

## Digitalization of Receivables Management

**Daniya Kamalovna Bikchantaeva, Pavel Anatolievich Samolyanov and Ilvira Ilinichna Stepanova**  
Department of Management, Economics and Finance,  
Kazan Federal University, Russia.

(Corresponding author: Daniya Kamalovna Bikchantaeva)  
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**ABSTRACT:** This article describes the ability to manage the company's receivables using modern software products. We carried out the research of receivables and its place in the structure of the company's assets. The main target of receivables management is determined as optimizing of its level but not reducing. In this study, we have analyzed the mechanism and different methods applying in this sphere, each of that is a combination of various tools, taking the form of IT-decisions.

This article includes an empirical comparative analysis of several modern digital solutions that increase the efficiency of receivables management such as: MS Excel, Directum Prestima, Credit to cash, 1C, SAP S/4HANA Finance. The results lead to the conclusion that automated software products are able to upgrade the classic mechanism of receivables management. Nevertheless, company administration must properly identify the necessary requirements for the automated information system before its buying and implementing.

**Keywords:** receivables management, software, digitalization, MS Excel, Directum Prestima, Credit to cash, 1C, SAP S/4HANA Finance.

### I. INTRODUCTION

An essential condition of enterprise's financial well-being is its effective payment discipline, where receivables occupies a special place. This is one of the most important factors for cash flow generation of any commercial organization. There are two points of view [1]. On the one hand, receivables is an objective necessity in building productive commercial relationships. But on the other hand, it can lead to lack of cash due to debtors delay of obligations fulfillment. At present, many enterprises have gained extensive experience in receivables management, which mechanism and tools are determined by many factors. However, nowadays organizations are facing with such problems like the necessity of the prompt information about its counterparties payment capacity and timely decision-making. That is why many companies upgrade classical mechanisms due to IT-products. All these facts indicate the special relevance of our research.

### II. THEORY

There is no exact definition of the concept "receivables" in scientific literature, but more often it is presented as the sum of debts in favor of the company [2]. According to this statement, receivables management is focused on minimization not optimization. From our point of view, this concept should be considered more widely. Receivables is not only the part of current assets, but it is expected money that enterprise may get with payment delay or not. The policy of receivables management should be aimed to support the acceptable level of counterparties liabilities and its optimal dynamics with subsequent control. Consequently, the purpose is to keep receivables within rational limits, as unreasonable growth and sharp decline can have a negative impact on business [3]. An elaborate mechanism is required for effective management in this sphere. It is shown in the chart.

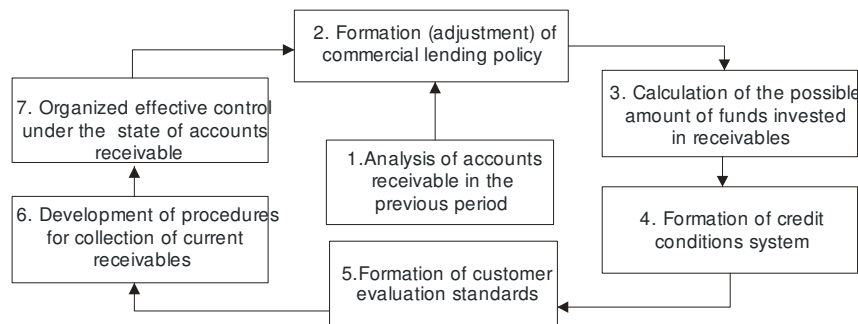


Fig. 1. Mechanism of receivables management.

Each component of this mechanism is supported by the appropriate tools and techniques, which together define the following methods for receivable management:

(1) Analytical method is based on the opportunity to determine payment deferrals and receivables structure. The main database for this approach is company's managerial accounting [4].

(2) Receivables return accelerating is the method characterized by the possibility to provide special commercial conditions (for example, discounts) instead of standard payment delay. However, this kind of motivation is not always profitable for debtors, and they prefer to pay later [7].

(3) The method of refinancing means rapid transformation of receivables to other different forms of company's current assets:

- in cash – by applying of factoring and forfeiting mechanisms and assignment agreements;
- in highly liquid short-term securities – by adopting derivatives on account of debts;
- in stocks - by offsetting debt on barter conditions.

### III. METHODS

According to experience of many companies, these methods will lose their efficiency, if they are not supported with appropriate automated tools, that allow to get comprehensive information and make necessary decisions quickly [5].

These tools are IT-products of such companies as: 1C, SAP, Microsoft, Oracle, etc.

The choice of software depends on:

- scale of organization;
- the number of shipments (invoices) per day;
- the number of units involved in the information exchange

More detailed specification of tools, offering by modern IT-developers, will be compared further.

MS Excel. At the initial stage, any business generally has a small number of customers and a corresponding volume of shipments, which makes it inexpedient to introduce complex systems and ERP-solutions. Therefore a lot of companies start its activity with using of MS Excel. Despite of apparent simplicity, this program allows to control and keep tabs on receivables. The undoubted advantages of this software are:

- easy installation and use;
- the ability to add and expand the information database and prepare summary debtor's reports;
- the possibility of data visualization (construction of various diagrams).

MS Excel spreadsheets can also be applied by larger enterprises [6] successfully. Especially if the company is currently at the preparatory period for automation of managerial accounting and, in particular, receivables management. However, as more and more organization departments are becoming involved in this process, the methodology of receivable management becomes more complex. As a result, database will increase enormously and MS Excel will quickly reach the limit of its functionality.

Consequently, significant disadvantages of MS Excel are as follows:

- data is entered into the system manually, that leads to high probability of error and the risk of the human factor increases;
- intensive growth of shipments and operations with customers leads to reduced efficiency.

The software product "Directum Prestima" allows the company make important solutions [8], related to the implementation of credit policy requirements and direct receivables management, equipped with a larger information base than in MS Excel. The "Directum Prestima" fundamental functionality consists of the following components: customer ranking, notification, receivables portfolio analysis.

Customer ranking is based on following indicators: the annual turnover, the number of arbitration cases, deferred payment period and the credit limit. Program "Directum Prestima" can hedge the risk by creating stop-lists, based on the client's ranks. Debtor can be assigned in this list for the following reasons:

- its payment delay reached top point;
- limit of shipment into a commercial loan was exceeded;

- the creditworthiness of the counterparty deteriorated, etc.

In the context of receivables management, this program notifies users about exceeding or reducing customers credit limit, entry of some counterparties in the stop-list and other "critical events". There are two approaches for identification of "critical events" for each client: individual and standardized for a specific group.

The next crucial component of "Directum Prestima" is the ability to analyze company's receivables portfolio in two aspects. First of all, users can conduct online express diagnostics of receivables, based on information about its volume, structure and duration of work with the counterparty. Secondly, you can control the status of receivables using certain KPIs that are laid into the system.

However, in order to protect confidential information, executives may restrict users access to such data. Moreover, middle and lower managers can make wrong decision, as they can not be aware of the debtor's strategical importance.

"Oracle Credit to cash" [9] covers the processes from defining and agreeing of commodity credit to payment receiving. The functions of "Oracle Credit to cash" allow not only to introduce the requirements of the company's credit policy into the system, but also to monitor compliance with these rules.

The main distinctive feature of this IT-product is the ability to manage credit limits flexibly and efficiently. The system can create an individual package of conditions for each group of counterparties. Moreover, the credit limit can automatically be calculated and changed depending on the special conditions applicable to the particular case. For example, when the buyer is a famous brand, firm-lender can increase the credit's limit for it, as the cooperation with such customer will have a positive effect on the company's reputation.

"Oracle Credit to cash" has a function of debtor ranking, too. The program forms a hierarchy by debtors automatic grouping. That is why this system provides more detailed information about the conditions of a commercial loan, as compared with "Directum Prestima". Indeed, each customer group can be complied with different commercial conditions. It reduces the risk of problem receivables. What is more, the program gives an opportunity to review the credit limit by providing information about the counterparty's credit history.

This system has an analytical module that allows to manage not only current but also overdue receivables. "Oracle Credit to cash" optimizes the combination of company executives actions must conduct in order to collect overdue receivables (client's calls and meetings schedule, accessing factoring services and other radical ways).

Russian company "1C" [10] offers its product "1C: receivables management". The main feature of this software product from Russian developer is the generation of a corresponding scenario for each specific debt obligation and automatic calculation of its effectiveness. For example, when company decides to apply the factoring service, the program will be able to calculate profitability of each proposal from factoring agencies and compare it.

The functional opportunities of the program is automated and based on:

- information storage about debtors and debt obligations, amounts of debts;
- the movement of debt obligations by performers and departments;

- registration of actions on debt obligations (planned, completed, canceled);
- collecting information about particular debtor from companies related to it;
- cash inflows monitoring and forecasting;
- client scoring system ;
- receivables management scenarios development;
- work of call-center.

Moreover, this program allows executives to organize the process of receivables management inside the company more effectively. For example, "1C: receivables management" is able to track the workload of workers and reallocate work between employees based on its occupancy.

The SAP S/4HANA Finance suite of IT-solutions for receivables management consists of several products [11]. The main functions of these programs are the following:

- evaluation of debtors creditworthiness, which is based on indicators from external data ( credit agencies);
- monitoring of counterparty's loans and payments online, determining the priority of debts for collection.
- automatic identification of cash gaps and recommended actions for its quick elimination by reducing the maturity of commercial credit.

#### IV. RESULTS

The results of IT-products comparison is represented in Table 1.

**Table 1: Comparison of optimization tools.**

Characteristic	MS Excel	Directum Prestima	Credit to cash and «1C» product	SAP S/4HANA Finance
Target audience	Small business	Middle business	Middle and Major businesses	Enterprises of all scales
Working online with credit limits	Not carried out	Manually	The revision of the limit directly before the occurrence of critical events	Carried out
Verification of requirement compliance	Manually	Manually	Automatically	Automatically
Automation of payments to suppliers	Not carried out	Not carried out	Not carried out	Carried out
Big data optimization	Not provided	Limited by amount of information	Provided with problems	Provided by cloud technologies
Network for cooperation with suppliers	Not carried out	Not carried out	Work of the call centers is automated	Carried out

According to this table, the capacity of modern automated information systems and technologies is unrestricted. However, in order to get really effective results it is very important to determine right particular automated product correctly.

In this case, company shouldn't follow rule "the more functions the better". Indeed, expensive software products have a large number of functions, there is a risk connected with non-usage of all of them. Consequently, these investments do not pay off. Despite SAP designer's program is the most digitalized and valid for all sizes of enterprises, its price is much higher in compare with others. That is why when company decides to integrate this IT-product in its activity, it would be feasible to compare the benefits of its implementation with the costs not only for the purchase, but also for its subsequent operation. In addition, approximately 70-80% users do not use all the features that this software offers. For example, the automation of payments to vendors after the receiving cash from debtors can be impractical for some organizations, as it reduces the financial cycle.

#### V. CONCLUSIONS

Thus, based on the results obtained, automated software products are able to optimize the mechanism of receivables management, speed it up and improve the efficiency of decisions. However, executives must clearly define the necessary functionality of the program before its buying and implementing, because it determines not only the return on investments, but also the efficiency of the whole enterprise.

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#### REFERENCES

- [1]. Kupriyanova L. M., Petrusevich T. V. (2014). Analysis of cash flows and their impact on the performance of the organization. // *Mezhdunarodnyy nauchnyy zhurnal: Ekonomika. Biznes. Banki.* T. 3. S. 112-128.
- [2]. Malkin O. Yu. Debt management: monograph. M.: Vershina, (2008). 209 p.
- [3]. John G. Salek Accounts Receivable. Management best practices (2014). Wiley, 224 p.
- [4]. F. Allen, A. Demircuc-Kunt, L. Klapper, M.S.M. Peria. (2016). The foundations of financial inclusion: Understanding ownership and use of formal accounts *Journal of Financial Intermediation*, 27, pp. 1-30
- [5]. The Convergence of Digitalization and Sustainability <https://sloanreview.mit.edu/article/the-convergence-of-digitalization-and-sustainability/>
- [6]. Digital Twin: Digitalization of Enterprises <https://iem.community/articles/digital-twin/>
- [7]. Rosie L. Bukics, Walter T. Loven (2015). *The Handbook of Credit and Accounts Receivable Management.* 252 p.
- [8]. J.A. Ketterer Digital finance: new times, new challenges, new opportunities (2017) March. Available at: <https://publications.iadb.org/handle/11319/8199>, Accessed 14th Nov 2017
- [9]. Oracle Credit to Cash Management <https://www.oracle.com/us/products/applications/056898.pdf>
- [10]. 1C: receivables management <https://rarus.ru/press/news/67510>
- [11]. SAP S/4HANA Finance. // URL: <https://www.sap.com/cis/products/financial-management/payables-receivables.html>