

Mobile Broadband: Surf the Broadband Wave With a Customer-Centric Business Model

Abstract

With mobile broadband becoming more available all the time, and the introduction of smart phones and more applications and content, mobile broadband usage is poised to explode. Some would argue the wave has already hit the market. But if you think that means an automatic windfall for operators, you may be in for a rude awakening. They are challenged to manage this traffic growth, which is increasing at a much faster rate than revenues and creating profitability and customer experience challenges. And they are challenged to identify whether their mobile broadband strategy is to be a bit-pipe access player or to be a value-added player.

In this paper, we'll look at the imminent opportunity of mobile broadband, and assess the competitive threats every provider must grapple with. We'll also explore ways operators can insert themselves into the value chain, protecting their relationships with their customers, and giving themselves every chance to cash in on what needs to be a significant source of future revenue potential.

Introduction – On the Cusp of a Huge Opportunity

The numbers differ slightly from prediction to prediction, but they all reach the same conclusion: mobile broadband is growing exponentially. In fact, over the past two years, mobile broadband has already proven to be the one bright spot in a lackluster performance for global telecom. And analysts are forecasting that mobile broadband adoption will eclipse fixed broadband as early as next year, and reach upwards of two billion subscribers in the next four years.

You can do the math as to what that will mean in terms of revenue growth. Two billion mobile broadband users — and the only reason they will want to subscribe is that there will be must-have applications and content to support them. Somebody is going to supply it for them, and that somebody is going to get paid handsomely to do so, but with new business models.

We're not just talking about mature markets, either. In those markets, the evolution of users from 2G to 3G and even 4G will continue at an unparalleled rate. But in emerging markets, users may be going from zero to 3G+ in one leap. Their first experience with mobile communications might just as easily be watching a video on their handheld as it might be talking on the phone. The business opportunity is staggering.

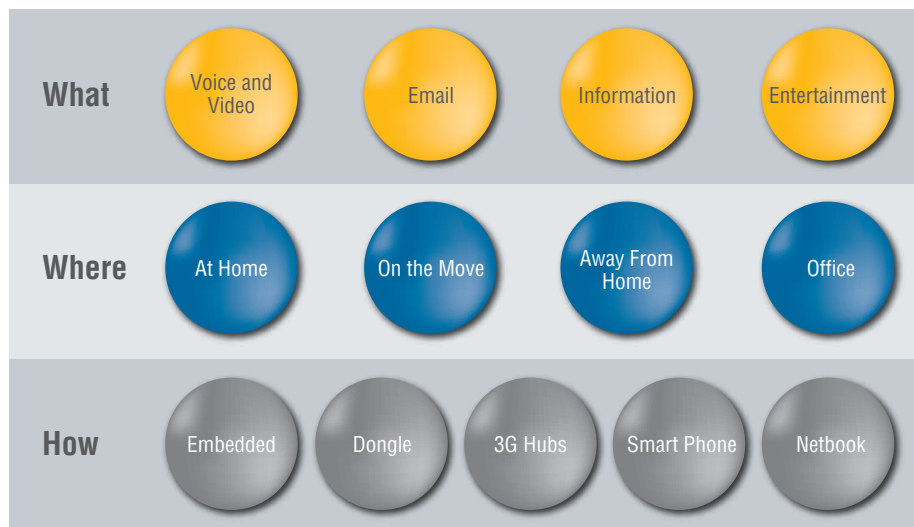


Figure 1: Mobile Broadband, More Than a Smartphone

Danger Just Below the Surface

Equally, if not more staggering, however, are the infrastructure and bandwidth implications of such growth. Many providers are already struggling to keep up with overloaded networks and customers who are less than satisfied with their 3G performance. This is due, in part, to plans that promise unlimited data, which unwittingly enable a minority of bandwidth-hogging users to compromise the 3G experience for everyone on the network. Network operators can't expect to add millions more users every month without either some serious infrastructure and spectrum upgrades, or without rethinking the all-you-can-eat data plan model.

Also troubling is the fact that while mobile broadband traffic continues to grow, revenues aren't keeping pace. The cost of delivering reliable mobile broadband is very high, and yet users seem to place roughly the same value on mobile broadband as they do on fixed broadband, driving prices down towards fixed levels. "Why should I pay more for a dongle than I do for my DSL?"

they wonder. And the fierce competition to attract and retain customers has only added to the misperception. What's more, as mobile devices replace fixed devices as the primary tool for surfing the Internet, users might expect that surfing and downloading data will be virtually free, based on their current web experience. Operators are going to have to find a way to change these perceptions, or mobile broadband margins will remain very thin, if not nonexistent.

Perhaps the biggest threat of all comes from over-the-top players. Operators will be required to make all the investments in infrastructure and provide a reliable customer experience. And yet, if they aren't careful, they will absorb the bulk of the costs, while allowing third-party content providers to reap the biggest profits. There is certainly precedent with fixed broadband, where the over-the-top players ended up dominating the search, content, and value-added services part of the equation, while the ISPs, who made it all possible, became commoditized utilities. Service providers mustn't repeat this mistake. They must create a value proposition that encourages partners to work with them and share revenue. Or, together with their delivery partners, they must identify value-added services they can provide that will bring in additional revenues. These services will not be just application store- or content-based. They also will include advertising as part of the mix to realize this revenue potential.

Fair usage, a service provider-centric term, does little to create a win-win relationship between customers and service providers. As long as a customer's usage is within the fair usage limit, then customers are happy. But the customer is not served well today when the fair usage limit is exceeded and most of the options that kick in result in either large charges or a slowing down of access. Fair usage provides a framework for the service provider to manage mobile broadband, but this first generation is not customer-centric. What is needed is a next generation usage management model that puts the customers in control and gives them a real-time view of their service, so that they can consider a different service tier or perhaps vary their consumption to use the network more during off-peak hours.

Follow the Money

For a time, while the priority is building out the mobile broadband infrastructure, there may be a competitive advantage in offering a "better network." But soon enough, the pipe will become a commodity, and the long-term potential revenues will be in the delivery of services, applications, and other user-demanded content. Smart players already know that they can't give third-party content providers a free pass, and are finding creative ways to partner with them to share in the potential revenues, while giving customers added benefit.

The first generation of mobile broadband tariffs offer little to address the challenge created by peak hour traffic being managed through monthly usage limits for postpaid and daily usage limits for prepaid. Instead, service providers need solutions that will help them manage different customers and traffic in different ways so that, for example, a more valuable customer could get better service and some services could get higher priority. Zero-revenue over-the-top content video, which will dominate the traffic load, will need to be managed differently from paid content from a partner or from the service provider itself. Customers will need real-time updates of usage so that they have the opportunity to purchase a higher bandwidth or usage plan or enable access to services that are not allowed with their current plan.

An obvious service to provide to third parties is payment: allowing users to pay for things using their (prepaid or postpaid) mobile phone account. This is particularly useful in markets where other payment mechanisms (e.g., credit cards and banks) are in short supply or with customers who cannot access them (e.g., teenagers).

Another example of a value-added service for mobile broadband is operator-owned or partner portals, where a user can download certain third-party content. The operator can incentivize the user by offering that downloads don't count against the user's pre-set monthly limit — or perhaps at a discounted rate. The user is more prepared to turn on mobile broadband on their mobile handset, the content provider has increased sales, and the operator shares the revenues. It's a win-win-win scenario.

Yet another potential source of revenue is in managing content usage patterns more effectively. Operators can offer special incentives to encourage usage at off-peak hours, or perhaps a limited-time promotion that allows the user to download a specific type of data. As an example, users could purchase a temporary World Cup package that pushes scores, statistics, and video highlights every evening when bandwidth is available. Or an operator could charge one rate for video downloads during the day and a discounted rate in the evenings, to encourage more responsible network usage.

But Don't Follow the Herd

Still, the delivery of content is no panacea for profitability. Indeed, there is every possibility that you can end up offering the same content and services as your closest competitors, at virtually the same price. In that case, there must be another way to differentiate your offering, and keep your customers close to home. The key won't just be in what an operator offers, but in how the operator handles the user experience of that offering. If a user can get the same content from anyone, what kind of control does the user have over that experience? If every operator employs some form of bandwidth management strategy of caps and limits, what is the customer's role in it? The traditional model has been driven by the need to manage the network. A more differentiated model is driven by revenue generation, and puts the customer at the center.

Network-Centric Versus Customer-Centric

Bandwidth management is all about keeping costs down. But unless it is done in a way that feels fair to the user, they will simply churn to another provider. Network-centric management imposes caps and limits, and is increasingly mandated by regulators so that customers have some idea of how their usage affects their bill. For example, a user might travel across borders, incurring an increased data tariff. After they reach their limit, the customer might be sent a text message with an update — usually at the end of the day. The right idea — but the wrong outcome. By the time the user knows their boundaries, they may have already overspent, and their knee-jerk reaction is to stop all data usage out of uneasiness or fear. The customer is unhappy, and the operator loses potential revenues.

User-centric bandwidth management, on the other hand, provides information and interactivity in real time, so customers are in control of their own usage. Armed with information and options, the customer can then make decisions and purchases without fear of hidden charges and unfair draining of their data cap. The customer knows immediately if an Internet purchase will count against their cap. The customer knows immediately that a certain download will cost them more right now due to the amount of traffic on the network. The customer knows immediately when they are getting close to their roaming limit. The customer immediately becomes a willing partner, rather than an unwitting pawn.

The Central Role of Real-Time Policy

Users don't like surprises. Especially when those surprises are on their bill at the end of the month. And when a customer gets an unwelcome charge, you might just get a phone call to customer care — and each call is a drain on your profits. Real-time policy puts customers in control of their usage. When users are in control, they are more likely to open their wallets. If a user is unsure, they won't risk it.

With real-time control, users can set their own usage limits and stay informed in the moment. They can also supersede those limits when it suits them. A user might self-impose restrictions to certain file-sharing websites during peak times of the day. A parent might set limits for their children on certain types of usage, or during school hours, but then override them on school holidays. A user might opt-in to downgraded service when network traffic is peaking. In all instances, the user receives updates in real time and can make informed spending and usage decisions. The more they know, the more comfortably they will consume.

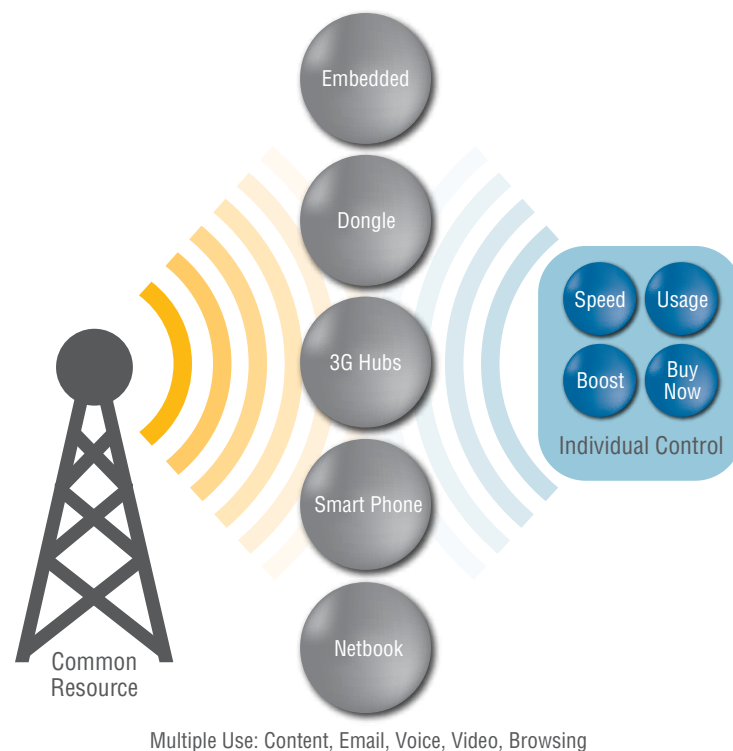


Figure 2: Mobile Broadband – Common Resource, Multiple Uses, Individual Control

Real-Time Charging Is the Revenue Engine

Another key differentiating component is real-time charging. If customers are going to make decisions on the fly, operators need to be able to accurately account for and charge in real time, for prepaid, postpaid, and hybrid accounts. This allows the operator to engage in a partnering business model, playing an active role in supplying the value-added services and content that is carried on its network. Charging models will no longer be a simple matter of on and off peak, but more variable based on network traffic, and upon special promotions and offers. If a provider can't charge for something, they can't sell it, putting the over-the-top content providers squarely in control again.

With real-time charging, the operator can get much more creative in the types of products and services that can be made available to users, such as time-sensitive or geographically-based promotions. Perhaps an operator foresees a lull in network traffic and can offer a limited 12-hour buy-one-get-one-free deal on TV programming. Or an operator makes a donation to a charity for every gigabyte of data downloaded from a certain localized event — with an immediate digital thank-you card for every participant.

The Advertising Equation

A user's Internet experience isn't free. It is driven by advertising, of course. Likewise, if properly administered, advertising in the mobile broadband space can provide another important source of revenue for operators, without creating an unnecessary annoyance for users. Based on real-time policies and context, ads can be delivered to a user on an opt-in basis, in exchange for free or discounted bandwidth or content. The user can set the general parameters under which advertising will be acceptable, and then the operator can contextually serve up the right ad for the right moment. For example, perhaps a user has allowed for three ads a day. It's early evening and the user is accessing a "free" GPS application in the theater district. The system ascertains where the person is, and whether they've reached their quota for the day. Then, it serves up an ad for a nearby restaurant while the GPS app is loading.

The Right Mobile Broadband Solution

When considering what type of solution makes the most sense for your organization, it's imperative to keep in mind that the growth trajectory projected for mobile broadband is off the charts. Whatever your solution, it needs to be massively scalable, first and foremost. Otherwise, you could be replacing it before you ever get it fully deployed. Beyond that, there are certain elements that need to be considered:

- A bandwidth manager, to get real time control of the usage of your network, in particular management of peak hours and tiered services
- Real-time policy, giving end users real control of their service so they can set their preferences and which gets them onto the service provider portal
- Real-time charging, to charge for a range of new data and content models
- Mobile marketing and advertising, to realize new revenues
- All payment types — prepaid, postpaid, and hybrid — with real-time balance, data usage, and multiple charging options.

Conclusion – Sink, Swim, or Surf

The mobile broadband wave is going to affect everyone in telecom. Some will get washed over, some will do respectably well, and some will get on top and ride the momentum to enormous gains. But, the competition is going to be on all sides trying to pull you down. Operators need to manage bandwidth as the first step toward realizing a profitable business and they must build on that capability, forming active partnerships with content providers, to get their fair share of the profits.

What's more, if operators are going to set themselves apart from their competitors, they will need to make sure their mobile broadband offering is centered on the user experience.

Customers who are barraged with after-the-fact information and, even worse, unexpected charges, will keep a tight grip on their purse strings and a sharp eye out for someone who can provide a better customer experience. Users who have an interactive relationship with their provider will be more comfortable accessing and purchasing more services. You can't put a price on trust. But your customers can.



For more information about Telcordia,
contact your local account executive,
or you can reach us at:
+1 800.521.2673 (U.S. and Canada)
+44 (0)20 7632 4450 (Europe)
+1 732.699.5800 (all other countries)
info@telcordia.com
www.telcordia.com