Mobile Commerce
Signature Cards

Who Owns The Customer?
Banks and Telcos compete for market shares

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Abstract:

Banks as well as telcos are in competition to identify the customer within the growing mCommerce market. Identification of customers is a core component for the introduction of high value mCommerce applications.

Currently arguments pro/contra the most appropriate identification method are exchanged on a mostly technical basis. But only one standardised method will have a real chance to be established at the market since this is the only way to achieve a market penetration in a fast and cost-effective way.

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Banks and Telcos competing for market shares

The question „Who owns the customer?" is currently discussed by two business lines that had only few common businesses – banks and telcos. Based on the framework invented with the new medium mobile internet, both parties compete in opening up new business areas.

Legal Framework

By the adoption of the European Union guideline 1999/93/EG resp. the German Signature Act (SigG[1]) the legal framework was established to make digital signatures equivalent to physical signatures. In contrast to the conventional identification method (passport/identity card) the state will not offer digital identification means itself. Therefore different possibilities of offering services around the identification arise for the private sector.

Telcos

So far telcos have positioned themselves primarily in the area of communication and as technical service provider of the necessary infrastructure. In the fixed network area the telcos could extend their business field by using the existing line network for data transfer. Within the mobile phone area the telcos use the infrastructure for data transfer as well. However, so far only SMS could be established as genuine data service due to technical restrictions. The future mobile phone networks based on the new standard UMTS overturn existing restrictions and enable the use of mobile internet services. The quality of the new services will reach a level which is known from the internet so far. The market launch of UMTS is just ahead (approx. mid 2003). For the refinancing of the UMTS licenses, which cause

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[1] Article 3 of the German „Informations- und Kommunikationsdienste-Gesetz"

enormous capital outlays for the network, telcos need so-called killer applications. The identification of the customer over his mobile phone turns out to be such a central service.

Banks

Banks have grown relationships to both business and private customers. Moreover, they have the necessary reputation to be accepted as provider of respectable financial services. The banks try to offer existing internet services to their customers in mobile form as well.

With this so-called multi channel approach they intend to establish a universal identification procedure which may be applied in all markets which are relevant at this point of time (physical business, eCommerce and mCommerce). On the one hand new potentials to save expenses arise in the core business of the bank as a result of the legally binding signature available in the internet (e.g. on-line opening of an account etc.). On the other hand the bank as a trustworthy institution can offer the identification service to external partners. At present banks consider issuing signature cards as a universal instrument for identification.

Both approaches currently result in a potential conflict between the parties about the identification of customers in mCommerce.

Technology determines the opinion

Basically, three technical implementations of the identification via the mobile phone can be differentiated:
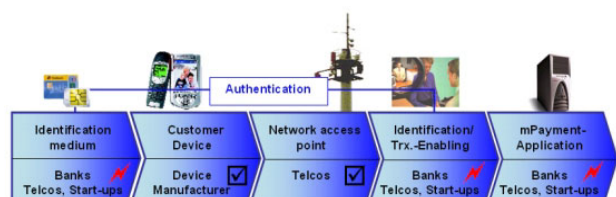
Single Chip:
The existing GSM chip is extended by the exchange data / identification data.

Dual Chip:
The mobile phone possesses a further SIM card beside the GSM chip, on which the exchange data / identification data are stored.

Dual Slot:
The mobile phone possesses an additional card slot, into which for example a credit or a debit card can be inserted.

As issuers of plastic cards banks and credit card companies prefer the dual Slot version, while as issuers of SIM cards telcos prefer single chip or dual chip. All solutions have the common disadvantage that in order to supply an identification service the mobile phones must be extended with appropriate functionality.

All technical versions only marginally differ with respect to security consideration and flow control. Therefore the substantial characteristics are resulting from the question: "Who is the issuer of the identification medium?". The issuer of the identification medium is in charge of both the customer registration and the authentication during the business transaction. Therefore he would like the customer to be in his customer base and to use the customer relationship for all his business.

Thus the issuance of the identification medium substantially influences the creation of value and the process chain. If one regards the enormous costs of issuing legally binding identification media, it becomes clear that only financially strong enterprises which already have a large customer base will be able to generate a positive return of invest-

ment in medium-term. This explains why just banks and telcos appear as competitors.

Initial position of the players

The initial position of both industries for entering the new business area of identification services is very much different due to the different core business fields.

Banks

Banks are the most important card issuers. Each customer usually possesses several cards of its bank (Bank Card, EC card, credit card). Due to the rising fraud rates the banks are forced to migrate from the current magnetic stripe cards to smart cards. For the credit cards a common standard of VISA and MasterCard will be established, called EMV. Beyond that all German banking bodies work on a common standard for the bank signature card which is expected to replace the present bank cards in the long run. The bank signature cards will be issued in compliance with the German Signature Act. With respect to the banks' strong customer relationships and its universal usability these cards are to be used in the mCommerce area as well.

All bank cards are usually provided with a certain period of validity (normally 3 years). Thus banks already have processes in place for the smooth exchange of the cards. Thus, new card generations can be smoothly established at the market. Another advantage of the banks is their status as trustworthy institution, which plays a substantial role especially for the identification service.

Telcos

In contrast to bank cards the GSM cards are not limited in their validity period. Owners of mobile phones often replace their phones at the end of the contract run time; however they keep their SIM chip. At present there is no process established by the telcos to replace masses of modified SIM cards, as it

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would be necessary for the establishment of a new identification procedure based on the existing GSM technology. However, for the new transfer technology UMTS new and special terminal generations are required, which determine a new generation of SIM cards. This results in the unique opportunity to position a new identification mechanism all over the country starting together with UMTS. The traditionally close co-operation between telcos and terminal manufacturers thereby provides a very good initial position for the telcos.

Result and view

Both industries have a good initial position for the establishment of identification services. At present none of the industries can gain an advantage for itself within the mCommerce area. Therefore, there will be a strong competition in the market for identification services in the next couple of years. At the moment, none of the industries is in a position to refinance the high investments by the introduction of suitable applications alone.

In addition, the past has shown that the coexistence of similar systems tends to result in an obstruction of the market penetration. Thus an early agreement on a common standard is a prerequisite for the fast and cost efficient development of the market.

From the authors' point of view the question "Who owns the customer?" should not play a central role. Primarily the market is opened via high-quality applications, which offer a genuine increase in value for the customer; the customer identification is merely a component of the value chain.

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