Solving the broadband challenge to leverage full cloud advantage

By Paul Fick   20 Mar 2014

According to Ovum Research, next-generation broadband and cloud-based ICT services are two of the top emerging trends in the telecoms, media and technology space. These two trends are intrinsically interlinked, as the cloud requires fast, efficient and available bandwidth in order to deliver services and enable organisations of all sizes to leverage its many advantages.

Therefore, delivering next-generation bandwidth, which offers improved speeds and higher quality essential for the cloud, is a critical challenge in enabling the delivery of effective cloud-based ICT in South Africa and the African continent.

With terrestrial infrastructure not widely available in emerging markets across Africa, adoption of fixed-line services has been limited, which, in turn, has limited the availability of services and solutions, like the cloud, which require connectivity.

As a result, mobile technologies have had massive uptake in these markets, where the number of mobile devices exceeds the number of people in many instances. It is, therefore, a logical next step from mobile phones to mobile broadband, and the next evolution of mobile broadband will open up the market dramatically.

Two of the hottest topics

In South Africa, the move towards cloud-based ICT has been steadily gaining traction, and mobility, along with the cloud, are two of the hottest topics currently. While many consumer services already exist in the cloud, it is only with the increased availability and quality of bandwidth that businesses have begun to take steps.

In the Small to Medium Enterprise (SME) market, adoption has been significant, as the benefits - such as a pay-per-use model and the removal of the necessity to own infrastructure - have outweighed many of the problems around unstable access. Even in the corporate space, as mobility becomes more important and the mindset changes from premises-based to the ability to work remotely from anywhere, these are increasing the pressure to make the move into the cloud.

There is no doubt that cloud-based ICT is the future and is set to experience dramatic growth the world over. However, the delivery of next-generation bandwidth is critical to the widespread business adoption of cloud services, as fast, reliable and ubiquitous broadband services are essential in ensuring the required levels of uptime for corporates and large enterprise. Service providers wishing to capitalise on the move into next-generation broadband should take heed of a number of pointers.

The delivery of next-generation broadband requires an alignment with the government. The government currently regulates the entire telecommunications space and, until such time as this market becomes further deregulated, large-scale adoption can only be delivered in partnership. It is also necessary to embrace wireless as a means for delivering broadband technologies.

The terrestrial infrastructure in South Africa, and throughout Africa, is not sufficient to cater to explosive demand, and the delivery of next-generation broadband will more than likely be driven through wireless technology rather than fixed lines like copper or fibre. This will also further drive the trend of network sharing, where infrastructure is "rented out" to service providers on a per-use basis, creating wider network coverage for consumers while minimising the cost to service providers.

The Internet of things

As the number of connected devices grows, we are beginning to experience a phenomenon known as "the Internet of things" or "the Internet of everything", where practically every device has an IP address, is connected to the Internet, and is capable of transmitting and receiving data. This is creating additional traffic, further fuelling the drive towards next-generation broadband.

The move towards next-generation broadband will not only drive further and more widespread adoption of new services, including the cloud, it will also require innovative data pricing plans to encourage usage from consumers, and the provision of content to drive traffic. As broadband becomes increasingly ubiquitous, driving increased traffic is the key in creating additional revenue. Content services delivered by mobile providers, as well as innovative solutions to deliver a variety of content and services, will be key.

With the country, and the continent, positioned for a move into the cloud, the market is changing from one in which organisations purchase solutions and physical infrastructure, to one in which they purchase services, delivered via the cloud to any device. While there will always be a need for infrastructure, for the majority of enterprises of all sizes, the cloud is a more affordable, viable and cost-effective option. There is a huge opportunity for providers to shift their focus from delivering tools and software to offering solutions and services, along with expertise.

The market is changing, and both carriers and ICT service providers need to align with this shift if they are to remain relevant, profitable and competitive into the future.

ABOUT PAUL FICK

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