Management mechanisms for resolving organizational conflicts in the context of implementing the economic opportunities of organizations in the construction industry

T V Tselyutina, Zh N Avilova and O A Timokhina

1 Department of Economics and Management, Belgorod State University, Pobedy St., 85, Belgorod, 308015, Russia
2 Department of Economics and Management, Belgorod State Technological University named after V.G. Shukhov, Kostyukov St., 46, Belgorod, 308012, Russia

E-mail: tselyutina@bsu.edu.ru

Abstract. The paper presents a critical analysis of the functional representation of the mechanism for managing social and labor conflicts in the process of organizational changes. Network mechanisms and their functionality in the management system of organizational conflicts are updated. The relationship between the level of staff involvement in work and the level of conflict in the organization is determined. To ensure effective management of organizational conflicts, it is necessary to take into account the level of involvement of the personnel of the organization in processes at different levels, as well as to create conditions and economic methods of motivation that ensure the necessary level of involvement. “Portfolio” of empirical tools for comprehensive research of issues and a mechanism for managing organizational conflicts are developed, taking into account the specifics of the activities of construction organizations.

1. Introduction
The problem of studying mobile mechanisms for managing organizational conflicts in organizations in the construction industry is primarily determined by the very rapid pace of transition to new management technologies in the process of social and labor activity. As a result, there is the staff’s resistance to organizational changes, “hidden” conflicts, and the problem of reducing the staff. Therefore, it is important that organizations have effective management mechanisms for conflict prevention and management, based on a program-oriented approach and involvement of staff in organizational changes. The need to find an innovative, more adaptive approach to managing organizational conflicts is dictated by the variability of the environment and the need to ensure the effectiveness of strategic development of more effective solution to the contradiction between available resources and the required innovative proposals of external environment.

2. Materials and methods
The methodological basis of the research was a systematic approach to the research object, the principle of specificity, principle of development and the principle of objectivity. Research methods: organizational-comparative; group of empirical methods — archival (primarily, document analysis),...
survey methods (questionnaires, interviews), observation; processing methods – qualitative and quantitative analysis; interpretation methods – structural. The subject of the research is socio-economic and managerial relations that arise in the process of forming mechanisms for resolving social and labor conflicts in construction organizations.

3. Results and discussions
The manifestation of VUCA economy trends in the construction industry because construction, as the Russian economy as a whole is facing deep and systemic challenges reflecting the uncertainty and instability of the global trends, so the complexity and contradictions of internal barriers to development of Russian industry. Among the most significant challenges, along with strengthening global competition, innovation waves of technological change (digitalization, bio- and nanotechnology), reorientation of financing of housing construction, it is necessary to highlight the increasing role of human capital as a key factor of economic development of the country. These challenges have determined the need and expediency of developing management mechanisms for resolving organizational conflicts in the context of implementing the capabilities of the VUCA economy in construction [1].

In modern conditions, the role of innovation is increasing in all spheres of public life. This is a reflection of the growing understanding of society that the socio-economic development of the country and certain spheres of life is impossible without innovations in various spheres of public life [2]. The toughening competitive situation for many Russian enterprises has put them in front of the problem of effective operational management aimed at reducing production costs, as well as ensuring optimal use of human resources, which in turn implies the search for new, innovative approaches to managing organizational conflicts [3, 4]. The analysis shows that in economic practice, construction organizations implement various innovations by type of novelty, depth of changes made, scale and scope of application [5].

Management of organizational conflicts occupies one of the central places in the system of personnel management of modern construction organizations. Moreover, taking into account the importance of labor resources, modern companies are aimed not only at getting benefits from the labor potential of the company, but also at acquiring experience, new knowledge, and the latest technologies by employees. In addition, modern managers are interested in the growth of competencies and personal motives for the work of their employees. The future competitiveness of the company and further development depend on effective management of personnel formation. In the environment where it is clear that the development of the personnel of the company affects its market stability, it is necessary to recognize the need for a measured strategy for developing human resources [6].

Within the framework of the issue we define the essence of social-labor conflict as the polar collision of certain subjects of social-labor relations, which resulted in the observed open limit aggravation of contradictions in social and labor spheres of the organization, and involving local management or strategic action (decisions) that are necessarily directed to the achievement of the goals and objectives by each of the actors, the gap and protect of their interests or the interests of their group (department, team, etc.).

3.1. Recommended “portfolio” of empirical tools for complex research issues
The first direction of the study is to assess the satisfaction with the personnel’s work of all categories.

The second direction of the research is the assessment of conflict in the construction industry organizations, based on the identification of an integral indicator of social tension. This indicator is detected using factor analysis. A special place in the management of social and labor conflicts is occupied, first of all, by their prediction and prevention based on the control of the level of social tension. The higher the social tension, the more negative, adverse conditions and factors, at any stage of origin and course, can lead to a conflict situation [7].

The main problem – it is necessary to provide effective procedures for forecasting and preventing possible social and labor conflicts, taking into account the specifics of a particular construction
organization. It is necessary to carry out systematic monitoring of the level of social tension, which will be one of the tools of the social and labor conflict management system, namely, prevention.

The third direction of research is expert interviewing of managers and specialists as the main initiators of supporting measures for managing social and labor conflicts in order to study existing conflict management procedures. The task is to get an expert assessment of the main signs of social tension (absence at work; increase in interpersonal conflicts; increase in dismissals on their own; dissemination of false information, rumors; collective failure to comply with orders of senior management, etc.). The aim is expert assessment (including consulting resources) of current measures and procedures for conflict prevention; the degree of involvement of personnel (staff) in the system of resolving social and labor conflicts in the construction industry [8].

The fourth direction of research is the analysis of the socio-psychological climate as an indicator and resource for preventing the development of social and labor conflicts. We recommend using the methodology for studying the socio-psychological climate in the labor team of O. Mikhalyuk and A. Shalyto; the methodology for diagnosing the types of behavior of personnel in a conflict situation – the questionnaire of K. Thomas “Determining ways to regulate conflicts”; the methodology for interpersonal diagnostics of relations of T. Leary.

The general set of research on the impact of the level of staff involvement on the number of organizational conflicts was made up of 9 construction organizations in Belgorod (figure 1).

![Figure 1](image.png)

**Figure 1.** Employee engagement index a) by age and number of conflicts and b) by length of service and number of conflicts.

Research results: a significant part of organizational conflicts is related to interpersonal conflicts (70%); the largest number of conflicts occurs in the group of 36-45 years old, while this group also has a significant decrease in the level of involvement; with a long period of work of employees, their level of involvement decreases significantly, while the number of interpersonal conflicts between them increases (this is a very poor indicator).

Table 1 shows the distribution of correlations between factors that influence conflicts and the degree of conflict in a particular construction organization. The higher the value of the correlation indicator, the stronger the influence of the factor.
Table 1. Distribution of correlations between factors that influence conflicts and the conflict degree in the organization.

| Factors                                      | High  | Above average | Average | Low  |
|----------------------------------------------|-------|---------------|---------|------|
| Relations with colleagues and management     | 0.539 | 0.418         | 0.420   | 0.401|
| Content and nature of the work               | 0.225 | 0.128         | 0.118   | 0.001|
| Career and development                       | 0.347 | 0.301         | 0.223   | 0.0008|
| Economic motivation                           | 0.478 | 0.489         | 0.289   | 0.167|
| Changes and innovations                       | 0.151 | 0.114         | 0.112   | 0.018|
| Loyalty to the company                        | 0.012 | 0.125         | 0.005   | -0.109|
| Culture of the construction organization      | 0.189 | 0.111         | 0.187   | 0.008|

Conclusion – the factor “relations with colleagues and management” has the maximum impact on the number of conflicts. Regardless of how respondents determined the degree of conflict in a particular construction organization, there is a clear correlation between this factor and the occurrence of conflicts. It is also worth noting such factors as “economic motivation”, primarily “salary” and “career and development”. In addition, a negative (inverse) correlation dependence between the level of conflict and the degree of staff involvement was found (-0.282), which reflects the fact that when one variable grows, the second one decreases. The greater the number of conflicts in a construction organization, the lower the level of staff involvement, and the more dissatisfaction with economic methods of motivation.

At forming a comprehensive mechanism for managing social and labor conflicts for organizations in the construction industry, we propose to apply a program-target approach that can combine the object and subject of management, a system for implementing management decisions in the conditions of socio-economic transformation of the VUCA environment.

The model of managing social and labor conflicts in the process of organizational changes is shown in figure 2.

The set of reasons underlying the social and labor conflict determines its general nature, configuration, features of its course, as well as the basic conditions for managing it:
- ignoring, incompetence, ignorance of the norms of current labor legislation in construction by managers;
- reduction of social and labor guarantees for all categories of personnel;
- low wages and their late payment (long delays in payments), unfair rewards and bonuses;
- corrupt, bureaucratic attitude of the top management to the social and labor interests of employees; irrational social policy and social infrastructure of the construction organization;
- the lack of policies to ensure decent working conditions;
- “veiled” attempts by the administration to dismiss employees illegally;
- devaluation of corporate and labor culture values as a social and managerial resource.

The mechanism is based on the following sequence of actions:
- combining the concept of the model and the theory of the stakeholder network explain the formation of the stakeholder system, as well as the roles that stakeholders play in the process of organizational change;
- the importance of resistance factors (both organizational and individual) as the cause of conflict is emphasized;
- using network mechanisms and strategies to intervene in the conflict system for management and resolution;
- providing a methodological basis for the process of identification and elimination in the context of organizational changes at various levels of complexity of the organization with the participation of individuals, divisions, departments.
On the one hand, resistance is a phenomenon that can both undermine organizational change by delaying or slowing its start, which will make it difficult to implement and increase costs, and serve as a source of additional information for developing a more successful change process [9, 4].

The factors that cause resistance must be identified and evaluated in order to manage them effectively as part of an overall conflict management strategy. Factors that influence the resistance process can be classified into individual and organizational ones. Individual resistance factors include: selective perception and retention, self-interest, frustration, fear of the unknown, low motivation, feelings of failure, self-doubt, conservatism, and loss of control. Organizational factors of resistance include: compliance with norms and values, culture, past experience, and so on.

The proposed model of conflict management in the process of organizational changes involves the allocation of a “network of small niches” for the purpose of more detailed consideration and identification of participants in the conflict (active or passive). It is important to answer questions related to individual or organizational sustainability, as well as to get a complete picture of the system of their interaction. The formation of networks of this type can affect both the perception and opinions, and the interpretation of emerging events and phenomena, which in turn can be used in conflict management by providing a point influence on the perception of conflict participants in the process of organizational changes (table 2).
Table 2. Network mechanisms and their functionality in the conflict management system.

| Network mechanism       | The functionality of the mechanism                                                                                                                                 |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication proximity | This mechanism considers an organization as a communication network in which stakeholders repeatedly interact (directly or indirectly) to process resources and information. |
| Positional proximity    | This applies to a network of structurally independent individuals who may not be connected to each other, but they have similar attributes – roles, obligations, states, and expectations. |
| Spatial proximity        | Spatial proximity is based on the probability of interaction and dissemination of social information between parties in close proximity, which subsequently affects the formation of relationships. In contrast to direct interaction, this can affect the processing of social information through the impact or unavailability of individuals to the organizational subclimate, targeted materials, and activities. |

Implementation of network mechanisms should be carried out in the process of making changes through “niches”. In the context of the change process, the intervention should have an impact on the specific individual directly involved or expected to participate in the changes. Network mechanisms, together with appropriate intervention strategies, will have a direct impact on the attitudes and behaviors of conflict participants. The network mechanism will ensure the flow of information, while the nature of the intervention and the roles played by public opinion leaders during these events will ensure the implementation of the process of change [10].

The proposed conflict management mechanism takes into account the constantly increasing complexity of information systems and the growing number of contacts, which in turn requires the staff of modern organizations to have appropriate knowledge in the field of modern communications [11].

It is worth noting that one of the advantages of the proposed mechanism for managing organizational conflicts is the creation of more favorable conditions for the development of intellectual capital, which, according to I.V. Somina, in the last decade is considered as one of the main factors for ensuring the competitiveness of our country, regions and individual companies [12, 13, 14, 15, 16].

4. Summary
The main methodological approach to the solution and prevention of organizational conflicts, which we define as the most effective in obtaining a social effect is the method of choosing strategic means of resolving conflict situations, taking into account the specifics of the activities of a particular construction organization. The proposed mechanism of conflict management – this information management system, comprising a set of target programs and flexible socio-managerial mechanisms for timely resolution, first of all, social and labor conflicts, the task of which is to ensure that on the basis of diagnostic and prognostic analysis to trace the emergence and deployment of conflict processes in social and labor sphere of specific construction company, and depending on their nature put forward reasonable proposals, specific procedures, methods for prevention, localization and resolution of organizational conflicts.

5. References
[1] Strategy for the development of the construction industry of the Russian Federation until 2030: approved by Order of the Government of the Russian Federation of May 10, 2016 No. 868-r https://www.srosp.ru/upload/files/documents/strategy_text_13112019.pdf.
[2] Podborodnikov I S 2019 Impact of the level of innovation activity in the region on the degree of development of small and medium-sized businesses, education, health care in the region Russian Economic Bulletin 2(3) 78–90
[3] Minaeva L A, Glagolev S N, Doroshenko Yu A 2019 Practice of applying innovative solutions in operational management. Actual problems of economic development: Collection of reports of the X International correspondence scientific and practical conference. Publishing house: Belgorod State Technological University named after V.G. Shukhov 269-272 https://elibrary.ru/item.asp?id=41326232

[4] Doroshenko Y A, Minaeva L A, Avilova Z N, Somina I V, Leonova O V 2015 Socio-economic aspects of development of small innovative business in Russia Journal of Applied Engineering Science 13(4) 293-298

[5] Bukhonova S M, Kamyshinsky K O, Kurlov D A 2006 Development of a mechanism for providing investment resources for innovative activities of industrial enterprises. Innovations. Publishing house: LLC “Transfer-Innovations” (Saint Petersburg) 7(105) 117-120 https://elibrary.ru/item.asp?id=12937468

[6] Cherepanova T G, Arbenina T I, Makhinova N V 2019 Methodological approaches to the formation of enterprise personnel Modern Economy Success 1 120-127

[7] Hachaturova M 2010 The role of personality traits in choosing of coping strategies in an organizational conflict Department of Psychology, University - Higher School of Economics, Moscow. World academy of science, engineering and technology 3778 735-736 https://elibrary.ru/item.asp?id=18087061

[8] Avilova Zh N, Tselyutina T V 2017 Consulting resources as a component of the innovative potential of the construction sector in the region Bulletin of BSTU named after V.G. Shukhov 10 209-216

[9] Tselyutina T V, Vlasova T A, Timokhina O A, Maslova Y V 2019 Convergence of institutes of functional representation of group interests under transformation of social processes, quality of life, and human capita Humanities and Social Sciences Reviews 7(6) 111-117 http://giapjournals.com/index.php/hssr

[10] Tselyutina T V, Timokhina O A, Vlasova T A, Maslova Y V 2019 Development of the Personnel Risks Assessment and Supply Chain Strategy as a Basis of the Risk Management System of Modern Organizations International Journal of Supply Chain Management 8(5) 1030-1038 https://ojs.excelingtech.co.uk/index.php/IJSCM/article/view/3912

[11] Doroshenko Yu A, Logachev K I, Antipov E A 2011 Improvement of management of strategic development of industrial holding Belgorod Economic Bulletin 4(64) 3-8 https://elibrary.ru/item.asp?id=20770079

[12] Somina I V, Chernyshova D I 2019 Role of intellectual capital in the development of innovation science-intensive technologies and innovations (XXIII scientific readings) International scientific and practical conference dedicated to the 65th anniversary of BSTU named after V.G. Shukhov. Publishing house: Belgorod State Technological University named after V.G. Shukhov 121-124 https://elibrary.ru/item.asp?id=39254861

[13] Otsokov K A 2020 Innovative technologies in construction and their use in organizational and technological measures Construction materials and products 3(1) 7-13 https://doi.org/10.34031/2618-7183-2020-3-1-7-13

[14] Ismailov R I 2020 Making production decisions using the expert evaluation procedure Construction Materials and Products 3(1) 49-56 https://doi.org/10.34031/2618-7183-2020-3-1-49-56

[15] Subbotin O S 2019 Building materials and technologies of modern housing: architectural and ecological aspects Construction Materials and Products 2(4) 84-88
[16] Manzhilevskaya S E 2019 Organizational and economic problems of ecological safety in construction *Construction Materials and Products* **2**(4) 73-78

**Acknowledgements**

This work was realized in the framework of the Program of flagship university development on the base of the Belgorod State Technological University named after V G Shukhov, using equipment of High Technology Center at BSTU named after V G Shukhov.