

What does 5G mean for South African businesses?

 By [Vishal Barapatre](#)

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5G, the latest technology standard for mobile networks and the successor of 4G or LTE, will provide 100 times more bandwidth than 4G, which means more availability and far greater speeds. It has the potential to revolutionise the world for both consumers and business, although widespread implementation is not a simple matter, and the current global pandemic has caused further delays.



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However, while pervasive 5G may still be a number of years off, businesses need to begin gearing up to ensure they can leverage the benefits as soon as possible.

When will it be here?

Traditionally, South Africa has tended to lag behind the developed world in terms of technology, yet 5G is one area where we are not that far behind. There are service providers and networks already rolling out limited pockets of 5G, both locally and across the globe. In South Africa we have the Rain network and similarly in Europe, Canada and the USA various service providers have deployed networks. However, all of these networks are siloed, many are still in testing phase, and we remain several years away from stable and pervasive 5G deployments.

One of the challenges with the rollout of pervasive 5G networks is the need for new standards, which have not as yet been developed completely or agreed upon.

“ *There is also a requirement from governments to make additional bands available and to license these bands, and questions remain around the security of the network.* ”

In addition, the 5G network will require more base stations, closer together, which dramatically increases the cost of deployment. It has also raised concerns about the long-term effects of exposure to the millimetre 5G waves on the human body, which need to be studied.



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The global Covid-19 crisis has also caused delays with the deployment of 5G networks, not only because of its effects on commerce but also because it has put extreme strain on many budgets. Service providers have plans for deployment, but their timelines have been thrown off. So, while we know for a fact that 5G is coming, pinpointing exactly when it will become widely available is an all but impossible task.

What does it mean for local businesses?

The pervasive availability of 5G will bring unprecedented network availability and speeds, giving us incredibly fast download speeds and the ability to move huge amounts of data fast. For example, a consumer would be able to download an entire high-definition movie in less than a minute.

“ *The rollout of 5G will also finally enable the Internet of Things (IoT) to be used to its full potential, which means real-time applications like autonomous vehicles will become a real possibility outside of specific and siloed areas.* ”

Once we are able to leverage the full potential of 5G, we will see even more IoT and machine to machine data being leveraged. A while back, IDC predicted that by 2020 we would have 26 times more devices than people in the world, and whether or not this statistic is accurate, the sentiment is true. Harnessing the power of this data, businesses will be able to become more proactive, more agile, innovative and will be able to make decisions in real-time based on real data insights.

For South Africa, 5G enabling IoT could completely change the game. While our major cities are well-connected currently, much of the country lacks connectivity, particularly the rural areas. These areas are also where the farms and mines are located, and these businesses would benefit immensely from connected technology. In addition, connectivity will enable improved healthcare and educational prospects. Widespread deployment of 5G can help to improve health, safety and security in previously disconnected and underserved areas and bring the benefits of technology to all.

How do we prepare for its arrival?

Arguably the biggest challenge in the rollout of 5G is the budgets required to create these pervasive networks.

“ *The traditional approach of every service provider building its own infrastructure is no longer a financially viable solution and is in many cases an unnecessary duplication of effort, so cooperation is essential.* ”

It is also critical for government to prioritise the allocation of zones and licensing of bands, and to work with service providers to create more flexible regulations to overcome deployment challenges.

For businesses, it is important to begin planning for 5G now so that when it is available, the benefits can be harnessed immediately. This means bringing the right ICT partner on board with the necessary history, skill sets and experience.

While the foundation technology behind 5G may differ to previous mobile network iterations, the underlying principles of service delivery remain the same. A partner with the skills to help create, develop, and implement new services on the 5G network will help businesses push their competitive advantage as we move into this new connectivity era.

ABOUT VISHAL BARAPATRE

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