

Cell Multiplication

Phones Become the Key to a Wide Range of Consumer Goods

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The cellphone is fast becoming the Swiss Army knife of consumer electronics products.

Cellphones have become ubiquitous in the U.S. and many other countries. But what has generated excitement in the past 12 to 18 months is the growth and potential of nonvoice functions on cellphones, industry executives say. Last year, for the first time, sales of camera-equipped phones exceeded sales of digital cameras themselves. "That was huge," says Jon Maron, head of U.S. marketing for **LG Electronics** of South Korea.

Cellphones have a decisive advantage over many other electronics devices: People typically carry them wherever they go, unlike laptop computers, MP3 players or digital cameras. As a result, cellphones have become products on which all sorts of industries want to attach their technologies and services. "Cellphones have become lifestyle devices, rather than just things you carry on your hip to make phone calls," says Mr. Maron.

GUESS WHERE I'M CALLING FROM

As a result, cellphones are becoming an integral part of an expanding range of consumer goods. At this year's Consumer Electronics Show in Las Vegas, for example, **Motorola** showed off a new product built with **Burton Snowboards**: a ski jacket with wireless speakers and a microphone built into the hood, allowing boarders to ski and chat on the phone at the same time.

Motorola also has outfitted a motorcycle helmet with a cellphone headset. Bruce Hawver, who heads Motorola's companion products unit, says the idea came from seeing a motorcyclist in a rainstorm in Britain, who had stopped at the side of the road to take a call. "He was getting drenched," Mr. Hawver says. The product, made in conjunction with the Italian helmet company **Momo Design**, will be available in Europe this year.

"We are going out in the environment and seeing where people are and where they want to be accessible," Mr. Hawver says. "We are developing a line of products to make that become reality."

Some obstacles remain for the cellphone to become the universal device that many have predicted for years. Chief among them is finding the right mix of applications that consumers want and that will become profitable. In this regard, more industry consolidation, such as the recently announced merger between **Sprint** and **Nextel**, is needed to

create the necessary economies of scale for the industry to develop even more advanced applications, says Raul Katz, chief executive officer of Adventis, a telecom consulting firm.

"The key issue is adoption and achieving critical mass," says Mr. Katz. "I say, 'Who the hell wants a camera on a phone,' but then I see my daughter using it, which gets me using it."

One of LG's 14 new phones on display at the electronics show was the high-end VX8000, which comes equipped with a 1.3-megapixel camera, zoom lens, video player and MP3 music player, among other features. Latest models on display from **Nokia** and **Motorola** also come loaded with cameras, music players, e-mail capabilities and other nonvoice options.

Several factors are making such ideas possible—and stoking enthusiasm about what will come next. For one thing, cellphone network coverage has improved, even in rural areas, to the extent that building cellphone headsets into ski jackets and motorcycle helmets has become attractive. The second factor is new technology such as a short-distance wireless system called Bluetooth, which allows headphones to connect to phones without cords. Third, better digital networks and improvements in the software inside cellphones have made them much more powerful and capable of handling an assortment of accessories. And finally, prices are coming down, turning the latest high-end features into mass-market offerings within months.

The expected rollout of so-called third-generation networks and phones over the next couple of years in the U.S. should further expand the capabilities of phones. South Korea, one of the Asian countries where cellphone technology is more advanced than in the U.S., provides a possible window on the U.S. cellphone future. South Koreans for several years have used their phones to remotely and wirelessly control home appliances, such as air conditioning, lights and garage doors. That capability should come to the U.S. within the next couple of years, executives predict, with the rollout of third-generation technology. Another feature already available in South Korea is the ability to watch television on the phones' screens.

Then there are medical applications that could be even more important to some consumers. In South Korea, for instance, phones have been modified to allow diabetics to check their blood-sugar levels, and the data can be sent by the phone network to a physician. Experts say other vital signs could be monitored remotely by doctors as well.

"All of a sudden, this device is becoming really important in how you run your life," says Mr. Maron of LG.

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THE NEXT LEVEL

Some of these visions likely will not take off. Mr. Katz of Adventis doubts that cellphone users will really want to watch live television or movies on their cellphones, given the size of their screens. What is more likely, he says, is that consumers would watch short video clips, containing music videos or highlights from sporting events. Videoconferencing on cellphones may also prove popular, he adds.

Sprint already sells video phones, but users have complained of choppy images because of the inconsistent speeds of the wireless network. That is slowly changing with the arrival of a third-generation technology called EVDO that Sprint and **Verizon Wireless** are introducing nationwide.

Some devices, such as the **BlackBerry** and **Treo**, already have proved successful by combining phoning and e-mail. The next level of convergence, such as combining music, cameras and phoning in a meaningful way, requires much more data storage than most cellphones allow today.

These functions may require the incorporation of hard drives, like those used in the **Apple iPod** to store songs—furthering their evolution from a phone to a computer and then to something entirely new. As cellphones increase their data-storage capacity, analysts say that their cameras and other functions will continue to improve.

Other than voice calls, what do you use your cellphone for? Are you willing to pay more for such features? Write to letters.classroom@wsj.com.