Volume 2, Number 1, January 2003

WGR Presents:

Mobile Entertainment analyst

In-depth coverage of the wireless entertainment business

Mobile Dating Services

by Elizabeth Biddlecombe

It's a sure bet that sex and love sells even when all else is failing. The human fascination with mating has been successfully exploited in existing entertainment media, so it should come as no surprise that as the personal communications device has evolved into a mobile multimedia machine, it too has become a gateway to the romantic and erotic.

It's hard to imagine anything less of a turn-on than typing a text message on your mobile phone, but apparently the process hasn't dissuaded people from mobile flirting via basic SMS. Ken Hyers, senior analyst, Wireless Data & Carrier Services, In-Stat/MDR, recalls, "It's been 18 to 24 months since I first heard carriers say how surprised they were about how popular it was."

Many providers continue to offer standard anonymous text messaging and mobile chat services. Operators such as Sunrise in Switzerland or Vodafone in Europe are now enhancing this basic service with MMS, so that people can send pictures of themselves (or virtual bunches of roses) to prospective love interests.

Services (for instance, those provided by online text services provider Sms.ac) that rely on a web interface allow customers to view pictures and profiles before selecting someone to flirt with. Fabrice Grinda, CEO of mobile entertainment company Zingy, also talks of integrating a mobile component into Internet-based dating services that would generate a mobile alert when a potential partner is online.

The addition of location information adds a new dimension to finding your ideal mate. You might be traveling and use services like SMS.ac's smsClubs or smsFlirt to pick up a local sweetheart. Anecdotes speak of a service in Japan whereby you list your profile and preferred partner type and when someone who is deemed to be a good fit walks past you on the street, you both receive an alert on your phones. With a bit of luck, you won't have just nipped out to get

Continued on page 8 ►

Mobile Entertainment in Singapore

by Vishal Gondal

Singapore is a small island at the tip of the Malay Peninsula. It's a place where east meets west, and Asian heritage blends with modernity and sophistication. There are four official languages in Singapore: Malay, Mandarin, Tamil and English. English, the language of business and administration, is widely spoken and understood. Most Singaporeans are bilingual and speak their mother tongue as well as English. Thailand and the Philippines are short plane journeys away, and Singapore, with its airport served by more than 69 airlines, is very much the gateway to Southeast Asia

Singapore's commercial importance — as an international communications hub, as a test market and as a gateway to Asian consumers — is indisputable. For these reasons, despite a small, albeit growing, population of around only 4 million, Singapore has become an important business and telecommunications services hub for the region. The island republic has one of the most modern telecommunications infrastructures in the world with nationwide broadband services connecting schools, offices and homes.

Among the most popular activities for Singaporeans are shopping, eating and watching TV. Traveling on Singapore's MRT (rail system) will give you a good idea of how hooked people are on their mobile phones. It's a rare sight to see anyone without a mobile phone. The size of the local telecom industry is limited by the size of the total population. However, the pro-business Singapore government continues to encourage foreign talent to take up residence in Singapore, and the total population is expected to reach 5 million by 2015. SMS traffic here is also among the highest in the world, with 52% of mobile phone users using SMS more than once a day compared with the global average of 23%.

Mobile penetration is at 75.6%, roughly equivalent to three out of every four of Singapore's 4 million

Continued on page 6 ►

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Contents

Short messages

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Editor's note: Last issue we mentioned that Short Messages is undergoing a transformation into a "Month in Review" section. In that vein (and because of the notorious news slowdown during the holiday season), this month we're taking on the whole year. Next issue we'll be back with a look at the important happenings in January, so send email to leaks@wirelessgamingreview.com if you've got news that should appear here.

2002 in Review

A moment like Hillary and Norgay experienced on The Balcony. An emotion like Marconi felt in Villa Grifone. The mix of pride, excitement and respect for the effort still ahead that everyone encounters at the top of Heartbreak Hill. The pioneers of wireless games, the engineers at Nokia who got Snake on the 6100 series, the game developers who saw WAP and thought multiplayer, the managers and directors at operators worldwide who studied DoCoMo and advocated internally for data networks and content provisioning — all those people had at least one moment in 2002 where they thought they might reach their goal.

Just as the Alpine Club of Great Britain and the Royal Geographic Society saw no benefit from Hillary and Norgay's ascent to The Balcony, investors in wireless games efforts won't celebrate until their pioneers reach their ultimate goal and then climb down. But that's why investing isn't as cool as pioneering.

This year was one of rollouts. Network operators on four continents launched products that connected our wireless voice devices to the web, to customized content, to the creative output of thousands of artists, engineers and designers. Handset manufacturers rolled out, recalled, and re-rolled out millions of handsets for every consumer segment with money to spend. Software vendors launched, re-booted, and re-launched content distribution systems, OTA servers and provisioning systems. Consumer software companies endured bugs, glitches and long nights coding to bring out new products, prices, services, interfaces and brands.

2002 was a year in which wireless content was blessed by the most powerful beings in western civilization: the brands. James Bond, Frodo, Tony Hawk, AiAi, Crash Bandicoot, Tiger Woods, Ms. Pac Man, Nelly, Rayman, The Undertaker, Britney Spears, NSync and Eminem all came to mobile phones.

It was not a year for investors. Telecom investors continued to lose faith in their former darlings. Software companies once fueled by venture excesses slashed workers or shut the doors, or both. Game publishing companies had a giddy runup until June and ended up sliding into Christmas.

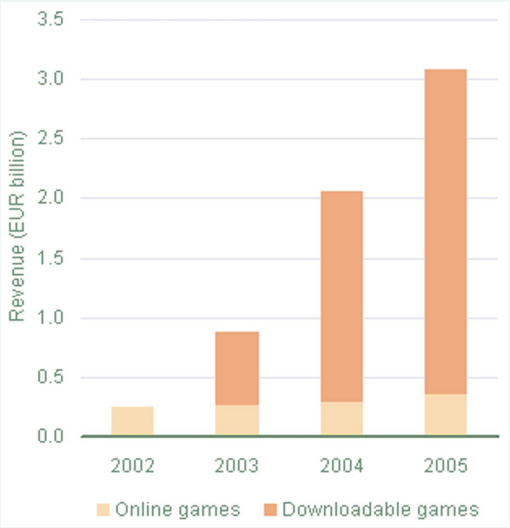
So while 2002 contained glimmers of hope, there is plenty more to achieve before mobile content can become even a small part of most people's lives. More people need to know that entertainment is possible on their phones. Devices, and especially services, need to be cheaper. We need a compelling game or two that will get people buying game-capable handsets the way they bought CD-ROM drives when Myst came out. Mobile service, both voice and data, has to work better. And all this must to be accomplished in an investing environment where capital is far from plentiful.

Still, looking forward, it's very conceivable that these goals and more can be accomplished in 2003. We'll see n-Gage, 3G, Everquest, the P800, plus color and cameras everywhere. The pioneers, re-invigorated by their glimpse of the summit, need to put their heads down again and keep going. But the goal is in sight.

2002 was a landmark year for mobile entertainment. The coming year will usher in the emergence of a full-fledged, mass-market industry. From all of us at WGR Media, thanks to everyone for your support and encouragement during 2002. Here's to an exciting, productive, rewarding and fun 2003.■

Stat!

Forecast revenue from mobile games services in Western Europe, 2002–2007



(Source: Analysys Research, 2002)

Old School Games

by Damon Brown

Atari. Intellivision. Commodore. The mere mention of these companies conjures up images of one-button joysticks, blocky graphics and random sound bleeps. Unlike the high-tech gaming available today, in the early '80s game designers and players were forced to use their imagination to enjoy a game. For instance, the Spiderman game released in 2002 has breathtaking visuals, a full soundtrack and dizzying camera angles. The original Spiderman for the Atari 2600 consisted of a red stickman shooting a wire at a green blob (the latter representing the Green Goblin).

Cell phone and PDA technology has forced game publishers to go into their archives for low-tech content. Most of us have fond memories of the classics, but is everyone ready to go back to the future?

That '80s Show

"We took 10 of our older titles and put them in Shockwave form on our web site a couple of years ago. They were played more than 100,000 times the first year," says Midway's Director of Worldwide Syndication, Sangita Verma. "They still love these games, and cell phones are the perfect format to play them on."

Midway is one of the old-school companies jumping on the wireless gaming bandwagon, taking its classics to the small screen.

Midway provided Spy Hunter, Joust, Defender 2 and Tapper for the Palm in 2001. Defender and Kick Champion were rolled out for the cell phones, both done in J2ME format, and Midway is looking at releasing "new" old-school games such as Mortal Kombat.

It also plans to expand into non-Midway titles for wireless systems. "Our approach is to not only use Midway games but other third-party ones," Verma says. "Just to give you an idea, we recently licensed (the Internet puzzle game) Bejeweled."

When asked if all the effort to translate old titles to a new product is worth it, Verma replies quickly. "I say a great game is a great game: Defender was great in the '80s and is great now. People want to play it."

"Another thing," she adds, "is the target audience is males 25-40, those that played it originally, and, considering they are the prime audience for cell phones and PDAs, it is a natural fit there."

> Defender was great in the '80s and is great now.

Game Boys

"Atari was attractive as it is a well-known and respected brand to the over-25 age group, which is likely to be the same age group for early adopters of Java devices," says Motorola's Senior Content Product Manager, Kenny Mathers, whose company, along with iFone, has licensed the Atari games catalog.

The consensus is that, at least from a marketing standpoint, the precious 25- to 40-year-old demographic makes old-school games on the mobile a given. The challenge is that this is also the target demographic for virtually every other game system. The average person in this age group has a PlayStation 2 or another next-gen system at home, and the hardcore gamer probably has a few systems to play on. Why would they want to play Centipede with a tiny keypad when they can enjoy epics like Grand Theft Auto 3 or The Legend of Zelda at home?

"When you're playing Final Fantasy X (for the PlayStation 2), it takes you two hours to figure out what you're doing," Mathers says. "It's not a bad game; in fact, it's an incredible game... but for cell users, they don't need to make a long-term commitment. (Eighties' games) are extremely accessible to everyone. If you only want a five-minute gameplay experience, you need the game to be immediately accessible."

"(However,) that may change," Mathers says. "Looking at two to three years down the line, cell phones will have aspects similar to (Nintendo's high-tech handheld) GameBoy Advance. There's so much opportunity. That's what made me and (Motorola partner) Juan (Montes) move to this type of gaming."

A Next-Gen Platform?

Motorola's Mathers and Montes exodus is most telling: at the beginning of 2002, both of them worked for gaming giant Sony, creator of the PlayStation. According to Mathers, wireless units are not only a solid platform, but a strong platform — even compared with the mighty PlayStation.

"Limitations that the technology imposes force greater creativity, as you won't be able to hide behind impressive graphics," he says.

It doesn't get much more creative than early '80s arcade games, so Motorola and iFone have licensed Atari's extensive game catalog for multiple cell phone platforms. In the fall Motorola released Asteroids, Pong, Breakout and Centipede for their V60i, V66i and T280i series. And, according to another Motorola spokesperson, these four classics plus at least six other titles will be released in Q1 2003 for Motorola T720, the color java device. As for other platforms, Mathers says that the goal is to have games "device agnostic" and that several other formats have been in trials.

Continued on page 11 ►

Technology Explained

Tap Tap Tap

by Cashman Andrus

The 12-key pad was introduced by AT&T in 1963, and since then it has become the undisputed standard for telephone dialing, both mobile and landline. Infamously, it was designed to be different from the standard layout found on calculators and typewriter keypads because engineers were worried that experienced touch-typists would dial too quickly for telco equipment to keep up.

Still, people have certainly gotten used to the 12-key pad, making it arguably the most widespread electronic user interface in the world today.

To go beyond mere dialing, mobile phones add a few special buttons. Most handsets supplement the 12-key pad with a pair of large buttons ("Yes" and "No," green and red, "Send" and "End"), two or four directional buttons for scrolling through menus, and perhaps a few more keys, such as one or two "soft buttons", a "clear" key, or a dedicated power button. Each manufacturer generally likes to put their own spin on the exact button set, and buttons have appeared and disappeared as phone software has changed. Furthermore, because these extra keys are generally laid out more for compactness and visual symmetry than for ease of use, most of us have to at least glance at the buttons we're pressing.

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: Informa Media Group

This lack of standardization can pose a serious problem for software developers, as it exacerbates the problem of porting from one handset to another. For many games, the 12-key pad is the savior because it is easy to map directional control to the 2, 4, 6 and 8 keys, while leaving the others free for diagonal movement, firing or performing special actions. For other actions, though, the 12-key pad offers no help in designing an easy-to-use interface – quick, which key means "pause", "quit", or "mute"? And even the 12-key pad is not a given, as the forthcoming Nokia 3650 shows.

One at a Time, Please

Another issue for game developers is the lack of support for "chording" in nearly all mobile phones thus far. Chording (strafing, multi-key press) is the ability to recognize when two keys are being pressed simultaneously. In most phones, if you hold down one key and then press another, only the first key will be recognized by the phone. If you're dialing a phone call, this behavior is a feature, since it's easy to accidentally hit a neighboring key. But if you're blasting a wave of incoming alien spaceships, this is a bug because you really do want to move while shooting.

As yet, I've seen only three handsets that properly supported chording, though I have high hopes that more are on the way. The three currently available are:

Innostream I-1000
(Asian GSM phone with TTPCom's WGE game engine)

Sharp GX-10
(Specially designed for Vodaphone's Live! Java game service)

Sony Ericsson T300
(Mass-market phone with Mophun game engine)

To enable chording, phones need to be designed to allow games and other applications access to discrete "key down" and "key up" events for all the available buttons. From a hardware point of view, this is not at all complex, but it can be difficult to achieve within the strictures of existing phone firmware. These devices are, after all, telephones first and foremost, so rewriting low level routines to allow third-party applications to access hardware events has not been a priority for manufacturers.

> ...there will be more pressure on handset manufacturers to offer a standard complement of buttons...

Most games get around the lack of chording by avoiding the need to perform two actions at the same time. Notably, in shooting games, this usually means there is some sort of "auto-fire," so the player can focus on steering. Some games just can't be played properly like this; for instance, in Defender a stray shot could kill the civilians you're supposed to protect. Games built for handsets with chording support don't have this limitation, of course, and can be more complex and more fun as a result.

Textual Healing

One aspect of telephone keypads that has received a lot of attention

over the past few years is text entry. Obviously, typing in full text using only a 12-key pad is not as simple as using a 101-key computer keyboard, but through a combination of improved phone software and lots of practice from users, it has become surprisingly manageable.

I've seen only three handsets that properly supported chording...

The simplest solution for text entry is "multitap" – pressing the "8" key three times to get "V," for example. Nearly every modern phone supports multitap: it can handle any word in any Western language (though with some variations in how different phones handle accent and other character sets), and with a little practice it is very predictable. Avid SMS-ers can get good enough so they don't even need to look at the display while they type: touch multitapping!

Most phones now also offer a dictionary-assisted text-entry method, Tegic's T9 being the most common, but Motorola's iTAP and Eatoni's LetterWise are also found. These systems use data about how letters appear next to each other to cut down on repeated key presses. Instead of multitapping, the user types one key per letter, and then scrolls through a list of alternative words that match those taps to choose the correct one. A distinct dictionary is needed for each language used, and names and other unusual words can cause problems, but on the whole these methods speed text entry. However, these text-entry systems are usually not available to third party applications, due once again to limitations in the way phone firmware is designed.

Still, to get up to anything like a normal typing speed, the only real solution is to have a button for each letter. To achieve this, there are several different approaches.

The now-classic thumbboard, found on devices like the RIM Blackberry, squeezes a full QWERTY keyboard into a space slightly smaller than a business card. The Blackberry thumbboard has been a real hit with users: it is easy to use, fast to learn and surprisingly quick after only a little practice. Other manufacturers have copied this approach, notably Handspring with their Treo Palm OS smartphones and Danger with the Hiptop. In a slightly larger form, Nokia's forthcoming 6800 phone offers a 12-key pad that conceals a flip-out thumbboard.

An interesting twist on the thumb keyboard comes in the form of Fastap – a new keypad design from startup Digit Wireless. Instead of forcing phones to become wide to accommodate a QWERTY layout, Fastap uses the spaces between the standard twelve keys to squeeze in a full set of letters.

Keypad Heaven

So what does the keypad of the future look like? There will likely never be a single answer to that, but we can expect to see a few trends. One force is the push toward standardization. As third-party applications become more important, there will be more pressure on handset manufacturers to offer a standard complement of buttons and to implement chording more widely. Standards bodies like the Open Mobile Alliance can speed this up by pushing their members toward common ground.

Another, superficially opposing, force is the tendency toward specialization. As mobiles become more than just telephones, a variety of devices that emphasize different aspects are emerging. We've seen

Continued on page 7 ►

Handset Highlights

Sagem myG-5

Modes: GSM/GPRS 900/1800
Price: free, with contract in many countries
Screen: 101 x 80 pixels, 256 color
Apps: ExEn 2.0
Available: now, in France

This phone is built for gaming, with a directional keypad layout, color screen, polyphonic tones, ExEn 2.0 game engine and a rock-bottom price, all while still not departing from the basic phone form. Don't be surprised to see more attempts in this vein in the next year or two.

Neonode N1

Modes: GSM/GPRS 900/1800 or 900/1900
Price: €500 (estimated)
Screen: 176 x 220 pixels, color touchscreen
Apps: Windows CE (but not Pocket PC or Smartphone)
Available: early 2003

The Neonode N1 is targeted at youthful consumers and offers powerful video and multimedia capability in a package the size of a credit card. The brainchild of a Swedish startup, it remains largely a mystery, except for what little can be gleaned from its Flash-encrusted web site.

Samsung SCH-V200

Modes: GSM/GPRS 900/1800/1900
Price: €500 (estimated)
Screen: 128 x 160 pixels, 16-bit color
Apps: Java
Available: early 2003

Samsung continues to steamroller into every possible technology niche, and handset families that span many of these technologies are emerging: the V200 is the European GSM Java phone with a camera, while the V100 is the same without the camera, the A600 and A500 are the CDMA Java versions, the A530 is the BREW phone.

NEC e808

Modes: GSM/GPRS 900/1800 and WCDMA
Price: UK£449 with contract
Screen: large, color
Apps: Java MIDP
Available: early 2003

3 (née Hutchison 3G) has finally taken the wraps off its new 3G service for the UK, offering, appropriately, a trio of handset choices. The most interesting is the NEC e808, which sports a full thumb keyboard rather than the more common number pad, making it kind of a folding wireless PDA.

Singapore

Continued from page 1

residents owning a wireless device in September 2002.

The main fixed-line telephone operators are SingTel and StarHub. Companies currently offering mobile cellular services are SingTel, MobileOne (M1) and StarHub. Virgin Mobile had entered the market with SingTel as a virtual service operator offering mobile services. But it exited the highly competitive Singapore market within months.

Operator	Subscribers in September 2002	Market Share	Data Services
SingTel	1.5 million	50.00%	SMS, WAP, GPRS, MMS, JAVA
MobileOne	1 million	33.00%	SMS, WAP, GPRS, MMS, JAVA
StarHub	0.56 million	17.00%	SMS, WAP, GPRS, MMS, JAVA

Source: Dow Jones

In the highly competitive Singapore market, data services have become so important for these operators that it is the only way to differentiate among the three telcos. In some cases, data services already contribute to 13% of postpaid ARPU. All this is happening at a stage where Java & MMS have not yet kicked off big time.

> The island republic has one of the most modern telecommunications infrastructures in the world...

Operators like StarHub offer free incoming SMS messages; most service providers charge between five and 10 cents in Singapore for messages sent and received. Mobile devices have claimed a permanent stronghold in the youth market, aided by numerous packages bundling free SMS messages with new consumer plans. On Valentine's Day, StarHub estimated a 20% increase in the number of SMS messages sent in Singapore as compared to traffic on other days. MobileOne quoted a high 3.7 million figure, while SingTel Mobile indicated 3 million Valentine's text messages exchanged. In another youth-oriented promotion, MobileOne customers can buy drinks from selected vending machines via SMS. SingTel partnered with Pizza Hut to allow the former's subscribers to participate in Pizza Hut's advertising campaign by sending personal information to the restaurant using SMS.

MobileOne recently went through a successful IPO and was oversubscribed 4.9 times. SingTel has a pan-Asian presence, with networks in Thailand, Indonesia, Philippines, Australia, India and Singapore. StarHub is moving to EDGE technology for faster data access speeds and, having merged with a major cable TV company, it plans to provide convergence services across its cable TV and telecom networks. Recently, SingTel became the first in Singapore to offer 3G video calls as part of its 3G trials.

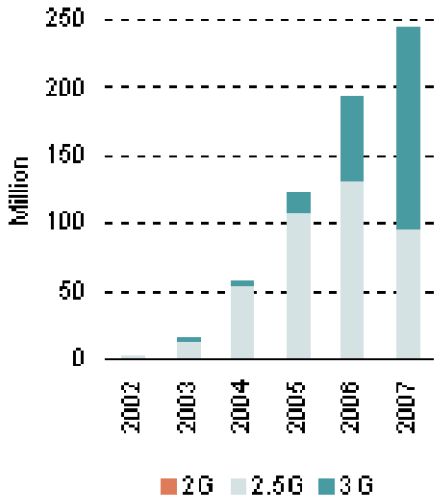
Plans to launch high accuracy, location-based wireless services have taken a major step forward following successful initial trials in Singapore. The trial, the most extensive of its kind in the Asia Pacific region, was supported by the Singapore Government through the Infocomm Development Authority (IDA).

Each of the telcos have implemented major initiatives to attract the best content to their networks. SingTel recently teamed with a host of companies and organized the Asia Java Mobile Challenge. They received more than 200 entries from around the world and selected 20 top content applications for trial.

All of the telcos have launched MMS services and were among the

Stat!

Forecast number of MMS-equipped handsets in circulation in Western Europe at year end, 2002–2007



2007 (Source: Analysys Research, 2002)

first in the world to announce an initiative for MMS delivery across their networks.The download rates for games range from SG$2(US$1) to SG$6 (US$3) per download, and the download numbers are already in the thousands per month. MobileOne has been among the few telcos in the world to launch differential pricing for games, e.g., SG$6 for unlimited use and SG$3 for 20 uses.

The SMS version of "Who Wants to be a Millionaire?" which was carried exclusively by MobileOne, earned the company millions of dollars in revenue.This success has prompted many other branded content owners to launch SMS and WAP games in Singapore.The latest brands to make the foray are the BBC's top rated "The Weakest Link," "Star Trek: First Duty," "Top Gun" and "Alien Fish Exchange."

Apart from the telcos, many aggregators, such as Club Nokia, Yahoo, MSN and Catcha, are selling content like ringtones, logos, picture messages using IVR and premium SMS services.

Content providers are well-respected in Singapore, and the telcos make sure that the content providers are happy. But at the same time they are very demanding and quality conscious.

One can easily count Singapore among the mature mobile data markets in the world, and it is surely a place that no mobile content owner can afford to ignore. ■

Some web sites to refer to include:

http://www.miworld.com.sg

http://www.yahoo.com.sg

http://www.starhub.com.sg/geefundownloads/

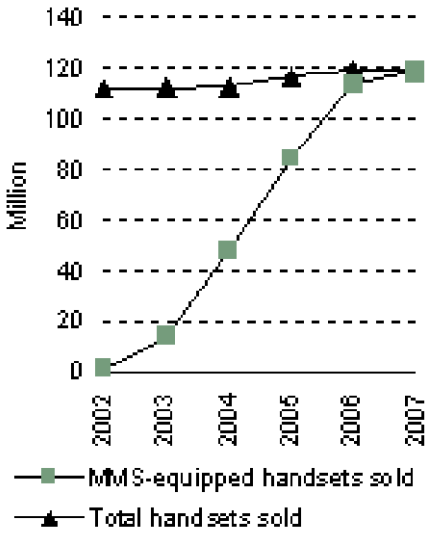
http://club.nokia.com.sg

http://www.catcha.com

http://home.singtel.com/javagames/index.htm

Stat!

Forecast number of MMS-equipped handsets sold in Western Europe per year, 2002–2007



2007 (Source: Analysys Research, 2002)

Tap, tap, tap

Continued from page 5

phones focused on SMS messages, email or music for years, and now models that specialize in gaming, photo messaging and web browsing are starting to appear. Manufacturers are playing with new form factors and feature sets, and all sorts of creative approaches are being shown. As successful designs emerge, we can expect to see families of similar devices that cluster around each market niche.

An analogy can be drawn to desktop PCs and game consoles. PCs and consoles are made up of the same technology and components: a circuit board packed with computer chips, wired to an optical drive and a big glass CRT. Both are programmed the same way and can run most of the same software. But the standard user interface and mode of use is quite different for each of them. PCs have a single keyboard and mouse, while consoles have two (or more!) game controllers, each with a joystick or two, a four-way directional pad and a panoply of buttons. Because of their different input hardware, PCs excel at solitary games, text chatting and complex simulations. Consoles, on the other hand, are all about head-to-head competition, shouting at your buddy next to you on the couch, and twitchy racing games.

As mobile devices become more complex and more common, that same kind of branching will occur. What will the niches be? It's too early to say for certain, but gaming, text messaging and photo/video look like good bets to start.■

Mobile Dating

Continued from page 1

some milk with an overcoat over your pajamas and your hair looking like a bird's nest when that happens.

A service offered by UK mobile marketing company Carbon Partners, called Time To Flirt, adds a bizarre twist to the "the thrill is in the chase" phenomenon. As John Farmer, Carbon Partners' director, explains, an event is held in a pub, club or student union bar. "People sign up to a central number and are allocated a big bright badge with a short code on it for the night." You can then text message anyone you like the look of. "It's tremendously successful and very good fun," he claims.

> ...flirting is one of the two most popular services his company offers.

Once you've met someone you like, operators hope you will find your mobile device indispensable in working out whether you are truly compatible. For instance, Singapore's MobileOne (M1) offers a "Love Calculator" that may provide more guidance than simply staring into their eyes. Application developer Aspiro (which just signed a deal with MM02 for 41 of its applications) offers a '"Love Horoscope" service that advises you as to what will please a particular star sign. If you and your amour actually hit it off, you can woo them with a song dedication fueled by Comverse technology, currently used by operators in the Far East and Europe. Yishay Waxman, marketing director for Comverse' VoiCD platform, says that last Valentine's Day the most popular song was Stevie Wonder's "just called to say I love you." Presumably the same service can also be used to say, "Don't call me baby."

If you fail to hit it off with an actual human being you need not despair. Operators in Asia are finding success with virtual dating. For example, in Singapore, Mobile One's "I-Date U" real-time interactive game allows customers to pick a virtual partner from six different choices. The customer then plies his or her cyberpartner with pick-up lines and sweet nothings with the aim of achieving specific goals. For instance, if you've chosen to date Alice, a top model, your aim is to get to the stage of announcing the relationship to the press.

Operators polled would not release usage figures for these services. According to Greg Wilfahrt, executive vice president and cofounder of Sms.ac, flirting is one of the two most popular services his company offers. Sms.ac charges users per message sent (although the amount varies according to geography), while for I-Date U, MobileOne charges US$0.30 per SMS sent or $0.50 per WAP access, in addition to airtime charges. Its Love Calculator costs just US$0.50 per SMS sent. Other operators charge only their regular SMS transfer fee, although it's worth noting that in some markets users get large amounts of free messages as part of their prepaid plans.

John Farmer says CosmicCupid, their SMS flirting service, isn't a revenue generator for Carbon Partners but a means for them to keep their pulse on what mobile consumers will or won't buy. "It is a phenomenal service for engaging people to use the phone," he adds, "encouraging them to buy ring tones or use mobile chat." CosmicCupid has 130,000 registered users worldwide, among whom you can find anywhere from five to 750 flirters a day.

Not surprising, the majority of users of flirting services fall between ages 14 and 24. Nevertheless, every provider we interviewed mentions users in their 40s, 50s and 60s.

But Andrew Cole, SVP of the global mobile practice at Adventis, explains that some important distinctions need to be made. "People like Virgin Mobile — MVNOs and people targeting the youth market — consider it part of the cheeky stuff that they do," he says. (Indeed, both Virgin Mobile UK and Boost Mobile in the US plan to offer flirt services). But, Cole continues, "It's more difficult for the older single segment — the period of flirting tends to be shorter (because) they are looking for a partner versus the youth market, which will carry on using the service for a long time before they settle with someone."

It is at this point that cultural issues come into play. Zingy's Fabrice Gringa says you can copy what is doing well in Europe for the US market, especially because, he says, "online dating is probably more acceptable in the US than elsewhere". Indeed, this doesn't necessarily hold for other geographies.

> ...Time To Flirt, adds a bizarre twist to the "the thrill is in the chase" phenomenon.

"Dating" is a particularly American word and online dating is more acceptable in the United States. In other societies, dating is not the norm for cultural or religious reasons. Even so, Shiv Putcha, analyst with the Yankee Group's Wireless Mobile Asia Pacific Group, thinks that it is precisely in such cultures that mobile dating will do well. "It could be a mechanism for making contact in an environment that is not particularly conducive (to flirting or dating)," he says.

Local ethics and laws must also be considered. For instance, Ken Hyers suggests, the Chinese service that

Continued on page 10 ►

Games We Like

by Avery Score

Metroid Prime

A while ago, I was really unhappy that Retro Studios, a fairly new developer, had been entrusted with the task of recreating one of my favorite games of all time. I felt that this was a job that should be handled in-house by Nintendo, not outsourced to a company with whom they are merely partnered. I told my friends that Metroid Prime was doomed from the start and would damage one of my favorite videogame franchises the way I feel that the recent Star Wars films have damaged one of my favorite film series. I couldn't have been more wrong.

Metroid Prime is, hands down, the best game I've ever played. There is an incredible degree of polish in every aspect of the game, from the incredibly beautiful, expansive, moving landscapes — every inch perfectly sculpted to be interacted with — to the incredible gameplay mechanics and gadget system. Metroid is what a videogame should be: a work of art.

Metroid begins by rocketing you into the action. The first level does an amazing job of balancing tutorial with an almost self-indulgent display of how cool the game to come will be. As soon as you get the hang of the controls, you must rush to escape from an exploding base. My jaw was agape as I used grappling hooks, shot at an alien race of Space Pirates with an energy cannon and rolled up into the famous morph ball to avoid a swarm of cybernetic rats hot on my tail. During this introductory scene, you are blessed with almost your full compliment of tools and artillery. Unfortunately, when you are nearly crushed toward the end of the sequence, the majority of your equipment is destroyed. You gradually get it back, along with many new toys, by killing bosses throughout the game. Certain equipment is used to access certain areas of the map, and so you often must return to an already-explored part of Tallon IV, the planet where the game is set, because a new tool allows you to reach a previously inaccessible area. The magnetic ability of the morph ball, for example, allows you to climb up magnetic strips scattered throughout Tallon IV, while the charge blast for your blaster cannon allows you to more efficiently take out enemies and is also required to open certain doors.

> I told my friends that Metroid Prime was doomed from the start ... I couldn't have been more wrong.

One of the most intriguing aspects of Metroid is its science fiction storyline. An alien race called the "Space Pirates" has harnessed an element, Phazon, present on Tallon IV for use as a genetic mutagen. With it, they are creating new, more aggressive forms of existing species as well as a creature called a Metroid, which seems to be pure energy, something that it also can drain from Samus or any other lifeform. Phazon levels are skyrocketing on Tallon IV, ruining the environment in the process. Apparently, Phazon levels move in cycles on the planet, similar to the way ice ages happen on Earth. Your goal is to find out the nature of the Pirates' experimentation and put a stop to it. Almost every object in the game can be scanned using a special visor, revealing a new part of the plot in the process. In this way, you can choose to ignore the story altogether, or you can immerse yourself in it, examining your environment, creatures and computer consoles for clues from the past and present.

The attention to detail we see in Metroid surpasses that of any other videogame. If you stop firing after a trigger-happy few moments, you will see the heat rising from the barrel of your blaster, not in the form of smoke, but as hot air bending the scenery beyond it. Birds and airborne baddies move in realistic flight patterns, which becomes repetitious only when it is a part of the gameplay, as in one jumping puzzle in which two ridiculously fast flying creatures must be avoided.

Metroid Prime's graphics are the best I've ever seen. The lighting effects in the game are simply breathtaking, from the translucence of the shifting, perfectly rendered water to the incredibly realistic reflections on

Continued on page 10 ►

Mobile Dating

Continued from page 8

offers a schoolgirl option for a virtual cybermistress is not likely to fly in the US (at least not in a legal context). Andrew Cole at Adventis agrees that US operators are more conservative than, for instance, their European counterparts.

While there are fewer legal issues with mobile dating than with the provision of adult services, some providers do monitor what is being transmitted. "While these games are entirely 'fun' games and should be played in that spirit, M1 does reserve the right as the service provider to stop any player from further participating if he is found to cause embarrassment or annoyance to others," says a MobileOne spokesperson.

> ...a schoolgirl option for a virtual cybermistress is not likely to fly in the US...

Carbon Partners gets around this issue by limiting content to what they themselves provide, at least for CosmicCupid. "All messages sent between people are pre-configured by us," explains Farmer. "There is a degree of personalization available — people can compose messages from a series of drop-down lists." The company portrays this as a benefit to the consumer — that is, that they are helping with "coming up with the crazy lines." The company also has a chat service where people compose their own messages, and this service is monitored.

This consideration has been enough to persuade one operator, NTT DoCoMo, not to offer such services itself (though they are available via unofficial I-mode sites). "One reason is that, culturally, dating services have not been widely accepted in Japanese society. The other reason is the recent emergence of crime involved in dating Internet sites, as has been widely reported in Japan," says Miki Nakajima McCants, NTT DoCoMo spokesperson. Of course, most services render the user anonymous through the use of SMS IDs. Not only does this anonymity increase safety, it also adds to the thrill of the chase.

Key characteristics of mobile devices heighten this effect. "With an email-based system like Match.com, it may be days before you hear from someone or you may not hear from anyone at all," says Greg Wilfahrt at Sms.ac. "How cool is it that you can get a response instantly? And soon you will be able to see someone on the phone," he says. (Note: this writer didn't receive that instant of a reply to her smsFlirts, though she concedes this could have been because the lack of enticing profile information provided). Wilfahrt continues, "Romancing the phone is something people are really interested in. There's instant gratification, it's cheap and you can do it anywhere."

Private Media's Director of Wireless David Jarvis goes one step further with the psychological analysis: "It is a style of content that gives someone the opportunity for a one-on-one relationship with a person who likes them, who is attractive or who has something in common with him or her. It's the illusion, as with Internet chat rooms. It's about how you feel, even when you know in reality the guy you're talking to is old and fat."

It turns out that in some cases these (fat and old) frogs have turned into princes. Sms.ac and Sunrise report that numerous successful relationships have been spawned thanks to their services, although neither could boast of marriages and children.■

Games We Like

Continued from page 9

Samus' metallic suit, especially in morph-ball mode. The polygon count appears to be insanely high on both the landscapes and the character models. Surfaces are smooth and rounded. Everything is anti-aliased to perfection. The days of "jaggies" are over.

Although Metroid has third-person moments, and even the occasional side-view in morph-ball mode, it is, for the most part, a first-person shooter. Although this is typically a genre controlled with keyboard and mouse, it has been done successfully on consoles before. The previous standard of excellence was GoldenEye for the Nintendo 64. Finally, with Metroid Prime, 007 has been unseated as the holy grail of the console FPS. Metroid benefits from Yu Suzuki's brilliant controller design. The control scheme is seamless and Samus moves through her world fluidly and elegantly.

Metroid's soundtrack is beautiful. Kenji Yamamoto, the writer of the score of the original NES game, was tapped once again and the result is tremendous. As an electronica artist, myself, I was especially drawn to Yamamoto's beautiful tracks, ambient yet exciting, the atmosphere of each piece perfectly matched to its in-game setting. The music in the Phenandra drifts is especially gorgeous: subtle, yet catchy, with its some cool, echoey highs reverberating with a delay effect.

From start to finish, Metroid is a joy to behold. Sometimes, an objet d'art is such a piece of beauty that it seems to have a soul. Metroid is one such piece of art.■

Old School Games

Continued from page 3

Motorola, even with its faith in old-school gaming, is hedging its bets: Not only is Motorola offering classics like Missile Command and Combat as part of the dozen T720 games coming in early 2003, but it's also looking to release recent PlayStation hits like Stuntman. "Word of mouth and extensive use of demos will expose the content to the younger markets, and, once they play the games, I honesty believe they'll love it," Mathers says. "However, we do need to address the youth market with brands that will appeal (to them, like PlayStation games) V-Rally, Stuntman and Unreal."

Just the thought of complex, cutting-edge titles like Stuntman and Unreal on the cell makes one realize where former game designers like Mathers see the platform going. Idealism only goes so far: recreating old-school games on a weaker platform is, in a sense, a chance to focus on addictive gameplay, but eventually we all want wireless XBoxes and GameCubes so we have a choice whether we want to play Centipede or Final Fantasy X.

One place that may always have a craving for old-school games, regardless of the newest gaming technology, is Japan. The main reason is cultural: most Japanese have a daily commute, hence the boom in cell phone use, but it is not necessarily long enough of a commute to require a complex gaming experience. The average commute is perfect for a handful of Pac-Man sessions, but hardly enough time to enjoy a long game of Final Fantasy.

Old school cell phone gaming has been a staple in Japan for a while: companies like Namco were bringing fully-realized versions of Pac-Man to Japan when Americans were still marveling over Snake. Now there is a nice niche of second- and third-generation arcade games that have been coming to mobile. While we relish early '80s hits like Centipede and are just starting to get more mature old-school games, the Japanese have been enjoying titles like Capcom's 1943 and Sega's Space Harrier, both circa 1986, since 2001. Quarter-munchers such as Capcom's excellent Ghosts 'n' Goblins, also released in the arcades around 1986, are from an era where arcade games were both brief and immersive; the perfect combination for today's mobile gaming.

Remember the Time

Old-school gaming may make wireless units the platform of choice in the future, if only for one reason: the old-school video game systems don't exist anymore.

> "Limitations that the technology imposes force greater creativity, as you won't be able to hide behind impressive graphics..."

"I still get fan mail today, much of it from younger gamers who have been introduced to my games by their parents, teachers, etc.," says game designer Scott Adams. His classic text games, such as Pirate Adventure and Adventureland, were released more than two decades ago on MIA platforms like the Commodore VIC-20. Now gamers won't have to hit the garage sales: those two games are on the WAP platform via Digital Bridges, with more possibly on the way.

Adams admits that the game is a little different ("It looks like quite a bit of graphics were added to Pirate Adventure."), but, considering it is a text adventure on a keyboardless cell phone, he's pleased. "I had little to do on the project, but I had final creative authority. The conversion team did such a great job."

THQ Mobile Producer Stuart Platt also hopes to keep you away from garage sales. Last year the company resurrected Intellivision, one-time rival of Atari and ColecoVision. Lots of games have rolled out since Spring 2002 for various Nextel, Sprint and Motorola phones, including Astrosmash, Shark! Shark!, and Skiing. Though it is often considered an also-ran, Platt says that Intellivision's game catalog is remarkably strong.

"The great thing about Intellivision was that most of the games were original titles and not licensed properties," he says. "The competing systems of that era had mostly licensed titles and did not push many original titles. A good example is the ColecoVision. I believe Coleco only published a handful of original titles."

The Intellivision license gives THQ access to more than 50 games, making it possible for THQ to continue to release old-school games well after more complex wireless games are possible. Platt says that they even toyed with the idea of making unique games using the Intellivision game engine.

"Look at the popularity of games like Snake. Snake is probably the simplest game available on a mobile phone. I think most users who play games on phones are looking for great gameplay and relatively simple graphics," he says.

Platt doesn't deny that next-gen platforms aren't incredible. It's just that old-school games provide an experience that newer ones can't.

"Today's games are great. I own all of the new consoles and probably spend too much money on games," Platt says. "(However), the fact is I still often find myself itching to play a game of Galaga or to turn on my Intellivision and play a game of Astrosmash."■

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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.