



## On the Razr's Edge: Cell Phones Morph into Hip, Consumer Electronics Devices

Published : May 04, 2005 in [Knowledge@Wharton](#)

According to Ron Garriques, executive vice president of Motorola's personal communications sector, markets in the developing world -- especially China and India -- are emerging as the battleground for mobile-device makers.

Today, Illinois-based Motorola leads in North America and is investing heavily in China, said Garriques during a talk at the recent 2005 Wharton Technology Conference. Motorola's archrival, Finland's Nokia Group, the world's biggest cell phone maker, trounces everyone in Europe and has a hefty head start in the developing world. "The high-growth markets are India, Pakistan, the Middle East, Africa, Turkey and all of South Asia," he said. "These markets are dominated by Nokia, with over 60% market share. Nobody else has more than 10%."



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But the number of potential customers in these places is so huge -- about 4 billion people in the world have never used a phone of any kind, Garriques stated -- that the markets are effectively wide open. Nigeria, for example, "has 160 million people, more than half the population of the United States, and our industry has almost zero penetration there."

Cell phones and other mobile devices such as Blackberries represent more than just additional gizmos that western firms can peddle to consumers elsewhere. They are also a way for developing countries to accelerate their growth by skipping over the lengthy, costly process of installing landlines and computer networks to support them. In many places, consumers can jump directly to wireless services without ever having used landlines.

As the fight for these new markets takes shape, Motorola and Nokia figure to be the leading players. Motorola is known for producing chic, sleek "clamshell" (or flip) phones, while Nokia pumps out cheaper "candy-bar" phones that provide the company with better margins. Analysts say Motorola's profit margin averages about 10% compared with 16% for Nokia.

The \$100 billion industry produces approximately 700 million mobile phones annually, Garriques stated. Motorola accounts for about 100 million of them or about \$17 billion in sales. It earned \$1.5 billion, or 64 cents a diluted share, on total sales of \$31.3 billion in 2004, compared with \$893 million, or 38 cents a share, on sales of \$23.2 billion in 2003. The company, which slumped in the late '90s only to surge again in this decade, saw its stock return 73%, compared with 50% for the Dow Jones Telecommunications Index, over the two years that ended March 18.

### The \$5 Cell phone

Motorola's competition with Nokia has heated up with Motorola's recent release of a \$40 phone. At that price, the phone is cheap enough to be sold competitively in poorer countries. Garriques believes it will enable his firm to make substantial gains on its rival. "This was a big win for us because it's been known for several years that Nokia had the lowest cost structure in our industry," he said. "If you want to change the shape of the game, you have to make a move like this."

Affordability is especially important in China, which is flooded with phones. "There are about 200 manufacturers of cell phones in China that are state-owned enterprises," Garriques noted. "They believed that the market was a commodity business and created about 18 million cell phones that nobody ever bought. They are all being offered now for \$5 a piece. [These companies] called the market wrong. The technology curve changed -- from grayscale to full color, from candy-bar to clamshell -- and all those phones are just sitting there."

Affordability is less important in India, where consumers like more expensive clamshell phones, Garriques said. Motorola's market research has indicated that Indians don't want to be stigmatized as buyers of only the candy-bar phone. "People think about the Indian market as a lower tier. About 30% of the U.S. market is high end, and maybe it's only 5% in India. But India has 1.1 billion people" compared with 290 million in the U.S. In gross numbers, that means India's premium market is about half the size of the United States'. Meanwhile, according to a report in the *New York Times* last week, Motorola Labs has opened an applied-research facility in the Indian city of Bangalore, the 11th such center owned by Motorola but its first in India. The company's research investment in India, the article pointed out, currently totals \$85 million as compared to \$50 million in 2002, and will be growing by another 10% to 20% a year.

As Motorola tries to grow in the developing world, it's also moving to shore up its lead in North America by introducing ever-more stylish and high-tech phones.

It created buzz with the introduction of the Razr V3, an ultra-slim (one-half inch thin) phone with a face the size of a credit card that includes a color camera, Bluetooth wireless technology, instant messaging and unique ring tones. It retails for about \$450. "That one phone, although we only sold 750,000 in the fourth quarter 2004, creates a halo effect with the average consumer," he pointed out. "They walk into the store and say, 'Can I see a Razr? Okay, I can't afford one. Can I have something else?' The brand pull is significant."

Indeed, an AP article last week noted that "Sleek and stylish are in as a new focus on design wins back customers and market share at Motorola....The symbol of the resurgence is the ultra-thin Razr, whose success helped vault the Schaumburg, Ill., company over worldwide leader Nokia Corp. as the top phone seller in North America last year and, even more noteworthy, stamped Motorola as the trendsetter again in innovative design."

The Razr has been so well received that Motorola is launching a whole line of phones whose names are "four-letter words," Garriques quipped. Among them are the Slvr (pronounced "sliver") and Pebl (pronounced "pebble"). Motorola designed the Pebl, which has rounded edges like a stone worn by the tides, to appeal to women. But once the company started showing it to consumers, men liked it far better.

## Increasing ARPU

In both developed and developing countries, the key for the future mobile-device industry is increasing average revenue per unit (ARPU) -- in other words, the amount of money an average subscriber pays in a month. "Around the world, ARPU rates are going down as voice is becoming almost free and that next gee-whiz technology isn't showing up yet," Garriques said. "The company that creates devices that get the highest average revenue per unit will win the handset game."

Garriques, for his part, doubts that phone-shared pictures and video will bring the kinds of gains companies want. "I don't know about you, but the two worst fears I have when I go to someone's house are that they are going to show me their picture albums and home movies. Why would you think that, just because it's on a cell phone, people want to do it?" Instead, he predicts that the email capability offered by, for example, a Blackberry will spread to more devices. "That's a real ARPU generator," he said. "Once

you get a 'Crackberry' [so-nicknamed because of its addictive appeal], you use it over and over and over again."

Another promising area is the convergence of mobile phones with digital music players like Apple's iPod. According to a report in the *Wall Street Journal* last week, Motorola recently announced three new music phones that can download and store up to 500 songs from personal computers. In addition, Motorola is developing a phone on which users can load and play songs from Apple's iTunes website.

Beyond these sorts of devices are the unexplored frontiers, including one that Garrigues called the "mobility premium." "Think about conference calls at work -- the ones that never end, especially around 5 p.m. when you have to be somewhere. You would love to be able to drag that phone call onto your cell phone and into your car and leave work. What's your willingness to pay for that?"

A similarly promising area is "location-based services" -- technologies that tap into the wireless carriers' ability to pinpoint the location of their users. "If you have a Verizon or Sprint phone, they know where you are within three feet at all times," he pointed out. "If you are on Cingular or AT&T, they only know where you are within 100 feet."

In theory, businesses should be able to figure out how, for example, to deliver advertising over phones based on users' locations. "Every day, the mobile industry is a giant game of Texas Two-Card Hold 'em," he added, referring to the popular poker game. "It costs between \$15 million and \$20 million to develop a new device and \$100 million to market it. You don't have enough marketing dollars to bet on all of the promising technologies."

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