

Corporate Information Management System and Its Influence on Increase of Changes Productivity

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ABSTRACT

The urgency of the problem under investigation due to constant changes in the external business environment requires organizations to establish a mechanism to manage change and increase the impact of these changes. The purpose of the article is to analyze the change management concepts and their applicability in the strategically important holdings in the region, as well as identifying features of reforming of the enterprises in the crisis through the creation of change management system. The leading approach to the study of this problem is a systematic approach to identify the main features allowing for the formation of the mechanism of change management in the regional holding companies. The main results: systematization and analysis of the existing change management concepts, and identified particular changes in the company based on the use of change management system. Article Submissions may be useful for the regional and federal holding companies with constant changes in the external business environment.

KEYWORDS

Holding structures management changes system, strategically significant branches, corporate information system

ARTICLE HISTORY

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Introduction

In a modern society together with competition development, technologies improvement, business environment has become more dynamic and changeable. It demands more flexible approach to a strategic business management from organizations, and also it requires carrying out periodic goals and tasks corrections, organizational structure improvement, revision of centralization extent of key functions, and also change of personnel involvement and motivation system. Management of large corporations and small firms faces the

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situation when business success depends on authorities, on decision-making efficiency and speed and reaction to organization changes. Changes are an issue concerning all organizations. According to J. Kotter (2007) and I. Ansoff (1999), the majority of the companies and departments of large corporations come to a conclusion that they have to implement moderate reorganization, at least, once a year, and radical - each four or five years.

At the end of the XX century within management science an independent field of knowledge, changes management, started to be emphasized. At the beginning of a new century the issue of scientific studying of organization development, transformations and changes management has become obvious.

A. Pérez-Méndez & Á. Machado-Cabezas (2015) describe relationship between management information systems and corporate performance. Corporate internal management information system was described in the work of S. Huang et al. (2015). L. Xu (2010) said that “with the development of market economy and the intensification of market competition, corporations require not only quick business process reengineering and continuous business process changing, but also faster information system reengineering correspondingly”.

Methodological Framework

In the course of the study were used the following methods: theoretical (dialectical logic, rational knowledge, and others), Methods of innovation management, project management, strategic management, marketing and financial management.

The study was conducted in three phases:

- Systematization of existing theories and models of implementation of changes;
- A study of old and new change management concepts;
- Identification of factors influence the implementation of the conversion program in the regional and federal holdings.

The methodological and theoretical basis of research was made by theory and methods of innovative management, projects management, strategic management, marketing, financial management.

The concepts and hypotheses that were proved in scientific works of the representatives of organization and administrative direction became a theoretical and methodological research basis: strategic, production, investment, innovative and other management branches; works on changes management in holding companies, general theory of systems, regional economy, etc.

Methodological research basis is a system interdisciplinary approach that allows using theoretical provisions of both classical and modern management, and other sciences (economic analysis, sociology, social psychology, economy, political science, demographics, ecology, etc.). The methodological basis was made by works of national and foreign scientists that develop issues of social systems, enterprises economies, and social systems management. The sources that were used in research can be divided into some groups depending on a considered perspective.

In the course of research, the following methods were used: dialectic and system analysis, scientific abstraction and comparison, methods of economic indicators grouping, received results interpretations, statistical supervision.

Results

There is a large number of theories and models of changes realization, the process control, and also ways how to overcome resistance to changes. Some of them are considered. So, the professor of Bern University N. Tom (1998) defines two models of changes - revolutionary and evolutionary. For a revolutionary model of changes the following features are characteristic: radical reconsideration of corporate culture, radical transformation of an enterprise management system, resolute elimination all kinds of resistance on the way to an ultimate goal. Evolutionary changes are implemented gradually, within the planned process of the organization development that has long-term goals. The purpose of changes is to increase organization productivity and labor quality.

In G. Mintsberg, J. Kuinn& S. Goshal's (2001) book "Strategic process" authors claimed that strategic management "is always science about changes". This characteristic becomes especially obvious during the periods when main sources of companies' development and competitive advantages acquisition are changed. In the XX century when changes in environment were not so rapid, the predictability of organizations development was guaranteed and long-term planning was the main source of competitive advantages formation. Producers manufactured goods which, in their opinion, were necessary for consumers, lifelong employment was guaranteed to employees, corporations owners did not change, and in general everything told about quiet future. Similar companies achieved progress, increased their potential to develop and increase management efficiency, to protect advantages and a market position. If changes happened, it was a start of new production types, an entry into new markets, it meant that changes were not radical. Now the world has changed, and the formula that was successful in the past, does not work today and brings failures.

The paradigm and a business model changed, and an ability to operate changes competently and effectively is very important. Key elements of old and new paradigms of changes management are shown in Table 1 (Voldachek, 1999).

Table 1. Old and new paradigms of changes management

Characteristic	Old paradigm	New paradigm
Changes character	Gradual	Fast
Speed of changes	Slow	Fast
Prod	Risk leveling	Rapid changes introduction
Source of changes	From up to down	On all levels
Planning degree	High	Average
Volume of changes	One-time use	Multi-use

Source: N. Tom (1998) Management of changes. *Issues of theory and practice of management*, 1, 68-74.

So, the companies which noticed changes too slowly illustrate an old paradigm. There is a corporate culture in such companies, long-standing methods, ideas which were reflected in access to information, opportunities for career promotion. They treated changes as an inevitable evil, but not as a possibility for improvement.

The new paradigm of changes management assumes another approach. Changes are perceived as a natural element of organization life. At the same time there can be some transformations. Failures in process of changes



management are inevitable, but retreat more risky tactics, than attack, and excessive planning is more dangerous, than rapid reorganization.

The transition from an old to new paradigm means growth of management capacity and opportunity to cope with a large number of changes. The better the companies manage it, the more favorable their position is.

In Russia with its federal political system future of some enterprises and level of regional economies development depends on speed and efficiency of companies' transition from an old paradigm of changes management to the new one.

The local government historically played a special role in regions. In Soviet period regional authorities were actively engaged in economic activity, construction, turning rural settlements into cities.

It created a sufficient level of respect for the regional authorities from the local elite and population. However in modern conditions the authorities cannot fulfill all social duties. Together with economy development market relations, new technologies, regional business have more and more essential impact not only on economic, but also on socio-political sphere of regional life. Such influence from the regional holding companies that were described in the previous parts is especially strong.

As such enterprises have essential impact on economic development of the region, efficiency of their functioning becomes an important issue for the regional authorities. For this reason an imperious elite has to promote changes implementation in these companies, and also coordinate their development with long-term plans of territories development.

One of the main aspects that influence efficiency of changes project implementation is to define a group of people, who are involved in the project. As a rule, a large number of experts participate in transformations program implementation, each of which performs his functions. It is possible to define 4 groups of participants.

1. Top officials of the company. Top managers have a choice: they can direct process of transformations or concentrate on current business, and to delegate part of the functions which are connected with changes to a special team or a manager. It is supposed that the most right decision is that the head participates in changes at the conceptual level. It will show, first of all, the importance of a specified project to all employees, and secondly, it will resolve arising conflict situations, and it will also be aware of main working areas.

2. Committee on changes management (committee on changes introduction). This title has a very conditional character. People who are ideological project inspirers are included in the committee. They are responsible for realization of changes process, they coordinate and direct it. The committee disposes resources to solve of common issues, such as, budget management, PR, development of employees' motivation system and it develops the feeling of changes necessity and inevitability, etc. The committee provides uniform standards and approaches to changes, consecutive performance of all stages of process, plans and takes operational correcting measures, forms the agenda for a managing committee, interacts with the teams that implement transformations. Committee functions on changes introduction are defined by branch specifics, scale of planned transformations and degree of personnel readiness for them. In

some organizations the committee performs only operational management of changes realization process and takes key decisions, and heads of division are in charge of financial control, work with personnel, public relations and corporate culture issues. All these tasks can sometimes be referred to the committee on changes introduction.

3. Manager who is responsible for changes management. Manager appointment who is responsible for changes is a key decision so it requires to be accepted as soon as possible. Only the person with high qualification and considerable experience can take this position, or he will not cope with the volume and complexity of tasks that he should solve. He has to see clearly general administrative tasks, he should have skills of a project manager to control the process, and the main thing, he should understand clearly, what benefits the organization and each employee will get from a successfully realized project. As a rule, the position of a manager, who is responsible for changes, is occupied by a skilled director dealing with issues of strategic and corporate development with a good track record, or by an executive director who has worked in a company for some period of time.

4. The teams which implement changes. Development and operating plans implementation of changes realization, calculation, monitoring and special objectives realization belong to these teams duties. Similar teams are some kind of a link between top managers, committee on changes management and ordinary company staff. How successfully the changes project is implemented in company corporate culture depends on overall performance of these teams. Even the most exact and competent introduction plan that is developed by committee on changes management can be failed in case of bad work with ordinary employees. For this reason holding authorities should carry out permanent explaining and motivating work with the experts who are included in the teams on changes introduction.

According to some authors, when the project on changes management is implemented in holding companies it is necessary to involve independent consultants. The method of independent experts team attraction proved itself in developed countries and it can be even more useful on developing markets, including Russia where companies often should make decisions at random. By means of an independent experts team it is easier to overcome the main obstacles arising on the way of changes (Galanin & Tyuilye, 2005).

One of the first concepts of organization changes management appeared in 1967 and it is connected with a name of L. Greyner (Meskon, Albert & Hedouri, 2002). He developed a model of effective changes management which consists of 6 stages.

1. Authorities awareness of changes necessity.
2. Problems analysis and the choice of changes implementation direction.
3. Reasons diagnostics for problems arising at all levels of organizational hierarchy.
4. A new solution finding, its coordination with the persons who are responsible for a new course completion.
5. Experimental changes implementation, possible negative consequences identification.



6. Changes realization. It includes such necessary elements as employees' motivation, convincing and stimulation.

There are three ways of power distribution between organization levels in process of changes management: authorities division, authorities delegation and an unilateral act from the head's part. For each situation, depending on external and internal environment factors, traditions and corporate culture each particular way of power distribution is important.

Other approach to changes program implementation is presented in works of a famous American consultant U. Bridges (2007) on organization development issues. He considers management of a transition period as a process of three stages:

- refusal from previous administration and self-identification;
- an intermediate period when the old system is already destroyed but a new one does not work properly. U. Bridges (2007) calls this stage a neutral zone;
- transition phase completion and new self-identification. At this stage planned changes become real.

U. Bridges (2007) considers that all three stages can overlap each other. Each of these processes begins before the previous one completely comes to the end so there can be a situation when the organization should get over several stages at the same time, and the movement in the course of transition is more characterized by prevalence change of one stage over two others, but not by a full shift from a stage to a stage.

The similar model of organization changes that consists of three stages was offered by an American psychologist K. Levin (Meskon, Albert & Hedouri, 2002). He identified the following stages:

- defrosting - creation the required atmosphere for changes implementation in an organization. At this stage it is necessary to convince people to take part in changes process, to smooth possible negative demonstrations and to get support;
- movement - practical changes implementation that is based on a prepared and approved transformations plan ;
- freezing - new behavior standards establishment. At this stage, unlike the first one, there is more strict interaction with the people who are refusing to accept existing changes. And the employees, who are involved in this process, receive, as a rule, additional work incentives.

One of the most widespread and popular models of organization changes is J. Kotter's model (2007). This model is the most developed and it describes in detail steps on the way to transformations project implementation in organizations. In his opinion, the process of changes implementation consists of eight stages: developing feeling of changes necessity, reformers team creation, strategy and prospects definition, new future concept promotion, conditions creation for employees' participation in transformations, receiving the first results, fixing progress and deepening changes, rooting changes in corporate culture. The first four stages are necessary to loosen an old regime, old rules and beliefs. From the fifth to the seventh stages the main innovations are introduced, those programs are realized for the sake of which the whole process was updated. At the final stage changes are adopted in a corporate culture and

become a norm. According to the author of this theory, to realize changes successfully the company has to get over consistently all eight stages, thus it's possible to overcome several stages simultaneously. But the author warns enterprise authorities against mistakes which can arise at any stage of changes process and destroy a transformations plan.

J. Kotter (2007) allocates the following mistakes (In the same place): inability to form influential team of reformers, there is no understanding that changes are necessary, inability to formulate ultimate goals, lack of changes promotion in a team, lack of fast, notable progress, premature celebration of success, etc. Making any of these mistakes can cause serious consequences, and often full failure of changes introduction project. However, according to the scientist, specified mistakes are not fatal, and if we understand reasons for resistance to reforms, and we plan multi-stage process of reforming accurately, it is possible to soften their consequence or not to let them happen.

So in the course of strategy realization of changes introduction a head can choose different management styles. I. Ansoff (1999) allocates three options of transformation process management - jet, active and planned management. Jet management means reaction to environment changes, but, as a rule, reaction is late by the time of a rational start of action. Jet management almost completely denies strategic actions and assumes the solution of all tasks by means of operational measures. Unlike jet management, when active management model is used, heads analyze available data, and then choose the best combination of measures. If it does not lead to success, a company takes strategic measures. However these strategic actions, as a rule, are based only on extrapolation of the last years and it does not guarantee correct decisions adoption in the modern dynamic world. At planned management a company does not apply extrapolative forecasting, and uses new techniques, such as scenario planning, structural forecasting, the complex environment analysis etc. The obtained data allow the company to be more flexible, quicker and to react to changes more effectively.

At the same time, all theories and concepts give general definitions to the concept "changes and alterations". Therefore in scientific and practical literature transformations are classified by directions or objects on which these or those reforms are directed.

So, famous experts in the field of management (Meskon, Albert & Hedouri, 2002) allocate four spheres in which changes can be implemented.

- Purposes. In terms of the fact that in modern business external environment is in a constant dynamic state, periodic purposes modification is necessary even for the most successful and large organizations.

- Structure. Changes in the system of authorities and responsibilities distribution, transformation of organizational functions in the departments is one of the most widespread and visible forms of changes in the company.

- Personnel. Changes in employees' assume changes in motivation, labor quality assessment, new training systems introduction etc.

- Technology. Changes affect production process, schedule of tasks performance. Changes in technology often involve changes in other three spheres of the organization.

R. Daft (2002) allocates one more direction of changes implementation, it is changes in the products and services that the organization produces. Other



approach is presented in L. Voldachek' (1999) work. It represents the following spheres in which the enterprise can implement changes in the reforming process: production, organizational, personnel, financial, marketing. In this concept the author allocates all functional areas of the company and suggests implementing certain organization changes in each of them.

The connected diversification leads to expenses reduction due to consolidation of one or several links of a value chain in different enterprises, creating the effect of intercompany cooperation. Effect of cooperation is one of the main advantages of related diversification. It occurs in a situation when operations of several links in a value chain of several enterprises are more preferable to implement in a centralized way, than separately. Sharing technologies, research and development implementation, use of capacities, sales channels and dealer networks, brands and an administrative resource - any cooperative activity within corporation leads to total costs reduction. The higher the saving at intercompany interaction scale is, the better the conditions for competitive advantage creation on expenses are.

The connected diversification is so attractive that allows turning elements of strategic compliance of value chains into competitive advantage. Diversification is not enough in the field of strategic compliance, it is necessary to manage in order to take all advantages of coincidence in value chains. For this purpose coinciding links of chains should be united in one functional division, only in this way it is possible to achieve expenses reduction (Voldachek, 1999).

However, the merge of functions also means costs for reorganization therefore authorities should think, if centralization provides such advantages for the sake of which it is necessary to sacrifice enterprises autonomy. Similarly, if strategic compliance is observed in skills or technologies, managers have to find an effective way to exchange these skills and technologies that will allow avoiding the transfer of skilled experts to other enterprises or production can lose their major personnel potential.

Despite the advantages of related diversification, many companies choose a way of unrelated or untied diversification, investing the capital in any branch which seems to them profitable. In this case it is not required to select the enterprises with strategic compliances. It is enough that the selected branch corresponds to the criteria of attractiveness and entrance costs, and the third criterion means additional benefits and it plays a supporting role in this case (Bridges, 2007).

Discussions

T.A. Kazachenko (2015) described the use of information and communication technologies. L. Xu (2010) said that «with the development of market economy and the intensification of market competition, corporations require not only quick business process reengineering and continuous business process changing, but also faster information system reengineering correspondingly". A. Pérez-Méndez & Á. Machado-Cabezas (2015) describe relationship between management information systems and corporate performance. Corporate internal management information system was described in the work of S. Huang et al. (2015).

Conclusion

Thus, in modern conditions business running constant changes implementation is a necessary element of survival and competitiveness increase.

From the concepts given above, there is a large number of approaches and mechanisms of changes management. As a rule, as an example authors of the specified models take into consideration large, multinational corporations. At the same time, Russian regional companies, holding structures, mid-sized businesses need to carry out large-scale changes as soon as possible. It is connected with many factors, first of all with the lack of world and European corporate management practice, lack of administrative-command management principles, low qualification and motivation of people in the regions.

But, despite negative factors, it is much simpler to realize transformations program at the regional level, than at the federal or international one. It is connected with a variety of reasons.

First, the region limits the territory of organizational development program implementation and it allows defining purposes more clearly, solving arising problems, analyzing received data more attentively and making more operational decisions. In regional holdings there is less distance between the head and the performer and, therefore, the process of employees' convincing, stimulation and motivation can be more effective during changes implementation. In a similar situation the example of a head, who is active, ready to changes and opened to dialogue, is important.

Secondly, regional holdings, as a rule, take local authorities support. Therefore all legal and technical coordination procedures that are resulted from enterprises restructuring, business forms reorganization, business units allocation can be solved quickly and without essential costs.

Thirdly, in spite of the fact that the mechanisms of changes management are introduced to increase company efficiency, in a transition period it, as a rule, falls that leads to a short-term competitiveness decrease and as a result, to revenues and a profit fall. In the region the local holdings can avoid a similar situation due to local authorities support, protectionist policy, and also due to representation of various preferences.

Now the crisis economy phenomena put management of the regional holding companies before the necessity to implement large-scale organization changes. Meanwhile, efficiency and success with which these programs will be realized, define a group of companies that will be able not only to get out of crisis, but also considerably strengthen its competitive position. For this reason the mechanism formation of changes management in the regional holding companies becomes an urgent topic for research, so conclusions and recommendations will have essential applied character.

Disclosure statement

No potential conflict of interest was reported by the authors.

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