



Mobile Entertainment Analyst

In-depth coverage of the wireless entertainment business

MVNOs: Marketing Goes Mobile

by Elizabeth Biddlecombe

The mobile phone is a retail proposition. These days, there is no greater reminder of that fact than the news that The Virgin Group – better known for selling CDs and flying planes – launched in the U.S. as Virgin Mobile USA on June 20th.

And Virgin is not alone. Rumor has it that we'll soon be seeing something along the lines of "AOL Wireless", "MTV Mobile" or "ESPN Talk", though confirmation was not available from any of these players.

These companies are using their brand strength to extend business into the mobile arena, typically as a way of strengthening the customer relationship as well as create a new revenue stream.

Once they've got a network operator on board, these branded mobile

services look any number of ways. For instance, the UK football club Queens Park Rangers (QPR) offers club ring tones or SMS alerts as well as a QPR-branded mobile service delivered by white label provider Affinity Telecom.

Boost Mobile (based in Irvine, California) has partnered with mobile operators in the U.S., Australia and New Zealand to sell its own-branded service without putting any of its own back-end systems in place. Virgin Mobile, on the other hand, partners with network operators for the airtime, but puts in its own service activation, application creation and delivery, billing and customer relationship management systems.

Strictly speaking, Boost Mobile is a service provider or reseller, while

Virgin Mobile gets the distinction of being associated with the exciting acronym, MVNO – mobile virtual network operator. Both models revolve around marketing to a particular niche but an MVNO has more leeway to launch services that are tailored to its constituency and that leverage its core business strengths.

Forecasts predict a significant opportunity for MVNOs around the world. Massachusetts-based Strategy Analytics predicts that worldwide, MVNOs will earn US\$20.9 billion in revenue this year from some 52.3 million subscribers. In 2006, it predicts revenues of \$73.6 billion from 205 million users.

Comparatively, non-virtual bricks and mortar wireless operators will earn around \$390.76 billion from a

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Keeping Score

Culture Clash

by Dan Scherlis

As a new medium, mobile games carry with them uncertainty regarding business models and product definition. But mobile games are not simply new; they also constitute a convergence of telecommunications services and interactive entertainment. Thus, along with uncertainty we see conflict between the two industries' expectations for this new business. There is in particular an underlying cultural conflict that can make for serious industry mischief.

The telecommunications industry and the games industry have wildly different styles of interaction. The differences include simple language barriers as well as expectations for business meetings, negotiations, revenue models, and even strategic planning.

"Company culture" is discussed endlessly, but industry culture gets less attention. I started my career at HBO before building companies in the games development world, and then spent the last 18 months consulting to the telecom world. I've noticed several places where the industry cultures differ, and I frequently find myself explaining each world to the other. Here are some of the issues that I find most striking:

In telecom meetings there are usually no jackets, and ties are optional. In game-developer meetings, there are usually no shirt-collars, and shoes are optional.

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Short messages

Virgin Mobile USA Details Announced

The high-flying, high-styling companies of Sir Richard Branson are entering a period of change. Mr. Branson is going to sell big portions of eight Virgin companies over the next eight years. Only three companies in the portfolio will make money in 2002, but that's not why he's selling, Virgin says. He wants to invest in growth, and one of the big opportunities he sees is the Sprint MVNO, Virgin Mobile USA. To date Virgin has put in \$163 million (according to the Financial Times) and the conglomerate is getting ready for more.

On June 20, Virgin Mobile USA CEO Dan Schulman, Sir Richard and Charles Levine, president of Sprint PCS, announced that VMUSA would launch over the weekend in two markets, and aims to have nationwide coverage by late July.

Virgin doesn't plan any technical innovations - it will use Sprint's 2G network and two familiar Kyocera handsets (the 2119 and the 2255). Virgin Mobile USA's real area of innovation will be in marketing its brand and communicating to a relatively underserved mobile phone audience: the U.S. teen.

Some of the initiatives announced seem less than threatening to the competing U.S. carriers. In Virgin Mobile land, handsets will not be known by model numbers, but by names. So the 2119 becomes "The Party Animal" and the 2255 becomes "The Super Model." Now I'm not a knight of Her Majesty the Queen, but I don't think naming phones is going to open doors into a new market.

Simple pre-pay pricing schemes, however, might. VMUSA will charge \$0.25 per minute for the first 10 minutes talking per day and \$0.10 per minute for the rest

of the day. By comparison, Verizon's pre-pay program, FreeUp, shows a 4x4 pricing grid, with per minute fees ranging from \$0.10 (nights and weekends) to \$0.35 (weekday rate if you buy the smallest denomination phone card.) Not included in the grid is the FreeUp "off-network" rate of \$0.99 per minute.

VMUSA's prepayment scheme might help it too. Other U.S. pre-paid programs expire airtime 60 to 90 days after the minutes are paid for. The short "use-it-or-lose-it" timeframe might be alienating customers who discover their accounts are cancelled. VM in the

develop open standards for wireless browsing, messaging and downloading.

While Pertti Korhonen, SVP of Mobile Software, Nokia, compared the organization's birth to the release of the GSM standard, outside industry watchers were more skeptical. "It's an alliance of alliances," Amit Nagpal, senior consultant with Analysys Consulting, told Unstrung. Unstrung Editor Dan Jones went so far as to call it "The wireless alliance that ate itself."

Aside from the potential confusion with the Ontario Medical

Stat!

Top Six PDA Downloads - as of July 1st

- 1: Noah Lite English Dictionary: free dictionary for Palm
- 2: DopeWars: game of buying and selling drugs for Palm
- 3: Blocks: a Tetris-like game for Palm
- 4: SimCity2000: the urban simulation game for PocketPC
- 5: TV Remote Controller: for PocketPC
- 6: Cherrysoft Strip Blackjack: for Palm

*Source <http://www.download.com>

UK expires accounts after 180 days of non-use, and paid-for airtime never expires. If Virgin carries that policy to the U.S., it could make VMUSA prepaid more attractive than the competition.

Of course, Virgin Mobile USA has talked about mobile entertainment features like faceplates, ring tones, SMS and games. We'll have to wait until the nationwide launch to see the details.

Mobile Companies Schedule More Big Meetings

On June 12, more than 200 mobile phone companies joined a newly formed Open Mobile Alliance organization (www.openmobilealliance.org), which promises to

Association (www.oma.org), we at WGR think that the Open Mobile Alliance group could do some good. First, Microsoft is involved, which is important because, like it or not, it's going to be in the mobile space. Second, the OMA consolidates a bunch of other related associations into an organizing body, which means fewer groups to join (or to write about). Finally, the closer we get to underlying standards, the more fun we can have with content. Will more industry gatherings help the building process? Right now, we don't see any other choice. One thing is certain: as soon as the competitive/financial landscape allows, the associations will stop and competition will take over. No one likes going to meetings. ■

Microsoft Plus Mobile Equals What?

By Matthew Bellows

At the beginning of June 2002, Stewart Alsop, New Enterprise Associates VC and board member for several mobile entertainment companies, predicted that "Microsoft will never amount to anything in mobile phones... in 2010 they will have precisely zero percent market share. Symbian will be a close second." In other conversations with mobile operators and mobile game developers about Microsoft's role in the mobile world, people expressed real doubts that Microsoft, for all their marketing wizardry, would be able to significantly penetrate the world of operators and handset manufacturers.

Doubters say that phone OS decisions are already made, that Microsoft's application quality standard will never be acceptable in the telecom world, and that it is outside its area of expertise. They say that SmartPhone 2002 is too hard to develop on and that the real trick to mobile software is not in the software, but the billing, which carriers and Qualcomm have already solved. Finally, MS doubters say "We've already got so many varieties of OS/extensions/handsets/distribution systems, the last thing we need is another big company adding complexity."

But last week Reuters reported that "sources close to Microsoft" claim "All major mobile operators in Europe and the US will launch cell phones and other wireless devices working on Microsoft software in the next year."

So who is right? And if Microsoft does enter the mobile phone world in a big way, is that a bad thing?

Can Microsoft Really Enter the Market?

Microsoft's mobile strategy consists of two major components: the PocketPC/SmartPhone 2002

operating system and the Mobile2 Market distribution program. Scott Smith, Technical Evangelist, Gaming and Entertainment, for Microsoft framed the operating systems side of the strategy from a user point of view: "People aren't going to want two separate devices to carry around. We want to make a PDA that makes phone calls and a mobile phone that acts like a PDA."

The Pocket PC 2002 Phone Edition is an extension of the Pocket PC OS that adds telephony features. Like the Handspring Treo, the Kyocera QCP 6035, and the Samsung SPH-I300, which all use Palm OS, the Pocket PC Phone Edition is aimed at single device users who want "A PDA that makes phone calls." Phone Edition devices, though expensive, are appearing in the US and in Europe now.

Microsoft's Windows® Powered Smartphone 2002 is for Scott's other target market. Formerly code-named Stinger, Smartphone 2k2 uses the code-base of the Pocket PC OS, but eliminates the stylus input method. To Scott Smith, "The Pocket PC Phone Edition is a two-handed device. The Smartphone is a one-handed device."

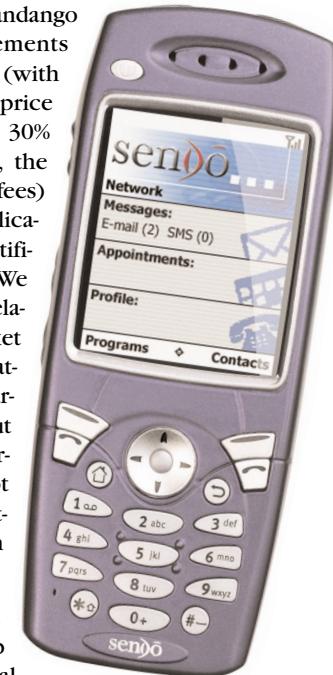
By using the PocketPC OS as a starting point, Microsoft feels like it has gone a long way to answering its critics' concerns about software quality. "SmartPhone is not version 1.0 software. We're building on three years of intensive experience with the PDA platform." Whether or not Smartphone is telecom quality remains to be seen, but Microsoft has a history of version-by-version quality improvement, and as demonstrated by recent DoCoMo and Nokia problems, telco quality isn't what it used to be. Microsoft's OS background, combined with its marketing expertise, has resulted in a de

facto desktop, office suite and browser standard. What's so different about a mobile phone?

Distribution and billing for mobile phones is a different world for Microsoft, and its solution to that issue is the second component of the company's mobile strategy. Mobile2Market is an initiative to build a "technology ecosystem" to test, certify, host, distribute, report on and bill for mobile applications. The main distribution point is Handango, the largest distributor of PDA software. Handango signs publishing agreements with software developers (with 70% of the application price going to the author and 30% split between Handango, the carrier and any payment fees) and then hosts the application through testing, certification and distribution. "We don't have an exclusive relationship for Mobile2 Market distribution," said Clint Patterson, VP of Product Marketing for Handango, "But we've certainly shown ourselves to be one of, if not the only, distribution partner capable of acting on this opportunity."

So Mobile2Market and Handango are setting up to compete against Qualcomm's BREW and the various J2ME distribution systems? When asked about this, Clint said, "I can't comment on that, but we work really closely with Qualcomm. We're very into cooperation here. We work closely with Handmark, who is also a competitor. I can imagine a similar relationship with Qualcomm."

On the same topic, Jason Kenagy, Senior Director of Product Management for Qualcomm said "It's a little early to get into these details. The carriers are looking for a



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Technology Explained

Never Mind the Bandwidth

by Cashman Andrus

Wireless hype, especially in the popular press, promises ever increased speeds - 128 k, 386 k, even 2 Meg! People hear these numbers, compare them to the 56k modems or 256k DSL lines they have on the desktop, and think they know the whole story. But in so many ways, the wireless net isn't the same as the wired one. The applications, interfaces and devices are different. So are the network properties and the effects they cause.

What those much hyped speeds refer to is **bandwidth**, which describes how many bits per second can be sent down a connection; in the plumbing metaphor network people like to use, this is the width of the pipe. The other important thing for network performance is **latency**, which is how fast each bit moves from one end of the pipe to the other. Latency gets little press compared with bandwidth, but ask any game developer, and they'll tell you how important it really is.

It's great to get lots of bits through the pipe. Some applications (streaming media, downloading attachments, etc.) depend on good bandwidth. But for most interactive activities, short latency is much more important. As the size of the data to be transferred goes down and the number of round trips goes up, latency becomes more and more important. First-person shooter games like Quake or Unreal Tournament put such an emphasis on latency that 50 milliseconds (msec) can mean the difference between life and death. On the other hand, overnight mailing a stack of DVDs - bandwidth measured in megabits per second, latency of 20 hours or so - is actually a pretty good way of

sending video, if you can wait for the mail to arrive.

Where does latency come from?

There are several sources of latency in wired networks. Wireless has all those plus a few of its own. Most fundamentally and unavoidably, there is propagation latency. No information can travel faster than the speed of light through a vacuum, and the actual speed of electrons through wire or photons through optic fiber is a little slower than that. As the distance the bits travel increases, so does the time it takes to transmit. Due to propagation delay, the theoretically fastest time for a bit to travel from one side of the planet to the other (New York to Tokyo, say, or London to Sydney) is around 150 msec. Propagation delay is a big reason why satellite internet access is a tough sell - it takes 250 msec just to get a data packet up to a geostationary satellite and back down, so the minimum round trip time is at least half a second.

Another big contributor to latency is the routers, gateways and other machines that make up the network. These devices routinely receive and store packets for many milliseconds at a time before retransmitting them. Each hop through a router or other device adds to the delay, and though the network architecture can be optimized to minimize this, there is always going to be some effect. This is one area where wireless networks are still young and inefficient: most carriers now are sending their network's entire data traffic through a single gateway to the internet. So, for example, if your wireless phone in New York requests data from a server in Boston, your request may well be going through Seattle, or wherever your carrier's gateway is. International roaming can make for even crazier situations.

2.5G and 3G characteristics

Different wireless networks have different latency characteristics, due both to the air interface and the ground infrastructure. Each carrier's network is different, of course, and even each device and each call on the network has its own effects, but in the aggregate we can see some trends.

In the 2G networks that most people are using today, whether GSM, CDMA or TDMA, data access was rather an afterthought of the design. These networks provide only circuit-switched data (CSD) and both bandwidth and latency are rather poor for data purposes. Users report latencies in the range of 800-1,200 msec in mature networks, with bandwidth up to 9.6 kbps for GSM or 14.4 kbps for CDMA. Most WAP connections are over CSD, and there is no doubt that this latency has an effect on the poor experience WAP usually provides. Consider that with a 2k file, enough for most WAP decks, the total transmission time over a 9.6 kbps link is 1,700 msec. So, an extra 1,200 msec of delay raises the total response time per transaction by 70%.

GPRS, the 2.5G enhancement to GSM, adds packet data capabilities but so far has done little to improve latency. Studies have found even worse performance over GPRS than the older CSD, reporting routine delays as high as 2,500 msec! These days, 1,000-2,000 msec seems to be typical in live commercial networks. Certainly, GPRS' speedier bandwidth (usually 30-50 kbps in real use) and drastically faster call set-up (1-3 sec, rather than 15-60 sec of CSD) have deflected criticism from the latency problem, and in the nearly two years since the first networks went live, there has been some anecdotal evidence that latency is improving. But it is a real concern that there

There are several sources of latency in wired networks.

Wireless gets all those plus a few of its own.

Wireless gaming is a great example of how latency can affect the user experience. Games like Quake and Unreal Tournament require low latency to be played smoothly. If the latency is too high, the game can become unplayable. This is because the game needs to receive input from the player and send it back to the server in a timely manner. If the latency is too high, the game can't keep up with the player's movements and the game becomes unresponsive.

are no big improvements on the horizon before WCDMA; much of the world may be stuck with more than one-second latencies for quite a while to come.

CDMA 1xRTT, the recent upgrade to CDMA that just barely edges into "3G" territory, is live in Korea, Japan, and parts of the U.S. 1xRTT adds packet data bandwidths similar to or slightly better than GPRS, usually reported as 40-60 kbps under real conditions. It appears to have a real edge in latency, however: users in the US are reporting 300-1,200 msec in their tests, and some have even noted cases as low as 100 msec! This is a huge improvement over the other wireless networks to date and, if it holds up as more users come on line and the networks mature, could a real boost for the CDMA carriers.

WCDMA is still a dark horse, with very little performance information available. Only very small networks in Japan and Europe are live now, so it's still early to draw any conclusions. In many ways, WCDMA more closely resembles 1xRTT than GPRS though, so we can expect similar or possibly better latencies. Because this technology holds the wireless data hopes of most of the world's carriers, customers and manufacturers, the stakes are high for a good showing. ■

MVNOs Continued from page 1

total of 1.08 billion subscribers this year. Strategy Analytics says overall, regular wireless operator revenues will rise to \$633.66 billion in 2006 with 1.9 billion subscribers.

Audience specific services abound

The Shell Mobile MVNO has been live since March 2002, offering mobile service to motorists in Hong Kong. Hong Kong is a highly competitive telecom market, but Shell's initial target is the 300,000 Shell Loyalty cardholders of the region.

CEO Alistair Gordon said that the goal of Shell's MVNO is to strengthen its relationships with its customers. The company is doing this by establishing a range of traffic and driving services on top of standard offerings such as ring tone downloads and games.

For instance the customer can be told where the nearest car park or Shell station is, can receive traffic reports, a route planner, or if really stuck, 'journey assist' whereby a real human being who will give directions in either English or Chinese. Shell Mobile combines services from Nebraska and the limited GPS offerings from Hong Kong's mobile operator.

With the advent of mobile payment systems such as those being developed by New Jersey-based Cellenium, the progression from Shell card to Shell phone to Shell card-on-a-phone would be complete.

Mobile payments will be an added arrow in Virgin Mobile USA's quiver. The company, a joint venture with Sprint PCS, is tapping into the underserved youth market. First, it has rethought the whole payment structure, doing away

**We look at
the mobile
phone as a
lifestyle device...**

with the usual credit checks, contracts, bucket plans or surcharges. On Virgin Mobile, the customer pays in advance and then is charged \$0.25 per minute for the first ten minutes, \$0.10 thereafter.

Moreover the company has tuned its branding and personality to the niche it is chasing. This covers everything from customer service -

the 'Central Intelligence Team' as it is called - to the voices used for recorded messages and interactive voice applications.

It is in these 'VirginXtras' applications that Virgin can bring the broader strengths of the Virgin Group to bear: a brand that is known for being funky and the content that comes with Virgin's music business.

An example is the "Hit List" service, whereby you can listen to and vote on a top ten list of songs, guided by a friendly voice using a fair dose of slang, or "Mobile Messenger" whereby you can send a text message to a friend leading them to a particular song in your hit list. In the future there is the possibility for cross-selling: users listen to the MP3 clip and then are given the option of buying the CD, which they would access, like most of these services, with voice commands not keypad inputs.

Virtual Mobile Battles for the USA

Virgin Mobile already has operations in the UK, Australia and Singapore. The UK operation is often cited as the classic MVNO success story. The company has been the fastest growing mobile operator in the UK since launching in December 1999. As of May, it has wooed around 1.7 million subscribers (from a total of more than 47 million subscribers) with its simplified pricing, low tariffs and value-added "VirginXtras" SMS-based services such as horoscopes, games, information on sports and film, as well as discounts from other Virgin-related areas such as plane and train tickets, CDs and concerts.

In May Virgin Mobile UK reported it was EBITDA positive in the first quarter of 2002. They project positive operating earnings of US\$16 million by the end of the year.

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Microsoft Plus Mobile

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single software source, and we can support different OSes now. We have done some work getting a major non-proprietary handheld to run BREW applications. SmartPhone 2002 is an amazing device, but it will probably take a while to reach broad market penetration. We think that the mid-tier handsets are the absolutely critical piece of the market."

Whether Nokia's Tradepoint, or the J2ME distribution platforms from Elata, MForma or 4th Pass play as nicely with Mobile2Market remains to be seen. But an integration of Mobile2Market and BREW, both distributing applications in C/C++, that presents a common billing interface to a carrier could be very attractive to a carrier looking at software distribution options.

Carrier billing integration is crucial to any distribution system, and

If Microsoft Does Enter, Is that So Bad?

"This seems like SmartPhone 2002 is an opportunity for the wireless games segment," said Jamie Conyngham, VP Business Development for iobox, at Terra Mobile. "The next logical step for gaming is the multi-player cross platform game. Sony Computer Entertainment has already demonstrated a console/mobile game. Game continuity could span from a PC or an XBox to the mobile smartphone."

Conyngham continued "If a large Japanese mobile vendor like NEC develops phones using SmartPhone 2002, this will increase pressure on Symbian members to recognize the OS."

Terra Mobile is currently porting Midway classic arcade games to the SmartPhone. If it catches on, developers will quickly port other Pocket PC games as well. "It took us about a week, maybe ten days," said Alexandre Taillefer, CEO of Hexacto, "to make our Tennis Addict from Pocket PC work on Smart Phone. We'll get faster as we port more titles."

Another developer disagreed. "They said it would be simple to go from PDA to phone, but it took us more than twice as long as expected. When we were working on it, SmartPhone was not a stable specification. That was not an easy port."

Easy or not, more mobile game developers are porting to SmartPhone 2k2. In addition to Terra and Hexacto, companies like ifone, Comverse, Synovial, Pixel Technologies, MonkeyStone and Materna are all reportedly making games for the OS. It's not hard to imagine companies like Gameloft, which currently makes games for J2ME and BREW phones

as well as Pocket PC PDAs, supporting SmartPhone 2k2. So even though supporting additional handsets and operating systems means significant additional work, developers are going to go where they think the market will be. At least a few of them are hedging their J2ME bets with Microsoft.

Of course, in the end, the most important thing is the price/quality tradeoff between the competing platforms. For pure entertainment quality, SmartPhone 2k2 is the clear winner. Currently, though, Pocket-PC phones are selling at a significant premium to all other models. That could change, however.

Both Microsoft and mobile operators are well versed in subsidizing hardware to sell software or services. If Microsoft shows a willingness to contribute hardware subsidies to an operator's service subsidies, and thereby brings SmartPhone 2k2 handsets into the price range of mid-tier Java handsets, the marketing battle will be largely over. With over \$38 billion in cash and short-term investments - compared to Nokia's \$6.8 billion (as of 3/31/02) - Microsoft certainly has the marketing budget edge.

The emergence of de-facto standards is not a pretty process. In moving from operating systems to office software to browsers, Microsoft has left smaller companies and arguably better applications in its wake. But through its monopoly, it has also created a definable game platform (the PC) whose component parts are developed by hundreds of individual companies. This has given thousands of game developers low-cost access to a very large audience. If the same thing happened to the mobile phone, would it really be so bad? ■

Stat!

Best Selling Videogames on Amazon.com

- 1: Medal of Honor Frontline for PS2 (EA) \$49.99
- 2: Grand Theft Auto 3 for PS2 (Rockstar Games) \$49.99
- 3: Eternal Darkness for Gamecube (Nintendo) \$49.99
- 4: Gran Turismo 3 for PS2 (Sony) \$19.99
- 5: Dragon Ball Z for GBA (Infogrames) \$29.99

* Source <http://www.amazon.com>, July 1, 2002

Mobile2Market has yet to make that step. Cingular has announced support for Mobile2Market, but Handango admits that it hasn't gotten very far with integrating with the carrier. Handango's Patterson said, "It's an addressable problem, and we have the experience from the PDA side to do the work."

Games We Like

MVNOs Continued from page 5

Theoretically Virgin should have an easier time establishing itself in the U.S. market where prepay has yet to mop up pent-up youth demand and mobile penetration is lower as a whole. However as of August 31st, 2002 the company will have competition for those young users from newcomer Boost Mobile USA.

Boost Mobile will initially be launching in California and Nevada. It styles itself as a 'lifestyle' mobile company. Existing antipodean activities include branding surfing or bmx events but Mark Fewell, Media Director, says the company also aligns itself with fashion and music. "We look at the mobile phone as a lifestyle device and we believe that youth market think of it like that as well," explains Fewell, adding that games and entertainment services are key to this concept.

Boost is leaving everything except branding and marketing to network provider Nextel. Because Boost will initially launch as a pre-paid service there is no need of a billing system, but in general, says Fewell, "We don't feel the need to go out and replicate systems. We deliver our own services, the rate plans will be specific and we can pick and choose the features on the phones that are suitable."

Boost Mobile also has a significant advantage by partnering with Nextel because the latter's iDEN network brings unique capabilities to the U.S. market. As Charles Golvin, senior analyst at Forrester Research points out, the packet nature of iDEN means that Boost can instantly avail itself of data services as well as the "less than trivial selection of Java phones" available for the Nextel network. Perhaps most important is the 'Direct Connect' walky-talky type service, which Fewell points out, has never been available to the youth market.

One of the biggest problems the wireless games industry faces is that so few people outside of game development shops actually play videogames. As a service to carriers, investors, analysts and handset manufacturers everywhere, each month we'll survey a couple of titles through which you non-gamers can scratch the surface of video gaming. Hopefully, after an hour or two with some of these amazing and accessible titles, you'll understand viscerally why this is a multi-billion dollar business - because it's so completely fun.

Tony Hawk Pro Skater II

Yes, we know that the third version of this title is out, but for a taste of this amazing franchise without having to upgrade your machine, download the PC demo for Tony Hawk No. 2.

How to start: Use the arrows to turn right and left, the space bar to jump, the ramps to gain speed and get air. Hit the "b" "v" and/or "c" keys in combination with the arrow keys to do tricks and gain points.

What to look for: Check out how cool it is to feel like a world-class skateboarder. Explore the park. Dig the traffic zipping by on the road. Wince in pain as you launch off a ramp and then bite it, badly.

What to ignore: Ignore how hard it is to get good, how dark it always is in France and how there's only one song in the demo.

Play at least until: You score 8,000 points (a raw beginner) or can pull two tricks in a row.

Dope Wars

One of the most popular computer games of all time, and consistently the No. 1 game at www.download.com, Dope Wars is the grandfather of crime-ridden, amoral hits like Grand Theft Auto. You can get great PDA versions of this game and play it on the road.

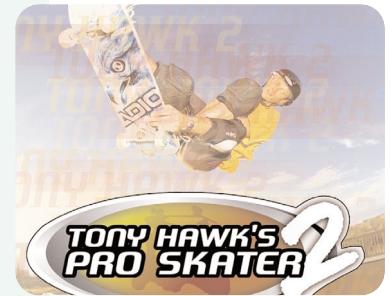
How to start: Move from neighborhood to borough buying low and selling high.

What to look for: The illicit enjoyment you get from imagining yourself to be involved in the drug underworld. If this game were about fruit and vegetables, it wouldn't be nearly as fun.

What to ignore: The feelings of guilt/shame/moral outrage you feel toward yourself after the rush of a big score.

Play at least until: You end the game with \$1 million.

Ultimately, whether any MVNO will fly is predicated on fine-tuning the brand to a specific target market. Shell Mobile works because it focuses on its most enthusiastic customers. Virgin's and Boost's networks target an underserved market with new features and new attitudes that traditional operators could never even imagine. If these companies can operate profitably, more companies that serve specific niche audiences will enter the mobile phone business. ■



Culture Clash Continued from page 1

The telecommunications industry is dominated by enormous operators (a.k.a. carriers) and manufacturers, and by the technology and services companies who serve those giants. Reflecting the industry's high leverage and the enormous costs of deploying almost anything new, telecom decisions are made carefully

Perhaps because there are so many proposals and so many products, the game industry's standard for responsiveness is poor. This has baffled many telecom people: "I thought they wanted to work with us," goes the refrain, "but my calls and emails have not been answered for a week." Successful games-industry business development can approach what police call *stalking*.

"That's not a platform, that's a device."

The two industries not only hold different kinds of meetings, they also use conflicting languages. A game developer, brandishing a mobile phone, might refer to "this platform" by analogy to the Nintendo GameCube or Sony PlayStation. Telecom distinguishes the device in hand from the platform as a hardware and/or software solution deployed in the operator's switch or network center. Indeed, the game-developer is concerned with distinctions that apply within a single device, between its various modes of SMS, MMS, WAP, J2ME, or audio.

"That's not a game, that's an SKU."

Even the word game is ambiguous. When a telecom exec asks for "your game for a Java phone" there is often misunderstanding. Game folk distinguish the brand from the title (the game itself), from the various SKUs (Stock-Keeping Units, including versions and add-ons) that must be created for each console. The distinctions between genre and setting and brand are similarly subtle, but vital.

In meetings, game developers use whiteboards. Telecom folk use PowerPoint slides.

In a typical slide-driven telecom meeting, the game people will squirm after a few minutes of slides, and can grow nervous if there is no whiteboard visible. One successful game-publishing exec would reject any proposal that involved PowerPoint, saying: "Developers must be interactive people." The nature of their interactive product extends to their business style: they improvise, problem-solve, and interrupt, and will ignore the meeting's agenda if they can find a better path to the goal.

Games people negotiate more openly, but expect less pushback and renegotiation. They share gossip and suggestions. Telecom people start with aggressive terms and then hammer each other towards the middle. They share analyst forecasts and company announcements.

Bad enough that mobile-game business meetings must resolve telecom's structured slide shows with games' whiteboard-based improvisations. When the deal making starts, there can be real problems – the industries negotiate differently.

Stat!

Global Games Market Value by Sector (%)

	2001	2002	2006	2010
Console Hardware	25.9	26.3	19.3	9.8
Console Software	40.1	43.3	31.3	22.9
Handheld Hardware	7.3	6.2	6.1	2.8
Handheld Software	9.4	8.0	6.6	3.6
PC Software	16.0	13.5	10.9	6.7
Online	0.6	1.1	6.2	12.2
Interactive TV	0.3	0.6	7.9	18.4
Mobile	0.4	1.1	11.7	23.7
Total (\$ billion)	27.78	31.17	30.07	38.06

* Source: <http://www.informamedia.com>

and conservatively. The conservative approach is reflected in everything from office layouts to the way people dress for meetings.

Game-development companies, by contrast, are traditionally small teams of artists, programmers, and game-designers – a volatile blend in its own right – who live hand-to-mouth off milestone-based payments from their publishers. As befits such a mix of creative personalities, game developers dress however they please. As a rough rule of thumb, the developers are "pony-tails," and go to the Game Developers Conference. Their publishers are called "suits," and attend the Electronic Entertainment Expo (E3). But the larger game-publishing companies are part of the entertainment industry, and thus their people are in practice dressed within the range of "business casual." The telecom crowd actually does wear suits.

Telecom executives respond promptly, but decide slowly. Game execs respond slowly (to the point of rudeness) but often make decisions at a first meeting.

Telecom is professional but glacial in its internal process. Game industry people might appear opportunistic and impulsive by contrast, as they respond quickly to new license opportunities or new game concepts.

As a young industry that has yet to reach its potential, the game business fosters a frontier-town atmosphere. Direct competitors in new genres or modes become friends and mutual fans. A developer may be delighted to see a competitor's game do well; it can validate their own choice of genre.

The games industry is ripe with "coopertition"; direct competitors in one game genre might cross-license different games for distribution. Thus, a games industry negotiator frequently lays out internal needs and goals, and starts with deal terms that are reasonably likely to be final. The telecom negotiator is more likely to start with an aggressive offer, anticipating push-back towards the fair middle ground. The telecom world has likely experienced more commodity-style (or "zero sum" or "fixed pie") deal making.

Game-industry negotiations are different, but not necessarily superior. The telecom negotiation is an easier place to push back hard, without implications that good faith is being violated. And the telecom negotiator is less likely to interpret a wide gap between proposed terms as a sign of deal-making doom.

The game industry likes royalties.

Telecom likes fixed-fee license.

Games and telecom have different standards for deal structures, as well as for communications and negotiations. Games and telecom have each evolved a set of fairly well understood deal terms. Mobile games' business models remain in the primordial-soup phase; both consumer-revenue models and business-to-business deal structures are murky. There is no "standard

**...with mutual respect,
and with a sense of humor,
we will create rich new
forms of fun.**

interface" for these cross-industry deals, such as the game-industry "affiliate label deal." In fact, there isn't even a common language for discussing the various assets, roles, or functions involved with mobile game development.

Game and media executives instinctively expect royalties (revenue sharing) and advances (upfront cash) from almost any relationship. Telecom services and applications are more likely licensed, often priced against capacity or subscriber population. The two industries can bring their different default deal structures to the table, and later leave in frustration: "I can't believe those guys refuse to strike the obvious deal."

The game industry should expect difficult negotiations as it enters the mobile world, and should be cautious in drawing analogies; for example, operators are not retailers. Publishers have strong expectations for the percentages they will pay to developers, to licensors, and to distribution partners. Those numbers are not yet well defined in the mobile games arena.

Stat!

Top Ten Videos on MTV - week of June 24th

- 1: Nelly "Hot In Here" (Fo' Real/Universal)
- 2: Eminem "Without Me" (Aftermath Records)
- 3: Avril Lavigne "Complicated" (Artista Records)
- 4: Enrique Iglesias "Don't Turn Off The Lights" (Interscope Records)
- 5: Vanessa Carlton "Ordinary Day" (A&M)
- 6: B2K "Gots Ta Be" (Epic)
- 7: Korn "Here To Stay" (Immortal)
- 8: Kylie Minogue "Love at First Sight" (Capitol/EMI Records)
- 9: Kelly Osbourne "Papa Don't Preach" (Epic)
- 10: Will Smith "Black Suits Comin" (Columbia)

* Source http://www.mtv.com/onair/trl/lastwk_top10.jhtml

The telecom industry, as it draws upon entertainment and media industries for brands and for content, will be learning new standards for business, including business interactions. Generalizations, again, are dangerous (although I have given many overstated generalization above!). For example, each publisher has a distinct culture. Some are big-media subsidiaries, others are focused on specific demographics of gamers.

No matter how irreconcilable some of these differences seem, however, and no matter how protracted negotiations (or accounts receivable) become, the gap can be crossed. We are at the very early stages of an exciting new form of interactive entertainment, and a lucrative new application for mobile networks. The games and telecom industries need each other's expertise and assets. With this motivation, with mutual respect, and with a sense of humor, we will create rich new forms of fun. ■

The View from Europe

Phones, Java and Better Games

by Jamie Conyngham

The stage is set for an exciting second half of 2002 for wireless games in Europe. With major developments in handsets, operating systems and content all launched or about to be, it's a very good time to be a mobile gamer in Europe.

Handset Development

There are a number of new handsets coming onto the European market in the next six months, all with increased processing power, memory, storage and colour screens. In terms of wireless game capability, the arrival of some of these new handsets can be likened to the launch of a new games console.

Sendo's device is a EGSM/GSM-900/1800/1900 EFR & GPRS capable phone with a 120 MHz, 32-bit StrongARM processor, 16 MB ram, 32MB Flash ROM and an SD slot for additional memory. The colour screen is superb quality. This is the mobile phone for the serious gamer.

And games for the Sendo device are coming. Iobox is publishing Midway's Defender for the Sendo Z100 in July or August. Hexacto has developed Defender specifically for the Sendo control system, which has a small joystick and several buttons. Defender will be an embedded game (not Java) written specifically for this device and the MS Smartphone 2002 OS. There is more to come. Hexacto plans on producing 20 games for the Smartphone 2002 platform this year. Similarly Ziosoft and UK based Ideaworks are porting some of their Pocket PC titles to the Smartphone 2002 platform.

The fact that games are easily ported from Pocket PC to Smartphone 2002 OS will mean that the number of quality games will be higher for the Sendo Z100 than for any other mobile phone within the next six months. You simply cannot get the same results with any other mobile phone. Naturally, other phones running the Smartphone 2002 OS will have the same advantage Sendo does. If Sony/Ericsson, Motorola, Siemens or Nokia came out with a Smartphone 2002 OS mobile phone with similar specifications and a cheaper price, it would be a mass-market success. Including subsidy the Sendo Z100 is expected to retail around £270.

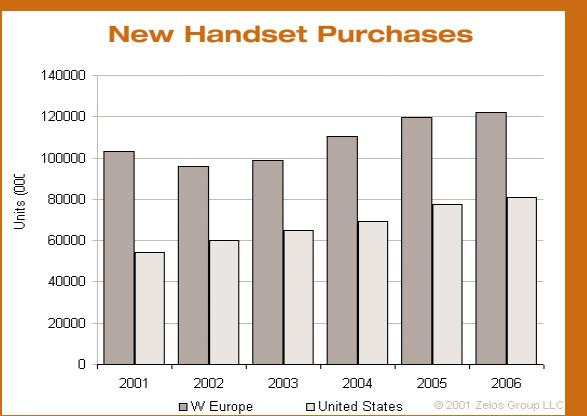
Other devices I'm excited about are the Nokia 3410 (MIDP Java), the HTC XDA and the NEC n21i. The XDA launched on June 16 in the UK and is available on mmO2 right now. The XDA runs on Pocket PC 2002 so all Pocket PC ARM games will work on it. Basically, it is an IPAQ with GPRS and an SD slot, retailing for £499. The Nokia 3410 is a mass-market phone aimed at the Nokia 3330 owner. Its combination of J2ME and very low price is great for the mobile games world. The NEC n21i is the I-mode launch phone for Germany's e-plus operator. It's a beautifully designed handset, and its cost has been slashed since release because of low subscriber figures for the e-plus I-mode service.

Java Penetration in Europe

Europe has yet to see Java games launched to the public in a major way. Most publishers are waiting for increased sale of Java handsets. Nokia will help drive the upgrade path to Java through devices like the 3410. At iobox, we down-

Handsets are climbing the same curve described by the PC 20 years ago.

Stat!



Handsets are climbing the same curve described by the PC 20 years ago. And while better platforms don't guarantee better games, the limitations of first generation handsets were so severe that I think we will see much improved game play in the next generation of phones.

Of all the devices I have seen due for launch in Europe over the next couple of months, the Sendo Z100 looks to be the best for games.

loaded several MIDP Macrosspace Java games using Orange settings in the UK. The whole thing worked very well.

The European wireless sector is hoping that J2ME applications will mirror what happened with ring tones and icons - mass market success and runaway revenues.

Handset Highlights

The vendors of ring tones and icons are gearing up for massive Java game distribution. Almost every ring tone company I have spoken with in the last three months has a Java launch strategy. So just like the ring tone and icon market, the Java game market is threatened with commoditization.

While Java penetration in Europe is all but assured, we might go from drought to flood with mobile games. European content aggregators everywhere are stockpiling games for distribution. If the same games are available across the value chain, and there is insufficient differentiation, the customer might end up drowning in commodity Java games.

Large Publishers and Great Content Entering the European Market

As with ring tones and icons, when audience and revenue models are in place, the larger players will enter the market place. In the case of ring tones it was the record labels that entered the market. They wanted a piece of the action because ring tone margins were similar to if not better than, their margins on CD's.

In Europe, THQ (THQI), Infogrames (IFGM), Ubi Soft, Konami (KKMIF), Eidos (EIDSY), Midway (MWY), Activision (ATVI) and EA (ERTS) are all fairly active in the wireless gaming space.

All of the largest console and PC game publishers are working on mobile games here. Electronic Arts signed an impressive deal with Orange (France Telecom) last April - EA used to say publicly that they were not interested in wireless

...we might go from drought to flood with mobile games.

games. Infogrames' titles from Atari, developed via ifone will be embedded on both Motorola and Sony/Ericsson phones. THQ recently partnered with Sony/Ericsson for embedded games as well as Java downloads.

While this interest is great for the mobile games segment, we will not see publishing investment (e.g. at the level of a console game) until publishers see significant real revenue. Still, with the experience, resources and licenses those publishers have, mobile gamers can look forward to some great titles coming to their handset.

Conclusion

At last, the wireless games market in Europe seems to be gathering momentum. There will be more handsets with more functionality in the next six months than Europe has ever seen before. Publisher activity has increased this year, and it looks like it will continue to build, which will produce more quality and branded games. European retail activity for wireless games is set to expand with SMS, PDA, Java and Smartphone games being sold in many operator and electronics retail outlets. Java will become widespread, Microsoft will enter the market, and people will hopefully get used to downloading games.

For July, the most interesting figures for me will be; the number of Nokia 3410s sold, the number of XDA's sold and the number of games downloaded to these devices. If I had to guess, I'd say that from July, mobile game downloads will increase at an exponential rate month-over-month. ■

Nokia 7650

Modes: GSM/GPRS 900/1800

Price: € 800

Screen: 176x208, 4096 colors

Apps: MIDP Java, Symbian native

Available: now

Nokia's newest phone adds a camera, MMS capabilities and full Symbian and Java support. While a bit expensive, this phone shows the shape of things to come.



Motorola i95cl

Modes: iDEN 800

Price: \$300

Screen: 120x160 pixels, 256 colors

Apps: MIDP Java

Available: July 2002

This is the first color handset available from Java early-adopter Nextel, and it's a beauty.

Launch games include MotoGP, Astrosmash and Snood from THQ.



Samsung A500 "Rainbow"

Modes: CDMA 1xRTT 800/1900, AMPS 800

Price: \$300

Screen: 120x160, 4096 colors

Apps: MIDP Java

Available: August 2002

Samsung's Rainbow phone will be Sprint PCS's flagship model for their 3G launch this summer. It features Java games including MonkeyBall from Sega, Space Invaders from iFone and MotoGP from THQ.



Sony Ericsson T300

Modes: GSM/GPRS 900/1800/1900

Price: estimated E\$ 80, with contract

Screen: ? pixels, 256 colors

Apps: Mophun

Available: Q4 2002

Sony Ericsson shoots for the mass-market with this phone, featuring MMS, polyphonic sound and Atari games running on the Mophun VM from Synergenix.



Contributor Bios:

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Jamie Conyngham Jamie is Vice President of Business Development for Terra Mobile, a wholly owned Telefonica group company. His current focus is wireless gaming across all major platforms. Jamie works closely with European, Japanese and American top games publishers and has been instrumental in creating Terra Mobile – iobox gaming strategy and vision. His background involves various business IT consulting roles at industry giants Hewlett Packard and Computer Sciences Corporation and large financial players Invesco, Commonwealth Bank of Australia, Westpac, AMP and Reserve Bank of Australia.

Dan Scherlis Dan Scherlis (Dan@Scherlis.com) consults to interactive ventures, including Converse Mobile Entertainment, and is a member of MTGP, investors and advisors for digital media. Dan was CEO of online-game developer Turbine (Microsoft's Asheron's Call), and established publishing operations for Papyrus (IndyCar Racing). He has worked at HBO and AT&T/Interchange Online Network.

Anne McLellan Anne (annemclellan@attbi.com) has many years of experience in graphic design and production, with a specialty in publications. In addition to general design, Anne has worked as a consultant in corporate training and development, and in marketing, in particular for education and arts clients. She has a BA in Fine Art from Brandeis University, a Graphic Design Certificate from Mass College of Art and studied design and illustration at the Art Institute of Boston and Rhode Island School of Design.

Cashman Andrus Cashman, a co-founder of Wireless Gaming Review, has nearly a decade of engineering and management experience in software development, design, implementation and operation. Before WGR, Cashman was Director of Development at Yesmail and an award-winning application developer for the Palm platform. He earned a Bachelor of Science degree in Brain and Cognitive Science, with a concentration in Computer Science and Linguistics, from the Massachusetts Institute of Technology.

Matthew Bellows Matthew has worked in telecom and the Internet since 1995. Before co-founding Wireless Gaming Review, Matthew was Director of Business Development for Engage (NASDAQ:ENGA). At Engage, Matthew managed the team responsible for 4,000 advertising contracts that drove \$30 million in annual revenue. He received his MBA with high honors from the Olin School of Management at Babson College. Matthew's first job in the game industry was as a tester at Infocom, where he spent the bloom of his youth playing Leather Goddesses of Phobos.

Amy Monaghan: Amy comes to WGR from Forrester Research Inc. (NASDAQ: FORR), where she edited research on infrastructure and applications, as well as telecom, media and other industry verticals. Her background is in science and technology publishing: she has edited publications of the Massachusetts Medical Society and Rockefeller University Press and was the original managing editor of *Immunity*, a leading immunology journal published by Cell Press. Amy holds a Masters degree in English literature from the University of Chicago and a Bachelor of Arts in English literature from Wellesley College. She is not as boring as her career path might suggest, and she rides a black Schwinn Classic cruiser.

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