Connectivity as commodity

by Rick Woods, VP Americas, Volubill

Broadband is a finite resource. Nevertheless, to encourage subscriber growth and build short-term revenues, broadband providers have acted as though technology had no limits. All-you-can-eat data and voice plans drove bandwidth consumption through the roof. Prices wars cut revenues and profits, caused service outages, and broadband became a commodity. Segmented pricing schemes are efficient; they avoid waste, prevent abuse, create value, ensure that adequate connectivity is available and treat customers fairly - they only pay for what they need.

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Enabling universal connectedness in 21st-century society is a worthy, necessary, goal. Increasingly, being connected means having high-speed Internet access. This is why many Governments around the world have launched connectedness initiatives, calling them national broadband plans. These plans echo the growing sentiment that universal connectedness should be considered as important as food, shelter or healthcare. Connectedness, however, has a different characteristic than food, shelter, and healthcare; it isn't necessary to sustain life. Connectedness offers quality of life.

The importance of connectedness

Being connected has always been important to humans. The Incan civilization, for example, had a 2,500-mile highway stretching between modern-day northern Ecuador and southern Chile - the Chasquis. Literally meaning 'to exchange', it was an extremely rapid method of communication. So great was the need to stay connected that the runner messengers who traversed it trained since childhood to help bring information hundreds of miles in less than a day.

Since the Chasquis, the means to 'connect' have grown faster, more sophisticated, more diverse and more effective. Today, the Internet is the best means to stay connected, and it is helping to realize some of the most important social reasons for connectedness: education, awareness, democracy, and well-being.

The Pew Research Center's Internet and the American Life project surveyed US teenagers and their parents about the importance of the Internet in education: ninety-four per cent of the teens who have Internet access said they used

the Internet for school research. Eighty-seven per cent of the those teens' parents said the Internet helps students with their schoolwork, and 95 per cent said learning to use the Internet is essential or important for today's children.

In 2007, a survey of physicians in ten Latin American countries asking about use of the Internet found that 55 per cent used the Internet as their number one source of professional information. Considering that South America's Internet penetration has increased more than 900 per cent in the last decade, one can only imagine that the Internet has become even more important for healthcare professionals.

In June 2009, the US State Department took an unusual interest in the software update schedule of one of the hottest Internet start-ups: Twitter. The reason? So that Iranian citizens using Twitter could protest the country's allegedly corrupt June 12, 2009 presidential election and would not lack a medium to voice their dismay. At the peak of the election controversy, 221,744 Tweets including the term 'IranElection' were sent in one hour. More than 2.2 million blog posts on the subject were published in 24 hours. More than 3000 videos, many taken by Iranian citizens using their cell phones, were posted to YouTube in one day.

Statistics like Iran's, which occurred largely through the use of mobile phones, reveal the other important component about being connected today: How do we connect? How do we get access?

The Incan Chasquis provided connectivity and access. It was the connectivity technology of its day. Today, much of that same area is blanketed with high-speed 3G HSPA mobile broadband capable of transferring data thousands of miles in seconds. Thirty-five communities in the US sport even-faster 4G Wimax-based networks, and satellite network providers bring coverage to more remote regions. National broadband plans like Finland's - which made it a legal right for its citizens to have a domestic Internet connection - are proof that broadband connectivity has achieved 'necessity' status.

Broadband - a bottomless pit?

With today's connectivity technologies, it's easy to take being connected for granted. And many people have. The overwhelming success of the iPhone is proof. The popularity of high bandwidth applications has caused network congestion to a degree that normal service delivery is disrupted. This is a well-known issue. It would be easy to conclude that if only the networks could simply provide more bandwidth, things would be fine. In the short-term, yes, that would help. But there's a more fundamental challenge underneath.

Broadband is a finite resource just like anything else. There are physical limits to how much cable can be laid for fixed-line networks, and there are only so many radio frequencies available to transmit mobile communications.

Nevertheless, over the last several years, to encourage subscriber growth and support short-term revenue needs, providers and consumers of broadband acted as if the technology had no limits. All-you-can-eat data and voice plans drove bandwidth consumption through the roof and pushed provisioning costs higher for bandwidth-hungry services like Netflix and Pandora. Prices and revenues for these unlimited plans dropped lower and lower as providers engaged in a price war to gain subscribers. Profits fell, service outages became commonplace and neither providers nor subscribers were winning the fight.

Now we get to the nub of the reason for why broadband is approaching commodity status. Why was such a price war waged? Because consumers in these markets perceived broadband as a service with no differentiation, and providers didn't offer them anything in the way of unique value that proved otherwise. Subscribers got as much as they wanted, with no value added, for an ever-shrinking price - the definition of a commodity.

There are certainly parallels between broadband and other commodities. Take oil for example. Demand for broadband data will outpace supply for the foreseeable future, much like oil. Also like oil, broadband service lacks any real differentiation. Oil is oil - broadband is broadband.

But broadband as a commodity presents a problem. Most consumers don't use commodities with much respect. As broadband has become faster and cheaper people treat it with a similar disregard to how they treat oil, never thinking it could run out, but, at times, it has run out. Without better protection, universal connectedness becomes harder to achieve. There is a socio-economic need for more connectedness. Broadband must be a readily available resource, but neither the consumer nor the supplier are well served if broadband becomes a commodity.

A better way

It is a commonly held belief that economic models in developed regions like Europe and North America are more sophisticated, mature and sustainable than those in developing regions. The generally perceived goal, usually, for any country in a developing region is to emulate the economic practices of a European Union or North American country.

In the case of broadband connectivity, it may be the other way round. Operators in the emerging world, like Africa and the Middle East, many of which we currently work with, are in a much stronger position to avoid the trap of broadband commoditization. Unlimited plans are rare and these operators have been much more adept at offering subscribers a truly personalized experience. The result is a population that does not expect to get unlimited quantities of a finite resource.

New mobile broadband pricing plans that have ditched flat-rate models protect the communications service providers, but broadband providers need to go further. They must leverage the systems and tools at their disposal to add transparency, personalization, quality guarantees and price incentives to the customer experience.

Flat rate, 'all you can eat', pricing schemes are inefficient.

- They result in low bandwidth users subsidizing high bandwidth users. Why should a casual Internet consumer who uses email and web surfing pay the same as a gamer who consumes a tremendous amount of bandwidth?
- They prevent a segment of the global market from affording broadband access. Some people simply cannot afford to pay US$40 per month for a broadband plan, but they could pay US$10 for a plan that offered something less than premium service.
- They prevent highly demanding users from realizing a high-quality experience because they must share a common service with the general population.

On the other hand, segmented pricing schemes are efficient. They avoid waste, prevent abuse, create value and ensure that adequate connectivity is available.

Connectivity's finite nature means that providing universal access in modern society, while certainly worthwhile, is a tricky balancing act. Treat it as though it was limitless, and it becomes apparent it is anything but. If broadband providers utilize policy control and data management tools they can achieve the differentiation needed to avoid the negative spiral towards commoditization. They also get happier, more loyal customers who don't pay for services they don't need, get a better experience and feel like they have a broadband provider that cares about their specific needs. ●