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Telco AI:
State of the Market, Q3 2025

Towards revenue and sovereign AI

October 2025

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01 Executive summary

Summary

01

Moving towards a revenue objective

Telco AI deployments in 2024 largely focused on saving money through easy-win or low-risk solutions for customer care, network automation and pre-emptive maintenance. While these still account for the bulk of deployments, there is a growing movement towards using AI in the service portfolio with a revenue objective. This is most prominent in the US (accounting for 20% of AI deployments), China and other parts of Asia (25%), reflecting experimentation with GPU-as-a-service (GPUaaS), inference and (in some cases) AI factories; examples include Verizon and SK Telecom. Results and disclosure of commercial performance in Q4 2025 and into 2026 will be key to understanding the effectiveness of monetisation.

02

Capitalising on sovereign AI

Sovereign AI refers to retaining AI workloads in the same country or jurisdiction where they were generated. AI raises the stakes because of the enormous compute workloads involved and the underlying infrastructure – data centres and telco access networks – being designated as critical national infrastructure. Examples from Q3 2025 include Ooredoo Qatar (with Ericsson), Indosat and Bell Canada (with Cohere). This is a key competitive advantage for operators against hyperscalers and others in the compute value chain, given their role as local/national connectivity providers. Operators need to leverage this position wherever possible.

03

Nvidia versus the field?

GPUs sit at the base of the AI infrastructure pyramid that ultimately powers large-language model (LLM) training and inference from specialists such as OpenAI, Anthropic, DeepSeek (in China), Perplexity and Cohere. Nvidia's position is well established on several metrics, with its representation among telco AI deployments remaining No.1 in GPUs. AMD and Intel rank second and third, but trail Nvidia by a significant margin. While we are likely to see some movement in the GPU space, barring increased competition from China (which itself would require a geopolitical detente between the US and China), it remains Nvidia's game to lose. There is, however, more open ground in cloud, with Google and Microsoft in the top positions in telco AI partnerships with large and small/medium-sized operators, respectively.

AI in numbers

47%

Customer care

Customer care (call centres and other sales touchpoints) is still the most common function for operators to target with AI, comprising almost 50% of all deployments tracked by GSMA Intelligence. Motivations include cost savings, pre-emptive upsell/cross-sell and churn mitigation.

70:30

Live versus trial/planned

Just under 70% of the AI deployments tracked have already been launched by operators as part of their day-to-day business. Around 30% are in the trial or planning stages. Unlike with 3G/4G/5G networks, where trials linearly give way to live networks over the course of a 10- year cycle, AI is likely to be a repeated pattern of 'cycles within a cycle', with trials representing a large proportion of deployments.

~20%

Telco AI with a revenue objective

Telco AI deployments have so far primarily focused on internal cost savings and efficiencies. The use of AI to drive new business is less prevalent but grew in Q3, using models such as GPUaaS and agentic AI. This will change during 2025 and 2026 as more trials give way to new products.

20%

Size premium

Larger operators have, on average, 20% more AI deployments than their small and medium-sized competitors. This size premium is often seen in infrastructure cycles, helped by higher investment budgets, R&D pipelines and the desire to secure first-mover advantage. There are notable exceptions, however.

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02 Recent developments

Recent developments: news flow

Commercial

Optus has launched Optus Expert AI – an agentic AI solution for frontline teams (read more at Optus)

Indosat introduces AI-based smart surveillance solution, Vision AI (read more at Indosat)

KT launches the KT AI Station – a mobile AI experience centre (read more at KT)

True deploys AI-CODC system for monitoring and managing base station signals, to enhance the performance and stability of networks (read more at True)

Ooredoo Qatar has launched sovereign AI cloud powered by Nvidia Hopper GPUs (read more at Ooredoo)

Technology

Umniah has partnered with Ericsson to deploy AI/ML solutions to cut energy use in their network (read more at Ericsson)

AT&T with Aira Technology and Ericsson tested an AI-generated rApp on Ericsson's Intelligent Automation Platform (read more at Aira)

Bell Canada and Cohere forge strategic partnership to deliver sovereign AI-powered solutions for government and business (read more at Bell Canada)

e& launches AI-powered drone solution for tower inspections (read more at e&)

Elisa strengthens collaboration with Google Cloud to build AI-driven autonomous network (read more at Elisa)

Regulatory

South Korea selects five elite teams for the Sovereign AI Foundation Model project (read more at Ministry of Science and ICT)

UK's telecom regulator, Ofcom, has outlined a strategy for supporting safe and innovative use of AI across telecoms, broadcasting, postal services and online platforms (read more at Ofcom)

Brazil launches consultation for the use of AI in telecom networks and cybersecurity (read more at Anatel)

Source: company press releases

Implications of news flow

Commercial

- **Revenue focus.** Telco AI deployments continue to rise. While most are cost-driven, operators are also working on deploying AI solutions for enterprises. As a result, in the long run, operators aim to see tangible benefits from AI adoption in their top-line and bottom-line P&L figures.
- **Customer experience.** Operators are collaborating with multiple players to broaden their portfolio of AI offerings, aiming to serve customers with faster and reliable networks as well as more enjoyable interactions. GSMA Intelligence data also shows that more than 60% of deployed AI solutions are focused on customer care or network enhancements.

Technology

- **Energy focus.** Energy still accounts for 20–30% of operator opex. AI will put pressure on data traffic – both directly and indirectly (i.e. from changing customer behaviour), which means that energy efficiencies will become more important than they already are in the RAN and core.
- **Agentic building blocks.** Agents are becoming the de facto approach for AI-based services in customer service, network operations, billing and product. This underlines the need to invest in core and edge capacity to support lower compute latency, particularly for services requiring ultra-fast response times (e.g. customer queries and fault resolution, and virtual reality).

Regulatory

- **Moving on sovereign AI.** The growing number of telco private clouds deployed to support government compliance requirements on data protection is a lead indicator. However, there are unknowns in the requirements that operators and other digital infrastructure companies will face to handle data from AI chatbots (e.g. ChatGPT) and enterprise workloads. Understanding these requirements will help operators position themselves early, which should help win business in a competitive landscape.

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03 Telco AI tracker

Coverage of telco AI dataset

- The GSMA Intelligence telco AI dataset covers more than **760** operators from **240** countries.
- While comprehensive, this is a sample of the telecoms sector's activity based on publicly available announcements and information; it is not designed to be exhaustive.

Number of countries where AI has been deployed

Region	1 operator	2 operators	More than 2 operators	Total
Latin America				39
Europe				38
Asia Pacific				29
MENA				19
Sub-Saharan Africa				19
Eurasia				7
North America				3
Total	**69**	**35**	**50**	**154**

1 operator – Countries where one operator has deployed at least one AI solution
2 operators – Countries where two operators have deployed at least one AI solution
More than 2 operators – Countries where more than two operators have deployed at least one AI solution

Source: GSMA Intelligence

Telco AI: where is it being deployed?

To help show where telcos are deploying AI, the various use cases have been categorised according to a set of standard business areas. While every company is different, these categories are broadly consistent across operators.

Each category has a set of use cases that AI (or genAI) supports. The network category, for example, could include pre-emptive maintenance and energy saving through sleep states. Customer care could include AI agents or chatbots. Some use cases (e.g. energy saving) could apply to multiple business areas and are reflected as such.

Telcos deploy AI in different parts of their business

Deployment area	Example use cases	Internal/external primary objective
Network	Maintenance AI-RAN Energy saving Performance	Internal
Product sales and marketing	Customer sales Application development Solution provision (e.g. operators working with a third party to deliver AI-enabled services to enterprise customers, such as GPUaaS)	External
Customer care	Chatbots Spam filters User experience	External
Corporate functions	Employee development Operational support (e.g. finance, IT) Energy saving	Internal
Data centre	OSS/BSS Energy saving	Internal and external
Others	R&D Smart infrastructure Other	Internal and external

Source: GSMA Intelligence

Telco AI deployment metrics

Business area of AI deployments	Asia-Pacific	Europe	Sub-Saharan Africa	MENA	Latin America	Eurasia	North America	Global (Q2)	Global (Q3)
Customer care	37%	38%	60%	41%	77%	52%	43%	47%	47%
Network	17%	19%	13%	22%	9%	19%	14%	17%	17%
Sales and marketing	21%	20%	10%	17%	7%	14%	14%	16%	17%
Corporate functions	12%	10%	4%	11%	2%	5%	14%	9%	8%
Data centre	3%	3%	0%	2%	0%	0%	0%	2%	2%
Others	10%	10%	13%	7%	5%	10%	14%	9%	9%

Volume of AI deployments (average per telco)	Asia-Pacific	Europe	Sub-Saharan Africa	MENA	Latin America	Eurasia	North America	Global (Q2)	Global (Q3)
Large operators*	2.0	1.5	1.3	1.3	1.2	1.6	2.2	1.5	1.6
Small and medium- sized operators*	1.5	1.3	1.4	1.6	1.0	1.0	1.5	1.3	1.3
Average	1.8	1.4	1.3	1.4	1.1	1.4	2.0	1.4	1.4

Primary objective of AI deployments	Asia-Pacific	Europe	Sub-Saharan Africa	MENA	Latin America	Eurasia	North America	Global (Q2)	Global (Q3)
Cost savings	75%	84%	94%	83%	91%	81%	79%	84%	83%
Revenues	25%	16%	6%	17%	9%	19%	21%	16%	17%

Maturity of AI deployments	Asia-Pacific	Europe	Sub-Saharan Africa	MENA	Latin America	Eurasia	North America	Global (Q2)	Global (Q3)
Live	66%	73%	57%	57%	85%	70%	61%	69%	67%
Trial	4%	3%	1%	2%	0%	0%	9%	2%	3%
Commitment	30%	24%	42%	41%	15%	30%	30%	29%	30%

Note: AI deployment data to September 2025.

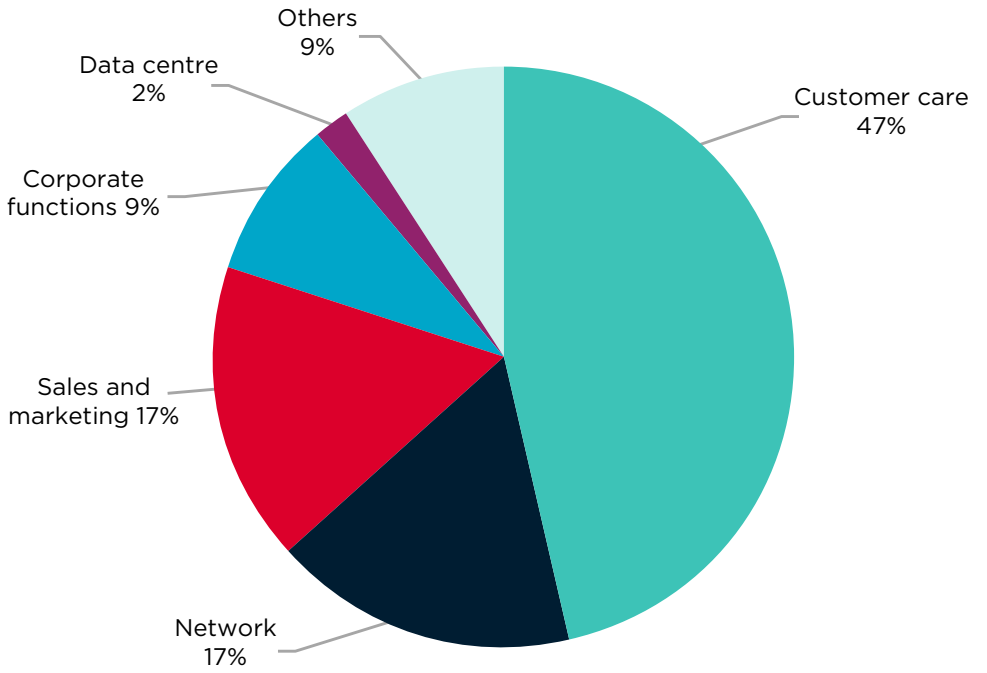
*Large = top 250 operators in sample frame (ranked by mobile subscribers); small and medium-sized = all others (510).

Source: GSMA Intelligence

AI adoption: prioritising the easy wins of customer care and networks

- **It's a long race.** As noted in the Q2 2025 update, telco AI deployments span a range of functions across the business, reflecting the pervasive applicability of the technology. However, not all of these happen at the same time.
- **Easy wins still on top.** Operator activity continues to gravitate towards low-risk, easy wins where functions can be automated through AI agent stacks. Customer care alone accounts for almost 50% of deployments, with networks at just under 20%. Nevertheless, the sands are shifting towards revenue-generating objectives (see page 15).

Where is the AI sweet spot for telcos?
Percentage of telco AI deployments

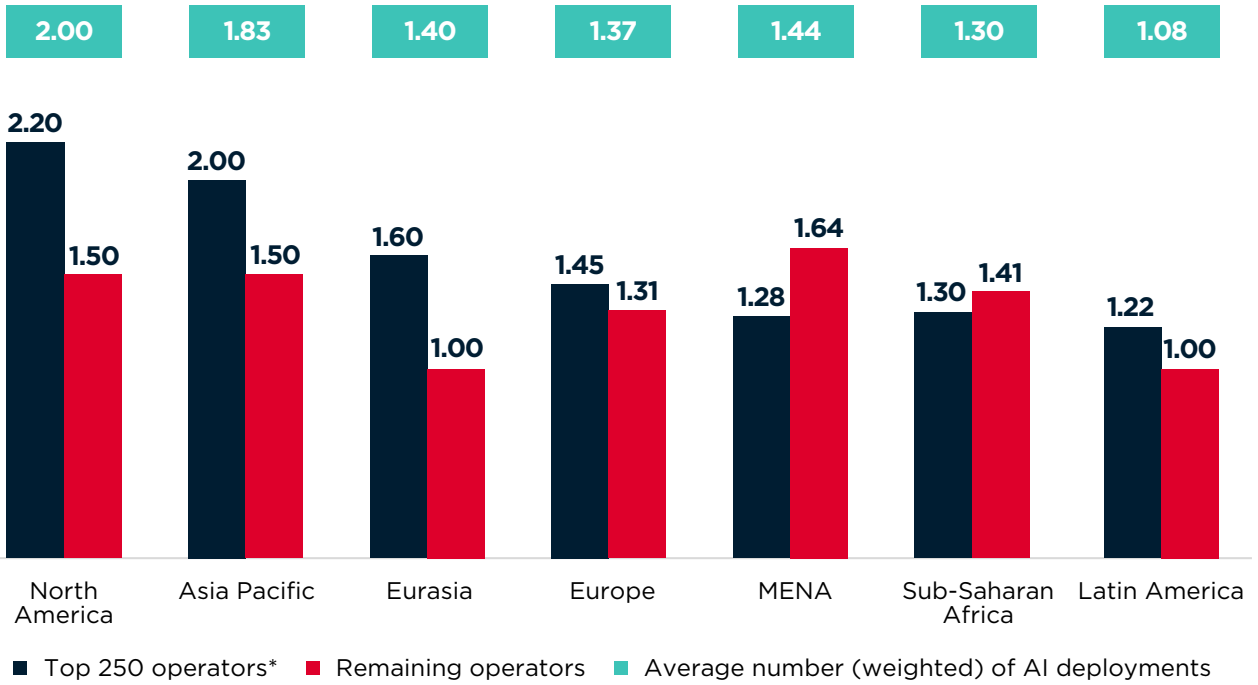


Source: GSMA Intelligence

Deployment intensity: a size premium

- **How much is an average operator using AI?** While it is an imperfect science because not all deployments are publicly known, we can make regional comparisons on a like-for-like basis (i.e. using data that is publicly available). The size of the dataset has materially increased to more than 700 operators, compared to 250 in Q2 2025. This makes findings more representative and allows us to explore deeper cuts
- **Is there a size premium?** There is a consistent correlation between telco size and the extent of AI deployments. This equates to large operators having around 20% more AI deployments per group than small and medium-sized ones (i.e. tier 2 and 3 groups), likely reflecting greater financial resources, R&D pipeline and the desire to secure a first-mover advantage.

Average number of AI deployments per operator



*Global top 250 operators by connections as of Q2 2025
Source: GSMA Intelligence

AI adoption: business objectives

- **Cost savings are the early priority.** Operator cost savings remain an imperative in a low-growth environment and continued pressure from data traffic and energy. AI deployments reflect this, with approximately 80% primarily targeting internal efficiencies (e.g. customer care, network fault detection and OSS/BSS).
- **Revenue goals are emerging.** The Q3 pipeline indicates the start of a rebalancing as operators try to make money from AI. The US, South Korea and China are at the forefront but, even in Europe, a quarter of the AI services announced in Q3 2025 were targeted with a revenue objective, a forward indicator of new product launches and/or revenue models being put into practice, such as GPUaaS and edge inferencing.

Primary business objective of AI deployments, by region

Region	AI deployments launched (cumulative)	Primary objective		New deployments (three months to September 2025)	
		Internal (costs and efficiencies)	External (product revenue)	Internal (costs and efficiencies)	External (product revenue)
Europe	122	84%	16%	75%	25%
Asia Pacific	120	75%	25%	63%	37%
Latin America	57	91%	9%	-	-
Sub-Saharan Africa	52	94%	6%	92%	8%
MENA	46	83%	17%	79%	21%
Eurasia	21	81%	19%	50%	50%
North America	14	79%	21%	100%	0%

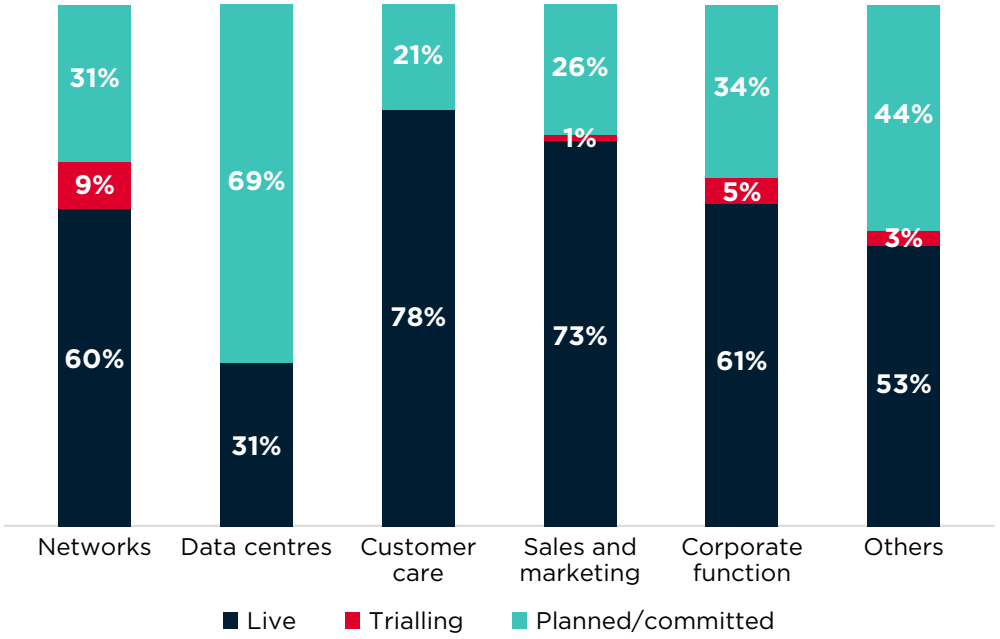
Source: GSMA Intelligence

Pipeline view: watch the trials

It is useful to split out AI deployments by commercial status:

- **Customer care and sales & marketing are the most mature.** Some 78% and 73% of these are now live, respectively (the rest are in trial or a planned commitment). Network and corporate functions are each at around 60% live.
- **Data centres are looming.** AI deployments in telco private clouds and data centres that form the network core are at an earlier stage. This signals the level of complexity in orchestrating agent stacks in a core network. It also reflects that many of the core deployments will focus on monetisation, so it pays to do the research before launching products for full commercial availability. There is also the added aspect of increased energy consumption from running big AI workloads in data centres, though that is more a cost to optimise than avoid, so we expect the 'live' share to grow in Q4 2025 and into 2026.

Early movers versus slower burns
Percentage of AI deployments by phase



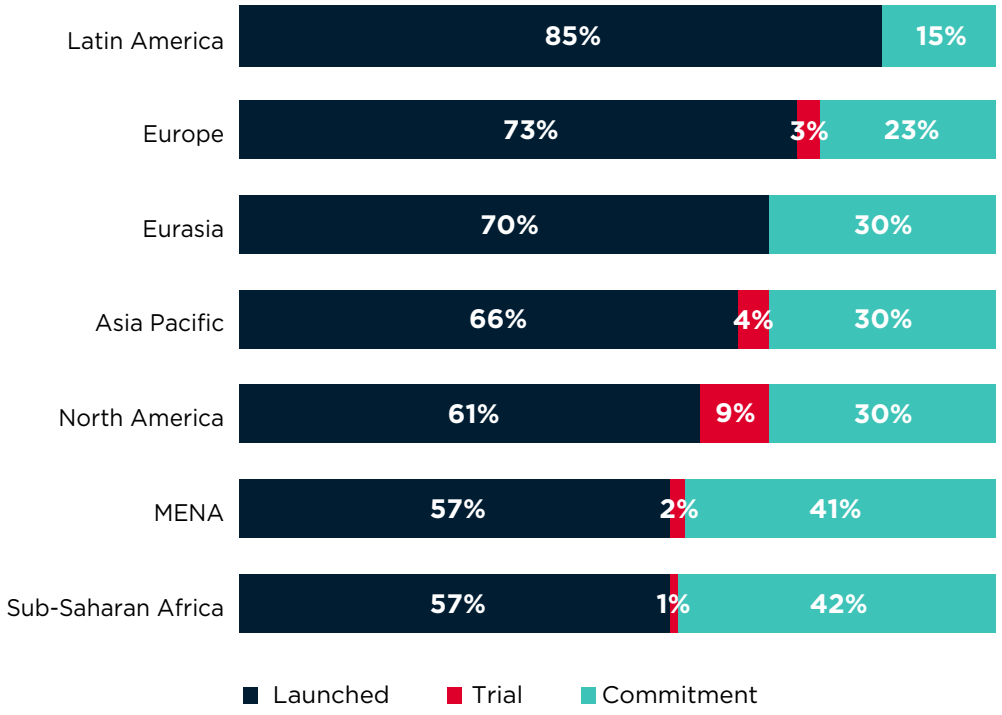
Source: GSMA Intelligence

Regional view: playing the long game

- **Latin America and Europe: cost urgency.** Operators continue to bring AI into their business at different speeds, even if the nature of those deployments is consistent. Latin American and European operators are furthest along, on average, with 75–85% of their AI service portfolio live, compared to 50–60% elsewhere.
- **Does it matter?** To a large extent, we believe the above reflects the preponderance of AI-driven cost savings for operators in those regions – where cashflow margins are under greatest pressure – as opposed to faster innovation cycles and time to market. The bigger question to follow is around cost and revenue impact for the portfolio of telco AI deployments and services.

AI deployments at different speeds

Percentage of telco AI deployments at different maturities



Source: GSMA Intelligence

Partnership ecosystem: Nvidia out in front

- **Nvidia versus the rest.** Nvidia is the company of the moment as one of the foundational providers of GPUs that underpin the compute and processing power for AI. This is a crowded field though; Google's Gemini, OpenAI and the main hyperscalers are near equal.
- **Size differences.** Operator size does not appear to have any bearing on the GPU industry dynamics, with Nvidia the partner of choice. However, there is nuance when it comes to the cloud and LLM space. Google is the top hyperscaler partner among the largest operators in the sample, with Microsoft ranked third. The situation reverses for small and medium-sized groups. It is hard to pinpoint the reasons for the difference, but Microsoft's extensive local country presence and vast scale of existing SME business for its enterprise cloud are likely to support its success with tier 2 and 3 operators in the telecoms industry.

AI ecosystem presence in telco AI

Large operators (top 250)

Category	Rank 1	Rank 2	Rank 3
GPU providers	Nvidia	AMD	Intel
Hyperscalers	Google	AWS	Microsoft
Foundational models	Perplexity	OpenAI	DeepSeek

Small and medium-sized operators (250–700)

Category	Rank 1	Rank 2	Rank 3
GPU providers	Nvidia	Intel	AMD
Hyperscalers	Microsoft	AWS	Google
Foundational models	OpenAI	Perplexity	

Based on share of telco AI deployments where the company is a supplier or partner. Deployments are only those in the public domain, so this is a proxy for ecosystem presence rather than the true underlying picture.

Source: GSMA Intelligence

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04 Deep dive: monetisation strategy

Telco AI monetisation: right place, right value

- **Understanding the stack.** AI is delivered through a combination of foundational infrastructure, on top of which sit LLMs, agent-based services and the orchestration software for coordination.
- **Where is the sweet spot for value creation?** Telco access networks sit at the infrastructure layer, though activity with GPUaaS and other services (from IoT to gaming) suggests several operators are moving up the stack. This is a highly competitive arena with hyperscalers and enterprise IT groups (Dell, HPE etc), which augurs for a partnership-led approach.

The tech stack for AI

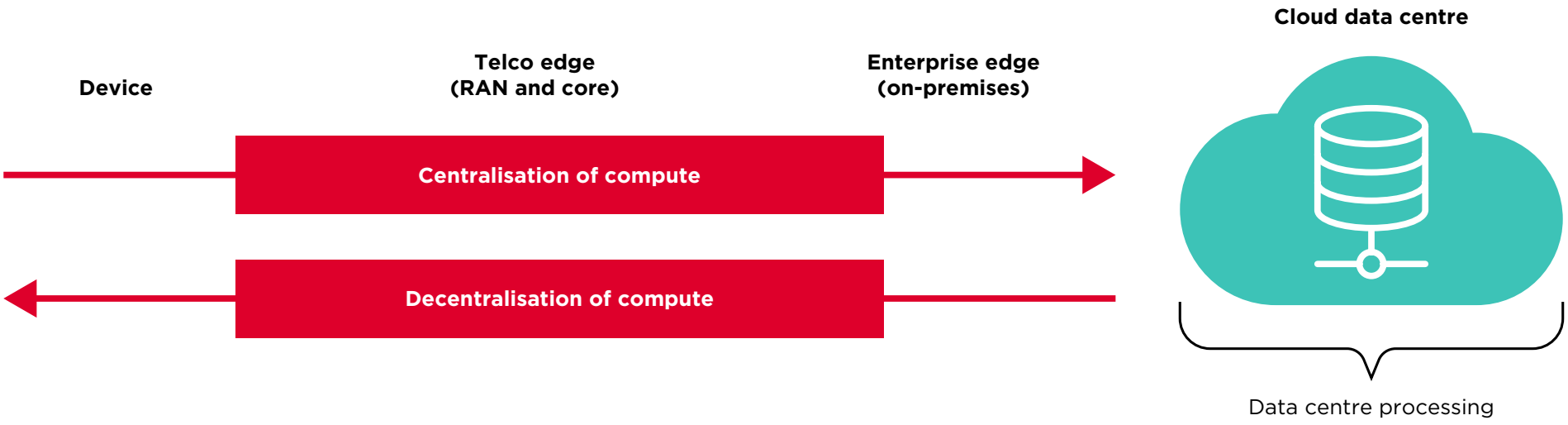
Apps	• Enterprise and domain-specific apps • AI agents and stacks • Business intelligence apps
AI engineering tools	• Tools and frameworks to map to enterprise workloads • Orchestration • Use-case mapping
Models (LLM/SLMs)	• Domain-specific model training • Model training (LLMs/SLMs) • AI platforms (enterprise data centre, industrial edge, device edge)
Infrastructure	• Connectivity layer (intra and inter data centre) • Cloud infrastructure (centralised/edge), storage, memory • Compute layer (semiconductors, GPU processors)

Source: GSMA Intelligence

AI monetisation can happen along a spectrum

- **Understanding the trade-offs of location.** The other way of framing monetisation options is to look at AI services as sitting along a spectrum from the operator core/private clouds to the edge of the network, whether that is an enterprise premises or device. These are not mutually exclusive and have trade-offs based on the level of investment required to run the compute versus potential revenue versus strategic benefits (such as satisfying sovereign AI compliance).
- **Having capacity in place.** Monetisation success (or not) will depend on whether products meet customer expectations and, for the business sector, help them take out costs or monetise. A key implication for operators is to have the requisite compute capacity in place on their own access networks and with any partners, whether device makers, enterprise IT groups or other.

The distribution of compute power from the device edge to the public cloud

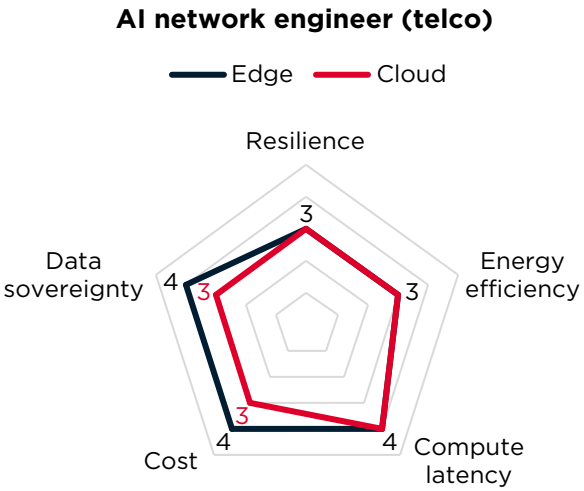


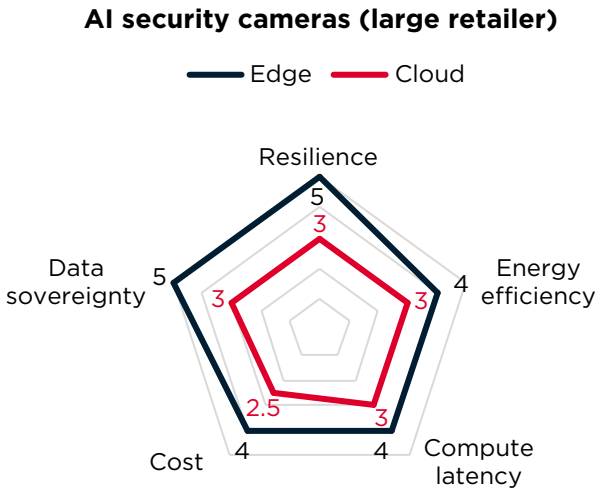
Source: GSMA Intelligence

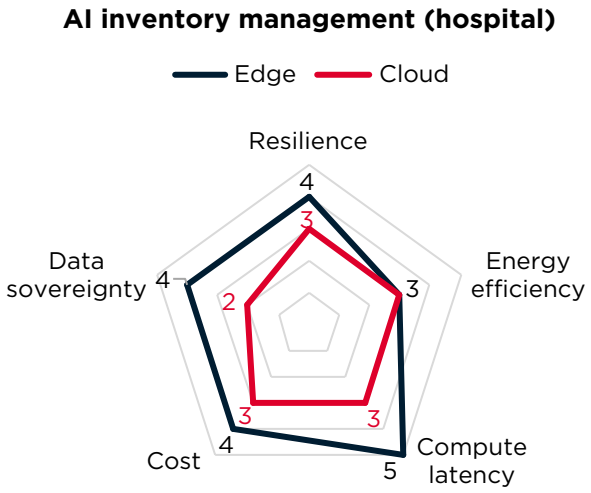
Right location, right model for monetisation

- **Core versus edge.** The key benefits of running AI inference along the edge come from cost savings (on backhaul and cloud processing), better compute latency and compliance with rules around sovereign data retention. Some applications may also be deployed at multiple points along the edge.
- **Early examples.** AI factories and GPUaaS from companies such as Verizon, SK Telecom, e&, Orange and Deutsche Telekom point to such a hybrid approach of monetising using a combination of network capabilities. Revenue models are also likely to be a mixed bag from traditional volume pricing (adapted for GPUaaS using compute tokens) to more nuanced approaches including licensing and revenue shares.

Comparison of AI inferencing options







Scores are based on typical performance characteristics for a typical deployment. 1 = least favourable; 5 = most favourable.

Source: GSMA Intelligence

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