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SOCIOECONOMIC EFFICIENCY OF FLEXIBLE MANAGEMENT OF HUMAN CAPITAL DEVELOPMENT INVESTMENT PROJECTS

ABSTRACT

Modern projects investing in the development of human capital are extremely diverse and differ in the level of complexity or the volume of tasks and work that need to be carried out both in advance and directly during the process. Therefore, there arises a need to choose the right method of managing these problems. Moreover, the choice depends on the results of evaluating their effectiveness, including socioeconomic effectiveness. Thus, the aim is to conduct an evaluation of the effectiveness of flexible management of projects related to investments in the development of human capital. The subject of the research is projects investing in the development of human capital. The task is to present an approach to evaluating the socioeconomic effectiveness of flexible management of such projects. The key method is the modelling method for choosing the most optimal form of flexible management of the investment project in the development of human capital. For visual assessment, a real project investing in the development of human capital was selected. Corresponding areas for evaluating socioeconomic effectiveness were determined. It is proposed to carry out the evaluation of the socioeconomic effectiveness of flexible management precisely based on these areas: quality, budget, time for completing the set tasks, risks, and the health of the team involved in the investment project in the development of human capital. Thus, the result of the article is an improved methodology for evaluating the socioeconomic effectiveness of flexible management using the EVM method based on the criteria of quality, budget, time, risks, and team health. Regarding limitations, it should be emphasised that practical application occurred within only one project. Further research should be dedicated to evaluating the safety aspect of implementing projects investing in the development of human capital.

Keywords: modeling, EVM method, human capital, investing, flexible management, assessment, socio-economic efficiency

JEL Classification: C51, R53, O15, J24

INTRODUCTION

The essence and content of the main terms and concepts used in the article

Flexible management should be understood as a kind of iterative and incremental approach to management, emphasising cooperation, feedback and continuous learning in order to adjust the system to new operating conditions. This is a relatively new approach, but it has quickly gained popularity due to its effectiveness in helping organisations adapt to change quickly and effectively. At the same time, flexible management has an extremely positive impact on the results of the organisation's activities, such as productivity, employee satisfaction and customer satisfaction. As for investing in human capital development, there are a significant number of interpretations in both scientific and practical literature. It is noted that investing in human capital development should be understood as any kind of investment in human capital, which is any action that improves a person's professional qualifications and productive abilities and, thus, the productivity of his labour. At the same time, this is a process of distributing resources, such as time, finances and efforts to improve the qualifications, education, health and general capabilities of people or the workforce. It should be understood that investing

in human capital may have a certain socioeconomic effect, which depends on the flexibility of this kind of investment project management. Socioeconomic efficiency should be a certain kind of characteristic of the management system of a specific project (as in our case, a project that provides investment in human capital development), providing the necessary information about its state and changes in the satisfaction of the needs of the key subjects of this management. We believe that flexible management of investment projects for the development of human capital should be a process of applying adaptive and interactive management methods of various levels of complexity, which allow effective responses to changes and uncertainties throughout the project's life cycle.

Importance and need for human capital development

In recent decades, there have been significant changes in the perception of human capital investment and its role in economic development. Initially, human capital investment was viewed primarily as spending on education and upgrading workers' skills. However, over time, this criterion has evolved into a more comprehensive approach to understanding human capital investment. Ukraine's human capital has gone through an extremely difficult path aimed at achieving a certain constancy in development and ensuring security. However, the dynamism of the external environment has brought significant changes that have upset the balance. This includes the COVID-19 pandemic and a full-scale invasion by an aggressor country. All this has led not only to hypersensitive investment risks but also to new threats and dangers. Human capital can take many forms.

In general, any acquired skills, knowledge, or even information that will help a person increase productivity and thus earn more can be considered a form of human capital. And each of its forms has suffered as a result of changes in the external environment. Ineffective management of investment projects has ruined any effect of investments. There is a lack of flexibility and understanding of how to evaluate it. It is noted that it is through investment management that a set of economic problems can be solved at the micro and macro levels, and it also creates favourable conditions for economic reforms and restructuring. Investments in the development of human capital, such as education, training, health improvement and other opportunities for personal growth, carry inherent risks due primarily to their speculative nature and uncertainty of profitability. With proper management, all these risks can be minimised, but for this, this management must demonstrate socioeconomic efficiency.

Need to assess socioeconomic efficiency

Socioeconomic efficiency is the final characteristic of the work of any management system, being an integral indicator of efficiency at different levels of the socioeconomic system. In turn, the main criterion of socioeconomic efficiency is the degree of satisfaction of the final needs of the subjects of the management system. The process of investing in the development of human capital consists of many different elements that require competent and, most importantly, flexible management. Consequently, in the case of constant changes in the external environment, adaptability and flexibility are paramount when choosing a management method. In this context, the issue of socioeconomic efficiency of managing investment projects in the development of human capital becomes especially relevant.

LITERATURE REVIEW

Literature Review on Recent Scientific and Practical Research in the Field of Investing in Human Capital Development

According to Bechtel (2007), investments in human capital are worthwhile since the population is a key factor in the creation of knowledge, entrepreneurship, and knowledge economies, and knowledge and idea production serves as the core of economic growth. Knowledge about the economy comes hand in hand with information about society and its policies and institutions, which are elements trained in every civilised society. We all have certain structures in our countries or groups per se that have some form of an economy within them, as well as an education system or other type of system that promotes constant growth and improvement. A key part of this is somewhere conjunctive to business, be it in coworking spaces or in offices of other corporates or institutions.

Aman-Ullah (2022) emphasises the fact that in the day and age of information society, rapid globalisation process, knowledge-based economy, etc., it has been established beyond doubt that human beings are at the core level, which is what fundamentally ensures all business entities' profitability. Aside from human capital, all resources in an enterprise are passive and can only ever be used for their face value — unless humans find a way to attach more meaning behind it. This is agreed upon. Furthermore, Under et al. There is a famous saying by Megginson (2011) that "in modern conditions, the technological and scientific transformations are accelerated to such an extent that new needs for labour constantly arise, which makes it almost impossible not only further development but also survival without investment in human capital by enterprises regardless of their form or industry sector. That is their theses, even at the enterprise level, confirm that

without investment in the development of human capital, it is impossible to achieve the desired socioeconomic effect. In their writings, scientists have repeatedly repeated that management is the key to increasing investment efficiency.

As Hayton (2003) indicates, focusing on human capital and investing small yields far greater returns in the long run than major Capital investments of a technical nature made to any organisation. Capital investments are considered to be an important source of economic growth, more so even than physical capital. The scholar warns that a lot will depend on the management system. Jagoda (2014) and Unger (2011) say that investments in human capital occur in a moral loss of employees associated with the deprivation of free time and overstraining during exams, so-called personnel confirmation, training courses qualification improvement or professional retraining, including changes to another locality. That is, even with small, targeted investments, a management system is needed, preferably flexible and adaptable to internal and external operating conditions.

As Stasytyve (2015) notes, modern risk management tasks at enterprises are related to the problem of dynamic changes in the internal and external environment. Changes in our lives are unpredictable. Uncertainty is growing everywhere, including in business. This situation contributes to the significant impact of risks and the emergence of new types of them. Enterprises pay for underestimating risks with financial losses, a decrease in the value of shares and, most importantly, the loss of human capital. Investments are also constantly accompanied by risks, even if they concern the development of human capital.

Literature Review on Recent Scientific and Practical Research in the Field of Flexible Project Management

Delise et al. (2023) note that at the stage of determining the most appropriate management method for a company, it is necessary to focus on the specifics of investing, teams, and projects. The easiest way is to choose an existing method of flexible management and adapt it, and later, on its basis, it will be possible to develop your own, most suitable for the company. Many methods are already being applied, so their advantages and disadvantages are already known. In the process of adapting the method, it is necessary to analyse the roles, artefacts, processes, and practices it entails.

We agree that as a result of the increasing relevance of theoretical justification and methodical support of management technologies, the flexibility of enterprises is also determined by the processes of transformation of the convergent development of market entities into a discrete one, which requires additional research into the chaotic development and self-organisation of systems. In such conditions, socioeconomic efficiency is one of the key indicators of the effectiveness of flexible management (Sushil, 2016; Sharma et al., 2010).

Flexible management of investment projects is a field that covers different segments of an organisation's activities, where the creation of a specific product or service is carried out through a unique combination of related activities. The investment project itself operates in a certain environment, which includes internal and external components, taking into account economic, political, social, technological, legal, and cultural aspects. This can be interpreted in the context of projects investing in the development of human capital, as this process must also take into account economic, political, social, technological, legal and cultural aspects.

AIMS AND OBJECTIVES

The aim is to conduct an evaluation of the effectiveness of flexible management of projects related to investments in the development of human capital. The subject of research is projects investing in human capital development. At the same time, the article task is to propose an approach to assessing the socioeconomic efficiency of flexible management of investment projects in the development of human capital.

METHODS

The Essence and Significance of the Modeling Method

Modelling is a scientific method of cognition that consists of replacing the object of research with an artificially constructed analogue, reflecting those properties and qualities that are important to the scientist (Savkovic-Stevanovic, 2015). We applied this method to assist in choosing the most optimal form of flexible management of the investment project in the development of human capital.

The EVM Method

Earned Value Management (EVM) is a performance measurement technique that has been introduced in the field of project management (Czemplik, 2014; Proaño-Narváez, et al., 2022). The point of this method is that it provides the reasonable ability to control production so that you can respond smoothly when a problem arises as the project goes on. This helps in better forecasting, cost-effectiveness and timely completion of the project goals within pre-set budgetary and time constraints. Within our research, the method is used to assess socioeconomic efficiency as one of the key factors in the context of flexibility. The application of EVM in real conditions involves the integration of planning, monitoring and control of project work by measuring the volume of work performed; the budget spent and adherence to the schedule, which allows you to effectively track the progress of the project and timely correct deviations.

Description of the Investment Project

For the evaluation, we have selected a specific ongoing project of investing in human capital development. It is important to note the following details of this project (Khomenko, Saher, 2022):

- area - investment in enhancing digital literacy through the implementation of new software (Digital literacy is the ability to effectively use digital technologies, information and communication tools to solve problems, learn and interact);
- the project has been ongoing for over 2 years;
- the number of team members - 20 people.

In the summer of 2024, there was a change in leadership on the project aimed at adjusting processes and improving team efficiency.

The Kanban method is used on the project with the simultaneous development of multiple functionalities. Kanban is a flexible methodology for project and workflow management, focusing on task visualisation, limiting unfinished work, and optimising workflow.

The assessment of the effectiveness of flexible management was carried out based on the data from two months of activity in the project of investing in digital literacy and competence (July-August 2024).

To reveal all aspects of evaluating the socioeconomic effectiveness of flexible management in projects investing in human capital development under digitalisation conditions, it is recommended to focus on key research directions and analysis. It is noted that the most effective application of this evaluation would be its integration with the model for selecting the method of flexible management for the project investing in human capital development (Table 1).

Table 1. Proposed Areas for Evaluating Levels of Socioeconomic Effectiveness of the Flexible Management Method for the Human Capital Development Investment Project.

Areas of analysis	Low level of difficulty	Medium level of difficulty	High level of difficulty
Quality, budget and deadlines	EVM	PnL	Critical path method
Physical and psychological health of the team	Surveys, personal meetings	Competency matrix	Assessment of psychological safety
Risk assessment	Risk register matrix	Monte Carlo method	Scenario planning

Within our research, a method with a low level of complexity was chosen since our article aims to offer methods that are characterised by comprehensiveness and appropriate practicality. They are more accessible and convenient to use. At the same time, it is possible to conduct a comprehensive assessment of the effectiveness of project management using the EVM method. One of the recommended tools to use is EVM (Earned Value Management). We apply this method in order to improve the efficiency of investment project management and to contribute to improving the results of evaluating its socioeconomic efficiency. In this regard, to establish the earned value of the project, a series of calculations need to be performed (1):

$$\begin{aligned}
 CEI &= EV/AC \\
 SEI &= EV/PV
 \end{aligned}
 \tag{1}$$

where *EV* represents the measure of work performed and expressed in budgetary terms; *AC* stands for costs incurred during the work; *PV* is the approved project budget.

We use CEI and SEI indicators to evaluate the effectiveness of the management of an investment project in the development of human capital. They are part of the EVM methodology. CEI will allow us to determine how effectively the investment project we have chosen uses its budget and compare it for the first period (for example, weeks of the project's life). SEI will allow us to assess how well our chosen investment project meets its schedule and deadlines by comparing and determining whether it is ahead of it or behind it.

RESULTS

Current State of Investment in Human Capital Development

It is well known that the problems of human capital development are becoming more and more urgent since the economic and social development of both a separate territory (district in a city, town, region) and the country as a whole depends on it. However, appropriate development is not possible without investments in people. In order to increase the productive and intellectual abilities of a person and reduce the level of risks of their decrease (loss), it is necessary to invest funds from both the public and private sectors in human capital, in particular, in the construction/reconstruction and operation of educational, social assistance, cultural, health care institutions.

It should be noted that significant changes have taken place in the perception of investments in human capital and their role in economic development in recent decades. Initially, investments in human capital were primarily considered to be spending on education and employee training. However, over time, this criterion has evolved into a more complex approach to understanding human capital investment. Today, investment in human capital includes a variety of activities and programs aimed at improving education and training, strengthening the health and well-being of workers, stimulating the development of creativity and innovative thinking, and ensuring equal opportunities and access to the labour market for all segments of society. Investing in increasing digital literacy has become one of the priorities for most organisations and enterprises in the era of artificial intelligence technologies (Figure 1).

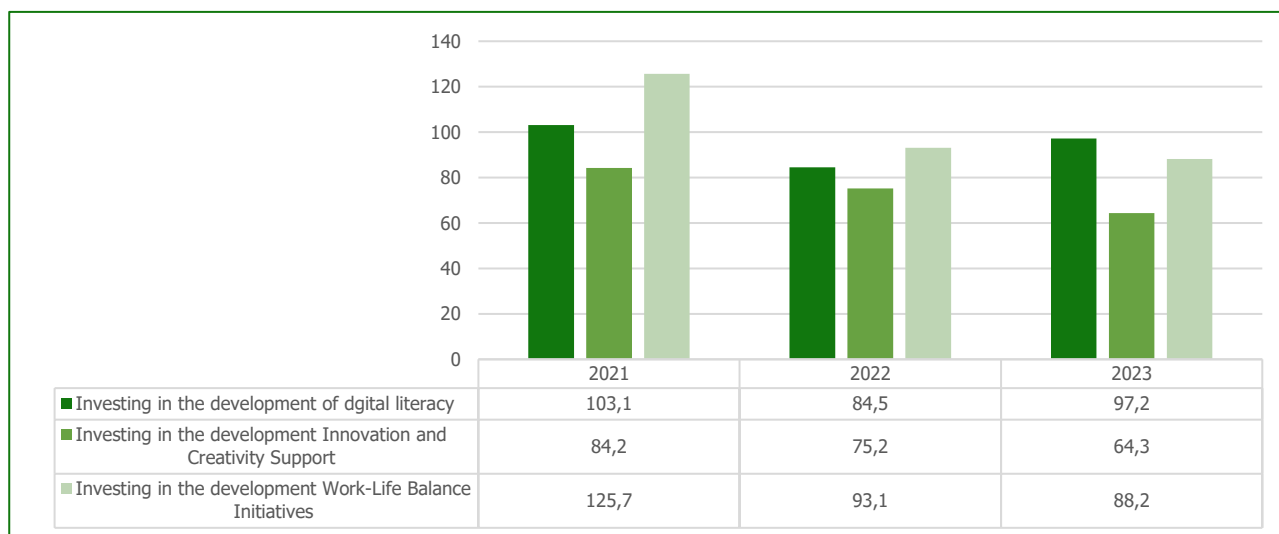


Figure 1. Dynamics of changes in the volume of investments for employees of enterprises and organisations in Ukraine, UAH million.
 (Source: State Statistics Service of Ukraine, 2024)

Since the investment project chosen for evaluation concerns the improvement of digital literacy, it should be noted that in Ukraine, after the full-scale invasion, the volume of investments in this is increasing as a component of human capital development. It can be seen that the issue of creativity and innovation decreased after 2022. The same can be said about investing and balancing work and free time. The reason is the emphasis on improving digital competence, which today is not considered relevant in the context of economic security and development.

Flexible Management Evaluation

The human factor plays an extremely important role in projects. Digital technologies play a crucial role in flexible management, but success depends on the collaboration and cohesion of the team. Simply put, appropriate surveys should be formed so that the team can better understand several indicators in the proposed areas in Table 1.

Thus, we will enter the EV and AC data into Table 2, thereby representing the earned and actual cost over those 8 weeks (2 months of the project).

Table 2. Earned and Actual Cost Over 8 Weeks of the Human Capital Development Investment Project. Note: * Earned Value: What has actually been accomplished at this point in time, compared to the planned schedule and budget; Actual Cost: What was actually spent, without any adjustments or interpretations based on planned performance.

Tasks	The value of the task USD thousand	Results															
		Earned Cost* (EV) 1-8 weeks, %								Actual Cost* (AC) 1-8 weeks, USD thousand							
Task 1	87.0	0	4	95	100	100	100	100	100	40.68	45.11						
Task 2	52.0				96	100	100	100	100			47.22					
Task 3	35.0					57	78	93	100				20.05	25.47	6.3		
Task 4	56.8					0	21	75	100						10.85		
Task 5	10.0							25	100							3.7	12.61
USD thousand	240.8	0	3.48	82.62	136.92	158.95	178.22	216.65	240.8	40.68	85.79	13.3	16.3	20.42	22.13	22.5	23.77

PV data represents the planned value and they are used to display the planned expenses that will be incurred for each period (Table 3).

Table 3. Planned Cost Over 8 Weeks of the Human Capital Development Investment Project.

Tasks	The value of the task, USD thousand	Planned Cost, 1-8 weeks, USD (PV)									
Task 1	87.0	43.5	43.5								
Task 2	52.0			52.0							
Task 3	35.0				11.66	11.66	11.66				
Task 4	56.8										
Task 5	10.0								5.0	5.0	
USD thousand	240.8	43.5	87.0	139.0	169.6	200.2	230.8	235.8	240.8		

We believe that the socioeconomic efficiency of an investment project for the development of human capital should be determined through the calculation of CEI and SEI. At the same time, present the so-called scale by which this same efficiency should be measured:

1. CEI and SEI > 1: The project spends less than planned because the cost of the work performed exceeds the actual costs.
2. CEI and SEI < 1: The project is over budget, meaning that resource costs are greater than the cost of work performed.
3. CEI SEI = 1: Project within budget.

In our case, the optimal achievement will be "1" or close to it. Let's give an example: if, let's say in our case below, in the first week CEI and SEI is 0, then this indicates that no value has been earned relative to the costs incurred. This is typical for the initial phase of the project.

With this data, it's possible to calculate the socioeconomic effectiveness indices for the set period of project implementation, which is 8 weeks in our case (Table 4).

Table 4. Socioeconomic Effectiveness Index.

Weeks	Cost Efficiency Index (CEI)	Schedule Execution Index (SEI)
1	0	0
2	0.04	0.04
3	0.6	0.5
4	0.8	0.8
5	0.7	0.7
6	0.8	0.7
7	0.9	0.9
8	1.0	1.0

The calculations show that by the eighth week of monitoring, the cost of completed tasks did not exceed the planned amount. It was also established that by the end of the 8th week, all tasks were completed on time. Additionally, the calculations showed that the cost of performing the tasks did not exceed the planned budget and was even over USD 3,000 less (Figure 2).



Figure 2. Cost and Schedule Deviations in the Investment Project Implementation, USD thousand

In general, the schedule for 8 weeks of implementation of the investment project shows that in the last week of the project, cost deviations are practically reduced to zero. That is, at its last stage, one can talk about the flexibility and efficiency of project management, but not at its beginning.

Risk Assessment

Each investment project is a series of risks and challenges for the flexible management system. Therefore, it becomes logical that for the method to be effective, it is necessary to regularly work with risks - identify them and take preventive measures or quickly identify problems according to a plan in order to avoid problems when investing in the development of human capital. The selected project of investing we choose and explain in Methodology in the development of human capital, as of today, has lasted more than two years. During this period, work on the assessment of the risks of investing in the development of human capital was not carried out. We think this is wrong. Therefore, keeping a register of risks has become necessary, as it will allow us to work more confidently and efficiently (Table 5).

Table 5. Risk register matrix for investing in human capital development.

№	Risks	The possibility of risk	Importance	Priority	Remedial strategy
1	Project delay due to different expectations from stakeholders	High	High	High	Agree on the criteria for evaluating the success of the project Create a road map plan Synchronise tactical objectives
2	Delay due to increased volume of work				Changes to the scope of work must be done transparently Control over unplanned by increasing the amount of work
3	Delay due to a number of previously unfinished works				Try not to transfer team members The scope of work must be fixed
4	Delay due to software issues				Refactoring should be planned Analysing the root causes of regression errors
5	Delay due to a number of "bottlenecks"	low	average	average	Checking tasks and identifying weak points
6	Delay due to complicated procedure	average		low	Review of own process structure

We believe that such a risk register for investing in human capital development will help the team analyse their work and calculate possible future problems. This is an integral part of the continuous improvement process on the project, which enables the assessment of the effectiveness of flexible management. At the same time, it contributes to the optimal use of resources, increasing the level of trust among stakeholders and ensuring stable development of human capital, which, in turn, enhances competitiveness.

In general, we believe that such an assessment involves the calculation of important components of socioeconomic efficiency, such as the Cost Efficiency Index and Schedule Execution Index, which provide critically important data regarding the execution process of our chosen project. Using CEI and SEI, we can better estimate the costs, schedule and time of implementation of a particular investment project. At the same time, detailing by time (in our case, weeks) allows better control of the investment project implementation process. In our case, the Achievement of CEI 1.00 for week 8 is positive, demonstrating that the project is managed with high financial discipline. This achievement increases the confidence of the stakeholders and creates a solid foundation for the successful completion of the project.

DISCUSSION

In comparison with other studies in the context of discussion of own results, for example, we note that Ehmann et al. (2023) and Mačiulytė-Šniukienė (2018) illustrate how the effectiveness of performance management can be evaluated when working on various projects, including investment ones. We propose specific areas for assessing socioeconomic performance and emphasise the importance of flexible management for project success. When they do not emphasise socioeconomic efficiency, Mohamed K. and Ahmed R. (2023) and We et al. (2024) also assess the socioeconomic component of investing in human capital development, but the lack of even a risk register makes their results less comprehensive than ours. Investments are always risks. Therefore, it is necessary to carefully evaluate and identify all possible risks for the project you are evaluating.

Another example is Zakharova & Kratt (2014), who offer insights into the redistribution of human potential and its impact on capital formation but do not focus on specific projects. In contrast, we practically apply the EVM method to a specific project.

Social-economic factors influencing this and flexibility itself are presented by Bilan et al. (2017), which makes their study highly significant; however, their approach was based on personal judgment without consideration of risk assessment and only superficial factors. That is, their results are only based on their own judgments. Čadil (2014) and Sushil (2016) suggest evaluating investments in human capital development using a structural approach but also ignore risk assessment and specific examples of investment projects. We, in turn, present the author's vision of the registration matrix of these risks. In general, most of the work focuses on the evaluation or directly of the management system through certain indicators or takes management of all projects as a whole, i.e., generalised. It should be noted that practically all the scientific-practical works reviewed in this article emphasise the critical role of human capital development and effective management practices in achieving organisational and economic goals. It can even be asserted that combining the practical application of the EVM method with theoretical models and risk assessments from other studies could lead to a more comprehensive

methodology. It requires a high level of organisation, responsibility and interaction from the team, as well as appropriate evaluation. Compared with the results of other studies, it should be noted that the key advantage in our case is the application of the methodology specifically to a specific investment project with specific goals, timeframes and investment volumes.

CONCLUSIONS

The analysis of the data carried out in the article made it possible to identify trends and ways to improve, identify potential risks and provide the team with a basis for making changes. We evaluated not only the economic component but also the social aspect (the ability to control and monitor the human factor and the risks associated with the socioeconomic component of flexible management). The presented risk register matrix will improve the team's ability to analyse their work and calculate possible future problems. It is an integral part of the process of continuous improvement of the project, which allows us to evaluate the effectiveness of flexible management and work with risks, challenges and changes. Summarising the results, it should be noted that the calculation of CEI and SEI showed that in the first weeks, typically, no value was earned relative to the costs incurred. However, since the sixth week, the project has solved the problems that caused the decline in the previous week. Cost efficiency is restored to match previous performance levels. Then, starting from the seventh week of the project, the actual costs are gradually transformed into the earned value. Finally, an achievement of 1 means that the project is exactly on budget.

Limitations and Prospects for Further Research

Unfortunately, within the framework of our article, there was no physical opportunity to evaluate the approach for several investment projects. The limitation of the method used is that it is very dependent on the management system at the enterprise. So, regarding limitations, it should be emphasised that the practical application of this study was limited to only one project. This means that the obtained results may not fully reflect the diversity and complexity of other projects investing in human capital development, which may have unique features and requirements. Limiting the sample to one project may affect the overall generalizability of the conclusions and their applicability in a broader context. Also, it should be noted that the analysis of the security aspects of project implementation was not included in the current study, leaving unexamined potential risks and threats that may affect the success and sustainability of the projects. Further research should be dedicated to assessing the security aspect of project implementation when investing in human capital development.

ADDITIONAL INFORMATION

AUTHOR CONTRIBUTIONS

All authors have contributed equally.

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CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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СОЦІАЛЬНО-ЕКОНОМІЧНА ЕФЕКТИВНІСТЬ ГНУЧКОГО УПРАВЛІННЯ ПРОЄКТАМИ ІНВЕСТИВАННЯ В РОЗВИТОК ЛЮДСЬКОГО КАПІТАЛУ

Сучасні проекти інвестування в розвиток людського капіталу вкрай різноманітні й відзначаються рівнем складності або ж обсягом завдань і робіт, які слід провести й попередньо, і безпосередньо під час цього процесу. Відтак, виникає потреба у виборі правильного методу управління цими проблемами. При цьому вибір залежить від результатів оцінювання їх ефективності, в тому числі соціально-економічної. Таким чином, мета дослідження – проведення оцінки ефективності гнучкого управління проектами, що стосуються інвестицій у розвиток людського капіталу. Предмет дослідження – проекти інвестування в розвиток людського капіталу. Завдання – представити підхід до оцінки соціально-економічної ефективності гнучкого управління такими проектами. Ключовий метод – моделювання вибору найбільш оптимальної форми гнучкого управління проектом інвестування в розвиток людського капіталу. Для наочної оцінки було відібрано реальний проект інвестування в розвиток людського капіталу. Визначено відповідні зони для оцінювання соціально-економічної ефективності. Запропоновано здійснювати оцінювання соціально-економічної ефективності гнучкого управління саме на базі цих зон: якість, бюджет, час для виконання поставлених завдань, ризику й здоров'я команди, що залучена до проекту інвестування в розвиток людського капіталу. Отож,

результатом дослідження є вдосконалена методика оцінювання соціально-економічної ефективності гнучкого управління за допомогою методу EVM на основі критеріїв якості, бюджету, часу, ризиків та здоров'я команди. Щодо обмежень слід наголосити, що практичне застосування відбулося в межах лише одного проєкту. Подальші дослідження слід присвятити тому, щоб оцінити й безпековий аспект реалізації проєктів інвестування в розвиток людського капіталу.

Ключові слова: моделювання, метод EVM, людський капітал, інвестування, гнучке управління, оцінювання, соціально-економічна ефективність

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