E-BANKING SERVICES AS AN ELEMENT OF E-BUSINESS

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Abstract
An increase in social expectations in relation to subjects rendering financial services, dissemination of new technologies, more developing technical culture of society, an increase in importance on information technology in economy, business globalization, consolidation of banks and an increase in competitiveness are only a few reasons which had an influence on a type and quality of services rendered by banks.

Electronic business is of particular importance in the finance sector. It comprises both a scope of customer service and a transfer of funds and mutual co-operation of institutions. Necessity to introduce comprehensive electronic business results from, among others, a level and scope of competition present on world financial markets nowadays. Banks wanting to maintain an appropriate position on the market face challenges which force them to use solutions increasing effectiveness of their activities.

Keywords: e-business, financial services, electronic banking, e-banking services.

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Introduction

Electronic business is a complex and dynamically developing sector. It is not only limited to access to World Wide Web and information exchange. In order to achieve success in it, different requirements must be met, and they are such as: safe information processing concerning transactions, winning customer's trust, skillful management of intangible products. Electronic business is of particular importance in the finance sector. It comprises both a scope of customer service and a transfer of funds and mutual co-operation of institutions. Necessity to introduce comprehensive electronic business results from, among others, a level and scope of competition present on world financial markets nowadays. Banks wanting to maintain an appropriate position on the market face challenges which force them to use solutions increasing effectiveness of their activities. In this system of market forces even commercial networks offering their own credit cards and financial institutions not

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having a status of a bank, but offering less expensive services of the same kind constitute a threat and competition for banks.

Financial sector activity, including banks, is not connected with manufacturing physical products, but it is business based on information using telecommunication and information technology achievements on a wide scale. Management of finances becomes more and more management of information about creditability, purchasing power and financial position of persons and institutions. New technologies are directed to manage relations with customers, to improve internal integration of systems and internal operations of banks, but not as in the previous period to increase inner efficiency and development of distribution channels. Those factors cause that the bank sector is prepared best to function in the electronic environment and develop electronic economy. Information and communication technologies can be used in any type of bank activity and they are the main factor of changes in the whole sector of financial services. In that economic situation only those banks, which will use different distribution channels and variety of services and modern technological solutions will be basis of their long-term strategy, will achieve success.

Problems of electronic economy became a key element of initiatives undertaken by European Union within the framework of the Lisbon Strategy. The main aim of the Lisbon Strategy, within the e-Europe initiative accepted in Seville in July 2002, is to transform the European economy to 2010 into the most competitive world's knowledge-based economy. One of the assumptions of the strategy is to make electronic banking development more dynamic a fundamental factor to create an integrated European market of financial services. It is possible due to liberalization of the telecommunication services market, what will have an advantageous influence both on development of this sector and development of electronic services rendered by the banking sector. For that reasons the Lisbon Strategy emphasizes the market liberalization, development of the telecommunication sector and it defines clearly a role and place of financial institutions and capital market in UE. The Romanian banking sector has been obliged to undertake activities aiming at creating an integrated market of financial services until 2005.

**E-banking services**

Thanks to multiplicity of channels, banks use multichanneled strategy which offers many distributive channels to clients along with financial service which seems to be attractive. The level of complicated service changed from simple marketing service into complicated interactive service thanks to new information technologies and information techniques. It also influenced bank functioning from interactive into proactive, supporting the client (the concept of partnership e-banking).

The changes of e-banking led to creation of new e-services dependent on used accessible channel such as:

- Bills payments;
- Funds transfer among accounts;
– Orders instructions;
– stocks and shares trade;
– credits acceptance;
– accepting credit cards applications;
– reviewing the calendar of dates and deadlines;
– reviewing the history of carried out operations;
– tax accounts;
– sending orders and messages by means of text message system;
– aggregation of financial services as well as associated financial services i.e. insurance, leasing, investment or retirement services.

Table 1. Classification of chosen e-banking services on on-line offer

| Products improving comfort                      | – Mobile banking  |
|                                                | – Mobile payments |
|                                                | – SMS alerts      |
| Services for third parties                     | – Internet payments|
|                                                | – Payments of taxes on-line |
|                                                | – Payments of bills |
| Other financial products                        | – Life insurances |
|                                                | – Vehicle insurances |
| Investment products                             | – Opening and managing deposit accounts |
|                                                | – Purchase/sales of investment funds securities |
|                                                | – Purchase/sales of bonds and other investment instruments |
| Bank loan products                              | – Bank loans applications |
|                                                | – Credit cards applications |
| Simple banking products                         | – Opening/closing/managing an account |
|                                                | – Domestic and international money transfers |
|                                                | – Standing orders |
|                                                | – Direct debits |
|                                                | – Debit cards applications  |

Source: Centeno, C. Adoption of Internet Services in the Enlarged European Union from the Internet ranking case. June 2003.

With the development of e-economy new payment instruments were introduced on the market. These new instruments made it possible to conduct transactions on the Internet and in the mobile environment. In Romania the market of pay cards was created only in the 90ties of the last century following the reforms initiated after the change of political system in 1989. (in the year 1995 appeared for the first time in Romania the card as a payment instrument) These reforms radically transformed Romanian banking sector. In this initial period demand for modern payment instruments was moderate. There was no sufficient technical infrastructure which
would accept electronic payments. The year 1999, however, saw considerable increase in demand which was a result of rapid changes on Romanian financial market and was determined by potential customers needs.

The future of banking and financial services is associated with EMV microchip card. Currently in the EU there are 25 different kinds of electronic money based on microchip cards. The first microchip card in Romania was MasterCard Standard International (2006) created by ING. The big asset of microchip cards is greater level of transaction security when compared with cards with magnetic strip. Such cards can be used in health care, transport or e-Governement. Another important factor is the microchip potential to process information and store a few thousand times more information than a magnetic strip. Having recognised these new areas of EMV cards application the EU is currently promoting activities aimed at popularising microchip card solutions making it a priority of Europe programme.

A solution gaining big popularity in Europe (especially in Belgium and Luxembourg) is the so called electronic purse. It is an intelligent chip card used off-line, by means of which it is possible to settle small payments for services worth less than 10 USD in cashless way. The European Committee claimed e-purse proves to be essential in creating the Economy and Currency Union. It was also pointed out that thanks to low costs electronic payments can replace cash in member states where the local currency is weak. E-purse standard is being created in cooperation with CEPS (Common Electronic Purse Specification), VISA, Proton and a number of European financial institutions. This project is partly stimulated by introduction of the European currency Euro. It is expected that all national enterprises connected with e-money wanting to go internationally will join CEPS. Combination Euro-CEPS can be the greatest driving force towards adoption of e-money.

Another solution based on e-money concept is a credit card:

a) post-paid-cards: the issuer covers the costs incurred by the card holder for purchasing goods or services. The card holder can purchase goods or services by means of his credit card and its authorisation in Authorisation Centre before he actually pays for them. If the payment is settled through the Internet, the card holder must provide his card number as a part of the cripto-graphic procedure.

b) prepaid cards with determined credit value reflected only on central server. Payments are settled anonymously (registration is not required).

Popularisation of the Internet Channel in business activity created a demand for payment instruments adjusted to network environment - network money and software money. There are two kinds of network money:

c) money on a microchip card whose reading is carried out on a PC of its holder. The PC, however, must be equipped with a special programmed reader (i.e. pre-paid card- e-purse).

d) money on a computer disc: E-Cash, DigiCash12, stored on the hard disc and used in networks (e-cash is of single-use type which means that once a banknote with a given number has been used it is invalidated by a bank).
These systems are similar to the solutions used a cash card or money transfer. Their special feature is innovative opportunity to send money by SMS, e-mail or Internet websites. Taking as a criterion the addressee of the payment the systems can be divided into two groups:

- systems which allow to make a payment only to a business person (person to merchant);
- open systems allowing for transferring payments between market users (person to person). To these open systems belong banking institutions and other non-banking subjects.

These opportunities are used by PayPal the Internet payment system. There are not many similar solutions on the European market. It is used by a Dutch bank ING. product Way2Pay, Robobank, system Minitix.

**Distribution channels of the products and e- services in ebanking**

In new economy conditions managing financial institutions is connected with the change of the ways of services selling, providing information to clients as well as with the change of their function and noticing the key competence. The standard of work in banking area has been related to the usage of solutions based on information, knowledge and new technologies which give the clients access to financial means collected on the bank accounts and the possibility to make different transaction there. It has led to distinguishing great variety of e-banking channels such as:

- Cash dispensers;
- Phone banking;
- Banking based on separate network - home banking (Corporate banking);
- Call Centre;
- Voice-IVR;
- Internet banking (with the type, limited to virtual sphere, virtual banking);
- Mobile banking (SMS banking, make possible to manage the bank account by means of textual news SMS as well as WAP banking, allowing for interactive contact of the client with the bank by means of mobile phone using protocol WAP- Wireless Application protocol);
- TV-banking, allowing access to the bank account by means of TV set and telephone;
- Multimedia kiosk.

The usage of these channels in the banking sector vary and depend on the level of entanglement of the services offered by them, offer of banking financial tools as well as strategies used by the banks. Cash dispensers are the most popular channels. It results from the easiest way of operating and the possibility of doing different services by these machines. In Romania the network of ATM is constantly developing. In 2000 751 items have been installed (Fig.1), 11,287 million transactions have been made (Fig. 2) and their value has been on 848,79 million RON and in
2008 9246 items have been installed, 207,233 million transactions have been made and their value has been on 80592,77 million RON.

**Figure 1 Changes of the number of ATM in Romania in 2000-2008**

![Changes of the number of ATM in Romania in 2000-2008](image)

**Figure 2 Changes in the number of transaction in cash dispensers in million items**

![Changes in the number of transaction in cash dispensers in million items](image)

Nowadays many of the cash dispensers functioning on the Romanian market are the multi functioning machines and the owners of the cards can use them 24 hours. In spite of the fact that year by year there is a growth of cash dispensers their location is not steady. Further growth of the popularity of this banking channel will be possible when the financial tool such as chip cards EMV will become more common. The internet becomes the e-channel which is developing very fast these days. Despite the e-banking leads to segmentation of the market, products and services (this may derive from the level of service complication, its value and the security of transactions), it allows to enlarge the receivers. It is caused by:

- Conducting simultaneous and fast bank service for large number of clients;
- Individualisation of bank offers, creating of individual client wallet on the basis of information gained about him for instance preferences;
- Conducting service of client by the bank 7 days a week as well as 24 hours (without time limit);
- Enlarging geographical reach. bank without borders (borderless bank), which allows to realise the order from different place (without space limit);
- Enlarging market research;
- Realisation of the orders on-line;
- Quick support of bank workers in case of emergency;
- Lowering the cost of single transactions and commission for the services;
- Enlarging client satisfaction this can lead to the growth of his loyalty towards the bank.
- Enlarging the competitiveness of the bank on the market of bank services.

The growth of the interests in services offered by this channel was the reason of creating by the banks, in terms of their structures, internet braches which are mainly responsible for the development of e-services. The success of the internet braches have been gained by traditional banks with strong and stable position on the financial market and with wide consumers base. It resulted from the compromise between the habits of clients to traditional form of transaction realisation in the bank and the solutions of 21st century standards (internet channels).

**Conclusion**

Modern e-banks take a particular place in e-economy. Their importance for development of new economy has been emphasised in the e- Europe programme, that is one of the Lisbon Strategy principles. E-banking makes it possible to perform such services as: electronic tax clearings, unemployment benefit or scholarship payments. According to many Romanian bankers, there is a strong belief that multichannel activities and modern technological solutions will contribute significantly to the improvement of profits coming from banking operations. It means that the importance of both Internet and virtual banking on financial markets will be gradually increasing. The researches led by IPSOS show that about 84% of the banks plan to introduce new solutions to bank-client relationship management. Other key enterprises of banking sector include: popularisation of mobile banking technology based on GSM technology with main access channel via Short Message Service (SMS (on a smaller scale, via WAP) and introducing Straight Through Processing Systems (STP).

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