

INSIGHT SPOTLIGHT

Earlier in the year, we began exploring the link between 5G enterprise services and network performance visibility. Our [initial analysis](#) highlighted the importance of enterprise services to the 5G business case. A [follow-up](#) looked into specific enterprise requirements, including how 5G will support these and how service capabilities beyond 5G (such as service visibility) will be just as critical.

Operators' plans and views of the market are also crucial for understanding the state of 5G offers and for identifying disconnects that suggest operators may need to rethink their plans. To that end, we held in-depth discussions with operator executives focused on the enterprise segment to shed more light on 5G enterprise use cases and the capabilities (including network and service visibility) required to execute on them.

Analysis

The enterprise 5G imperative

Nearly all operators we spoke to agree that the enterprise segment is a key component of their 5G strategies, either because they wish to reinvent themselves or because they recognise that consumer market growth is limited. But that doesn't mean their strategies are identical or that enterprises necessarily represent new business for them. Some operators are focusing on specific enterprise verticals (manufacturing, transport, utilities, media, and the public sector get the most attention), while others are looking to enterprise as a whole. Most, however, aim to walk the line by focusing on several verticals while also offering horizontal capabilities that can be leveraged across all enterprises e.g. connected assets, asset security, AI-enabled video monitoring etc.

Operators understand that SLAs will need to change

Just as operators were delivering on enterprise services long before 5G emerged, the need to back up these services with SLAs is not new. For the most part, however, operators position these SLAs as an important but not integral part of the sale, with a focus on high-level criteria such as coverage, average speeds and uptime (availability).

Going forwards, there is an expectation that SLAs will need to be more granular and better exposed. At a basic level, this naturally follows from 5G's support of specific demands – including latency and real-time bandwidth performance – and enterprises wanting to know that these demands are being met. As one telecoms executive put it: "When they buy something, they want to know that we are delivering." At the same time, there is a recognition that requirements will vary across services and use cases, which will drive SLAs and service visibility on a user, service and device level – not just on an account level.

There is one caveat: these are not universal views. Roughly half the operator executives did not yet have clear ideas of how SLAs will need to differ going forward. Indicative of how SLAs have been delivered to date, one comment summarised the sentiment: "We don't monitor specific service performance. We just call out performance at a network level – we expect this to continue."

Integration with enterprise processes is the way forward

It is wrong to think that operators don't offer a way for enterprises to verify SLA performance today. Some operators noted that they can monitor service performance directly from customer portals, while others stated they are informed via requests to account executives. Some operators mentioned websites, which point to aggregate network coverage and uptime data. And for many (i.e. the half that do not see SLA demands evolving) the expectation is that these methods will suffice.

For the operators that believe the SLAs they promise with 5G will become more complex, there is an understanding that the way in which network and service performance insights are shared will need to evolve. Imprecise network performance data will not be acceptable if SLAs are built on much more granular specifications. And serving performance data via portals or reactionary methods won't scale when enterprises are looking at per-user, per-service performance.

The solution is performance reporting via an integration with enterprise processes. Few operators noted this as a near-term reality, but absent such a strategy, scaling enterprise services could be a challenge. After all, performance-sensitive 5G applications may need to understand their performance in real-time to adjust to the reality of degraded conditions (consider the way in which Netflix adapts video bitrates to reflect each user's bandwidth). Enabling such a capability at scale – across multiple verticals, services and users – will require more than simple SLA reporting. Rather, dynamic, granular and self-service approaches to delivering performance feedback will be needed, if only because cloud-savvy customers have come to expect it.

What next?

Operator views on SLAs as a part of enterprise 5G are an important indication of what future enterprise services will look like. But 5G is about more than new connectivity metrics for enterprises (or consumers). It is also about new network architectures. In our next analysis in this series, we will look at what operators are saying about future network architectures and what they will need to know about how these architectures perform.

Implications

Mobile operators

- **Focus on standalone 5G** – GSMA Intelligence research suggests that more than 70% of operators plan to deploy standalone (SA) 5G within three years.¹ The rationale is clear: SA 5G promises more of the capabilities (e.g. low latency, slicing, high reliability) that the prized enterprise segment is likely to demand and it doesn't require blanket coverage to be effective. Operators that are still evaluating their timelines for SA – or re-evaluating their commitments – need to recognise its importance and look to the lessons from early deployments.
- **Listen to your customers** – It is not surprising that some operators are dubious about the importance of enterprise SLAs in a 5G world; to date, most have got by without strict or particularly granular SLAs. However, the enterprise 5G value proposition is built on meeting specific network and service requirements – and enterprises themselves are emphasising the importance of SLAs.
- **Play to enterprise expertise** – Operators are rightly focused on the value that foundational 5G capabilities will bring to enterprises. Tying these capabilities to specific use cases, though, will require a solid understanding of enterprise requirements, both broadly and across specific verticals. This will include an ability to build, and integrate, end-to-end solutions. It will also require an understanding of how enterprises want to do business and an ability to meet these demands. It's clear that some operators are more mature in their enterprise business – they need to highlight this expertise. Where an operator is relatively new to the enterprise segment, they must lean heavily on their partners as part of any marketing campaign.

¹ [Network Transformation 2020](#), GSMA Intelligence, 2020

Enterprises

- **Watch operator 5G trials** – Many operators have spent considerable time and money on 5G trials addressing a diverse set of enterprise verticals. Every enterprise with connectivity demands should be watching these in order to explore how they could leverage 5G. Beyond demonstrating hypothetical use cases, enterprises must build an understanding of 5G capabilities (particularly with SA) so that new applications that would otherwise be impossible can be developed. At the same time, the results of these trials are a way of gauging the maturity of an operator's enterprise strategy and the development of 5G offers.
- **Get familiar with slicing** – Compared with distributed edge computing (i.e. mobile edge computing), the operator perspective on network slicing is far more nuanced and much less positive. While the complexity of deploying, managing and selling slices may be to blame, this doesn't obscure the fact that slices should be important for enterprises with demanding requirements. If operators lag on their slicing plans, they need to hear from enterprises that want/need that functionality.
- **API integration into what?** – The notion of integrating operator network and service performance data into an enterprise business system makes sense on paper, but it assumes that the enterprise's processes are prepared to accept this type of integration. Leveraging 5G may make up one part of the digital transformation effort, but it is also important to consider the internal operations capabilities or the partners (such as public cloud players working with operators) who can deliver on them.

About this research

This research forms part of an Insight Spotlight series focussed on the market demand, requirements and technology solutions around 5G network and service performance visibility in support of enterprise services.

In conjunction with service assurance vendor EXFO, and with support from a number of mobile network operators around the world, the research aims to shine a light on a business and technology asset key to delivering 5G enterprise services but less publicised than some 5G capabilities. In doing so, the ultimate goal of the research is to help the industry execute on the 5G opportunity it has already recognised.

Related reading

[Global 5G Landscape, Q1 2020](#)

[Operator revenue in the enterprise market](#)

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