Beyond the broadband buzzwords

Broadband is the buzzword of the day: not only has it emerged as the single most important element in making SMEs competitive but more and more individual users are cottoning on to the advantages it has to offer. "Currently, South African users are spoilt for choice when it comes to broadband offerings," says Jo Melville, MD of Futurex & Equip organiser Exhibitions for Africa.

She continues, "The best way to make an informed decision is to compare the different offerings in a neutral environment and then decide on which service is best for a user's specific needs.

Beyond the hype

The only stumbling block to all-over broadband lies in getting beyond the hype and understanding what each offering actually is and where it would be best used. Simply put, broadband is a fast connection that keeps the user connected to the Internet (always-on) in order to send and receive email, surf the Web, or download files.

Broadband is available as a fixed or landline connection – in other words, like a telephone line, it comes to a single place; fixed wireless – where a wireless signal comes in to a single place; or mobile – which, like a cellular phone, goes with the user wherever there is a signal of sufficient strength.

South Africans have traditionally been behind the international curve when it comes to broadband, especially in regard to pricing, which was far more expensive that the rest of the world. Recently, however, there's been a decided upturn for local users and broadband is now more available and more affordable than ever.

Melville points out that there is a direct correlation between a country's connectivity status and its GDP (gross domestic product) – the more connected a nation is, the better its GDP.

"Affordable and pervasive Internet access increases competitiveness and helps to drive wealth creation. It is also a vital tool in providing education to all, and healthcare to under-serviced communities," she says.

The need for broadband connectivity is apparent, and the country's appetite for it has proved to be healthy. Pervasiveness and affordability are issues that are sorting themselves out as a more technology-hungry market creates competition among service providers.

> **ADSL**
> Asynchronous Digital Subscriber Line is Telkom's fixed (landline) broadband connection. It is always-on so users don't have to worry about how long they spend online as there is no additional charge over and above the monthly fee.

They do need to watch their "cap", however – this is the amount of bandwidth they pay for each month – and make sure they don't exceed it.

ADSL makes use of the existing copper wire infrastructure and so users can keep their phone and fax on the same line, operating at the same time as the ADSL connection is running – they will continue to pay for normal telephone line rentals and calls at the normal rate, however.

MyWireless

Sentech's MyWireless service is sometimes classified as fixed wireless: there are limits to where it can penetrate, so users need to determine that the place where they plan to use the service is within its effective range. Having come under fire in the recent past, however, Sentech has increased the number of base stations that it has and now offers greatly increased coverage around the country. MyWireless runs on 3G technology and Sentech offers a range of packages that start at R99.00 per month for 200Mb of bandwidth, targeting the dial-up or entry-level broadband user, to 20Gb packages at R1 999.00 per month.

iBurst

iBurst services are based on IntelliCell technology from ArrayComm in the US and use radio frequency, creating a "personal cell" that follows each user around. iBurst is a mobile service, but it is recommended that users test the signal strength in the area they will be using the service and be aware that being mobile means they may roam out of the signal area. Unlike voice networks such as GSM, CDMA and 3G standards, iBurst technology has been designed from the ground up to provide data, so the network is able to provide data rates of up to 1Mbps to each user with a maximum base station capacity of 20Mbps.

GPRS

General Packet Radio Service (GPRS) was the first high-speed digital connection available for GSM cellular phone users and allows cellular phone users to use WAP (Wireless Application Protocol) to browse the Web. It is one of the applications available on 2,5G networks. Ordinary GSM phones transfer at between 9.6kbps and 14,4kbps; GPRS increases these speeds to between 32kbps and 48kbps. GPRS is not charged at either a fix rate like broadband or for the time consumed, like dial-up: rather, users pay for the amount of data sent and received. WAP sites are simplified versions of traditional websites, specially designed to be viewed on a cellular phone. Users can also use GPRS to turn their cellular phone into a modem and access the Internet via a PDA or laptop computer.

EDGE

EDGE is another, more advanced application for 2.5G networks (ie: those that are not at the 3G level yet). It is not true broadband, but offers speeds of 384kbps – significantly faster than either GSM dial-up or GPRS and not very far off entry-level 3G speeds.

3G

3G stands for "third generation" and it allows data to be transmitted quicker and in greater quantities over cellular networks. This means users can now uses their mobile phones, laptops or PDAs to send and receive data-hungry applications, like live broadcasts, video clips, emails and so on. 3G is nine times faster than GPRS with a maximum download of 384kbps.

3G HSDPA

The latest iteration of the 3G service, High-Speed Downlink Packet Access (HSDPA) offers communication speeds of up to 1.8Mbps, which is even faster than fixed-line broadband available on the ADSL network. Realistically, however, users should expect but expect speeds of between 400kbps and 800kbps with peaks of about 1.4Mbps. HSDPA works with existing 3G routers, but users wishing to use the service on their mobile phones will need to check that their handsets are compatible. All 3G-enabled base stations have been upgraded to also support HSDPA, although coverage quite as wide.

"Users will be able to use Futurex & Equip as the place to compare all the different offerings, by visiting exhibitors like Nashua Mobile, Vodacom and Telkom," says Melville.

Futurex & Equip will be held 15 - 18 May 2007 at the Sandton Convention Centre in Johannesburg.

For more, visit: https://www.bizcommunity.com