
INTELLIGENT MANAGEMENT OF ASSETS BY ANALYTIC METHODS

■ Abstract:

To have the invoices paid in time is a dream of every businessman. The nineties characterized by low payment morale were replaced by an era of economic growth with better situation in the payments area. This positive trend has recently been disturbed by economic crisis and warnings of low payment morale in economics are starting to appear. Experts are of opinion that many companies can be affected by this problem, even such ones that didn't know this problem in the past.

■ Keywords:

economic growth, assets management, methods

■ CATEGORIZATION OF ASSETS IN SR

In early nineties, it was clear that the state help will be necessary by solution of risky loans resulting mainly from centrally controlled economics. The amount of unpaid loans in the bank sector was increasing due to economical, legal and political conditions bound with transformation of economics and deficiency in experience of banks in market environments. This had negative effect not only on the banks but on the whole business environment and therefore it was necessary to stop the process of increase of irrecoverable assets and to quicken the process of recovery of loan portfolio of banks. The situation could not be solved in the year 1993, where in conditions of the new state other problems had arisen. Later NBS accepted resolution num 3. from 3rd March 1995 about "Rules of evaluation of assets and under-balance sheet obligations of banks according to their risks for creation of resources to cover these risks". According to severity of risk of loss that they contain, assets can be divided into these five categories regarding the mentioned resolution:

1. Standard assets

These are such assets, where there is no reason to be doubtful that the asset will be paid in time and in full sum of its nominal value by keeping other conditions according to the contract. This category includes all assets that fulfill all of the following conditions:

- *the client is solvent, economic situation and paying ability are such that there is no expecting of danger in payment of fund, interests and fees,*
- *latency in payments is not longer than 30 days,*
- *the bank supplied the client correct type of loan,*
- *the client used the loan on purpose defined by loan contract.*

2. Standard assets with conditions

Standard assets with conditions are such assets where worsening of their quality has appeared, but according to accessible data it is expected that they will be paid in full sum of their nominal value.

This category includes such assets that fulfill at least one of the following conditions:

- the client has economic and financial difficulties, which aren't however of such measure that it wouldn't be expected that he would be able to overcome them and pay the loan in full sum,
- delays in payments are longer than 30 days but not longer than 90 days,
- the client didn't supply the bank needed financial reports at least 30, at most 90 days from the moment these should be supplied to the bank,
- the bank supplied the client incorrect type of loan regarding his demands (e.g. a short-term loan to cover long term activities),
- the client used the loan on other purpose than set in the loan contract.

3. Nonstandard assets

Nonstandard assets are such assets where it is probable that they won't be paid in full sum of their nominal value, while payment for the bigger part of their nominal value is highly probable. Nonstandard assets have at least one of the following features:

- the debtor is in considerably bad economic situation and financial end economic difficulties, based on which it can be expected that he will become insolvent in near future (during the time of contract with the bank),
- delays in payments are longer than 90 days, but not longer than 180 days,
- the client has not supplied the bank with needed financial reports and other data at least 90 days, at most 180 days from the moment these should be supplied to the bank.

4. Doubtful and disputable assets

Doubtful and disputable assets are such, where payment in their full nominal sum is very improbable or doubtful. Partial payment is however highly probable. Doubtful assets have at least one of the following signs:

- the debtor is insolvent,
- delays in payments are longer than 180 days, but not longer than 360 days,
- the client has not supplied the bank with needed financial reports and other data at least 180 days, at most 360 days from the moment these should be supplied to the bank.

5. Loss assets

Loss assets are such assets that appear according to accessible data as unrecoverable, or

recoverable only partially in a very low sum or after fulfillment of some conditions.

Loss assets are assets that have at least one of the following signs:

- the client doesn't pay his obligations at least 360 days,
- the client has not supplied the bank with needed financial reports and other data more than 360 days, from the moment these should be supplied to the bank,
- the client is in a concourse or in liquidation (irrespective of the amount of losses).

Nonstandard, doubtful and loss assets are designated as classified assets.

■ MANAGEMENT OF ASSETS

Fears from future touch not only the building companies where nonpayment was well known in the past, but also companies in productive or network industry are affected, lately also financial institutions belong in this category. Banks record loans that people and companies cannot pay. Due to the global economic crisis, people are loosing their employment. Some companies replace worse access to bank financing by delaying payment of invoices and in this way they fund themselves by supply loans. Under such payment conditions, more and more companies are getting into economic problems, because their revenues for supplement of goods and services are really endangered. The importance of active control of assets is thus increasing.

However, there appears the question what can be recommended to such companies, clients of which cannot pay for their obligations. Will the present solutions of assets recovery be efficient? It can be assumed that the influx of new cases will flood advocate offices and courts, thus slowing down court or other recovery. In the case of sale or forwarding of the asset to collecting companies, we can face disinterest to buy or decrease in price of packages of assets. An appropriate solution lies in prevention of occurrence of non-recoverable assets and mainly better use of information about customers, their behavior and recovery of assets by use of analytic applications.

■ ANALYTIC MODULES

In recent past, modern solutions for intelligent management of assets began to appear on the market, aimed at improvement of cashing and the process of assets recovery. The essence lies in expansion of the traditional tools of assets management by analytic modules, by help of which more accurate information for active prevention of unrecoverable assets. By use of analytic methods, we can understand better the behavior of customers (potential debtors) and in case of delays, the system can choose the optimal communication channel. For every debtor, the system automatically sets itself and will execute individual recovery campaign, while it selects the order of actions and their escalation.

Different scenarios of recovery are at disposal, while the system alone modifies the scenarios according to obtained data (internal and external) in accordance to reactions of the debtor. The important part of the system is calculation of real expenses for recovery including fines and fees bound with a particular case. If we choose to solve the asset by an external cashing company, the system can set the most appropriate moment for advancing of the asset to the company. If we choose to sell the package of assets the analytic software will help us to precisely set the price of such portfolio of assets. The price is set except expenses also based on the probability of payment of the asset, this means the amount of its recovery price. Such evaluated package of assets brings better arguments for price negotiations by sale.

The use of analytic methods in the area of assets management is not entirely new. We can observe the incursion of analytic methods into all enterprise processes. The implementation of analytics usually means increase in efficiency or accuracy and obtaining of new information and overview of processes. Intelligent management of assets is exceptional not only by strong use of analytics but also optimization procedures. These are tasked with selection of optimal parameters of assets management as is use of resources, capacities and channels (personal, technical, e.g. a call center) by the highest efficiency of the process by the lowest costs. Optimization is used by selection of addressing

of the debtor by an appropriate communication channel and also selects strategy of actions towards him with optimal escalation. It also selects the most appropriate intervention strategy for every debtor (in-house, outsourcing, sale). Automation of different tasks bound with recovery (e-mails, SMS, letters) is evident, while it also selects manual tasks bound with recovery (phone calls, letters, visits...). The result of such interconnection of modern technologies bring a unique solution that can be described with:

- high success rate of the process of recovery,
- low costs for securing the process of assets,
- the possibility of automated processing of tasks bound with the process of recovery,
- systematic and individual approach to debtors,
- delicate approach to debtors, that increases chances of continuation of cooperation.

■ USE OF ANALYTIC MODELS

The use of analytics is traditionally most successful where there is a lot of information that cannot be processed by traditional manual and expert methods. Therefore the gains in the area of assets management will be reflected in companies that have a numerous clients:

- banks,
- insurance companies,
- network industry companies,
- telecommunications,
- leasing companies,
- tally companies, etc.

or in cashing companies that solve management of assets for their clients.

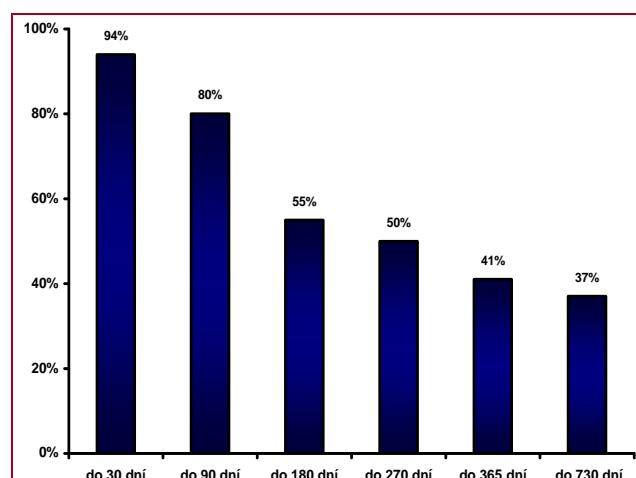


Fig. 1: The process of intelligent management of assets

THE TASKS OF INTELLIGENT RECOVERY

Intelligent recovery has the following tasks:

- to minimize costs bound with recovery,
- to maximize the income from fees of delays,
- to classify the type of the debtor and to select the efficient approach to the asset recovery,
- intelligent (self-learning) models of debtors' behavior or strategies of recovery,
- to automate the whole process of recovery.

The world's trend in the area of assets management is to shorten the time of recovery of financial means from assets by setting the process of contacting and claiming of payments for every individual debtor..

The success of recovery is conditioned by:

- speed (the age of assets),
- existence of sufficient legal grounds,
- the insurance of the assets,
- the existence of debtor's properties,
- used methods of recovery.

CONCLUSION

The intelligent management of assets represents a revolutionary breakthrough in the area of assets recovery on the Slovak market. It is mainly designated for active businessmen. It represents a combination of the most efficient and most penetrative methods of assets recovery that is presently accessible. Within the frame of this method, unique approaches are used, result of which is the maximal payment recovery in the shortest possible time and all of this for only a fraction of price of standard recovery. The result of these approaches is a service that brings the clients presently unknown comfort that presents with speed and efficiency a solution that doesn't presently have any real competition.

REFERENCES

- [1.] Denisa Al-Zabidi : *Význam finančného a marketingového controllingu*, 2006. In: *Acta Montanistica Slovaca*. - ISSN 1335-1788. - Roč. 11, č. 4 (2006), s. 298-304.
- [2.] Katarína Kameníková, Denisa Al-Zabidi: *Finančný manažér a jeho činnosť pri riadení financií podniku (s ilustráciou výbraných metód v modelovom podniku)*, 2006. In: *Acta*

Montanistica Slovaca. - ISSN 1335-1788. Roč. 11, č. 1 (2006), s. 96-101.

- [3.] Katarína Kameníková, Denisa Al-Zabidi : *Finančné riadenie firmy : zbierka riešených a neriešených príkladov*. - 1. vyd. - Košice : TU, FBERG, 2006. - 63 s. - ISBN 80-8073-663-4.
- [4.] Katarína Suchá Očenášová, Michal Cehlár, Anton Grinč: *Metodika zdolávania banských havárií a banské záchrannárvstvo na Slovensku*, 2009. In: *Uhlí-Rudy-Geologický průzkum*. - ISSN 1210-7697. - Vol. 16, no. 1 (2009), p. 37-40.
- [5.] Michal Cehlár [et al.]: *Informačný systém ťažobného podniku a jeho vplyv na zhodnocovanie ložiska /*, 2005. In: *Uhlí-Rudy-Geologický průzkum*. - ISSN 1210-7697. - Vol. 12, no.4 (2005), p. 24-28.
- [6.] Katarína Teplická, Gabriela Alexandrová : *Hodnotenie efektívnosti a funkčnosti procesov v systéme manažérstva kvality*, 2009. In: *Q-magazín : internetový časopis o jakosti*. - ISSN 1213-0451. - No. Červen (2009), p. 1-7. www.fmmi.vsb.cz/639
- [7.] Gabriela Alexandrová : *Controlling ako pomoc riadenia podniku v krízovej situácii*, 2009. In: *Manažment podnikania a vecí verejných - dialógy*. - ISSN 1337-0510. - Roč. 4, č. 10 (2009), s. 49-58. - www.sam-km.sk
- [8.] Samer Khouri: *Analýza bezpečnosti informačných systémov organizácií*, 2009. In: *UNINFOS 2009: univerzitné informačné systémy zborník príspevkov z medzinárodnej konferencie*. Nitra, 25.-27. november 2009. - Nitra: SPUL, 2009. - ISBN 978-80-552-0309-6. - S. 140-144. - Spôsob prístupu: <http://www.fem.uniag.sk/uninfos2009/sk/zbornik>
- [9.] Samer Khouri : *Analysis of information as the content of an enterprise information system*, 2009. In: *Journal of Engineering Annals of Faculty of Engineering Hunedoara*. - ISSN 1584-2673. - Vol. 7, no. 2 (2009), p. 205-208.

AUTHORS & AFFILIATION

¹ SAMER KHOURI,

² ABED AL-ZABIDI,

³ MONIKA OROSOVÁ

^{1, 2, 3} THE TECHNICAL UNIVERSITY OF KOŠICE, FACULTY OF MINING, ECOLOGY, PROCESS CONTROL AND GEOTECHNOLOGY, KOŠICE, SLOVAKIA