GSMA Intelligence

The opportunity for operators in B2B technology services

Sizing prospects for growth in financial services, manufacturing, automotive and aviation

October 2024

gsmaintelligence.com

@GSMAi

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 www.gsma.com

Follow the GSMA on X: @GSMA

Authors

Vivek Gautam
Analyst, Verticals & Telecoms

Silvia Presello
Lead Analyst

Tim Hatt
Head of Research and Consulting

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

GSMA Intelligence

01 Executive summary

State of the market

01

Operators look beyond the core network business

With slow ARPU growth in the mobile and fixed connectivity business, revenue diversification remains an imperative for operators. They have pursued various strategies, including offering digital services in the B2C segment and technology services in the B2B segment. Progress has been slow but steady. Services beyond core telecoms contributed 26% of revenues in 2022, up from 18% in 2019.

02

B2B is driving significant growth opportunities

Riding the digital transformation wave, operators have seen faster growth on average in the B2B segment than in B2C. With demand expanding for solutions across a range of technology areas (cloud, edge, IoT, security), B2B still offers significant growth opportunities. Enterprises are increasingly looking for service providers to integrate a blend of technologies for their specific environment and needs.

03

The addressable opportunity amounts to more than $400 billion

GSMA Intelligence estimates that $400 billion is currently addressable for operators, incremental to what they currently make from core telecoms. To put that in perspective, $400 billion is around 35% of the global mobile operator revenue base, underlining the potential magnitude. However, this and the projections represent the total addressable opportunity rather than a forecast of what will happen. Competition is fierce, with hyperscalers, platform players, IT service companies, equipment manufacturers and software startups all jostling for market share.

04

Four priority sectors account for a third of the opportunity

In 2023, financial services, manufacturing, automotive and aviation offered addressable opportunities of $59 billion, $61 billion, $22 billion and $16 billion, respectively, and are expected to grow at CAGRs of 10.9%, 12.1%, 12.0% and 8.4% between 2023 and 2030. Together they account for around a third of the total addressable market for B2B technology services beyond core telecoms.

05

A new mindset and operational changes are required to win

To succeed, operators must adopt an enterprise-centric, solution-oriented approach, behaving more like IT consultants than connectivity sellers. They need to consolidate and simplify their enterprise portfolios, adapt their sales and marketing approach, be prepared to bid as consortia with other competitors and ‘frenemies’, and acquire new technical and commercial skills.

The market in numbers

34%

The total revenue opportunity for B2B technology services beyond core telecoms is projected to grow significantly faster than for core telecoms, reaching $2.9 trillion by 2030. The share addressable by operators is estimated to be almost $1 trillion (34%).

37%

Manufacturing, financial services, aviation and automotive together account for 37% of the addressable market for B2B technology services.

12.1%

The addressable market for B2B technology services in manufacturing is set to grow at a CAGR of 12.1%, reaching $136 billion by 2030. Use cases enabled by edge, cloud and AI/ML include preventive maintenance, digital twins, asset tracking and robotics.

10.9%

The financial services vertical offers significant opportunities across cloud, edge and cybersecurity, with the addressable technology services revenue opportunity projected to grow at a CAGR of 10.9%, reaching $122 billion by 2030.

02 The B2B opportunity

Methodology and definitions

Research methodology

To size the total available B2B market, revenue estimates were developed for each technology segment (cloud & data centres, cybersecurity, IoT, others and core telecoms) by triangulating data from multiple sources including GSMA Intelligence data, financial reports (from operator groups and IT vendors) and third-party sources. The total available B2B revenue opportunity is the sum of the opportunity in each segment, adjusted for inter-segmental overlaps.

To estimate the addressable B2B opportunity for operators, we began by taking a current view of the technology solutions offered by a representative set of operators (the largest operators). These were mapped first to segments for technology services beyond core and then to established solution and service areas within each segment. The total addressable opportunity is the sum of the market for all solution and service areas where operators have an offering. The addressable opportunity for individual operators will vary according to the geography served and portfolio offerings. The technology solutions and services offered by operators vary according to their acquisitions, partnerships, organic service development efforts and market focus.

The opportunity by vertical was estimated through data triangulations based on multiple data points, including enterprise technology spend (overall and by technology service beyond core), digital maturity, technology priorities and adoption by vertical.

Key components of B2B services

Core telecoms

- SD-WAN, edge networking, private wireless networks
- MPLS WAN, IP VPNs, leased lines, Ethernet, unified communications, web conferencing
- Traditional fixed voice and broadband
- Traditional mobile voice and data

Technology services beyond core

- Cloud and data centres – public and private cloud (IaaS, PaaS, SaaS), cloud professional services, virtual desktop infrastructure, colocation and hosting
- Cybersecurity – incident detection and response, threat intelligence, data protection, security assessments, managed security services, and network, end-point and cloud security
- IoT – IoT connectivity, platforms, associated professional and managed services
- Others – big data and analytics, AI-related services, blockchain, network APIs

Methodology and definitions

Defining verticals

Vertical	Definition
Financial services	The provision of any type of financial service such as banking, life and non-life insurance, payment processing, trading and wealth management, and microfinance. Many areas of financial services are regulated, so sector-specific regulatory agencies are also included in this vertical. Example companies include Allianz Group, Axa, Bank of America, Barclays, Citibank, Industrial and Commercial Bank of China, Munich Reinsurance, Stripe, Swiss Re, UBS, Wellington Management and Worldpay.
Manufacturing	All types of manufacturing activity except automotive manufacturing (see below). Enterprises in this vertical can be sub-divided into two broad categories: process industries (e.g. chemicals, fertilisers, food processing) and discrete manufacturing industries (e.g. electronics, industrial products and machinery, medical devices).
Automotive	All types of automobile and auto component manufacturing. Example companies include Audi, BMW, Bosch, Continental AG, Cummins, Denso, Faurecia, Ford, Honda, Motherson Group, Tesla, Toyota and Yamaha.
Aviation	Airlines, air freight and logistics firms, airport operators and related service providers, maintenance, repair and operations (MRO) companies, unmanned aerial vehicle (UAV) operators, air traffic controllers and regulators.
Others	All other industries, such as healthcare, public sector (education, public safety, federal and state government), retail, media, energy and utilities, agriculture, oil and gas, transport and logistics (excluding aviation), professional services, personal and consumer services, mining and ports.

The B2B market is increasingly important to the success of operators

B2B is growing at a faster pace than B2C

Multiple factors have led to slower growth in the consumer segment. These include changing consumer expectations, the emergence of alternative low-cost service providers, and over-the-top (OTT) platform solutions eating into core B2C services.

Although the consumer segment is still the largest contributor to operator revenues, the enterprise segment is growing at a faster rate (average revenue growth of 5.6% in 2022 versus 1.5% in the consumer segment). Enterprises undergoing digital transformation are seeking new technology and use cases to boost efficiency.

The incremental revenue opportunity in the 5G era is in the enterprise segment

Operators looking to monetise their massive investments in 5G need to look beyond consumer-centric, basic connectivity use cases.

A greater focus is needed on offering advanced network solutions such as network slicing and private networks in the short term, and developing end-to-end solutions to support enterprise use cases (combined with integration capabilities) in the longer term.

Network and IT transformation will enable broader involvement in B2B

Network and IT transformation (e.g. the shift to cloud-native architectures and software-defined-networking), combined with the introduction of network APIs, enables operators to offer on-demand services tailored to the specific needs of businesses.

Operators can support enterprise digital transformation by offering value-added services beyond connectivity and integrating more deeply into customers' ecosystems.

Operators need to look beyond core telecoms and take a holistic view of the B2B opportunity

Core telecoms offers little headroom for growth

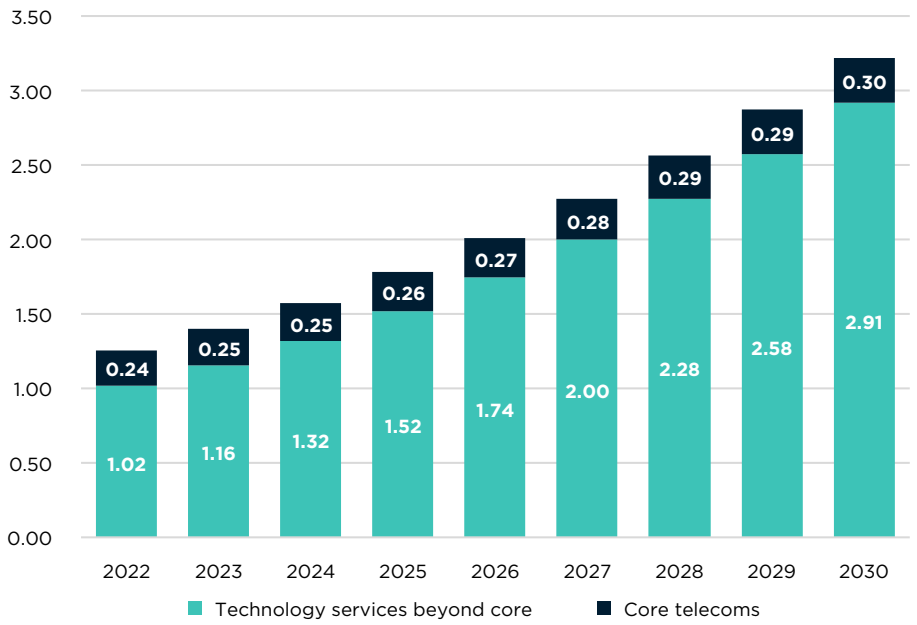
Core telecoms contributes on average around 70% of B2B revenue. However, the market is small, is growing at a slower pace than technology services beyond core and is seeing escalating competition with the launch of AWS Cloud WAN, Microsoft's Azure Virtual WAN and other data traffic solutions.

The imperative is to expand and innovate in technology services beyond core

The market for technology services beyond core telecoms is big and growing fast. Though competition is intense, digital transformation is reshaping the fundamentals, creating demand for new solutions and impacting established supplier ecosystems. This presents a significant opportunity for operators to redefine their role in the B2B landscape. They need to look beyond connectivity solutions and services and take a broader view of the opportunity. By enhancing their offerings (in services such as cloud computing and cybersecurity), expanding into new enterprise verticals, and forging new partnerships, operators can drive growth while helping enterprises thrive in an increasingly digital world.

Global B2B revenue opportunity

$ trillion



CAGR 2023–2027

Core telecoms 3% **Technology services beyond core 14%**

Source: GSMA Intelligence

Services beyond connectivity are gaining prominence in operators' B2B strategies

Connectivity + services leads for the first time

Market leadership in enterprise connectivity and services is the primary goal for 36% of the operators surveyed by GSMA Intelligence, with leadership in enterprise connectivity second. Connectivity received the highest share in previous editions of the Enterprise Opportunity Survey. This is the first time operators have identified connectivity + services as their primary goal. This signals a shift in focus towards services and the need to bundle connectivity with services fit for enterprise needs.

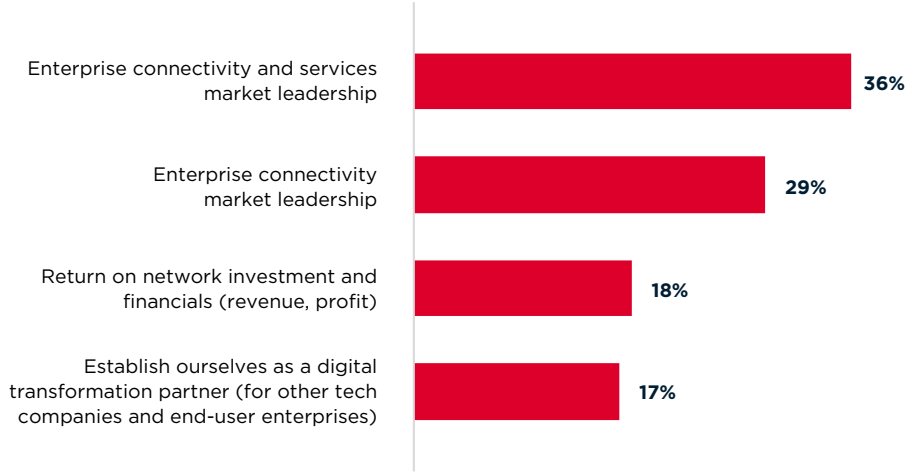
Regionals trends

European operators deem connectivity + services relatively more important as a goal than operators on average globally. Achieving a return on network investment and financials is relatively more important for operators based in North America. Operators in North America have been engaging with enterprise clients with solutions encompassing connectivity and services, so this may reflect a current rather than lasting trend, with increasing pressure to improve financials and return on investment.

Primary goal driving enterprise strategy

What is the primary goal driving your company's enterprise strategy?

Percentage of operators



Source: GSMA Intelligence Operators in Focus: Enterprise Opportunity Survey, December 2023

Combining established assets with new capabilities can help target a third of the total opportunity

Leveraging established assets to expand in technology services beyond core telecoms

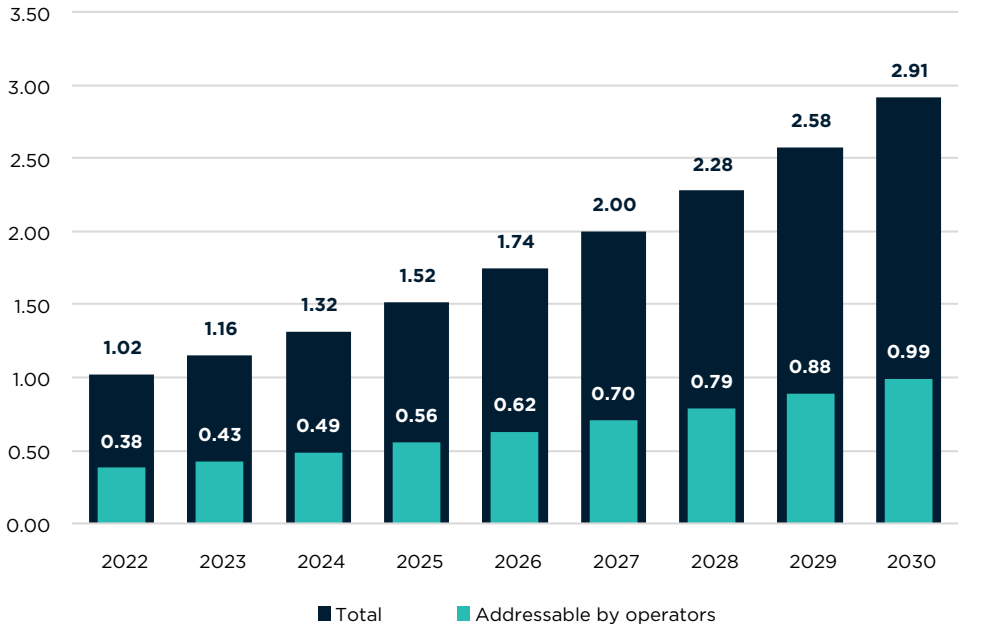
The global opportunity for B2B technology services beyond core telecoms is expected to reach $2.91 trillion by 2030. Operators can leverage their existing service capabilities and strengths to target an estimated 34% of this opportunity. These include ICT infrastructure, managing enterprise data, identity, security, established relationships with enterprise customers, partnerships, and sales and distribution channels. Operators can further enhance these assets by making targeted investments to build or acquire capabilities in new technology areas.

Building a view of the addressable opportunity

Each operator needs to assess its own addressable opportunity in the space beyond core telecoms, as it is a function of the geographic markets served and breadth and depth of their portfolios. The view of the addressable opportunity will constantly evolve, reflecting an operator's appetite to make new acquisitions, forge partnerships and make organic investments to develop new solutions and distribution channels.

Global revenue opportunity for B2B technology services beyond core

$ trillion



Source: GSMA Intelligence

Around 80% of the opportunity is in cloud & data centres and cybersecurity

Cloud & data centres offer room for growth

Though hyperscalers will likely continue to dominate the cloud market for the foreseeable future, there is room for operators to grow. Leveraging their data centre infrastructure, operators have historically offered co-location, managed hosting and private cloud services. Building on these strengths and forging partnerships with cloud giants, operators could play a role in hybrid and multi-cloud orchestration, especially for SMEs. As critical infrastructure providers, operators are also well positioned to tap into demand for sovereign cloud and edge computing services.

Cybersecurity is a key strength

Operators' expertise in network monitoring and surveillance offers a competitive advantage. While pure tech companies (security vendors, IT service providers) and public cloud providers may be better placed to offer cloud and application security, operators hold a significant market position in network security, identity and access management, endpoint security, zero-trust security and managed security services.

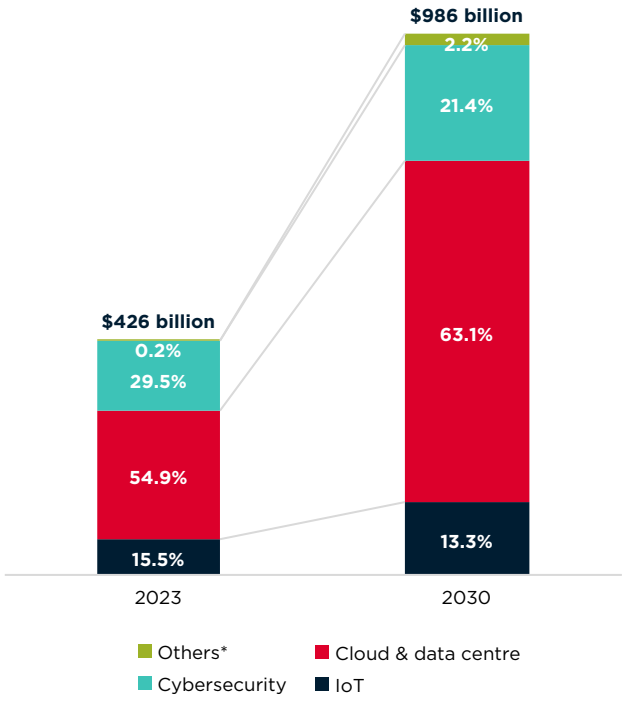
IoT demand will continue to grow

The global IoT market is forecast to grow at a CAGR of 9% between 2023 and 2030. Enterprise IoT will see the greatest increase (12% CAGR), with smart manufacturing leading on growth.

Other areas are fast gaining share

By building new capabilities, operators can target emerging areas such network APIs, AI and data services. For instance, Chinese operators have focused on AI combined with IoT and 5G to offer services to manufacturing, while Telefónica is taking steps to monetise 5G through network APIs.

Global revenue opportunity for B2B technology services beyond core, addressable by operators, by segment



* Others includes data analytics, AI-related services and network APIs
Source: GSMA Intelligence

Four verticals account for nearly 37% of the total addressable market

Manufacturing and financial services offer the biggest opportunities

The four verticals in focus account for around 37% ($159 billion) of the market addressable by operators for B2B technology services beyond core telecoms. Manufacturing and financial services offer the most significant opportunities, with no other verticals offering similar potential.

Cybersecurity is key to automotive and aviation digital transformation

As IoT, edge and cloud computing investment increase in these verticals, so too will demand to secure digital assets against cyber threats and ensure compliance with security regulations.

Other verticals are looking at new technologies

Other verticals account for 63% of the operator opportunity for B2B technology services beyond core communications. The size of the market is expected to grow further. Growth is being fuelled by diverse verticals including healthcare, transport and logistics, and smart cities. There is currently no clear evidence on which industry will dominate.

Global revenue opportunity for B2B technology services beyond core, addressable by operators, by select verticals, 2023

$ billion

* Others – healthcare, public sector, retail, media, smart cities, energy and utilities, agriculture, oil and gas, transportation and logistics (excluding aviation), professional services, personal and consumer services, mining, ports.

Source: GSMA Intelligence

03 Sizing the markets

Financial services

A changing competitive landscape is driving demand for cloud and offering opportunities for edge compute

Cloud uptake continues

New players, evolving business models, and rapid growth in data volumes will continue to accelerate digitalisation in financial services. This will encourage further uptake of cloud technologies as key enablers of agility, scalability, security and operational resilience to support wider enterprise digital transformation.

Edge compute to stay ahead of competition

Adoption of edge compute in financial services enables low latency and high-speed order execution. As financial needs become more complex, low latency becomes a key differentiator in banking. By implementing advanced data analytics at the edge, financial institutions can respond swiftly and leverage the vast amount of data generated to gain a competitive advantage.

Limited IoT opportunity

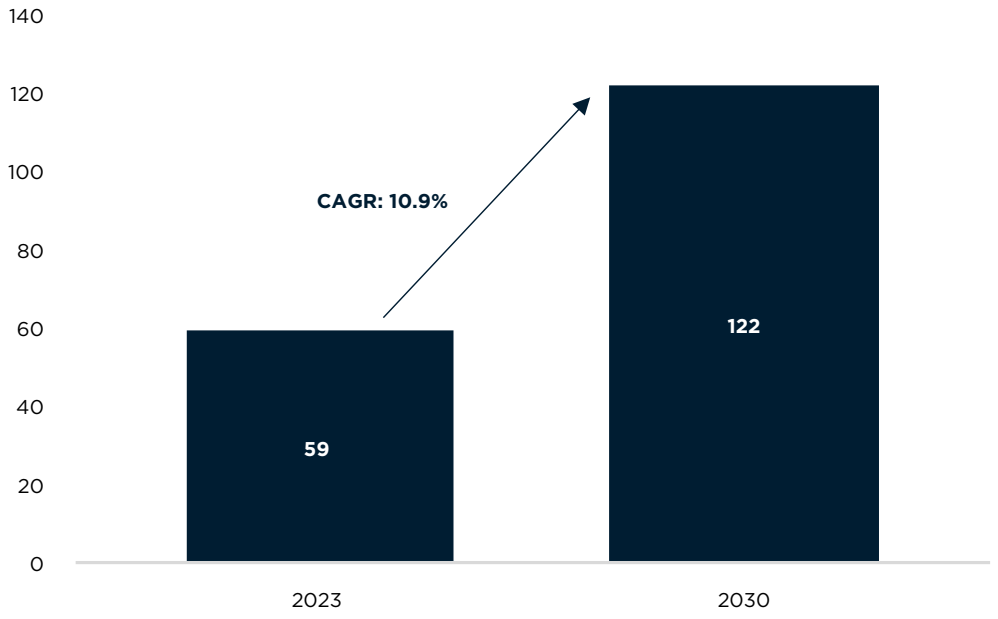
The applicability and use cases of IoT in financial services, which mostly deal with intangibles, remains limited (compared to other industry verticals). Use cases typically centre on IoT payment devices, smart ATMs and vehicle insurance telematics.

Opportunities outside technology services

Operators have a growing opportunity to offer financial services to consumers and businesses. Examples include M-Pesa (Safaricom), Paycell and Finacell (Turkcell) and MoMo (MTN). These ventures have boosted investors' perceptions and the market capitalisation of operators. For instance, Globe Telecom's e-wallet service, Mynt, was recently valued at $5 billion.

Financial services: global addressable revenue opportunity for operators in B2B technology services beyond core

$ billion



Source: GSMA Intelligence

As digital assets expand in financial services, cybersecurity continues to be a top priority

Digital assets expand the attack surface

As financial services organisations undergo digital transformation and invest in technologies such as cloud, edge compute, AI, big data and analytics, their digital footprint and assets are multiplying. Consequently, the attack surface continues to expand. With the growing frequency and severity of cyberattacks, cybersecurity is a perpetual focus area for companies in the vertical. Some 86% of operators surveyed globally believe the security threat for financial services and payments organisations is high or very high.

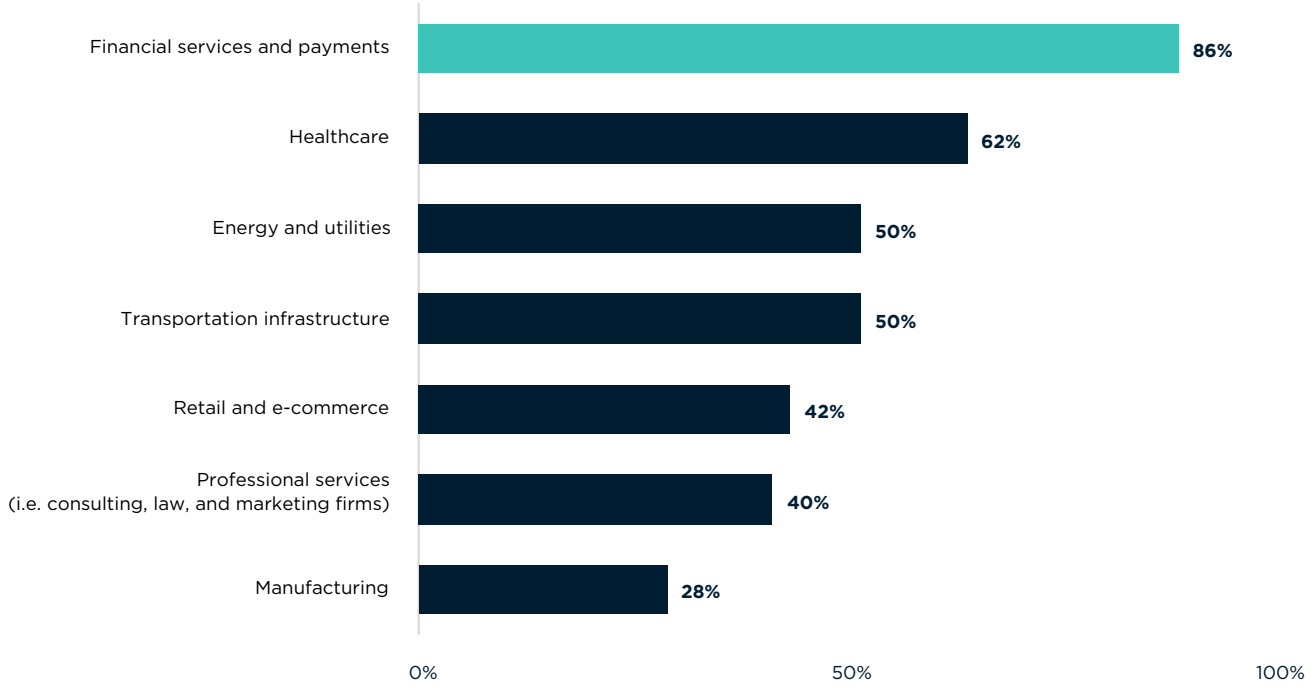
Regulatory pressures will drive the cybersecurity opportunity

Evolving cybersecurity regulations such as the Digital Operational Resilience Act, Cyber Incident Reporting for Critical Infrastructure Act, UK FCA Consultation Paper 26/23 and growing compliance requirements are leading to sustained regulatory pressure on financial services firms. This will drive spend on security solutions and managed security services.

Financial services drive demand for cybersecurity solutions

How would you rate the overall security threat level across the following verticals?

Percentage of operators rating high or very high



Source: GSMA Intelligence

Operator case study: Telefónica Tech helps Virgin Money boost customer acquisition with new onboarding solution

Virgin Money is a UK banking and financial services organisation. It has more than 6 million customers and is structured around three divisions (personal, mortgages and business). Virgin Money offers a range of products and services for consumers and SMEs.

Need and challenges

A lengthy onboarding process

Virgin Money's client onboarding process involved customers going through a time-consuming and manual process to apply for business banking accounts.

High customer drop-out rates

The lengthy onboarding process was causing high customer drop-out rates and risked losing potential customers.

Further drivers to digitise onboarding

The company needed a scalable platform to enhance customer experience and satisfaction, reduce turnaround time and agent effort, and enable straight-through decisioning for customers to increase conversion rate, market share and cross-sell.

Solutions and services

Automated client onboarding

Using Microsoft Power Platform, Telefónica Tech built, implemented and launched a client onboarding platform for Virgin Money, providing maximum automation, minimum customer input and an enterprise-level automated decisioning process for new clients.

Enhanced customer offerings

The new platforms, built with the support of Telefónica Tech, allowed customers applying for banking to access their bank account details and online profile, provide additional information, and make an application with instant approval or rejection.

Business value

Customer growth and a better onboarding experience

The customer acquisition rate has grown from 5% to 34% since implementation and continues to grow, due to a faster and more user-friendly application process.

Cost-effective solution

The digital approach has saved time and money due to less involvement required from back-office employees.

Increase in straight-through applications (no colleague involvement)

The average time to complete an application was reduced to 10–25 minutes. Twenty percent of customers are onboarded via the new portal and half of customer accounts are now opened within five days of application.

03 Sizing the markets

Manufacturing

Industrial automation is a key driver of the opportunity for technology services beyond core

Automation to generate growth for cloud, edge and IoT services

In recent years, manufacturers have been hit hard by pandemic shutdowns, supply-chain disruptions, economic instability and climate change. They have embraced cloud, edge and IoT technologies to improve operational resilience, agility and flexibility. Initial use cases for cloud have been in areas such as supply chain visibility, vendor collaboration and new product development. While these use cases remain relevant, the next wave driving the use of cloud, data centres and intelligent edge services comes from the adoption of smart manufacturing technologies. Examples include dynamic digital twins, the fusion of AI and IoT, and augmented reality.

Managed security services are a key growth area

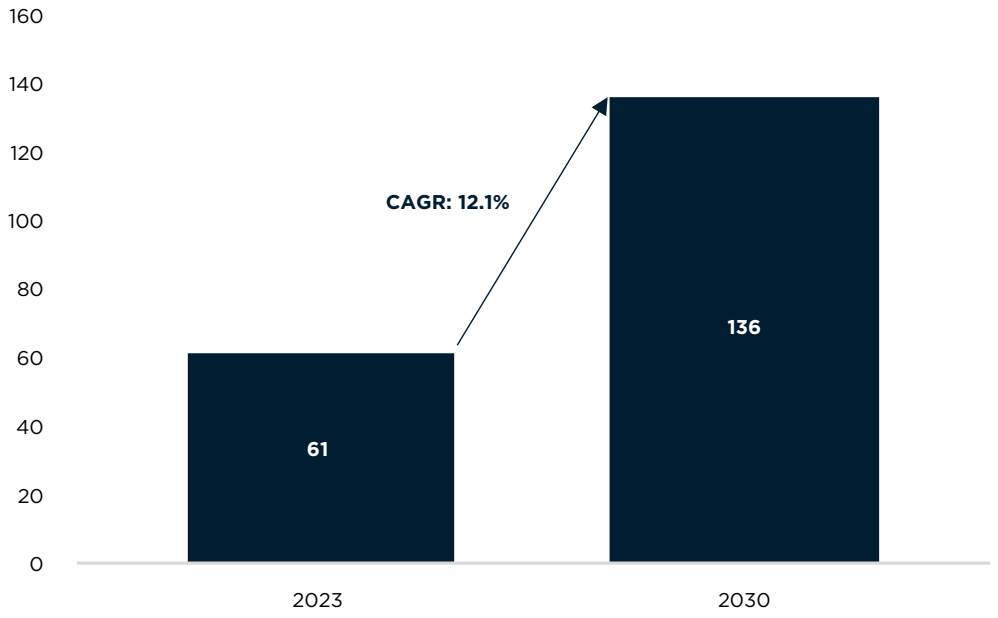
Growing reliance on information technology (IT) and operational technology (OT) convergence, cloud and edge service, and digital assets are contributing to an expanded attack surface. Coupled with increasing cyber threats and cybersecurity skills gaps across most manufacturing organisations, this is expected to create sustained demand for managed and professional security services.

Growing volume of data drives AI/ML and big data analytics

Greater adoption of IoT, edge and cloud technologies, and pervasive connectivity in factory and plant environments is generating large volumes of data. To extract business value from these data troves, new use cases are emerging, fuelling investments in big data analytics and AI/ML.

Manufacturing: global addressable revenue opportunity for operators in B2B technology services beyond core

$ billion



Source: GSMA Intelligence

A host of use cases are driving greater adoption of advanced manufacturing technologies

Advanced predictive maintenance is driving industrial automation

Though the use cases are numerous, the primary driver of industrial automation in manufacturing is advanced predictive maintenance, according to operators. For example, receiving an alert ahead of a fault occurring in a piece of equipment or process can save significant costs for an enterprise. This involves the use of IoT sensors and on-premises edge computing to build predictive analytics. As big data flow increases, storage and cybersecurity solutions will also be important factors to consider.

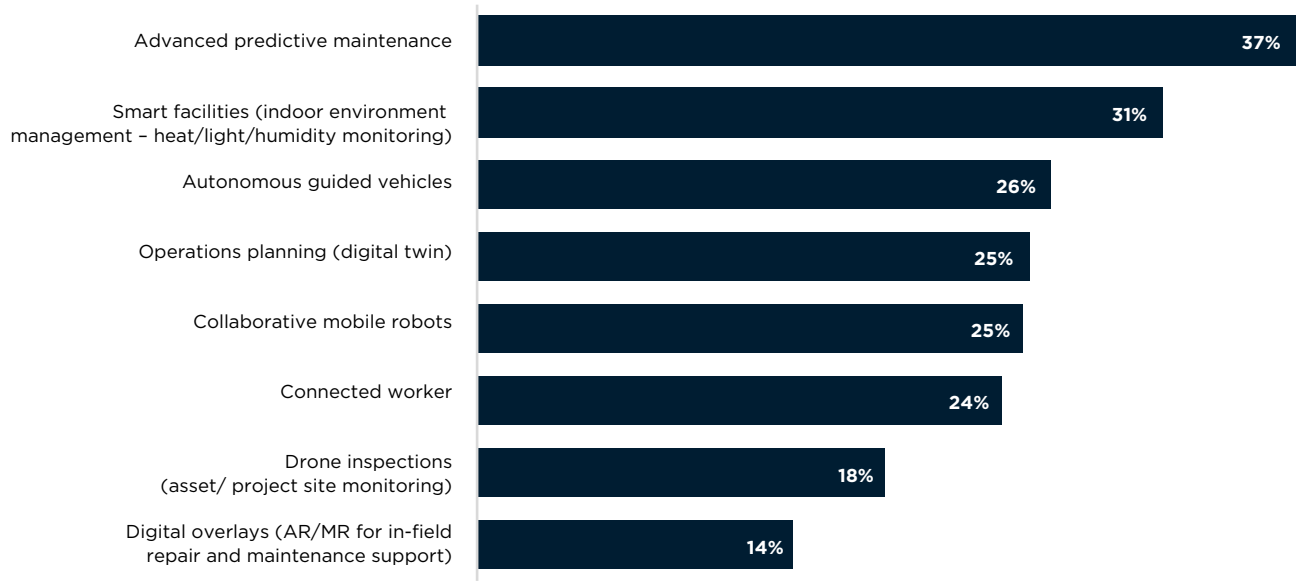
Decarbonisation is an imperative

Digital investments are a major part of strategic plans to improve energy consumption and emissions from facilities. As climate change rises up the agenda, developing and implementing tighter environmental regulation is becoming a key priority for governments. Environmental regulation – ranging from reducing waste to emissions standards requirements – will drive adoption of smart technologies in manufacturing. Edge compute and IoT sensors enable enterprises to build smart facilities that enable higher efficiency levels, collect environmental and energy KPIs, and comply with regulations.

Advanced predictive maintenance tops industrial automation use cases

What are the top three use cases enabled by connectivity and non-connectivity services in the manufacturing/industrial sectors?

Rank top three



Score = Rank 1 + Rank2*0.66 + Rank 3*0.33
Source: GSMA Operator Survey: manufacturing vertical priorities, 2024

Case study: Verizon strengthens Fujifilm's global cybersecurity monitoring and cyber intelligence capabilities

Fujifilm Holdings Corporation is a Japanese multinational conglomerate offering products and services in the areas of medical devices, biotechnology, advanced materials, office and business solutions, and imaging. With more than 270 consolidated subsidiaries and 75,000 employees, the company generated approximately $20 billion in revenue in fiscal year 2023/2024.

Need and challenges

Decentralised protection

Each business unit operated its own security system, so Fujifilm lacked consistent, group-wide cybersecurity measures, and the ability to detect sophisticated attacks that could be disguised as normal communications.

Adapting to remote working

As remote working increased, the group needed to update its security measures to protect both external cloud environments and on-premise devices.

An evolving threat landscape

The company needed to adopt an agile, modern security strategy and implement advanced preventative measures to counter the growing threat of sophisticated and targeted cyberattacks.

Solutions and services

The Security Information and Event Management (SIEM) platform

This collects logs saved on subsidiaries' systems, statistically analyses the activity within company networks to detect cyberattacks and identify suspicious behaviour in real-time (or near-real-time), and takes appropriate action.

Verizon Advanced Security Operations Center (SOC) services

These provided Fujifilm's technology team with access to daily threat intelligence feeds from Verizon's nine SOCs and six forensic labs around the globe. They also had access to local-language security engineers and analysts who monitored the company's global remote environments on a 24×7×365 basis.

Business value

Early incident detection

The previous surveillance method relied on pattern matching security software, which meant the firm would notice a problem long after an incident had happened. The solutions and services implemented have enabled early detection of security incidents.

Strengthened response capabilities

The focus of surveillance was previously on Japan. Executing the same level of surveillance for locations in Americas, Europe and Asia Pacific was an issue. Verizon services have enabled efficient and effective 24×7 centralised surveillance worldwide.

GSMA Intelligence

03 Sizing the markets

Automotive

Advanced manufacturing initiatives and connected vehicles spur growth in technology services beyond core

Massive data consumption is fueling growth in edge and cloud

The automotive industry has been leading the way in edge computing applications. With greater integration of software, sensors and connectivity, vehicles are evolving into highly data-driven systems that generate real-time data in massive quantities. Car manufacturers are continuing to explore edge computing as it leads to new uses cases in areas such as intelligent driving and advanced driver assistance system (ADAS).

Accelerated digitalisation to drive demand for technology services

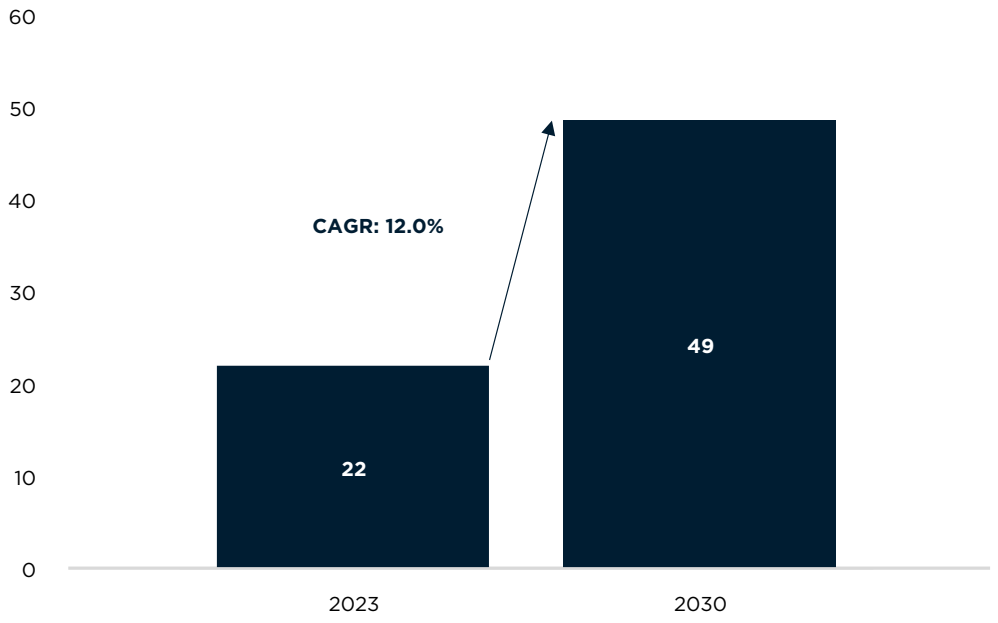
Automotive companies are facing escalating competition globally, technology shifts (towards electric and connected vehicles), complex supply chains and heightened consumer expectations. They are integrating advanced manufacturing technologies such as IoT, AI/ML and digital twins to improve time-to-market, customer responsiveness, efficiency, sustainability, quality control and compliance. This is generating demand for complementary IT services.

Cybersecurity is a growing concern

As more sensitive data is processed locally, the need for cybersecurity solutions and a data storage defence layer increases. In recent years, numerous incidents of data breaches and ransomware attacks, as well as pervasive connectivity and evolving regulations (e.g. R155, R156 of UNECE WP.29), have made cybersecurity a key industry concern. As cybersecurity practices mature across the ecosystem, the services market is expected to evolve.

Automotive: global addressable revenue opportunity for operators in B2B technology services beyond core

$ billion



Source: GSMA Intelligence

Aligning portfolios with the digital transformation priorities of car manufacturers

Car manufacturers view IoT as the most important area of transformation

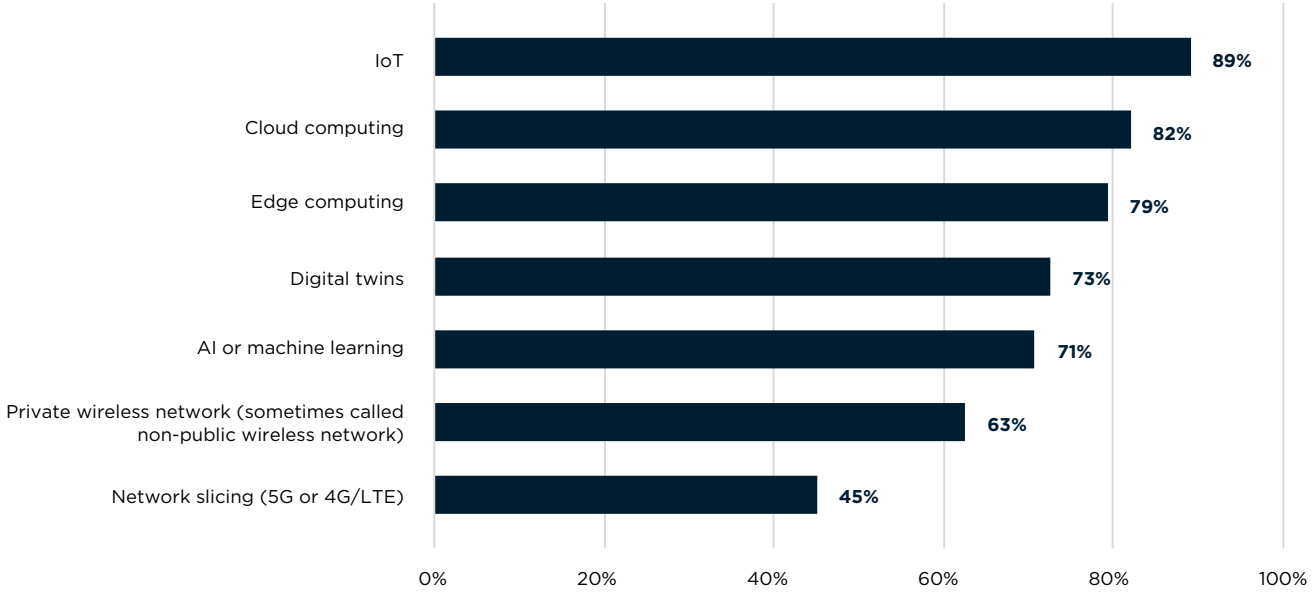
Some 89% of car manufacturers surveyed globally view IoT as the most critical enabler of B2B sales success. The benefits of IoT in the automotive industry are vast, including enhanced vehicle efficiency, better maintenance and improved sustainability. As key technologies that complement IoT, cloud and edge computing are also viewed as very or extremely important by more than a third of car manufacturers. Other technologies such as digital twins, AI/ML and network slicing are set to grow in importance as digital transformation in the automotive sector progresses.

Comprehensive solutions aligned with manufacturers' priorities

It is essential that operators and their enterprise partners consider the full range of technologies car manufacturers consider important, as this will enable them to tap into the right opportunities at the right time. This means not only focusing on IoT but also understanding how edge, cloud, AI/ML and digital twins can be integrated into comprehensive enterprise solutions aligned with car manufacturers' business requirements.

Car manufacturers view IoT as the most important area for sales success

How important do you view each of the following areas for your enterprise B2B sales success?



Source GSMA Intelligence AECC survey, June 2023

Case study: T-Systems migrates Continental's SAP systems to a private cloud

Continental AG, a German multinational, is one of the largest automotive suppliers globally specialising in tyres, brake system electronics, automotive safety, powertrains and other auto components. With more than 200,000 employees in 56 countries and markets, the company generated sales of €41.4 billion in 2023.

Need and challenges

Need to future-proof SAP operating platform

Continental operated more than 450 SAP systems on on-premise infrastructure. Though SAP production systems were operating with high levels of stability, reliability and availability, the infrastructure had reached its end of life. Continental was looking for a new future-proof SAP platform that could offer:

- stability and reliability like the existing infrastructure
- greater flexibility and scalability to support growth
- facilitation of hybrid and multi-cloud working (e.g. integration with Azure)
- cost reductions.

Need for a single service provider

Continental wanted to outsource all services to a single provider to ensure one point of accountability for all SAP issues.

Solutions and services

Future Cloud Infrastructure (FCI)

T-Systems is migrating Continental's SAP systems to its FCI – a managed private cloud service that brings on-premises infrastructure, private cloud and public cloud onto one platform, reducing IT complexity and enabling easier integration and central management of all systems. The company has set up a landing zone on the shared private cloud platform in the Frankfurt data-centre cluster. The migration will be competed in 2024. As part of the long-term contract, the company will operate and support the SAP operating system until at least the end of 2027.

Business value

Cost reduction

Sophisticated migration procedures reduce downtime and, in turn, migration costs. The FCI platform and its efficient management enable significant cost reductions during the continuous operation of the SAP system.

Increased flexibility and scalability

FCI provides flexible and scalable infrastructure for future consolidation projects within the group – for example, the operation of non-SAP systems and upcoming transformation to SAP S/4HANA.

A path to hybrid cloud

The migration provides business units with an option to integrate their own preferred platforms to enable hybrid working – for example, Azure or AWS.

03 Sizing the markets

Aviation

Digitalisation of legacy processes drives uptake of cloud, AI, analytics and other technology services

Data to drive significant business value

Safe and efficient operations, sustainability and offering a seamless travel experience are imperatives for airlines and airports. To fulfill these, companies are constantly looking for opportunities to extract value from large volumes of distributed and real-time data generated across their businesses. This will continue to create opportunities for the use of big data, analytics, AI and IoT in areas such as customer experience and maintenance, repair & operations (MRO).

Need for rapid innovation and cost savings will spur cloud growth

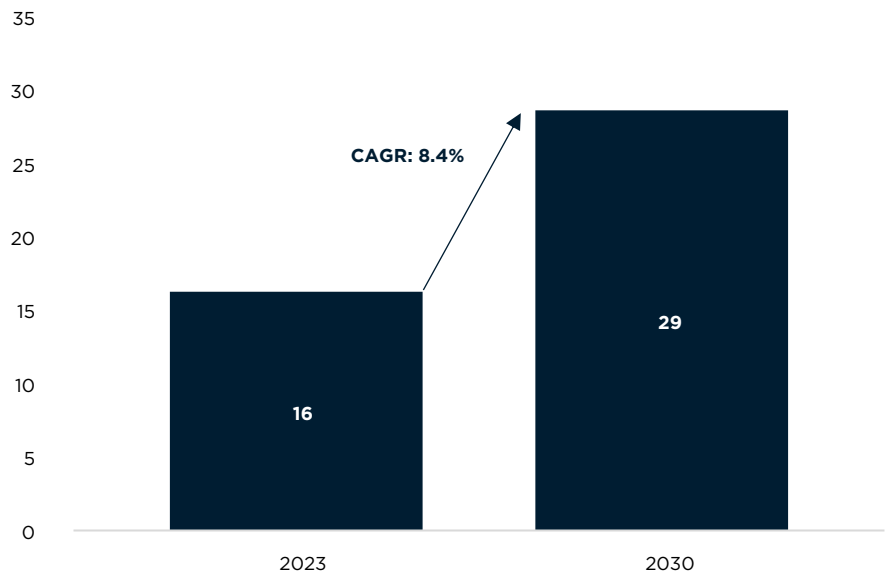
Aviation was one of the hardest hit industries by Covid-19. In the post-pandemic world, the need to save costs and rapidly innovate has accelerated digitalisation of processes across aviation. In the front office, technologies such as chatbots, mobile apps, biometric authentication, digital ID and digital payments will see greater adoption. In the back office, migrating legacy applications to the cloud will remain a focus. These trends will drive use of cloud infrastructure and services, as well as demand for managed and professional services.

New regulations are a key driver for cybersecurity

Increasing reliance on interconnected systems and the evolving threat landscape have grown the cyber risk exposure of all industry participants. Firms across the aviation sector are expected to comply with new, stringent cybersecurity regulations (e.g. EASA EAR for Information Security Part IS, US TSA emergency amendment requirements, and FAA operational authorisation requirements). This is set to generate further demand for cybersecurity solutions and services in the vertical.

Aviation: global addressable revenue opportunity for operators in B2B technology services beyond core

$ billion



Source: GSMA Intelligence

Drones represent a key area of opportunity in aviation

Drones are a key area for B2B sales success

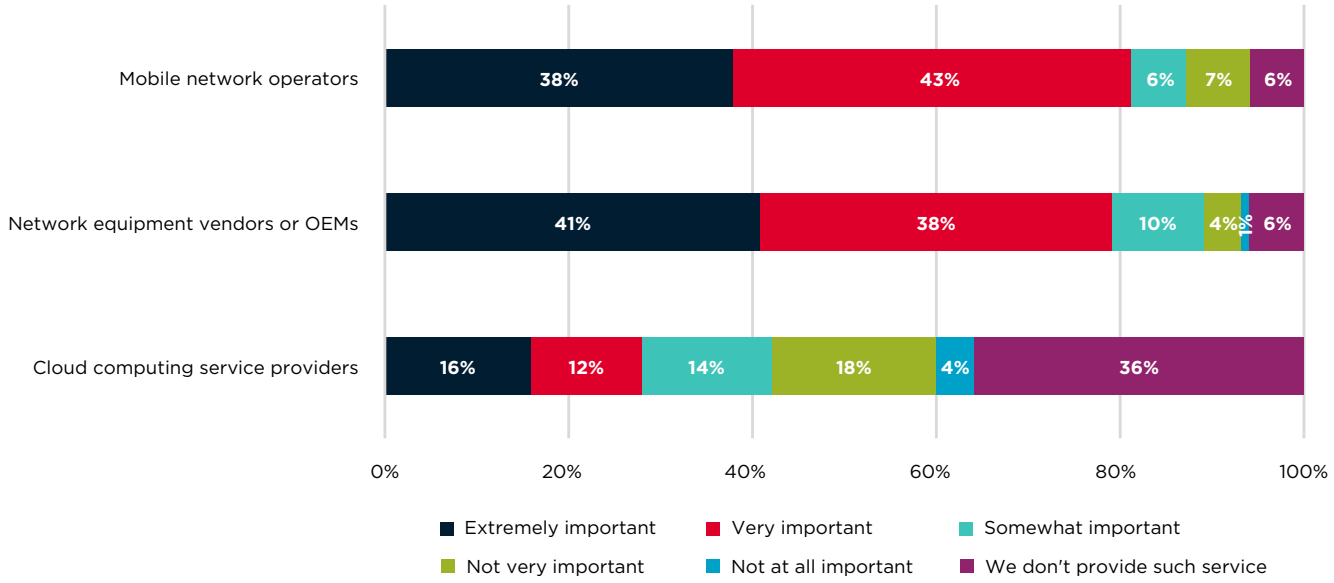
81% of operators surveyed view drones as important or extremely important to their enterprise sales success. This view is shared by 79% of network equipment vendors. The multitude of drone use cases makes it possible for the aviation industry to intersect with other verticals, such as transport and logistics (e.g. delivery of packages and traffic monitoring), and energy & utilities (e.g. inspecting a wind turbine).

Operators focus on creating new offerings

Besides connectivity, drone use cases can drive demand for edge computing, cloud, AI/analytics and cybersecurity solutions. Operators can focus on creating new enterprise offerings by combining technologies. For example, SK Telecom has developed a communication and AI-enabled video analysis module for drone flights and mission execution. The module connects drones and ground control systems to transmit status and control messages. It also uses deep learning to identify illegal drones.

Over 80% of operators view drones as very or extremely important for their B2B success

How important do you view drones to your enterprise and B2B success?



Source: GSMA Intelligence AECC Survey, June 2023

Case study: Telefónica Tech provides Heathrow Airport with data analytics and managed services

Heathrow Airport is the fourth busiest airport in the world. Spread over 1,227 hectares, it handles more than 80 million passengers each year. The company has more than 75,000 employees and generated revenue of £3.7 billion in 2023.

Need and challenges

Specialist talent

Working with Microsoft, Heathrow consolidated data from multiple operational systems – including weather tracking, flight schedules, baggage tracking and cargo tracking – into its centralised Heathrow Universal Data Lake (HUDL), which further developed into the Heathrow Insights Platform (HIP). HIP utilises a full suite of Azure cloud and data tools and introduced processes for insight creation. With these initiatives, Heathrow felt the need for a data specialist to streamline data analytics processes across the airport and operationalise data-driven decision-making.

Solutions and services

Managed services

As part of Telefónica Tech's managed services, a data analyst workbench is being established to simplify insight creation and a secure area for management of personal identifiable information. The firm also improved the data ingestion process for Heathrow's retail data systems and created a new interface to transform retailers into data-driven operations.

Business value

Access to scale and skilled resources

Heathrow gained access to highly skilled resources that it was finding difficult to recruit and retain on its own. This helped rapidly scale insight generation and the use of data for better decision-making.

Detailed insights into operations

HIP and managed services have enabled Heathrow to gain detailed business insights. For example, it can forecast different KPIs down to the granular level of a day or produce new 'what-if' scenarios. This has helped optimise its cargo terminal, retail partnerships and airport operations.

GSMA Intelligence

04 Outlook

Operators will need to compete with an array of players, from hyperscalers to specialised IT providers

Fierce competition

As enterprise customers have embraced digitalisation, the B2B landscape has become increasingly complex and fragmented. As operators target the digital transformation of enterprises, they will face increasing competition from a range of providers targeting the same opportunities. Successfully navigating this evolving landscape requires operators to directly compete in certain solution areas while collaborating in others.

Edge networking and cloud

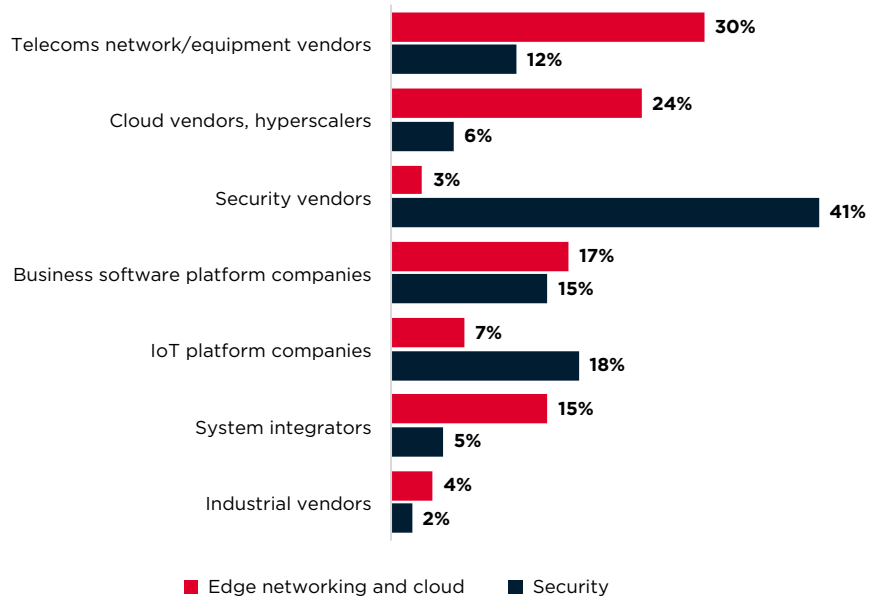
It's no surprise that around a quarter (24%) of operators view hyperscalers as formidable competitors in edge networking and cloud, as the latter's core offerings are in the cloud, while their expansion of edge zones and networking directly threatens operators' cloud and edge reach and relevance.

Security

In the security space, 41% of operators see competitive pressure from pure security vendors. As connectivity and 5G penetrate further into enterprise operations, there is an increased need to secure networks, operations and assets, broadening the competitive landscape for security solutions.

Operators' most formidable competitors for edge networking and cloud, and security

Who do you consider your most formidable competitor, besides your telecoms peers, in each of the following areas?



Source: GSMA Intelligence Operators in Focus: Enterprise Opportunity Survey, December 2023

A new mindset and operational changes are required to succeed

The B2B market needs a solution-oriented approach

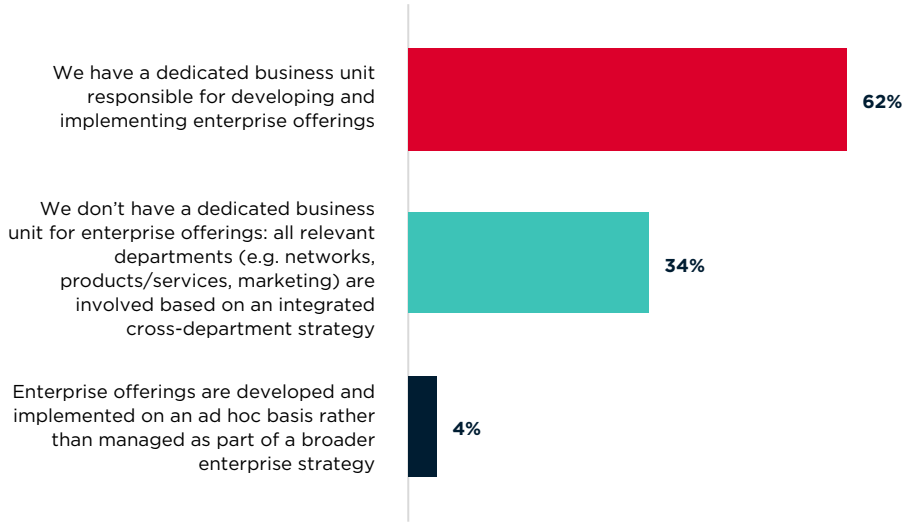
In the expanding market for technology services beyond core, value can be found in seamlessly integrating elements such as connectivity, cloud orchestration, cybersecurity, data and analytics to drive enterprise digital transformation. To succeed, operators must not look at everything through the lens of core communication services; they should take a comprehensive, solution-oriented approach. However, 38% of operators surveyed still manage their enterprise offerings across multiple business units or on an ad-hoc basis, hindering their ability to compete effectively.

An evolving operating model

Just over 60% of operators (up from 54% a year ago) now have a dedicated business unit responsible for developing enterprise offerings and strategy, indicating a growing realisation of the need to reorganise their operations to better serve enterprise customers. Beyond this, operators also need to consider simplifying and consolidating their B2B portfolios and adapting sales, marketing and service delivery. They can leverage data and feedback to inform decision-making processes while enhancing customer understanding. Establishing proactive communications with enterprise clients will help operators understand their painpoints as they innovate and expand their value proposition.

Planning for and implementing enterprise offerings

How are enterprise offerings planned for and implemented across your organisation?



Source: GSMA Intelligence Operators in Focus: Enterprise Opportunity Survey, December 2023

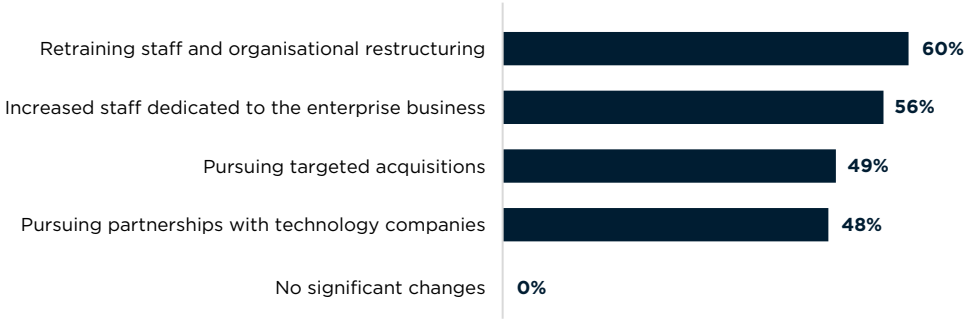
Operators need to balance building internal capabilities and fostering ecosystem partnerships

Evolving B2B strategy

Operators realise the need for new skills across commercial and technical areas to serve enterprise customers. Most (60%) are focused on retraining and upskilling staff, and 56% stated they have increased resources dedicated to their enterprise business. Many have focused on targeted acquisitions to build in-house capabilities and partnerships with cloud giants and specialist software providers to drive higher-value engagements. Around 50% of operators surveyed mention pursuing targeted acquisitions or partnerships with technology companies as an operational move to support their evolving B2B strategy.

Operational changes to support enterprise strategy

How have your operations changed to support your enterprise strategy?
(Percentage of respondents)



Source: GSMA Intelligence Operators in Focus: Enterprise Opportunity Survey, December 2023

Examples of operators' strategic moves in technology services beyond core

Cloud and digital services, IoT, Cybersecurity, Multiple areas

Operator	Acquisitions	Partnership
Telefónica Tech	Cancom UK&I, Altostratus, Incremental, Geprom	Microsoft
Telenor	Combitech	
TIM		Oracle
Vodafone		Microsoft
Orange	Expertime, SCRT, Telsys	Microsoft
KDDI		Fortinet
Telstra Purple	Alliance Automation, Aqura Technologies	
ZainTech	Citrus Consulting	CoreStack
SoftBank	Cubic Telecom	
Etisalat	Help AG	

Source: GSMA Intelligence

Recommendations for the way forward

Develop a comprehensive strategy and clear value proposition

The B2B market offers significant opportunities across a range of segments, verticals and offerings. There is no ‘one size fits all’ approach. Based on their growth aspirations, risk appetite, geographic footprint, client relationships and capabilities, operators need to assess their own addressable opportunity and prioritise key market segments and verticals to target. Further, they must develop a comprehensive strategy and clear value proposition.

Offer customised services

Value in the B2B segment lies in integrating connectivity and other technologies to enable enterprise use cases. Operators must therefore look beyond the network business and evolve into a strategic business partner that can deliver tailored value-added solutions demanded by enterprise customers.

Reorganise to sell effectively to enterprise customers

To unlock the true potential of the B2B segment and drive sustainable future revenue growth, operators must make operational changes such as consolidating and simplifying their enterprise offerings into one business unit, and adapting sales, marketing and delivery for greater flexibility and agility. Additionally, they must be willing to invest in new capabilities, pursue targeted acquisitions and collaborate to compete.

Related reading

From telco to digital telco: navigating trends and drivers shaping revenue growth beyond connectivity

Enterprise Opportunity 2024: operator strategies, plans and expectations

Operators in IoT: progress in the last decade and pathways to success

gsmaintelligence.com

@GSMAi