

## Connect everything, empower everyone

by Raghu Subramanian, VP of System Engineering, Juniper Networks Asia Pacific

There are 6.8 billion people on the Earth and around five billion mobile handsets - one for every adult person; yak herders - with shoes on their feet or not - have mobile devices in their hands. We fret about the corrupt spelling used for SMS texting, but texting has done more to improve literacy in under-developed parts of Asia than any government or NGO. Mobile communications already permeate the warp and weft of Asian life and will eventually empower everyone.



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The old saying about missing the forest for the trees is particularly pertinent when it comes to mobile communications. It is well known that mobile networks are increasingly usurping the place of the traditional last mile of fixed networks. What is sometimes missed is the mind-boggling scale at which this adoption is happening.

The earth's population is estimated to be 6.8 billion humans. The number of handsets on the face of the earth is now around five billion. That's a handset for every adult human being. To put

this in proper perspective, there are approximately one billion automobiles out there, 1.5 billion TV sets and two billion credit cards. In fact, no consumer technology to our knowledge had ever exceeded three billion users – until the mobile revolution hit its stride.

Another thing that we generally fail to properly recognise is that mobile devices are no longer simply phones; they are general-purpose computers. Technologically, they have been computers for the past ten years; psychologically, they have been recognized as computers only since the

introduction of the Apple iPhone, which made mobile web browsing practical for the first time.

To refer to these mobile devices as 'phones' is somewhat misleading, and reminiscent of the spoof secret agent movie *Our Man Flint*, where Flint says of his gadget-packed cigarette lighter: "This has 82 different functions; 83 if you want to light a cigar!"

The impact of the mobile revolution is most deeply felt in developing Asia, in terms of both quantity and quality. It is transformational in ways that those of

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us who have always had access to good communications infrastructure find difficult to truly fathom.

The quantity argument stems from the fact that Asia is home to 50 per cent of the world’s population. China and India alone add more mobile users annually than the entire population of Scandinavia, long seen as the crucible of the mobile development.

So pervasive are mobile devices these days that new mobility related words are entering the vernacular. A couple of years ago, when I was visiting Chennai in India, I hired a taxi for a day. Upon being dropped at a friend’s house, I asked the taxi driver if he could pick me up in an hour. He said in his native Tamil, “No problem: just give me a ‘misseducall’ when you are ready.” It took me a moment to realize that ‘misseducall’ meant for me to call his mobile handset without expecting him to answer, thereby letting him know that I was ready - without paying the mobile service provider a single paisa.

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After an international conference in Indonesia, an American professor was taken to see an archaeological site in the remote countryside. Much to his surprise, he received a call from his wife who happened to be in a conference in Hawaii at the time. A few days later, his plane touched down in a major US airport. Much to his surprise again, it took him

several tries before his mobile service provider succeeded in connecting him to his wife who had come to pick him up. He was left wondering whether the First World is really the Third World when it comes to mobile communications.

The quality argument stems from the fact that most people in Asia don’t have the money to buy a conventional personal computer, but they have the money to buy a mobile device. Therefore, mobile devices are becoming the primary mean whereby people will experience the Internet. When people have Internet access they become empowered in all sorts of ways.

Most of us have heard of the stories of rural fishermen who, while returning from sea with the day’s catch, use their mobile devices to check the prices offered by buyers on shore, enabling them to land their boat directly at the doorstep of their preferred buyer. Prior to the Internet, they would pick a buyer at random, and then would find themselves at a negotiating disadvantage given that the catch only lasts for a few hours before it loses its freshness.

On a recent trip to Bhutan, home to the concept of Gross National Happiness, a colleague of mine observed that the most common occupation appeared to be yak herding, and each yak herder - whether he had shoes on his feet or not - certainly had a mobile device in his hands. Clearly, mobile communication is part of the mix that goes to make national happiness.

While the intelligentsia bemoan the arcane abbreviations and spelling snafus of SMS messages, it turns out that SMS texting has done more to improve literacy rates in under-developed parts of Asia than the policies of any government or the pious intentions of not-for-profit organizations. The treasure trove of information to be found on the Internet will no doubt drive up literacy rates and education further. This will inevitably lead to the general populace being able to

make better-informed decisions about a whole host of issues.

The point of these stories is simple. Mobile communication has penetrated the remotest corners of Asia and permeated the very warp and weft of Asian life. This is not a point about Tweeting teenagers and other such trivialities. It is a far deeper point about how mobility beats in the very heart of Asia, in the hands of the silent billions, how it will connect everything, and how it will eventually empower everyone. ●



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