Volume 2, Number 3, March 2003

WGR Presents:

Mobile Entertainment analyst

In-depth coverage of the wireless entertainment business

Opportunities and Threats in Mobile Entertainment

An upcoming white paper sketches out the future of our industry

by Rimma Perelmuter, Mobile Entertainment Forum General Secretary

On March 17, 2003 the Mobile Entertainment Forum (MEF), Booz·Allen Hamilton (BAH) and the Mobile Entertainment Analyst (MEA) will release a 15-page white paper entitled "Four Scenarios for the Future of Mobile Entertainment." This project describes the current state of the mobile entertainment (i.e. "wireless and fun") industry and sketches out the four most likely scenarios for our emerging industry's future.

The partnering of mobile and entertainment to create a new medium creates numerous business challenges and opportunities. Since the MEF's inception in 2001, our top priority has been building coherent business models for the emerging industry and gaining consensus on beneficial revenue distribution schemes for carriers, handset manufacturers and content companies. The white paper project was initiated by the MEF's Commercial Task Force as a way to develop a comprehensive survey on the current state of the industry and a glossary of terms for a lexicon evolving from the merged partnership of mobile and entertainment.

While many members felt that an operator-centric view of the emerging mobile entertainment value chain was most likely to dominate, the emergence of proven alternative business models led the MEF to pursue a more rigorous analysis. At an MEF event in April 2002, a panel on "The Mobile Entertainment Value Chain" provoked a lively discussion on the variety of business models – not just operator-centric – already visible in the mobile entertainment market today.

As a global trade association representing all participants in the mobile entertainment value chain that are interested in driving the industry's evolution and commercial potential, the MEF is

Continued on page 7 ►

The Wireless Retail Point of Sale – The Final Frontier

by Adam Guy

When I came to my first CTIA show in 2001, the buzz was all about the networks. In the wake of AT&T's GSM overlay announcement, the industry was operating under a "If you build it, they will come" mentality. By the time the 2002 show rolled around, the conversation had shifted to the search for compelling applications that would enable carriers to realize a return on their hefty spectrum and network investments.

Now that we have some impressive applications and devices, particularly in the mobile entertainment arena, the most important question facing the industry is "what do we have to do to get more people to start paying for this stuff?"

One obvious place to influence consumers is at the retail point of sale. This venue represents a unique opportunity for carriers, manufacturers, and software and application developers to evangelize the value of wireless data to the mass market – live and in person. While America has seen the commercials of people playing games, messaging and taking pictures, for the mass market to adopt this, somebody is going to have to show them how and explain why.

This isn't another retail-bashing article, where we've done some mystery shopping and documented the misery of our experience. InfoTek Research (where I work) has done quantitative data collection on the point of sale by interviewing a nationwide sample of retail sales associates on their sales practices as well as their impressions of what the consumers are buying. The results are published in *The Wireless Retail Survey: What's Really Happening at the Point of Sale,* available from InfoTek Research Group (www.infotekresearch.com).

Continued on page 6 ►

Contents

Opportunities and Threats in Mobile Entertainment 1
The MEF's Rimma Perelmuter announces a white paper about the future of mobile entertainment

The Wireless Retail Point of Sale 1
Adam Guy explores the final frontier

Short Messages 2
Mobile Games at GDC Mobile

Technology Explained
Pirates Ahoy 4
The wireless warez explosion and how to keep your content safe

Handset Highlights 5

Keeping Score
Culture Clash 8
When two worlds collide, like game developers and mobile operators, there's bound to be some confusion. Dan Scherlis discusses the ramifications.

Games We Like 10
Avery Score is a made man in Mafia

Short Messages

by Matthew Bellows

Mobile Games at GDC Mobile

The GDG Mobile conference hosted industry luminaries from all over the world, but as usual, most of my attention was on mobile games. (Disclosure: I was on the organizing committee, but only the jaded would mark this event less than an unqualified success.) In addition to giving a presentation (http://www.mobenta.com/articles/worldtour.htm) on games with David "DC" Collier, a number of folks showed me some new titles.

Here are the highlights:

♦THQ's **MotoGP** with Superscape's **Swerve 3D** engine by Cybiko: This game, running on a Nokia 7650, sets a new standard for graphical achievement on mobile phones. The introduction alone is impressive, featuring full 3D titles, bikes and fly-overs. Playing the game is even better. For the first time with a mobile-phone game, I got that woozy, swaying feeling when threading my bike side-to-side on the track.

♦They don't have the license for the characters or weapons that they're using, but TopGam's **Light Saber Combat** for the Nokia 7650 won my vote for "Best Game by Company I've Never Heard Of." It's a 2D fighter featuring white robed and mulleted men facing off with glowing swords. The combat was fluid and fast, the animations were great, and the losing/dying sequences were the most graphic I've seen on a mobile.

♦JAMDAT's **Fudomyo** on a Motorola T720: This game, so long in the making, was the source of much speculation before the show. JAMDAT exec Zack Norman took me through some of the game's details, but there's more to explore. The game mechanics are built on JAMDAT's Gladiator -- select three moves (two punches, two kicks, 2 blocks, a throw and up to 16 earned moves), send them to the server, and watch how your choices match up against your opponent. It's not revolutionary, but Fudomyo has a rich and complex character development system that has benefited from the contributions of Steven Segal. The game builds on Gladiator, and it owes a debt to NGame's WAP title Chop Suey Kung Fu. But there's much more to Fudomyo, both in plot structure and character development. Look for a full review on WGR soon.

These are just three of the highlights of a very exciting Game Developer Conference Mobile. The debriefings have been roundly positive, so start booking your hotels now. San Jose in March is the place to be for the mobile game development industry.

Multiplayer at GDC

There are lots of flashy new mobile games that were shown at the Game Developer's Conference, but we are most excited to see the first real surge of multiplayer games start to trickle out. Several publishers are showing off alphas and betas of two-player games (mostly "off the record"), and it's clear that most developers have started to experiment and make plans for more. In addition to JAMDAT's Fudomyo, we've seen (and can talk about) two-player mobile games from Tira Wireless (**Checkers, Chess**) and Sorrent (**Fox Sports Live Football**).

However, one of the most impressive two-player demos we've seen is from the Mophun guys at Metrowerks' booth: they've got a two-player **Minigolf** game that runs over the network, using a multiplayer server from Terraplay back in Sweden.There is a second or two of lag due to GPRS, but it doesn't noticeably impede play – you can watch your opponent take their stroke nearly at the same time they're seeing it.This is significantly better than many of the demos we've seen, emphasizing the value of a solid multiplayer engine. Many large developers and publishers have announced plans to build their own servers, but they may be better off licensing the best of what's already available instead.■

Stat!

Top 10 Game Downloads on CNET as of 28 Feb 2003

1) SolSuite 2003: Solitaire Card Games Suite
2) Dope Wars
3) AirStrike 3D: Operation W.A.T.
4) Tony Hawk
5) Duke Nukem: Manhattan Project
6) Free Spider 2003 - Solitaire Collection
7) Pocket Tanks
8) Grand Theft Auto 2
9) Dungeon Siege Demo
10) Insane Pong

Source: http://download.com.com/3101-2012-0-1.html?tag=dir

Publisher
Matthew Bellows
matthew@wirelessgamingreview.com

Editor in Chief
Jimmy Guterman
jimmy@guterman.com

Technology Editor
Cashman Andrus
cashman@wirelessgamingreview.com

Copy Editor
Amy Monaghan
amy@wirelessgamingreview.com

Design & Production
Anne McLellan Design
annemclellan@attbi.com
+1 781 326 8007

Published by:
WGR Media Inc.
PO Box 390764
Cambridge, MA 02139
+1 617 628 1210

Website:
www.mobenta.com

To Subscribe:
www.mobenta.com

For Existing Subscriptions:
mea@wirelessgamingreview.com

"Printed" via Adobe PDF
12 times per year

PDF and online archives access
$695 per year

Technology Explained

Pirates Ahoy

by Cashman Andrus

The wireless warez explosion and how to keep your content safe

Digital piracy is a fact of life, but not a happy one, for content developers. The game, software and music industries spend millions of dollars every year fighting content theft, but rarely do they manage to do much more than slow it slightly and keep it underground.

Until recently, mobile platforms haven't been sophisticated or widespread enough to inspire much piracy, but that is quickly changing. With the widespread launch of Java-capable phones and the move to polyphony in the ringtones industy, wireless "warez" sites are popping up like mushrooms after a rainstorm.

Thus far, mobile warez poses a limited and manageable problem. Few people know how to find content or get it on their phones, and the process is cumbersome enough to turn away many would-be pirates. Of course, those are exactly the same problems confronting the legitimate sale of mobile content, so the barriers are likely to recede as manufacturers, carriers and publishers improve their technology and services, and spend millions of dollars on advertising them to consumers. As you might expect, cool marketing and ease-of-use attracts thieves as well as customers. Also, not surprisingly, industry players are trying everything they can to ensure they get paid.

...cool marketing and ease-of-use attracts thieves as well as customers

Limited Downloads

One strategy to fight piracy is to prevent users from getting content onto their phones if they haven't paid for it. Handset manufacturers, often at the request of their carrier customers, alter or remove features to limit download access in the handsets. Typically, serial ports are removed or locked down, IR ports are set to limit usage, and WAP download capability is limited to a small set of sites, or even to a single carrier portal. For example, it's become quite common to prevent a phone's WAP browser from saving images to be used as wallpaper, which allows carriers to sell specific pictures at a dollar or two each.

This may be a good start is slowing down piracy, but it's not going to stamp out the problem. By attacking the demand side, this strategy can be very effective in preventing widespread piracy, especially among casual users on a single carrier. But there are many different models of phones available, all of which would need to be locked down to prevent the more motivated pirates from succeeding. Furthermore, while these limitations may make sense in mass-market or mid-range handsets, they are seen as serious detriments to the high-end phones favored by the customers most likely to buy content.

Lock Up the Valuables

The flip side of limiting downloads is that it prevents unauthorized users from getting their hands on the content at all, or at least not in a way that can be transferred to other devices. Because the content does need to be transferred to paying users, this can be a tricky proposition. There are several weak links in the chain from the publisher to the consumer, all of which need to hold to keep content safe. Phones must be locked to prevent retrieving files from them. Download servers need to recognize authorized phones, and refuse to hand over files to other devices, like PCs or PDAs, which could easily make copies. Test and review copies of software must be closely controlled. If any of these fail, and the files fall into the wrong hands, well, you'd just better hope your content doesn't turn up on Kazaa.

This strategy is being used widely now, and while it is working fairly well, cracks are begining to show. Unlike the "limited downloads" approach, these techniques are not especially inconvenient or annoying to legitimate customers, as few expect to copy applications from their phones. Unfortunately, the systems put into place on the phone to prevent this frequently are not complete, and a subculture of "serial port hackers" is emerging to reverse-engineer them. By cabling the phone to a PC and monitoring the serial traffic between them, a savvy person can decipher which codes are needed to get phones to do many things that aren't in the manual. Some of these are useful features, some are nifty but pointless hacks, and some are exactly what content providers dread having discovered – secret entrances into locked vaults.

Fingerprint Locks

A step up in sophistication is to lock each piece of content to a single device, using the phone's serial number and some clever encryption. The IMEI (International Mobile Equipment Identity) is a 15-digit number that uniquely identifies a single unit. By locking each game or application to a single IMEI, you can be quite certain that it can't be stolen and transfered to another phone, since it wouldn't run there.

Of course, to accomplish this, the distribution system needs to find out the IMEI of the destination phone (which, depending on the

phone model and carrier, may be impossible to accomplish automatically), and run an encryption routine on each individual download (which requires a more complex and expensive download server). Also, until most phones offer full IMEI encoding support, there will be a lot of content that cannot be locked, including ringtones and most J2ME applications. More complete application platforms like Symbian and Mophun do support IMEI locking, but most Java phones do not.

Time Bombs and Booby Traps

In the absence of cryptographic locking, there are still many options to limit the individual copies of an application. Programs can set time limits on themselves, ask for activation keys, or register with the publisher's servers. With executable code, persistent local storage and networking capabilities, many creative copy protection schemes are possible. Of course, ringtones and screensavers lack those properties and will have to find some other mechanism.

> The most effective way to prevent piracy is probably to control the entire chain, from the publisher to the user.

These sorts of techniques may actually be the best system for the longer term. By protecting the use of the program rather than the possession of it, many security hassles disappear, and it becomes much easier to get applications in front of users. Eventually, a kind of peer-to-peer distribution system could be used to overcome the limited space available on carrier decks. As long as people are still paying to play, there is no particular need to keep the applications secret.

Fragmentation, Monoliths and FUD

Ironically, one of the biggest foils to widespread piracy is the notorious lack of standardization among mobile platforms. As long as there are a wide range of different handsets, each with unique capabilities and applications, as well as a short lifespan before being replaced, there won't be much stolen content to be found. As soon as individual devices become popular enough that their successors maintain backward compatibility, however, that will change. And, of course, standards are on their way Real Soon Now, right?

The most effective way to prevent piracy is probably to control the entire chain, from the publisher to the user. BREW takes this approach, and thus far it has been very successful in preventing theft of downloaded applications: every component, from the download server to the handset to the encryption on the individual application, is built as part of a single system. Because the technology standards aren't published and the whole system can be tested as a unit, there are very few gaps where a would-be pirate could extract content or introduce applications stolen from elsewhere.

The realities of the marketplace may make such approaches impossible for many carriers and publishers, so they'll have to find the balance of strategies that works for them. Choosing an effective policy is an important decision, and a bad choice will mean very real costs in lost revenue. But now is the time to try out new solutions, while the stakes are still relatively low; next year, a misstep will cost much more. Be cautious but confident, and watch the horizon for the Jolly Roger.■

Handset Highlights

Siemens SX1

Modes: GSM/GPRS 900/1800/1900
Target Market: high-end
Screen: 176 x 220 pixels, 65K colors
Apps: Java MIDP, Symbian native
Available: first half of 2003, Europe and Asia

Nokia has signed up many partners for its Symbian-based Series 60 platform, and Siemens becomes the first to provide details on an upcoming phone, the SX1. With a lot of features, a compact package and sleek design, this should be a pretty cool phone. One quirk is the keypad layout – the numbers are arrayed in two vertical columns alongside the screen, with just navigation keys remaining below, in the traditional spot.

Motorola A760

Modes: GSM 900/1800/1900
Target Market: high-end
Screen: large color touchscreen
Apps: Java MIDP
Available: early 2003

Motorola threw a bit of a curve ball last month, when they unveiled the A760. This phone runs Linux as its operating system, with Java MIDP for downloadable apps. Does this mean that Mot is not siding with Symbian or Microsoft in the phone platform wars?

Sony Ericsson T610

Modes: GSM/GPRS 900/1800/1900
(or 850/1800/1900 for T616)
Target Market: mid- to high-end
Screen: 128 x 160 pixels, 65K colors
Apps: Mophun, Java MIDP
Available: Q2 2003

The new flagship phone from Sony Ericsson, the T610 surpasses the aging T68 with an integrated camera, a much larger screen with better color, and both Mophun and Java engines. All the basics are there as well, in a tiny package with elegant design.

LG VX-4400

Modes: CDMA 1xRTT 800/1900, AMPS 800
Target Market: mid-range
Screen: 120 x 133 pixels, 65K color
Apps: BREW
Available: Now, on Verizon in the USA

This folder from LG is the newest BREW phone to hit North America, and it is quickly becoming a favorite of software developers for its stability and application performance.

Wireless Retail

Continued from page 1

In our years of channel-related high-tech research we've found that salespeople know quite a bit about what end users want and how they want it. Retail salespeople spend every day trying to get consumers to buy handsets and services, so they know as well as anyone what consumers are buying and what needs to happen to get them to buy

> ...our results show a strong correlation between personal use and sales results...

During late December 2002 and early January 2003, InfoTek interviewed 256 wireless retail associates from carrier stores, national consumer electronics retailers and other regional local and independent reseller stores. We interviewed each associate for 45 minutes on value-added services, handsets, accessories, price plans (including data), store layout and available sales tools. We also asked reseller associates about the specific factors that make one carrier's service easier to sell than another and how each major carrier rates on these factors. We also put together several focus groups of carrier and reseller associates to help fill in some of the "whys" behind the "whats".

InfoTek's hope in publishing the Wireless Retail Survey is to provide meaningful and measurable data on the wireless retail channel so that carriers, manufacturers and developers can make it easier for salespeople to deliver the message of enhanced wireless's ability to improve the life of the mass-market consumer.

The looming problem at the point of sale is that there is a lack of alignment between incentives and efforts. Salespeople at carrier stores, mass-market retailers and local / independent reseller stores have different incentives, access to training and overall philosophy of selling wireless products and services, particularly the value-added devices and services that the industry is depending on them to sell.

Different services, devices, accessories and pricing structures demonstrate varying sensitivities toward the associates' knowledge, commission structure and personal use in terms of how often salespeople talk about them and how much they sell them. In other words, the answer is not a matter of simply paying associates more money or hiring more college graduates, it is a matter of aligning objectives and behaviors. For some services, giving sales associates access to the services for free would make a difference because our results show a strong correlation between personal use and sales results. With certain handset capabilities, associates just do not know enough about them to sell them effectively.

Handsets and their advanced capabilities represent some of the most cogent examples of this alignment issue because carriers and resellers can have different business objectives in this regard. For carriers, the ultimate goal is to attract and keep subscribers and increase ARPU. For many resellers, their business models motivate them to sell the largest quantity of devices regardless of how they contribute to the lifetime service revenue of each subscriber.

What follows are a few key findings from the handset capabilities section of the study, which scratches the surface of this issue of priority disarrangement.

> ...the more that associates know about handset capabilities, the more they talk about them and sell them

Customer awareness: A higher percentage of customers asked about color screens than about any other handset capability. Compared with the associates in reseller channels, associates from carrier stores report significantly higher percentages of customers asking for capabilities such as color screens, data capability, embedded digital camera, over-the-air download, polyphonic ringtones, smart-phone, international roaming, Bluetooth, infrared and MP3 capabilities. The study reports similar trends for associates proactively telling customers about these features and for customers buying handsets with these and other enhanced capabilities.

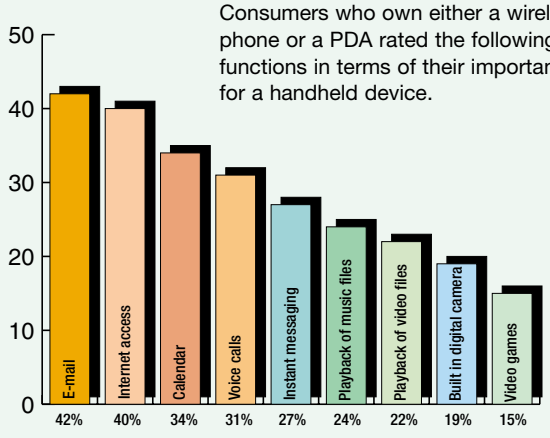
Associate knowledge: The survey asked associates to rate their knowledge of specific handset capabilities and other variables. Compared with resellers, carrier associates rate themselves as being

Continued on page 12 ►

Stat!

Consumer Interest in Mobile Device Functions

Consumers who own either a wireless phone or a PDA rated the following functions in terms of their importance for a handheld device.



Source: the Yankee Group Digital Home Entertainment Survey 2002

Opportunities

Continued from page 1

committed to delivering the most rigorous and relevant analysis possible for accelerating the industry's growth. Within our membership lies a wealth of expertise, but for the purposes of analyzing the mobile entertainment industry, we needed more. To obtain a comprehensive, and neutral result, the MEF engaged a founding member, Booz·Allen Hamilton – one of the world's foremost strategy and management consultancies. BAH carried out comprehensive survey and interview-based research with a broad range of MEF members and industry players.

Upon completing their assessment, the BAH team recognized both the significant potential of the industry and the inevitable changes that will occur as it matures. The BAH team also identified eight technical and strategic issues that caused significant uncertainty around the future configuration of the mobile entertainment industry value chain. With analysts projecting that the mobile entertainment industry will gross billions of dollars during the next five years, there is significant opportunity for companies that can successfully navigate the industry's maturation.

So, to prepare companies for an uncertain but potentially very lucrative future, the team at BAH mapped out four future scenarios for the industry:

- *Operators dominate*
- *Handset manufacturers dominate*
- *Content owners dominate*
- *One operating system dominates*

By examining the likely challenges and opportunities associated with these scenarios, the BAH analysis will help companies prepare for the four most likely environments in which they will operate. Each of these scenarios outlines the opportunities and threats facing companies across six stages of the value chain. Companies hoping to use this research to guide their strategic choices can consider possible implications of each scenario based on their current and future position in the industry. While each scenario is characterized by a dominant player, the research makes clear that there are considerable revenue-generating opportunities to be had by companies in all stages of the value chain. We are already seeing a number of enablers in the mobile entertainment value chain (WASPs, mobile delivery and portal provisioning companies) generating significant revenue as a result of building up a specialization. Consequently, the MEF believes that nondominant players who develop a unique, scalable service in the mobile entertainment value chain while avoiding the pitfalls discussed in the white paper stand to gain substantially under one or more of the scenarios presented.

> ...there are considerable revenue-generating opportunities in all stages of the value chain.

The result of the initial research by MEF members and the further research and analysis by BAH has generated a five-chapter volume of several hundred PowerPoint slides detailing the technological, strategic and DRM drivers for mobile entertainment. These comprehensive findings provide invaluable industry input, so the MEF and BAH decided that the first output should be made available to all participants in the mobile entertainment industry. Our first deliverable, "Mobile Entertainment Scenarios: Outlook and Opportunities in an Emerging Market,"' centers around the future scenarios for the market, describing the industry's evolution and the resulting power play among industry players along the emerging mobile entertainment value chain.

For the purposes of maximizing outreach to the mobile entertainment community, we turned to the team at Mobile Entertainment Analyst. MEA launched in July 2002 and has quickly become a targeted, widely read and highly respected journal for our burgeoning industry. Based on the BAH slides and discussions with BAH and MEF team members, Matthew Bellows of MEA developed the engaging and informative white paper we are pleased to announce on March 17.

Continued on page 12 ►

Stat!

Top Ten Ringtones on Zingy (USA)

1. Cleaning Out My Closet (Eminem)
2. So Fresh So Clean (Outkast)
3. Crush Tonight (Fat Joe)
4. ABC (Jackson Five)
5. Smooth Criminal (Michael Jackson)
6. Better Off Alone/Take On Me (Anonymous)
7. Get Ur Freak On (Missy Elliot)
8. Thousand Miles (Vanessa Carlton)
9. Charlie's Angels (Ventures)
10. Don't Let Me Get Me (Pink)

Source: www.zingy.com as of 7 Feb 2003

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.

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

> I frequently find myself explaining each world to the other

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 "ponytails," 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.

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.

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 pushback 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 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."

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

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.

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. ■

Stat!

Top Ten Handsets on Handy.de (Germany)
(without/with contract)

1. Nokia 6100 (€549/€289)
2. Siemens S55 (€409/€119)
3. Nokia 6110 (€449/€189)
4. Nokia 3510i (€219/free)
5. Siemens CL50 (€399/€149)
6. Nokia 7650 (€549/€99)
7. Nokia 7210 (€479/€199)
8. Nokia 8310 (€329/€29)
9. Nokia 6510 (€259/free)
10. Nokia 6310i (€319/free)

Source: www.handy.de as of 7 Feb 2003

Games We Like

By Avery Score

Mafia

You sit in the café, watching the rings of smoke rise from your lit cigarette. A wax cylinder recording plays jauntily in the background. Your eyes pan about the room, examining each poor sucker sitting in the place, sizing him up, trying to figure him out. Is he a family man, a business type – maybe he's in your line of work.

You tap out your cigarette and lean back a little, drawing and releasing the slow, steady breaths of experience and of pain. "Does the name 'Salieri' mean anything to you, Detective?" you ask the fat-fingered man sitting across the table. His eyes light up a little.

In Mafia, you play Tommy Angelo, a wise guy at the top ranks of the Salieri crime family, a closely knit clan warring with the Morello family for control of the city of Lost Heaven, where the game is set. You want out of the mob, but that's easier said than done. You agree to dish the dirt on your former employers in exchange for police protection from them. The game takes place in your memories, and each mission is an incriminating anecdote that unfolds as you tell it to a detective who is more than willing to listen to you reminisce.

Mafia is defiantly stylish. It takes place in the 1930s, during Prohibition, when racketeering and corruption were merely steps on the road to legitimacy. The buildings in the game are accurate to the period, as are the cars and the clothing. The faces on the characters seem to have a rugged, world-weary quality unique to the early twentieth century. And oh, what faces. Mafia's characters have the most expressive mugs I've ever seen in a game. They are perfectly detailed and articulated. They express emotion fluidly and realistically and really add to the immersion factor. The game has a cinematic feel, right down to – gasp – good voice acting and well-scripted scenes.

Mafia offers two types of gameplay: gunslinging on foot and fast action on wheels. Both options are equally compelling and realistic. The on-foot missions are quite rewarding, as they give you the chance to get down and dirty. Mafia has plenty of flashy gunplay, but it is no Max Payne. Mafia is very realistic within its own parameters and the fact that you never find yourself performing superhuman feats is probably a plus. As fun as it is to shoot up a bar (how many times have you wanted to whip out a real Tommy gun?), though, you'll spend most of your time behind the wheel. Thomas Angelo was hired by the Salieris as a driver, and he adheres to that role throughout his underworld ascent. Fortunately, the driving is fun and challenging. At times, you cut across parks and sidewalks in hot pursuit of a Morello mafioso; other times, you'll be called upon to follow traffic laws and obey speed limits to avoid police attention. In either case, it is a pleasure to drive through Lost Heaven's beautifully rendered streets. The city map is huge, as is the surrounding countryside.

As you progress through the game, more weapons and vehicles become available to you. The latter feature really adds a lot of depth to the game. Mafia's cars are as collectable as they are useful and, as you move up the rungs of the crime-world ladder, you gain access to new hot rides. Each car has its own distinctive characteristics, and the handling on one car differs vastly from the next. The colorful classics you have the good fortune to drive are not unrealistically fast, either. It's a lucky day when you break 60mph. In addition, to drive a car, you must first learn how to pick the lock on its door, something which should be done well out of view of the cops.

Despite the unprecedented originality of Mafia, some gamers will inevitably compare it to Grand Theft Auto III. For those folks, let me set the record straight: Mafia has about as much in common with GTA as Capcom's Resident Evil series has with Mickey and the Great Outdoors. Sure, there's the whole illicit activity connection, but, honestly, Thomas Angelo makes the stars of GTA seem like small-time thugs. This is not to deny the appeal of one of the greatest games of all time; it's just that Mafia has a different approach to fun and one that proves, ultimately, to be better. Grand Theft Auto is characterized by an irreverent attitude and ridiculously nonlinear gameplay, whereas Mafia feels serious and scripted by comparison. While GTA thrills you with huge explosions and killer car stunts, Mafia draws you in with solid writing and a sickeningly stylish world. The net effect is that, while GTA's gameplay will always be fun, Mafia's world is, quite simply, more immersive. Sitting in my office, playing this game, I felt my real-world identity melt away. Glancing in the mirror during bathroom breaks, I was surprised that my reflection wasn't wearing a pinstripe suit spattered with blood.

Whether you're as big a fan of the American gangster as I am or not, you'll find that Mafia has an undeniable appeal. If Mario Puzo were to make a video game, this would be it. My suggestion is this: draw the blinds, don a fedora, and sit down for one of purest examples of gaming bliss to be had. And remember, the family is everything.■

Contributor Bios:

Adam Guy Adam Guy (aguy202@yahoo.com) is an independent telecommunications analyst and consultant based in Alexandria, Virginia. He spent two years as a senior analyst of mobile wireless research at The Strategis Group. Prior to that, he worked as a lobbyist for GTE Corporation, now Verizon Communications. Guy has an MBA from the American University in Washington, DC, and a BA in English from the University of North Carolina at Chapel Hill.

Jimmy Guterman is founder and president of the Vineyard Group (http://guterman.com), a consultancy. He has performed management consulting work for New York Times Digital, Tribune Interactive, and many other clients.

Dan Scherlis Dan Scherlis (Dan@Scherlis.com) consults to interactive ventures, including Comverse 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.

Cashman Andrus left a career of slinging code and herding cats to co-found Wireless Gaming Review. 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 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.

Anne McLellan (annemclellan@attbi.com) has varied experience in graphic design and production, with a specialty in publications. Anne has worked as a consultant in corporate training and development, and in marketing, 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.

Amy Monaghan (cinetrixie@yahoo.com) Amy has edited research on infrastructure and applications, as well as telecom and media, for Forrester Research Inc. (NASDAQ: FORR). Her background is in science and technology publishing: she has edited publications of the Massachusetts Medical Society, Rockefeller University Press, and 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.

Avery Score (Avery@wirelessgamingreview.com) is a self-proclaimed otaku who constantly partakes in such involved, athletic endeavors as playing old-school RPGs. Avery has the looks of Camui Gackt and the mind of Yu Suzuki, and has been likened to several deities. When not providing content of truly extraordinary quality for WGR, Avery is an honor-roll student at Milton Academy. ■

Opportunities

Continued from page 1

This first of many joint efforts that this three-company partnership is keen to undertake so that companies everywhere will be better prepared for the future of our industry. The MEF white paper is intended to demonstrate the dynamics of this highly promising emerging market and indicate strategic opportunities and risks for all value chain players. Its contents should also serve as a good introduction for analysts, journalists or investors interested in joining the mobile entertainment industry. ■

Our industry white paper will be available for free download on March 17 at www.mobileentertainmentforum.org and www.mobenta.com, as well as at a press briefing at CTIA in New Orleans. It should be noted that only MEF members will gain access to the other key research findings critical to understanding the commercial and technological drivers for mobile entertainment.

Wireless Retail

Continued from page 6

more knowledgeable of many handset capabilities. InfoTek believes that this is a result of consumer electronics retailers' wireless-specific knowledge being diluted by information about all the other electronics and computer product lines. The exceptions are embedded digital camera and MP3 player capabilities, about which consumer electronics retailer associates are more knowledgeable. Intuitively, this makes sense because these resellers have digital cameras and MP3 players on another shelf in the store.

The relationship between associate knowledge and sales activities: Knowledge of handset capabilities significantly correlates with associates' tendency to be proactive in telling customers about them. Possession of this knowledge has an even greater correlation with the percentage of customers buying handsets with those capabilities.The bottom line is that the more that associates know about handset capabilities, the more they talk about them and sell them. For many device capabilities, the associate's knowledge level is more significantly correlated with sales activities than whether or not the associate earns a commission. In other words, if you want to sell devices and services, you've got to make sure your sales staff is fully informed first. Sell the product to your own people, and they can do much better at selling it to their customers.■

For more information on this report and other custom research projects, please contact Adam Guy (703.823.5566 or adamguy@infotekresearch.com).