Chapter 9
Some Aspects of Implementing Always-On IT-Solutions and Standards in Banking Sector: The Case of Croatia

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ABSTRACT

The growing competition in the banking sector, resulting in growing demands of the customers, requires from the banks a 24 hour availability of services. The technological development is accompanied by the increase in technologically sophisticated forms of fraud. The answer to these challenges is a more efficient use of information technology. The use of new technologies, besides the defense from unauthorized access into the bank's information system, abuse of information technology, and damage that can be caused, represents the basis for the new service offer which has an important role in market positioning of the banks. An empirical research was conducted in order to determine the level of influence of the information technology to the payment transactions. The results suggest that the level of influence is important due to the enlargement of product range and communication channels with clients, expense reduction for the costumers and the bank, as well as the increase of the business security.

INTRODUCTION

With the reform of the payment system in Croatia, during which payment operations and accounts of the participants of the payment system, bank depositors, are transferred from the Payment Operations Institute (Zavod za platni promet - ZAP) to commercial banks, banks as depository institutions became main bearers of the payment system.

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The payment system is a significant segment of banking business from the aspect of substantial revenues for the banks, as well as from the aspect of the bank's interest in collecting deposits, granting of loans and other banking activities. Due to the significance of the payment system for their business activity, banks need to invest in its development. The basis for the development can be provided by information technologies, which themselves are developing on a daily basis. The development of information technology initiated the development of new forms of banking activities though direct distribution channels.

The development of the Internet thus enabled the banks to connect with the large number of users (from other financial institutions and business subjects to individual users of financial services) and a higher level of security of the bank information system, but problems in ensuring the communication between the client and the bank arose as well.

PAYMENT SYSTEM

The payment system[1], according to the Committee on Payment and Settlement Systems of G-10 countries (CPSS[2]) acting within the Bank for International Settlements (BIS) in Basel, is a system which consists of sets of instruments, procedures, rules and systems of interbank funds transfer, used to enable the circulation of money within the country.

Shortly, the payment system implies the transfer of a payment order from the payer to the payee, i.e. debiting of the payer's account and crediting of the payee's account.

The payment system includes all payments between legal persons and individuals with the aim of settling monetary debts or collection of monetary claims. Aforementioned payments represent a way of settlement of monetary obligations, which can be cash (cash delivery) or cashless (transfer from one account to the other, i.e. accounting transfer of money amounts from the debtor to the creditor).

A large proportion of the payment system consists of cashless domestic payments within the bank itself. Payment orders on paper are performed by a commercial bank transferring the money from one account to another within the same bank. If the account in favor of which the transfer is being made is open in another bank, the transfer is made through a central bank.

Payments from one account to another managed in different banks are performed through systems for settlement of interbank funds transfer. Payment systems serve the purpose of collecting orders and performing settlements.

Depending on the payment methods in interbank transfer systems, there are gross settlement systems and net settlement systems.

Gross settlement system[3] is a system in which every payment order is performed separately and in the given amount. The bank-entries are simultaneously done at the account of the receiving bank and the one of the sending bank. In these systems payments are performed in real-time[4].

Net settlement system is a system in which payments are recorded during the whole work day but they are performed at a time of the work day where final settlements are completed. The final settlement is the moment where final and non-revocable transfer of funds is made to the accounts of the banks within the central bank.

There are two forms of net settlements: bilateral and multilateral net settlements.

In the bilateral net settlement system a net position of each pair of direct participants is calculated and in the multilateral net settlement system a net position of each direct participant is calculated in relation to all other participants in the system, which means in relation to the whole system.

The division of payment systems to gross and net settlement systems can be viewed as large value payment systems and retail payment systems.