



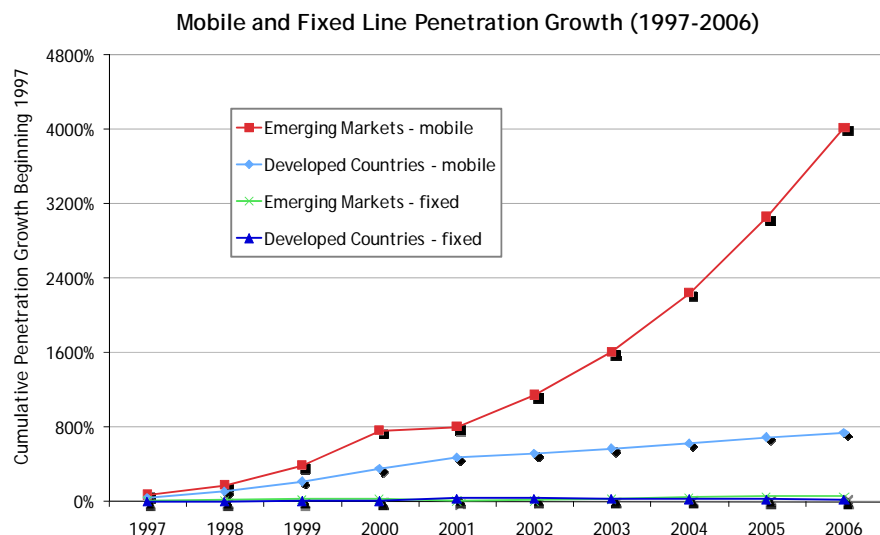
10 Facts about Mobile Markets in Developing Countries

Today's mobile industry business managers are increasingly turning to developing countries for new business growth opportunities. But what makes these markets different? And what are the new opportunities these differences present?

To help answer these questions, Vital Wave Consulting provides ten facts about mobile markets in developing countries, and their implications for business growth.

1. **Emerging markets are *the* growth opportunity:** Since 2002, mobile penetration in emerging markets has grown 321% compared to 46% in developed countries. Additionally, out of the top 10 countries for subscriber net additions in the fourth quarter of 2007, nine are emerging markets.

Implications: In the past, industry watchers believed there was little opportunity for mobile technology in markets where the majority of people live at or below subsistence-level income. It is clear now that emerging markets are the primary growth opportunity for the mobile industry and, with the right business models, mobile phones are accessible to some of the world's poorest.



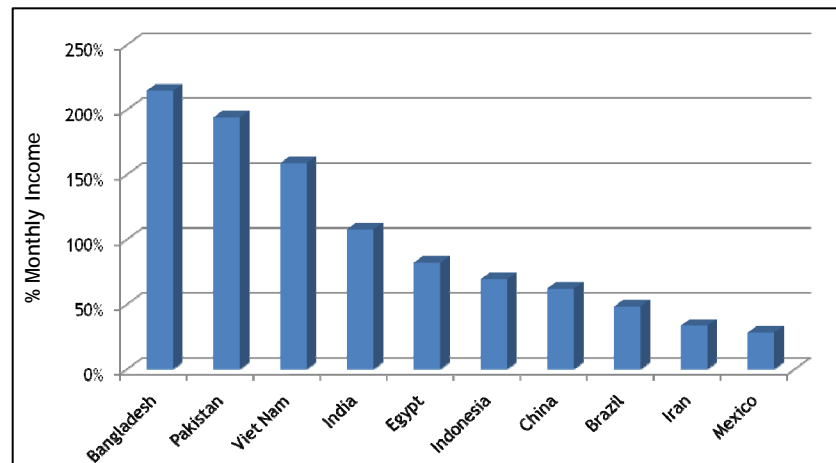
2. **The greatest opportunity for mobile business is concentrated in a few places:** 73% of the near-term market for mobile growth (i.e., potential first-time mobile phone buyers) is represented by 10 emerging-market countries: China, India, Indonesia, Bangladesh, Iran, Egypt, Vietnam, Brazil, Pakistan, and Mexico. The largest opportunities are in China and India, which together account for 747 million near-term market candidates, or 58% of the total near-term market.

Implications: By concentrating on a few key emerging-market countries, handset manufacturers have the opportunity to capture a large share of the global near-term growth market. With targeted campaigns in India and China and other carefully selected target markets, companies can gain market share with minimal investment. In an effort to regain their number two position, Motorola is focusing on low-cost handsets for the Indian market by addressing a high perceived demand for multimedia-capable phones in rural areas.

3. **Low-cost does not equal affordable:** The average price of a handset in emerging markets is \$58—still a significant burden for billions of individuals living on just a few dollars per day. Yet, these low-income, first-time buyers are demonstrating their willingness to purchase and use mobile phones.

Implications: Handset manufacturers and mobile operators could accelerate penetration of developing-country markets by facilitating alternative payment programs and financing options to help low-income buyers overcome the barrier of the initial capital outlay for handsets.

Average Cost of an Entry-level Handset as a Percentage of Monthly Income of near-term market candidates in Select Emerging Markets



4. **Mobile phones have unprecedented reach in every market:** One out of every 2 people in the world owns a mobile phone and subscribes to mobile service. If one subtracts children under ten and adults over 69 years of age (i.e., those who are unlikely to own a mobile phone), 67% of the remaining world's population owns a mobile phone.

Implications: Mobile phones are one of the most efficient and accessible devices for reaching the world's masses. With access to many rural and low-income populations, mobile technology has the capability of providing information and services to individuals who would otherwise be excluded. These individuals are often eager for services such as banking and health education that cannot be provided profitably through traditional business models. With appropriately-designed applications, under-served populations will spend a greater portion of their family income to gain access to these services. Safaricom, a mobile network operator that allows users with special SIM cards to transfer money, is the most profitable company in Kenya and a leader in Sub-Saharan Africa.

5. **Alternative business models prove successful:** Prepaid subscribers make up over 50% of subscribers in many populous emerging-market countries, including Bangladesh, Brazil, China, Egypt, India, Indonesia, Mexico, Pakistan, Russia, South Africa, and Vietnam.

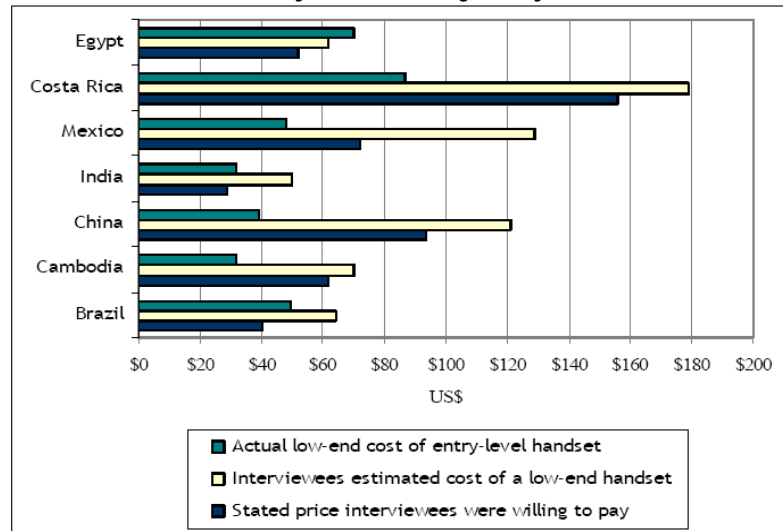
Implications: In emerging markets, low-income users have preferences, usage patterns, and cash-flow restrictions that require innovative business models. Additionally, the dominance of pre-paid subscriptions makes it more challenging to maintain brand loyalty. Operators must offer additional incentives or benefits to maintain customers. For example, some operators are packaging prepaid minutes in lower denominations to accommodate users' limited cash flow.

6. **Would-be mobile phone buyers overestimate the costs:**

Individuals living in emerging markets commonly overestimate the cost of a low-end handset in the local market, and some even express a willingness to buy a handset at a higher price than the actual market rate. Vital Wave Consulting has found this to be a common occurrence with technology products in emerging markets.

Implications: Appropriate and targeted marketing campaigns would expand the addressable market by educating potential buyers about the true costs associated with mobile phone ownership.

Actual versus Estimated Cost of a Handset, and the Price Buyers are Willing to Pay



Source: Vital Wave Consulting primary research, 2007

7. **Low-income customers in emerging markets require technology solutions that meet basic human needs:** Developing countries have enormous challenges in the areas of education, health and social services. 1.2 billion people still live on less than \$1 a day. In the developing world, the risk of dying in childbirth is one in 48, and 113 million children do not attend school.

Implications: Governments are committed to achieving broad development goals through strategic investment and reform. Tying mobile solutions into basic human needs will help gain the cooperation and support of governments and the development community.

8. **Market saturation presents service opportunities:** Mobile penetration rates exceed 100% of a country's entire population in nearly 40 countries, including several emerging markets in Asia and Eastern Europe. Other countries that are not saturated, such as India and China, already had a robust population of mobile phone subscribers—232 million and 547 million respectively—at the end of 2007, with those numbers increasing rapidly every year.

Implications: In emerging markets, there is an opportunity to realize incremental revenues by delivering services that capitalize on expanding mobile phone penetration. In many cases, basic services (e.g., banking and Internet) are as underdeveloped as landline telephone services. Mobile phone owners in the developing world have already demonstrated a willingness to utilize their mobile phones to access value-added services. Providing more robust and varied services to address basic needs among new subscribers is a compelling growth opportunity.

9. The last mile of cellular coverage is the toughest: Despite high rates of rural-to-urban migration across emerging markets, 56% of emerging-market populations still live in rural areas. However, cellular coverage in developing countries is predominantly in urban and peri-urban geographies. In Latin America, *area coverage* is limited to less than 50% in all but four relatively small countries, and ten Latin American countries have less than 20 percent coverage. The Philippines' largely urban population is almost entirely covered by cellular service, but geographically only 50% of the country is covered. In India, 40% of the country has area coverage that reaches only 60% of the population.

Implications: Strategies for tapping into growth markets depend on a country's level of area coverage and the urbanization of its population. Highly rural countries require different services such as access to market information and other travel-saving offerings.

10. Developing-country operators are competing on a global scale: With a potential buy-out of South African MTN Group, four of the world's top seven mobile operators will be based in emerging markets.

Implications: Emerging-market companies have certain advantages over their developed-country competitors. Companies based in developing countries may have lower cost structures and a better understanding of developing-world needs. In addition, they know the importance of working with locally-trained experts and innovating for new markets. Developed-world mobile industry leaders offer the advantages of brand awareness and the ability to scale—powerful assets that could attract local partners with a shared ambition for rapid growth in these new markets.

Vital Wave Consulting, 555 Bryant Street #226, Palo Alto, CA 94301-1704
(650) 321-3313 • info@vitalwaveconsulting.com