

Corporate Blog Post

Preparing your business network for the 5G age

We all know 5G is coming, but it means a lot more than just faster internet. Emerging capabilities and opportunities will let you connect with customers better and improve both your experience and theirs.

Executive summary

5G is going to be a new kind of network, not just a faster one. It will present benefits as well as challenges, and you need to be aware of them. Start planning now and begin a 5G network strategy so you can understand the opportunities and be ready.

Client:

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Post for the Optus consumer blog.

Brief:

To educate and inspire business customers to retool their businesses for the advent of 5G networks.

Deliverable:

500 word blog post with strict parameters around sections, section lengths, SEO and keywords, social, key takeaways, related content, CTA, etc.

According to Kent Wu, Director of Mobile Networks Planning, speed is only a short-term benefit and we should all dream bigger. Just as important is the fidelity with which the network will deliver data.

"In 4G the latency usually ranges from 20 to 30 milliseconds, but 5G will cut that down to around 5ms, which means a much more sustained signal and therefore a more constant real-time connection," Wu says. "In the medium term that will mean a lot of new use cases beyond just 'the fastest'."

5G will both expand the digital economy and create new sectors in it. Wu says research projects have already calculated the benefits it will have on the national GDP of several countries. Just one claims 5G will propel the global mobile economy to \$US4.2 trillion by 2020.

Bring it on

Like the networks before it, 4G was developed for voice communication – leading to the characteristic drop-outs and stop/start nature of data delivery. 5G has been built for services where uptime is key.

Wu calls 5G 'ultra-reliable'. "Interactions, not just between people but between people and machines and machines and other machines, will be seamless."

The reason, he says, is that 5G will have a lot of self-optimising capabilities. "It's about the resources and capacity [of the network] together. If any part of the network has a problem, other resources on standby will take over."

Any way you slice it

Network slicing took its baby steps in 4G but will be a critical part of 5G, allowing for unique, self-governing control over its own resources.

Where old-style networks packaged data in nebulous, ad-hoc clumps, 5G will send smartly-prioritised 'slices', customised on the fly according to the needs they're defined to serve.

Think of an autonomous car where telemetry, upcoming traffic information and GPS data needs to be constant. When moving between 5G base stations or transmitters, network slicing means the data stream is prioritised over information not tagged with the same urgency, like Instagram selfies or email.

It will find you

5G can also go where the users are – as Wu explains, it can be targeted dynamically. “Under 4G the signal goes where the antenna is pointing, but the 5G signal can be steered according to demand,” he says.

That means when part of the network might be down, the infrastructure that drives and monitors it will be able to steer the signal to cover the outage. It’s one of the lynchpins of always-on 5G connectivity.

A small price

No, you don’t have to throw your entire ICT kit out and start again, with Wu saying costs won’t be vastly different than the IT refresh you should already be budgeting for.

“You might have to install a more advanced and intelligent antenna on the network side, so there’ll definitely be some equipment modernisation,” he explains, “but just like with 4G, over the years you change your phones, you change your home devices – [5G] will be much the same thing.”

Building your 5G reality

So, what can you do now? “First, get prepared,” says Wu. “Look at your overall business needs. Are you interested in expanding a new revenue opportunity or improving efficiencies of your connections?” You can then look at how to upgrade the network facility and the connected devices. Now is the time to partner with your provider to design suitable solutions.

Conclusion

5G isn’t just a new network, it’s a new kind of network that will give you more ways to connect and engage with customers.

A business review with your ICT provider will help you design solutions together, and implementation of network upgrades, device fleets, etc will be much better informed from the get-go. ■