

## 5G and CX: Standing Alone, Together

By: Patrick Kalaher

You can almost write a book consisting entirely of Benjamin Franklin [quotes](#), but one of his best known is that “by failing to prepare, you are preparing to fail.” And while no one would accuse the telecom industry—a sector that prides itself on setting global standards—of being unaware of the need to prepare for the future, there’s something about 5G that both excites and worries mobile operators.



It’s widely acknowledged that a true, stand-alone 5G network will be the most intelligent, most complex, most open and most flexible network the telecoms community has ever created. Most of the services that run over this network will involve multiple partners or players, each responsible for one piece of a brilliantly conceived puzzle. Presented to consumers and businesses as complete products, these innovations will be the result of complicated collaborations—and every player in the project will need to deliver their element perfectly for the product to please and delight end users.

## Customer experience: Who’s in control?

The industry describes a true 5G network as a stand-alone network, but in reality, a 5G network will be anything but stand-alone. It will effectively be a network of service partners, orchestrated not just by the operator but also by giants from the IT industry as well as a host of smaller players. It will be a network ecosystem where it will be reasonable to ask: “Who’s actually in charge?” When we are talking about the customer experience, that’s an important question, since timely resolution of service issues requires a clear understanding of service accountability.

An advertisement for the Pipeline Innovation Awards. The ad features a collage of images: a red carpet leading to a stage, a group of people in business attire, and several award trophies. The text on the ad includes the Pipeline Innovation Awards logo, the phrase "Be Recognized as a Top Industry Innovator", and a call to action "ENTER THE AWARDS TODAY" with a "CLICK HERE" button. At the bottom, there is a link that says "Click this ad for more information".

The best service providers (SPs) realize the importance of customer experience and give it increased priority when it comes to winning and retaining customers. While that may seem obvious, it’s not always been the case among telecom companies or mobile operators. The telecom industry has a history of incumbent, monopoly suppliers where the advent of customer choice served to trigger competition that was primarily based on price rather than on customer experience. Yet changes are afoot.

# Seeing through the fog of the 5G wars

Of course, we are all familiar with the assault by OTTs on traditional telecom revenue streams such as voice and text—and the direct result. As a result, when it comes to price competition, the operators find themselves in an unsustainable race to the bottom. It's all too easy for operators to copy and adopt each other's services, making it almost impossible to maintain a competitive advantage through the range of products available. Therefore, the ultimate winners in the SP community will be those that provide the best overall experience, not those that offer the cheapest plan—which brings us back to 5G.

Most of the earliest forms of 5G being marketed today are being delivered over the operator's existing 4G infrastructure. That immediately creates a gap between the 5G hype and the 5G reality. Enhanced mobile broadband (eMBB) is not a killer 5G app: nobody's going to pay a premium to download a video marginally faster than they can over 4G. However, you can be certain that right now out there in the developer community, innovators are working on new services and applications for businesses and consumers that will take advantage of true, stand-alone 5G network systems. These will be the networks where the 5G radio path meets a 5G-ready transport layer and where the backbone networks are supported by powerful mobile edge computing capabilities.

The transition from a hybrid 4G/5G network to a pure 5G environment means there are a lot more things to think about, and a lot more moving parts and service partners to manage. And those operators that are interested in maintaining and enhancing their customer experience—which, frankly, should be all of them—must prepare now for that collaborative 5G customer experience of the future.

Of course, it is difficult for operators to prepare for the use cases of tomorrow when they do not know exactly what those innovative developers are cooking up in the background. However, they do know the advanced characteristic of a stand-alone 5G network that developers will most likely want to leverage. That characteristic is primarily low latency connections which operators and vendors alike have talked about endlessly.

## The 5G CX conundrum

Operators also know the areas that are most likely to cause customer concern and consternation. A groundswell of headline-grabbing stories about 5G network vendors has gotten consumers worried about 5G's security, privacy and the protection of their personal data. In Europe, the EU has [cited](#) the increased security risks posed by 5G. Ironically, this is because one of the key features of a 5G network—the ease with which services can be connected to it over open APIs—is also a feature that arguably makes it more vulnerable to hackers. As such, this is an issue that operators can neither ignore nor underestimate.

Forward-looking service providers are focusing their attention on the elements they need to master in order to deliver 5G services that can protect the customer experience. These are availability, reliability, and the security of the service and the end-to-end connection.

In addition, operators must also focus on interoperability. Given the partnership and collaborative approach to service delivery within the 5G ecosystem, measures must be put in place to test that all the various parts work together as expected. It's no small task. [According to Ericsson](#), annual shipments of 5G devices are projected to reach 160 million units by the end of 2020. That will be a plethora of platforms, protocols and products to manage and test.

When developing “minimum viable products” (MVPs) to release to the market, it's important to bear in mind that it is likely these are going to be limited in terms of feature set, but that should not apply to the quality of the experience. Operators therefore have to ensure—and must have processes in place to test and prove—that all the features of the MVPs as they come online work perfectly. They must also be

able to test and approve additional features as they are added.

Customers who have a poor experience with a failing 5G product or service will blame the supplier, the network, or even both. And in the race to secure the early adopters in an ultra-competitive market, operators cannot afford to have failing products and irate subscribers. Putting in place the controls that test those products and services and prevent them from being live on the network until they work flawlessly is the only way to maintain that excellent customer experience and retain your subscribers.

What's more, given the number of players—large and small—that are likely to be involved in rolling out 5G services, testing is going to be more challenging and more difficult than anything the operators have faced before. That's why there are now several labs where multiple vendors and operators can work in collaboration to test out potential 5G services together.

Stand-alone 5G networks will rise or fall on the strength of their collaborations and the ability of service providers to manage them and guarantee the service levels required. If that isn't top of mind right now, they are in danger of putting their overall customer experience at risk.

Operators that aren't focused on this would be wise to heed another Benjamin Franklin saying: "Lost time is never found again." The time to perfect your 5G customer experience is now.