

## TELECOMMUNICATIONS

# BROADBAND: HGC'S INVISIBLE AGENT OF CHANGE

Broadband is the unsung hero of the information age. HGC has delivered its benefits to the people of Hong Kong in both business and entertainment. The pipes are fat and deliver a phat, fantastic future!

**T**he world is agog at the changes wrought by the online giants of commerce and entertainment – big data processing, cheap global telecommunications, and what seems to be the entirety of mankind's learning at our fingertips. In all this, one important element and the role it plays in making all this happen is often overlooked. The information revolution would not be possible without it. Invisible to the general public, it is a powerful agent enabling our transformed lives. It is the power of broadband.

Hutchison Global Communications Limited (HGC) recently celebrated 20 years of

pushing innovation to the people of Hong Kong. HGC came online just as fibre-optics were getting big, or, as Jennifer Tan, Chief Operating Officer of Hutchison Telecommunications Holdings Hong Kong puts it, the company's "timing perfectly fit the development of fibre-optic".

HGC's broadband delivery is now among the fastest and most accessible in the world. In the beginning, it was mostly used by corporate staff as fees were high in order to allow the huge investment costs of this new technology to be recouped. But it was superior to the old copper wire systems and business quickly figured out how to get a return on their investment through adopting the new technology.

The broadband company and its global counterparts found themselves in a virtuous circle. As users determined more ways to use capacity, demand soared. Hong Kong kept up by increasing capacity by 25 times between 2005 and 2015. HGC's contribution is a network of over 1.43 million kilometers of fibre-optic cable, enough to circle the earth about 36 times! Its extensive fibre-optic network in Hong Kong, coupled with a fully fledged international network, provides a wide range of fixed-line telecommunications services locally and overseas.

With a network across the city that now can provide a big pipe for data to flow through, HGC is in a position to deliver on

the promises of the much promoted "Smart City" of the future. Soon, the affordability of Wi-Fi hotspots supplied by HGC's 1G-speed pipes will make telecoms more convenient as the company provides a plethora of hotspots. In Hong Kong, the expectation of Wi-Fi availability is high as people ask for connections as soon as they arrive at many shopping malls and restaurants. More - and faster - are to come.

**GETTING BUSINESS DONE**

Ms Tan is betting that major corporate users of data will be among their biggest customers, and HGC is offering one-stop enterprise solutions embracing Internet, mobile, private data lines, data centre services and cloud services to corporate customers - the early adopters of new services. The Super Retail Network, for example, allows customers like Pizza Hut and KFC to supercharge their online ordering through the use of mobile apps and back-end software that routes orders to the closest outlets. It also generates immensely useful data on sales and customer intelligence for use in future planning.

With world-class data centre facilities and connectivity capability, HGC is well-positioned to capture cloud computing opportunities. Many new data-hungry services in the cloud collect big data from multiple touchpoints, combine those data, analyse them and then provide management information and analyses, all in real time. Without the fattest pipes for these data to traverse and cost-effective cloud storage, these services would not be possible.

For example, HGC's Cloud Surveillance allows businesses to watch their assets and operational conditions from anywhere in the world using mobile devices. Video data must be collected, encrypted and sent to mobile devices in real time. The same is true for Star Trek-style Cloud Video Conferencing like that used in the CK Hutchison Group (see *Sphere* #35). Cloud Audience Analytics improves bricks and mortar retail business by bringing to bear analysis from data-hungry applications like facial detection, which analyses consumers' demographics and expressions when they browse through an array of advertising displays. Broadband allows the complex data to be delivered, analysed and then used to make decisions that maximise in-store layout and product presentation. Cloud Signage allows in-store

digital displays to be changed in real time from a remote location, reducing the need for on-site computer hardware and trained staff. **3** Hong Kong is a pioneer in using this in-store technology.

**PLEASE ME**

It is hard now to imagine the TV era of 'rabbit ears' (an indoor TV antenna) and unreliable reception of just one or two stations, especially when looking at the entertainment currently deployed to people's homes. Broadband makes this possible.

The latest innovation is over-the-top services where the expansion of bandwidth allows businesses to offer purely Internet-based entertainment on demand, bypassing the need for traditional providers like cable TV companies. **3** Home Broadband can now provide broadband at speeds up to 1G to over 1.8 million households in Hong Kong. Its user-friendly "myTV Super" service brings over 19,000 hours of on-demand high-resolution programming to homes.

But too much is never enough. As the network grows, consumers demand even more and businesses are more than happy to provide it. In addition to passive TV watching, consumers are actively communicating with others and working at home over the network. The massive demand puts strains on the system but HGC has responded with its Content Distribution Network (CDN).

**Broadband: Invisible to the general public, it is a powerful agent enabling our transformed lives.**

This advanced and scalable network enables a faster and more reliable delivery of web services like document download, video streaming, two-way communications and a multitude of other bandwidth-hungry services. Online commerce is also sped up, which is crucial as waiting customers often abandon their orders if there are delays or instability in their browsing experience. CDN enables the infrastructure to keep up with fast-rising demand.

While the public may be seduced by sexy phones and racy apps, it is the constant improvement and evolution of broadband that has made the information and entertainment revolution possible. HGC is on board to keep providing the goods in Hong Kong and beyond into the 21st century. This innovation is truly 'phat'! ▣

