

Get Your Share of the Mobile Internet Pie: Capitalize on Growing Demand for Personalized Services

Dr. Vikram Saxena
Chief Technology Officer,
Tellabs

A survey of 15,000 mobile users in 15 countries reveals a growing hunger for smart, personalized mobile Internet services. But service providers are at risk of losing their piece of the pie if they don't act now to meet demand. Adding intelligence to the mobile packet core equips networks to transform the user experience and avoid becoming "dumb pipes."

Everywhere you look, people are tapping into the power of the mobile Internet for e-mail, Web access, gaming, videos, music and much more. According to a new Nielsen survey, mobile users know they've only had a taste of what the mobile Internet can deliver. Within the next six months, consumers say they want smart, personalized mobile Internet services.

A global survey of 15,000 consumers across 15 countries highlights a hunger for mobile Internet services tailored to individual preferences, location, time of day and social setting. Although consumers say they trust wireless service providers, they don't necessarily see them as the source for these new, desirable services.

Instead, third parties with well-known brands — Google, BBC and Facebook — are cited as the preferred source for new services such as e-commerce, social networking, mobile banking and location-based services. In contrast, service providers were deemed "most appropriate" to provide basic voice, SMS and MMS services.

Service providers who want a piece of the mobile Internet pie must respond quickly to changing consumer demands to retain and attract customers.

The silver lining for mobile carriers

There is a silver lining in the study for service providers. The survey reveals that globally, consumers' trust in service providers' handling of personal data is high, second only to banks. They also know that mobile carriers already provide many of the desired services today (see About the Survey).

Smart networks win smart customers

So, how do mobile carriers capitalize on their positive position with customers?

To stay in the game and avoid becoming "dumb pipes," mobile carriers can tap into the valuable network assets they already have, such as location awareness, to bring more user applications to

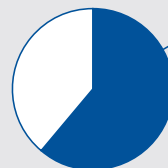
market. A more powerful scenario is the addition of intelligence into the network to enable third-parties — and their own applications — to provide smart, personalized services.

Tapping the mobile packet core

The skyrocketing popularity of smartphones and other mobile Internet devices, along with the content-rich applications they support, is propelling the popularity of the mobile Internet. The Yankee Group estimates the market for mobile services will be worth US\$200 billion by 2011. To position themselves to capture a share of this lucrative market, many service providers already are beginning to deploy 4G technologies and all-IP infrastructures. The Nielsen study

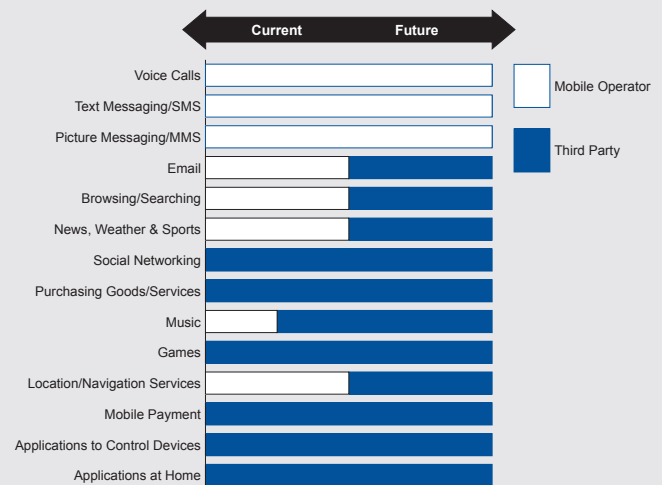
About the Survey

The Nielsen Company surveyed 15,000 consumers across 15 countries about mobile Internet use: Argentina, Australia, Brazil, China, France, Germany, India, Italy, Japan, Mexico, Russia, South Africa, Spain, United Kingdom and the United States.*



The survey revealed almost two-thirds of users (63%) want smart, personalized mobile Internet services within the next six months.

In 11 out of 14 service areas, users expect a range of third-party providers to deliver new services, rather than service providers.



*Tellabs commissioned the survey. Fielded in November 2009.

emphasizes that advanced networks must do more than transport the surging tidal wave of mobile-broadband traffic. To avoid becoming “dumb pipes,” the networks must enable the creation of new revenue streams while reducing capital and operating expenses (CapEx and OpEx).

The enormous rise in mobile Internet traffic volumes threatens to overwhelm not only service providers’ networks but also their voice-based business model, i.e., charging a flat rate for monthly use. Consequently, they seek network solutions that can create new, non-traditional revenue streams, which in turn will increase the average revenue per user (ARPU) on their networks. Basically, they want a mobile packet core with the intelligence to:

1. learn about user content at line speed,
2. apply that knowledge in ways that selectively adapt the network,
3. create new revenue-generating opportunities,
4. dynamically optimize both the network and services, and
5. support the rapid, flexible delivery of new services.

Solutions such as the Tellabs® SmartCore™ 9100 Series mobile packet core platform are purpose-built to handle all of these requirements. Designed to support 4G, LTE and WiMAX networks, as well as 3G infrastructures, this type of mobile packet core reduces CapEx by aggregating on a common platform several network functions that historically have resided in separate network elements. These functions include peer-to-peer traffic management, new charging functions, quality of service (QoS)/policy enforcement, filtering, and compression.

By making networks smarter to deliver new, personalized mobile Internet services, service providers can build powerful relationships with application providers and users.

Because of a converged platform’s ability to inspect and analyze content, encrypt and decrypt signals, and scale and manage traffic; service providers do not need to purchase additional cards or hardware to deliver those functions. In addition, such a platform’s built-in, scalable control plane can deliver a CapEx advantage of four to eight times over competing products.

An intelligent mobile packet core platform trims OpEx in part by reducing the number of required devices and cards. However, its OpEx-reduction capabilities extend to the creation of “the smart, personalized mobile Internet.” It delivers to a wireless network with the real-time intelligence necessary to use that network’s limited resources — spectrum and backhaul capacity — more intelligently, dynamically and efficiently. Without that intelligence, operators must put in more base stations to re-use the spectrum and add more backhaul capacity — both of which obviously stretch the OpEx budget.

An advanced mobile packet core platform also delivers comprehensive, real-time intelligence about customer requirements and behavior, including where a user’s physical location and the content he/she is using. A network that is “aware” of both customer content and context enables service providers to tailor the rapidly evolving mobile Internet to individual user requirements. That ability, in turn, translates into enormous competitive advantages that can lead to greater market share, higher revenues and stronger margins. Among those advantages are:

Differentiated QoS and Corresponding Price Points – Service providers can capitalize on the platform’s built-in intelligence to identify Internet-based applications, offer customized services dynamically and apply the appropriate levels of QoS and security, thereby achieving strategic differentiation in an ultra-competitive marketplace. For example, recognizing that an emergency call is a public-safety application, as opposed to a best-effort browsing application, the platform assigns the right QoS level to ensure the content goes through the network immediately. This intelligence clearly enables service providers to work with residential users, for instance, to provide more granular parental controls. Enterprise users can identify mission-critical applications and assign the appropriate levels of QoS, security and price points.

A Double-Sided Revenue Model – By leveraging the intelligent mobile packet core platform, service providers can partner with content providers to deliver specific content over “premium” pipes, for an additional fee. For example, a service provider can team with Amazon.com to offer digital book downloads. This capability enables a service provider to evolve the business model, beyond the “all-you-can-eat” service for a monthly flat fee, to a transaction-oriented, double-sided revenue model. The service provider can derive revenues not only from users’ flat-rate monthly fees, but also from content-provider partners.

Enhanced Mobile Advertising – With users’ permission, service providers can use the platform’s delivery of real-time, user-centric intelligence to attract advertisers. Understanding the Internet preferences of a given user and the kind of content that user is trying to find means that an advertiser can produce precisely targeted, effective ads. In other words, if a company advertises on the mobile Internet, the intelligent mobile packet core platform increases the ad’s ability to produce real business, beyond that of a standard branding campaign.

Mobile packet core in the network

Architecture Overview – Solutions such as the Tellabs® SmartCore™ 9100 Series are custom-built for all-IP 4G networks, with intelligent content-handling capabilities and flexible service differentiation, and also:

- massive scalability,
- non-traditional charging functions,
- dynamic policy enforcement,
- mobility management,
- network optimization, and
- the enormous bandwidth needed for 4G services.

North America

Tellabs
One Tellabs Center
1415 West Diehl Road
Naperville, IL 60563
U.S.A.
+1 630 798 8800
Fax: +1 630 798 2000

Asia Pacific

Tellabs
3 Anson Road
#14-01 Springleaf Tower
Singapore 079909
Republic of Singapore
+65 6215 6411
Fax: +65 6215 6422

Europe, Middle East & Africa

Tellabs
Abbey Place
24-28 Easton Street
High Wycombe, Bucks
HP11 1NT
United Kingdom
+44 870 238 4700
Fax: +44 870 238 4851

Latin America & Caribbean

Tellabs
1401 N.W. 136th Avenue
Suite 202
Sunrise, FL 33323
U.S.A.
+1 954 839 2800
Fax: +1 954 839 2828