Application of Batch and Automated (STP) Processes in Banking – Case Study *Aseba BI*[1]

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ABSTRACT – Strong competition in banking market has led to a significant reliance of banks on information technology. In the last decade, main progress has been made in introducing straight-through processing (STP) and batch processing in banking information systems. In this paper we analyse the impact of application of these processes in banks. We choose four parameters to follow: system quality information quality, service quality and user satisfaction. As a sample of case study we select Aseba BI integrated banking information system, produced by ASSECO-SEE. Through the analysis of several examples: batch processing in core banking system, batch processing in credit module, STP in national payment processes, STP in international payment processes, automation of Treasury back office (TBO) and Treasury (Trading) and Securities trading we conclude that batch processing and STP have great impact on selected parameters.

KEY WORDS: banking, information systems, automated processes, straight-through processing, STP, batch processing

Introduction

Fast development of financial markets has caused changes in bank services. Bank is no longer perceived as a micro institution, but as a social and financial institution. Furthermore, it can be seen as a social and financial institution whose business capabilities and operational efficiency significantly effect rationality of usage of funds at global level. As a result of these processes, the modern banking is perceived as a business with dynamically changes which is described through a frequently used expression „banking revolution". It reflects in the manner in which banks and other financial institutions are reorganized and restructured, in the processes of their mutual merges and takeovers, as well as in the appearance of new functions, increasing speed of money transactions and deregulation of financial market. Besides, information systems available to banks provide almost instantaneous speed of processing.

Modern banking is based on four aspects of analysis in the term of development tendencies: institutional or structural, functional, instrumental, and regulatory. *The institutional transformation* regulates the manner of founding and managing a bank, distribution of bank's income and expenses, maintenance of liquidity and termination of bank's operations. *Functional and intrinsic transformation* is seen through establishment of new methods and mechanisms of mobilisation, concentration and circulation of free financial funds by usage of adequate banking channels. The essence of functional transformation manifests through the speed of economy's potential increase or through the quality of change of economy's financial position and other non-banking sectors within the bank's balance structure. *The instrumental aspect* of transformation of banking system includes introduction of adequate structure of instruments and mechanisms which shall contribute to optimum financial transactions execution. Introduction of new instruments for money transfer and payment into the payment system has aim to achieve faster circulation of funds. *Government control or control of some other regulatory body* prevents banks from becoming monopolists and therefore prevents financial catastrophe with devastating economic consequences, having in mind that banks hold great funds in form of various types of deposits, along with their additional power of money and loan creation.

In this paper we first present trends in banking information systems and then conduct an analysis of some major information systems parameters. We choose case study method as basis for analysis, and quality of information, quality of service and user satisfaction as basic banking information system parameters. Also, we select *Aseba BI* integral banking information system, product of ASSECO-SEE company as a sample for the case study. Though the several examples we present impact of automated and batch processes on selected parameters. At the last part of paper we present our conclusions.

Trends in Banking Information Systems

The information system has become the lifeblood of a business (Clemons, 1986; Clemons&Weber, 1990). It has been used successfully by many companies to increase their competitive advantages. In the modern economic environment it is assumed that banking operations greatly depend on information technology resources. The changes which occurred in economic, legal, technical and technological terms, along with constantly present process of globalization in world economy, have considerably influenced sharp competition, high price fluctuation, change of roles and nature of financial agents, together with appearance of new banking and financial products and change of customers' behaviour.

Comparison of modern and traditional banking has resulted with the appearance of considerable differences. There is a new banking philosophy, which is the result of the new strategy, and it is characterized by *orientation towards customer*, which was not the case with traditional banking (Khare, 2010; Coltman, 2012). In the conditions of increasing competition and fight for survival on the market, customers and their requirements take the central place in banks which are striving to find easier ways of meeting these requirements. The changes in banking business philosophy were inevitable, as they appeared as an answer to the changed business conditions and they led to the great investing into techniques and technologies of information systems (Han-Yuh, 2007). Banks introduce new technological solutions which provide access to computers by connecting hardware, software and

telecommunication technologies for payment transfer, cashless payment of goods and services purchasing bills (POS systems), sending of cheques and execution of other transactions with no need of going to the bank. At the beginning this caused creation of a new group of products, and afterwards also a global phenomenon – *electronic banking (e-banking).* Imperative for every bank which wants to survive in the twenty first century is to follow the market trends and to be fast in introducing and developing new information technologies, which is all due to the innovations which are adopted very quickly. Foss&Stone (2008, p. 302) argue that the need has become so pronounced that now many more companies that provide financial services start to determine the minimum rate of return on investment in information systems which explains the rationale income from investments, while Ives&Learmonth (1984) stressed the strategic importance of information systems in banks, twenty years ago.

Automation of banking operations started in nineteen sixties. The goal of introducing first computers was increase of banking efficiency, taking into account that banks are centralized institutions and that they have to be constantly informed about the funds they have available. Application of automatic processes in banking has been postponed for a long time, regardless the revolutionary discoveries in the field of informatics, due to the low value of an average transaction. The reason was the price of information technologies and necessary technological infrastructure for retail payment systems which was too high, exceeding the costs of one transaction processing. Research show (Pikkarainen, 2004)) that many factor influence the quality and acceptance of e-banking and on-line banking: information about opportunities, security and privacy, etc. But the quality of back office is measured by the speed of the operations. According to the analysis of modern banking information systems there are two key innovations which stand out, batch and STP processes.

Batch processing is a type of processes where serial of programmes execute automatically, without any manual intervention. This type of processing involves setting of operational task queues, and the processing starts at or after a predefined time. Demand for batch processing appeared at the very beginning of software development in the nineteen fifties, and the first examples are related with accounting calculations. Usage of these processes helped in overcoming of problems caused by slow operational work, as at that time there was not available multitasking. Based on Morrison & Wilhelm (2004) firstly, the advent in the 1960s of powerful transistor-based computers which facilitated batch-processing of transactions data; and secondly, the development of the microcomputer which facilitated the real-time implementation of new techniques in financial engineering. Batch processes are widely applicable today, and they also became important in banking. It has been noted that these transactions have an advantage compared with real time transactions as they are almost identical, but batch processes have an option of rollback. Real time transactions do not have the rollback option. Besides, transactions in real time are always executed immediately, and batch transactions include collection, and then mass processing which frequently takes place at night while the other banking operations are not performed. Two common applications of batch processes in banks are serial cheque clearing and update of insurance companies' policies. Both processes include transfer of great quantity of information and they require high attention level so that any potential errors could be

avoided. Leinonen & Soramaki (1999) emphasize that the use of information technology in batch processing has enabled a reduction in payment processing time from several days in the forgone manual era to typically one day.

Figure 1. Manual account opening process
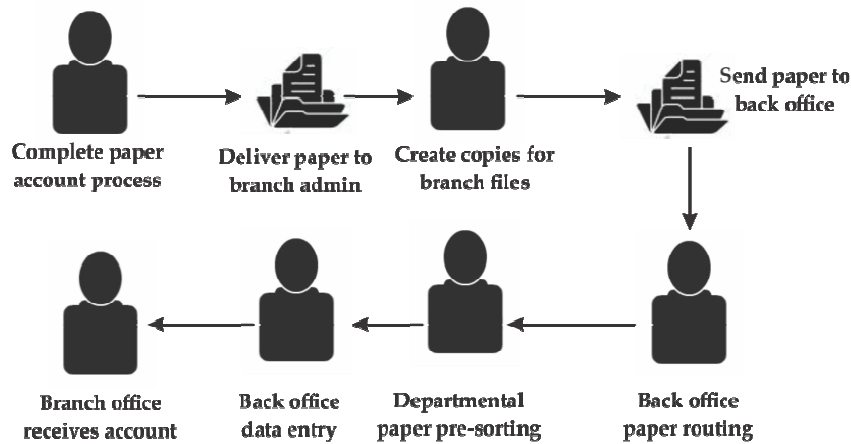
Straight Through Processing (STP) represents a step further comparing to batch processing. STP paradigm is set of business processes and technologies that can be used to create an infrastructure for automated real-time transaction processing (Khanna, 2008). The best way of showing a STP processing is the example provided in Figure 1 where process of Account Opening with manual processing is shown, and in Figure 2 where the same process is shown but instead of manual processing STP is applied.

Figure 2. Automatized opening account process
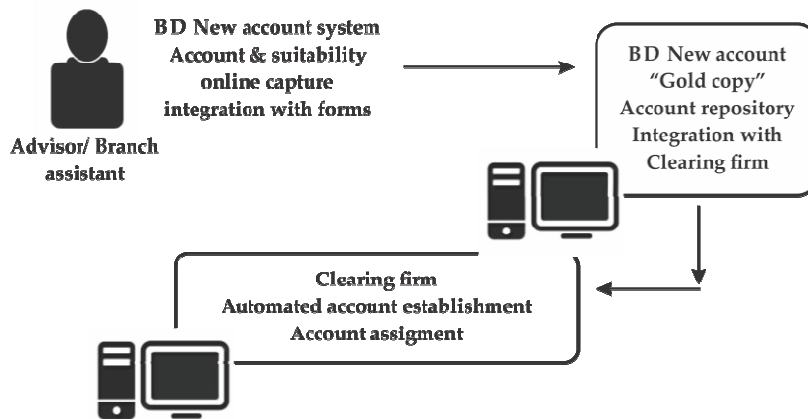
It is important to emphasize that these processes are suitable for banking operations because of two important features: a) they reduce transaction processing risk (operational risks), which is very high in case of manual operations and b) they reduce transactional costs providing at the same time better service quality (operational costs).

Both innovations have brought improvement to the routing banking operations execution, and in the next part of paper we will analyse the areas of benefit as well as the ways in which these positive effects are generated.

Methodology and hypotheses

It was relatively long ago when Darke, Shanks and Broadben (1998) acknowledged that interest of scientists for researches dealing with evaluation of successful application of information systems in various areas of business is growing. Moreover, they emphasize the importance of usage of better quality researching methods such as action research and case study. Analysis of these researches however shows that the case study method is most frequently used. In this research we also use a case study method for analysis of batch processes and automated processes implementation effects in banking operations. Arguments regarding the selection of this method can be found in the study of Flyvbjerg (2006) who shows that it is justified to accept the generalization of conclusions based on a case study research. He notes that one can often generalize on the basis of a single case, and the case study may be central to scientific development via generalization as supplement or alternative to other methods. However, it is important that the case study is strategically selected, i.e. that an example with most relevant researching properties is selected, which does not have to be the case with random selection method.

Apart from general methodology, other issue in this research is selection of appropriate parameters for measuring of successful information systems application in various business fields. Beside traditional financial measures, such as ROI, researchers also use balanced scorecards and benchmarking, emphasizing the need for better and more constant success matters, having in mind that information systems have complex, independent and multidimensional nature. In order to overcome the shortcomings of existing measures the authors suggested a model (DM model) which includes the following success dimensions: system quality, information quality, service quality, system use, user satisfaction and net benefits (Petter, DeLone, McLean; 2008).

Figure 3. DeLone and McLean information system success model
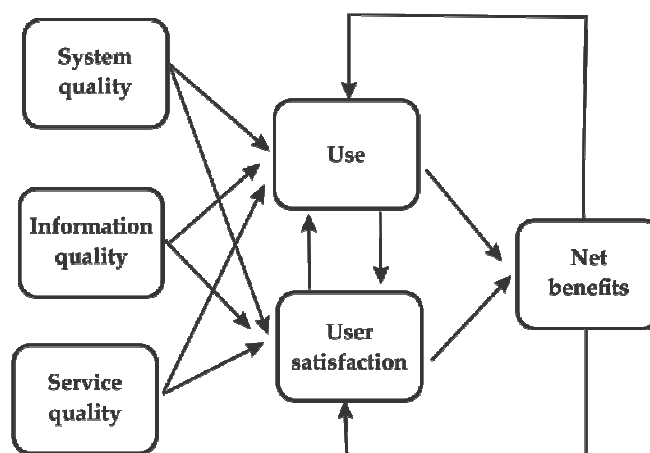
Source: Petter, DeLone, McLean; 2008

Starting from the conclusions set forth in this study, there has not been created a comprehensive and precise measure, so we have selected three dimensions which we assume could considerably improve the quality which is achieved with application of batch and STP processes in banking operations. Therefore in this research we will test the following hypothesis:

a) Application of batch and automated processes in banking improves system quality, information quality and service quality;

b) The result of improvements in system, information and service quality improves users' satisfaction.

We will test the hypothesis by using case study methodology.

Unit of analysis

Aseba BI is a banking information system which represents upgrade of BAPO system. Development of BAPO system started in 1992 within the system of *Karić banka*. The development was initiated at request of *Karić banka* management team who requested automation of a part of operations in FX sector and a part of teller activities dealing with FX. It started with production at headquarters of *Karic banka* in Belgrade and in its branch office in Kragujevac in 1993.

Its technology platform is ORACLE database, Windows servers and Unix operating system, which provided sufficient computing power for real time transaction. Then in 1994 first major software revision took place. The major novelty was the feature enabling communication among branches. All the branches have a local server, so that the headquarters could have the real information on the situation. However, the system could not operate in real time regime. Within the same year company started to develop loans subsystem, and in 1996 communication with SWIFT system was developed, and in 1997 the technology transferred to 2000, Forms ver. 4.5. That was the first time the usage of computer mouse was enabled and that graphical user interface (GUI) was supported. Four years later, in 2001, the payment system of Bosnia and Herzegovina was reformed, i.e. decentralized. Local servers were abandoned, and it was required to provide a central server at the whole bank level. This year had another feature developed a robust card module (Visa, Master Card) and in the following two to three years there was the greatest growth of the system. Besides, e-banking was developed and data exchange via telephone lines was provided (until that time modems were used). This year was marked by a strong development of module for the payment cards (Visa, Master Card, e-banking) and in two or three years it recorded the highest growth in the system. When in 2003 new payment system was implemented in Serbia, it changed the focus of banking information system, so that it was no longer primarily used for posting, but it was required for various analyses, such as analysis of data based on Basel standard which defines customer's history. The system was now more oriented to the analysis of collected data, in contrast with the previous times when the collected data remained unused. This year system changed its name into Banking Intranet (BI), and after the acquisition of company ASSECO-SEE its today's name Aseba BI was created.

Today Aseba BI has been implemented in sixteen banks in Serbia, Bosnia and Herzegovina and Montenegro. In this paper we also used the internal evaluation material of those banks, to provide statistical data, in order to illustrate improvement after implementation of new information system. 6 banaka smo obuhvatili u istraživanju

Case Analysis Summary

Analysis of the selected case was performed at two levels. The central part of the system (Core) supported with batch processes was analysed first, and then modules with implemented straight-through processing: National payment transactions, International payment transactions, Treasury back office (TBO) and Treasury (Trading) and Securities. Every system module was analysed from the perspective of its effecting on info quality, service quality and user satisfaction, after implementation of batch processing and STP.

Banking information system Aseba BI is an integral information system which consists of modules with one central part - Core system. Every module covers individual banking function, as it is presented in Figure 4.

Figure 4. Structure of Aseba BI information system
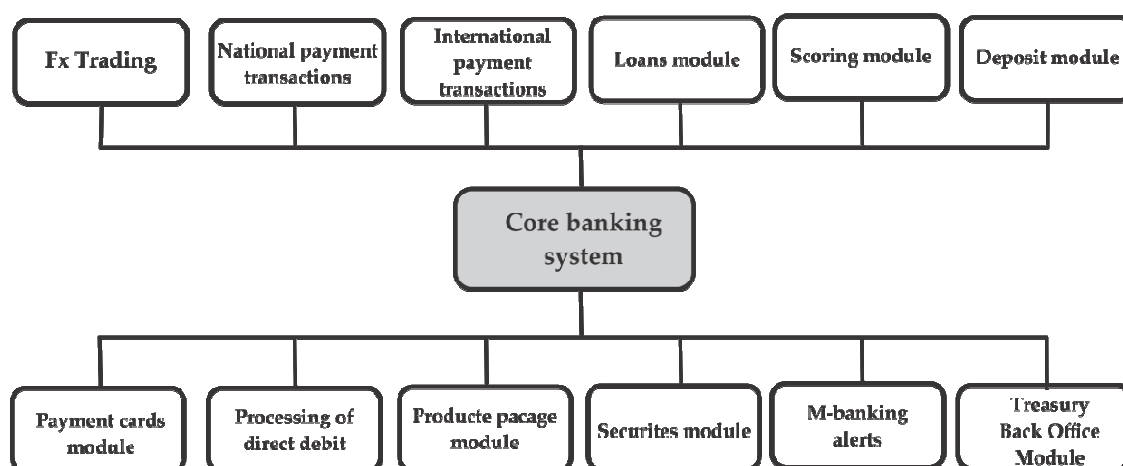
Source: ASSECO-SEE internal material

The database platform of Aseba BI runs on newer versions of Oracle database. On its applicative level Aseba BI system uses Oracle Internet Application Server 9i Enterprise Edition. The middleware runs on Oracle HTTP server (Oracle's modification of Apache server) and Forms and Reports server.

All business processes in Aseba BI system are performed in the real time. Many of these processes are automated, and some of them also meet the STP criteria. Transactions which are performed, and whose life cycle process in bank allows that, can be realized in Aseba BI system from beginning to end automatically (without manual intervention at any of the stages). By system parameterization (setting of performances) bank can stop and check certain phases of a business process. The following part of the study shall analyse the effects

of automated business processes and STP processes throughout examples of transaction realization in various system modules.

Example 1 - Batch processes in Core banking system. Batch processes are introduced into Core system in order to optimize utilization of resources and realization of operations processing great quantities of data in day periods when system is less occupied with transactional processing. Batch enables avoiding of unnecessary system stress during the operational period, and 24 hours functioning of bank system is fully supported.

Batch controllers are in charge of execution of batch processing jobs and they need to be configured so that they perform groups of tasks in a desired sequence. The controllers are activated once or several times a day and they execute individual tasks, and the tasks can be configured to be executed every day, on a specified week day, on a specified date in month, or on a specified date. While a batch process is in progress, the operations go through various statuses, and information and possible processing errors are entered into log files. The system provides automatic control of batch processes based on provided parameters. It provides introduction of custom processes defined by system user, i.e. by bank. There are two types of batch processes, one which runs by using controllers and the other by using AQs (Advanced Queue) which can start unlimited number of processes and which speeds up the processing. Scheme of using batch process in Core system is presented in Figure 5.

With the growth of functions and operational domains of Aseba BI application, *batch processes became one of key points regarding efficiency and programme operability*. The increase of processing procedures and quantity of data which are processed made it necessary that these processes are centrally administered and adapted to new requirements. In contrast with the sequential functioning which has been used so far, it is required to introduce a higher level of parallel processing so that user's hardware resources are exploited in the best possible manner, and that higher system and service quality is provided, and as a result of that higher user satisfaction is enabled.

Figure 5. Batch processing in Core of Aseba BI
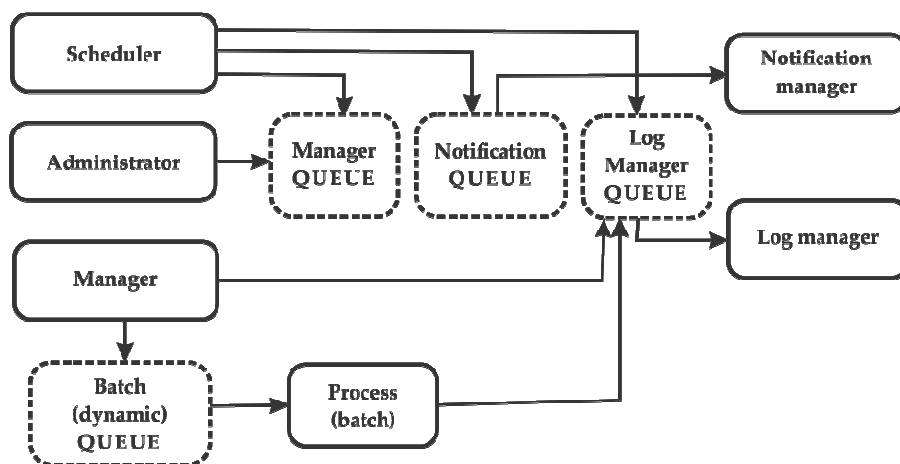
Source: ASSECO-SEE internal material

In contrast to the previous system version, introduction of batch processing, as shown in Figure 5, has introduced automation into majority of processes referring to transactions which could be done without manual influence. That has directly improved quality of information as processing based on batch processes is considerably faster and error free, as in the case of manual operations. The information quality improvement indirectly effects improvement of service quality and therefore on user satisfaction.

Example 2 - Batch processes in Loans module. Loans module is one of the most ambitiously created module of Aseba BI integrated information system, aiming to provide general support for all types of loans appearing in banking practice. Within this module automated calculations are started from the batch processes triggered by the operating system, based on a defined sequence, at night and/or in morning. The following processes are automated: accounting and posting processes of due receivables and due liabilities, distribution of payments, collection from current account, successive release of deposits which secure a loan, creation of fixed interest rates, and creation of printed notifications. In this module, as well as in the previous one, batch processes directly affected improvement of information quality, which improves the quality of services and users' satisfaction.

Example 3 – STP in national payment processes. Subsystem for support of domestic payment system fully automates data exchange with Clearing house, National (central) bank, Agency for enforced collection and Bank association (clearing of cheques) which is provided by this module integration with other modules of Aseba BI system.

Every incoming message MT102, MT103, MT202 also generated in the payment operations system a posting order by which funds are paid to customer's current account or to undistributed income when instructions are not complete. The system includes option of setting the stress level of batch processes which process the messages of giro clearing.

Besides, when an Aseba BI system operator enters a transfer order, the system batch processes send an authorization order (control of current account's balance of ordering party). If there are not funds, the processes stop the order in the order status „waiting for inflow to account". After the inflow to account is realized, and when the ordering party's balance on account is increased so that the order can be realized, the processes send the order to further processing. The system generates SWIFT message, e.g. MT103 as well as the posting order. As well, system recognizes answer to this message. The answer is processed so that a posting order is generated, and then payment system order gets status Realized, which means that its life cycle has ended. Bank's system parameterization can stop and check the order at two points of this process: a) immediately after the order is entered (when order is verified, i.e. when order data are checked), b) in assets management department, before a SWIFT message is generated.

Finally, upon the receipt of message announcing account blocking, system attempts to collect the required amount from accounts of the customer whose accounts are to be blocked. If there are not enough funds no actions are taken, and at bank's decision, a responding message is sent notifying that there are not enough funds so that request based on announced blocking message could be realized. When a blockade message is received, the system enters the customer to the black list (that is a log of customers by their ID numbers where history of all blockade requests is recorded). If the customer has accounts which are subject to enforced collection, the system blocks them and a message on these accounts'

balances is sent to the Collection Agency. The following phase is receipt of requests for payment based on blockade. Banks can stop this request or they can allow its automatic processing depending on the system parameterization. Upon the realization of payment order, the message on realization is automatically sent to the Agency. Upon the receipt of an unblock message the customer is removed from the black list and all its accounts are released, so that there are no other active blockades.

In the previous version of this programme, all the specified steps were performed manually, most frequently by using Excel spread sheets. That caused frequent errors and relatively slows processing. After the automation was introduced, the processes became faster, error free and this effected improvement of quality of all analysed parameters (system, information and service quality), which however improves user satisfaction, too.

Example 4 - STP in international payment processes. International payment processes are supported by STP as much as it is allowed by regulations of the country where the programme is implemented to automatically cross book the inflow from a foreign country to a customer's account. Starting from February 2005, all f/x accounts have the structure of International Bank Account Number (IBAN) which enables higher automation both of inflow and of outflow. When a message MT103 is received from the SWIFT network, it triggers the automated processing of inflow (MT103) throughout batch processes along with the posting of inflow to the customer's account. Figure 6 shows a scheme of inflow message automation.

Figure 6. Automatized loading of incoming MT103 from SWIFT
(Straight-through processing)
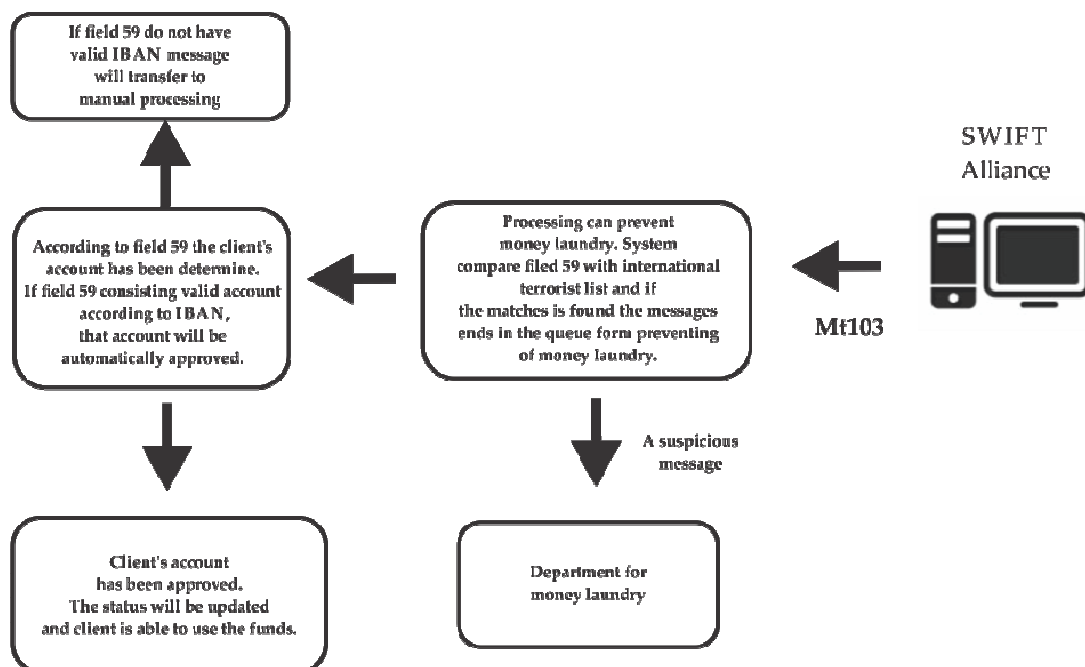
Source: ASSECO-SEE internal material

Automatic file processing from SWIFT service RMA (Relationship management application), by which banks exchange data on direction and type of messages which can be

exchanged, is also supported. Method of payment (serial or with coverage) is determined based on uploaded data, through the mechanisms of rules and priority definition of f/x payments from nostro accounts. The connection with SWIFT is established at three levels.

SWIFT Alliance Entry is a software solution authorized by SWIFT for access to SWIFT network. It is usually installed on a separate machine which is kept in special conditions. SWIFT client is ASSECO software solution which serves as interface between Aseba BI f/x payment system and SWIFT Alliance Entry package. It imports generated SWIFT messages from Aseba BI tables and delivers them to the other side in form of files. SWIFT client can also run vice versa: it can take files with messages coming from SWIFT and stores them into Aseba BI tables.

Aseba BI subsystem for f/x payment operations stores generated SWIFT telecommunication messages into special tables wherefrom, soon afterwards, SWIFT client collects them and sends them into the world. These tables also contain all received SWIFT messages. Modules of Aseba BI module for f/x payment system search for and process these messages.

The automation applied in this segment of information system considerably improves information quality and service quality.

Example 5 – Automation of Treasury back office (TBO) and Treasury (Trading) f/x positions. The automation encompasses processes which are identified in operational work as *bottle necks*, and these are automatic posting of products, recording of review of f/x position and generation of SWIFT messages. Deals are not entered manually into Aseba BI system but they are automatically imported from REUTERS application. Import and generation of SWIFT messages by products (MT300, MT399, MT202, MT320 and MT299) are automated, too. Earlier operators used to match SWIFT messages with appropriate Reuters deals, but now this matching is automated. Processes of loans and deposits (e.g. for Money Market product) had to be executed from Loans and Deposits Module. After the automation and integration, loans and deposits can be directly processed from TBO module.

The term Treasury (Trading) position means a total current balance of local and foreign currencies with Bank. There are two types: f/x position (recorded in foreign currencies) and position in local currency. The application supports automatic recording and creation of f/x position which is required for management with funds and making of tactical and strategic decisions regarding trading with currencies. Basic product characteristics of f/x trading position are as follows:

- Balances by items which enter into the Treasury f/x position are read automatically in batch processes;
- During the day, announcements are used for position definition (disbursements and loan and deposit repayments, f/x trading operations, etc.), and after the Cut-Off time real postings are used for accounting of the position (where „real" position can be accounted several times before the end of day);
- It enables manual entry of amounts which are not included by automatic balance accounting;
- The position is kept in currencies which bank parameterizes and
- Initiation of the position items accounting is enabled for a date in the past.

The previous generation of banking software did not have this module, but it was developed due to the business requirements. The application of automation in this module appeared as an imperative for this particular process, as manual execution of operations relating TBO and Trading would not be possible in modern business conditions.

Example 6 – Securities. Stock exchange is connected with Aseba BI system through the client application and therefore automatic sending, withdrawal and modification of entered orders are enabled. The responding message from the stock exchange on complete or partial realization of a broker order is processed into the Aseba BI system and then the order receives its final status (completely or partially realized).

Figure 7. Exchange of SWIFT messages between participants in securities trading
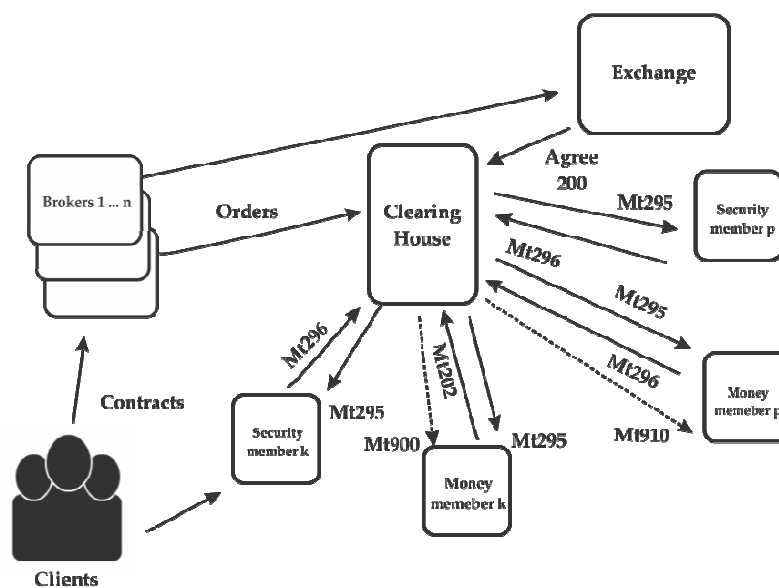
Source: ASSECO-SEE internal material

Upon the receipt of a message MT295 from the Central register, the bills of sale on trading with securities are generated by Aseba BI system and stored into the bills of sale records. In addition, bills of sale are grouped based on the security type, and it is controlled whether the customer's accounts exist, and their balances are checked. Simultaneously with placing of a bill of sale into unique bills of sales record its initial status in its life cycle is defined, as well as its status regarding its meeting of trading requirements.

For verified bills of sale bank notifies the Central register on conformity or inconformity regarding continuance of trading with securities by sending messages MT296 (for trading through money account of seller, security account of buyer and security account of seller) and MT202 (for trading through money account of buyer). In addition statuses of confirmed or rejected bills of sale are automatically updated.

Message MT900 from Central register bears a piece of information on provided approval for money accounts of members and it is sent for bills of sale which refer to money accounts of buyer customers. Message MT910 from Central register bears information on provided approval for money accounts of members and it is sent for bills of sale which refer to money

accounts of seller customers. Upon the receipt of these messages within trading of bonds, provisions of funds reserved on date of trading are automatically executed, reservations are made of market values and bank, Beokliring and broker fees, and appropriate postings are performed. When shares are traded, along with the receipt of these messages, grouping of share bills of sale is allowed, and posting is performed automatically upon the receipt of messages. When these messages are received, for trading with bonds and shares, the posted bills of sale are automatically transferred to the final status.

After the message MT292 is received from the Central register, bills of sale which were withdrawn, i.e. rejected on the starting date of trading, are automatically transferred to the final status.

Stock exchange and stock exchange operations have to provide accuracy and timely performing of transactions, which are their key success parameters. However, stock exchange transactions are closely related with financial flows whose transfer is in charge of bank custody. The development level of this operational segment is not very high in Serbia, but in spite of that banks recognized the need to improve this information system segment, so that creation of a link between internal and external stock exchange segments was to be expected in the development of the new generation software.

Some empirical evidence

When the banks decide to introduce a new version of the banking information system they expect to improve working processes. In order to measure performances banks use several indicators. Also, ASSECO-SEE has its own, internal evidence for all banks with the system. In this paper we used empirical evidence for six banks with *Aseba BI* based environment. Figures that will be displayed are the average values of selected indicators for six banks.

In *Loan module* we chose a) accounting position of interest maturity and b) loan collection as typical transactions. Before implementation of *Aseba BI* system 4,856 calculations and entry of interest could be finished in 120 minutes, and that job needed 2 employees. After the introduction the new system, with active batch processes, the same number of transactions can be finish in 25 minutes, without the involvement of banks employees. The evidence for transaction of loans repayment entry shows even better results. Before, banks needed 90 minutes and 3 employees for 5068 transactions and now the some process can be finished within 8 minutes, without the involvement of banks employees.

In module for *International payment processes* the chosen transaction is execution of payment order and bank expense invoiced upon incoming MT103, type OUR. In old system 1 employee could execute 9 orders per hour, and for one order it needed 6 minutes and today 1 employee can execute 18 orders per hour. The time for one order is reduced to 3 minutes and 30 seconds. In the case of order 191 in old system banks needed 3 employees for 41 orders within 240 minutes and today 1 person can finish the same number of transactions within 1.04 minutes.

Finally, we chose order execution as a typical transaction in the *Securities module*. Before introducing new system banks needed 1.30 minutes for 1 order execution and 1 employee. With the support of Aseba BI information system banks can execute 136 orders within 3

minutes and that process can be handled by 1 employee. The same process needed 60 minutes and 2 employees in old system.

Presented evidence showing a drastic increase in efficiency in the execution of transactions, reducing execution time and reducing the number of employees engaged in the work.

Conclusions

Analysis conducted in this paper shows that implementation of automated processes, i.e. batch processes and STP have substantial impact on successful application of information systems and results in banking business. Based on Aseba BI integral information system, product of ASSECO-SEE Company we can conclude that all three parameters that we observed information quality, service quality and users' satisfaction are improved in all automated module: Core banking system, Loans module, National payment processes, International payment processes and Securities module. Evidence provided at the last part of the paper support the hypothesis.

The analysis based on case study methodology is often subjective, but the cross study analysis or benchmarking can improve results. Regarding that we propose further research of this subject.

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Primena batch i automatizovanih (STP) procesa u bankarstvu – studija slučaja Aseba BI

REZIME – Jaka konkurencija na tržištu bankarskih usluga dovela je do velikog oslanjanja banaka na informacionu tehnologiju. U poslednjoj dekadi glavni progres učinjen je na polju uvođenja straight-through procesiranja (STP) i batch procesiranja u banke. Odabrali smo četiri parametra za analizu: kvalitet sistema, kvalitet informacija, kvalitet usluge i zadovoljstvo potrošača. Integralni informacioni sistem kompanije ASSECO-SEE, Aseba BI predstavlja slučaja na kojoj je izvršeno istraživanje. Kroz analizu nekoliko primera: primena batch procesa u Core bankarskom sistemu i kreditnom modulu, primene STP procesa u domaćem platnom prometu, međunarodnom platnom prometu, trgovini devizama i hartijama od vrednosti zaključili smo da batch i STP procesiranje imaju veliki uticaj na odabrane parametre.

KLJUČNE REČI: bankarstvo, informacioni sistemi, automatizovani procesi, straight-through procesiranje, STP, batch procesiranje