

The appeal of mobile WiMAX in emerging countries

Mobile WiMAX may find early adoption in emerging markets, if the right devices become available

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New technologies like WiMAX are typically successful first in developed markets where disposable incomes are higher and new devices and services are adopted earlier.

However, we expect WiMAX will initially be better suited to emerging markets. We predict in 'WiMAX: Ambitions and Reality' that emerging markets will account for 55 per cent of WiMAX subscribers by 2012.

Emerging countries may take the lead in mobile WiMAX growth due to two trends:

- Demand for affordable, flexible broadband, coupled with the lack of wired broadband.
- Widespread 3G deployments, lack of spectrum, and non-committal operators will delay mobile WiMAX in many developed markets.

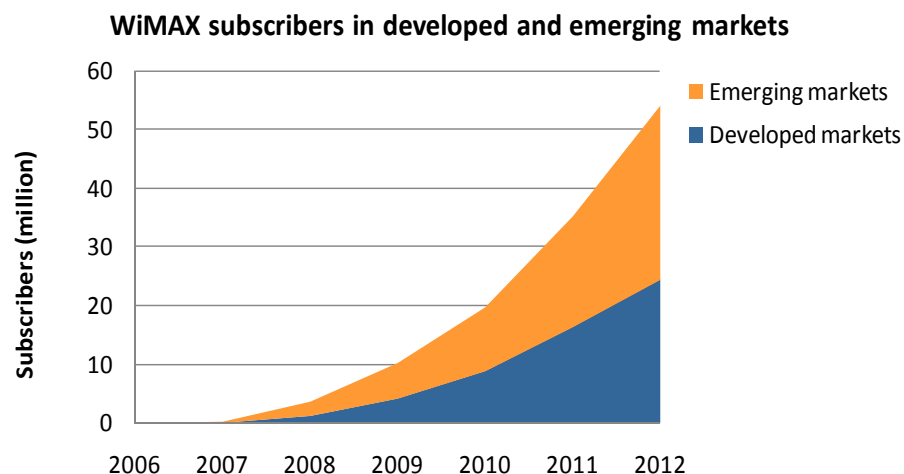


Figure 1. WiMAX subscribers worldwide. Source: Senza Fili Consulting, *WiMAX: Ambitions and Reality*, June 2007

The value of mobile WiMAX is not mobility per se. Up to half of mobile phone calls are placed from the home or office. The percentage should be even higher for data-centric devices and applications. Operators estimate that up to 80 per cent of WiMAX access will be from indoors, where subscribers are stationary.

The true appeal of mobile broadband in developed and developing countries is ubiquitous high-bandwidth network access.

In developing countries, however, mobile WiMAX will be positioned differently.

Rather than targeting high-ARPU business users, early adopters or tech-savvy teens, mobile WiMAX services will attract first-time broadband users without a fixed line data connection who are nevertheless accustomed to mobile phones.

These subscribers cannot afford both fixed and mobile subscriptions. Mobile WiMAX offers them both on a single contract and a single device. Operators can offer mobile broadband ahead of fixed broadband, adding value by combining fixed and mobile access.

For instance, a retailer may need broadband in his shop, using both data and VoIP applications. After work he may take his WiMAX device home where he and his family can make VoIP calls or access personal email.

WiMAX operators, both greenfield and established players, have been very active in markets such as Russia, Eastern Europe, Latin America and India.

In most cases the initial focus is on fixed broadband access, where demand is known and devices, albeit expensive, are available. Most operators, however, see the potential for mobile access and want to enhance their networks when devices become available.

Device availability is key. Operators are still dependent on a limited selection of form factors: desktop modems, PCMCIA cards and, soon, a few PDAs.

Vendors need to offer new form factors, new functionality, and new price points, based on the specific requirements of emerging markets. The traditional

model of marketing of low-cost, entry-level devices to emerging countries is no longer sufficient.

The early adopters in developing countries have low price sensitivity. However, laptops and PDAs are too expensive and bulky for the wider market.

Our retailer may not be able to afford, or indeed need, a powerful laptop. A low-cost, durable, portable device that supports key applications such as VoIP and internet access will be enough. The key functionality is connectivity, not computational power.

Devices like this are largely absent from vendor product lines as vendors prefer targeting either early adopters worldwide or the mass market in developed countries.

That is because low-cost data-centric devices tend to have lower margins. However, volumes can be high and vendors should carefully assess the opportunity.

Not only can these devices be profitable, they are also key to WiMAX in emerging markets (and possibly worldwide). They will accelerate adoption in the initial deployment stage which in turn will drive economies of scale stimulating lower device prices, which will make WiMAX services more affordable.

A lack of compelling devices will greatly reduce the appeal of mobile WiMAX as operators will struggle to demonstrate a positive business case. They will need a wide choice of devices to cover their entire customer base, not just the top segments.

If vendors are committed to WiMAX success, they must develop devices targeted at emerging markets as that strategy can, ultimately, open the door to even more promising markets.

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About Senza Fili Consulting



Senza Fili Consulting provides advisory support on wireless data technologies and services. Our expertise extends to cellular communications, WiMAX, Wi-Fi, and other fixed and mobile Broadband Wireless Access (BWA) technologies. We assist vendors in gaining a better understanding of the service provider and end-user markets. We work alongside service providers in developing a wireless data strategy and in assessing the demand for wireless services. Independent advice, a strong quantitative backing, and an international perspective are the hallmarks of our work.

At Senza Fili we have in-depth expertise in financial modeling, market forecasts and research, business plan support, due diligence, white paper preparation, training, and evaluation of end-user requirements. Our clients are international and span the entire value chain; they include fixed and mobile operators, ISPs, wireless ISPs, other service providers, vendors, solution providers, system integrators, investors, and industry associations.

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