

GUEST ARTICLE

ANSWER THE CALL OF MOBILE BROADBAND



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"Mobile broadband has real potential to open profitable new high-growth markets for existing and new businesses and the investors who fund them."

Despite the current downward trajectory in the economy, consumers and businesses alike are becoming dependent on broadband as a critical component of their daily lives. It is just behind such necessities as utilities and basic phone service. This dependence will help ensure that spending continues its upward trend against economic headwinds. As a result, companies with business models and technologies that address the revenue opportunities available in the promising broadband and mobile internet access space offer attractive returns to investors.

Considerable opportunities for mobile broadband lie in its potential to cross the so-called "digital divide" in which much of the world's population—even in developed economies such as the United States—has not had regular, affordable Internet access. Regardless of the considerable advances in communications in recent years, the fact remains that the more affluent have the benefits of access to information and communications technology, while the lower income/credit-challenged still do not. This no doubt has been a contributing factor in the widening income gap between the groups.

So for all the talk of broadband communications revolutionizing the way we live, today's fixed-line and some mobile approaches are still too expensive for many people, both in terms of access and equipment.

According to data from **Leichtman Research Group**, more than half of U.S. households subscribe to broadband Internet, but less than 40% of those with incomes under \$50,000 get this type of service. Additionally, 81% of all U.S. households have at least one PC, but only 56% of households with incomes under \$30,000 have them.

The good news is that emerging mobile phone business models offering easy-to-use, unlimited, flat-rate wireless services with no signed contract are showing great promise in closing the divide and placing broadband access within reach of everyone, regardless of their means.

Although mobile phones do not replicate the functions of broadband-connected PCs, they are inexpensive and can be used by people with no previous experience with technology. These phones can provide broadband connectivity without the associated costs of a PC, while providing the basic voice and data capabilities necessary for introducing people to the digital society.

There is investor interest in companies in this sector—and service providers have great potential to profit from it, although they face some challenges as they attempt to increase mobile broadband penetration. Similar to mobile voice services five years ago, when penetration levels hovered around 50%, companies need to aggressively target niches that have not been successfully addressed to date.

To be effective in bridging the divide, business models must address large enough markets, be affordable and flexible enough to allow low-income users to purchase only services they can afford, and provide workable payment methods for paycheck-to-paycheck customers. While cream skimming more affluent markets yields high profits, establishing economically viable models for serving those who live paycheck to paycheck is considerably more difficult. But, as wireless service penetration drives greater broadband adoption, the economies of larger customer bases will contribute to profitability.

Driving the move to make mobile broadband accessible to lower-income segments in the United States are providers like **MetroPCS** and **Cricket**, which offer "all-you-can-eat" pricing (unlimited, flat rate, no signed contracts). Such providers typically have more efficient networks and lower operating costs than large incumbents, enabling them to profitably penetrate and serve lower income segments.

While the primary focus today for these companies is signing up voice customers, the bulk of their subscribers use wireless phones as their primary or only communications device, and as their only access to the digital society. Typically, such customers talk more

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than twice as much as traditional users and send daily text messages at levels far above national averages. In fact, most do not have PCs in their households and generally regard texting as their de facto email service.

The success of companies like MetroPCS illustrates the appeal of flat-rate pricing and its ability to penetrate the lower income segment of the United States. With the backing of investors who believed in this new approach, the company was able to fund its initial market build outs and went on to become the fastest growing wireless company in the industry's history, eventually going public in April 2007. The company currently has more than 3 million subscribers. And today, investors continue to back regional operators executing on the flat rate, unlimited business model.

There's no doubt that mobile phones are a good means of introducing people to the digital society. But while mobile phones lend themselves to texting and the like, they are cumbersome to use for Internet access, searches and other more advanced functions. Lower income users are ready to move beyond these limits and on to more advanced devices when they become available and affordable.

Low-cost, mobile-broadband capable laptop PCs will be the most likely means by which they will make the move. Indeed, projected demand for these PCs shows that such users are eager to move forward. For example, research from the Pyramid Group performed for Microsoft and the GSM Association (GSM)—the global trade association for the mobile industry—shows a market opportunity for 70 million low-cost, mobile broadband-capable notebook PCs with the right form factor and “out-of-the-box” connectivity.

Whether they are accessing the network with phones or with PCs, customers have shown a strong preference for mobility. The potential size of the market opportunity driven by new subscribers—whether they are gaining access to the network for the first time or replacing their fixed connection—is substantial. A recent report from **Informa Telecoms & Media** indicates that the number

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of mobile subscribers will surpass fixed broadband subscribers by 2011.

In addition, the **Yankee Group's** 2007 report, “Mobile Internet Utopia: Imagine if Supply Could Satisfy Demand,” indicates that, although this market currently has reached \$9.5 billion, it has the potential to reach \$66 billion per year in access alone. And although Informa forecasts that mobile broadband services will generate more than \$400 billion globally by 2012, the incremental revenue from the billions of transactions consumers would generate if ubiquitous mobile Internet access were available should be equally as large.

Regardless of the specific numbers, it's clear that operators who provide flat-rate price plans with the services customers want have great revenue potential.

The social and economic impact of millions of new customers with mobile Internet access will be tremendous. Now that customers are accustomed to having broadband in their offices and homes and the convenience of mobile phones, they also are becoming interested in multimedia services that require both broadband service and mobility (content, media, search, entertainment, etc.). Interest in these services will drive investment opportunities in companies with applications and technologies that can create personalized

environments and make wireless broadband as easy to use as fixed broadband.

There also will be demands for, and investment opportunities in, mobile broadband tools that leverage mobility to enhance home and workplace productivity, and save costs. Such tools could range from those that enable document sharing and collaboration to others that provide the ability to access and control home appliances and business equipment by using IP-based devices and intelligent mobile broadband networks.

Other service provider and investor opportunities can be found in technologies that address the complexities and interoperability issues of wireless broadband. Many organizations, especially SMBs, do not have the dedicated IT resources for managing their increasingly complex networks, the growing number and variety of intelligent devices in them, and greater bandwidth demands.

As a result, there is a need for companies that can provide infrastructure, device and network management solutions that enable convergence across fixed and mobile voice, data and video applications. Finally, as networks and services become more complex, end-to-end security solutions are needed to protect user activity while roaming across multiple WiFi/WiMax, cellular and other networks.

Clearly, mobile broadband has real potential to open profitable new high-growth markets for existing and new businesses and the investors who fund them. By targeting large enough markets and making the benefits of access to information and communications technology a reality for everyone, mobile broadband will positively impact investors, service providers and users alike.

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