

M-Commerce – the next Hype?

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What is M-Commerce?

It looks as if the term M-Commerce and the business models behind become the next great hype in the digital economy. At the moment, however, it is not clear, where the story will end. Suppliers of M-Commerce Solutions, content providers and suppliers of hardware (mobile phones) predict (again) a great future for this concept – with great new services for the customers and great business for themselves.

There are two possible directions for the development of M-Commerce in near future:

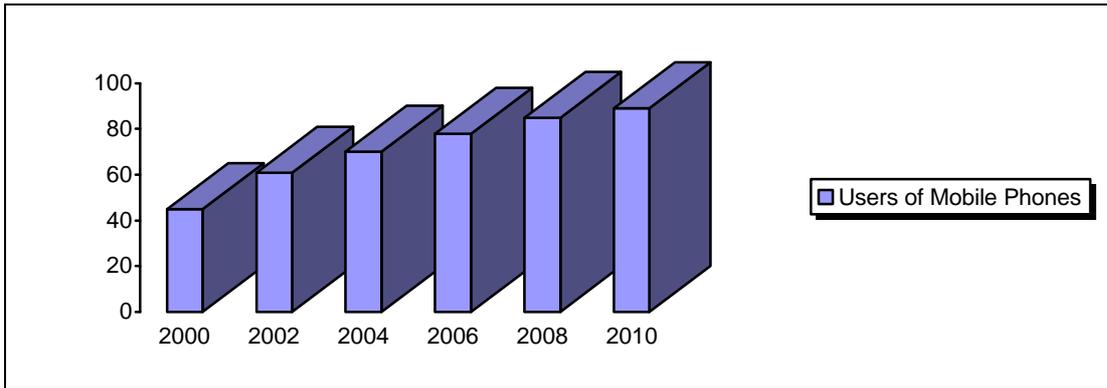
- M-Commerce becomes the next hype – with all the consequences of a hype
- M-Commerce is a natural evolution from E-Commerce into a digital and mobile world

Definition

"Mobile Commerce is the use of information technologies and communication technologies for the purpose of mobile integration of different value chains an business processes, and for the purpose of management of business relationships."

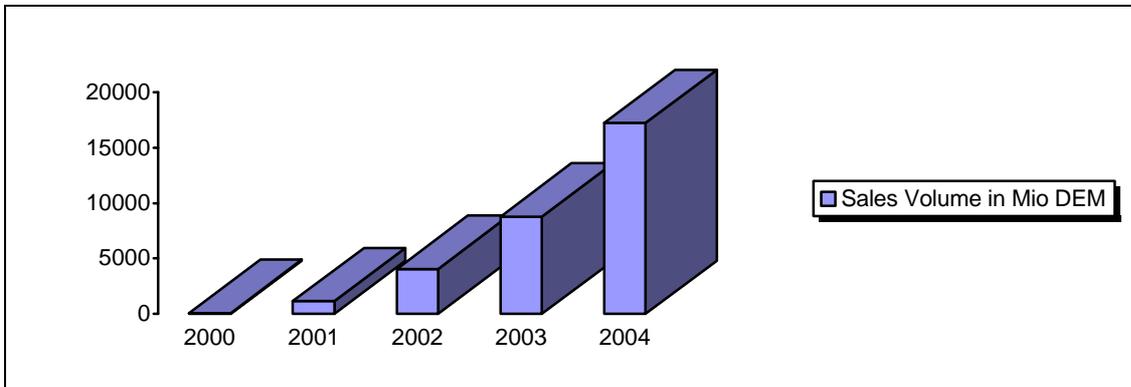
Webagency, 2001

The basic idea of M-Commerce is to distribute information and thus to generate business in a mobile way. M-Commerce gives traditional media (newspapers, magazines, TV) the opportunity to supply different pieces of information tomillions of users, and – in the end of the day - to earn money from re-using their content. These ideas are supported by a variety of predictions, most of them base on the sales figures of mobile phone devices. In general, this is a good starting point. However, it does not take into consideration other devices (e.g. PDA) or the limited usability of mobile phones. The reason for the idea to predict mobile commerce volume from the level of mobile phone use is that powerful UMTS networks will be available to all users in the long run. That means, that, once technical preconditions for mobile commerce are available to the user, he will probably use them. Nevertheless, it is completely open to which level there will be real sales from M-Commerce.

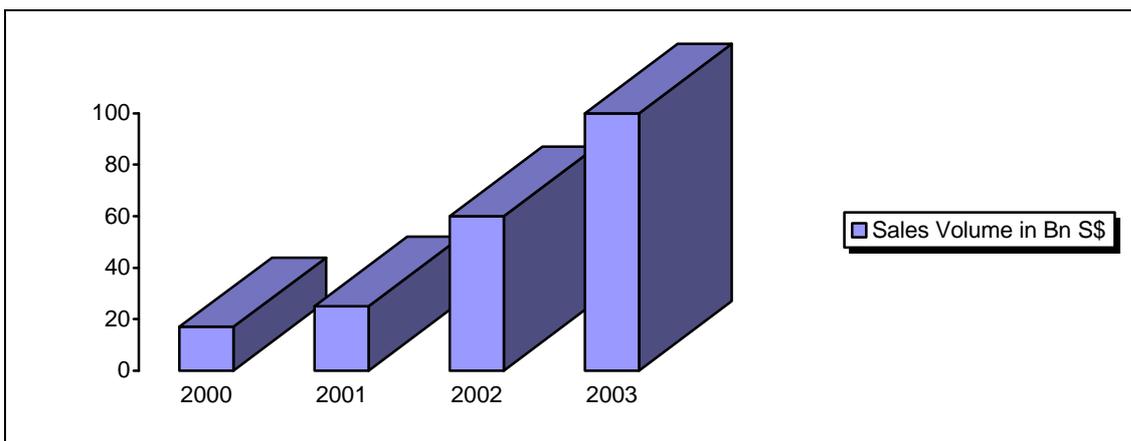


% of Inhabitants of Germany (Ericsson Consulting)

On this basis we can already find first predictions for (possible) sales volumes from B2C-M-Commerce and B2B-M-Commerce:



Predictions for B2C M-Commerce sales in Germany



Predictions for global M-Commerce sales (Boston Consulting)

From a business model point of view, there is a M-Commerce-copy for every model in the offline and the online-world. Hotel room reservation, auctions and event tips are just some examples of what us-

ers can expect in near future. Another application is the transmission of user-specific advertisements/offers directly to the user's mobile phone, in close distance to the supplier (e.g. the menu of the restaurant or the special offer of the grocery store next by). However, these predictions do not take into consideration technical issues and the actual needs and preferences of the users.

Problems with technology and costs

The transfer-standard GSM, that represents the present basis of the mobile-radio-networks, is not optimally suitable for mobile data-transfer. The connections are unstable, the data-transfer-rate is limited on 9,6 kBit/ses and, due to too long transfer duration, the accomplishment-costs are almost prohibitively high. Because of these technical problems, actual revenues in mobile commerce are fairly low. Truly interesting and comfortable services can be offered only with GPRS¹ and UMTS² to the customer.

GPRS can increase data transmission tenfold. Some of the mobile phones available today are already suitable for GPRS. GPRS removes two important barriers for mobile Internet access: pages are transferred quicker and hence, costs of current Wap-services will decrease. However, Wap will probably not rise up to I-Mode, the successful Japanese model.

Moreover, the manufacturers of mobile phones have to come up with something more user-friendly. Today's mobiles are by no way suitable for surfing the Internet; their displays are much too small. In the light of M-Commerce applications, voice messages will lose their central role in use of mobiles.

The time needed for all these developments might be too long for some content providers. Many of these businesses have revenues of less than \$ 5000 a month at the moment. Others are already bankrupt, like the Swedish Citikey. Citikey had a business model that was once highly-praised: a Wap-info-service made local information available by mobile phone. The big boom for content providers is predicted to come in a few years, when UMTS is in use. However, in order to cover the extremely high investments necessary for UMTS, providers might start such services themselves.

Due to the high investments in UMTS licenses and in infrastructure and the related financing costs, all players will have to increase competition in order to make this business a success for themselves.

Overview on Technology

GPRS is data transmission on the existing GSM-network in packets. Its function is similar to the Internet-Protocol IP, therefore it better utilises the existing resources in today's mobile phone networks. After switching on, the mobile phone is always connected to the network. It is possible to download messages at any time, without connecting to the network again and again. Fees are payable only when data is transmitted, not for the time the mobile phone is "online". It is possible to relate payments

¹ General Packet Radio System

² Universal Mobile Telecommunication System

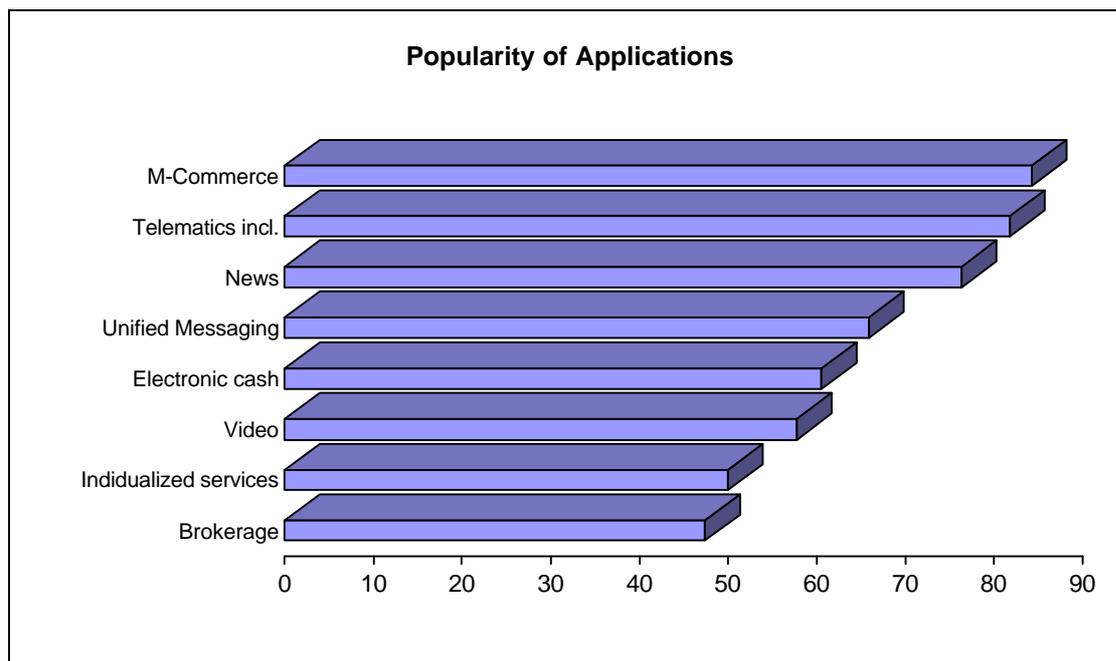
directly to the volume of data transmitted. Therefore GPRS allows to offer volume related rates instead of the traditional time-related rates.

HCSD – High Speed Circuit Switched Data – bundles up to eight GSM-channels. This provides a transmission rate of up to 76,8 Kbits per second. However, this bundling requires an enormous bandwidth in mobile phone networks. Hence, HCSD will not be a viable alternative to UMTS.

UMTS is a global standard for third-generation mobile phones. Up to now there are two different standards – the European GSM and the American CSMA. UMTS can replace both protocols. This new standard provides a theoretical transmission rate of up to 2 Mbit per second; hence, it will be possible to download complete Internet applications via mobile phone. UMTS automatically recognises voice and data.

Problems with the Acceptance amongst Users

Currently, operators and providers of mobile phone services expect a high acceptance of M-Commerce applications:



Popular Applications (Ericsson Consulting GmbH)

This study from Ericsson Consulting has several interesting aspects: M-Commerce is said to have a popularity of 84.2 %. How does the user define M-Commerce here? Telematic services including navigations hold second position. Most probably, M-Commerce will have a profitable future only when it can offer new services or existing services in a new quality. The strategy “We go for M-Commerce because it is technically possible to do M-Commerce” is a dead end. Telematic services (e.g. GPS) are already available. Another currently very popular example of M-Commerce is the Pay-Box-System (payments via mobile phone), which is used in Frankfurt taxicabs. What is the value added for the

customer, who already has to options to pay his taxi via credit card or in cash? Moreover, it still is completely open what will happen in the case that the networks should be overloaded during rush-hour.

After an initial enthusiasm about the opportunities of M-Commerce, we now see disillusionment. **M-Broking** has made customers uncertain, and hence, slowed down mobile banking, with underdeveloped products and technical transaction problems. Therefore, many banks have decided to wait and see how the acceptance of mobile finance is going to develop. An analyst from Forit, however, warns of exactly that. She says it is not possible to reach the enormous mass of potential customers without appropriate investments. (How about an ROI-calculation?) The first objective for banks should not be revenue, but improved customer relationships. Forit thinks that, instead of blaming technical problems for the low usage, banks have to be aware of their customers needs and have to develop products that meet those needs. The consultants predict: "The potential for mobile finance will grow quickly as soon as there are fast, easy to use and mature applications available."

Some M-Commerce solutions base on personalised services (e.g. position-related and user-specific offers that direct the user to a shop or restaurant nearby his actual position). On the Internet, only 13% of users make use of the option to register to websites or to personalise websites. Nevertheless, in a survey, more than 30% of participants stated that they would prefer personalised websites. This proves that predictions of the "Would you like to ..."-type do not necessarily reflect later actions of these persons.

One reason for this contradiction is probably that customer data has been misused (e.g. for spam) on the Internet. The author predicts that a similar trend (not-authorized use of personal data) will come up for M-Commerce.

A recent study from the German Society of Consumption Research found that only 3% of participants would be willing to accept position-related advertisements. If such advertisements were combined with a discount on the advertised products or services, not more than 12% of participants would accept them. Similarly, only 12% expressed their acceptance of personalised advertisements that are related to their individual profile.

Outlook

What opportunities does M-Commerce offer? Doubtless, there are some applications that will be useful for users. These are time-critical services that people would need on their way – e.g. traffic news, stock market reports, booking functions etc. Nevertheless, it is not a good idea to simply offer a mobile version of all services that are available offline or on the Internet without critical analysis of their usefulness.

Many E-Commerce service providers had to learn this the hard way. M-Commerce should learn from these experiences.

In the United States, computer-based Internet services are much more common than the use of mobile devices. This offers a huge growth potential. The point is, however, to determine which applications the customers will really perceive as valuable. One could say that the Americans observe the European market for mobile services as some sort of test-market. But maybe, they simply have a better feeling for which applications are suitable for mobile business models?

It is easy to understand that companies like Nokia, Ericsson, Siemens, and Motorola, or service providers like the German Jamba promote M-Commerce actively. The supply of new high-tech-devices and of high bandwidth service applications is promising huge business volumes.

Despite the new hype – the rule for M-Commerce is the same that applies to the old economy and the new economy: Get to know your customers. Learn about the needs of your customers. Critically analyse, which of these needs could be served with mobile services.