



Mobile Market Insights

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Special Topic

- Mobile Handset

Mobile handset - from function to fashion

Fashion is now a key driver for consumers when purchasing mobile devices. Many manufacturers are now explicitly marketing devices as 'fashion phones'. The fashion phone market is now at an advanced stage of maturity. There has been a move from simply ownership of a mobile phone being considered fashionable, to specific devices being seen as fashionable, and now vendors are producing devices specifically designed with fashion in mind. Design has become increasingly important for the mobile device market, and in recent years devices have emerged that push fashion as a priority over functionality. Manufacturers' attempts to bring fashion to mobile devices range from simply offering devices in alternate colours and designs, to high-end, heavily styled handsets using precious materials. The success of both the Motorola RAZR and recently LG's Chocolate device has proven that consumers will happily choose fashion and form over functionality. Both have received relatively poor reviews in terms of their usability, but have proved popular with consumers due to their looks.

Exciting new input technologies are making inroads	2
Bringing the world to your mobile	2
New music phone from O2	2
Use wind power to recharge your mobile phone	3
Govt study group wants mobile operators to scrap handset sales rebate	3
Smartphone shipments will exceed 100 million units in 2007	3
Yahoo steps up push into mobile-software arena	4
Video boosts content, but SMS still king	4
One million paid mobile phone navigation subscribers	4
Indian consumers jazz up mobile music sales	5
Consumers warming to the touch-screen phone	6



Source: Ovum

The future

The \$ 100 billion mobile-handset business is in a state of flux. While unit growth is still strong—volume rose by 29 percent in 2006, to reach 725 million units—dollar growth has been more modest (18 percent), a reflection of the industry's harsh economics. Many markets, especially China's, are expanding as new users buy their first phones; but other markets have matured. In all markets, customers are becoming more fickle in their choice of handset, and in several, operators are trying to gain more control over the consumer by offering handsets that they have designed and branded themselves. Last but not least, some Asian players are quickly acquiring the will and skill to compete against the more established players. All these developments create considerable uncertainty in a large but still relatively young industry. As average selling prices and margins have fallen in the past several years, many vendors have concentrated in tackling operational issues and restoring profitability. But given the magnitude of the changes that are now taking place, it is time to ask a fundamental strategic question: What is the basis for sustained success? The answer hinges on how well vendors recognize and respond to four realities:

- Asia has become the engine for the industry's growth and innovation
- Decisions about design, price, and features cannot be made without a deep understanding of consumer behaviour
- Integrated manufacturers are increasingly the exception: companies must find their spot in a deconstructed value chain.
- Clarifying the nature of relationships with operators, particularly with regard to handset design, is essential.

Source: Ovum, Strategy Analytics

Exciting new input technologies are making inroads

Mobile phones have long been touted as the next big area of convergence, combining multimedia applications, internet access, and high speed data services. Both operators and manufacturers have invested significantly in technology that will help this prediction come to pass, including greatly improved air interface technologies, faster chipsets, increased memory, and better screens. However, IMS Research reports that advances in input technology will also be critical to ensure widespread consumer uptake of 3G applications and services.

Touch screen technology, although not new in the mobile phone segment, has been generating a lot of discussion recently thanks to Apple's iPhone announcement. However, there are several other new input technologies that are positioned to play as significant a role. These include capacitive sensors, enhanced keypads, and even motion sensors. "The key issue for operators is to get consumers to engage with multimedia services and 3G applications," explained IMS Research Analyst Bill Morelli. "One of the big stumbling blocks to date has been the awkward interface

offered by the standard 12-key keypad. What we are starting to see in the marketplace are innovative solutions to these problems."

Some of the key applications that mobile network operators are hoping will drive ARPU include Mobile TV, mobile internet and consumer e-mail. These applications require more complex navigation, as well as better options for text entry.

Source: Cellular News



Bringing the world to your mobile—mobile TV

The mobile handset is evolving. More than a piece of communication equipment, it is becoming a mobile entertainment tool - for listening to music, downloading video clips, playing games and watching mobile TV.

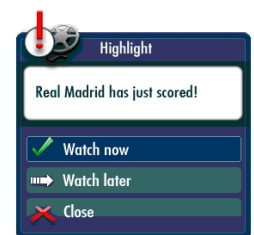
Consumers want to be entertained and stay updated, a demand that is driving the introduction of content-to-person services such as Mobile TV. This allows people to follow live TV shows while traveling, receive sport video clips or watch music videos wherever and whenever they want. The

Ericsson Content Delivery System (ECDS), part of Ericsson's Multimedia portfolio, makes all these services possible. The ECDS is the core component in Ericsson's Mobile TV & Video offering, providing a streaming and download server, a mobile-TV client and the Electronic Program Guide to give the user information about channels and programs.

Service providers and network operators around the world are introducing mobile TV as a way to attract consumers and secure new revenue streams. Mobile TV builds on existing behaviors but

the mobile channel adds personalization, interactivity and mobility. The networked generation sees downloading content - rather than watching scheduled programs - as the natural choice. Mobile TV opens up a new ecosystem of services that can help an operator earn revenue from advertising and voting services, for example. Consumer interest in mobile TV is growing and media companies are starting to adapt content to the mobile phone.

Source: Ericsson



New music phone from O2

The UK network operator, O2 has previewed a new music phone which it will be releasing in August. The selling point of the handset is the LED display which is embedded into the outside of the clamshell handset.

A key feature that consumers rated high in testing is the blue LED display which can be programmed to show time, 'now playing' information, caller ID and also displays the beginning of text messages as they arrive in the users inbox. Speaking at the launch in the VIP area at the O2 Wireless Festival, Sally

Cowdry, O2 Marketing Director, said: "The introduction of the new O2 Cocoon phone is an exciting development for our customers and a big step forward for O2 branded devices. It's fresh and different, yet simple to use and packed with features." The O2 Cocoon music player is compatible with a wide range of file formats, enabling users to simply drag and drop their music collections onto their device and start listening. With 2GB of in-built flash memory, and the opportunity to add a further 2GB on MicroSD, the O2 Cocoon can hold a massive music library with up to one thousand tracks.

The O2 Cocoon's music credentials also extend to an innovative 'location aware' feature enabling the handset to take on a new life when users enter The O2 (formerly known as the Millennium Dome, in London). Upon entering the venue, the O2 Cocoon will undertake a transformation with the wallpaper adapting to welcome users to The O2. In addition, O2 Cocoon users will be provided with a venue map, hints and tips as well as the latest news direct from The O2.

Source: Cellular News



Use wind power to recharge your mobile phone

Orange UK has shown off a mobile phone charger prototype which is powered by wind energy. The Orange Mobile Wind Charger is the result of months of research into a viable alternate energy source to power mobile phones during summer music festivals, where attendees more commonly live in tents for several days. Working with Professor Shashank Priya at the University of Texas at Arlington, Orange commissioned the research into an off grid wind-powered portable phone charger that would take into account the unpredictable English climate to ensure a constant energy source.

Whilst the research of Professor Priya's team is still in its infancy

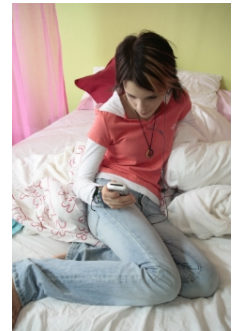
and continues to be developed before mass consumer rollout, Orange has built fully functioning models of a mobile wind charger that will be on display at this year's Glastonbury Festival in Somerset.

The wind turbine, weighing in at only 150grams, is small enough to fit into a weekend rucksack and is easily mounted onto festival goers' tents using a simple mounting bracket. So whilst festival revellers are out during the day taking in their favourite bands, the turbine stores wind generated power in the control box, ready for when they return to their tent each night to recharge their phone.

Mobiles phones are just as important as wellies in terms of festival survival essentials, especially one as big as Glastonbury. With capacity for this year's festival at a record high at over 175,000 spread across a sprawling 900 acres of farmland, keeping connected to your friends is essential.

Hattie Evans, Head of Sponsorship at Orange, said "As official communications partner of Glastonbury Festival, it is important that we continue to innovate and demonstrate how mobile technology can make festival life a little bit easier."

Source: *Cellular News*



Govt study group wants mobile operators to scrap handset sales rebate

A Japanese government study group put forward a draft report that calls on mobile phone operators to stop paying sales rebates to handset retailers. The communications ministry study group maintains that the current practice of passing rebate costs on to consumers through service fees puts subscribers who use one handset for a long time at a disadvantage. By scrapping the rebate system, the group wants mobile phone operators to introduce new fee structures, possibly by 2010. After a new scheme is test-launched in fiscal 2008, the group intends to decide by 2010 on whether a new

system is needed, informed sources said. Under the new system, mobile phone handset prices would soar to 450 \$ to 600 \$ from current prices that are as low as zero yen. However, user charges would fall. While the new scheme is apparently aimed at ending zero-yen sales of handsets, a senior industry official said that as long as there is a market, zero-yen handsets would never disappear. Masao Nakamura, president of leading mobile operator NTT DoCoMo Inc. , said the new system would probably not appeal to younger users, who prefer to switch from one model to another, and he

acknowledged that the industry would have difficulty breaking with a convention that has helped promote handset replacement purchases. As well as proposing an end to the rebate practice, the report suggested customers who conclude long-term contracts be offered lower-rate services. To increase options, the report said the government will consider nullifying the so-called subscriber identity module lock, which prevents the SIM card storing subscriber information from being used in other handsets.

Source: *Factiva News*



Smartphone shipments will exceed 100 million units in 2007

According to new research report from the analyst firm Berg Insight, global shipments of smartphones running advanced operating systems will reach 113 million units in 2007. Increasing at an average annual compound growth rate 25.6 percent, shipments are forecasted to reach 365 million units by 2012. Smartphones will then account for over 22 percent of all handsets worldwide, compared to 10 percent today. Berg Insight estimates that Symbian OS was the leading smartphone operating system in 2006 with a

market share of 63 percent. Linux was the second largest platform, followed by Windows Mobile. "Nokia's commitment to Symbian OS as the core of the S60 platform is the key to its success", said André Malm, telecom analyst, Berg Insight. "In the future there will however be increasingly strong competition from Linux for consumer devices and Windows Mobile in the enterprise segment." Microsoft's performance in the smartphone segment is consistently improving, even though Windows Mobile is still far from

threatening either Symbian OS or Linux for the top market positions. The once popular PDA operating system Palm OS has virtually disappeared from the market and is now being converted into a version of Linux. Apple's OS X will become a new entrant on the smartphone operating systems market this year with the launch of the iPhone.

Source: *Berg Insight*

Yahoo steps up push into mobile-software arena

In a move to grab ground in the emerging mobile arena, Yahoo said it will launch on Friday an improved version of its suite of software for cellphone users in the U.S. and unveil test versions in 13 other countries. The Sunnyvale, Calif., Internet giant will also announce pacts with six mobile carriers in Asia to use its oneSearch Web-based search service as the default engine on their mobile portals. "We have a very clearly stated goal, which is to be No. 1 in mobile," said Lee Ott, director of mobile product management at Yahoo. "We're making a major push to get the service out in everyone's hands." Ott predicted that "2007 is going to be the tipping point for mobile," because finally "the phones are good enough, the networks are good enough and now, with the new Yahoo Go, the products are good enough." Yahoo's downloadable Go for Mobile application, which has been in test mode in the U.S. since January and, Yahoo said, has been requested by

more than 3 million people, makes a number of Yahoo's Web-based services for computer users available from mobile devices. Go will be released with several key improvements, the company said.

Yahoo Mail users will be able to open many common attachments, including Word, Excel and PDF files, in addition to the basic text and image files they could view previously. They will also be able to access and file emails in folders. The new Local and Maps service will offer satellite maps, satellite maps overlaid with street names and real-time information on traffic conditions. There will be shortcuts for finding the location of ATMs, restaurants and other places people often search for while on the road. And the software will use global positioning system technology embedded in certain high-end devices to help those users find nearby establishments more easily.

Go users will also be able to access Yahoo's calendar service, and address

book users will be able to, with a click, call people in their address book and get driving directions and maps to their street addresses. And in its effort to expand outside the U.S., Yahoo said it would test launch localized versions of the service in Canada, France, Germany, India, Indonesia, Italy, Malaysia, the Philippines, Singapore, Spain, the United Kingdom, Thailand and Vietnam.

Worldwide, Go will work on more than 200 phone models by the end July and 400 models by end of the year, Yahoo said, though availability to consumers will also be subject to the agreement of their wireless carriers.

The six Asian mobile operators that Yahoo inked search deals with are Globe Telecom in the Philippines; Idea Cellular in India; LG Telecom in Korea; Maxis Communications Berhad in Malaysia; PT Telekomunikasi Selular, or Telkomsel, in Indonesia; and Taiwan Mobile in Taiwan.

Source: Dow Jones Newswires

Video boosts content, but SMS still king

The mobile content market experienced a year-over-year growth in revenue of 78% and an 11% increase from the previous quarter, according to new statistics from Telephia Inc. Mobile video continues to see the greatest rate of growth, increasing 23% from the previous quarter and 76% from the year-ago period. Despite the steady growth, mobile video still only accounts for little more than 3% of the entire mobile

content market. The \$146.3 million mobile video services raked in for the industry in the first quarter of 2007 pales in comparison to the \$4.61 billion mobile content generated overall. SMS services still account for the lion's share of content revenue, comprising 39% of the entire market or \$1.89 billion, according to Telephia.

Source: Wireless News



One million paid mobile phone navigation subscribers

Networks In Motion, the award-winning wireless navigation and location-based services (LBS) company, announced that it recently exceeded one million paid users of its real-time navigation services on GPS-enabled mobile phones based on the company's LBS NavBuilder(TM) platform.

Networks In Motion's LBS platform delivers turn-by-turn, voice-prompted directions with auto-rerouting if a turn is missed, as well as local search of nearly 14 million points of interest and detailed color maps that can be quickly panned and zoomed. The subscription costs \$9.99 per month or \$2.99 per day.

"Reaching one million paid subscribers in just over a year is a major milestone that shows consumers are choosing the convenience of GPS navigation on a device they already carry with them everyday," said Doug Antone, president and CEO of Networks In Motion. "We believe this rapid market acceptance strongly indicates where people will turn for their navigation needs." According to Frost & Sullivan, the total U.S. LBS market will exceed \$600 million by 2008 and according to ABI Research, mobile phone LBS will reach 335 million subscribers worldwide by 2011. Major North American telecommunications companies using Networks In Motion's

LBS platform include Verizon Wireless, Alltel and TELUS. Networks In Motion also partnered with AAA to provide AAA Mobile to consumers later this year, which transforms the mobile phone into a powerful navigation device and travel companion.

Source: Business Wire



Indian consumers jazz up mobile music sales

More than most, the top honchos at India's music companies know that declining physical sales in stores are no reason to feel the heebie-jeebies. And if they are listening to a song when the phone rings, they might as well carry on. Because it's that ringing tone along with the handset that is coming to the industry's rescue. Indian consumers purchased more mobile than physical music in the first three months of 2007 and will buy almost nine times more mobile music than any other format by 2009, according to data sourced from PriceWaterhouseCoopers, industry associations, International Federation of the Phonographic Industry and Internet and Mobile Association of India. "Whilst mature markets like Australia and the United States will see growing online music revenues at 1:1 online: mobile or greater, emerging markets like India will be virtually 100% mobile music-oriented," the data says. That's reason enough for the music industry to turn da music on. Says a source at one of India's leading recording labels, "New mobile services, attractive pricing and enhanced interoperability will drive sales in this format." Adds Sudanshu Sarronwala, whose Soundbuzz.com has done the number crunching, "Unlike in the US, India will witness mobile music sales offsetting the drop in physical sales." That assumption comes from the fact that projections show mobile music sales surging from Rs 1,026 crore in 2006 to Rs 3,600 crore in 2009, making up for the likely fall in physical sales from Rs 756 crore to Rs 500 crore. Total music sales will rise from Rs 1,782 crore in 2006 to Rs 4,100 crore in 2009. That should make the industry keep tapping its feet. Even mobile operators feel that there is no reason for the music industry to lose sleep over falling physical

sales. As for their own revenues, carriers are listening to the sweetest sounds. Says Vodafone-Essar MD Asim Ghosh, "It is very significant for us since it brings in additional revenues." He, however, refused to divulge specific break-up figures. In fact, observers say that music downloads may turn into a primary source of revenue for mobile operators. A PWC report, "Global Entertainment and Media Outlook", issued last week forecasts that countries like India will make the digital shift faster than the US. And the tune's unlikely to change. Value Added Services (VAS) account for a little over 10% of the revenues of India's largest mobile phone operator Bharti Airtel. Explains Bharti president (mobile services) Sanjay Kapoor, "Music is the second biggest VAS revenue grosser for us after SMS." Bharti's music portfolio is over 50,000 strong-which includes complete tracks, ring tones, ring-back tones and corporate jingles.

"Music is the second biggest VAS revenue grosser for us after SMS"

Sanjay Kapoor,

President of Bharti Airtel

Adds Mr Kapoor on future prospects, "Music offers operators the ability to penetrate on a much larger scale when compared to SMS. Since it is neither handset- nor language-dependent, the market for music is larger. If you go by the success stories of Japan and Korea, VAS accounts for about 25% of the operators' revenues. We can match this, especially considering that music is part of Indian existence unlike other countries."

This is why some in the industry beg to differ when told that digital sales may affect physical sales. Says Mr Ghosh, "The

music industry is big-their revenues from VAS will not be larger than their usual revenues." However, the chords are strumming something else. Says Mr Sarronwala: "The higher rate of handset replacements in India will surely bolster the growth of VAS." His company's conclusions show that almost 50% of all music purchases in Asia in 2006 were digital (either online or mobile)." And he himself feels once 3G arrives in India, companies can look to many other entertainment-related revenue streams. The IFPI has already identified music videos as a revenue source for music companies. And it is not just private operators who are betting big on music. Even state-owned BSNL, the third-largest GSM operator, has joined the fray. In fact, going a step further, BSNL, last week, awarded two contracts to Swedish equipment major Ericsson to host its multimedia services. As per the deal, Ericsson will host the mobile content download portal and a ring-back tone service for BSNL.

Ericsson will also be responsible for running the next-generation portal that will offer a variety of mobile content including music downloads ringtones, video clips and other software applications. The second agreement is for hosted ringback tones, one of the most popular and highest revenue-generating mobile data services available today. BSNL executives say the Ericsson deal was part of the PSU's strategy to increase its revenues from the music and other VAS. So the Indian music industry need not fear the instruments of change. They only require a fresh tuning as, according to Mr Sarronwala, it is a format shift. In India your moby is your next jukebox.

Source: The Economic Times, Ericsson



Consumers warming to the touch-screen phone

Canalys has revealed more results from its recent consumer mobility survey, which show how receptive European consumers may be to emerging mobile phone design trends, such as the use of touch screens. The online survey was conducted in April among more than 2,000 employed, adult mobile phone users in France, Germany, Italy, Spain and the UK. Following Apple's iPhone launch, several handset vendors have announced their own finger touch-screen devices, for example the LG Prada phone and the HTC Touch. Vendors going down the touch screen route face some big challenges, in gaining user acceptance, in winning over operators who have strong content and branding aspirations themselves, and not least in building an interface that actually works well all the time. The rewards, however, could be significant for those that manage to overcome these hurdles. Regular, widespread use of mobile phones by consumers for applications beyond communications is still in its infancy in most countries. Less than 10% of those surveyed by Canalys were paying for and downloading ringtones, pictures, games, videos or music on a recurring basis, but more than twice as many had tried doing so at least once. In contrast, more than 70% of those whose phones had integrated cameras were using them regularly. Using the camera is, of course, free, but is also typically only one button press away.

"Although the user interface is only part of the solution to expanding the

market, it is a critical part. You need compelling services and content, and transparent and fair pricing," said Canalys senior analyst Pete Cunningham. "But if the interface gets in the way people will soon lose interest or choose other platforms to satisfy their needs. More than half of those we surveyed said they disliked having to learn where all the features were when they got a new phone."

Phones that have a larger screen, giving more flexibility over the placement of application icons and having less reliance on the location of a limited number of fixed, physical keys could make more features and services accessible to more users. A bigger display also allows for more attractive advertising and presentation of content and, combined with a software-led, malleable interface, lends itself to the later addition of services by operators, without them being buried so far down a menu tree they are never found. "User interface design is very easy to get wrong and you need to strike the right balance - promoting new or lesser-used services without compromising access to the features that people use every day," added Mike Welch, Canalys VP. "The interface has to be responsive, and consistent all the way through - not just up to a point where suddenly another paradigm kicks in. And the standard features that people take for granted, like using predictive text, dialling numbers, finding and updating contacts and using the camera, must

work at least as well as on a more conventional phone - it isn't just about the advanced applications. If a customer picks up a phone in a retail store and can't see how to do the basics within 20 seconds, they will walk away. "Execution challenges aside, the Canalys survey reveals a high degree of acceptance among mobile phone users to the idea of using touch screen models.

When asked about their personal phone preferences, 23% of respondents said that having a touch screen interface would be good if it meant they got a large display, but without increasing the overall size of the phone. A further 10% were prepared to make a trade-off by ending up with a larger phone in return for a large touch screen or a good keyboard. Only 28% said categorically that they just wanted a traditional numeric keypad while another 24% said that having a small phone was the priority regardless of input method used. Acceptance of touch screen phones was up to 50% higher among those who had high interest in having mobile TV services, mobile e-mail or handset-based GPS navigation, or who already used most of the features on their current phones. But the requirement that the larger screen did not result in a larger phone remained strong across all these groups.

Source: Cellular News



We are glad to share with you "Mobile Market Insights" following our Mobile Technologies Outlook publications.

Our ultimate aim is to facilitate and support your development in these technologies through providing how these technologies relate to end user needs, expectations with best practices, case studies, latest news.

In each issues we will provide insights about a specific topic and telecom tidbits.

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We will try to address your requests within the following issues.

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