
- ASPAC: 21%

Enterprise transition to 5G backbone for communications vs. wired and Wi-Fi networks
- Total: 19%
- North America: 23%
- Europe: 9%
- ASPAC: 21%

Growing B2B private enterprise network (4G/5G) service offerings
- Total: 16%
- North America: 13%
- Europe: 19%
- ASPAC: 15%

Emergence of 6G, Wi-Fi 7, and other low-power, wide-area (LPWA) connectivity solutions
- Total: 15%
- North America: 11%
- Europe: 21%
- ASPAC: 14%

Up-the-stack solution offerings driving stickiness for the B2B/B2G customers
- Total: 12%
- North America: 6%
- Europe: 14%
- ASPAC: 14%

New non-traditional service providers entering the market
- Total: 9%
- North America: 9%
- Europe: 16%
- ASPAC: 7%

Hyperscalers crossing over to connectivity providers
- Total: 8%
- North America: 17%
- Europe: 7%
- ASPAC: 6%

Legend: Total | North America | Europe | ASPAC

Signals of change

Strategic imperatives
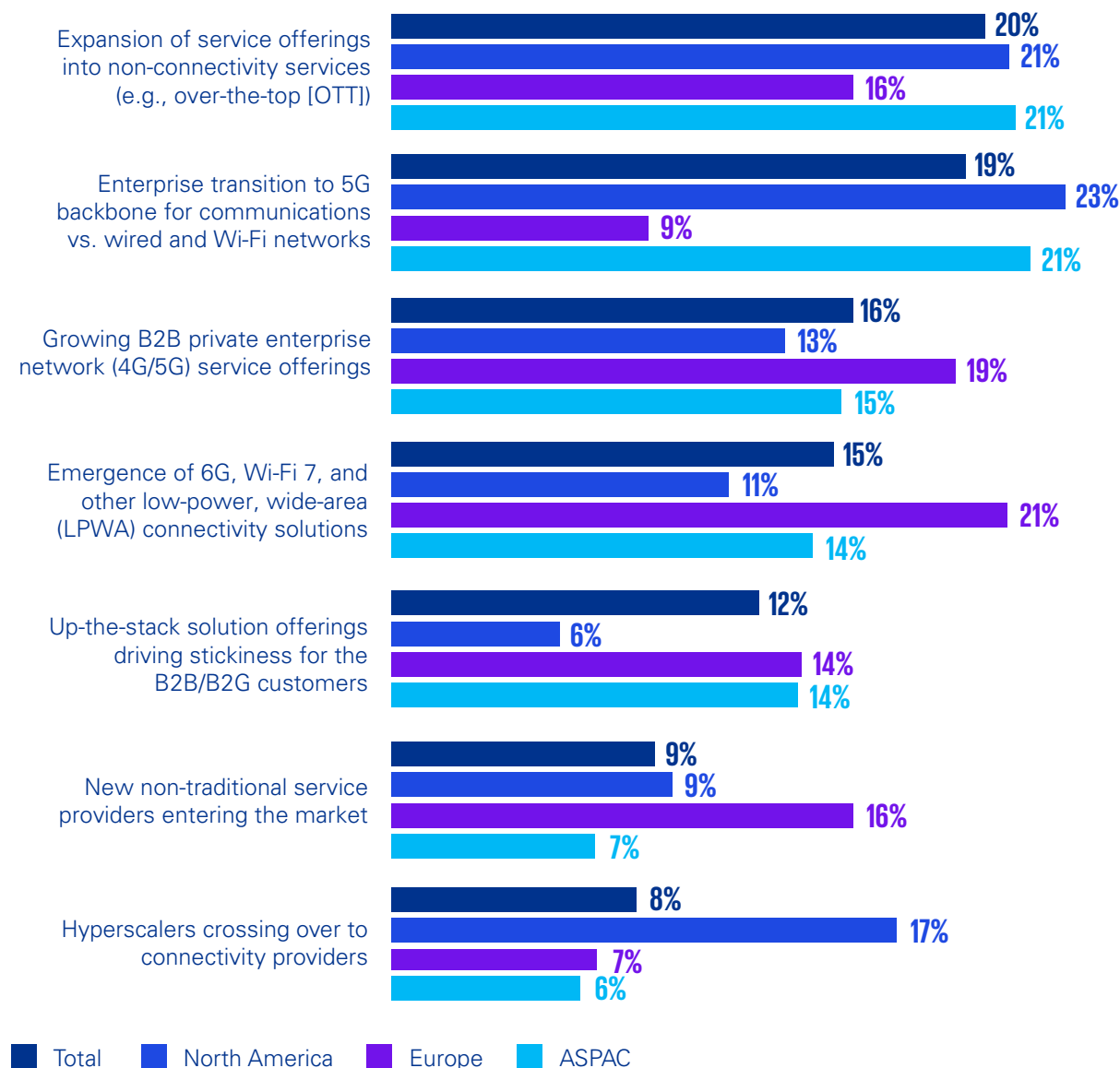
KPMG Connected Enterprise

Case studies

4. A possible global recession
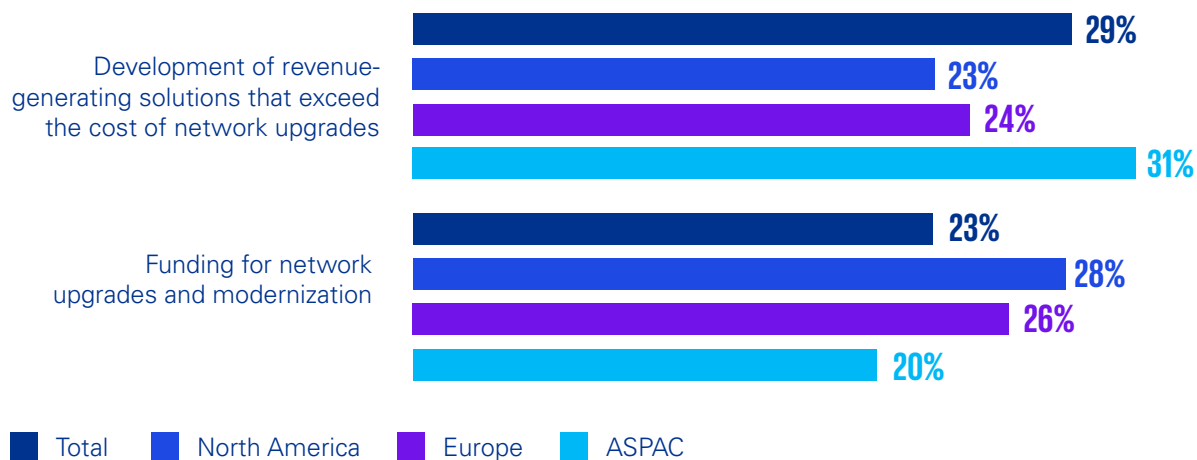
Inflation and interest rates are likely to continue to rise and a recession is looming. In many markets, rising interest rates will likely raise the cost of capital, potentially impacting telcos' borrowing capacity and access to fresh capital. For some telcos with weaker balance sheets, this could lead to a higher risk of potential financial distress. Not surprisingly, many telcos are reexamining their capital plans, and several aspects — from infrastructure upgrades to the deployment of new 5G capabilities — are being reassessed and reprioritized.

The impact of this may have ripple effects on other priorities. Slowing down the rollout of 5G may leave the advantage open to competitors. Delaying the upgrade of the vehicle fleet to electric may lead to missed net zero and ESG targets. Putting off equipment upgrades may impact the overall resilience of the network. In some extreme cases, telcos near or under financial distress may seek consolidation or even bankruptcy, potentially creating important consequences across the entire telecom ecosystem.

As a result, some telcos have set up joint ventures (JVs) with competitors to share the costs of deploying costly network equipment and expand their reach. Examples include AT&T's October 2022 announcement to create a multi-billion-dollar JV with an unnamed infrastructure partner, and Vodafone's recent announcement of a JV with Altice, although not direct competitors in this market, to support fiber infrastructure in Germany. Nearly three-quarters of telco leaders in our global survey say they are already investing in or planning to invest in JV network operating models.[2] That has allowed telcos to start to differentiate based on the services they provide, rather than just the connectivity.

Which [economic] factor has the greatest potential to change the landscape for the telecommunications industry? (Select one.)

Development of revenue-generating solutions that exceed the cost of network upgrades
- Total: 29%
- North America: 23%
- Europe: 24%
- ASPAC: 31%

Funding for network upgrades and modernization
- Total: 23%
- North America: 28%
- Europe: 26%
- ASPAC: 20%

Legend: ■ Total ■ North America ■ Europe ■ ASPAC

Base: 315 customer-centric strategy decision-makers at telecommunications organizations; 53 at organizations in North America, 58 at organizations in Europe, and 208 at organizations in ASPAC
Source: A commissioned study conducted by Forrester Consulting, April 2022

---

[2] Connected Enterprise Telco Survey 2022, a commissioned study conducted by Forrester Consulting on behalf of KPMG

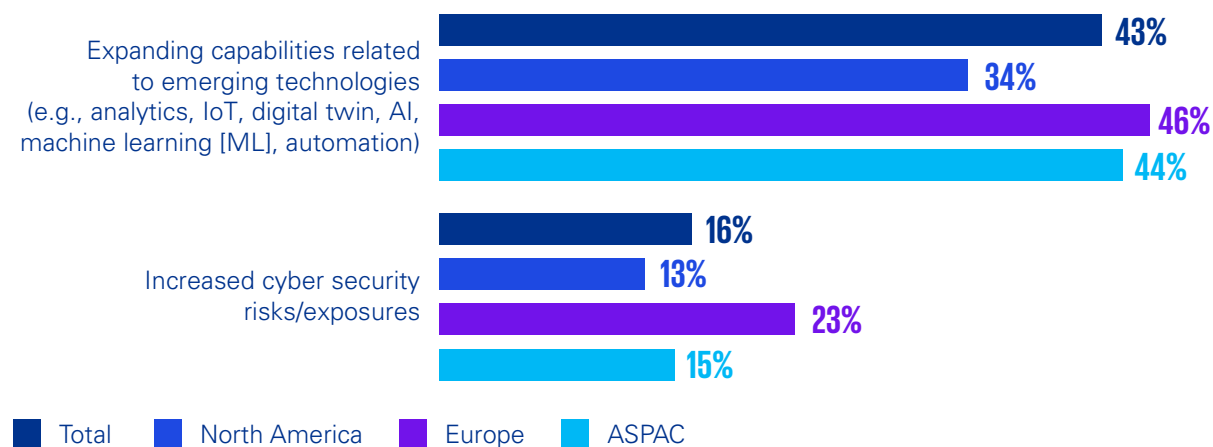# 5. Technology can create new opportunities — and threats

In our view, the most important — and costly — technology investments will continue to be network upgrades. 5G has been central to telcos' efforts to satisfy the bandwidth needs of residential consumers, but the cost of deploying it has been prohibitive. As for 6G, it requires the same massive investment as 5G and is still estimated to be 3 to 5 years off. In addition, telcos should continue to focus on how best to use evolving tools like AI and machine learning for service and operating improvements.

The technological disruptor that fewer telco leaders are talking about is the ongoing advancement in low-earth orbit (LEO) satellite connectivity. Given the current level of competition and the aggressive plans from some key players, the promise of global connectivity through LEO satellite constellations is coming closer to reality. And this is one of the only technologies in development today that could fundamentally increase telcos' customer base, including rural populations and private enterprise networks.

The entry of this kind of new competitor with global reach and different unit economics could upend the industry's investment and business strategy. Traditional telcos should explore how to embrace this technology before it can erode their existing connectivity play.

Which [technological] factor has the greatest potential to change the landscape for the telecommunications industry? (Select one.)

Expanding capabilities related to emerging technologies (e.g., analytics, IoT, digital twin, AI, machine learning [ML], automation)
- Total: 43%
- North America: 34%
- Europe: 46%
- ASPAC: 44%

Increased cyber security risks/exposures
- Total: 16%
- North America: 13%
- Europe: 23%
- ASPAC: 15%

Legend: ■ Total ■ North America ■ Europe ■ ASPAC

Base: 315 customer-centric strategy decision-makers at telecommunications organizations; 53 at organizations in North America, 57 at organizations in Europe, and 205 at organizations in ASPAC
Source: A commissioned study conducted by Forrester Consulting, April 2022

6. Fulfilling the ESG agenda

In our recent CEO survey, executives responded that the economic downturn required them to turn away from their ESG initiatives, with 50 percent saying they were pausing or reconsidering their existing or planned ESG efforts over the next 6 months.[3] In our view, that move could backfire. As the financial sector moves to get behind ESG, we anticipate telcos will find that more significant proportions of their corporate loans and debt vehicles are tied to ESG metrics. For example, since 2019, Verizon has been the US Telco leader to offer green bonds and to date a total of US$4 billion in green bonds have been issued, with proceeds focused on renewable energy investments. Verizon paid over US$20 million in underwriting fees to minority- and women-owned firms in 2021 and over US$5 million in fees to such firms in 2022 in connection with its fourth green bond.

The higher cost of energy is another impetus for decarbonization, forcing many telcos to consider how they might accelerate their energy decarbonization plans and efficiency investments. Almost three-quarters of telco leaders say they are investing in decarbonizing their business.[4]

One strategy to help telcos be more energy efficient is consolidating real estate and retrofitting facilities. Massive office parks and commercial buildings could be sold, and leases could not be renewed. Those that remain in the network could be retrofitted to meet the business's new requirements and enhance their environmental footprint. Another oversized agenda item is expected be to retrofit or consolidate central offices or telecom exchanges.

Which [ESG] factor has the greatest potential to change the landscape for the telecom industry?

Decarbonization mandates

- Total: 9%
- North America: 12%
- Europe: 7%
- ASPAC: 9%

Legend: Total | North America | Europe | ASPAC

Base: 308 customer-centric strategy decision-makers at telecommunications organizations; 51 at organizations in North America, 55 at organizations in Europe, and 202 at organizations in ASPAC
Source: A commissioned study conducted by Forrester Consulting, April 2022

[3] KPMG 2022 CEO Outlook, KPMG International, October 2022
[4] Connected Enterprise Telco Survey 2022, a commissioned study conducted by Forrester Consulting on behalf of KPMG
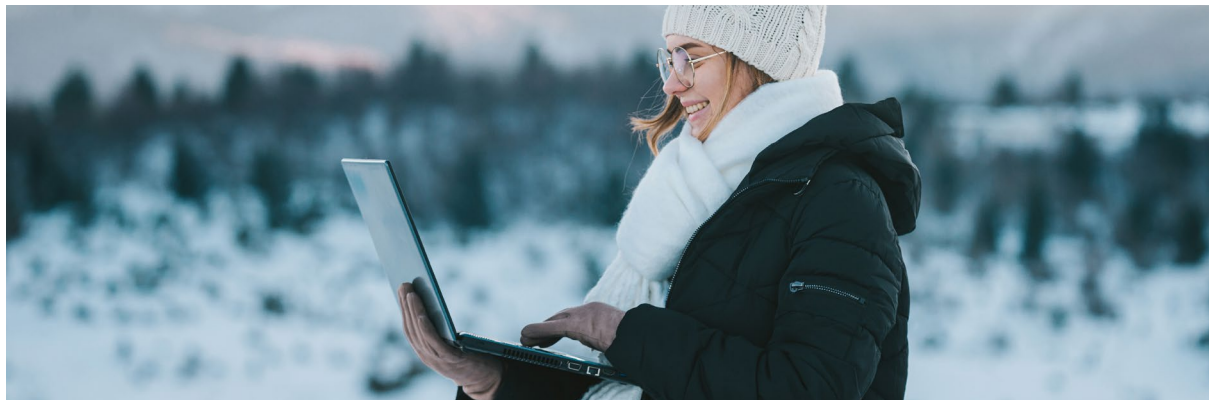
7. Telcos likely can't avoid stricter regulations indefinitely

Most carriers had to sink many millions into complying with the General Data Protection Regulation (GDPR) and other global privacy statutes. These policies will continue to mandate carriers to establish more robust privacy and cybersecurity controls across their networks, applications, and operations than they have traditionally cared about.

We are confident that cyber will continue to receive funding and attention, as it should. We also believe, however, that in the current market, many telcos will put their heads in the sand and hunker down. That means they will be less likely to entertain early adoption to regulatory requirements and keep developing policy at bay until time conditions permit.

One interesting regulatory development is that telcos are trying to unite globally to force big tech to begin paying their fair share for network access. In Europe, for example, telecoms are encouraging regulators to establish fees that companies must pay to help support infrastructure enhancements, given their outsized use of the system. If these rules pass, some fees could also be used to fund increased privacy requirements.
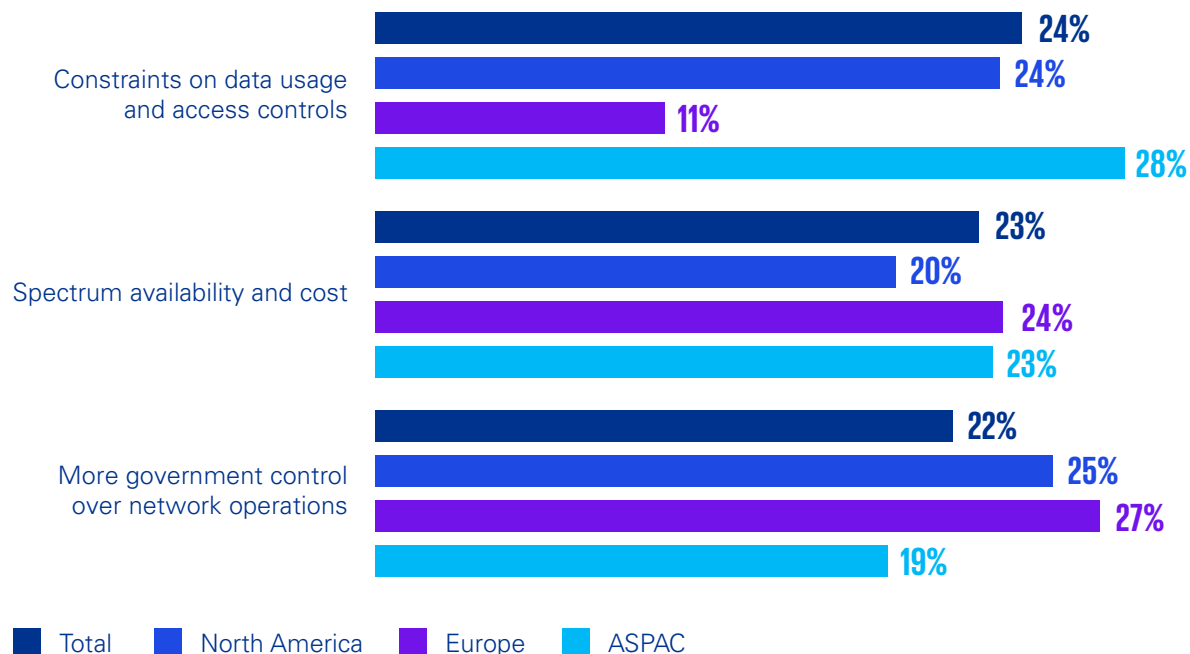
Which [political] factor has the greatest potential to change the landscape for the telecommunications industry? (Select one.)

Constraints on data usage and access controls
- Total: 24%
- North America: 24%
- Europe: 11%
- ASPAC: 28%

Spectrum availability and cost
- Total: 23%
- North America: 20%
- Europe: 24%
- ASPAC: 23%

More government control over network operations
- Total: 22%
- North America: 25%
- Europe: 27%
- ASPAC: 19%

Legend: Total | North America | Europe | ASPAC

Base: 308 customer-centric strategy decision-makers at telecommunications organizations; 51 at organizations in North America, 55 at organizations in Europe, and 202 at organizations in ASPAC
Source: A commissioned study conducted by Forrester Consulting, April 2022

Strategic imperatives

As the signals of change put pressure on traditional telco business models, we see various strategic imperatives emerging related to each one. One of the primary challenges telco leaders face is to decide how they will address the changes in order to enhance their future growth potential.

1. Doubling down on network

The key imperative to achieving success in this business model requires telcos to double down on core connectivity and network infrastructure. It requires sticking to what made them great and focusing on delivering connectivity at scale, speed, and high availability.

We believe this is the most straightforward path. It leverages existing capital assets and infrastructure investments. It requires very little change in operating or business models. The competitive landscape is (comparatively) established. Customer expectations are well understood.

The challenge is that this model is likely doomed to commoditization and continuously squeezed margins without new growth in the network. To be sure, part of the allure of the connectivity play is that costs can be hammered down through scale. Yet connectivity players should still find new paths to grow and increase network traffic if they hope to make the model sustainable.

Some of that volume will undoubtedly come through the adoption of new technologies. The rollout of 5G (and, eventually, 6G) will unleash a range of new apps and Web 3.0 technologies that will help drive network traffic. The adoption of Internet of Things (IoT) and smart devices connected to the burgeoning virtual reality (VR) metaverse will bring exponential volume, while new connectivity technologies like LEO networks could open up new geographies and customer markets.

New revenue models will also be essential. Some connectivity players are already starting to focus on becoming connectivity "wholesalers" — essentially providing infrastructure and Connectivity as a Service (CaaS) to a range of emerging virtual and asset-light players. This is helping connectivity players lock in volumes and drive higher utilization of their capital assets.

2. Focus on digital front-end play

This is a continuation of the Mobile Virtual Network Operator (MVNO) model, which means the key strategic imperative is for telcos to focus on the sales and marketing front end and leave the connectivity and most of the services to other players. MVNOs and additional "asset-light" models allow the telco to scale up or down as volumes and demand requirements evolve, thereby helping to improve overall margins, reduce costs and drive simplicity. For example, Comcast, Spectrum Charter, and other traditional cable providers have launched MVNOs piggybacking on conventional carrier networks. And small MVNOs like Kore Wireless, Jasper Wireless, and others have set up solution-specific MVNOs for IoT and other services.

These players focus highly on customer experience, but mainly at the front end. They are customer acquisition specialists and excel at sales and marketing. Invariably, they rely heavily on connectivity wholesalers for infrastructure and hyperscalers for services and to deliver the core. With fewer assets on the balance sheet, they tend to achieve higher margins and better valuations.

The challenge here is maintaining subscriber numbers in a highly competitive yet increasingly commoditized sector. The reality is that the barriers to entry in this market are low. There's a tendency for new competitors to appear, push down prices and then go bust. But the downward pressure on margins and prices remains.

Success at the digital front-end play can require a significant partnership and alliance ecosystem. It can also require a greater focus on innovative products and improving customer experience — in some cases tailored to a specific set of use cases and patterns for targeted customer segments or verticals. And players should be much more responsive in their operations and supply chain to help ensure they meet customer expectations.

Considering the global expansion of 5G networks, connectivity through APIs (Application Programming Interfaces) will provide great opportunities in the development of new business models and ways of monetizing the network from data. Personalizing the consumer journey and connecting brands will improve the customer experience in real time and really contextualized with the use of technologies such as edge computing.

Some will see this as a natural step towards becoming a fully digital technology company. And, having removed the shackles of bricks and mortar infrastructure and pivoted around the customer, this model can certainly help telco players enhance their value — both to customers and investors. However, commoditization is also a big risk as players compete around subscriber numbers in a brutal fight to the bottom regarding prices.

3. Enhancing managed services

The managed services business model focuses on moving up the value chain, which makes it imperative to offer a complete solution set to clients, particularly business customers. But it also gives telcos a way to drive increased volume and traffic to their networks.

This model could manifest in a range of innovative value propositions. On the business-to-business side, telcos already offer solutions like managed security services and managed network services, such as Network as a Service (NaaS). Some are now tailoring these services within specific verticals to create unique solution sets centered around connectivity for healthcare, banking, insurance, manufacturing, and retail. However, the organization's ability to become more connected across the back, middle, and front office can help drive the success and sustainability of this model. In our view, that will be the key to uncovering new services, building better ecosystems, creating insight-driven strategies, and delivering better experiences through more digitally-enabled technology architecture.

At the same time, market trends and skills shortages are driving large global organizations to rethink their networking strategies and look outside to telcos to fill the gaps. A new trend is emerging where partners and suppliers fully own networking and provide fully managed NaaS solutions. This is happening in multiple areas related to private 5G enterprise networks in healthcare and industrial manufacturing settings. That said, telcos should evolve and better position themselves to capture this new market segment.

Telcos could then adapt these new service areas to deliver similarly effective customer solutions. Telcos in this model could start to offer IoT packages where a certain number of devices are connected and managed (perhaps even monitored) for a flat rate, as with a collection of smart devices throughout the home. They could continue to bundle managed cybersecurity features into their consumer offerings and begin taking an increasing role in hosting the processes that underpin the smart home. With the emergence of gaming and other value-added, high-quality services demanded by consumers, telcos can position their tiered connectivity and quality per market demand in this area.

Managed services players could enjoy better margins and higher market valuations than their pure connectivity peers. But that will likely require players to fully understand the needs and expectations of their business and consumer customers first. Then they should develop a culture and operating model that can deliver seamless, resilient, and scalable services to help meet these expectations.

We believe that the key to success in the managed services play will be the organization's ability to deliver innovative products and services on a digitally-enabled technology architecture that enables seamless interactions and commerce.

The managed services model again helps move traditional and incumbent telcos up the value chain and closer to becoming a digital techco. But it also helps bring increased competition and an overwhelming need for a more customer-centric culture and approach.

4. Making the telco-to-techco jump

For many telcos, their primary, overarching strategic imperative is to fundamentally reimagine themselves as technology companies. And many of them are trying to call themselves "tech companies" as they try to move away from their traditional branding as network infrastructure providers. They are leaning into that claim by launching new products and services that help them move up the technology stack, including private 5G networking systems in hospitals and innovative city services.

But it's not likely they'll accomplish this without partners like hyperscalers or other industry-based application solution providers. Essentially, telcos are bundling networks and applications/solutions from partners to help them get to that coveted tech company branding. This is causing the lines to become increasingly blurred as hyperscalers evolve their innovation strategies and advance their deep-pocket agendas. At the same time, legacy telcos embrace a too-big-to-fail mindset.

KPMG Connected Enterprise

Digital transformation in telco requires adapting to a connected operating model.

The eight capabilities of KPMG Connected Enterprise

Telcos can benefit from adopting a set of fundamental capabilities to support the connected enterprise. These capabilities can help telcos define a customer-centric approach to digital transformation that connects the front, middle and back offices.

Enhancing these capabilities will help ensure that every process, function, and relationship of the organization is focused on meeting customer expectations, creating business value and driving sustainable growth.

KPMG International research shows that firms that make a moderate or significant investment in all eight capabilities of the connected enterprise are two times more likely to deliver a customer experience that exceeds expectations, successfully execute on one or more customer-centric objectives, and increase ROI across one or more metrics.*

Insight-driven strategies and actions	Innovative products and services	Experience-centricity by design
Seamless interactions and commerce	**2x** Impact*	Responsive operations and supply chain
Aligned and empowered workforce	Digitally-enabled technology architecture	Integrated partner and alliance ecosystem

*Base: 1,299 professionals involved with customer strategy decisions

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, 2018.
The research was conducted on a sector-specific basis.

With the need for more connected and seamless digital offerings, what can good look like?

- Investing in the right capabilities to help drive effective digital-first ways of working and operating models.

- Connecting and applying these capabilities across the functional value chain.

- Making the most of technology with a platform mindset.

Connected capabilities can enable a winning operating model

Organizations need to become increasingly connected, within their ecosystems, within their enterprise, and with their customers and stakeholders. They should be agile and robust enough to launch new offerings to capture their focused market segment or segments. The competition will likely be challenging, and new pressures will likely emerge, mainly related to data privacy and regulations.

A winning operating model can require maturity in eight connected capabilities. These are cross-functional and apply across the operating model. Telcos that are investing in these capabilities are more likely to see overall success as they transform.

Capability	Connectivity	Digital front end	Managed services	Telco to techco
Insight-driven strategies and actions	Leverage micro-segmentation to better target lead generation, pricing, and packaging. API (Open Telco)	Apply human-centric designed digital front ends to simplify the customer engagement experience.	Use customer insights to help drive autonomous operations by offloading manual, repetitive management and operational tasks.	Analyze existing digital assets and data to uncover new opportunities to create exciting new products that interact to build a robust ecosystem of products and services.
Innovative products and services	Drive usage in low hours and during low connectivity load to help bring additional revenue and increase customer satisfaction. API (Open Telco)	Deliver seasonal campaign offerings with minimal effort, while building capability tied to various pricing models to help drive loyalty.	Move beyond fixed contract and performance to bucket/time-limited and flexible pricing for enhanced managed services to help accelerate B2B growth.	Develop new business and financial models to enable an agile launch of new services and offerings.
Experience-centricity by design	Offer connectivity with tiered quality and a high level of experience for specific services to help grow revenues within high-paying customer segments. API (Open Telco)	Develop an art-of-the-possible approach to engineering-led user experiences to help accelerate digital adoption and usage.	Design industry-specific B2B services and solutions to unlock new business value for enterprise customers.	Create a dynamic ecosystem of new applications and experiences that can offer incremental value to engage customers.

Capability	Connectivity	Digital front end	Managed services	Telco to techco
Seamless interactions and commerce	Use digital to help drive lead generation within SMB and mid-market segments. API (Open Telco)	Deliver a digital experience that enhances add-ons and helps new customer acquisition costs.	Leverage digital tools to allow ease of onboarding and self-management of new managed services while aligning workforce skills to new paradigm.	Create tailored customer experiences using digital technologies and data that can lead to increased revenue and brand recognition.
Responsive operations and supply chain	Use insights to help create operational agility and cost effectiveness while maintaining customer experience and network quality. API (Open Telco)	Focus on creating a customer-centric experience and operational/eco-system capabilities designed to meet customer expectations.	Employ analytical insights to enhance cost of delivery and support differentiated service levels.	Extend operational capabilities to support a differentiated Anything as a Service (XaaS)/tech experience.
Aligned and empowered workforce	Refocus workforce on improving customer engagement and experience while enhancing network technology skills. API (Open Telco)	Retool/reskill the workforce to help increase organizational "clock speed".	Align people strategy to focus on managed services and the proper labor pyramid.	Expand workforce to include expertise in customer experience and rapid application building while creating a culture of innovation.
Digitally-enabled technology architecture	Leverage the latest network technology for growth, along with robust digital services for rapid customer onboarding and self-service. API (Open Telco)	Continuously improve and enhance digitally-enabled technology architecture to help maintain a cutting edge.	Use digitally-enabled technology architecture to support automated service delivery as needed.	Explore new architecture platforms to enable new applications and services that support an ecosystem of products.
Integrated partner and alliance ecosystem	Use new technologies (like LEO) to cover remote areas through a partnership and revenue share model to provide basic connectivity. API (Open Telco)	Create a secure application program interface (API)-based framework that enables partners to offer new services and offerings locally without significant effort.	Combine operational services with existing partner offerings to open new, efficient ways to deliver managed services.	Consistently engage with technology and delivery partners to complement offerings.

Signals of change

Strategic imperatives

KPMG Connected Enterprise

Case studies

Balancing future-focused strategies with a connected approach can help drive better performance

Compared with followers, future-focused telcos are:

4.0x More likely to harness data, advanced analytics, and actionable insights with a real-time understanding of the customer and the business to shape integrated business decisions.

3.1x More likely to engage, integrate, and manage third parties to help increase speed-to-market, reduce costs, mitigate risk, and close capability gaps to deliver on the customer promise.

2.7x More likely to interact and transact with customers and prospects across marketing, sales, and service and achieve measurable results.

2.6x More likely to build a customer-centric organization and culture that inspires people to deliver on the customer promise and drive up business performance.

2.5x More likely to develop compelling customer value propositions on price, products, and services to engage some of the most attractive customers and drive profitable growth.

2.3x More likely to create intelligent and agile services, technologies, and platforms, enabling the customer agenda with solutions that are secure, scalable, and cost-effective.

2.1x More likely to design seamless, intentional experiences for customers, employees, and partners to support customer value propositions and deliver business objectives.

2.1x More likely to operate the business with efficiency and agility to fulfill the customer promise in a consistent and profitable way.

Base: 62 future-focused customer-centric strategy decision-makers and 62 followers at telecom organizations

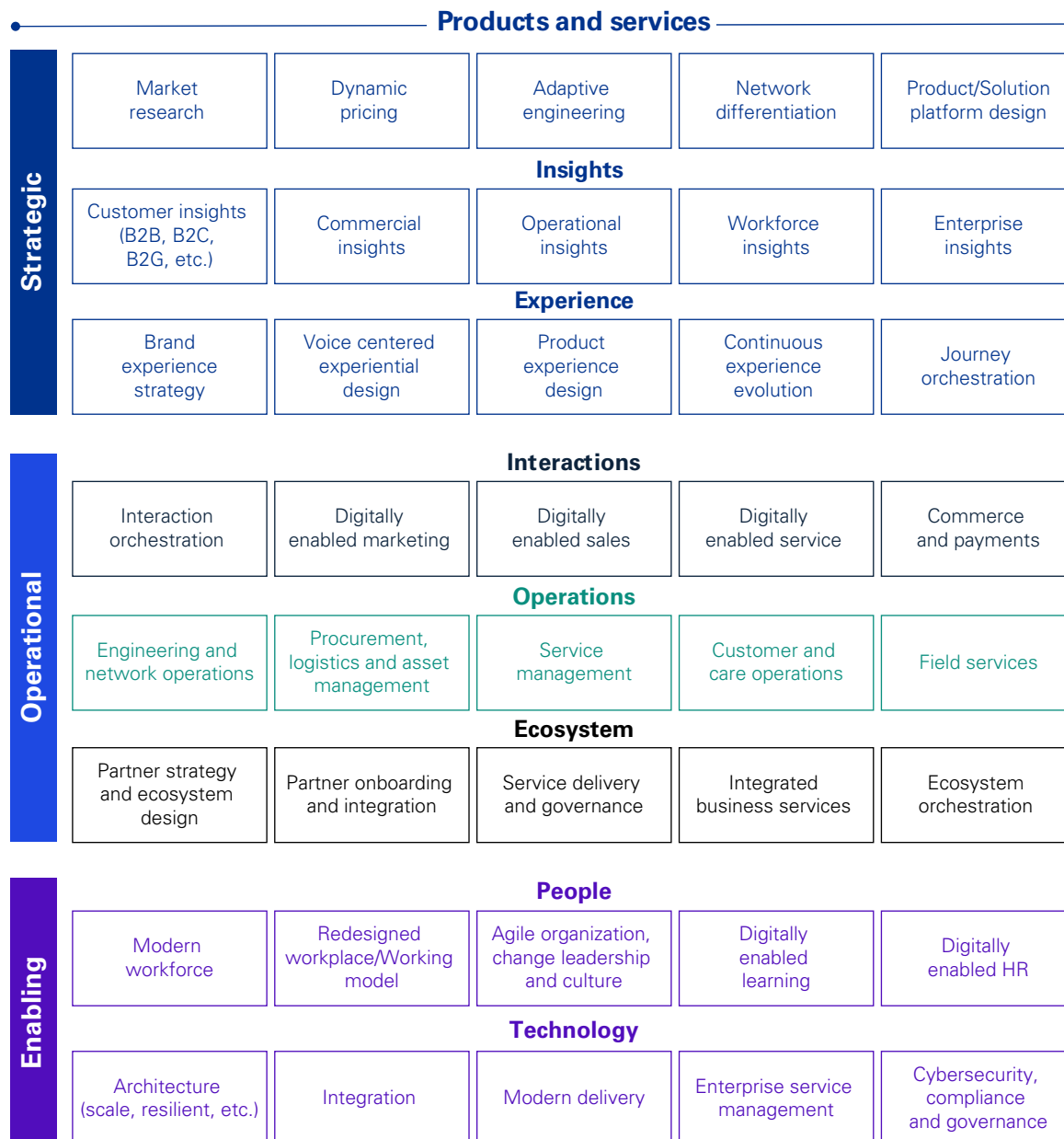Source: A commissioned study conducted by Forrester consulting, April 2022

Evaluating your capability maturity

Each of the eight enabling capabilities are underpinned by a set of five sub-capabilities. One of the first steps in defining a winning model is understanding your relative maturity in each sub-capability against the required maturity to help deliver your winning business model. KPMG offers three levels of maturity diagnostics depending on the needs of your business.

Products and services

Strategic

Insights

Market research	Dynamic pricing	Adaptive engineering	Network differentiation	Product/Solution platform design
Customer insights (B2B, B2C, B2G, etc.)	Commercial insights	Operational insights	Workforce insights	Enterprise insights

Experience

Brand experience strategy	Voice centered experiential design	Product experience design	Continuous experience evolution	Journey orchestration

Operational

Interactions

Interaction orchestration	Digitally enabled marketing	Digitally enabled sales	Digitally enabled service	Commerce and payments

Operations

Engineering and network operations	Procurement, logistics and asset management	Service management	Customer and care operations	Field services

Ecosystem

Partner strategy and ecosystem design	Partner onboarding and integration	Service delivery and governance	Integrated business services	Ecosystem orchestration

Enabling

People

Modern workforce	Redesigned workplace/Working model	Agile organization, change leadership and culture	Digitally enabled learning	Digitally enabled HR

Technology

Architecture (scale, resilient, etc.)	Integration	Modern delivery	Enterprise service management	Cybersecurity, compliance and governance

KPMG Connected Enterprise offers a set of tools and templates that can help translate the maturity assessment into tangible strategic and operational blueprints, roadmaps and initiatives to help accelerate your implementation of connected capabilities and ensure the success of your digital transformation.

Case studies

1. Enhancing the finance operating model [Global telecommunications provider]

The telecoms environment has changed. This leading US-based provider knew it needed to sharpen its focus if it wanted to remain competitive. They wanted to standardize their processes, helping their organization and service delivery, enable new tech solutions, and better manage their data. Yet they were being hampered by a lack of integration and coordination across their strategic initiatives. And finance had identified several areas of deficiency in their organizational structure and service delivery model. A practical blueprint for the future state of the organization was needed.

Professionals from KPMG in the US started by assessing the requirements, expected outcomes, and high-level design decisions. A gap analysis then identified a portfolio of prioritized initiatives based on benefit and complexity to implement. Cross-functional dependencies and existing transformation initiatives were also considered. This led to developing a robust 3-to-5-year roadmap, supported by a rolling 12-month integrated plan to help ensure the company achieves its desired outcomes.

KPMG professionals identified more than 100 actionable, quick-win opportunities that helped deliver significant savings in the near term. The team helped reduce labor costs, improve strategic business partnering and ensure consistent service across the organization. Supported by detailed future-state process documentation and governance frameworks, our team showed the organization how it could achieve its end-state vision, tracing its objectives to its original pain points and requirements.

2. Scaling up to capture the market [Global telecommunications provider]

This major US-based IoT player wanted to move quickly to expand into the global market. Customers were asking for a bigger footprint, more consistent services, and a more seamless experience. Leadership recognized a massive revenue opportunity in providing global IoT connectivity services. But the existing network was locally focused and not scalable to the worldwide market. Moreover, the organization's billing and operations centers did not meet local regulatory requirements in many markets. A global connectivity strategy would be required to meet their goals and objectives.

KPMG in the US worked closely with the organization's leadership to develop a massive US$10 billion target revenue business case that included US$622 million in capital investments. KPMG professionals engaged leaders from across the organization — IoT network, customer care, product development, legal and regulatory, among others — to design a new operating model, including identifying global IoT network and billing solution ecosystem partners, as well as an operational roadmap to realize the business case objectives.

The US$10 billion revenue business case and the capital investment portfolio were ultimately approved to support the global expansion. The organization inked a new global IoT network partnership that promised to deliver around US$200 million in savings in the first five years. New products to support end-to-end logistics and edge computing solutions have been launched. And a new care operations target operating model has been adopted to support global clients.

3. Turning techco [Regional telecommunications provider]

When one of Asia's leading telecom providers decided to get into the platform business, they turned to KPMG in Singapore to help them articulate their strategy. The company already boasted world-class internal capabilities that could quickly be adapted to develop new external service offerings and internal value propositions. The organization focused on Analytics as a Service (AaaS) as a pathway to delivering a market-facing CaaS offering.

KPMG professionals worked closely with company leadership to assess the organization's current AaaS capability and define a strategic blueprint. Capability gaps were identified. And a broader action plan was developed to articulate key steps and design considerations to meet the opportunity. KPMG professionals also helped the organization identify internal use cases for AaaS and to communicate the value potential around the new CaaS services.

The organization is now continuing to evolve its internal AaaS capability and maturity to meet ongoing customer needs. The KPMG team is helping the organization conduct continuous maturity evaluations and improvements to its Agile AaaS service delivery model. At the same time, KPMG professionals are exploring ways to work with the partner ecosystem to better monetize the CaaS opportunity.

Making it happen

KPMG Connected Enterprise for telco is an insight-led, client-centric approach to digital transformation.

In KPMG professionals' experience, there are a number of key considerations that can help telco companies make faster progress on the connected journey:

1 **Keep close to what your consumers want.** The ability to think "outside-in" is key in building a customer-centric business. Ensure you know and act on what your consumers want, need and value; keep continually looking up and outside of the organization and industry to help ensure alignment with some of the best consumer experiences in day-to-day life.

2 **Do things in an agile way.** Break changes down into specific steps, sequence and then implement them. Keep standing back to assess whether the change has been successful in a "test-and-learn" approach. It's about a series of small changes that together can add up to a significant and impactful transformation.

3 **Build in resilience.** Take on today's challenges with resilience and determination, and be prepared to expect the unexpected, fail fast and learn along the way. By developing a connected enterprise architecture, you will find that your ability to change course at speed can be significantly enhanced.

4 **Keep it human.** While embedding new technologies, such as artificial intelligence (AI) and automation, is likely to be critical in developing more seamless interactions for consumers, remember that you also need to keep the experience "real." Many great organizations remain defined by the quality and passion of their people and their sense of purpose.

5 **Make use of new technologies.** Continually look at what new technologies are becoming available that could help you serve consumers better or connect your business more seamlessly. Experiment with the opportunities available through cloud, machine learning and advances in data science.

Contacts

Mark Gibson
Principal, Global Head of Technology,
Media & Telecoms, KPMG International & Principal,
KPMG in the US
mgibson@kpmg.com

Greg Corlis
Global Leader, IoT and Private Networks,
Technology, Media & Telecoms, KPMG International
& Principal, KPMG in the US
gcorlis@kpmg.com

Huntley Bakich
Principal, KPMG Connected Enterprise,
Technology, Media & Telecoms
KPMG in the US
huntleybakich@kpmg.com

Phil Wong
Principal, Strategy, Technology,
Media & Telecoms
KPMG in the US
philipswong@kpmg.com

Diogo Sousa
Principal,
Head of Telco Center of Excellence
KPMG in Portugal
dsousa@kpmg.com

Levi Watters
Principal,
National Telco Lead
KPMG Australia
lwatters@kpmg.com.au

Darren Yong
Principal, Asia Pacific Head of Client
and Market Development, Technology,
Media & Telecoms, KPMG in Singapore
darrenyong@kpmg.com.sg

Some or all of the services described herein may not be permissible
for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia