Mobile Broadband's Big Bang

By Becky Bracken

Dongle. It's unlikely that such a goofy-sounding thing could spark a revolution. But across Europe, dongles, or USB modems for laptops, are driving an explosion of consumer demand for mobile broadband that is pushing the EU's 3G network capacity to its very limits.

In North America, it's the equally silly named iPads and Droids that are putting mobile broadband access in every purse, pocket and backpack. And as prices for smartphones, tablets and other Facebooking, Tweeting, movie-streaming and Siri-enabled devices drop, demand will only continue to skyrocket.

A recent report from Berg Insight, "The Mobile Broadband Connectivity Market" says mobile broadband subscription in the European Union grew by 33 percent to 33.9 million in 2010. In North America, there were 14.6 million mobile broadband subscribers by the end of 2010. That number will likely reach 58 million in 2016. North American service revenues are also expected to double by 2016 to $8.3 billion.

While North American networks haven't yet reached the same gargantuan capacity levels as their European counterparts, with more customers buying multiple devices every day, the issue is on their doorstep.

So how can operators manage the drain on networks this mobile broadband explosion is creating and still carve out a profit? Savvy network management, flexible and innovative IT solutions, including OSS and BSS systems, and the adoption of a pricing strategy that ties plan prices directly to a service.

The Bandwidth Value Proposition

The heady days of unlimited data plans will soon be an ancient memory as a result of the mobile broadband explosion. Sure, LTE and 4G will expand capacity, but with exponential growth in the number of devices coming online every day, providers need to think about how to manage consumption rather than how to provide an endless supply of bandwidth to their customers.

What's casually called the European price model, or tiered pricing, is ubiquitous in Europe precisely because of the demand for mobile broadband.

Likewise, as North American demand for mobile broadband exceeds capacity, operators are going to have to force their customers to tie pricing to usage and adopt a similar European-style tiered pricing model.

"This has been de facto in Europe for several years with only a handful of operators still offering unlimited access," Jessica Ekholm, principal analyst for Gartner says. "Most access is capped. We are likely to see a larger variety of tiered pricing plans but also a larger selection of options such as rolling monthly contracts, speed tiering and more personalized plans."

But operators know all too well the ultra-competitive North American wireless market is consumer-driven and incredibly price sensitive. How do you get customers to accept paying more for the same service? Tie the price to a particular service.

Shira Levine, Directing Analyst, Next Gen OSS and Policy with Infonetics, says the biggest problem North American service providers have is a lack of transparency in pricing plans.

"The problem is that there's no transparency," Levine says. "If you have a 4-gig plan, who knows what a gig is? But if you say the plan includes unlimited data and HD movie streaming, for instance, that's something customers can understand."

Levine recently co-authored an Infonetics report that said shared data plans across multiple devices is likely to be an attractive option for customers.

"The real benefit of this type of plan is that the user sees only a modest additional cost for the adoption of a second device, such as a $5/month provisioning cost for multiple devices. Also, the user actually gets to select a data allowance he might actually use, giving a much stronger sense of value for money." the report says.

She adds that it's really going to be about providing an incentive for customers to adjust their consumption behavior, like a price break for using underutilized cell sites, locations and even consuming bandwidth during off-peak times of the day. "I really think it's going to be a carrot approach rather than a stick approach," Levine says.

Annika Svensson, who is with strategic marketing business unit networks with Ericsson, says it's key to know how to predict what customers want and segment products based on those demands.

"(Customers want) services where you understand the value and the price and don't get unhappy surprises," Svensson says. The key is to segment the market and differentiate accordingly, and knowing what the customers are prepared to pay."

Pricing strategies aside, operators are going to need to get serious about getting nimble, real-time OSS/BSS solutions in place that will allow them to react to what customers are consuming, and then in turn, provide the service, bill for the service and present value-added service opportunities in fractions of a second. That means real investment in innovative policy, billing, customer service and data analytics tools that will provide opportunities for creative new services for customers and manage exploding mobile broadband traffic.

Levine points to several examples where this kind of innovation is already happening.

Orange Botswana does traffic-based rating in which data rates rise in response to traffic conditions.

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Teliasonera is doing "value-based pricing" in which bandwidth is bundled with content (think your Kindle, where the bandwidth required to download a book is included in the cost of the book). Rogers Communications offers day passes that bundle Web browsing, access to social network sites, email and mobile messaging for a daily rate. And Globe Telecom provides subscribers with unlimited free calling between Globe handsets and landlines within a specific geographic area, as part of its loyalty/churn management program.

She adds that LTE rollout will likely drive the same level of innovation in network agility in North America. Because of the capital investment that's going to be required for the switch is going to cause networks to look very closely at how they can get the most return on the investment.

"But it's going to take some time."

Thad Dupper, Chairman and CEO of Evolving Systems points out that that dynamic provisioning is going to become critical as prepaid data plans become more common.

With dynamic provisioning, operators can tailor the customer sign-up process and the types of products offered to customers depending on the device type and/or other factors like location," Dupper says. "They can use the capabilities of the browser on the device to explain tariffs and options clearly, reducing confusion and increasing customer satisfaction. They can also offer relevant promotions - including operator-supporting two-sided business models and advertising.

He adds that operators don't have to give up the customer-retention fight in order to offer flexible, prepaid plans.

"For operators, one of the key benefits of delivering this level of personalization is that it helps them keep churn rates under control."

The Policy of Policy

Network policy and management will be vital to making sure networks can deliver the level of service necessary to meet customer demand. This itself can potentially become a differentiating service. Customers could choose, as part of a tiered pricing strategy, how much bandwidth they're willing to pay for. In the case of streaming movies, operators and service providers could offer a more expensive package with a higher quality of service, so customers could choose how much breakup they're willing to live with.

> **The heady days of unlimited data plans will soon be an ancient memory**

Levine says she'll be interested to see how Net Neutrality and other regulation might impact this business model. She points to the Netherlands where laws were recently passed against any kind of policy that preferred one customer over another. She adds that since Netherlands was the first to regulate Net Neutrality in June of this year, so the full impact is still to be felt.

"Making sure that the service experience and network enforced policies are based on the customers' preferences and current spending and usage balance in BSS," is what will help networks keep up with skyrocketing demand for mobile broadband, Niclas Melin, Market Category Driver OSS/BSS for Ericsson says.

Regardless of the region, the internet has gone mobile and data is king. It's transformative times like these where only the smartest and most innovative survive. But that's nothing new for network operators; just another day at the office.