eCommerce
Signature Cards

Identification as Service
Registered customers' value

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Abstract:

The internet is connecting people all over the world. Because of the fact that the communication partners are located in different areas it is very important to ensure the identity of the communication partner. If a business connection between the involved parties already exists, such as the bank-customer relationship, it is possible to identify the partners using a PIN (Personal Identification Number) based on bilateral agreements. The value of a large number of registered customers becomes evident in the business model of internet portals like yahoo.com which earn an essential part of their revenues by selling the customers' addresses to co-operation partners for advertising purpose. The problem with regard to the usage of customer relationships is the transferability. A customer can use one identification mechanism for just one company and sometimes even only for specific services. With the announcement of several regulations (Signature Act, etc.) the legislator has provided a general framework for establishing identification as a commercial service. For the first time, a company which has registered customers and equipped them with "ID cards" can offer the identification service to other companies and institutions.

Starting position

Public networks such as the internet will be used more and more for business transactions all over the world. Because of the fact that communication partners are located in different areas it is very important to make sure with whom one is communicating. Especially with regard to business transactions over the internet it is necessary to ensure the identity of the business partners doubtlessly before exchanging sensitive data.

Internet portals as intermediary

Taking a look at the source of revenue for internet portals like yahoo.com one can see that registered customers represent a value. Private customers are registered at portals e.g. for opening free email accounts. In return the internet portals are using the customers' addresses for advertising. Cooperation partners are paying for the distribution of their advertising material to the registered customers.

Microsoft Passport

The IT market leader Microsoft is going another step further. With its Passport service as part of the .NET-strategy Microsoft wants to register a large number of customers (up to now, more than 165 million customers are registered). The customer has to be registered for Microsoft Passport once. This way Microsoft gets the personal data of numerous online customers.

With Passport Single Sign-on is possible: Customers don't need to remember several but only one password to get access to multiple web sites and services. Microsoft is offering this identification as a central service. Because of the fact that the registration process has a poor quality (only online registration without address verification, showing the identity card or something equivalent) the Passport identification cannot be used for all kind of business transactions.

Registration quality

It is very important to clarify who is responsible for the identification of the customer and how the personal data were recorded. Application data which are collected during simple application processes via the internet without customer identification cannot be checked easily in respect of misrepresentation. The offering of identification services requires both a high quality of customer registration and a reputation as trusted party at the market.

Especially banks have long term relationships with their customers. Due to legal regulations these relationships are legitimised. Therefore banks have a high potential to offer identification as a service for business transactions. How is it possible to use the existing customer relationships for the identification service?

Signature Act provides legal framework

In Germany the revised German Signature Act was announced in the Federal Law Gazette May 2001. It replaces the old Signature Act of 1997. By making electronic signatures equivalent to handwritten signatures the German government intends to stimulate electronic business transactions. Contracts which had to be signed manually in the past can be concluded electronically now.

For the first time, a company, which has registered customers and equipped them with "ID cards", can offer the identification service to other companies and institutions.

Because of the high costs for the customer registration it is obvious that only a few financially strong companies are in the position to establish such identification portals.

Emission of Signature cards

The following institutions and sectors can potentially act as issuers of signature/chip cards:

- government (with the public authorities)
- banks/credit card companies
- telecommunication providers
- other authorities which are issuing cards (e.g. employee cards, consumer cards)

At least in Germany it is most likely that the government is not going to issue signature cards in the foreseeable future. Employee and consumer cards can only be used for a restricted area (e.g. for access control). According to this, the most active players for offering the identification as a service to other companies are the banks and the telecommunication providers.

Identification as service

With the use of identification mechanisms which are complied with the Signature Act it is possible to offer services which could only be provided by the government itself up to now. In this context three important business areas could be identified:

Verifying the identification for a specific business transaction
This model is based on the consideration that the identification of the customer represents an extra value for every transaction. For a fee it will be proven whether a customer can present a valid ID card at the current point of time or not.

Verifying a legally binding digital signature
In contrast to a physical signature, which cannot be verified with absolute certainty even by graphologists, it is possible to verify digital signatures doubtlessly.
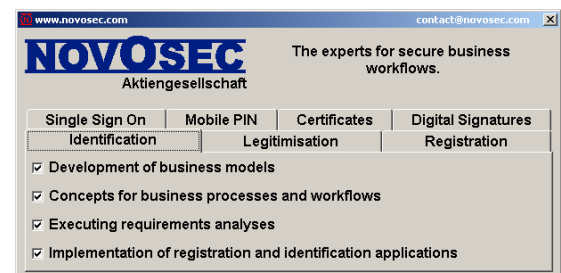The use of digital signatures makes it possible to save expenses in particular for institutions which are facing high costs for the verification of signatures.

Customer Identification for one unique legally binding registration
In order to adopt the proof of identity for the initial registration it is also possible to request fees. This model is comparable with the PostIdent method in Germany. The customer needs to undergo a face-to-face identification performed by a post officer. Presently the PostIdent method is often used for customer registrations which need the verification of ID cards because there is a lack of alternatives.

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