

UDK 338.242

IMPROVING THE EFFICIENCY AND USE OF INFORMATION RESOURCES



V.G. Gorovoy

Subdean of Faculty of Computer Systems and Networks, BSUIR



A.S. Sidorovich

Senior teacher of Electronic Computing Machines department, BSUIR

*Belarusian State University of Informatics and Radioelectronics, Republic of Belarus,
E-mail: gorovoi@bsuir.by, sidorovich@bsuir.by*

V.G. Gorovoy

Graduated from the Faculty of Economics of BSUIR. Senior teacher of the Department of Economics.

A.S. Sidorovich

Graduated from BSUIR. Senior teacher of Electronic Computing Machines department

Abstract. The article is about improving the efficiency of the use of information resources. The problem is solved by the example of the largest bank in the Republic of Belarus - the Belarusbank.

In the current environment, attention must be paid directly to the use of information resources. One of the directions of this application should be centralization based on modern computer technologies of accounting and management accounting in the head units of domestic large economic entities, which should lead to the elimination of intermediate links in their organizational structure and a significant reduction in the number of their administrative and managerial personnel.

Keywords: information resources, centralization, management system, economy, bank system, organizational structure, structural divisions, tax system.

One of the directions of organizational changes in the management of the economy at various levels, which allows to increase the efficiency of the use of information resources, is the centralization of accounting and management. This centralization will allow to optimize the organizational structure of the management of large entity, reducing them to the intermediate levels, and as a result, to achieve absolute and (or) related downsizing of administrative staff .

The possibility of achieving significant positive results from such centralization can be considered on the example of the activities of the largest domestic banking institution of Joint Stock Company «Savings Bank «Belarusbank».

Belarusbank has a developed regional network, for the management of which a four-level management system has been used for many years : the central office, regional administrations, branches and exchange offices. Each unit of level 1 - 3 (central office, regional administrations, branches) has its own balance, accounting, and databases.

Since 2005, Belarusbank has been actively working to centralize the management system and all types of accounting. Filial agency began to be reorganized in stages either into branches with inclusion in the structure of other branches, or into banking service centers - structural divisions that are at the third level of management, but do not have their own balance and accounting. Their balance and accounting is transferred either to regional departments or to the remaining branches.

Based on the use of modern computer technology, such a reorganization gives positive results. What can be evidenced by the data on the number of staff and structural divisions of Belarusbank for the period from 2002 to 2017, presented in table 3.1.

The table shows that over the first five years of the study period, the number of bank employees grew. The increase in the number was 1,500 people, or 6.4%. Moreover, this happened against the background of a reduction in the number of structural divisions of the bank (filial agencies, branches). During this period, their total number decreased by 83 units (4%), and the number of branches by 53 units (34.6%). Filial agencies, as noted above, were transformed into filial agencies or centers of banking services, sometimes even completely closed. Filial agencies were liquidated. There was a reduction in the bank's branch network and, accordingly, the elimination of a significant number of jobs. But the number of staff was growing.

Table 1. – The Number of employees and structural divisions of Belarusbank (without foreign representative offices and subsidiaries)

Indicator	Years of the period under review			
	2002	2007	2012	2017
1. The number of staff	23 500	25 000	21,813	21,777
2. The number of structural units (filial agencies, banking services centers, branches), units including filial agencies:	2 0 59 153	1 976 100	2 087 29th	1 619 23

Note – source: [2 , 3 , 4 , 5]

From 2007 to 2012, we are already seeing the opposite situation. Now the total number of structural divisions has grown (by 100 units or 5%), while the number of filial agencies has continued to decrease (by 71 units or 71%). The number of staff at the same time decreased by 3178 people or 12.7 %. In total, from 2002 to 2012, the total number of structural divisions of Belarusbank increased by 28 units (1.4%), the number of filial agencies decreased by 124 units (81%), the number of employees decreased by 1687 people (7.2%) .

The positive effect of the centralization of management functions and accounting carried out at Belarusbank, based on the use of modern computer technologies, obtained during this period, is obvious: with a smaller number of its employees, the bank was able to achieve a wider and denser level of coverage of the country, making thus, banking services are more affordable without compromising on their quality. Reducing the number of filial agencies and, as a result, the administrative and managerial staff, Belarusbank increased the number of structural units of the fourth level (branches and exchange offices) directly engaged in the provision of banking services and having a small number of staff. Computer technology has allowed even in such units as exchange offices, in which only 1 person works, to provide a fairly wide range of banking services.

The development of the centralization of management and accounting allows Belarusbank to gradually switch to a two-level management system: 1) the central office; 2) various types of units and points of sale. However, in fairness, it should be noted that this process is not always deliberate and smooth. As evidenced by a lot of questions, the dynamics of the considered indicators in the period from 2012 to 2017: the number of units decreased by 468 units (22.4%), but the number of employees decreased by 36 people (0.17%)! Planed (even in 2012) transition to a two-tier management system has not yet taken place.

Undoubtedly, the reduction in the number of staff in general, and administrative and managerial staff in particular, is not, and should not be, the goal of using modern information resources in managing economic processes. The purpose of this application is a significant increase

in labor productivity of the category of workers in question and, as a consequence, the release of their working time. The time freed from the performance of highly demanding routine operations should be redirected to the solution of other important tasks that require several great mental and creative efforts. In modern conditions of rapid scientific and technological progress, changes in the socio-economic sphere, emphasis on the “knowledge economy” and the development of “human capital”, a significant part of the released working time should be directed to improving the qualification level of workers and their retraining.

The effective use of information resources in the managerial sphere does not mean the automatic reduction of administrative staff. The reduction in the number of staff, as you know, is absolute and relative. The use of modern computer technology should lead, first of all, to a relative reduction in the number of employees.

Another reason that obstructs the increase in the efficiency of the use of information resources both in the banking sector and in the economy of the country as a whole is our legislation, its often ill-conceived and frequent changes, as well as the existing bureaucratic system. A large number of a wide variety of legal acts prescribes to perform many different actions, to create a huge number of all kinds of documents (reports, requests, acts, etc.). Moreover, it would be possible to do without many of the actions prescribed by law and without many documents. But they exist and hinder the increase in the effectiveness of the use of information resources.

The activity of any domestic business entity is associated with so many different regulatory acts (instructions, decrees, orders, etc.) that it is very difficult to understand them and conduct business activities in strict accordance with them. A huge number of these documents, published by various ministries and departments, significantly complicates their coordination. As a result, in a vast sea of regulatory acts, there is also a significant percentage of conflicting accounts. A business entity operating in strict accordance with one regulatory document may not intentionally break another. Just because the provisions of one document will be ambivalent to the provisions of another.

The current situation is getting worse by the huge number of changes introduced into all legal acts. Thus, to understand the already complicated system of documents, which are regulating the activities of business entities, becomes even more difficult. It is very problematic to carry out economic activities strictly within the framework of the existing legal field. Frequent, rapid, as in a kaleidoscope, changes in the rules of the game naturally lead to their violation. What yesterday was completely permissible and legal, today is becoming unacceptable, going beyond the bounds of legality. But it's impossible to immediately adapt to new business conditions. And often, enterprises, not having time to reorganize in time, willingly offend a particular regulatory act.

This state of affairs in domestic law forces even relatively small enterprises to maintain a large staff of accountants, lawyers and other categories of administrative staff. Otherwise, to cope with many instructions and the same many changes and additions to them is simply impossible. Computer technologies in such cases are ineffective, since they are not yet able to independently monitor, analyze these changes and "tune" in accordance with them. All this is done by man. Automated information systems of business entities operate according to a specific, predetermined algorithm, designed to operate in the current conditions of the enterprise's life. As soon as these conditions change, a need arises to change this algorithm. It is clear that comprehending the changes and the new conditions for the functioning of the organization, the development of the corresponding principles for the operation of an automated information system requires a lot of labor, time and money.

It should also be noted that in the republic the system of tax reporting in electronic form is still poorly developed, which does not allow to fully switch to its automated processing. Processing paper reports is a rather time-consuming process, requiring a significant expenditure of time and effort, and, consequently, a significant number of tax workers. Also, a large number of tax specialists are required to conduct checks on the correct calculation and payment of taxes by business entities.

To improve the situation, it is necessary to ensure, first of all, the stability of the tax system. Indeed, as many researchers rightly point out, it is better to have a complex tax system, but stable than a simple but constantly changing one. When you do not know by what rules you will have to pay taxes in a month. Therefore, the Ministry of Taxes and Duties of the Republic of Belarus should concentrate its efforts not on the development of numerous and poorly thought out "improvements" of the tax system, but on its stabilization and removal of contradictions.

Moreover, this should be done with increasing automation operations level, both in calculating tax payments and in monitoring strict compliance with tax laws. For this, it is necessary not only to develop an electronic document management system between commercial organizations and tax authorities, but also to develop and implement a single electronic system for calculating and paying taxes at all business entities of the republic, which will greatly simplify the procedure for verifying the correctness of calculating and paying taxes and reduce its complexity.

Such steps should first of all lead to an absolute (relative) reduction in the number of both administrative and managerial staff of enterprises and employees of tax control bodies, and, therefore, lead to absolute (relative) savings in the wage fund in business entities, as well as budget labor costs of employees of tax authorities.

Legislation also plays a significant role in improving the efficiency of the use of information resources. First of all, its stability. If the regulatory framework of the business entity is stable, then it has much more ability to automate operations carried out by its employees. Indeed, in this case, the technology of the operation does not change for a long time, which means that the information system of an economic entity can be easily configured to perform this operation in automatic mode. The role of a person is reduced only to insignificant control of the process of performing this operation, which leads to a decrease in the workload on him and an absolute and (or) relative reduction in the number of staff.

If the regulatory framework is constantly changing, then there is a need for careful monitoring of these changes, and the introduction of appropriate adjustments to the work of the information system. On the one hand, this increases the workload of the employee, on the other hand, it does not allow making a number of operations fully automated.

It is also necessary to pay attention directly to the use of information resources. One of the directions of this application should be centralization based on modern computer technologies of accounting and management accounting in the head units of domestic large economic entities, which should lead to the elimination of intermediate links in their organizational structure and a significant reduction in the number of their administrative and management staff.

References

- [1.] "An automated mess does not become order." Does Belarus have a digital future ? [Electronic resource]. - Belarusian portal TUT . BY . - Access mode: <https://news.tut.by/economics/626557.html?crnd=65257> access date 02/18/19.
- [2.] Annual report to the general meeting of shareholders for 2002 [Electronic resource]. - Internet portal Belarusbank. - Access mode: <http://belarusbank.by/ru/deyatelnost/1648/1651>. - Date of access: 04/29/2013.
- [3.] Annual report to the general meeting of shareholders for 2007 [Electronic resource]. - Internet portal Belarusbank. - Access mode: <http://belarusbank.by/ru/deyatelnost/1648/16775>. - Date of access: 04/29/2013.
- [4.] Annual report on the general meeting of shareholders for 2012 [Electronic resource]. - Internet portal Belarusbank. - Access mode: <http://belarusbank.by/ru/deyatelnost/1648/16775>. - Date of access: 04/29/2013.
- [5.] Annual report for 2017 [Electronic resource]. - Internet portal Belarusbank. - Access mode: <http://belarusbank.by/ru/deyatelnost/1648/16775>. - Date of access: 04.25.2019 .
- [6.] Message from President A.G. Lukashenko to the Belarusian people and the National Assembly in 2006 [Electronic resource]. - The Internet portal of the Security Council of Belarus today. - Access mode: <http://law.sb.by/451/>. - Access date 04/29/2013.

ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ И ИСПОЛЬЗОВАНИЯ ИНФОРМАЦИОННЫХ РЕСУРСОВ

В.Г. Горовой

*Заместитель декана факультета
компьютерных систем и сетей БГУИР*

А.С. Сидорович

*Старший преподаватель кафедры
электронных вычислительных машин
БГУИР*

Белорусский государственный университет информатики и радиоэлектроники, Республика Беларусь,

E-mail: gorovoy@bsuir.by, sidorovich@bsuir.by

Аннотация. Статья посвящена повышению эффективности использования информационных ресурсов. Задача решается на примере крупнейшего банка в Республике Беларусь - Беларусбанк. В нынешних условиях необходимо уделять внимание непосредственно применению информационных ресурсов. Одним из направлений данного процесса должна стать централизация на базе современных компьютерных технологий бухгалтерского и управленческого учета в головных подразделениях отечественных крупных хозяйствующих субъектов, что должно привести к ликвидации промежуточных звеньев в их организационной структуре и существенному сокращению численности их административно-управленческого персонала.

Ключевые слова. Информационные ресурсы, централизация, система управления, экономика, банковская система, организационная структура, структурные подразделения, налоговая система.