

Technology provides competitive advantage in a digital world

Today's consumer expects on-demand access to high definition coverage of live events like ever popular cricket, and the experience from overseas markets is that events of nationwide interest lead to dramatic spikes in viewership and hence network load.

Updated infrastructure can maximise viewers

Many cable companies are being held back from meeting the demands of today's consumer by the constraints of legacy network infrastructure.

During popular live events such as major cricket matches – watched by 335 million viewers during 2016,– sudden spikes in demand can cause significant quality issues, especially in urban areas. The way older networks propagate traffic means that as usage per cable increases the quality of the stream for individual users degrades. Therefore existing infrastructure is not capable of supporting these levels of viewership while maintaining the quality of the broadcast.

What can cable TV service providers do?

One option is to increase the number of satellite-receiving hub premises they have spread across the country or region, and install more dish antennas, signal boosters and the associated computer systems. The real estate and capital investment associated with this option is prohibitive. A second option is the installation of widespread fibre cabling with multicast technology that would support much greater traffic loads. The rollout costs associated with this option would be extremely high.

Another disadvantage of both these options is that capacity would be underutilised during 'normal' periods, thus yielding very poor return on investment.

CAPEX reduction through leasing models

One solution embraced by leading operators in India is to establish agreements to lease existing fibre to support these spikes and provide access to popular content for their customers as required.

Fibre is the ideal resource to transport content feeds over large distances and has the capacity and technology to cater for both sudden and anticipated spikes in demand. This technology already exists across major areas of India and is currently used to deliver high-speed broadband.

By leasing capacity on these networks on a service agreement basis cable operators can scale as they need, and pay as they go. Happy customer, happy bottom line.

The future is on-demand

In other parts of the world, the broadcast sector has seen the growing popularity of on-demand services, including those that offer limited-period access to specific content or packages. A viewer would pay a broadcaster just to watch the Rio Olympics, for example, instead of subscribing to that channel for a month or year.

Using leased infrastructure to support this ad-hoc usage enables a level of scaling impossible using own networks and also reduces the need to invest in, and install, specific end-to-end infrastructure. Once these events are over, the amount of capacity needed can be reduced to normal levels offering further cost savings for broadcast companies.

A new technology, called Layer 2 Multicast (L2 Multicast) has been developed specifically to support evolution in the broadcast sector and enable on-demand style services, in addition to other interactive services such as catch-up TV. Delivered over fibre, L2 Multicast enables a single feed to be copied to the destinations that demand it, and transmitted in close to real-time making it ideal for the delivery of live television services.

Leading providers offer reporting and monitoring tools, so providers can assess usage and create the relevant packages to serve their customers with valued content as demanded.

Deploying this next-generation content delivery technology is a must for modern cable companies and enables them to increase their customer-base, adopt new business models and compete effectively with new internet-based players in the industry.