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HUMAN RISKS OF PROJECT MANAGEMENT INVOLVING REMOTE TEAMS IN THE CONTEXT OF THE ENTERPRISE ECONOMIC AND FINANCIAL SECURITY

Abstract. The advantages and disadvantages of using remote teams in project management are identified. It is proposed to understand the concept of remote (in-house) team as a group of people who are involved in the project management in one way or another and who do not come together in a single workspace, reside in different places and work on a flexible schedule over individually defined tasks to achieve a common goal, which initiated the formation of such a group. The characteristics of remote teams are identified, which necessitate the search for new tools for managing them in the context of economic and financial security. The principle of Bohdan Havrylyshyn, to which civil servants must comply, has been transformed to ensure that it is suitable for use by employees of enterprises of various types of economic activity in order to timely prevent human risks to economic and financial security in the project management process. The 3D principle of correspondence of persons holding positions in the enterprise is formulated, combining such categories as professionalism, honesty and trustiness. The vectors of human risks influence on the Project Management Triangle are specified through identification of risks for each of the three bases of project management — time, financial resources (budget) and scope of the project. As a result of identifying trends in the management of the project team, a 4D concept of its development was formed. The main reasons for the increase in the percentage of employees working remotely are given, on the basis of which it is assumed that the tendency for the remote teams use in the project management and in the enterprise management process in general in the near future will increase. Project management team management characteristics are named. The advantages for the enterprise of using remote teams in the process of project management and in general in the implementation of various activities of the entity are found out. Human risks of project management with involvement of remote teams for the state of economic and financial security of the enterprise are concretized and generalized.

Keywords: project management, risk, human resources, economic and financial security, personnel, remote teams, enterprise.

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КАДРОВІ РИЗИКИ УПРАВЛІННЯ ПРОЄКТАМИ ІЗ ЗАЛУЧЕННЯМ ВІДДАЛЕНИХ КОМАНД У КОНТЕКСТІ ЕКОНОМІКО-ФІНАНСОВОЇ БЕЗПЕКИ ПІДПРИЄМСТВА

Анотація. Установлено переваги і недоліки використання віддалених команд у процесі управління проєктами. Запропоновано поняття «віддалена команда» (in-house команди) розуміти як групу осіб, які на тих чи інших умовах залучені підприємством для реалізації проєкту і які не об'єднуються єдиним робочим простором, перебувають у різних місцях і працюють за гнучким графіком над визначеними індивідуально для них завданнями для досягнення спільної мети, якою й ініційоване формування такої групи. Визначено характерні риси віддалених команд, які викликають потребу пошуку новітнього інструментарію управління ними в контексті забезпечення економіко-фінансової безпеки. Піддано трансформації принцип Богдана Гаврилишина, якому мають відповідати державні службовці, для забезпечення придатності його використання для працівників підприємств різних видів економічної діяльності з метою запобігання кадровим ризикам економікофінансовій безпеці у процесі управління проєктами. Сформульовано 3D-принцип відповідності осіб, які займають посади на підприємстві, що поєднує такі категорії, як професійність, порядність і лояльність. Конкретизовано вектори впливу кадрових ризиків на трикутник проєктного менеджменту через ідентифікацію ризиків для кожної з трьох основ управління проєктами — часу, фінансових ресурсів (бюджету) і масштабу (мети) проєкту. У результаті визначення тенденцій в управлінні командою проєкту сформовано 4D-концепт його розвитку. Наведено основні причини зростання відсотка співробітників, які працюють віддалено, на основі яких зроблено припущення про посилення тенденції до використання віддалених команд в управлінні проєктами та у процесі управління підприємствами в цілому в найближчій перспективі. Названо характеристики управління командами проєктів. Уточнено переваги використання віддалених команд для підприємства у процесі проєктного управління і в цілому під час здійснення різних напрямів діяльності суб'єкта господарювання. Узагальнено кадрові ризики управління проєктами із залученням віддалених команд для стану економіко-фінансової безпеки підприємства.

Ключові слова: управління проєктами, ризик, трудові ресурси, економіко-фінансова безпека, кадри, віддалені команди, підприємство.

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Introduction. Remote employment has been for a while a convenient and effective alternative to office work. The significant benefits of this form of employment are obvious to both - employees and businessmen who are ready to engage staff on a «part-time» basis for fulfilling their professional responsibilities. These include the saving of economic resources due to the absence of the need to find the placement for personnel allocation and due to the use of persons working remotely their own equipment and materials, office supplies, due to saving time for transporting workers to the place of work and due to lack of employer liability for injuries, loss of health by the employee during the tasks, etc. Remote work schedules can be flexible; its benefits for people who cannot work according to the standard «9 o'clock — 5 o'clock» are indisputable. At the same time, the temporary suspension of economic activity of Ukrainian business structures in early 2020, caused by the requirements of the national quarantine, proved the inability of the management of most companies that used traditional forms of workflow organization, to quickly adapt to the staff remote work in the enterprises of those types of economic activity, the specificity of which allowed such a transition. In addition to administrative restrictions on the use of remote employment in Ukraine, its popularity is also precluded by the mentality of citizens, which provokes violations by persons who work remotely and their employers, legal principles of doing

business, in particular, the rules of the code of labor laws and tax law. This makes it possible to talk about the problem of shadow employment. However, in the context of the proposed study, it would be desirable to draw the attention of the scientific community to the possibility of using remote workers to solve the problems of managing enterprise projects. Project management is one of the areas of management of organizations, methods and techniques of which are increasingly used in the practice of domestic business structures, given into account the suitability and relevance of this management approach in the current economic environment in Ukraine. Thus, project management allows directing managerial efforts to a specific important problem within the activity of the enterprise and professionally solve it by coordinated actions of specially created team. Project management is focused on the needs of clients and allows to take full advantage of the clientoriented approach, which integrates quite well with the realities of the competitive economy that is now developing in Ukraine under the pressure of European companies. Moving professionals from one project team to another helps to improve their skills, adapt to the requirements of multitasking and prevent their professional burnout. Project management in Ukraine continues to evolve, and given into account the worldwide trends in staffing, remote workers will increasingly become involved in project implementation. However, the obvious benefits, like any innovation, are always accompanied by risks that cannot be ignored by the management of modern companies in the process of pursuit of additional profits.

Research analysis and problem statement. The classic principles of project management define personnel or staff together with finances and time as mandatory requirement to start a project and an important prerequisite for its successful completion. In accordance with the approach of oriented on project stakeholders, project team members, their manager and clients or project initiators are the main actors in project management. It should be noted that the role of effective teamwork as one of the priority factors for the success of project implementation by different economic structures was noted in 1997 by R. C. Fordand, W. A. Randolph: «...finally, were view a model for effective cross-functional organizations, comprising environmental influences, organizational characteristics, project characteristics, project team characteristics, project leader characteristics, and project effectiveness») [1]. In extensive research work titled «The Human Factor in Project Management», D. Thompson notes: «It is the human factor in project management that drives success and earns results, not the tools» [2]. The principles and possibilities of using human resources in the project management are being explored by A. Keegan, C. Ringhofer, M. Huemann [3]. More specifically, the formation and operation of the project team studied R. Loo, who concerns about the problems of «team climate» assessing [4]. Various aspects of the existence of risks accompanying the implementation of projects under uncertainty, some of which have a staff as the source of origin, explore K. Boiarynova, K. Kopishynska, N. Hryhorska [5]. The presence of risks also draws the attention to the need to ensure the economic and financial security of the business entity during the implementation of a project, which requires looking through the research materials of domestic security experts [6]. Practices of human resources adaptation to requirements of safety-oriented management in the process of project implementation are offered by D. N. C. Lai, M. Liu, F. Y. Y. Ling [7]. Dilemmas of human potential management from the view point of employment security are investigated by A. Bodak, A. Cierniak-Emerych, M. Gableta, A. Pietroń-Pyszczek, K. Piwowar-Sulej [8]. At the same time, in the context of economic and financial security management researchers do not raise the issue of identification of personnel risks, the source of which are remote project teams implemented by enterprises. Therefore, this research offered to the scientific community is relevant and timely.

Study results. Well-timed fulfillment of business obligations to clients and partners is essential for the economic and financial security of business entity. High business activity and efficiency ensure the profitability of the enterprise, which allows to raise funds in risk management mechanisms, organize threat prevention, formation of reserve funds to compensate the consequences of destructive economic processes. Project management has become widespread in enterprises of various sizes, forms and types of economic activity. At the same time, every new project brings a risk for the business entity, and therefore can be destructive for its economic and

financial security system. The main threat is the unsuccessful completion of the project, its «failure». However, there are numerous additional risks that accompany the entire project implementation process. And as one of the core elements of project management, the project team is the source of their large number.

Even in its traditional form — as a group of enterprise employees who are temporarily integrated into a single executive system to achieve a specific goal by top-management order, implementing their new functional responsibilities during working hours and using employer resources — project team members can intentionally or unknowingly cause the unsuccessful completion of a project or of a separate phase of it. Involving a remote team to implement the project triggers new risks. Are mote team (in-house team) is a group of people who, in one way or another, are involved by the enterprise management to implement a project; they are not integrated into a single workspace, reside in different places, and work on a flexible schedule over tasks that are targeted to them individually for the achievement of the common goal that initiated the formation of such a team. Characteristics of remote teams are: the combination of the efforts of professionals from different cities or even countries; self-sufficiency of employees work with equipment, materials, work space; purposeful work (result-oriented, not process-oriented over a working period). The use of remote teams on a permanent basis is not inherent in Ukrainian enterprises, whose management prefers to constantly monitor the presence of the employee in the workplace and check its performance results, while remote teams are difficult to control, and monitoring excessive use destroys the essence and main benefits of remote work. In addition, the effectiveness of a remote team depends on the discipline and self-motivation of its members, and Ukrainian project managers do not believe in the hard work of Ukrainians without using supervisory and coercive tools.

Fig. 1 presents the impact of human risks on the classic project management triangle.



Fig. 1. **Impact of personnel risks on the project management triangle** *Source*: Compiled by the authors.

In May 2016, Cartridge People company commissioned an expert survey that involved 1096 workers in the UK, both — office workers and those who work remotely. Its purpose was to determine the extent of remote work in the UK and to identify the impact of this phenomenon on labor productivity, efficiency, well-being, staff morale [9]. The results of the study found out that people who work remotely in 84% of cases work even during illness, which may adversely affect their performance; 10% admit that they work more productively in the office, about 12% say that when they work at home, they are more distracted and their attention dissipates; 13% suffer from loneliness and desire for socialization, 4% are dissatisfied with the organization of their workplace at home.

Table summarizes the human risks of project management involving remote teams for the economic and financial security of the enterprise.

Table

for the economic and manetal security of the enterprise		
Advantages for the enterprise of using	Disadvantages and risks for the	Consequences for the enterprise
remote teams	enterprise of using remote teams	economic and financial security
Saving resources for workplace	Inability to organize workplace,	Breach of systematic in ensuring
organization	lack of information literacy and	economic security due to territorial
	necessary equipment	remoteness of employees
Minimum time required to get work	Low level of self-organization,	Loss of business reputation
started	failure to meet schedule	and company image due
	and deadlines due to inattention	to violation of project
	or distraction	implementation deadlines, which will
		result in profit loss
Possibility of individual approach	Lack of team spirit, low level	Additional costs for organizing
to each team member in the matters	of loyalty, trustiness due to	online meetings, the risk of cyber-
of motivation and work schedule	inability to associate oneself with	threats in the process of
	the team	communication using Internet
Goal oriented stuff, focusing	Low efficiency due	technologies
on the tasks to be accomplished	to the feelings of loneliness,	
	lack of communication	
	and socialization	
Prompt changes in the team	Refusal to perform work without	The possibility of losses arising from
	warning, change of work activity,	the transfer of insider information to
	project without prior agreement	competitors
Absence of severe work regulation,	Lack of constant monitoring	Failure to identify human risks
mutual trust between the manager and	of work efficiency by project	in a timely manner and assess
the team, which creates a positive	manager and employer	the predicted financial impact
psychological team climate		of their implementation

Human risks of project management involving remote teams for the economic and financial security of the enterprise

Source: Compiled by the authors.

In order to minimize human risks in the project management, the principles of team management should be followed. Among the trends in project team management, we define: 1) knowledge management (or Smart Personnel Management); 2) transition from vertical to horizontal organizational structure; 3) increase in the percentage of employees working remotely; 4) human-centrism. Determination of tendencies in the project team management allowed us to form a 4D concept of its development (*Fig. 2*).

Smart Management

Remote work **4D** Horizontal organizational structure

Human-centrism

Fig. 2. **4D-concept of project management team development** *Source*: Compiled by the authors.

The work of Neil Doshi and Lindsey McGregor [10] has once again confirmed the wellknown fact that the work of managers is based on knowledge, on science, on the experience of scientists, scientific and pedagogical workers of different educational institutions. Therefore, knowledge management as a tendency to manage a project team is nothing but recognition of science, knowledge, and experience of scientists as a basic element of the management system. This means that in order to ensure the necessary level of professionalism in human resources management, project managers need to acquire up-to-date knowledge through self-education or getting new competencies in higher education institutions. The transition from a vertical organizational structure to a horizontal organizational structure was an expected and triggered peculiarity of the organization of work of project team members. Traditionally, the manager was a specialist in the field in which the team works. Nowadays, in most cases, the project manager is not a specialist in the field, but is competent in certain aspects of management, in particular, process management, personnel management. That is, the project manager is not a leader in the traditional sense of the term, but is an ordinary member of the team whose job is to implement the function of organizing its work.

An increase in the percentage of employees working remotely was due, firstly, to the impact of the 4th Industrial Revolution, characterized by the utterly total application of information technology in business activities, and secondly, due to the pandemic of the COVID-19 virus crown that drove the business entities management to transfer personnel, if possible, to a remote form of work. Human-centrism is a worldwide trend that determines the need to apply a person-centered, humanistic, person-centered approach to managing an enterprise project team.

Each of the mentioned above project team management characteristics is due to specific reasons, changes of the external and internal environments of the enterprise, and has both advantages and disadvantages, which entails both opportunities and threats. It is clear that, with proper management, certain trends, turning into features of managing a project team, are transformed into its benefits, causing an increase in process efficiency.

In our opinion, human risks will be minimal for the state of economic and financial security when the employees of the enterprise will comply with the principle of Bohdan Gavrilyshyn (PCH): patriotism, competence, honesty. It should be noted that the mentioned principle was expressed concerning civil servants. Therefore, we have transformed it somewhat so that it can be applied to employees of enterprises of different types of economic activity. The category «patriotism» was changed to «trustiness». Thus, the 3D principle, which should be respected by persons holding positions in the company, combines: professionalism; honesty; trustiness (*Fig. 3*).



Fig. 3. **3D-Principle of compliance of employees with the positions they hold** *Source*: Compiled by the authors.

Taken the global trend into account, we expect an increase in the number of project management cases involving remote teams. The management of Ukrainian enterprises should be prepared to prevent human risks and their negative consequences for the state of economic and financial security of enterprises in the process of transformation of the model of labor relations from the traditional «eye» form to the remote one with its obvious and at times hidden advantages and disadvantages.

Conclusions. 1. Using the remote teams can significantly reduce the time and cost of project implementing. In circumstances where it is not possible for a business entity's to proceed normal current activities, such as during the quarantine period of early 2020, remote teams are the only and

the effective option to finish the project on time. At the same time, the involvement of remote teams is a challenge for the economic and financial security of the company, as it can cause losses due to the breach of project finish time because of the absence of control of the team members by the company management and project customers, constant monitoring of the effectiveness of their work, which is used in the team work on the basis of an entrepreneurial structure at a predetermined time. At the same time, control and monitoring can be organized for remote work, however, it requires certain skills as well as a high level of digital literacy, which is not typical for management staff in Ukrainian enterprises.

2. The formation of effective remote teams in project management requires the availability of a certain amount of specific information resources, the analysis of which should be done by personnel security experts. In particular, it is necessary to evaluate the experience of professionals without the ability to conduct an interview in person (although this stage can be implemented using online communication tools, but this again requires certain skills), to establish the level of communication channels of team members and to organize cyber security of their workflow; to establish the ability of team members to cooperate within the project implementation, taking into account their temperaments and behavioral characteristics; to assess the level of loyalty of remote workers, if not for the enterprise in a whole, than to the team of an individual project; to identify potential losses from ineffective actions or inactions of team members and to develop tools for individual motivation without the waste of resources.

3. As the risks to the company's economic and financial security from the involvement of remote teams into project management we consider: low level of motivation of employees, which reduces their work productivity; lack of team spirit due to lack of personal contacts and personal acquaintance of team members (this affects their willingness to insure each other during difficult stages of the project or when approaching deadlines, which may delay project execution, reduce the quality of work and lead to loss of clients, reputations, image, the occurrence of costs in the form of fines, penalties); disruptions in equipment operation, disruption of the functioning of information networks required for the exchange of project materials, results of performed work; cyber-attacks on personal data of project members and project materials that may result in the loss of important economic resources; the low level of using project software by participants, which may delay its implementation and reduce the effectiveness of team interaction; gravity of each participant to own convenient work schedule, which causes difficulties in ordering the project tasks and complicates the monitoring and control of the results at each stage of its implementation. Therefore, each of the listed risks can cause a breach of project deadline, decrease in the quality of its output, failure to achieve the project objective or refusal of its implementation, which will ultimately worsen the economic and financial security of the enterprise due to losses or shortfall in expected profits.

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