Online Stored Value Systems

Definition

Stored value systems are a form of electronic payment technology. They coexist with credit and debit technology and principally target the low value transactions. Online stored value systems have very low transaction cost. Stored value systems are based on creating a form of electronic value, for example on smart cards or as computer files. The value can be bought (withdrawn) anytime and spent in optional parts at a later date.\(^1\)

History

In the first half of the 1990s online stored value systems were developed. In the beginning the usage of stored value systems was low and it was unclear whether and when they will play a relevant role in the payments system market.\(^2\)

Today “Stored Value Cards (SVC) are one of the most dynamic and fastest growing products in the financial industry”.\(^3\)

SVC as a type of business model are necessary for low value payments. In addition SVC can only aggregate low value transaction cost-effective.\(^4\)

Examples of typical applications

Typical applications of stored value systems are Stored Value Cards (SVC). A SVC is a smart card with a microchip or a plastic card with a magnetic strip which registers the accounting balance. One leading difference between SVC and prepaid debit cards is that prepaid debit cards are usually issued in the name of the account holders. In contrast Stored Value Cards are usually anonymous. The notion “stored value” means the funds and data which is stored on the card.\(^5\)

SVC are used as fare cards, telephone prepaid calling cards or for micropayment in shops and vending machines. In every country there are different types of SVC:

- Chipknip in the Netherlands
- Geldkarte in Germany
- Quick in Austria
- Cash Card in Switzerland
- Mon€o in France
- Proton in Belgium
- FeliCa in Japan
- EZ-Link and NETS in Singapore
- Octopus card in Hong Kong

In Germany the Geldkarte is also used to verify the age of the customer age at vending machines for cigarettes. Stored Value Cards also appear in form of payroll cards, rebate cards, gift cards and travel
How Stored Value Cards work

It is necessary to differ between two types of Stored Value Cards:

Closed system prepaid cards

Closed system prepaid cards have substituted the traditional gift certificate and are known as merchant gift cards. “Closed system” means that the cards are only accepted at a single merchant. These cards are also referred to as “closed loop” or “single-purpose” cards. Purchasers buy a card for a fixed amount and can only use the card at the merchant that issues the card. The cards have often an expiration date or a service fee. In addition most closed system cards cannot be repaid in cash.

Open system prepaid cards

Open system prepaid cards have nothing in common with credit cards. The issuer doesn't allow a credit to the cardholder. Stored Value Cards use magnetic stripe technology to store information about funds that have been prepaid to the card. The value is not physically stored on the card. With the aid of the card number it is possible to identify the record in a central database. These cards are similar to closed system prepaid cards but they are connected with a retail electronic payments network such as Visa, Visa Electron, MasterCard or Maestro. Different to gift cards they can be used anywhere where debit cards with the same logo are accepted. They are very similar to debit cards except that they don't require a bank account and can be used to make debit transactions or to withdraw cash from ATM’s.

Furthermore the cards can be used as a safe and responsible method for parents to give their children some spending power. Kalixa or Travelex are examples of such “open loop” or “multipurpose” cards.

Another example of open system prepaid cards is the payroll card. Payroll cards enable employers to pay their unbanked employees via direct deposit.

Why and Who?

Why use Stored Value Cards?

SVC are easy to use, low-cost and easy to issue. Furthermore SVC are used to:

- convert cash and paper transactions to electronic
- reduce the cost of securing, transporting and accounting for cash
- accelerate transactions at the point-of-sale (POS)
- to get rid of intensive back-end processes like vouchers, meal tickets, money orders, traveler's checks or other payment methods
- decrease the extent of theft or loss
- offer consumers more possibilities

Who uses Stored Value Cards?

Organizations that aim to terminate the circulation of cash and reduce the costs of administration and processing of credit cards. As well Federal Agencies use SVC applications, for example the US Army. ¹¹

Misuse of Stored Value Cards

Money laundering

There is growing concern that criminals worldwide are using Stored Value Cards to move money from criminal activities across international borders. For example in the United States it is legal to enter or leave the country with money that is stored on these cards. ¹²

Forecast

To optimize SVC as a form of digital wallet it is necessary to pursue three goals:

- A widespread infrastructure is required for recharging the SVC anywhere. The customers need the possibility to recharge their cards on ATM’s, POS-terminals or in the internet. It would be useful to recharge the SVC during the payment process with the POS-terminals, if there is not enough money on the card.
- SVC have to be accepted not only through POS-terminals but rather at vending machines like parking meters, ticket printers or soda machines. It would be an optimum if these transactions work wireless.
- A sustainable marketing is required to boost the publicity of SVC. Often the consumers don’t have the adequate knowledge about the product and don’t know how to use it. That’s why the attractiveness of using the SVC for low value payments has to be increased through marketing.

Finally there is a aim of creating a European product, which can be used in the Single Euro Payments Area (SEPA). On top a European governance should regulate the product. ¹³

Further reading

- Digital Wallet
- Digital Cash
- digital_credit_card_payment_systems
- digital_payment_systems_and_the_wireless_web

— Matthias Winnai 2011/09/13 13:05

2) http://www.springerlink.com/content/q0810173m4877q2x/ (added September 11, 2011)


