

THRILLER APPS: THE WIRELESS INDUSTRY FINDS ENTERTAINMENT SELLABLE

Cellular-telephone companies are feeling market pressures from the economic downturn and the cultural shifts attending that downturn. These new pressures are worsening conditions for an industry already stressed by too many competitors and by technology's typical drive for more and more at lower and lower prices.

Apple's success in allowing programmers outside the company to develop applications for the iPhone has launched a healthy market for cellphone applications – small pieces of software that enable a cellphone to perform some diverting or functional service. These apps are becoming popular for all smartphones, and as a result, entertainment on the cellphone – whether it be movies, TV programming, music, communications and new apps – is providing some market dynamism to combat the overall contracting fortunes of the cellphone industry.

Hardware and Hard Times

In the nearly three years since Apple introduced the iPhone, the company has sold more than 13 million of the touch-screen wonders, although in recent months the pace has slowed considerably. Meanwhile, Apple's App Store, which sells individual applications (*i.e.*, software) that enable one of the devices to play a game, mimic a musical instrument, or bemuse an owner in a seemingly endless variety of ways, has filled requests for more than 800 million apps. Therein lies the market dynamic currently driving the wireless industry: hardware,

not so much; entertainment, gimme more. (*Wall Street Journal*, 3/6/09; *Newsweek*, 12/22/08)

The experience of handset maker Nokia exemplifies the wider industry's experience. The fourth quarter of 2006 signaled the company's troubles when its average selling price per unit declined 4 percent from the prior quarter. The company accepted the apparent "sunset" market reality of the standard cellphone and focused on the "sunrise" part of the industry – so-called smartphones – because these more sophisticated devices have more features, more memory, more speed and, best of all, higher margins. In pursuit of that sunrise area

of the cellphone market, Nokia in 2008 introduced the 5800, which could connect to 3G as well as WiFi networks and could, for example, enable a user to update his or her Facebook page from the handheld device. Then the company brought forth the N97, with its 3.5-inch screen, qwerty keyboard, Symbian S60 operating system, space for 32 gigabytes of media and applications, a five-megapixel camera, GPS, stereo Bluetooth and headphone jack. The company was moving to where early adopters and “big spenders” were supposedly lodged. (*New York Times*, 10/9/08, 12/11/08 and 1/23/09)



Yet in October 2008, Nokia announced that profits might fall short of anticipated numbers, with sales declining 5.1 percent globally. The company noted that the biggest drops were in Western Europe but that sales in emerging markets were still substantial. Despite the hope of continued growth in international markets, in January 2009 Nokia announced that global sales of smartphones in the fourth quarter of 2008 had declined a sizable 32 percent. Moreover, its ventures into developing-country markets had suddenly reversed course, with sales in China, for instance, declining by a worrisome 36 percent. In March, the company

announced 1,700 layoffs in its Devices and Markets divisions. (*New York Times*, 1/23/09 and 3/18/09)

Similar kinds of stresses on hardware marketers in the computer business as well as rivals in the cellphone business have forced manufacturers into “market jumping,” a context we first outlined in 2007. We described a scramble for new markets in a cellphone industry losing its pricing power, a situation in which manufacturers were moving into services and service providers into hardware, all to find some growth for their companies (see “Musical Chairs and Market Jumpers: The Mobile Phone Industry Reaches a Critical Moment,” *IF 2827*, 11/21/07).

In the current environment, technology-market stresses are triggering scrambles across industry lines, not just across categories within one industry. For instance, Acer, the South Korean hardware company, is **giving away its smartphone** with a purchase of the company’s Aspire One netbook computer. At the same time, Dell, the PC maker, has a prototype for a smartphone, and Asustek, a pioneer in the netbook arena, has several smartphones coming to market this year. Meanwhile, Nokia has announced that it could market a laptop computer in the near future. In short, the scramble for new markets, market shares and pricing in the hardware arena has started. (*PCMag.com* 2/19/09; *Information Week*, 3/6/09; *International Herald Tribune*, 3/2/09)



Wireless and a Cultural Reset

In a more recent *Briefing*, we outlined some changing attitudes and behaviors among consumers and companies as they seek to adjust their thinking and ways of operating to adapt to new economic conditions. Among those changed attitudes and behaviors, two seem especially relevant to the wireless industry: Sufficiency and Full Utilization (see “Radical Unfamiliarity, Part II: Dealing with Asset Depletion and Pondering a New Standard of Living,” **IF 3003**, 2/18/09).

Individuals are assessing what is sufficient in their lives – what size house is enough, whether the latest clothing styles are needed and how much technology is adequate. At some point during this reassessment, they are going to identify a level of cellphone sophistication that meets their needs. They have already made some adjustments as to how they access wireless networks, increasingly preferring carriers offering pay-as-you-go plans rather than those requiring extended contracts. For example, in the fourth quarter last year, MetroPCS, one of the cheaper and less complicated service providers, added 520,000 new subscribers, the biggest quarterly jump in its six-year history. Moreover, one study showed that 20 percent of new pay-as-you-go customers had switched from another carrier’s extended-service plan, where service providers typically enjoy 50 percent margins. (*New York Times*, 2/21/09; *USA Today*, 3/20/09)

When individuals focus on the second of the recent attitude shifts – full utilization – they are devising ways to extend the life of items they already own. As we noted in the *Briefing*, shoe repair shops are currently enjoying a boost in business between 20 and 40 percent, depending on location. For the wireless industry, full utilization means fewer cellphone purchases, a slower turnover to new phones and a growing indifference to the latest technology. As Nokia’s example highlights, this consumer shift is hitting the smartphone business especially hard. For instance, in the third quarter last year, AT&T sold 2.4 million iPhones, but in the next quarter, it sold only 1.9 million of the highly prized handheld devices, a percentage decline in sales reminiscent of Nokia’s smartphone sales in the same quarter. (*Investor’s Business Daily*, 3/3/09)

As consumers reset their value scales – rethinking what is sufficient and planning how to get full utilization from what they already own – many different consumer goods and services will undergo revaluations. The early effects of these value shifts on the wireless industry are starting to emerge, negatively affecting the carriers’ service-contract model and dampening the handset manufacturers’ sales figures. Yet the industry also offers something that fits comfortably with emerging attitude changes, products that could keep the industry dynamic right through the downturn: thriller apps.



Fun Is a Good Thing

The more than 300 million downloads that Apple’s App Store delivered in the seven months after its opening last July were for roughly 10,000 different iPhone applications – that is, ten thousand different tricks, gimmicks, games and playthings that consumers spent anywhere from one to ten dollars (or more in a few instances) to acquire. Currently, the site’s offerings are closer to 15,000 apps, and the download figure has surpassed 800 million. Here are a few examples of what iPhone users have been clamoring to own.

◆ A company called Smule sells four applications, each priced at one dollar: a virtual cigarette lighter, a virtual firecracker, a voice modulator that elevates or lowers a user’s voice and Ocarina, which converts a cellphone into an electronic “wind”

instrument. Smule, which, when it started, hoped to attract \$100,000 worth of business in 2008, closed the year with nearly \$1 million in revenues. (*Newsweek*, 12/22/08)

◆ Tap Tap Revenge, one of the App Store's most popular games, plays new music as accompaniment to a series of challenges that call on the user to keep tempo by completing certain feats of digital dexterity. The free version of the game represented six million of the App Store's downloads, and its \$4.99 version, which plays a user's preferred style of music, sold 100,000 copies. (*Christian Science Monitor*, 2/6/09)

◆ Psyclops Dance Mixer enables iPhone users to manipulate embedded music tracks for drums, bass and lead guitars, piano, horns and DJ turntables to create their own 30-second, four-track music video. The "director" can select from an array of animated figures to create virtual dance footage to fill the video or use their own images. (*Billboard*, 3/7/09)

◆ As 2008 came to end, several novelty applications surged to the top of App Store sales, including iBeer, an image of a mug filled with the namesake beverage, which, when the iPhone screen is tilted, drains the mug as if the user were actually drinking the contents, and iFart, which on demand makes said sound. On Christmas Eve and Christmas Day alone, 58,000 users together paid more than \$40,000 to buy their very own app that blurts out the special sound effect. (*edibleapple.com*, 12/28/08)

Among wireless customers between the ages of 14 and 25, 53 percent say they use their cellphones as entertainment devices, and among those between 26 and 42, 44 percent view the handheld communicators as a source of entertainment. Oddly enough, even cellphone fun could itself be a victim of shrinking attention spans. Among users who download a free app, just 20 percent are using it the next day. For paid downloads, only 30 percent are still using the trick or gimmick or game the next day. Given the vastness of the library of games, gimmicks and gee-whiz gadgets available for download, this one-day obsolescence "plan" could keep sales figures buoyant for some time. (*Adweek*, 1/5/09; *Information Week*, 2/20/09)

Despite the focus on ephemeral good times, not all popular applications for cellphones are quite as frivolous as iBeer. For instance, Shortcovers offers book and article downloads to cellphones, as do Google and Amazon. Qualcomm's MediaFLO will provide as many as 22 live broadcasting channels over cellphones in 63 metropolitan areas when it goes live later this year. It already has more than 100,000 subscribers. Pandora, a free app available for different kinds of phones, "streams" radio on the handheld device and is picking up 20,000 new listeners per day. Merge Healthcare has two services, both of which enable medical professionals and patients to view radiological images and the like on an iPhone (Merge Mobile) or any mobile device that can connect to the Internet (Cedara

WebAccess). Type the make and model of your car along with symptoms of a malfunction, and the RepairPal app displays possible solutions and their costs. ParkMark, an app for T-Mobile's G1 smartphones, uses the device's navigation tool to locate where the driver parked his or her car. Also, in Kenya, Turkey and Japan, individuals use cellphones to pay bills, send money to another phone owner, withdraw money from ATMs and pay for services. Meanwhile, Google is enabling cellphone users to embed GPS mapping systems into their handheld devices, thereby enabling them to find a local grocery store or



some other specific location. (*New York Times*, 2/6/09 and 3/12/09; *Billboard*, 3/29/09; *Multichannel News*, 12/1/08; *Publisher's Weekly*, 2/9/09; *eweek.com*, 12/15/08; *Atlanta Journal-Constitution*, 3/21/09; *International Herald Tribune*, 2/16/09 and 2/18/09)



Going Where the Action Is

Fun has enlivened the wireless industry, and not surprisingly, everyone wants to get a piece of that action – not always in ways that please some players in the industry. Specifically, several unauthorized app stores are planning to open and sell iPhone applications not available through Apple's App Store. Cydia Store, for instance, could offer several hundred iPhone apps when it opens, none of them approved by Apple. For that reason, anyone downloading an app from Cydia must modify the iPhone to transfer the app. Another planned app store for unauthorized iPhone apps, Rock Your Phone (RYP), claims that its programs do not require users to "jailbreak" their iPhones to access RYP apps. (*CNET News*, 3/6/09; *Wall Street Journal*, 3/6/09)

For the wider smartphone market, companies have been announcing new app stores for every kind of cellphone. Microsoft announced it would open an online store to sell applications for phones with its operating systems. Soon thereafter, Google said it had an app store in the works. Research in Motion, maker of the BlackBerry, announced that it would launch its own

outlet to sell applications for its operating system, and that led Palm to reveal that it, too, was readying an app outlet. (*CNN.com*, 2/10/09; *Information Week*, 12/22/08)

Nearly all of these applications are the products of individuals not associated with either the hardware or service providers. As such, they are operating in the contexts we have called "amateurs no more" and "customer, do it for us." In both contexts, individuals, who at one time were merely passive participants in commercial processes, are now actively involved in service fulfillment. In the wireless industry, they are creating innovative ways to convert the one-time communications device into an entertainment device. The fact that those "outside" the industry are, in fact, drivers critically involved with keeping the cellphone market dynamic hints at the kinds of changes that Internet technology is forcing on businesses.



Mobile Entertainment Evolves

The world's 4 billion wireless phones meet different needs in different places. For developing countries, cellphones overcome deficient infrastructure, offering communications, banking and telemedicine services quickly and relatively inexpensively. Among highly developed countries, new hardware technologies and wireless services abound, creating constant market battles. Recent hardware battles have forced

manufacturers to cross industry boundaries, with PC companies marketing cellphones and cellphone manufacturers marketing computers.

In the cellphone business, ringtones boomed for several years, providing a dynamic market for wireless carriers and music labels. More recently, e-mail, text messaging and Twitter have expanded demand for data-transmission capabilities and encouraged larger monthly fees. Now, different kinds of entertainment – with thriller

apps being added to a list that already includes TV programs, movies, music and GPS mapping – are bringing more interest to cellphone use. The diversity of applications being created by independent programmers could keep consumer attention on the cellphone industry – at least until another service or amusing trifle catches the users' attention...like the forthcoming projector cellphones that can beam photos or Powerpoint slides from a smartphone to the wall.

