Volume 1, Number 3, September 2002

WGR Presents:

Mobile Entertainment analyst

In-depth coverage of the wireless entertainment business

MMS DOA?

by Elizabeth Biddlecombe

Mobile operators are starting to launch services based on the delivery of color graphics, photos, and eventually video, as well as text in messages of unlimited length.

But will consumers care about these Multimedia Messaging Services (MMS)?

They do already if they are in Japan, where camera phones have spurred a second tsunami of mobile data uptake. J-Phone has been offering its "Sha-mail" camera phone service (actually based on wireless email, not the MMS specification) since late 2000. In August 2002, J-Phone announced that nearly half of its subscriber base – more than six million people –were using the photo-phone service. Meanwhile Docomo, which only launched its service in June 2002, had already shipped 1.05 million units as of August 16.

But as we know, Japan is a unique case, given the local predilection toward mobile phones, mobile data, graphical content and the regular purchase of electronics. "The idea that a quarter of subscribers to one mobile phone company would change their phones in one year [anywhere else] is pushing it a bit," says Dario Betti, an analyst from London-based consultancy Ovum. Ovum also suggests that J-Phone's handset subsidies have been an important factor in its success.

According to John Carmody, Product Manager, Multimedia Messaging Services at Tecnomen, which makes MMS platforms, most MMS deployment activity is currently happening in Europe. Some nine operators have launched MMS-based services to date and many more have announced MMS supply deals.

And, indeed, Ovum predicts that Western Europe will generate some US$29B in revenues come 2007, versus just under US$20B in Asia Pacific and around US$15B in the US.

But with an average of 62% with prepaid usage in Western Europe, according to Strategy Analytics, operators need to ensure MMS availability to this user group, something that is not currently in place.

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Sprint Vision Launch

by Matthew Bellows

Ever hear of a perfect launch? Not in the world of technology anyway.

Sprint's Vision launch on August 8, 2002, was the most ambitious in U.S. wireless history, but it wasn't perfect. For the first time, a U.S. carrier launched a nationwide, brand new network with dramatically faster throughput, a couple of market-leading devices, and a host of new services including content from outside content partners. Some things were bound to go wrong. But for the most part, Sprint's Vision launch offered both its prospective customers and the mobile entertainment industry a lot to get excited about. Whether pure excitement alone is enough to get consumers to buy new phones and new services is a separate question. For now, let's examine the Sprint Vision launch.

The Troubles

To judge by user reports on Usenet, the comments of journalists reviewing the new services, and our own experiences, the first couple of weeks of Sprint Vision was not pretty.

The main complaints centered on customer service and network availability. During the first few days of the launch, representatives at Sprint stores hadn't had proper training on the Vision product line. When we tried to buy into the Sprint Vision two days after the first phones arrived, it took nearly 30 minutes and all five employees to get a phone provisioned. The staff themselves complained that they had barely been trained. Some of the Usenet posters on alt.cellular.sprintpcs not only struggled with an undertrained sales staff, but also found their newly purchased service improperly provisioned and customer service unable to help.

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Mobile Entertainment Forum Endorses MEA

On September 6th, the Mobile Entertainment Forum (MEF), a global organization of top entertainment and mobile companies, announced their endorsement of WGR Media's Mobile Entertainment Analyst publication. Since we write and publish the MEA, we can't pretend to objectively bring you analysis on this announcement. We're very happy to begin work with such a well-respected trade association.

MEF Chair Rann Smorodinsky and Cash-U Co-Founder said about the endorsement, "The mobile entertainment sector is evolving and expanding extremely rapidly. Communicating the messages of this volatile sector requires knowledgeable and expert channels. In its short existence, MEA has demonstrated its expertise in and commitment to this sector. The MEF is happy to collaborate with the MEA to help communicate the industry's emerging culture and lexicon, and to accelerate its growth."

"We're proud to be associated with the MEF," said Matthew Bellows, publisher of WGR Media, which produces the Mobile Entertainment Analyst and the website WirelessGamingReview.com. "The Mobile Entertainment Forum tackles key commercial, legal and technical issues that our industry faces. It also provides valuable resources to help spur advances in mobile entertainment. I'm glad to extend the news and analysis of the Mobile Entertainment Analyst to MEF members."

MEF General Secretary Rimma Perelmuter said, "I am particularly impressed with MEA's attempt to cover the comprehensive range of important mobile entertainment areas. The MEF and the MEA's joint efforts in this area will undoubtedly allow the industry to identify the right opportunities for capturing the consumer and generating revenue."

MEF US Chair Ralph Simon commented that "MEA will facilitate the efforts underway in setting up the MEF in the USA. Working closely with mobile technology groups, distribution channels, telco networks, handset manufacturers, and a broad array of entertainment companies, the L.A-based chapter of the MEF will prove to be a helpful, if not essential, tool for Hollywood to take advantage of the emerging mobile entertainment industry.

The European and Asian experience has shown U.S. movie, music, TV and advertising businesses the potential for profitability in this emerging mobile entertainment field. All of the major telco carriers are enabling their infrastructure and networks to provide consumer-captivating mobile entertainment to the 145 million phone subscribers in the U.S. and Canada."

The two groups will coordinate joint marketing initiatives and event participation as well as collaborate on future industry initiatives. MEF members will lock in MEA launch rate discounts ($495 for 12 issues) for as long as they maintain their membership.

About WGR Media

A publishing and research company focused exclusively on the mobile entertainment industry, WGR Media (WGR) publishes the Mobile Entertainment Analyst and the website WirelessGamingReview.com. The Mobile Entertainment Analyst is a monthly publication that brings news and analysis to mobile and content executives worldwide. WirelessGamingReview.com previews, reviews and reports on the latest and coolest innovations in mobile gaming.

About the MEF

The Mobile Entertainment Forum (MEF) is a global and open cross-industry trade association representing all elements of the value chain for the delivery of Mobile Entertainment to the consumer. Established in February 2001 by the leading forces in the fields of entertainment and mobile value-added services, our mission is to provide a vehicle for all players in the value-chain of mobile entertainment to drive the industry's commercial potential including expediting its revenue streams and working to resolve its various commercial, legal, and technical issues.

Tokyo Tama Part One: Insights on the Japanese Mobile Market

by David "DC" Collier

I recently finished a meeting with a Japanese carrier to which I had invited a sales rep from one of the U.S. companies I work with. Afterward, the carrier thanked me. They said they had found it fun to meet one of those pushy American sales types. They'd heard about them but never before met one in person!

Japan is a strange place to do business, yet it embraces foreign culture more than anywhere else I have ever been. There are Japanese companies that have banned their own language and insist that all meetings are held in English.

Similarly, foreigners need to be fluent in the language of Japanese mobile business. Coming world standards like Java are going to create an amazing single international marketplace for applications, but it's necessary to understand the Japanese mobile market if you want to do business here. Kanji can be confusing, but the pace at which wireless is moving is sometimes even more daunting.

This article, the first of a two-part series, presents an overview of some of the trends and info nuggets about the amazing whirlwind of Japanese mobile content.

Menu Ranking

It's really easy to see which apps are doing well because the DoCoMo menu listing is in order of popularity. J-Phone takes a much stranger, chronological approach – so the newest services go at the bottom of the list. However, new services also are featured on a "what's new" page for a couple of weeks after launch, which is actually where a lot of savvy Japanese users go every day.

Above the Fold

Menus are generally grouped with three or four sites on the main page, and then everything following after a link. For example, the top four games in each category are displayed on the "Games 1" menu.

For many apps, this becomes a self-reinforcing loop, as new customers often go for whatever is at the top of the menus. For example "Pokemelo Joy" is the No. 1 ringtone site, and "renai no kamisama" (The God of Love) has remained the No. 1 fortune-telling site. The popular sites gradually gain a larger and larger distance from sites that appear "below the fold." For example, the mini-games category has more than 250,000 users each for the top three sites, and 20 thousand or less for sites over No.5.

If this cycle is repeated in the U.S., then early mover companies may actually reap an advantage rather than end up with the standard arrows in their backs.

Game Packs

The trend in Japan is to sell games in bundles. For example, on DoCoMo's i-mode "Games 1" menu, the top two categories are "Game Pack" and "Mini-games." An interesting pricing mechanism has developed for these. DoCoMo doesn't have an "event-based" billing system – everything is by monthly subscription. So to prevent people from un-subscribing, these sites keep adding new games each month. One very successful site in this category is G-Mode's "petit appli," which has a total of 60 games. However, you can only pull down three games per month for your 100-yen subscription and the games are time-bombed to keep you coming back to the site.

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G-Mode is a wireless pure-play startup, but it placed its bets judiciously on a few licensees (such as Tetris) – to use as an icebreaker for new customers. They announced profits of US$2M on turnover of US$10M last fiscal year, so that implies there is some profit in this business even in a very mature market.

(http://www.g-mode.co.jp/en/servicedocomo/i02b_list.html)

Hudson and G-Mode have been duking it out for the No. 1 position in this category. Hudson has taken the rather scary step (for publishers) of an "all you can download" pricing model for its chyakushin appli site. This site has some really excellent games, such as SimCity mobile, Bomberman and many more.

Given that my P504 phone can store nearly 100 of these 10K games, you might expect to see people signing up for one month, pulling down a ton of games and then unsubscribing. In fact, providers do see this pattern, but at the start of each month a large number of the same users then sign up again — lured in by the new games.

(Hudson: http://www.webbee.net/mobile/imode/iapp/index.html)

Usage Patterns

Because all billing is at the end of the month, rather than based on a month of usage, there is a huge bump cycle where many users sign off just before the end of the month. But most services see a good percentage of users stay with them and so, over time, the core user base steadily grows. Also, the peak usage for these games is not commute time but between 10 p.m. and 1a.m., when people are at home.

Continued on page 6 ►

Technology Explained

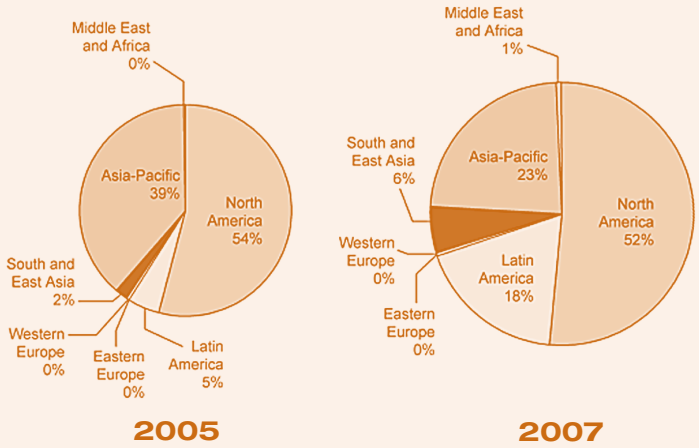
Play that Funky Music, Ringtone

by Cashman Andrus

What is the most lucrative mobile content in the world? Ringtones, of course. These little snippets of pop hits and nostalgia songs are by far the most used, most paid-for downloaded content in wireless today, and this is only the beginning. While monophonic tones are the norm, the polyphonic revolution is well under way. Killer audio capabilities will drive handset sales, ringtone downloads and even better quality games.

Stat!

Distribution of cdma2000 connections



Source: Mobile@Ovum

Mono Has Caught On

The vast majority of the world ringtone business is, for now, in monophonic ringers. These are the simple, shrill sounds that make up both the built-in ringers on almost every 2G phone and the many, many ringtone sites that clog the Web. If your attempt to sing along with the ringer comes out something like "dee dee la tee tee," you're hearing a monophonic tone.

There are several different formats available for mono tones, most tied to particular manufacturers. By far, the most popular is Nokia's RTTTL format (recently updated and renamed RTX), with Ericsson's eMelody /iMelody running a distant second. Other manufacturers have their own standards, but there is little content available for them.

These mono tones are usually distributed via SMS. Because a mono ringtone is little more than a list of notes and their lengths, SMS's 160-character limit is more than enough. For example, here's the RTTTL version of "The Girl From Ipanema," in 107 characters:

GirlFromIpane:d=4,o=5,b=160:g.,8e,8e,d,g.,8e,e,8e,8d,g.,e,e,8d,g,8g,8e,e,8e,8d,f,d,d,8d,8c,e,c,c,8c,a#4,2c

It's also possible, with many phones, to get tones using a cable or infrared connection to a PC. As well, some phones come with ringtone composer applications embedded, which many people use to key in tones they find on the Web.

Polyphonic is the Next Wave

A major step up the musical fidelity ladder, polyphonic tones include multiple simultaneous notes, or "voices". The technology of polyphonic tones stems from the MIDI ("Musical Instrument Digital Interface") format, first codified in 1984 as a standard for linking professional music synthesis equipment via serial cable. Today, 4- and 16-voice polyphonic tones can be found in nearly all phones currently sold in Korea and Japan, and are just starting to emerge in the rest of the world.

MIDI specifies a standard way to transmit the "sheet music" version of a sound. Each voice has pitch, length, tempo and timbre specified and the whole set of voices is synchronized to produce a unified sound. Timbre control means that each note can sound like it's been made by a specific instrument – flute, snare drum or piano, for instance – so the result can be a virtual orchestra when done well. (When done poorly, it sounds more like elevator music made on a $19 electric keyboard.)

There are a variety of new polyphonic formats based on MIDI, but Scalable Polyphony MIDI (SP-MIDI) is emerging as the most widespread standard. As the official recommendation of the MIDI Manufacturer's Association, it enjoys support from a variety of handset manufacturers and content creators. The cool thing

> If your attempt to sing along with the ringer comes out something like "dee dee la tee tee," you're hearing a monophonic tone.

about SP-MIDI is that it lets a single ringtone sound good on a variety of different devices. To make this happen, the content creator specifies how the tone is to be played when only limited voices are available. For instance, a 16-voice tone played on a 4-voice device will play only the most important four voices. It doesn't sound quite as impressive, but it works well. Nokia's 7210 and 3510, Sony Ericsson's P800 and Danger's Hip-

top will support SP-MIDI using an audio engine developed by Beatnik Corp.

MFi ("Music For i-mode") is NTT DoCoMo's spec for 16-voice poly tones, and it has appeared in millions of i-mode phones sold in Japan. While i-mode is starting to appear in Europe and promises to come to America, so far only DoCoMo's handset partners have shown interest in supporting this format. Even that support may be eroding, as the Toshiba T21i (the second Euro i-mode phone, after the NEC N21i) does not support MFi, only SP-MIDI.

> ...not surprisingly, many of the top players in ringtone composition got their start making songs for karaoke machines.

Other poly tones formats include SMAF ("Synthetic music Mobile Application Format"), developed by Yamaha, and CMX ("Compact Media Extension"), developed by Qualcomm and supported by Rohm. Both are found in an assortment of handsets, but they have yet to snag serious worldwide support. SMAF is used by several other Japanese operators, and appears in Europe on Samsung's T100, among others. CMX is at the heart of Sprint PCS's ringtone download service, with content licensed from The Music Solution, Ltd.

Games are also starting to use polyphonic sounds when supported by the hardware and the phone APIs. Some good examples include Cybiko's MotoGP on the Motorola i95cl Java phone (the throaty rumble of your racing bike rises to a whine as you accelerate; you can hear the cowbells of the fans as you round the turns) and Rally on the Innostream I-1000 phone with TTP-com's WGE (lively background music keeps the action going).

No matter the precise format, polyphonic ringtones are significantly larger than monophonic sounds. Most tend to be in the range of 2-10 Kb, which is between 10 and 100 times larger. Thus, instead of sending through SMS, polyphonic tones are usually downloaded via WAP (though cable and infrared are also possible). So far, no phone has shipped with an embedded polyphonic composer because it would be quite a feat to specify and synchronize a multivoice tone on a phone interface.

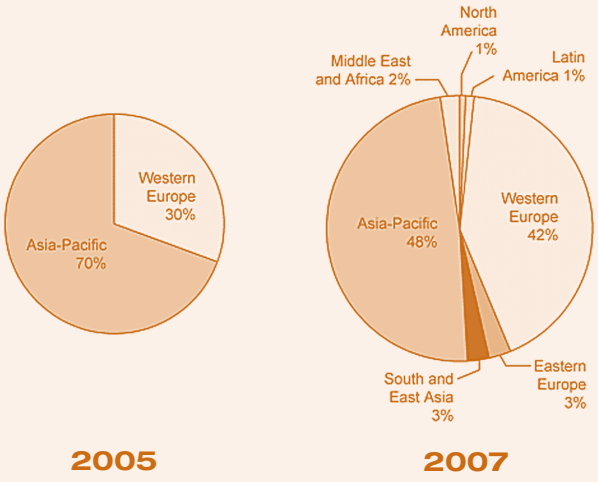
Distilling the Essence of a Sound

Composing tones requires a special combination of musical artistry, technical skills and black magic. Turning a three-minute pop hit into a 45-second MIDI track requires a good ear for music and a good sense of what grabs the listener. Perhaps not surprisingly, many of the top players in ringtone composition got their start making songs for karaoke machines.

Also not surprisingly, others are doing their best to replace or augment the human component with software. Nellymoser's Sereneta demo, for example, lets anyone call an IVR system, sing a tune into the phone, and have it automatically converted to a ringtone and sent to their phone. It's only monophonic for now, but the same technology could be used to generate polyphonic tones directly from a song recording.

Stat!

Worldwide W-CDMA presence



Source: Mobile@Ovum

But even with a good MIDI composition, the conversion to ringtone is not a simple process. The long list of different formats above (another example of "The nice thing about standards is there are so many to choose from"), combined with variations in hardware, means that each ringtone needs to be tweaked for each handset. So far, most polyphonic composition has focused only on the relatively small Japanese and Korean markets. It will be very interesting to see how the industry deals with scaling ringtone production to cover the whole globe. Will we all one day be singing the same happy tune? ■

Tokyo Tama Continued from page 3

Unofficial Content Aggregators

As Michael Thuresson wrote in MEA #2, free, or "Creator" sites, as they are euphemistically called in Japan, are gaining popularity. These sites provide indexes of popular games created by developers who posted them for the fun of it. People can hit these sites and email the URL to their phone to download the games. Some of these sites are provided by official content providers as a kind of supercharged developer program where they can later scoop off the best content to charge for it.

(Bandai: http://www.apptama.com/)

(Giga Appli: http://www.g-appli.net/)

(Spicy Vector/AppGet: http://appget.com/pc/)

Because these are unofficial sites, most of the downloadable games sit on the open Internet as opposed to behind a members-only gateway. If you have an interest you can download an emulator like the Zentek I-jade and then type in the URL of a jam file to launch a game directly. So you can play Java games anywhere in the world without paying packet fees to DoCoMo!

Stat!

Category	Q2 2002
Minutes of use (more than 500 monthly)	
Young adult users (18-24)	35%
All users	20%
Frequency of use (5 or more calls/messages made/received daily)	
Young adult users (18-24)	62%
All users	47%
Overall wireless data usage (e.g. SMS, wireless Internet)	
Young adult users (18-24)	45%
All users	22%
High churn risk users	
Young adult users (18-24)	16%
All users	12%

**source: Telephia/Harris Interactive*

Going from Unofficial to Official

Getting official site status is the only way to get paid. Showing that new companies can break through, developer Teruya started off by putting up a free game site that became very popular. DoCoMo took notice and then granted it official site status. Although they don't feature prominent brands or licenses, the Teruya games consistently get high ratings for playability.

(http://www.teruya.co.jp)

Another service that managed this transition was ImaHima, a friend-finding service. However, due to DoCoMo's restrictions on dating-type services, the official service requires you to know your friends' birthdays to add them to your buddy list. But on the unofficial site you can just search by area and find other people in your neighborhood who want to chat, hang out or hook up IRL. And that service is free.

(http://www.imahima.com/index.jsp)

Paying through the Appli

Usually, games gamers subscribe to games through the browser interface, and then download the software. This is one of the weaknesses of Brew in its current incarnation, where applications can only be promoted through a small listing or icon in the Brew store.

DoJa 2.0 allows a Java app to invoke the browser, and pass it a URL. So some apps are now using this technique to allow the user to download and try a free version of the game, and then launch the browser from the game later to pay for it.

Game Characters Used for Other Mobile Apps Extensions

Seaman, that charming sarcastic Sega character, is now being used by KDDI as a messaging application that is a little like a version of e-vite that insults your friends. This is a trend. Bandai also has a mascot character called Shige Shigeo that gyrates and shakes his booty in 3D while reading news or acting as a C-Mail messenger.

Cheeky Games!

Japan has a great tradition of erotic games on the PC, and this has also continued on mobile.There is a whole weekly magazine dedicated to mobile porn, a sign of a real market!

One of last year's fun games was "Shit Panic," in which you have to capture brown lumps in a toilet. Reminiscent of Kaboom!

(http://neko.zone.ne.jp/i/img/UnkoPanic.gif)

And this, from the country that brought us the remote controlled washerette…

(http://members.tripod.com/~Inge7/index-5.html)

More Next Time

This is part one, but I'm preparing more bullets from Japan. Check out MEA #4 in October. ■

Games We Like

by Avery Score

In celebration of the new Gamecube titles, let's check out the latest Mario game. This title has already sold 350,000 units in 10 days.

Super Mario Sunshine by Nintendo for the Gamecube

I never expected to start a Mario game already wanted by the cops. I also never expected Mario to be convicted of a misdemeanor and sentenced to community service. Can Mario clear his name and salvage his Dolphin Island vacation with Princess Peach?

We last saw Mario in Luigi's Mansion, trapped inside a painting at the hands of (you guessed it) Bowser. In Mario Sunshine, the world's favorite blue-collar hero has been blamed for graffiti throughout Dolphin Island. This vandalism has scared away the island's guardians, the Shines. Shines are exactly like the stars from Mario 64.There are even 120 of them. Mario must clean up the graffiti, find the real culprit, and uncover the true story behind this madness.

Mario Sunshine is much, much more than a graphical update to Mario 64. Play mechanics have been totally revamped. The main source of this innovation is a multi-purpose water pump, designed to help Mario clean up the island. In addition to its default, squirt-gun-like function, the water pump can help Mario hover, Jet, use Turbo, etc. It even shouts advice like that kid sitting in front of you at X-Men, yelling for Wolverine to "use (his) claws!" Cro-Magnons were the first Homo sapiens to use tools. Neanderthals probably were restricted to jumping on enemies' heads. Mario seems to be mirroring this evolution and it's a good sign.

> Mario's new control scheme is, on the whole, elegant.

Striking, too, is the size of Mario's new world. Mario 64 took place in a mansion. Mario Sunshine takes place on a whole Island. Levels are longer here and the overall difficulty of the game has taken a welcome step up. This is an older, more experienced Mario, and that's a perfect match for an older, more experienced gamer who remembers playing Mario on the NES.

As much as Mario 64 broke ground and defined the 3D platform, Sunshine is where Mario comes into his own in the third dimension. My main issue with Mario 64 was the camera. In Sunshine, the camera controls are pretty damn good.Thanks to the addition of the c-stick, the player can achieve the exact view desired.The horizontal axis of the stick controls the viewpoint and the vertical axis controls zoom. The L button can also be held down to allow Mario to look around using the main analog stick.

As great as these new features are, however, they can be a bit difficult to master. The joystick is inverted when controlling the pump's water flow, similar to its inversion in Luigi's Mansion for the vacuum cleaner. This is not necessarily a welcome feature and, to my mind, it unnecessarily complicates gameplay. Nevertheless, Mario's new control scheme is, on the whole, elegant.

> I don't care who you are or how you like your hamburger cooked – you'll enjoy this game.

Mario Sunshine succeeds because its gameplay and premise has truly universal appeal. I don't care who you are or how you like your hamburger cooked – you'll enjoy this game. Miyamoto has done us proud once again, folks; and this time, Mario is armed and dangerous. He never had to meet with his parole officer, but I'm sure that took place off-screen.

How to Get Started: Running and doing a series of jumps gets you higher. Running in one direction, then switching to the opposite direction and jumping performs a cool and useful jump. This allows you to jump high in a limited space. Mario can jump off walls by pressing the A button while flying toward one. When in between two walls, Mario can gain height by jumping back and forth. Listen to advice from your water pump for help with its operation.

When you first land on the island, there is a sludge monster to defeat. Get the water cannon and aim its jet into the center of the sludge. A man-eating flower should rear its ugly head. Aim your stream into its mouth when it opens.

What to Look For: Mario Sunshine revitalizes an aging genre with a sweet new graphics engine and numerous fun gameplay additions.

What to Ignore: Mario's inverted control for the water pump is a pain. Also, there's too much reliance on jumping puzzles in places. ■

London Calling

Distribution Channels in Europe

by Jamie Conyngham

So how are wireless games going to be sold to the end user in Europe? It's all well and good to project wireless game revenues as being huge by 2005, but how are these projections actually going to be made into reality?

It's clear that there will be multiple sales and marketing channels to consumers for games. From what I can see, the largest sales channels will be owned by carriers, handset vendors, third parties and games publishers.

Carriers

In my last MEA article, I talked about carrier marketing programs currently underway in the UK. This month, I survey the various sales and marketing channels currently developing in the UK and Europe. The infrastructure and technical methods for connecting carrier-distributed content with customers was addressed in MEA #2 by Cashman Andrus' "Technology Explained" article. For a summary of the operational issues around software distribution, I suggest you start with that article.

In the future, carriers are likely to advertise wireless games to their users via direct marketing (e.g. games leaflets sent with phone bill), SMS, print media (advertisements in national newspapers), point of sale (leaflets in shops) at carrier retail outlets, pre-configured phones at carrier retail to do Java downloads, carrier Web sites, retail merchandising (e.g. a packet of 10 Java games), and various other advertising methods (billboards with shortcodes, posters, TV advertising, TV program partnerships like Big Brother). Because carriers have the biggest marketing spend as well as infrastructure, they are most likely to control the bulk of the overall mobile games sales channel.

Most carriers have a strong retail presence in Europe. In the past, these stores were only used to promote new handsets, but more recently SMS gaming, ringtone and icon packs and PDA gaming products are creeping into the carrier retail outlets.

To see the way that carrier O2 is promoting Digital Bridge's Men in Black II SMS game and the other games being sold by O2 go to http://games.o2.co.uk/tmt/default.asp

In summary, the current carrier distribution models are;

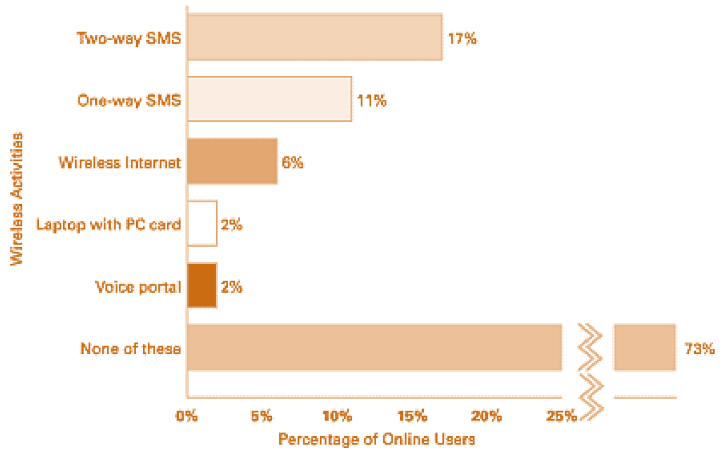
- Carrier direct marketing
- Carrier point of sale at carrier retail outlets
- Carrier walled garden with "best-of-breed" games from traditional publishers
- Carrier default configuration on handset to carrier download site
- Carrier buying pre-configured phones from handset vendor with games pre-loaded to carriers' specification.
- Carrier setting up walled garden using i-mode subscription model

Handset Vendors

In Europe, users access games already embedded on their handsets, and they also have the ability to download other games from the handset vendor's Web site. Motorola and SonyEricsson handsets will have Atari games from iFone (under licence from Infogrames). Sendo will offer Defender from Terra Mobile (under licence from Midway). In some cases games licences are being acquired directly by the handset vendor.

Another distribution model for handset vendors in Europe is where the vendor pre-configures phones with vendor Internet settings so that the users' default game download page is that of the vendor. Nokia is an example of this

Stat!



Question asked: Which of the following applications have you used on a cellular phone at least once in the past six months?

Source: Jupiter/The NPD Group, Inc. Consumer Survey (4/02), n = 2,287 (US only) © 2002 Jupiter Research

model, about which carriers like Vodafone have expressed concern.

Handset vendors are also distributing SMS games, Tones and Icons type retail packs in Europe. The handset vendors have distribution channels already in place for their handsets so it is easy for them to distribute software to the same retail outlets. As well as retail packs, the use of retail vouchers seem to be increasing. Using vouchers usually involves the user dialling an IVR number and inputting a scratch away access code from the voucher to the IVR number. Future vouchers will use Premium SMS (PSMS) codes to obtain SMS content and Java games. Right now, the success of these packs is limited due to the new nature of the sales channel and the availability of compatible handsets.

In summary the current handset distribution models are:

- Handset vendor buys finished game from wireless publisher and embeds it.
- Handset vendor buys finished game directly from IP owner and embeds it.
- Handset vendor pre-configures handset to default to vendors homepage for free downloads or pay-per-play/pay-per-download.
- Retail sales of games. SMS initially moving on to Symbian, Smartphone 2002, Java. Retail outlets would include operator and non-operator stores.

These distribution models could involve revenue-share deals, although right now they are generally either outright per unit deals or lump sum cash payments.

Third Parties

Independent wireless services companies, such as those currently selling ringtones and icons on the web and in newspapers, will use the same sales channels to sell wireless games. Most ringtones and icons from independents are sold in print media and from the Web. Examples of these companies are handy.de (http://www.handy.de/pages/sms/smsGames.php) in Germany, and Monster Mob (http://www.monstermob.co.uk/) in the UK. Neither of these companies are owned by carriers. Unless they partner with carriers (as handy.de is reportedly doing) their future is in doubt because of the low barriers to entry and potential marketing spend of operators.

Nonetheless, because of their marketing savvy, some independents are reportedly earning more revenue from ringtones and icons than operators.

In Europe, tones and icons can be sold via IVR systems, effectively cutting out the carrier infrastructure. In this case, it's the IVR provider who gets the distribution percentage rather than the carrier. Using IVR as a distribution channel is fading now that premium SMS (PSMS) is beginning to take hold. PSMS provides an integrated billing solution to developers and puts the channel control back in the hands of the carriers, thus cutting out the IVR provider.

The O2 example of MIBII above is a PSMS service, although at ECTS this year I saw Digital Bridges vouchers handed out for MIIB that use an IVR line. On the voucher, Sony Pictures was offering "the MIIB text game, movie ringtones and cool logos".

Traditional Game Publishers

Gameloft, owned by Ubi-Soft, is the leading game publisher using the Web for direct marketing to users. Because of the difficulty both with payments (credit cards) and with installation, plus the carriers' desire to limit distribution points, it's unlikely that distribu-

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Handset Highlights

Nokia 3650

Modes: GSM/GPRS 900/1800/1900
Price: €450-500, before subsidy
Screen: 176x208 pixels, 4096 colors
Apps: Symbian and Java
Available: worldwide Q1 2003

Just announced, the 3650 is a strong attempt at moving MMS and other advanced data services into consumer hands. More polished and likely cheaper than the current 7650, this handset is a strong showing from market leader Nokia.

Innostream I-1000

Modes: GSM
Price: ?
Screen: 130x146, 4096 colors
Apps: WGE
Available: in Asia by the end of 2002

Besided being a tiny thing with lots of features and a large color screen, this phone has truly awesome games, powered by TTPCom's WGE ("Wireless Game Engine"). With simultaneous keypresses, awesomely fast graphics and polyphonic sound, this is the first phone worth comparing to a GameBoy. (Read the full review at http://www.wirelessgamingreview.com/devicedir_viewdevice.php?device_id=44)

Danger Hiptop

Modes: GSM/GPRS 1900
Price: $200 with contract
Screen: 240 x 160 pixel, greyscale
Apps: Java
Available: September 2002 from T-Mobile USA

This looks to be a breakout device for getting consumers hooked on wireless data. With a full keyboard and swiveling hi-res screen, the Hiptop is built for instant messaging, email, web browsing and games. It will be initially available badged as the "T-Mobile Sidekick" and bundled with a digital camera and $40/month for unlimited GPRS data.

Sanyo SCP-530

Modes: CDMA 1xRTT 800/1900, AMPS
Price: ?
Screen: dual color displays (both internal and external)
Apps: J2ME
Available: late 2002/early 2003

Little is known beyond the FCC approval documents, but this phone packages a wide range of next-gen services into a slim clamshell: picture messaging (using built-in camera with flash), J2ME games, location services, high-speed packet data…

Are We There Yet?

By Thomas Ellsworth

It's been a busy year for downloadable games. But amidst the summer heat and hype, the burning question remains the same: "Now that BREW and Java downloadable wireless entertainment service offers are available and expanding, when will U.S. sales really take off?"

Sprint, Verizon Wireless and Nextel have formally introduced BREW or Java product offerings. AT&T and other carriers, including ALLTEL and US Cellular, are said to be in serious preparations to do the same. Cingular and Voicestream have launched merger talks as the industry awaits an announcement of their respective (or collective) plans for future Java (or BREW) product offers.

At its core, the introduction of BREW- and Java-equipped handsets and related service product offerings constitutes a consumer electronics platform launch. The consumer is being asked to purchase or upgrade a piece of hardware (the handset) in order to access advanced software in the form of entertainment, informational and business content.

...when will U.S. sales really take off?

The consumer electronics industry has seen this before. In the not so distant past, DVD player introductions were anxiously anticipated and subsequent sales rates were tracked and analyzed in great detail. The DVD player became the single fastest growing product in history, supplanting the records set by home satellite television systems in the mid 1990s. (Source: Cahners Instat Group)

BREW or Java handsets, like DVD players, represent a hardware upgrade required to gain access to advanced software. The question everyone wants to know the answer to is: "At what rate will consumers adopt a new platform after the benefits are made apparent and become affordable?" In that light, examining DVD player sales statistics may be instructive as we project sales for BREW- and Java-equipped handset introductions.

The lifetime unit sales history (U.S. market) for DVD players is as follows:

Year	Dvd Player Sales (Units)	Year-to-Year Growth
1997*	315,136	N/A
1998	1,089,261	246%
1999	4,019,389	269%
2000	8,498,545	111%
2001	12,706,584	50%
2002 Est.**	16,000,000	26%

Source: The Digital Bits, Inc.
www.thedigitalbits.com/CEMA
** In 1997, the DVD format launched in March.*
*** 2002 sales are 7,211,000 through July.*

The above sales figures demonstrate that it took approximately five years for DVD player sales to exceed 30 million units. In stark volumetric contrast, the wireless industry currently sells more than 10 million new handsets per quarter. According to analysts, for the remainder of 2002, BREW- and Java-equipped handset sales levels will likely be a modest 5% of total carrier handset sales for those carriers that have introduced BREW or Java product offers. In 2003, however, BREW- and Java-equipped handsets will represent increasing percentages of total new handset sales. Even conservative sales estimates yield sales projections that exceed 30 million units before Q4 2005.

With DVD player unit sales history in mind, where is the BREW- and Java-equipped handset market today? Consider the key launch events of 2002:

- Verizon Wireless brought Qualcomm's BREW platform to market in San Diego in the spring of 2002 and followed with wide U.S. availability.
- Nextel launched a color Motorola handset with preloaded Java applications in June and is expanding the line of downloadable applications.
- Sprint PCS launched its next-generation network and Java-based "PCS Vision" offer with color handsets and a palette of games in August.

At the time of the DVD format launch in early 1997, only a few manufacturers offered players and prices were at the typically high levels seen at the introduction of a new product. During the 1997 holiday selling season prices began to drop significantly.

BREW- and Java-equipped handset pricing has followed this model. The initial color BREW handset, the Sharp Z-800 from Verizon Wireless, was priced at $399 when it was introduced earlier this year. Recently, however, the price of this handset was said to be dropping to $199. Additionally, four different color Java handsets recently introduced by Sprint were priced between $229 and $179. Monochrome handsets are already approaching $0 when bundled with multi-year service commitments. It is clear that very attractive BREW- and Java-equipped handset prices, especially for full-featured color models, will greet holiday shoppers during the holiday season – a first for these products.

Looking deeper into the 2002 holiday selling season, several key factors are apparent. First, four of the top five U.S. carriers should have introduced their BREW or Java product offerings. Second, handsets will be attractively priced. Third, heavy carrier advertising will ensure consumers know that

advanced wireless services, specifically BREW or Java product offers, are available.

When all of the foregoing is considered, 2002 for BREW- and Java-equipped handset sales appears to compare favorably to DVD player sales between the end of 1997 and early 1998.

Looking forward, can U.S. BREW- and Java-equipped handset sales experience the growth in 2003 that DVD players saw in 1999? The factors that fuel such growth appear to be in place:

- Multiple Carriers: Sprint, Verizon, AT&T, Nextel, ALLTEL and US Cellular
- Retailer Experience: 2003 will be the second holiday season for BREW and Java
- Color: Diverse selection of BREW and Java color handsets introduced and in stock
- Hardware Pricing: The $199 price point will likely be the high end for color.

The DVD player became the single fastest growing product in history...

Up to this point, content has not been mentioned. Next-generation networks, BREW and Java platforms and affordable handset availability only provide access to content. Great content that reflects and successfully exploits the capabilities of the medium is key. In fact, that content is currently available and rapidly proliferating as carriers launch the next-generation networks and BREW or Java product offers.

JAMDAT and other leading publishers have been preparing for mass market BREW and Java product adoption through technical innovation and the securing of branded properties. Early on, JAMDAT saw the potential for branded and original content in this space. We currently offer a diverse slate of entertainment titles, including EA SPORTS™ Tiger Woods PGA TOUR Golf, EA SPORTS™ 2002 FIFA World Cup – On the Break, JAMDAT Bowling, Scrabble and other upcoming titles including O2 – Tony Hawk's Pro Skater for Wireless. Other publishers, including Sega Mobile and THQ, offer similar high quality content.

So, are we there yet? Yes. It's 1997 all over again in consumer electronics. But in this case it's wireless leading the way, as BREW- and Java-equipped handsets are introduced for use on next-generation networks that feature exceptional downloadable content published by JAMDAT and others. The Q4 2002 holiday sales season will be a mere sentinel of what awaits the prepared and diligent players in 2003 and 2004. Get your thumbs ready. ■

Distribution

Continued from page 9

tion of wireless games via the Internet to PCs will be a disappointment. Downloading must be simple, cheap, fast and enjoyable for users to bother.

Traditional game publishers can control the distribution channels by the types of deals they do, but because they are dependent on carriers and handset vendors for the bulk of their revenue, publishers will hesitate to compete directly with their customers.

This is not necessarily a permanent situation. If emphasis on wireless games sales changes to retail, the carrier's importance will diminish. Game publishers are used to distributing games at retail. If users want to pick up games for their phones and PDAs at retail rather than downloading them over-the-air, then traditional publishers will be in a strong position. They will use existing console distribution channels to immediately access the customer. I can see this happening especially if SD cards (memory sticks) for phones standardize and become more prolific.

The main types of distribution for traditional game publishers are;

- Traditional publisher develops and sells games to carrier
- Traditional publisher develops and revenue-shares with carrier
- Traditional publisher revenue-shares with new wireless publishers
- Traditional publisher licenses to new wireless publisher
- Traditional publisher revenue-shares with portals and carrier websites
- Retail distribution of wireless games

New Wireless Publishers

New wireless publishers include companies like Jamdat, iFone, In-Fusio, Terra Mobile, Digital Bridges, Macrospace and CodeToys.

The models most commonly found in this group are the same as the traditional games publishers. The only real difference is that new wireless publishers tend to also supply the technology distribution platform as well as the games. This is a distinct advantage for new wireless publishers over traditional game publishers because of cost savings gained by not having to outsource the delivery system. The main disadvantage for this group versus traditional games publishers is that they have to either buy the license from traditional games publishers or create a revenue-share deal with them. This mutual dependence has created some

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Sprint Vision

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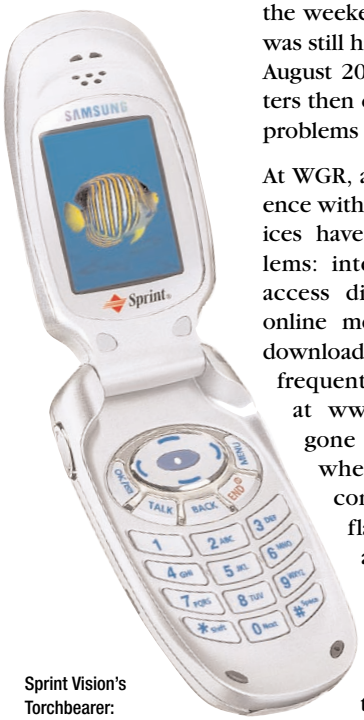
Sprint Vision data services were flaky at the launch. Mike Langberg, writing for the San Jose Mercury News, described the situation:

"I started heavy testing of my PCS Vision phone on Friday, August 16, and ran into 'communicaton error' screens when trying to reach Web pages and other features. Company representatives told me there was a system upgrade in process during the weekend of August 17-18, but I was still hitting brick walls Tuesday, August 20. The company spinmeisters then confessed to 'intermittent problems in various locales.' "

At WGR, all aspects of our experience with the new Sprint data services have been marred by problems: intermittent wireless Web access difficulties, several failed online menus (including content download and games menus) and frequent Web access problems at www.sprintpcs.com. We've gone through many periods when the data network is completely unavailable, or flashes in and out of availability without explanation. Similar, or less understanding, posts dominate the online discussion groups for the launch.



Sprint Vision's Torchbearer: the Samsung A500
source: Sprint PCS

The Interviews

In order to assess the "nationwide" claims that Sprint made about the Vision services, WGR called Sprint retail stores in the ten largest US cities and asked a series of questions:

Do you have the new Sprint Vision service yet?

What phones do you have in stock for Sprint Vision?

I saw the ad for games on the phones. What games are available now?

What else is cool about the Sprint Vision product?

How long does it take to get set up with Vision?

Results from these interviews generally backed up training complaints, but also showed that, by and large, Sprint achieved its nationwide rollout target, and had put the most important aspects of a mobile entertainment model firmly in place.

> ...the first couple of weeks of Sprint Vision was not pretty.

Across the ten largest US cities (New York, LA, Chicago, Houston, Philadelphia, Phoenix, San Diego, Dallas, San Antonio and Detroit) retail salespeople confirmed that the Sprint Vision services were up and running in their area.

Handset availability was spotty, but only Philadelphia reported not having any Vision handsets available in the store (they were expecting a shipment on September 1st). The Sanyo 4900 model was most widely available (8 out of 10 stores reported having them). Other models in stock included the LG 5350 (2 out of 10 stores), the Samsung A500 or N400 (3 out of 10 stores) and the Handspring Treo 300 (6 out of 10 stores).

Employee awareness of the games available through Vision was fairly low. While everyone we spoke with knew that games were available, only a few employees could give specific examples of titles to download. Only 5 salespeople could name any game titles at all, and some of their guesses (Donkey Kong, Tomb Raider, Missile Command, Galaga) were, shall we say, unavailable. To their credit, everyone we spoke with referred us to the Sprint PCS Web page for a complete list. Unfortunately, there's no comprehensive publicly accessible list on the site.

Some of the comments we heard about the games were overly enthusiastic ("Just like your Playstation," "They've got the 3G effect… it's like the graphics are coming right at you out of your phone.") but enthusiastic sales people are a valuable part of any business.

When asked about what they thought was coolest about Vision, Sprint employees most often mentioned surfing the web ("sites look much more like they do from your desktop") and the handset screens ("The color screens are fabulous… better than any we've sold before").

Estimates of set-up time varied widely, but (understandably) never approached the delays reported by early adopters on Usenet. From these interviews, we understood that once buying a new phone, a current Sprint customer could start using the service as soon as "instantly" to "after waiting 24 hours for provisioning."

The Bigger Picture

As frustrating as service, network and training issues can be for early adopters, Sprint's accomplishments with the Vision launch are significant. Once they correct some initial problems, Sprint, its customers and the rest of the mobile entertainment industry will have much to be pleased with.

Sprint customers who buy into the Vision will be immediately impressed with the reasonably-priced color handsets. Once they get provisioned, customers will have access to a very wide range of mobile content. Currently, Sprint is offering 115 ringtones in categories like Pop (from "99 Luftballons" to "Whip It"), Rock (from "All the Small Things" to "Wrong Way"), Rap/Hip Hop, Disney, Movie/TV themes, R&B, and Country, each for $1.00. Sprint lists 106 Screensavers and 31 Games on its customer content menu.

According to one unofficial source, the Vision network has measurably better latency than its competition.

Two postings on Usenet listed the following latency measurements for accessing Web sites on a laptop via a wireless connection:

Carrier	Ping
Sprint Vision via a Samsung A500	~ 350 to 370 ms
AT&T GPRS	~ 650 ms
VoiceStream GPRS	~ 650 ms
Verizon Mobile Office (CSD)	~ 850 ms
Voicestream Dialup (CSD)	~ 1000 ms
56 kbps wireline dialup via POTS	~ 200 ms

Source: Mark Henderson (mch@shell1.iglou.com) and Jeff (mogulman@yahoo.com), alt.cellular.sprintpcs

While we'll wait for more scientific and authoritative tests to be run before pronouncing one network the fastest or most responsive, these postings give some indications of the improvements that Sprint Vision provides.

One weak spot…SMS on Sprint Vision. Although the company still offers SMS services, and even features SMS games from Scan Mobile, Sprint's SMS is still accessed only via a WAP browser. Sending SMS over WAP is a poor substitute for the real thing. Because of the delays associated with doing SMS over WAP, Griffith Davis, co-founder and VP of Business Development at Adversoft reports significant SMS traffic drop-off from Sprint users as compared to other carriers. SMS aside and launch issues resolved, Sprint customers will undoubtedly be pleased with Sprint Vision.

For the mobile entertainment industry, Sprint Vision introduces consumer-priced color Java handsets, billing-on-behalf-of support and OTA download capability, and significant TV and newspaper advertising. There are at least three prime-time nationwide Sprint TV ads that prominently feature Java games. While Sprint data plans aren't significantly lower than their competitors (and no one knows if they are low enough to spur widespread adoption), prices certainly aren't out of line either. And although there are a number of concerns from content developers about getting information from, or building business relationships with, Sprint's business development team, the company's technical and marketing accomplishments with the Vision launch will serve the entire industry well.

Sprint Vision's Camera Attachment
source: Sprint PCS

Conclusion

Charles Levine, President of Sprint PCS said the main driver of Vision sales will be "the wow factor." With the Vision launch, Sprint has provided a lot to say "wow" about, from the opening weeks' network and service difficulties to the more important and more impressive variety of phones, content and industry-requested features. It's up to Verizon, and the other carriers, to match Sprint's strong consumer-focused offering. Whether, in the current economy, the "wow factor" will sell many phones and games is another question.

Now that we have a real nationwide launch in the US, we can start to explore the more important questions: How many people are actually in the mobile entertainment generation? And what has the industry got to do to get others to join? ■

Distribution

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interesting partnerships between the old-school and new-school publishers. If our segment of the videogaming industry is successful, I expect some of these partnerships to evolve into mergers or acquisitions.

Over-the-Air and Retail Win Out

Over-the-air download of ringtones and icons is still the wireless entertainment sector's biggest revenue source. As usability improves and carriers assume more control of the content on their handsets, users who want to download Java games in the same way as they download ringtones and icons will build the OTA games channel further.

However, most gamers who pay for titles today are used to buying games in stores, and this will not change completely. For the retail channel to become viable we need to see more phones with standardized expansion slots or the equivalent. I don't believe that scratch cards or vouchers in retail stores will ultimately be successful. In the medium term, even as the usability of OTA systems improves, I see the retail channel as the most logical evolution of wireless games distribution.

Carriers and traditional publishers will compete for dominance in the retail channel, with carriers leveraging their control of the electronics area of shops, and traditional publishers adding mobile games to the shelf space that currently distributes console and PC titles. If I had to bet on a winner in that battle, I'd pick the publisher. ■

MMS DOA?

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Global MMS Revenues 2007

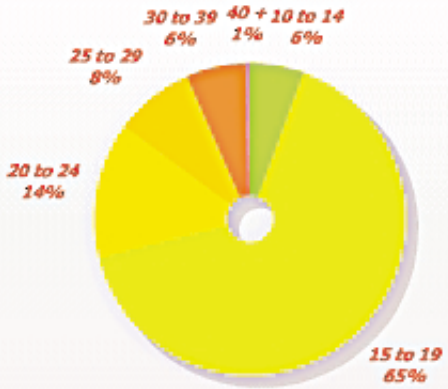
Western EU	$29 billion
Asia/Pacific	$19 billion
North America	$13.5 billion
South & East Asia	$4.5 billion
Latin America	$2.25 billion
Eastern Europe	$1.8 billion
Middle East/Africa	$1.4 billion
Total	**$71 billion**

Source: Ovum www.ovum.com

This is especially urgent when you consider that the youth market is considered a key user of MMS. The Wireless World Forum (or W2F) forecasts in its report "Multimedia Messaging 2002: The big picture" that 15- to 19-year-olds will account for the majority of MMS traffic by 2006. This sector tends to be high users of prepaid service and will also experience problems affording MMS phones and GPRS service at current prices.

Comparison of MMS sent by age group

UK 2003 - source w2forum.com



"It is important not to count out the prepaid solution," says Carmody at Tecnomen. But on the handset side he says that while initial handsets are expensive, they are "first stabs from the major vendors", and cheaper handsets will be out before Christmas.

Another issue of concern is the lack of billing systems that can deal with MMS pricing. At present, many operators (for instance, Mobile One in Singapore) are offering MMS for a free initial period, thereby enticing users while affording an opportunity to gauge usage before devising pricing structures.

The billing issue may prove a concern for potential content providers. It also creates a problem when it comes to interoperability or roaming. Operators have outlined a variety of pricing models (one price for any message size, tiered pricing according to message size, and a monthly price for 'all you can eat'), which makes it difficult for operators to agree on how to swap traffic. There's no use hoping that we'll send photo-phone snaps from our holidays abroad if we can't be confident that they'll get there.

Carriers are aware of this, however. A Vodafone UK spokesperson says that the carrier is already in discussions with other operators, "with a view to having it in place as soon after launch as possible." "However, this requires collaboration across the board and represents a significant piece of work," she said.

So what do experts think we will do with MMS? Ovum's Dario Betti thinks that pushed content – ringtones, screensavers, wallpaper, porn (complete with sound effects), sports clips, graphs portraying stock quotes – will generate more revenues long term than actual messaging, though the latter will dominate in terms of volume.

Dublin-based games company Speirtech is very excited about MMS. The company has been working with Logica on MMS casino games such as slot machines or roulette and has had a lot of interest from European operators, according to Brian Loughnane, Head of Software Development.

"The great thing about MMS," he says, "Is that it is the first time you get a truly multimedia experience on your mobile phone."

Loughnane echoes John Carmody in expecting a "big push" around Christmas. "The mobile phone companies will flood the market with handsets and do a lot of publicity. That's when we'll see it take off," he says.

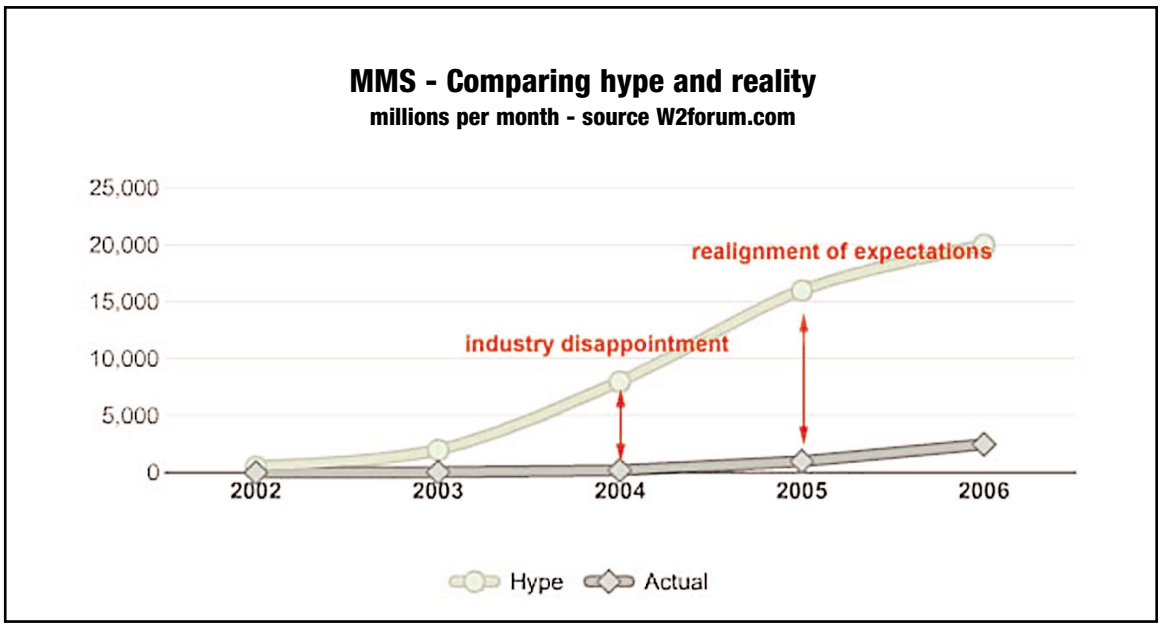
Even then it is unlikely that we'll see phone-to-phone photo messaging taking off for another year or so, because not enough people will have MMS-capable handsets. In the meantime, though, Mobile One in Singapore will send SMS to non-MMS phones, alerting the user that they have been sent a photo and pointing them to a Web site where they can retrieve it.

Still, points out Josh Dhaliwal, Executive Partner at the W2F, it will be cheaper to send out large volumes of photos via a PC and a fixed Internet connection than pay 50 cents per MMS photo.

So how long will it take to achieve a critical mass of MMS handsets in people's hands? Suzanne Cross, product marketing manager at Sony Ericsson, whose T68i is one of only two MMS phones that is currently widely available, thinks it will take 18 to 24 months. Orange is on record as forecasting that MMS will be used by 40% of its customers by the end of 2005. Meanwhile, Ovum believes that Western Europe will see a critical mass – 25% – of uptake in 2004 in Western Europe.

Dhaliwal at W2F does not agree that 25% is enough. "If 75% of the users are unable to send a message confidently to any network that is barring the same kind of ubiquity as we had with text messaging," he said, "It just won't be enough."

Indeed, Ovum and W2F have very different views on the MMS market. Ovum predicts that revenues will reach US$70B in 2007 in more than 50 countries. By contrast, the W2F forecasts revenues of US$5.8B across 16 key markets by 2006.



As a further point of reference, the Yankee Group forecast in its report "Wireless/Mobile Europe Report, Multimedia Messaging in Europe: Let the Fun Begin" a US$10B Wireless Multimedia Messaging Market by 2006.

J-Phone announced that nearly half of its subscriber base – more than six million people – were using the photo-phone service.

This is a considerable fluctuation in viewpoints and it's not all down to the fact that Ovum includes many more countries, says Dhaliwal, because, "Significant MMS revenues are a long way off for countries like The Philippines, South Africa, India."

While Ovum sees the service as being the second largest source of revenue after voice by 2006, W2F sees that spot being filled by SMS.

Chris Anderson, chief executive of Australian operator Optus, summed up operators' hopes when he stated that he hopes the MMS service launched early August will help to lift mobile data revenues to up to 25% of total revenues by 2005, from 6% currently.

For while MMS is seen as an extension of SMS, analysts agree that the platforms fulfill different functions. SMS will continue to be a useful, cheap and functional method of communicating textually. Nevertheless, Vodafone UK says that its target market at launch will be current SMS users.

Of course, the one country where SMS has failed to hold sway is in the U.S., where the lack of network interoperability has retarded uptake. In addition, Americans see SMS as an additional expense on top of their voice minutes. They'd rather talk than text. However, MMS, being a radical departure from existing services, won't suffer from this comparison, say commentators.

The W2F sees U.S. users being the most prolific users of MMS worldwide, sending some 726.8 million messages per month by 2006, compared to Germany's 324 million and 258.4 million in the U.K. Ovum's Betti does see strong interest emerging but says that operators are preoccupied with issues such as traffic and coverage at present.

"We think these services have a lot of promise," says Alexa Graf, spokesperson for AT&T Wireless, which launched its mMode Pix photo-phone service in July. Graf adds that the photo-phone won't just be attractive to consumers, but to, "insurance claims adjustors, real estate agents and other folks who might find a camera a pretty handy tool in a mobile environment."

It should be noted that AT&T has no announced plans for the introduction of true MMS. mMode Pix is based on wireless email, and users can only send a picture from phone to phone via infrared or Bluetooth.

Based on the take-up in Japan, it's somewhat likely that underlying consumer interest in MMS exists. Whether or not it becomes a messaging phenomenon depends largely on operator handset subsidies, service pricing and marketing cleverness. And although analysts don't agree on how large the MMS market will be, they do agree on one thing: over-hyping the service will kill it. ■

Contributor Bios:

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

Thomas N. Ellsworth (TEllsworth@jamdat.com) is the Executive Vice President of Marketing and Corporate Development at JAMDAT Mobile Inc. He previously served as vice president of incubator development and senior director of business development at Sprint PCS. He received a Bachelor of Science degree in Business Administration and Marketing from California State University, Northridge and an MBA from Pepperdine University.

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

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

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