Edge computing partnerships: Telcos and hyperscalers

Hyperscalers such as Amazon, Microsoft and Google are rapidly increasing their presence in the edge computing market. They have launched dedicated 5G network edge solutions and started partnering with telcos to bring their platforms closer to end users. Telcos, however, are yet to develop a clear strategy on how to use these partnerships to move up the value chain and play a role beyond hosting the infrastructure.

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A major opportunity for both telcos and hyperscalers

Many operators are looking at edge computing as a good opportunity to leverage their existing assets and resources to innovate and move up the value chain. They aim to expand their services and revenue beyond connectivity and enter the vertical market space through platforms and applications. By deploying computing resources at the network edge, operators can offer infrastructure-as-a-service and alternative application and solutions to enterprises. Also, edge computing as a distributed computing structure and an extension of the cloud supports the operators' own journey into virtualising their networks and running internal operations more efficiently.

Cloud hyperscalers, especially the biggest three – Amazon Web Services (AWS), Microsoft Azure and Google – are at the forefront of the edge computing market. In the recent few years, they have made efforts to spread their influence outside of their public clouds and have moved the data acquisition point closer to the end user physical devices. These include efforts in integrating their stack into IoT devices and network gateways as well as supporting private and hybrid cloud deployments. Recently, hyperscalers took another step to get closer to customers at the edge by launching platform solutions dedicated to telecoms infrastructure and integrate directly with 5G networks. The latest of these products include Wavelength from AWS, Azure Edge Zones from Microsoft and Anthos for Telecom from Google Cloud.

The need for partnerships

Both hyperscalers and telcos are among the top contenders to lead the edge market. However, each stakeholder lacks a significant piece of the stack which the other has. This is the cloud platform for operators and the physical locations for hyperscalers. Initially, operators and hyperscalers were seen as competitors racing to enter the market through different approaches.

However, operators acknowledge that even if they do own the edge stack, they still need the support of hyperscaler clouds to create a seamlessly distributed computing environment required by many applications. To fuel the edge market and build its momentum, operators will, in the most part, work with the cloud providers. Partnerships between operators and hyperscalers are starting to take place and shape the market, impacting edge computing short- and long-term strategies for operators as well as hyperscalers and other players in the market. Examples of major publicly known deals are listed in the table below.

Major telco-hyperscalers edge partnerships

Operator	Platforms	Infrastructure	Region	Use cases
AT&T	Google Cloud Microsoft Azure	No announced plans	US, Americas	AI/ML, video analytics, Enterprise AR
Etisalat	Microsoft Azure	No announced plans	UAE, Middle East	Smart cities, IoT, public safety, vRAN
KDDI	AWS	No announced plans	Japan	Gaming & entertainment AR/VR, video optimisation
Proximus	Microsoft Azure	No announced plans	Belgium	Manufacturing, AR/VR, gaming, healthcare, logistics
Rogers	Microsoft Azure	No announced plans	Canada	Smart campus, gaming, AR/VR

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SK Telecom	AWS Microsoft Azure Internal (MEC Open Platform) MobiledgeX	Planned 12 data centres	South Korea	Video optimisation, AR/VR, gaming, smart factory, autonomous vehicle
Telecom Italia	Google Cloud	No announced plans	Italy	
Telefonica	Google Cloud Microsoft Azure	No announced plans	Spain	Automotive (assisted driving), entertainment & media, financial services
Telkomsel	Microsoft Azure	No announced plans	Indonesia	Manufacturing, IoT, AI, AR/VR
Telstra	Microsoft Azure	Identified 500 potential locations	Australia	Financial services, gaming
Verizon	AWS	12 edge locations in 2020	US	AI-powered facial recognition software, AR/VR
Vodafone	AWS Microsoft Azure	24 sites planned for Europe	UK, Europe	Video analytics, real-time asset inspection, AR, drones, AI-powered media editing

Source: STL Partners

What does it mean for telcos?

Going to market alone might not be an attractive option for either operators or hyperscalers at the moment, given the high investment requirement without a guaranteed return. The partnerships between two of the biggest forces in the market will provide the necessary push for the use cases to be developed and enterprise adoption to be accelerated. However, as markets grow and change, so do the stakeholders' strategies and relationships between them.

Since the emergence of cloud computing and the development of the digital technologies market, operators have been faced with tough competition from the internet players, including hyperscalers who have managed to remain agile while building a sustained appetite for innovation and market disruption. Edge computing is not an exception and they are moving rapidly to define and own the biggest share of the edge market.

Partnering with hyperscalers can help grow the edge market opportunities for all stakeholders, but operators should secure strategies that guarantee they continue to play a central role in delivering edge services in the long term and have a growing share of the market. Both partners are on a learning curve right now. However, hyperscalers are known to be swifter to react to new customer needs and resulting opportunities for their businesses. Operators need to learn to act quickly too and to apply lessons learned from these partnerships directly into their edge strategies.

Telcos that fail to develop a strategic approach to the edge could risk losing their share of the growing market as non-telco first movers continue to develop the technology and dictate the market dynamics. Our report Telco edge computing: How to partner with hyperscalers looks into what telcos should consider regarding their edge strategies and what roles they can play in the market while partnering with hyperscalers on edge computing.

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