



# Mobile Market Insights

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## Special Topic

- M-Commerce

## Mobile Business

Mobile commerce is marking the start of another era of innovation in business and it will continue to extend the way organizations conduct business – and change the relationships between companies, customers, suppliers and partners. Mobility means *freedom* and freedom creates choice and value, something much more than convenience as it may revolutionize the way companies work, buy, sell and collaborate.

Business is always on the move and so are customers. Mobile commerce is rapidly transforming the mobile phone into a device from which customers can reliably and securely conduct transactions such as banking, payment and ticketing – irrespective of time and place. This will transform every day life, giving users a new type of freedom. With the advantages of mobility, availability, flexibility and personalization, mobile commerce can add a powerful new dimension to customer services and be a source of substantial new revenue.

With mobile commerce the consumer relationships get personal. Once a service application has become part of customers' everyday lives, it takes an extra effort for the competition to gain a foothold. Mobile phones already outnumber personal computers. The mobile phone is also a very personal and trusted device that is used frequently, thus creating a user habit from which mobile services will benefit.

Technical development of mobile commerce has now reached a stage where merchants can easily widen their business to mobile environment. However, we must remember that not all services are suitable for mobile context – pocket size device has its limitations.

Studies have shown that many aspects of ticketing and services requiring self-service, in particular, will be the killer applications in the area of new mobile services. Here are some good examples of mobile services that will make life easier and more convenient:

**Shopping:** Order a good delivered to your home and pay for it easily and reliably with your mobile phone.

***The fact that the mobile phone can deliver services any time gives it an undisputed advantage as a commercial***

**Ticketing:** Purchase, pay and receive tickets online (eg. airline tickets, movie tickets). Avoid long lines and make arrangements while on the move.

**Banking:** Take care of your banking easily and reliably without multiple passwords and usernames by using your mobile phone.

**Local payment:** Pay for your anything that you can pay online using your mobile phone – running short of cash is no longer a problem.

In the near future, the mobile terminal will be capable of storing and using virtual cards

for different service providers. This offers a great opportunity for more efficient customer management, customer loyalty, and service personalization – the mobile phone will be like a wallet full of different cards.

The fact that the mobile phone can deliver services at all times gives it an undisputed advantage as a commercial platform.

Location sensitivity is also a unique personalization feature of mobile phone.

The mobile terminal's ability to effectively link the physical and virtual worlds enables the creation of personal area network based services.

The key question for mobile commerce is to find some way to assess the value of mobile applications to prospective users, and to gain an understanding of the factors that may delay the penetration of the mobile Internet on a larger scale. There are a number of ideas of what is going to constitute the key success factors for the actors in the global m-commerce arena. This arena is already growing diversified with a number of application areas, which are growing in different directions and at different paces.

Source: Ericsson, Juniper

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## Mobile Ticket Holders Skip Long Lines

bCode has enabled one of the largest mobile ticketing events to date. Although mobile ticketing is nothing new, the implementation at CeBIT Australia 2007 was exceptional due to its ubiquitous device coverage.

CeBIT Australia is one of the leading business technology conferences in the region with approximately 30,000 attendees and more than 700 exhibitors. A mobile ticketing implementation by California-based bCode enabled more than 10,000 attendees to enter the Sydney event in May without having to wait in line. The technology provided by bCode combines 3G-enabled scanning kiosks with a patented formula for text-based mobile tickets. Pre-registered users were given the opportunity to sign up to receive

their entrance tickets via SMS, which they could then scan at 10 kiosks located at the conference center.

Michael Mak, CEO of bCode, says that CeBIT Australia has previously offered mobile tickets using a different technology but chose bCode for this year's event because of its simplicity and the sheer number of devices its scanners support.

"This technology is different because it is based on a short, three-line text message as opposed to graphical bar codes," Mak says. "Since most devices have the ability to render text-based messages, we are compatible with more than 99 percent of phones on the market."

The scanners from bCode can read a mobile ticket in about one second and print out a ticket in less than five seconds. No knowledge of the device or carrier is necessary to scan a bCode mobile ticket and it is even possible to

scan PDAs, iPods and BlackBerrys.

Based on the number of mobile tickets issued and the number of redemptions, bCode believes CeBIT Australia 2007 to be one of the largest mobile ticketing events to date. "The biggest potential for this technology is wherever there are long lines – such as in crowded metropolitan cities or in places experiencing rapid growth," Mak says.

While CeBIT was the first commercial implementation for bCode, it was previously trialed during the 2006 Commonwealth Games in Melbourne. It will soon be launching in Atlanta, US, at a dozen different venues – including fast-food restaurants, cinemas and clubs.

Source: Ericsson



## Thailand Advanced M-PAY Promotes Mobile Payment Service

Advanced M-Pay, the joint venture between the cellular operators AIS and NTT DoCoMo of Japan, is spending an additional 100 million baht to promote its mobile payment service, after registering faster-than-expected growth in mobile-to-mobile money refill service this year, the Bangkok Post reports.

Of the total investment, he said, up to 70 million baht is slated for marketing while the remaining 30 million would be spent on doubling system capacity to accommodate 10 million transactions per month.

In May alone, Mr Komsan said, One-2-Call prepaid customers refilled accounts in up to three million transactions through 30,000 M-agent vendors, for a value of 230 million baht, compared to 250 million baht in the first quarter.

"We expect to see seven million transactions with total spending of 500 million baht per month starting from November, the level we consider a break-even

point," he said.

"We are confident we can turn a profit in 2008 for the first time." Mr Komsan acknowledged that while Advanced M-Pay was expected to break even in November, it would post a loss for 2007 on expected revenue of 150 million baht. Topping up One-2-Call refill cards accounted for 80% of all transactions, with the rest involving AIS bills, mobile payments and purchases through vending machines.

"We are now on the right track. Our business witnessed an upward trend, thanks to the shift away in our business model from merchandise payments to digital bill payments," he said. He said Advanced M-Pay was stepping up promotion of mobile payments as the second M-Pay flagship service line in 2008, targeting young working people and university students. The services allow AIS prepaid and postpaid subscribers to conduct financial transactions and pay bills using handsets as both debit and credit cards.

Customers need to directly refill money from an authorised M-agent vendor without using a card, similar to the mobile refill-card channel. They can then directly pay bills for utilities, credit cards, life-insurance premiums, product leasing and individual loans.

In the past, M-Pay customers needed to deposit money with Advanced M-Pay or one of five participating commercial banks prior to using the service.

Mr Komsan said the company planned to offer the third phase of its M-pay service through a new contact-less payment channel in 2009.

Source: Ericsson



## Operators Begin to Reap M-Commerce Rewards

With nearly every person in Japan owning a mobile phone, Japan's credit agencies are hoping that the convenience of a wallet phone will increase their customer base and credit payment volumes. Compared to other advanced economies, Japan has very low credit card penetration; less than 10% of all consumer purchases are currently charged. The ultimate goal is for wallet phones to replace cash, credit cards, ID cards, public transportation tickets, and any other payment or identification method currently requiring swipe or contactless cards.

For mobile operators, m-commerce is a means to:

- Engender greater loyalty by making it harder for consumers to switch service providers;
- Convey greater consumer value with differentiated services and devices;
- Drive increased revenue from their role as transaction enablers and from greater data traffic (although the last is not applicable to IC chip solutions);
- Create opportunities for a host of parallel revenue-generating services: Operator portals are

usually the primary source for mobile content and this can be extended to include a storefront for physical goods and services. They can also provide parallel mobile advertising services; for instance a campaign for a new album can employ SMS, with users given the option to "click to buy", which then takes them through to the m-commerce platform.

However, beyond Japan and South Korea m-commerce remains nascent. Even SingTel is only now exploring mobile payments, with only one application (payment of road transport fines) currently available. A notable exception is the Philippines, where Smart and Globe's prepaid credit top-up services have evolved into full-fledged payment and remittance platforms.

The problem in much of Asia is regulatory, with financial services authorities unwilling or unable to approve mpayments within existing regulatory frameworks. Furthermore, in Asia's developing markets many consumers don't have bank

accounts let alone a credit card. In these cash-based societies (which also helps to avoid tax), mcommerce will at best remain limited to micropayments based on prepaid credit.

In developed markets, consumers still generally distrust electronic transactions and consider it unwise to put all payment options into one object that is liable to be stolen, misplaced or run out of batteries. Given these obstacles, we currently project modest m-commerce market growth in Asia overall. From \$708 million in 2006, we expect m-commerce service revenue (accruing to mobile operators) to reach \$1.26 billion in 2009. Of this total, Japan and South Korea will account for 39% of the regional market, down from a combined share of 60%. Roughly 10% of the region's mobile users (179 million) will use m-commerce on a regular basis, up from 10% in 2006.

Source: Ericsson, Yankee



## Two-Thirds to be Mobile by 2012

Mobile subscriptions will reach 4.6 billion just five years from now, telecom research firm Pyramid Research predicts. Africa, the Middle East and Asia Pacific will be the fastest-growing regions.

Smart operator business models that make mobile services affordable in low-income markets are contributing to explosive growth in mobile usage.

India, in particular, is expected to be the fastest-growing market in coming years, says Leslie Arathoon, vice president of research at Pyramid Research.

"Today, India has some of the lowest mobile rates in the world," Arathoon says. "And yet, some of the operators covering the markets there have some of the highest EBIDTA (earnings before

interest, depreciation, taxes and amortization - a measure of operating cash flow) margins in the world.

At the same time, mobile users in mature markets keep adding on subscriptions at a surprising rate.

"We had thought it would plateau at around 110 or 120 percent," Arathoon says. "Now we're seeing it move upwards to 130 percent in some places as people double or triple the number of SIM cards they use. They may use one for business, one at home, and one when they travel abroad. It builds up."

Studies predict that penetration in western Europe will rise from 109 percent in 2006 to 133 percent in 2012. North America will grow from 76 percent to 99 percent during the same period,

while Latin America will rise to 84 percent.

Africa and portions of the Middle East are the only regions where subscriptions are expected to remain below the 50-percent mark by 2012. Due to their size, however, these markets belong to the group that will account for a whopping 61 percent of total subscriptions that year, Pyramid predicts.

Now, vendors and operators alike must figure out how to retain these new subscribers.

"I think it's fairly easy to sign up new subscribers," Arathoon says. "Building services, keeping subscribers and making them profitable - that's the challenge for these operators."

Source: Ericsson



## Sign Language Calls Meet Standard

Ericsson has played a significant role in making a Netwise phone application for the deaf and hearing impaired compatible with the Service Availability Forum (SA Forum) standards.

The SA Forum is a consortium of communications and computing companies that is jointly developing an SAF, open-source, high-availability platform standard. As a member of the SA Forum, Ericsson began the process in January this year to show that it was possible to adapt a commercially available application to SAF.

The adapted application, Netwise's MMX (Multimedia Exchange), allows deaf and hearing-impaired people to make calls using sign language.

"This kind of interpreter service must be a high-availability service," says Marcelo Tapia, System Designer at Netwise. "It is an important social service and it is not acceptable if the service is down when, for example, a deaf person needs to make a distress call."

Carl Engblom, Director of Technology at Ericsson, is in the project's reference group. "Of course, in the future, applications will be developed for SAF from the start. But in this small project we have shown that it is possible to adapt parts of an existing commercial application to this platform."

MMX allows sign language to be sent through a video channel over the public-switched telephone network, the internet

or a 3G phone. An interpreter at a call center then relays the message to the hearing person by voice.

Those with 3G phones can also set up the interpreter service on the spot, allowing direct interpreting in a face-to-face encounter - the deaf person signs into the phone's video camera and the hearing person receives the interpreter's voice through the phone's speaker.

The adapted application was demonstrated recently at NXTcomm in Chicago. Today, MMX is being used in Germany, Spain and across Scandinavia. The US is the next targeted market for the application.

Source: Ericsson



## The Mobile Internet Matures

The idea behind what is sometimes called "all-you-can-eat broadband" is broadband that users are able and willing to access anytime, anywhere. Up until recently, however, the mobile broadband experience has not met these criteria. Consumers have not exactly embraced the mobile internet.

Peter Jarich, a leading analyst specializing in wireless networks at Current Analysis, says: "The web became so popular because it was so open; you could go from site to site through hyperlinks, eventually ending up far away from where you started. This should be possible when you are browsing the web on your mobile too. However, today, the web portals and services offered by many mobile operators keep users within 'walled gardens.' "

Jarich points out that another downside of many offerings is that subscribers pay for their web browsing based on the amount of data that they

download. But consumers are reluctant to accept such a pricing scheme.

But things are starting to change. Today, at least three operators are offering internet access in 'open gardens' with flat rates: T-mobile (Web'n'Walk), 3 (X-series), and Vodafone (Vodafone Mobile Internet).

Network capacity is not a barrier for these offerings according to Jarich, at least not in the US and in Europe.

"With EDGE and UMTS, you have the capacity, and as we speak, HSPA is being launched and rolled out all over the place," he says. "Today, the technological barrier is rather on the device side - many people don't have a mobile phone with which they can access all-you-can-eat broadband."

When it comes to high-growth markets there clearly is not the same demand for a mobile internet experience as in Europe

and the United States, but mobile internet can play a role in providing basic connectivity and internet access.

"Governments and regulators have realized that widespread internet access is important for economic prosperity and development," Jarich says.

Source: Ericsson



## Content Key to SoftBank's Rebirth

Since 2006, SoftBank has orchestrated one of the most impressive turnarounds in Japanese telecoms history. Today, the brand is known for its sleek phones, high-profile advertising and hip mobile content.

Over a relatively short period of time, Japan's third-largest mobile operator, Softbank, has reinvented itself. It has acquired Vodafone's Japanese subsidiary, made significant network investments and rebranded itself through a series of successful marketing campaigns.

In particular, SoftBank is making an effort to provide just the kind of content Japanese subscribers have an insatiable appetite for. In October 2006, it launched S! Town – a mobile social community with a unique three-dimensional interface.

In S! Town, mobile users can control and customize an avatar (a digital character), and use it to decorate their personal room, explore the virtual town, go shopping, play games or even chat with other users.

Since its launch, the mobile community has registered approximately 160,000 users, of which 30 to 40 percent use the service at least once per month. Its popularity among young women aged 18-24 is one important driver of this growth.

Tomokazu Nakaya is responsible for S! Town and says that SoftBank is keen on doing everything possible to fulfill the needs of this important group.

S! Town provides a secure mobile community of uniquely identified users and an easily accessible helpdesk. "Users can experience excitement and convenience that cannot be

gained through conventional text, image or video services," Nakaya says. And there is one additional perk – it has no record of malicious behavior.

There is no monthly fee for using the service but users pay based on the volume of data traffic. For example, starting up in S! Town (which requires about 25KB of data traffic) costs approximately USD 0.40, while changing the interior design of your personal room (about 100KB of traffic) costs approximately USD 1.60.

Mobile blog site Wireless / News reports that 45 million people around the world are currently using some form of mobile social networking, a number they expect to grow to 175 million by 2010. Meeting the needs of this rapidly increasing group is just one of the ways SoftBank is reinventing itself.

Source: Ericsson



## Brazil: Small ARPU But Big Opportunity

With 53 mobile telephones for every 100 residents, Brazil presents a huge, untapped opportunity. A small operator in northeastern Brazil, backed by American investors, has shown what South America's most populous country has to offer visionary providers of mobile telephony.

Brazil is the fifth-largest mobile market in the world, behind China, the United States, Russia, and India. Even so, mobile penetration in Brazil is lower than in many other Latin American countries, such as Chile, Colombia, Argentina, Panama, Venezuela, and most of the Caribbean.

A city located in northern Brazil, Quixadá, with about 75,000 inhabitants, looked like a perfect opportunity to Ruralfone, a US start-up firm that invests in niche markets bypassed by major operators.

Ruralfone's business plan is to offer low-cost telephony in low-income regions, which it does in Brazil through its start-up, Local Telecom. Dennis Côté, president and chief executive of Ruralfone, calls the markets his company aims for "non-central." That, he says, does not mean they are not profitable.

Today, Local Telecom has one of Brazil's highest EBITDAs, coupled with high usage and one of the lowest tariffs in the world.

This is made possible by a no-frills, pre-paid GSM wireless service that is based on the existing local telephone switches.

By sourcing equipment domestically, by not stocking phones, and by hiring workers locally, the operator is also able to keep down costs. In 10 months of operation the cash flow was positive.

Since Local Telecom started operations in May 2005, more than 2700 subscribers have signed up for the service – about half the number of customers served by Quixadá's local telephone company. It is an impressive figure in an agricultural economy located in Brazil's dry plains region, where GDP per capita is about USD 1,230.

"We have expansion plans for other cities throughout Brazil – around 100 all told – copying the same successful formula developed in Quixadá," Côté says.

In December 2006, Local Telecom rolled out mobile communications in Quixeramobim, a neighboring city with about 60,000 inhabitants. More than 500 customers had signed up for service as of March, 2007.

An innovative marketing strategy has proven key to Local Telecom's success thus far.

Valéria Andrade, the operator's commercial manager, says door-to-door sales make it easier for customers to access the service.

"This is a very efficient method; 90 percent of our subscribers signed up through this sales channel," Andrade says. "We have reached our objective of providing communications for everyone."

Quixadá's local economy is already seeing the results of the investments made by Local Telecom.

A local business owner, for example, reports that sales volumes and revenue at his small pharmacy have risen since he started using a mobile phone. The pharmacy owner now receives calls from customers who purchase his medicinal herbs via the mobile phone, without having to leave home.

His rising income helps him pay off a loan on a used car, which he uses to deliver medicines to customers' homes. He is also able to improve his own quality of life and that of his nine children.

Source: Ericsson

## Mobile Retail – Don't Sell Yourself Short

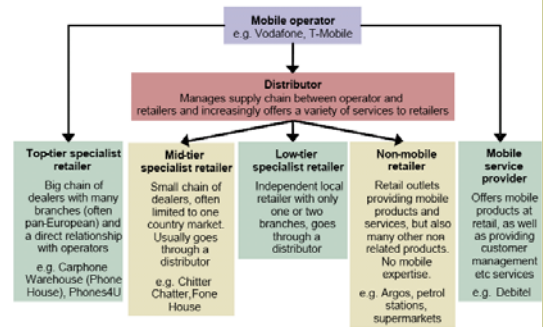
Mobile retail and distribution is a vital part of the industry, and is a key part of any operator's strategy. When it comes to a direct connection with consumers, retail is king.

### Key Issues

- The retail market is complex. It is vital for operators that they are aware of what other players in the value chain are doing, and how best to manage their relationships with these players. The ecosystem is constantly evolving, with new players entering the market, and consolidation and new partnerships being formed, and operators must be aware of this.
- Don't underestimate the importance of distribution. An operator may have a fantastic product, but if it can't get into consumers' hands, it won't have a chance to take off.
- Don't consider point-of-sale and distribution in isolation. They should be part of a larger customer service and CRM strategy, not a standalone

issue.

- You need to choose your strategies carefully. Operators need to ensure that they cover all segments, either through a broad strategy or a range of specific channels. However, they also need to ensure that their retail activity complements their overall strategic direction and service offering.
- Look at new channels. While the traditional retail channels are still going strong, it may be advantageous to look to new means of distributing mobile products and services – particularly for those players targeting a specific segment, or as means of driving cost efficiencies.
- Emerging markets will present new challenges. As mobile begins to penetrate emerging markets, operators will need to consider how best to distribute their products and services. This may involve throwing out everything they know about mature market infrastructures and starting again from scratch.



### Distribution is a Complex Issue

Mobile retail and distribution is a complex process, involving many different players. The relationships between them are constantly shifting as strategies change and the market evolves. Regional variations in distribution are vast, and strategies can differ hugely from operator to operator.

Source: Ovum



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

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