The Sleeping Giant

E-COMMERCE

Although there seems to be no agreed absolute definition of mobile commerce, or m-commerce, – some people think of it as a service, others as an application – it can be usefully characterised as a multi-facetted entity, comprising a number of products and services.

Services can range from buying physical goods in a retail store (using the mobile phone as a payment tool), to the purchase of financial services (using the mobile device as a communication tool) and the downloading of software or content that has a transactional value.

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Precise definitions aside, however, many would agree with the assertion that m-commerce is another logical step in the emergent age of cashless transactions and electronic money flows. Even the most casual of observers is familiar with recent technological advances that enable mobile users to subscribe to simple information-based services. Many too will be aware of more advanced SMS-based developments, such as the ability to order and pay for drinks from a vending machine. These developments hint at the potential of m-commerce, but the real revolution will only come about when it is embraced by the high street. This is contingent on a number of factors, not least the development of

proven user-friendly technologies, common payment standards and effective regulation. Above all, the introduction of adequate transaction security and data privacy safeguards will be essential to build consumer confidence. After all, the initial failure of e-commerce to live up to forecasts was not simply due to an overestimation of the significance of the dot-com economy, it was also due to an underestimation of the importance of security.

Market Growth

Growth to date in mobile commerce (m-commerce) across Europe has been steady rather than spectacular. Whilst there appears to be a consensus amongst analysts that m-commerce has much potential and will grow, there is less certainty regarding the rate of growth or the total value of the market two years hence. Analysts' forecasts for the total value of m-commerce transactions in 2005 range from 7bn to 24bn Euros. Sceptics may argue that such divergence renders forecasts meaningless, but that is not to deny the vast potential for developing new revenue streams that m-commerce brings. In any case, it is unlikely that the market for m-commerce

services will really take off until the end of 2004 – companies need to build and install new systems and it takes time for a critical mass of people to learn about and accept new ways of buying. In addition, the penetration of m-commerce at a European level is critically dependent upon the harmonisation of certain regulatory and business protocols. At present, payment systems and business models vary considerably between countries, re-

flecting different cultural and economic structures. However, the challenge to develop common standards is being taken up by a number of industry consortia and forums, mostly led by mobile network operators or financial service providers.

On the plus side, there already exists a very high mobile penetration across Europe, which will act as a driver for the takeup of m-commerce. This is particularly the case in Scandinavia, for example, where extremely high mobile penetration is catalysing the development of pioneering mobile commerce. Further, m-commerce is not wholly reliant on 3G, and much of the necessary technology is already in place: as well as the wide proliferation of 2G handsets, there is an increasing number of GPRS users, benefiting from higher speed, always-on mobile connectivity.

Business Opportunities and Challenges

Assuming that the technical, logistical and political hurdles are overcome by 2005, what will the m-commerce market look like? The first point to emphasise is that m-commerce covers all transactions for physical or virtual products and services made through a mobile communications terminal. As the market matures, so the variety of goods and services on offer will grow from in-band content to include out-of-band soft goods, hard goods and one-off or repeating services. In-band m-commerce refers to the purchase of content that is downloaded to a mobile handset (e.g. ring-tones, news headlines, sports results). Conversely, out-of-band m-commerce involves the purchase of any goods and services that are delivered by all other methods (e.g. by post or by the customer in person in a traditional high street retail environment). From shopping, ticket booking and personalised information services to banking and insurance, the range of potential services is vast.

The increasing variety of ways that individual consumers and businesses can buy and pay for goods and services will by itself act as a driver of growth in m-commerce. Just as transactions can be made on the mobile or fixed Internet, at real world shops and vending machines, and as person-to-person payments, so payment can be made by credit or debit cards, bank accounts, mobile bills, and other rechargeable or anonymous cards

and stored value accounts. New payment systems such as Vodafone m-pay cards, Mobipay and Paybox promise to make payment even more convenient and consumer friendly. At a macro economic level, however, the impact of a system that enables people to make large or small, explicit or implicit purchases, anytime, anywhere, is likely to be a concern to agencies involved in the collection of tax and settlement revenues.

Ultimately, the full potential of m-commerce will only be realised once high street merchants have adopted it, which means overcoming the virtuous circle of merchant and customer adoption: merchants will adopt when they perceive there is a large customer base, while customers will adopt when they perceive there is a substantial merchant base. Proponents of m-commerce would no doubt point out that this is a conundrum faced by any new investment-driven retail venture, and there are more practical issues that need addressing first. For instance, high street merchants are likely to place a premium on convenience and simplicity, requiring a quick and easy system to implement mobile commerce process. Business opportunities look inviting on paper, but selling the concept to profit-sensitive high street merchants in the real world will rest on the availability of proven new technology, stable mobile payment standards and guaranteed revenue streams. Mobile operators and other parties in the m-commerce industry will need to market the benefits of this new approach to both large and small merchants, and these two constituencies may have different priorities. Most commerce actually takes place in small, local outlets, but attracting a critical mass of such small players will rely on convincing individual businesses that enough new custom will be secured through m-commerce to warrant investing. The entry into m-commerce of large corporations such as supermarkets and banks raises different issues. It is unlikely, for instance, that such organisations

would accept a structure that is predicated on separate agreements with multiple providers. Moreover, the entry of such large corporations threatens to reshape the balance of power in an area traditionally dominated by telcos.

Who "owns" the Customer?

Whilst the growth of m-commerce and content-driven services will give rise to new business models, many of these will involve much more complex value-chains comprising numerous parties, such as network operators, content providers, advertisers and retailers to name but a few. M-commerce has the potential to blur distinctions between business sectors and providers more than ever, and whilst many parties can share in revenues from a single transaction, there will be competition amongst parties to "own" the customer. The concept of loyalty is far more slippery in the world of electronic commerce than in traditional bricks and mortar business. Network operators, credit card companies, banks, and a whole range of other businesses will need to develop new strategies and business models in order to compete effectively.

Transactions can be made on the mobile or fixed Internet.
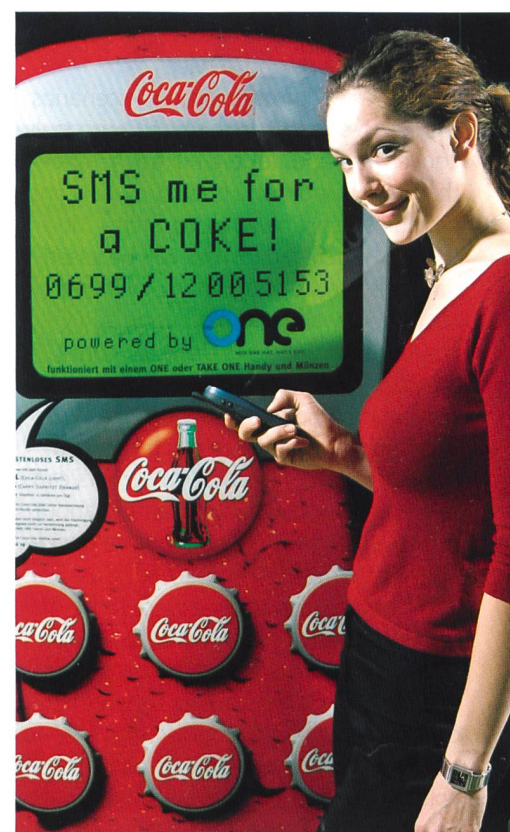
The onus will be on operators to develop value-added services if they are to retain their central position vis-à-vis customers. Networks will need to act as more than simple conduits for the transportation of information. Instead operators need to participate actively in the financial transactions that their networks carry by offering value-added services.

System Upgrades and the Centrality of Billing

Competing effectively in an m-commerce environment is contingent upon business systems as well as strategy. Depending upon their current infrastructure, operators may need to replace or augment legacy systems to ensure that they have m-commerce-ready operations and business support systems. An effective end-to-end platform for m-commerce needs to support key processes such as payment acquisition, retail billing and partner settlement.

Billing is a crucial component of an m-commerce system. Those companies that manage to secure the optimum position in the m-commerce value-chain will be ideally placed to exploit the opportunities that arise. To do this they require advanced billing systems that can bill for, and on behalf of, multiple parties. Operators can make money from payment services by billing for their own value-added services and content, or on behalf of content providers and retailers of real or virtual goods and services.

As the variety of m-commerce scenarios increases, so too will the need for a truly convergent and flexible billing system that can support any pricing models and provide sophisticated discounting functionality. Such capabilities will be essential tools for reducing churn, building customer loyalty and increasing ARPU (Average Revenue per User). M-commerce revolves around real-time transactions and companies will need systems that support pre-advice of charge and pre-authorisation so that customers can obtain information – for example about the cost of a transaction – before deciding whether or not to proceed. Customers will increasingly expect to be offered the choice of paying before or after a given transaction, and companies will need a strategic billing system that can integrate prepaid and postpaid accounts. It will be essential for operators competing in m-commerce to be capable of offering the same tariffs, discounts

and bundles irrespective of payment method. Systems that enable customers to switch between the two payment methods will become the norm, not least as the drive to capture prepaid customer details intensifies.

In addition, operators will need conditional settlement in order to minimise exposure to risk and fraud. Conditional settlement is a way to achieve this without forcing financial losses on partner merchants. In order to manage conditional settlement with thousands of partner merchants cost-effectively, operators will need closely coupled retail billing and partner settlement systems that support the tracking of retail bill payments and due partner payments on a transaction by transaction basis.

Security

Perceived concerns over fraud, privacy and security have long plagued e-commerce, and customers need to be assured that mobile commerce transactions are subject to rigorous checks and safeguards. Consumer confidence will also depend on the reliability of m-commerce, and it is incumbent on the industry to ensure not only that regulations and safe settlement procedures are established, but also that they are adequately policed and supported.

Conclusion

The potential of m-commerce is considerable, but its realisation rests much on the quality and timeliness of preparatory work at both micro and macro levels. At company level, organisations will need to upgrade IT infrastructure and review business strategies, addressing key issues, such as:
– Where in the value-chain should the business sit?
– How to integrate m-commerce with existing distribution channels?
– What partnerships and alliances will best deliver new revenue streams?
– What marketing strategy will work in this new environment?
At a more prosaic level, but arguably no less critical, is the need for operators to unlock the real value of prepaid users. Achieving this is contingent on capturing prepaid customers' details and records of their transactions, without which it is very difficult to sell additional services and increase ARPU for this type of customer. And the issue of "pricing" per se is one that will have to be resolved

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through what consumers are prepared to pay for. M-commerce services will only become apparent over time as the market matures.

At an industry level, stable and secure mobile payment systems and high merchant penetration need to be agreed to make conversion from old to new payment methods worthwhile. Once these are in place, and user-friendly handsets and handset applications are widely available, then it is up to organisational strategies and market forces to decide the winners and losers. M-commerce is unique in many ways, but ultimately success will rest on a tried and trusted recipe – giving consumers what they want, when they want it, and at a price they are willing to pay. [3]

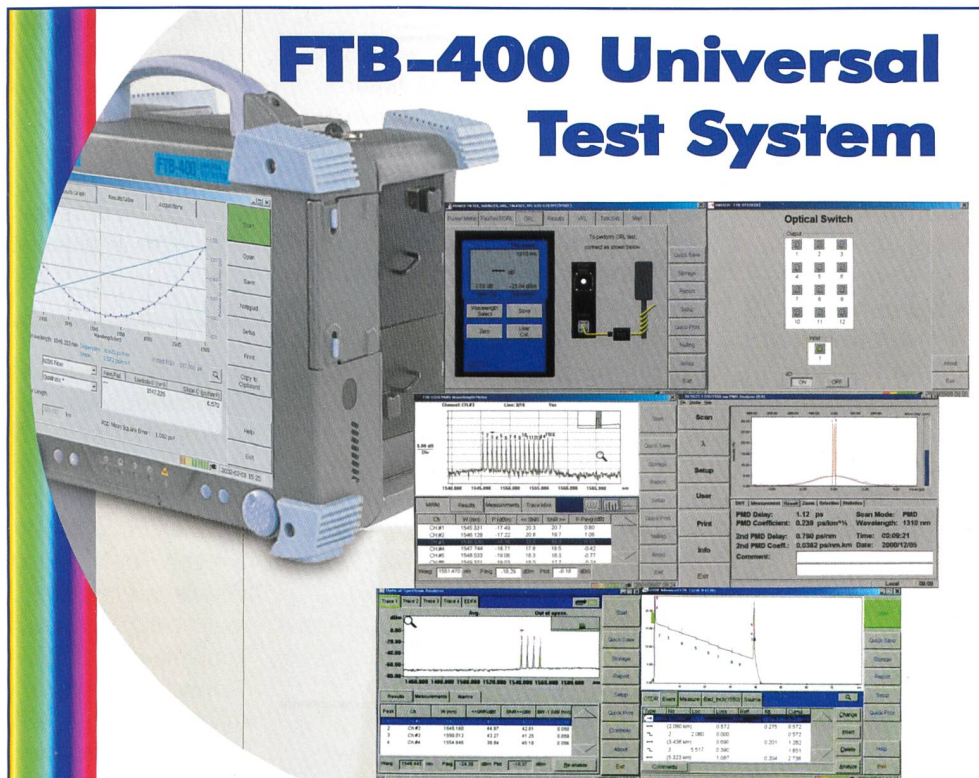*Anjum Sawhney, Vice President, Solutions Marketing for Convergys EMEA.*