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**STRUCTURAL MODELING AND PROCESS APPROACH TO
COMMUNICATION CONFLICT MANAGEMENT**

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Abstract

Management of communicative conflicts is closely related to the formation of the organizational structure, therefore, structural modeling and a process approach should be used as a method for resolving such conflicts. A survey of managers and specialists of companies of various scales of activity on change management issues showed insufficient attention to the issues of radical transformations. This process is controversial and has little to do with company restructuring. The maximum correspondence of the collective structure to the tasks facing it ensures their successful implementation. The purpose of reducing the destructive role of organizational and managerial conflicts in the company is to carry out structural changes. The most frequent and effective method of making changes is the reengineering of business processes. The article provides a description of the methodological aspects of business process reengineering, implemented in the concept of change management and communication conflicts. The changes that should occur in employees under the influence of new activities within the business process are one of the main goals of management, namely: reducing the number of conflicts, increasing the level of commitment of the company, increasing professionalism, and improving the corporate culture of communication. Based on SADT modeling and interviewing managers, a contextual behavior diagram and a model of the organization's leader's actions in conflict situations were developed for proactive management of emerging organizational and managerial conflicts. The proposed functional-structural model is a step-by-step algorithm of the manager's actions for preventing and managing conflicts during change management.

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Keywords: Change management, business process reengineering, conflict management, process approach, structural modeling.



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1. Introduction

1.1. The relevance of research on issues of new technology for innovation and change management

The problems associated with the new technology of innovation and change management became widespread, both in our country and abroad, almost immediately after the book of the founders of this approach was published (Hammer & Champi, 1997). A significant number of publications devoted to business process reengineering (RBP), considers issues of its conceptual foundations and development of methodology (Burdett, 1995; Biazzo, 1998; Hill & Collins, 1998; Ranganathan & Dhaliwal, 2001; Dzhukha & Kutelev, 2015), distinctive features and advantages (Peppard, 1995; Komissarova, 2011). A number of authors have focused their research on the industry aspects of the RBP or the possibilities of its application at enterprises of different scales of activity (Harrington, Esseling, & Nimvegen, 2002; Kiprina, Sokova, & Isaeva, 2013; Monakhov & Fayman, 2014). An important part of the research is devoted to the innovative nature of this methodology and its relationship with the introduction of innovative changes in business structures (Kazakova, 2010; Drobyshevskaya, & Bekirova, 2015; Teng, Grover, & Fiedler, 1996; Mishurova, Nikolaev, Nikolaeva, & Filimonova, 2018). Relatively rarely, researchers consider the relationship between structural changes and human resource management (Zukki & Edwards, 1999; Magomedov, 2014, Mishurova, Nikolaev, Nikolaeva, Sinyuk, & Nesterova, 2019).

2. Problem Statement

Business process reengineering as a management technology in Russia has been developing dynamically for over 20 years and is becoming one of the main tools for increasing the efficiency of enterprises of various types and scales. The article discusses the author's vision of reengineering business processes as a methodology for managing change and communicative conflicts, identifies problems that impede the widespread use of tools and require optimization of the reengineering methodology. This article analyzes the findings of a survey of 71 companies in the Rostov Region of Russia. This survey is part of a large study that focuses on the use of incremental improvements and radical innovations in the management of organizational changes (Dzhukha & Kutelev, 2015; Mishurova, Nikolaev, Nikolaeva, & Filimonova 2018; Ranganathan & Dhaliwal, 2001; Mishurova, Nikolaev, Nikolaeva, Sinyuk, & Nesterova, 2019). An extensive review of the relevant literature provides a number of worthy theoretical conclusions that support the entire project. They include: the circumstances in which a radical redesign of a business based on the reengineering of business processes, the implementation of a quality management system, a balanced scorecard, and managerial accounting seem most appropriate; the role of information technology in a radical business redesign project, as well as the potential results of a radical business redesign and their impact on communicative conflict management.

3. Research Questions

3.1. Studies of the mechanism of conflict management mechanism and the actions of a leader in a conflict situation of change management

The subject of the study is a mechanism for managing conflicts arising in organizations for managing change and overcoming crisis situations.

Object of study - a model of actions of a leader in a conflict situation of change management.

4. Purpose of the Study

The issues of the impact of ongoing changes in the BPO on human resource management, the relationship of the process approach and structural modeling with the management of organizational, structural and communication conflicts remain insufficiently studied. This predetermined the following goal: the formation of a conflict management methodology based on structural modeling and a process approach, as well as a number of interrelated tasks:

- Summarize the results of a survey of managers and specialists of enterprises on the issue of change management;
- Formulate the main characteristics of the process approach to conflict management;
- Develop a model for modeling the actions of the leader in a conflict management of change.

5. Research Methods

5.1. Methodological settings for this study

As a methodological basis, the authors relied on the methods of systemic and economic analysis, a process approach to making changes. Additionally, we used the SADT modeling technique and the results of the survey, which examined which change management methods are most often used by companies of different scales of activity and what factors affect the efficiency of business process reengineering.

In order to identify the main directions of transformation processes in entrepreneurial structures of various scales of activity, a survey was conducted of managers and owners of 71 companies in the Rostov Region of Russia, of which 41% were business owners, 44% were executive directors, 15% were managers and specialists. Most of the respondents represented small business (78.9%), 15.5% of respondents were from medium-sized companies, 5.6% were from large companies, which generally corresponds to the quantitative structure of enterprises in the region.

5.2. Research methods for structural modeling and communicative conflict management

- The questionnaire method is used to collect the initial array of data on business structures to determine approaches to managing communicative conflicts
- The Functional modeling method SADT was used to analyze conflict situations associated with making changes and modeling the behavior of the head of the organization in conflict situations.

6. Findings

6.1. Investigation of the actions of the head of conflict resolution

Of 71 respondents, 16 (22.5%) say that their companies were constantly (at least 1 time per year) involved in projects of radical organizational change, and out of 37 respondents who were not so significantly involved, 6 started such projects in the past. This level of implementation of change management projects is higher than expected. Although in only 9 cases (12.6%) were projects really marked as business process reengineering (BPO), more than 70% of respondents used the terminology of a quality management system (QMS) to describe ongoing projects. Detailed answers to the forms and methods of the changes lead to the conclusion that most companies understand the description and improvement of business processes as the QMS. Thus, we can conclude that, on the one hand, the terminology of BPM is not as widespread in the business environment as the QMS, on the other hand, the technology for describing and improving business processes is the most popular approach to change management. As the main results of reengineering, respondents named: 19.7% - customer focus 18.3% - improving the quality of products and services, reducing costs - 15.5%.

Summarizing, we can say that the reengineering actually implemented in Russian companies is not restructuring, reduction, automation, etc. These are changes that leave, but improve existing processes, erase multi-stage processes using information technologies and powers, focusing on consumers and results. This approach contradicts the idea of the founders of this concept, Hammer M. and Champi D., even reflected in the title of their already classic work "Corporate reengineering: a manifesto of the revolution in business".

According to the respondents, the main barriers to the implementation of a radical redesign of the business are: resistance by personnel - 43.7%, lack of necessary knowledge and resources - 40.8% of respondents. This conclusion additionally actualizes the research and promotion of the methodological tools for conflict management and overcoming resistance during the RBP.

Note that the gradual nature of the changes creates the conditions for minimizing organizational and managerial conflicts. Such conflicts are most often symptoms of approaching crisis periods, which, depending on the competence of the management team, can lead the organization to either bankruptcy or further development.

To consider the actions of the leader aimed at resolving conflicts, we use the construction of a structural-functional model. The methodology of functional modeling SADT is a set of methods, rules and procedures designed to build a model of an object of any subject area. This model reflects the functional structure of the object, in other words, the actions it performs and the relationships between them, and its feature is the gradual introduction of increasing levels of detail as diagrams displaying the model are created.

Building a SADT model starts with representing the entire system as a simple component, then the block that represents the system as a single module is detailed on another diagram using several blocks connected by interface arcs.

To develop the model, empirical data from interviewing the leaders of five enterprises about conflict situations related to the changes was collected and used. During the interview, questions were

asked aimed at clarifying the causes, attitudes, and the course of action taken in the event of a conflict. The following results were obtained.

The following were identified as the causes of the conflicts:

- Disagreements on the order of the work process;
- Lack of information;
- Lack of opportunities for self-realization;
- Subjective personality factors.

Also, based on the results of the interviewing, the order of actions of the leaders was clarified, which became an empirical basis for the development of a structurally functional model of the manager's behavior according to the SADT method.

Building a context diagram is the first step in functional structural modeling (Fig. 01). In the context diagram, the "behavior of the leader" acts as a functional block.

At the entrance, we have "information about the conflict," and at the output, the result of the leader's behavior, and in our case, the leader's behavior leads to "conflict-free relations". The interface arcs of the functional block management are designated as "organization charter", "organization values", "corporate culture". The mechanism (the arc entering the block from below) is the leader himself, which affects all modules. In the context diagram, the "behavior of the leader" acts as a functional block. At the entrance, we have "information about the conflict," and at the output, the result of the leader's behavior, and in our case, the leader's behavior leads to "conflict-free relations". The interface arcs of the functional block management are designated as "organization charter", "organization values", "corporate culture".

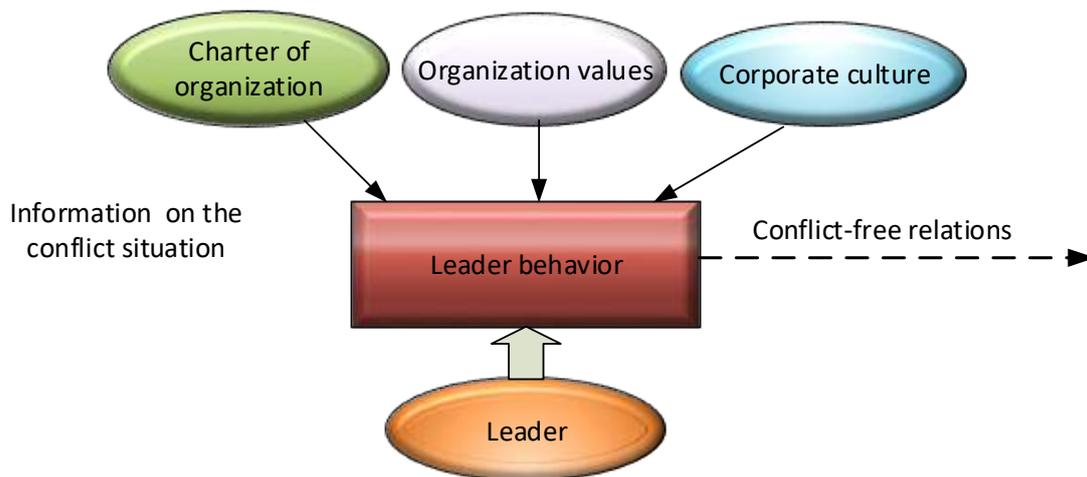


Figure 01. Context diagram of the behavior of the head of the organization in conflict situations

Next, the leader's actions aimed at forming conflict-free relations with subordinates were phased in detail, and his actions were grouped into four blocks, which are reflected on the second level of decomposition (Fig. 02).

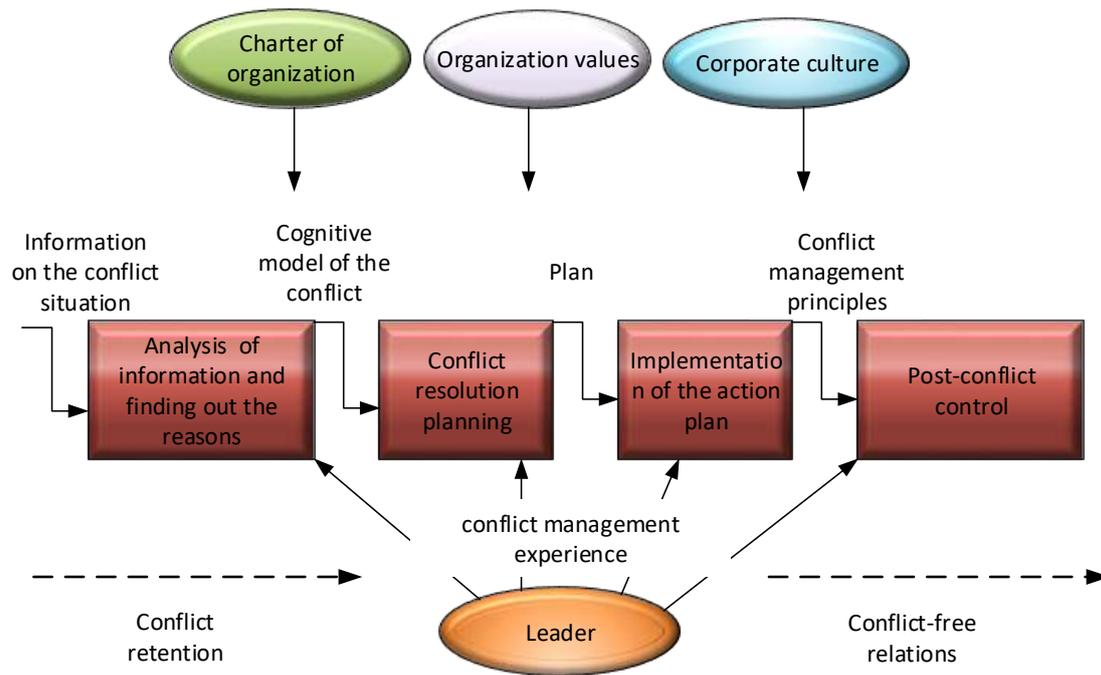


Figure 02. A model of a manager's action in a change management conflict situation

Presented in Figure 02.

1. Analysis of information and clarification of the reasons. The reason for the conflict is that it allows you to build a single map.
2. Planning for conflict resolution. In drawing up an action plan, the leader takes into account organizational information, its values and corporate culture.
3. Implementation of an action plan - a set of measures aimed at resolving a conflict situation.
4. Post-conflict control. If the conflict ends, the leader must monitor the post-conflict situation.

7. Conclusion

The participation of employees in issues that are directly related to their activities allows the manager to increase his own competence, expand understanding of emerging problems and make the most informed decision. Particularly teamwork is important during periods of active change, when it is necessary to eliminate resistance to changes, to ensure that the new work procedure is adopted by all employees and put into practice. In this regard, change management is closely linked to a change in organizational structure and the prevention of potential conflicts. The model of the manager's actions in a conflict situation of change management is a step-by-step process of conflict resolution: analysis of the pre-conflict situation, planning, implementation of actions for conflict management, control of the post-conflict situation to prevent relapse of the conflict.

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