

# Ukrainian Company Cost Accounting System Development from the Evolutionary Theory Position

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**Abstract.** Cost accounting system plays an important role in an enterprise managing. Our research is based on the demonstration of the transformations of the specific Ukrainian company cost accounting system on the way to implementing the business process management concept (BPM) and new generation of the BPMS / BPMT class (Business Process Management System / Tool) software in terms of the economic evolutionary theory provisions. Particular attention is paid to the influence of the modern organizational structure of the company built on the principle of flat networks, on the organization and cost accounting methodology.

**Keywords.** business process management (BPM), Business Process Management System/Tool BPMS/BPMT), economic evolutionary theory, Cost management systems, Cost accounting, Total Quality Management (TQM).

## 1 Introduction

The established traditions of accounting in the conditions of the administrative command system of the Soviet era management have long dominated minds of scholars and business practitioners in Ukraine. The true desire to drastically change the existing accounting system through the introduction of successful practices from other countries, mainly Germany and the United States, have just aggravated chaos in the 90s of the last century. The boundaries opening inspired the academic community to study and actively promote theories of scientists Drury C., El-Kelety, Charles T. Horngren, Sricant M. Datar, Madhav V. Rajan, Andersch A. However, the real economics did not accept methods artificially modified to domestic practice. Only evolutionary transformations in the economic system have created the basis for understanding the essence of new for the domestic management definitions, methodology, theories and concepts of the market economics.

At the present time Ukrainian business demonstrates examples of successful practices in many sectors of the economy, which allows to state the final and irreversible reformatting of human consciousness and the transformation of the traditional accounting system focused on strict control and centralized management, on the analytical accounting system designed for the management process informational support.

The purpose of the article is to study the process of adaptation of the cost accounting system of an actual Ukrainian company to the evolutionary

transformations of the socio-economic environment by improving traditional methods and implementing management concepts revolutionary for the domestic practice.

The scientific hypothesis of the study consists in the statement that the development of the accounting system, in particular cost accounting, takes place in accordance with the provisions of the economic evolutionary theory.

The structure of the article. The presented study consists of the following parts. The first part is devoted to highlighting the main theoretical aspects and trends of economic evolutionary theory and changes in the business environment of modern companies. The second part represents the analysis of the historical path of the cost accounting system of expenses of the Ukrainian company to the concept of BPM implementation through the prism of the economic evolutionary theory provisions.

## **2. Related works**

### **2.1 Theoretic foundations of the economic evolutionary theory**

The methodology of the thesis is based on the main provisions of the evolutionary economics, whose founders are Richard R. Nelson and Sidney G. [1-3]. They put forward the hypothesis of similarity of economic evolution and the evolutionary process in biology with the exception of certain details. Researchers have identified the existence of dialectically opposite processes of "variation" and "selection" in the economic evolution, which are similar to biological mutations and Darwinian selection. The first implies the emergence of industrial innovations as a result of a heuristic search process that combines the dynamic and stochastic behavior of firms, the second accords with the competitive survival and adaptation.

An analogue of self-organization in the economics is a free market, of the genome – the state regulation, the gene – routines.

The definition of a "routine" has several interpretations:

- the routines are all regular and predictable actions of the firm;
- the routine is the essence of the organization's ability;
- the routine is the memory of an organization stored in the memory of the members of the organization;
- the routine is a way of doing business;
- the routine is what the firm does during the short period with a given existing equipment park.

Certain routines are perceived equally for all companies without exclusions, others are individual for each particular company. Routines are classified according to the form of use:

- active, used in everyday practice;
- latent, stored in the archive and irrelevant for a certain time, but can be applied in the future.

There are four basic mechanisms for new routines generation:

- the mutation is the discovery of new routines due to invested in scientific research;
- the recombination is borrowing knowledge from other firms and using it as simulations;

- the transaction is the transfer (shifting) of the routine from one firm to another, after the transfer the routine becomes the part of the latent routine, which at some definite time may become active;
  - the transposition (transformation) is the transition of the routine to a qualitatively new level in the same or different segment of activity.
- The routine is an antonym of the category "innovation". In case of successful introduction of innovations into practical activity, they become routinized.

## **2.2. Trends and Changes in the Business Environment**

Many trends and changes in the business environment in recent years have caused significant modification in accounting and management methods and concepts, particularly cost accounting and management.

Trends and Changes in the Business Environment:

- Changes of the Markets and a Greater Focus on the Customer;
- Shifts in the Basis of Competition;
- Advances in the Manufacturing and Information Technologies;
- New Forms of Management Organization.

### **2.2.1 Changes of the Markets and a Greater Focus on the Customer**

In recent years, however, the seller's markets have dried up. In a buyer's market, it is simply not enough to get the product out; customers are more sophisticated than in the past, they are more knowledgeable, less loyal, and more cautious [4]. As a result of an increasing competition and globalization of markets, the markets have changed gradually from seller's to buyer's markets. In the early years of mass production, nearly products that were produced could be sold, because of the large production quantities of like products; the costs were low enough that they become affordable for most customers [5]. Today, customers demand products that meet or exceed explicit expectations; are delivered on time, are defect-free, and have low prices and low cost of ownership [6].

Companies react to the flexibility. Flexibility for Johnson [7] means "improving one's ability to do whatever the customer wants, when the customer wants it, at little or no extra cost.

Mass production of identical products - the business model for the industrial companies of the past - is not capable and responsive enough to cope with rapidly changing markets and shortened product life cycles [8].

### **2.2.2 Shifts in the Basis of Competition**

Total quality management is a management philosophy focused on exceeding customer expectations by continuous improvement of products and services [9].

The basic principles for the Total Quality Management (TQM) philosophy of doing business are to satisfy the customer, satisfy the supplier, and continuously improve the business processes [10].

Cost management systems can help attain the strategic objective of time by measuring and reporting lost sales and profits from late product introductions, costs

of delayed deliveries from suppliers, sales from new versus old products, response time to ship customer orders, and unused capacity available for new product introductions [11].

Response time improvements often drive simultaneous improvements in quality and productivity as well as doing things faster helps to increase revenues and decrease costs [12].

### **2.2.3 Advances in the Manufacturing and Information Technologies**

Product costing methods have to adapt to this new technological environment. On one hand, the high production overhead cost of these systems requires a special attention to overhead allocation. On the other hand, the constantly changing setup configuration and production plans require a constant recalculation of overhead allocation and a priori estimation of the expected production cost [13].

In general, advanced manufacturing technologies have dramatically changed manufacturing cost-behavior patterns; for example, the direct labor costs are decreasing, while depreciation, engineering, and data-processing costs are increasing. These changes have resulted in higher overhead rates and a shrinking base of labor over which to allocate those costs [4].

Organizations resorted to the use of advanced manufacturing technologies robotics, computer aided design, and flexible manufacturing systems. However, these changes repositioned manufacturing activities and by extension, changed the behavior patterns of manufacturing costs [14].

The evolutionary transformation in plane of the economic and social organization related to the globalization processes, scale electronic communication development, rapid development of the computer equipment and communication technologies, increasing number of the E-business types, determine the vector of the accounting deep transformation and accounting data formation in accordance with the post industrial society needs [15].

### **2.2.4 New Forms of Management Organization**

Company structures are continuing to evolve, "the company is no longer a physical entity with a stable mission or location, but a shifting set of temporary relationships" [16].

The challenge for accountants is to keep up with the wave of change.

The 1970s, most companies were structured like a pyramid with many vertical layers. The 1980s, introduction of new information processing and communication technologies allowed the tops and bottoms of pyramids to communicate more directly.

Some companies therefore began to transition their vertical structures from the pyramid to the hourglass form. Nowadays, we can note companies are organized like flat networks.

A major strategic advantage for network structure is that the organization, no matter how small, can be truly global, drawing on resources worldwide to achieve the best quality and price and then selling products or services worldwide just as easily through subcontractors [17].

The development of new organization designs, such as the flat organizational structure, team based organizational structure, and network organizational structure may force accountants to seek new accounting techniques to resolve the accounting problems that are created by new organizational designs such as responsibility accounting and performance evaluation, costs allocation, information type and flow [4].

### 3 Evolution of the Ukrainian company cost accounting system

#### 3.1 Description of the activity and organizational structure of the company

The main activity of the Ukrainian company is the wholesale trade and production of pharmaceuticals and pharmaceutical materials under its own brand and for other customers.

Over past decades the organizational structure of the company has evolved in response to changing opportunities and challenges. Initially, the company was structured as a pyramid with many vertical levels of management. The introduction of new information processing technologies and global communications networks, in particular the Internet, allowed the peak and the basis of the pyramid to communicate more and faster, despite the geographic branching of subdivisions and units. The Ukrainian company is one of the largest firms, which has an extensive network in the country. The organizational structure of the company is based on the principle of flat network (fig. 1).



Fig. 1. The organizational structure of the company

The head office in Kiev conducts contractual work with suppliers and buyers, manages the supply logistics, controls the work of territorial branches. Contracts are concluded for a year that allows composing a consolidated annual budget of incomes and expenses, an annual plan of production in accordance with available production capacities, a schedule for the purchase of goods for further sale, of raw stock and materials for the manufacture of products for customers and products under their own brand. Additional production orders are accepted by the head office or the

manufacturing subdivision under conditions of incomplete loading of production capacities.

Within the framework of the E-government program implementation in Ukraine, the ProZorro system of tender procurement for public funds is successfully operating, which opened the possibility for the company to open electronic auctions and outlined new directions of development (expansion of manufacture of existing types of products and development of new ones). The increased government agencies' demand for company products is due to military actions in the East of the country. Tender deals are concluded within a year; therefore, in order to reduce risks, the management of the company is focused on the monitoring the calculation of the forecast cost price of goods of its own production.

### **3.2 An excursus to the past**

During its existence, the company had several attempts to organize production in cities of Ukraine, but nowadays there remained only two successful examples, one of which is the Kherson production unit that operates successfully. And this is not by accident. First, the good geographical location - the city is located at the intersection of river, sea, rail and auto ways. Secondly, the availability of the technical base and highly skilled personnel, as for several decades in the city there was an industrial complex (Kherson cotton enterprise (KhBK) with a full cycle of cotton processing, from the cleaning of raw cotton to the dyeing of finished fabrics and terry products. Therefore, the cotton processing and production of dressing materials and hygienic products were started very quickly and efficiently.

Since the production unit was created on the basis of KhBK technical equipment, cotton processing process and personnel, the cost accounting system and the cost calculation methodology were inherited from that enterprise. We will analyze the system of cost accounting which was used before the year 2000. At the heart of cost accounting was a normative method - the analog of Standard Cost which was adapted to the administrative command policy of management. Due to the instability of the national currency and the gradual transition to world prices for cotton and electricity, all calculations were conducted simultaneously in UAH and US dollars (\$).

In the first stage, they compiled a production plan for a year and calculated the Standard Costing of 1 ton of the fiber processed.

Each step of accounting had its own algorithm and method of calculation.

With the use of normative accounting, the resource saving was encouraged, in some cases even at the expense of reducing the consumer attractiveness of products. Excessive expenditures were subject to strict control. There was a classifier of negative deviations of actual indicators from the normative, which determined the perpetrator in each case of the overexpenditure. The guilty person was required to reimburse the overpayment at his own expense.

The normative method of cost accounting can be recognized as an active routine inherited from the past, but the reasonability of using it in conditions of Ukraine transition to the market economy was quite questionable. During this period, rigid state regulation in the field of accounting prevailed. Unpredictable fluctuations in exchange rates, constant changes in legislation, uncertainty about energy and sale prices over a period of more than 6 months undermined all attempts to calculate the

standard cost of production. The loss of the main source of the raw material market (Central Asian republics of the Soviet Union) and traditional channels of distribution have led to the impossibility of steady functioning, the down-time became the norm, the enterprise depended on the state support and the political situation.

The management had to abandon the normative method of cost accounting, the actual-costs system was used for seven years.

Consequently, the survival of a company under conditions of the market economy and fierce competition depended on the search for new tools and methods. They refused from the normative accounting, in other words, the active routine has changed into the latent. In 2007, it was decided to upgrade the fiber processing technology, to diversify production by upgrading and expanding the range of finished goods, to perform a large-scale company reorganization, as a consequence, - to use the actual-costs system accounting method for financial accounting and introduce efficient market systems of cost accounting in management.

### **3.2. The company's cost accounting system prior to the introduction of BPM (business process management)**

The accountancy department of the production unit includes a chief accountant and an accountant. The task of accountants is to keep pace with the new management concepts, without violating the legislative and normative regulation of accounting in the enterprise. The financial accounting system of the company is constructed in accordance with the requirements of the legislation. The methodology of financial accounting conforms to the National Accounting Standards, other regulatory acts and accounting policies of the company. The accounting is conducted electronically using the software module "Accounting". The financial reports are based on the results of activity of the company as a legal entity; the branches are considered structural units. Expenditures on the operation of the regional network of branches are seen as sale expenditures, except for the production units considered as Cost centers, therefore all expenses of the production unit are recognized as direct and belong to the account "Production". At the same time, all expenses are accounted taking into consideration specific elements (material, labor costs, deductions for social actions, depreciation and other operational expenses). Documentation of the production process remains detailed and cumbersome.

Based on the company's budget and annual production plan, compiled by the employees of the head office, the accounting department of the production unit forms the Production Plan for the calendar month and the Schedule of the main production employees, who work in one or two shifts.

The raw materials and materials are delivered in the required quantity within clearly defined terms. Cotton, as the main raw material, after checking the quality by the controller and posting by the storekeeper, is taken to the production workshops, which is confirmed by the registration of the documents - Profitable Invoice and Certificate of Quality Verification, which are registered in the relevant journals. The auxiliary materials for production can be obtained from the storekeeper on the basis of the Application - Requirement document. The cost of raw materials and the cost of processing the fiber form the cost price of the processed cotton. At the end of the current month an accountant compiles the Movement Report which is based on invoices, applications and other documents. This report provides an opportunity to

control the inventory holdings in the storage and includes quantitative information about the remainders of the inventory holdings at the beginning and the end of the period, their receipt and use. Upon completion of the shift, the operator of the production machine checks the products for a shortage, and the finished goods are taken by the master who draws up a consignment note for their transfer to the warehouse.

On the basis of the data of counters the production machines are equipped with, operators add information about the number of actually manufactured products in the log book of manufactured products at the end of the work shift.

The finished goods are shipped in accordance with the terms of shipment and delivered to the customer at the address of receipt. At the end of the month, the accountant casts up on every type of manufactured products (hygiene sticks, cotton wool, cotton swabs, etc.) and used cotton cloths, ribbons, etc.

Specific conditions of activity, the complexity of the technological process and the geographical branching of the organizational structure have led to the implementation of a single accounting system for the compilation and publication of financial statements and management accounting in order to provide the administration with specific information in necessary aspects.

The development of the administrative cost accounting model is accomplished by simulating the flow of resources and the expenditure cost data. The simulation model of production is based on the decomposition of the production business process into simple blocks for better understanding of the transformation of resources into finished goods (fig. 2).

The process of production in terms of cost savings is conditionally divided into two main blocks: the processing of raw cotton and the manufacturing of products in the assortment. The processing involves the processing of cotton in large volumes. The next block includes types of work that are unique to both customer orders and individual batches of products manufactured under their own brand name. For this type of production the hybrid costing system is optimal. This system is a symbiosis of principles and procedures of the Process Costing System and Job-Order Costing System accounting methods, besides it combines them according to the specific features of the business and its management policies. The processing consists of several successive stages of handling a large quantity of raw cotton. In such a situation, it is impossible to track the costs incurred for each specific ton of cotton, so it is more efficient to accumulate costs at the aggregate level for a large batch, and then distribute them to 1 ton of processed cotton. For the first production block a process costing method is used, it accumulates costs during the reporting period and distributes them in the end to the amount of the cotton processed, thus defining the average cost of 1 ton.



Production Division of Ltd Trading House "Campus Coton Club" (II branch of Kherson)

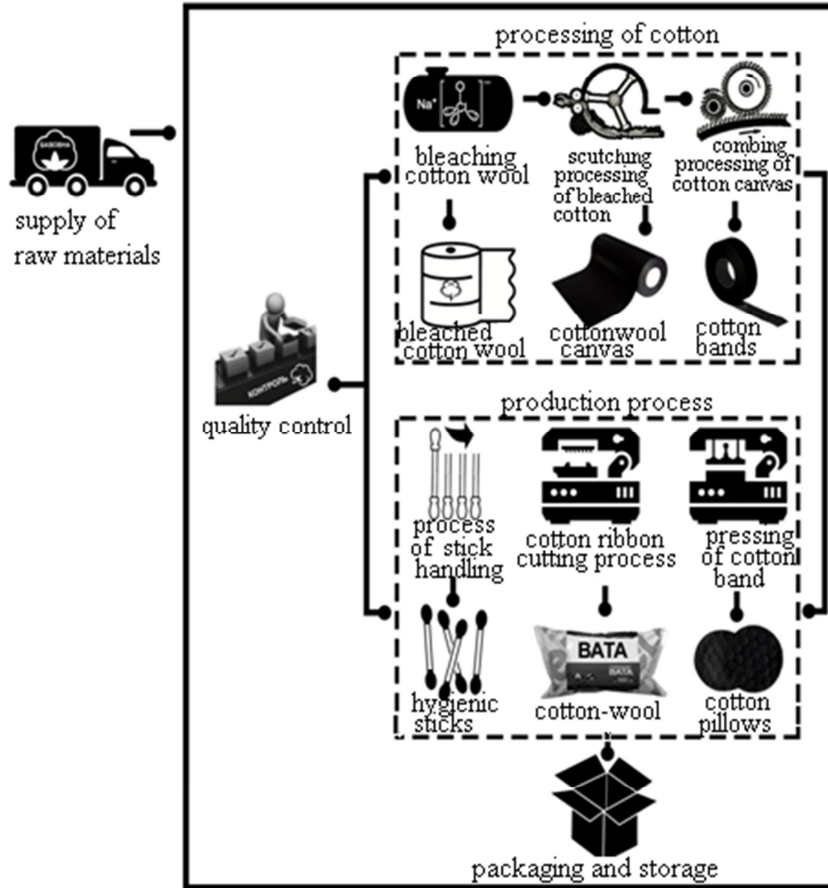


Fig. 2. The simulation model of the manufacturing process in the production department

The costs of the process are divided into direct (Direct materials, Direct labor) and indirect (Overhead). Direct material costs are determined by the amount of raw cotton consumed during the reporting period and estimated using the weighted average method. Other material and labor costs accrue throughout the production process, so they are accounted for in a different way than material expenses. In the production unit the best option for this phase is the standard costing system. For all cotton that was released and processed during the reporting period, the prescribed standard costs (other material costs, for electricity, for wages) are written off in full amount. On the volume of cotton that has not passed the full cycle of processing (Work in progress), we include costs according to the coefficient of readiness. The deviation between actual and standard costs we write off on the cost of the processed fiber.

The variable part of indirect costs is divided similarly, this division is based on the coefficient of the average level of completeness of the cotton processing. The full standard amount of indirect costs we write off on the cotton, which has passed

the complete processing cycle for the reporting period. Deviations between the actual indirect costs in the variable part and the standard ones are written off on the cost price of the cotton processed.

The development of standard costing required the study of the previous experience in the application of regulatory cost accounting in the enterprise, that is, the latent routine became active again. The operations of each stage of the processing were thoroughly measured and calculated. The engineering process of the production process was carried out by a technologist under the direction of the chief engineer. The accountant of the production unit calculates the cost of 1 ton of fiber obtained by processing raw materials as a common stage of production of several types of products, using the standard-cost method. The use of standard costing for the processing is also appropriate due to minor and unlikely changes in technology.

The opposite is the situation with the second production block. In practice, the costing of production of goods in the assortment adapts to the specific requirements of the customer or market conditions for products under their own brand name. Fluctuations in costs are related to the performance of specialized technical characteristics, namely the degree of cotton cleaning, the number of layers of wool on hygienic sticks (tampons), the number of units in the package and so on.

For the second block of the production process it was considered expedient to use a job costing system which is designed to accumulate costs in individual units or production batches (orders). Let's dwell in more detail on the specific features of the write-off costs. First of all, direct materials (direct costs) are the cost price of processed cotton, obtained as a result of the first block of production. The processed cotton in the form of cloth or ribbon is immediately sent to the second stage of production, but some part of it is kept in stock as an insurance reserve. The cost of the released cotton is written down for the production of a particular type of product, the remains of unused cotton are returned to the warehouse, and the cost of goods manufactured is adjusted.

Electricity costs can not be calculated in advance, so the best option is to fix machine-hours actually used with the subsequent calculation of the amount of costs included in the cost of production. Direct labor costs are also counted and written off in accordance with the performance of a specific task or order, based on the hours actually worked.

Unlike the processes cost accounting system, overhead costs in the variable part are not written off by one sum, but distributed between cost pools according to the pre-established methodology. For example, the depreciation of production equipment (Plant and Equipment) is calculated using the usage-based depreciation methodology and is written off according to the time actually worked.

The strategy of the company management is aimed at expanding the range of cotton products under its own brand, diversifying manufacture through the development of production of nonwovens and polyethylene, reducing the share of constant costs in the cost price of products based on the scale effect. Therefore, at the level of the production unit of the managerial accounting, the accountant allocates fixed costs as part of the indirect costs for their analysis and further optimization. To the fixed costs as a part of the indirect in the managerial accounting of the production unit belong the remuneration of the head of the unit, accounting office workers, managers, storekeepers, guards, telephone charges, the Internet, etc.,

i.e. costs that are not directly related to the production process and do not depend on changes in production volumes.

Finding directions for reducing the constant part of indirect costs was based on the results of calculating the cost of goods production by the method of multi-level Direct Costing.

The constant part of the indirect costs of the production unit (production management costs, security, warehousing, etc.) is distributed between two blocks by Pareto principle, that is, 80% of the costs are attributed to the processing of raw cotton and 20% are distributed among the cost pools respectively the established distribution base (the number of machine-hours worked out).

The Administrative Cost Accounting Model has become an ideal platform for implementing Just-in-Time (JIT) and Total Quality Management (TQM) concepts, as well as cost management systems.

Consequently, financial and managerial accounting is conducted in a single information system. The cost accounting system is based on a combination of several accounting methods. The strategy of the company management is aimed at expanding the range of cotton products under its own brand, diversifying manufacture through the development of production of nonwovens and polyethylene, reducing the share of constant costs in the cost price of products based on the scale effect. Therefore, at the level of the production unit of the managerial accounting, the accountant allocates fixed costs as part of the indirect costs for their analysis and further optimization. To the fixed costs as a part of the indirect in the managerial accounting of the production unit belong the remuneration of the head of the unit, accounting office workers, managers, storekeepers, guards, telephone charges, Internet, etc., i.e. costs that are not directly related to the production process and not depend on changes in production volumes.

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The Management Cost Accounting Model has become an ideal platform for implementing Just-in-Time (JIT) and Total Quality Management (TQM) concepts, as well as an instrument of Cost management systems.

Consequently, financial and managerial accounting is conducted in a single information system. The cost accounting system is based on a combination of several accounting methods. The transition to using the hybrid cost accounting system as a simbiose of Process Costing System and Job-Order Costing System, the methodology for determining the value of an additional order and other techniques has become a more logical result of finding a way out of a problem situation than a routine recombination, that is, the use of these techniques as already successfully tested at foreign enterprises. The management of the company was not even aware of the use of advanced methods, it simply adapted its system of accounting costs under the requirements of external environment, industry peculiarities and accounting

policies. Therefore, it can be argued that the evolutionists' position regarding the relationship between the amount of investment in scientific researches and the occurrence of mutations works in the system under certain circumstances. In the conditions of the severe shortage of funds, evolutionary transformations take place because of natural desire to survive.

### **3.3 Cost accounting system after the implementation of business processes management (BPM)**

Until a certain time the governing body of the company managed to maintain a ratio of income and expenses for profit. However, the loss of branches in the Crimea and the closure of a branch in Lugansk, sharp currency depreciation and other negative external environmental factors have led to the activity loss and reducing the cost of assets. On the other hand, attempts to reduce costs through internal firm reserves eventually only worsened the situation. There have been cases of failure of deadlines for execution of orders, customer complaints, and the number of deficiencies. By the end of 2015, accumulated problems have reached critical significance and have led to a crisis situation. This meant that the company's development stopped at the bifurcation point, the passage of which may give impetus to the transition to a new level of development or, conversely, will be the beginning of the company's completion after many years' standing.

The analysis of the company situation proved the need for inclusion in the list of facilities management and accounting, in addition to traditional costs and resources, business processes and time as well as establishing the relationship between the quality, quantity, speed of the work done by each individual performer and wages.

Three main directions of the crisis management were outlined:

1. Combining databases on the activities of the head office and regional branches into a single information system (IS) by "soft" integration with providing a quick access of specific executives to the necessary information in order to carry their tasks out.

2. Optimization of the work of the company's employees, the organization of a transparent and fair remuneration system, which will establish a direct link between the results obtained and the remuneration for the work performed.

3. Reorientation of the documentation process of the company from the total bureaucratization to the formation of information in necessary for the company management cuts in the shortest possible time.

The management of the company took a risky decision at that time about the revolutionary reorganization of activities based on the concept of BPM through the introduction of a new generation of software BPMS / BPMT (Business Process Management System / Tool).

At the initial stage, the company's activity was analyzed on the basis of a process approach and a business process map (BP) was compiled, which became the project of building the company's architecture for further implementation in the electronic environment. It was found that certain processes were inefficient, notably partial subprocesses and operations duplicated and the responsibility for the execution dispersed, the monitoring became complicated because of the lack of a clear separation of powers and clearly stated criteria.

After introducing, testing and using the BPMS software for 6 months, the management has received the necessary data for the further optimization of the company's activity. The BPMS software clearly specified the terms and the duration of the task execution by a particular executor and shaped the history of each business process in the Event Log. This allowed establishing «weak points», eliminating duplication, increasing the efficiency and mobility of business processes and calculating the cost of each transaction.

The functional of the software for BP "Production" provides developing the production plan per short intervals, so the production unit effortlessly developed the production plan per month approved by headquarters, plans per week and per day with simultaneous calculation of load capacity and scheduling of employment of workers of main and auxiliary production units.

Connecting to a single circuit of IS of all branches increased the efficiency of all business processes without exception. For example, the head and the accountant of the production unit were included into the execution of the BP "Contract" for the production of products under the brand name of the client. As participants in the business process they have the right to make reasoned proposals and remarks, to adjust the technical requirements and terms of execution, to agree on the value of the contract. This allowed not only to significantly reduce the risks of problems during the contract implementation phase, but also to motivate employees to understand their own significance for the company. In turn, the responsibility for each decision is taken by a particular participant of the business process, since the software module clearly captures the contribution of each participant in the history.

Within the framework of the BPM concept, the boundaries of the fixed functional responsibilities of the official were erased; the roles of the concrete executors of each stage of the business process were established. The software ensured the transparency of each employee's work and opened the opportunity to review the system of remuneration and incentive payments. Now the size of wages directly depends on the importance and amount of the work performed.

The BPM concept has fundamentally changed the traditional understanding of the record that dominated the previous century. Domestic accounting practice, poisoned with the total control of the Soviet era, operated records as evidence of the operation fulfilled. Sometimes, in order to display one operation on the accounts it was necessary to issue several documents, each of which was approved not by one signature. The BPMS software has largely preserved the traditional approaches to the record management, but after 30 days of use it became clear that the transition to operating record information (that is the data that did not receive the status of the record) not only does not distort accounting, but vice versa, makes it more transparent, controlled, mobile and operational. Moreover, this approach opens the way for the implementation of the state requirements, adopted on the basis of international ISO 9000: 2015 and 9001: 2015 Quality management systems [18,19], which clearly indicate the need to refuse documenting the entire volume of transactions, and to use a record only for the registration of information that is considered significant for the company.

Consequently, the concept of BPM has increased the flexibility of the production process and accelerated all business processes of the company. According to the author, the main advantage of the BPM concept and its implementation tool in the electronic environment of BPMS / T is the rethinking of the focus of the activity

effectiveness on the contribution of each employee in the results of the activities of the unit, service, branch, company. A transparent system of work-time accounting opens the possibility of cost-measuring the performance of each operation or task. This function generates collective responsibility for the business process implementation along with simultaneous delineation of individual responsibility within the limits of power. The BPM concept requires constant and continuous improvement of the employee's personal competencies.

From the standpoint of the evolutionary economics the implementation of BPM in the enterprise activity is considered as a recombination of the borrowed experience, adapted to the realities of their own business and business environment trends.

## **4 Conclusions**

The conducted research allowed to get the following results. The cost accounting system is under the influence of natural, social, cultural and political factors, corresponds to the principles of theories and concepts of management, takes into account the features of business and production technology. Solving the problem of effective development and economic growth of domestic enterprises lies in the area of modernization of the management system (including accounting systems) and the use of modern information and communication technologies.

The statistics show disappointing indicators of implementing the latest information-communicative technologies in companies. The main reason is the lack of understanding that, according to the evolutionary economic theory, each economic structure is unique, and it is impossible to distribute someone else's experience for it directly as a technical project. However, in the presence of a certain competence and taking into account the accumulated experience, the borrowing of successful practices is considered as innovations that "get accustomed" to the economic organism and turn into a daily routine on the assumption of spending money and time for analysis, testing and adaptation to the individual peculiarities of the internal and external environmental factors.

Innovations can occur as mutations (evolutionary transformations) with a severe shortage of funds through the natural desire to survive. On the other hand, routines that eventually become inactive, seem to lose their significance forever, but may become more useful in the future than any innovation that has become successful for other companies.

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