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RISK MANAGEMENT OF ORGANIZATIONAL CHANGES IMPLEMENTATION BASED ON THE PROJECT APPROACH METHODOLOGY

The need for constant implementation of organizational changes in the course of the enterprise demands the development of new approaches to this process, among which the project approach takes special place.

The purpose of the study is to develop the basic principles of risk management of organizational change in accordance with the methodology of the project approach.

The prerequisites for improving the functioning of the enterprise through the introduction of organizational change are considered. The role of the methodology of the project approach as management of constant changes is defined. The essence of risk and project risk is specified. The components of risk are considered: uncertainty, probability and consequence of influence. The possibility of considering the sphere of resistance management to changes in the context of project risks is determined. The essence of resistance to changes as a phenomenon in economics is investigated. The key approaches to determining the nature of resistance to change and its understanding as a negative risk in the context of project management are presented. The essence of actions in the field of risk management in the project of organizational changes on separate processes is detailed. A description of actions in the field of risk management in the project of organizational changes is given. A description of the risk management strategy to prevent resistance to change during project implementation is presented: avoidance strategy involves changing the project management plan so as to eliminate the threat of risk; transmission or transfer risk involves shifting the negative impact and responsibility in case of occurrence for the third person; reducing the likelihood or impact of a negative risk event on a project is the next risk management strategy; risk acceptance implies that according to the identified risk no precautionary measures are planned to reduce the probability of its occurrence or impact on the project, but appropriate alternative actions are planned, which often require additional funding that should also be taken into account in the project budget. Peculiarities of calculating the impact of risks on the project budget of organizational changes are determined. Factors that contribute to or counteract the success of organizational change are considered. Prerequisites for assessing staff readiness for change are identified.

Keywords: project, project management, organizational changes, project risks, resistance to change, staff readiness for change, project budget.

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УПРАВЛІННЯ РИЗИКАМИ ВПРОВАДЖЕННЯ ОРГАНІЗАЦІЙНИХ ЗМІН НА ОСНОВІ ПРОЕКТНОГО ПІДХОДУ

Необхідність постійного впровадження організаційних змін в ході діяльності підприємства обумовлює потребу в розробці нових підходів до цього процесу, серед яких особливе місце займає проектний підхід.

Мета дослідження полягає в розробці основних засад управління ризиками впровадження організаційних змін відповідно до методології проектного підходу.

Розглянуті передумови вдосконалення процесів функціонування підприємства шляхом впровадження організаційних змін. Визначено роль методології проектного підходу саме як управління постійними змінами. Уточнено сутність ризику та проектного ризику. Розглянуто складові ризику: невизначеність, ймовірність і наслідок впливу. Визначена можливість розгляду сфери управління опором змінам в розрізі ризиків проекту. Досліджено сутність опору змінам як феномену в економічній науці. Представлено ключові підходи до визначення природи опору змінам і його розуміння як негативного ризику в контексті проектного менеджменту. Деталізовано сутність дій в галузі управління ризиками проекту організаційних змін за окремими процесами. Надано опис дій в галузі управління ризиками проекту організаційних змін. Представлено опис стратегії управління ризиками для недопущення опору змінам в ході реалізації проекту: стратегія ухилення передбачає зміну плану управління проектом таким чином, щоб виключити загрозу виникнення ризику; передача або трансфер ризику передбачає перекладення негативного впливу а також відповідальності в разі його настання на третю особу; зниження ймовірності або впливу негативної ризикованої події на проект є наступною стратегією управління ризиками; прийняття ризику передбачає, що відповідно до ідентифікованого ризику не планується реалізовувати жодних запобіжних дій для зниження ймовірності його виникнення або впливу на проект, але плануються відповідні альтернативні дії, які найчастіше вимагають додаткових фінансових коштів, що також має бути враховано в бюджеті проекту. Визначено особливості розрахунку впливу ризиків на бюджет проекту організаційних змін. Розглянуто чинники, які сприяють або протидіють успішності здійснення організаційних змін. Визначено передумови оцінювання готовності персоналу до змін.

Ключові слова: проект, управління проектами, організаційні зміни, ризики проекту, опір змінам, готовність персоналу до змін, бюджет проекту.

Actuality. The need to introduce new technology, improve existing one, or introduce the production of new products based on existing technology and others – all this is a set of processes that must be carried out in the framework of change in the enterprise. Such processes are a part of production. They are often the key to making

changes. Management processes must be altered as a result of changes in production processes. In practice, the implementation organization of the improvement in both production and management processes should be carried out simultaneously. For the successful implementation of change in processes, it is necessary, firstly, to analyze all the processes carefully that will be subject to change. After this analysis, the processes that should be completely excluded from the activities of the enterprise, are determined, i.e. the reengineering procedure is implemented. If it is necessary to introduce fundamentally new processes, a detailed description is made, including the necessary inputs and outputs, resources and management mechanisms. At this stage, in the context of management, it is advisable to use a methodology for modeling processes, such as ARIS, BPWin i ERWin, Ithink Analyst, Oracle Designer, Power Designer, Rational Rose, Re-Think, System Architect, Workflow Modeler. Except others, these methodologies allow to establish links between processes to determine their interdependence. In the case of modification of existing processes, a detailed description is also developed, noting specific changes in inputs, outputs, resources and management mechanisms. Thus, as a result of the organization of change in the processes at the enterprise, there are three groups of processes: the first group of processes are those that need to be eliminated, the second are those that need to be improved or modified, the third are new processes that need to be implemented. If the company is certified by a quality system, such as ISO 9001, the organization of process changes is greatly facilitated, as to obtain this certificate the company has to regulate business processes that significantly affect product quality and develop quality management system documentation. Thus, after the certification procedure, the company has already formed a list of critical processes that affect product quality, and therefore any changes planned in the company, will affect these processes. The organization of process changes is the starting point for other internal areas of the enterprise that need change.

Analysis of recent research and publications. In the paradigm of organizational change management there is currently no generally accepted methodology for their implementation, we hypothesize that one of the possible approaches is the project. It involves the management of a set of works, united by a common goal, limited resources, time, risk in accordance with predefined quality parameters [1–6]. A similar approach is considered in the work of A. Baldynyuk, where the author emphasizes that “the organizational structure of change should be formed from a permanent structure and include representatives of volume management and a flexible team structure of the project of change” [7, p. 15]).

The role of project management is also proposed by Yu. Dukhnych within the framework of the “triangle of change” along with change management and leadership and sponsorship. The researcher emphasizes that project management should act as an organizational structure or project group, which will use its methods and tools for planning, organizing and implementing project changes [8].

At present, the project approach is sometimes seen as managing continuous change. From our point of view, project management should be considered as the most appropriate methodology at the stage of implementation of the function “change management” in the process of change management, which can combine all existing tools for organizational change management that include principles, methods, criteria, a goal, which has its own specific set of tools (means) that allow to achieve the goals with a lower amount of resources spent (approximately 25% lower) than other management methodologies.

The purpose of the study is to develop the basic principles of risk management of organizational change in accordance with the methodology of the project approach.

Presenting main material. The important area of organizational change project management is risk management. Risk means unforeseen loss of expected profit or property, cash, due to accidental changes in economic conditions, adverse, including force majeure, which is measured by the frequency and probability of occurrence [2, p. 366]. Project risks threaten the implementation of the investment project or reduce its effectiveness, representing a set of circumstances in which the completion probability of the objectives is reduced or eliminated [4, p. 347]. The goals are understood as the direct goals of the project and management parameters, such as: content, timing, cost, quality. On the other hand, these definitions do not include so-called “positive” risks, i.e. those events in which the project may receive additional unexpected benefits. Risk includes three components: uncertainty, i.e. the very fact of what may happen; the occurrence probability of this fact and the consequence of the impact of this fact on the project. Thus, risk management is reduced to influencing the consequences that may cause risk to the project, or the probability of its occurrence, or both these two parameters simultaneously. The importance of risk management project change is proved by the results of a study by foreign scientists: R. Pascal [11] emphasizes that Fortune 100 companies implemented at least one change program between 1980 and 1995, but only 30% provided improvements in total that exceeded the company's cost of capital, and M. Beer and N. Noria [12] determine that 70% of organizational change initiatives have failed.

According to these definitions, the scope of change resistance management can be considered in terms of the risks of the project of change. The issue of resistance is one of the key issues in the field of change management, because it is its emergence that the effectiveness of innovations, which can actually be equated to zero, is significantly reduced. Virtually all researchers of organizational change pay and have paid attention to the study of resistance. Thus, I. Ansoff defines resistance as a multifaceted phenomenon that causes unforeseen delays, additional costs and instability of the change process in response to them, which is realized as delays in the process of change, implementation difficulties that slow down changes and increase costs compared to planned; attempts to

sabotage changes within the organization or “drown: them in the flow of other priorities [13]. K. Prib defines resistance as the usual human reaction of staff to the implementation of any changes in the organization, which is manifested in the efforts of people to prevent, stop or slow down their implementation [14]. By generalizing numerical studies, we note that resistance to change should be understood as the behavior of enterprise personnel as a reaction to the introduction of organizational change in the form of rejection and opposition to innovation in order to maintain the status quo. Resistance to change is a classic example of negative risk, which, like any other risk, accompanies the implementation of the project, can occur at different stages and have different consequences for the success of change. In fact, each of the possible types of resistance has a level of probability depending on the organization of change and the degree of impact on the ultimate goals of the change project. That is why the consideration of resistance in the context of risk management, from our point of view, is the most appropriate, because it allows you to highlight its nature and develop a set of measures to prevent it and minimize the impact on the project in its event. To clarify the essence of management actions in case of the project risks of organizational change, we present them as follows (table 1).

Table 1

Actions in the field of risk management of the project of organizational changes are developed for [4; 15]

Risk management process	The essence of the organizational change project process
risk management planning	The process of determining the procedure for implementing risk management actions for the organization, staffing, justification of the methodology, data source for analysis and time interval. Coordination of the methodology for assessing the readiness of staff for change, determining the level of conflict of staff in the process of change.
risk identification	Analysis of the scope of the change project and all its components to determine possible risks. Formation of a risk register. Division of risks into external and internal. External are related to factors that are outside the organization. Internal risks are related to the activities of staff and all other stakeholders.
qualitative analysis	Prioritize risks according to the degree of their probability and impact on the project
quantitative analysis	Determining the amount of additional costs that may arise in the event of the occurrence of relevant risks, or the cost of implementing preventive measures to prevent risks
risk response planning	Development and substantiation of risk management strategy (for negative risks: avoidance, transfer, reduction of probability, acceptance; for positive risks: use, distribution, strengthening, acceptance)
monitoring and risk management	Tracking the occurrence of project risks, the effectiveness of anti-risk actions, clarification of the project budget

We have to take a closer look at the essence of risk management strategies for resisting change. Considering the resisting change as a separate type of risk of the project of changes, it should be noted that the methods of responding to this risk can be divided into preventive and countermeasures. Therefore, some methods should be used in the initial stages of implementation to prevent resistance. Other methods as a means of overcoming should be implemented during all the change project.

The evasion strategy involves changing the project management plan to eliminate the risk. Thus, if certain actions within the project may cause the greatest resistance of staff, these measures may be reviewed and excluded from the draft changes with a view to their implementation under another draft of changes or prolong their implementation. For example, if a company plans to implement a quality management system as part of a change project, together with the re-certification of all personnel in accordance with this system, and at the same time, these actions may cause very strong resistance. Thus, the strategy of risk avoidance in this case may be the postponement of re-certification of personnel after the introduction of quality management system or re-certification of only certain categories of personnel who are mostly interested in implementing this system.

The transmission or transfer risk involves shifting the negative impact and responsibility in case of occurrence for the third person. In some cases, this strategy is possible if the direct actions in the process of implementing the change project will be carried out by another organization on the terms of outsourcing. Accordingly, the risks of resistance to change will be minimal, as the company's staff is not involved in the project. On the other hand, the changes affect necessarily such components as the processes of staff competence, organizational culture and structure. Even if the staff will affect a result of the changes the least, the possibility of resistance may occur, which in any case reduce the level of change effectiveness. Thus, the transfer strategy will involve a third-party organization to work with staff in the process of change. The main task of this organization will be to determine the level of readiness for change, to monitor their perception by staff and to prevent resistance. Moreover, in case of its occurrence the outsourcing organization has to overcome this resistance independently, accepting it as its own risk.

Reducing the likelihood or impact of a negative risk event on a project is the next risk management strategy. Reducing the likelihood of risk combines all measures to prevent resistance in the early stages of initiating and planning a change project. Reducing the impact on the project in this case involves staff changes in relation to those employees who have a significant impact on personnel and hold relevant positions. In the case of early identification of resistance possibility, given their power and influence, personnel rotations are justified and necessary.

Acceptance of risk implies that in accordance with the identified risk it is not planned to implement any precautionary measures to reduce the likelihood of its occurrence or impact on the project. Instead, in the event of its occurrence, appropriate alternative actions should be planned, which often require additional funding, which should also be taken into account in the project budget.

Thus, as a result of identifying the risks of the change project, strategies for managing the risks of resistance to change are developed, on the basis of which additional measures are determined and the amounts of funds are specified as a management reserve to cover losses due to risks. It is worth remembering that all this applies to identified risks, in addition to them there are always existing risks, the nature and probability of which are difficult to predict, but project management practice suggests that to cover these risks need to add 20% of its value. Therefore, after the risk analysis, the budget of the organizational change project is additionally increased by the management reserve to cover the identified risks and by 20% to cover the implicit risks. In addition, as mentioned above, the preliminary budget has an error of up to 20%, which must also be taken into account. The budget for the start of the project should actually include a reserve of up to 50% of its estimated amount.

The success of project risk management lies in compliance with these processes. Thus, to identify the maximum possible risks, all project work, internal and external environment of the enterprise, where changes are made, are analyzed in detail. The stakeholders of the project require special attention, because they can change their behavior, provoking unforeseen events and circumstances that will complicate the implementation of the change project. Risk analysis should be conducted with the analysis of factors that affect the quality of the project changes, as the key factors are simultaneously the potential sources of risk. So, the authors I. Hrybik, L. Popadiuk, N. Smolynska, O. Sadovnik [16, 17] identify factors that contribute to or hinder organizational change, which include, for example: awareness of the need for change and organizational crisis, and failure to carry out previous transformations, along with insufficient competence to perceive something new. As we can see, the influence of these factors is very contradictory. Not all organizational crises lead to understanding the need for change and even more for their implementation. The analysis of the internal activity spheres of the enterprise within the framework of the project of changes, using the diagram of causal relations, on the one hand, will promote development of quality metrics, and, on the other hand, will act the thorough information for identification of risks.

Taking into account the specifics of implementing organizational change project, we will consider in detail the aspects of resistance management as an important type of risk. The key aspects of the analysis are to determine the readiness of staff, possible causes of resistance to change at the individual, group and organizational levels, forecasting the behavior of staff in case of conflict in the implementation of the project changes. The analysis of employees' propensity to conflict behavior in the conditions of changes should be carried out using the K. Thomas test [18; 19], which allows to determine the number of respondents who choose the appropriate type of behavior (rivalry, avoidance, compromise, cooperation and adaptation) and to identify methods of overcoming resistance.

Particular attention should be paid to assessing staff readiness for change. The substantiation issues of incentives system for employees to accept changes and their effective implementation should be related to the system of assessing staff readiness for change, monitoring possible causes of resistance in project risk management and monitoring the manifestation of this resistance. The company should develop a system for assessing staff readiness for change, which will include a set of criteria and methods of assessment at the individual and collective levels. This system should be integrated with measures to monitor resistance to change. Methods of overcoming resistance should be described in the risk management strategies of the project changes and implementation in case these risks occur. In any case, the costs of this strategy should be included in the budget as a management reserve.

Conclusions. It is proved that the main risks of each change project are the emergence of resistance from staff, which determines the set of work in the relevant field of knowledge, i.e. risk management. The use of the project approach allows to simplify the implementation of any changes in the enterprise, to develop a preliminary plan for their implementation with a certain duration, cost and quality parameters. Therefore, to increase the effectiveness level of organizational change, it is advisable to carry out certification of specialists in the management of the enterprise in accordance with the requirements of international project management standards.

References

1. Bushuev S. D. Upravlenie proektami : osnovy prof. znanij i sistema ocenki kompetentnosti proekt. menedzherov (National Competence Baseline, NCB UA Version 3.1) / S. D. bushuev, N. S. Bushueva. – Izd. 2-e. – K. : IRIDIUM, 2010. – 208 s.
2. Bushuev S. D. Slovník-dovídník z pytan upravlínnia proektamy [Tekst] / S. D. Bushuev. – K. : VD «Dilova Ukraina», 2001. – 640 s.
3. Dmytriiev I. A. Upravlínnia proektamy : navch. posibnyk / I. A. Dmytriiev, H.V. Dedilova, I. M. Kyrchata ta in. – X. : KhNADU, 2013. – 236 s.
4. Dovhan L. Ye. «Upravlínnia proektamy»: navchalnyi posibnyk do vyvchennia dystsypliny dla mahistriv haluzi znan 07 «Upravlínnia ta administruvannia» spetsialnosti 073 «Menedzhment» spetsializatsii: «Menedzhment i biznes-administruvannia», «Menedzhment mizhnarodnykh proektiv», «Menedzhment innovatsii», «Lohistyka» / Uklad.: L. Ye. Dovhan, H. A. Mokhonko, I. P. Malyk. – K.: KPI im. Ihoria Sikorskoho, 2017. – 420 s.

5. Kerivnytstvo z pytan proektnoho menedzhmentu: per. s anhl. / pid. red. S. D. Bushuieva; 2-e vyd., pererob. – K.: Vydavnychii dim «Delovaia Ukrainy», 2000. – 198 s.
6. Kerivnytstvo z upravlinnia innovatsiinykh proektamy ta prohramamy R2M / pid red. S. D. Bushuieva. per. z anhl. – K. : Naukovyi svit, 2009. – 173 s.
7. Baldyniuk A. H. Stratehiia upravlinnia zminamy v orhanizatsii / A. H. Baldyniuk // EKONOMIKA I SUSPILSTVO. – Vypusk 2017. – № 10. – S. 155–158.
8. Dukhnych Yu. Praktychesky oryentyrovannye modeli upravleniya yzmenenyami // statii [Proekt «Smart education»// [elektronnyi resurs] // Rezhym dostupa: http://www.cfin.ru/management/strategy/change/change_models.shtml]
9. Stepanenko S. V. Obgruntuvannia profilu zdiisnennia orhanizatsiinykh zmin na pidpriemstvi / S. V. Stepanenko // Visnyk Skhidnoukrainskoho natsionalnoho universytetu imeni Volodymyra Dalia. – 2017. – № 6 (236). – S. 202–207.
10. Lester A. Project Management, Planning and Control: Managing Engineering, Construction and Manufacturing Projects to PMI, APM and BSI Standards / A. Lester. 7th Edition. – Butterworth-Heinemann, 2017. – 650 p.
11. Pascale R. Changing the Way We Change / R. Pascale, M. Millemann, L. Gioja. // Harvard Business Review. – 199. – № 775(6 November-December). – R. 126-139.
12. Beer M. Cracking the Code of Change / M. Beer, N. Nohria // Harvard Business Review. – 2000. – № 78. (3 May-June). – R. 133–141.
13. Ansoff I. Strategicheskij menedzhment. Klassicheskoe izdanie. Strategis Management: Classic Edition. Seriya : Teoriya menedzhmenta / I. Ansoff – SPb. : Piter, 2009 g. – 344 s.
14. Prib K. A. Pryroda ta mekhanizmy oporu zminam v orhanizatsii / K. A. Prib // Rynok pratsi ta zainiatist naseleння. – 2014. – № 3. – S. 34–39.
15. Risk management guide for DoD acquisition / Defence System Management College. 3d. ed. Fort Belvoir, 2000. – Virginia: Defense Acquisition University Press, Fort Belvoir. – 171 p.
16. Hrybyk I. I. Sutnist protsesu upravlinnia zminamy ta osoblyvosti yoho efektyvnoi realizatsii v orhanizatsiakh / I. I. Hrybyk, L. I. Popadiuk, N. V. Smolinska // [Elektronnyi resurs]. – Rezhym dostupu : <http://ena.lp.edu.ua/bitstream/ntb/25842/1/69-384-388.pdf>
17. Sadovnik O. Teoretychni osnovy upravlinnia zminamy na pidpriemstvakh APK / O. Sadovnik // Visnyk Kharkivskoho naukovo-tekhnichnoho universytetu silskoho hospodarstva. Seriya «Ekonomichni nauky». – 2007. – № 66. – S. 150–155.
18. Brunner E. Yu. Metodika diagnostiki predraspolozhennosti lichnosti k konfliktnomu povedeniyu K. Tomasa (adaptaciya N.V. Grishinoj) [Elektronnyj resurs] / Personalnyj sayt E.Yu. Brunnera «Psihologiya». – Rezhim dostupa : <http://brunner.kgu.edu.ua/index.php/psy-metodiks/inquirer/116-thomas>
19. Prib K. A. Podolannia oporu personalu v systemi upravlinnia zminamy v orhanizatsii / K. A. Prib // Rynok pratsi ta zainiatist naseleння. – 2015. – № 1. – S. 57-60. – Rezhym dostupu: http://nbuv.gov.ua/UJRN/rpzn_2015_1_16.

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