# GenAI as a service: The 15X growth gem favouring telcos

Opportunities are most significant in banking, IT, government and retail, contributing to nearly a third ($24bn) of the total opportunity forecast in 2028.

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Businesses are actively navigating through the uncertainties of new AI-fuelled innovative technologies such as genAI.

GlobalData research finds that 2023 had nearly 23,000 genAI Large Language Model (LLM) patent filings; businesses are 48-times more likely to deploy genAI than they were in 2023. Further to this, there are also ten-times as many jobs advertised for genAI-related roles than in 2022 which signals a real intent to close the skills gap. Another study found 74% of respondents in Q3 2024 believed AI would disrupt their industry, either significantly or slightly. GlobalData forecasts, genAI (a subset of AI) to generate nearly $9bn in revenue at the end of 2025 to over $75bn in 2028.

As a result of these investments, there will be the use cases which follow. On one axis, there are the industries benefitting the most, such as telecoms and media, healthcare, financial services, retail, and manufacturing. On the other, there are the cutting-edge use applications such as improvements in medical imaging diagnostics (GE Health Care); accelerating drug discovery (Pfizer) or creating individual beverage flavours tailored to regional preferences (Coca Cola). Telcos have many use cases optimising infrastructure and predictive maintenance (China Mobile); and banks are improving real-time fraud detection (JP Morgan) or improve credit scoring (Bank of America).

## Recalibrating infrastructure

The question is not whether businesses will deploy, or identifying the potential business value; however, the conversation is more around making it work by address-

ing challenges related to infrastructure and skillsets.

As companies look to build their own, train or fine-tune an existing Large Language Model (LLM), each model under consideration will have a minimum of one billion parameters, powered by record levels of compute, memory, network, and storage resources. This will require networks to handle larger data sets (training and inferencing) at high throughputs. There will also be need for dramatic improvements in latency including routing optimisation and ability to scale linearly.

## Telco's strengths to support genAI adoption

While most businesses stand to benefit from genAI, there are many challenges that stand in the way such as the tactical skill sets in areas such as data collection processes through to the infrastructure design. There are other broader strategic considerations such as setting up a Responsible AI framework which would consider explainability and traceability of data sources including prediction accuracy and consistency. Models will typically

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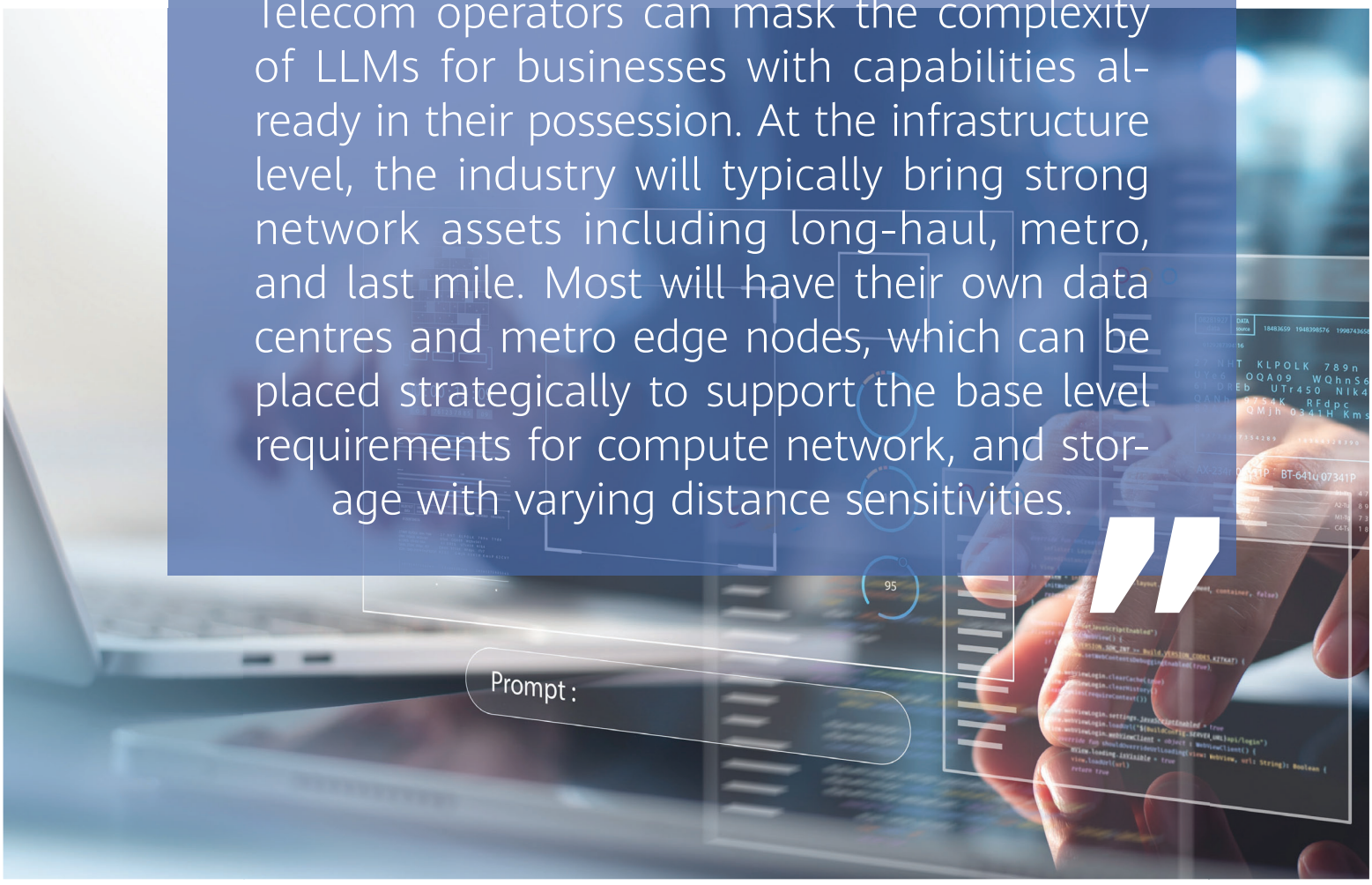

need to show fairness and avoid statistical bias. Security posture should align to unique LLM risks, such as model poisoning, tampering and theft. Likewise, many of the higher growth sectors such as financial services, IT, government, health care and manufacturing, will need additional measures to meet industry specific compliance needs.

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The telco industry tends to be among the most heavily regulated industries which bring for themselves and customers they serve the ability to meet higher standards in areas such as compliance and customer privacy. The core network is often viewed by governments as 'critical infrastructure' which brings mature data collection and reporting processes, granularity and layered cyber defences. Furthermore, in some cases, telecom operators are sharing data with other sectors such as banking and government on areas such as threat intelligence.

## Private cloud and genAI as a service

From a go to market perspective, both incumbents and leading challengers tend to have strong sales channels, partner ecosystems, customer support and operations to build out (or resell) ready-made products across the lifecycle. A strong physical presence, such as retail outlets, online channels, and direct billing relationships make them an enviable partner. Telcos will also have their own hybrid or multi-cloud capability, either direct or through partners which they use internally or sell locally. Many operators have advantages in purchasing power and experience in working across multi-vendor systems.

In terms of the commercial opportunity, there are at least two segments that stand out. Large enterprises, such as retail banking representing over 10% (or $903m) of the total opportunity in 2025. Operators can support these sectors in areas such as data centre design and connectivity and play an advisory role into compliance, governance and build these additional inputs into the reference architectures. The telecom sector also brings their own data sets, unique to each customer, that can improve the accuracy and/or security of LLMs.

The mid-market is also an attractive opportunity which can be upwards of 50% in total ICT spend and/or up to 99% of all businesses, in any given market. Mid-market segments tend to lack the internal skills to select, fine-tune, run and manage an LLM. They need to focus on improving productivity, efficiency and focussing on outcomes over technology. Budgets are also very limited. Plus, businesses with fewer than 100 employees, for example, tend not to have their own internal IT resources.

In these scenarios, a genAI as a service capability can be very appealing from a cost, commercial model, and risk point of view. Moreover, telecom operators should consider developing such a capability as they look for opportunities to leverage investments, diversify away from low-margin connectivity and thrust into services. A foothold into genAI as a Service should also have the potential to morph into a PaaS offer, or even marketplaces attracting many third-party offers, developers, and other participants.

Whether to support the mid-market in automating repetitive functions, or creating transformative industry plays, GlobalData shows an over $75bn opportunity in 2028 which is a 15X increase from 2023. While there is a healthy distribution across EMEA and Americas, APAC interestingly is showing just over 40% of the total opportunity. In addition, the opportunities are most significant in banking, IT, government and retail, contributing to nearly a third ($24bn) of the total opportunity in 2028.