

Project Management for Ensuring Sustainable Development of the Socio-Economic System: a Case of Integral Assessment

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Abstract: The relevance of intellectualization of the management project of managing the socio-economic system within the framework of sustainable development is determined by the modern orientation towards the transition to a post-industrial society, as well as changes occurring in the labor market. The purpose of the study is to contribute to the achievement of personnel security by ensuring the sustainable development of intellectualization of project management of the socio-economic system. Intellectualization of project management is, of course, fundamentally new management methods that are clearly innovative in nature, where the key concept is human potential and the efficiency of its use. The object of the study is the system of sustainable development of socio-economic systems, for example enterprises. The scientific task is to model the achievement of personnel security by ensuring the sustainable development of intellectualization of the project management of the socio-economic system. The research methodology involves the use of integral assessment and program modeling methods. As a result, the basic model for achieving personnel security through ensuring sustainable development of intellectualization of project management of the socio-economic system (enterprises) is presented. The study is limited to taking into account only one type of security (personnel security) and only one type of socio-economic systems (enterprises). Prospects for future research will include taking these aspects into account.

Keywords: Sustainable Development, Project Management, Security, Socio-Economic System, Management, Intellectualization, Sustainability.

1. INTRODUCTION

Intellectualization of project management should be aimed not only at employees as an object of management, but also in general to ensure the sustainable development of socio-economic systems, that is, it should also be carried out in relation to managers of all levels as subjects of management. The importance of involving in the implementation of tactical and strategic goals for employees with high intelligence, providing the ability to process significant amounts of information and generate new knowledge that becomes the basis for the creation of innovative products, becomes no less relevant during military operations. The imbalance in the labor market creates both threats in the form of a significant number of refugees and internally displaced persons, and additional opportunities in the form of hiring highly qualified

workers, who in the post-war period will become the basis for the formation of new competitive advantages.

For sustainable development, intellectualization of project management can be considered borrowed, in particular, in psychology, it is understood as the processes associated with the strengthening of human intellectual activity, the development of intelligence through the expansion of cognitive abilities, and the increase in the efficiency of the use of intellectual resources. Although intellectualization of project management has become relevant in personnel security only over the past three decades, in particular in the context of the theoretical substantiation of the essence of the economic development of the leading countries based on the increasingly active use of information and knowledge as the latest unlimited resources, the theoretical foundations for its application were laid earlier.

Today, the increasingly active use of the term "intellectualization" is due to at least two circumstances in the framework of sustainable development: the opportunity to gain competitive advantages due to the supply of innovative

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products on the market, the creation of which requires the activation of intellectual work; information and knowledge contribute to more efficient use of limited natural resources, forming the basis for the sustainable development of mankind. Already from the content of these two circumstances follows the relevance of considering intellectualization, in particular regarding the management of socio-economic systems, which should help improve its competitiveness against the backdrop of strengthening globalization processes, when most of the boundaries of domestic markets are blurred, and a more rational use of natural resources for the continuation of the existence of mankind in favorable conditions.

It has been established that intellectualization of project management for sustainable development should be carried out on the basis of grouping (stratification) of enterprise employees with identification and tracking of the level and change of their intelligence in order to apply incentive measures and more efficient use. Because enterprises are one of the key types of socio-economic systems and experience a number of problems with the intellectualization of project management of sustainable development.

As part of our study, we will consider the issues raised through one of the types of socio-economic systems, namely enterprises.

The main purpose of the article is to promote the achievement of personnel security by ensuring the sustainable development of the intellectualization of the project management of the socio-economic system. The object of research is the system of sustainable development of socio-economic systems, such as enterprises.

2. LITERATURE REVIEW

As noted in the scientific literature (Sylkin, et.al., 2018; Awan, et.al., 2019), the concept of intellectualization within the framework of the sustainable development of mankind is primarily determined by the content of the term "intelligence", which is ambiguous through the deep historical roots of the study and a wide scope of application. The basis of the modern understanding of the term "intelligence" is the Latin word intellectual, translated as "mind", "cognition", "mental activity", "or creativity". In the current conditions, intelligence in a general sense is perceived as certain mental abilities that allow you to know the world around you through learning, abstract thinking, analysis, synthesis, gaining experience, self-improvement, and solving actual problems, being the initiator of creative development to maintain vitality and development. The intellect is inextricably linked with a person and creates the necessary basis for his activity, that is, the realization of existing abilities to achieve personal and social interests.

Other literary sources (Zachepa et.al., 2019; Salih, et.al., 2023) point out the fact that intellectualization of project management for sustainable development of mankind must be perceived as a dynamic, constantly active process of obtaining new knowledge by an individual for their further use in improving their socio-economic situation, including as a participant in the labor market. The increasing use of robots and the focus on automating a significant number of technological processes in the industry is changing the criteria for

applicants for jobs, among which dominate: the presence of special knowledge, skills, the ability to learn, and constant work to improve one's own qualification level.

In the scientific and practical literature (Shareah, et.al., 2022; Shtangret, 2019), it is considered appropriate to focus on such important points: today there are all three types of society, but the pace of sustainable development for them is different; information and knowledge were also used in the first two types, but only in a post-industrial society do they become the main production resources; the opinion is erroneous that an increase in the amount of computer technology makes it possible to move to a post-industrial society, because it only contributes to the receipt, processing, and storage of information, and knowledge is generated by a person; a person with his personal intelligence becomes the driving force for sustainable progress.

The literature (Podra et.al., 2020; Berest, et.al., 2020) also describes the fact that the intellectualization of project management of sustainable development is considered on a large scale, that is, not only in relation to the individual but also to society as a whole. From this perspective, it is said: the mastery of a significant part of the population with the knowledge that allows the use of products of scientific and technological progress; the tendency to gain access to information using information and communication technologies, which contributes to the generation of new knowledge; the ability to adapt to the current conditions of existence within a society that is acquiring signs of an information society.

We partially agree with the authors, however, in our opinion, it is critically wrong that new methodological approaches to the processes of intellectualization of project management of sustainable development are not proposed.

The content of the intellectualization of project management can also be traced from the perspective of the stages of sustainable development of the world economy. The first stage - pre-industrial society, was characterized by a person's orientation to obtaining the resources necessary to maintain life through labor-intensive land cultivation and a significant dependence on the environment. The transition to an industrial society became possible as a result of the industrial revolution when hard work began to be done with the help of machines, the maintenance and improvement of which required new, deeper knowledge from workers (Bazyliuk, et.al., 2019; Lakiza, et.al., 2023).

Critically evaluating the literature, we can come to the conclusion that stages and visualization are important for the intellectualization of project management of socio-economic systems. This is rare in the literature, which is a big omission.

In general, it is rightly noted in the literature that the post-industrial society is fundamentally different in the role of a person who, based on the ability to process significant amounts of information, generates new knowledge that allows one to better meet the needs of each member of society in compliance with the principles of sustainable development. This is due to structural changes in the social division of labor, when there is a reduction in the share of the agricultural and industrial sectors and the growth of the information sphere. The decrease in the need for physical labor is accom-

panied by technological unemployment and interest in specialists with high intelligence and the ability to make independent, non-standard and creative decisions.

Based on the results of the literature review, the following gaps in the existing scientific research on this topic can be identified (Fig. 1).

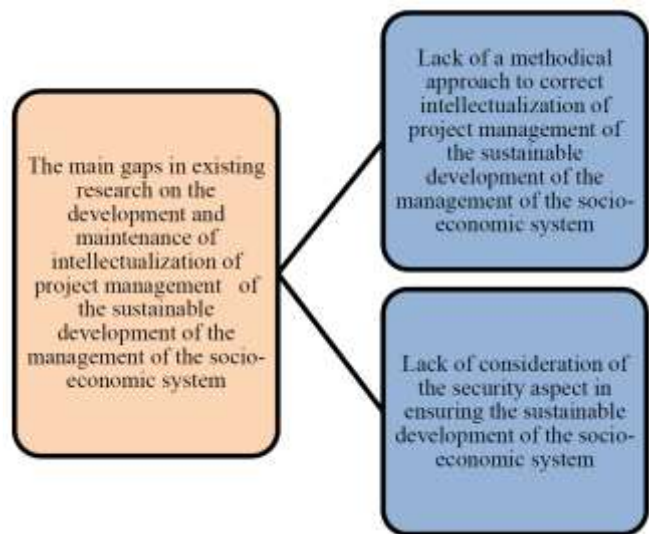


Fig. (1). The main gaps in existing research on the development and maintenance of intellectualization of project management of the sustainable development of the socio-economic system (developed by the authors).

The scientific task is to calculate the dependence of the sustainable development of the enterprise on the effectiveness of personnel security and model the achievement of personnel security by ensuring the sustainable development of the intellectualization of project management of the socio-economic system.

3. METHODOLOGY

Consideration of the achievement of personnel security through ensuring the sustainable development of intellectualization of project management was carried out using the following methods: induction and deduction, comparison and systematization; synthesis and analysis; morphological analysis; graphic - for clarity of presentation of the results of the study; abstract-logical - for the formation of theoretical generalizations and conclusions of the study.

The methods of induction and deduction were applied within the framework of characterizing the essence of intellectualization and its impact on ensuring the sustainable development of system management.

As part of the study, analytical materials from a number of institutions were summarized, which made it possible to clarify the content of the sustainable development of intellectualization of project management. The combination of theoretical developments with analytical materials made it possible to obtain a holistic view of the content of the intellectualization of project management of enterprise management and prove its key importance in the pre-war, war, and post-war period based on the importance of intellectualization of pro-

ject management in modern conditions of sustainable development of mankind.

Another method that was used in the context of our study is the integral assessment method. This method was used to correctly form subsequent models of the process of sustainable development of enterprise intellectualization of project management. The algorithm for implementing this method is shown in Fig. (2).

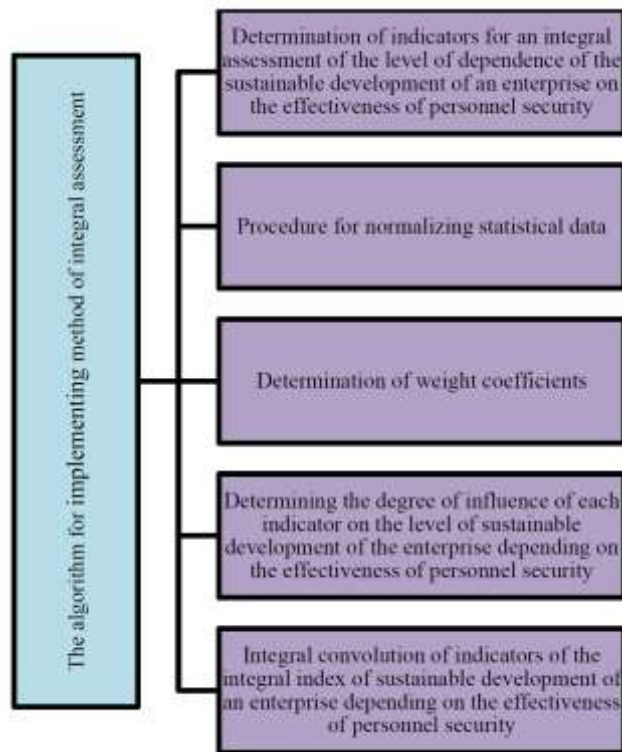


Fig. (2). The algorithm for implementing method of integral assessment (developed by the authors).

Thus, by using this methodology through many indicators, the level of dependence of the sustainable development of the enterprise on the effectiveness of personnel security will be calculated.

The first stage involves determining a variety of indicators that most fully reveal the characteristics of the dependence of the sustainable development of an enterprise on the effectiveness of personnel security. The criterion for selecting these indicators is those characteristics that can be assessed using formalized or numerical values. When forming a system of indicators to calculate the level of dependence of the sustainable development of an enterprise on the effectiveness of personnel security, we will be guided by the following principles:

- systematicity, that is, taking into account not only the system of personnel security elements under study, but also the relationships between it and the external environment;
- complexity, that is, the maximum combination of diverse aspects of the state of the level of personnel security;
- adequacy, which implies reflection of the real state of the processes being studied;

– continuity, which involves adjusting existing indicators or, if necessary, adding new ones;

A variety of indicators for calculating the level of dependence of the sustainable development of an enterprise on the effectiveness of personnel security, based on the above principles, are presented in Table 1.

Table 1. The main indicators for calculating the level of dependence of the sustainable development of an enterprise on the effectiveness of personnel security (developed by the authors).

№	The name of the Indicator	Indicator Type
1	Cases of ignoring threats in the system of ensuring sustainable development of an enterprise	Destimulator
2	Coefficient of coverage by the management system of the need for sustainable development of the enterprise	Stimulator
3	Personnel security level index	Stimulator
4	Proportion of disengaged personnel involved in the sustainability system	Destimulator
5	Share of income aimed at ensuring sustainable development of the enterprise	Stimulator
6	Share of crisis events in the sustainable development system	Destimulator

To better understand the process of analysis and further implementation of models, let's take the system for ensuring sustainable development at the «Ecoveist» enterprise, which operates in Bulgaria. The initial data for further calculations are presented in table 2, containing six main indicators that determine the level of dependence of the sustainable development of the «Ecoveist» enterprise on the effectiveness of personnel security.

Table 2. Dynamics of the main indicators that determine the level of dependence of the sustainable development of the «Ecoveist» enterprise on the effectiveness of personnel security (developed by the authors).

Year	Cases of ignoring threats in the system of ensuring sustainable development of an enterprise, %	Coefficient of coverage by the management system of the need for sustainable development of the enterprise, %	Personnel security level index, % to previous year	Proportion of disengaged personnel involved in the sustainability system, %	Share of income aimed at ensuring sustainable development of the enterprise, %	Share of crisis events in the sustainable development system, %
2018	68,9	1,02	87,	25,63	58,1	41,9
2019	104,6	0,93	104,0	25,67	55,8	44,2
2020	126,4	0,87	101,1	25,63	52,3	47,7
2021	115,3	0,83	103,0	24,6	53,2	46,8
2022	106,3	0,82	99,5	24,76	52,4	47,6

Data collection was carried out through official sources and public data. The second stage of the algorithm for calculating the integral index of the level of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security provides for the procedure for standardizing indicators, that is, the transition to a measurement scale at which the values of the indicators acquire a commensurate form.

Note that the direction of influence of each indicator on the level of dependence of the sustainable development of the «Ecoveist» enterprise on the effectiveness of personnel security is determined through the identification of each indicator regarding its direct or inverse influence on the value of the integral index.

The direction vector of the characteristics of the dependence of the «Ecoveist» sustainable development on the effectiveness of personnel retention is presented in Table 1. For stimulating indicators, normalization is carried out by the maximum value, and for disincentive indicators - by the minimum, which ensures the continuity of the integral index function and compliance with the condition for changing the normalized indicators in the range from 0 to 1. In the event that some indicators of the dynamic statistical series are equal to zero or will be negative, we will shift the statistical axis by the appropriate number of scale units so to satisfied the inequality $x_i > 0$.

The next stage involves calculating weighting coefficients using specific statistical calculation programs that determine the level of dependence of the sustainable development of the «Ecoveist» enterprise on the effectiveness of personnel security. The use of the principal components method of a statistical calculation program allows the use of the quartimax rotation method, which involves rotating the factor axes in such a way as to increase the value of the factor loadings, taking into account the quality of the structure of all components. The last characteristic is important for the further use of the values of factor loadings and the share of each component in the total variance to determine the weights of the indicators.

Thus, we first find the vector matrix of variances D_i and the matrix of absolute values of factor loadings A_i (using axis rotation and quartimax normalization, which establishes simpler correlations between the corresponding variables and factors) for the formed group of indicators. Let us define the matrices A_i and D_i using the following formulas (1):

$$A_i = \begin{pmatrix} a_{11} & a_{12} & \dots & a_{1j} \\ a_{21} & a_{22} & \dots & a_{2j} \\ \dots & \dots & \dots & \dots \\ a_{j1} & a_{j1} & \dots & a_{jj} \end{pmatrix}, D = \begin{pmatrix} d_1 \\ d_2 \\ \dots \\ d_j \end{pmatrix} \quad (1)$$

$i = 1, 2, \dots, 6; j = 2, 3, \dots, 11$

Where a_{ij} are the absolute values of the matrix elements after axis rotation and quartimax normalization; d_j – dispersion value determined by the formula (2):

$$d_j = M(x_j^2) - M(x_j)^2, M - \text{mathematical modeling} \quad (2)$$

To find the weight of each factor of the corresponding group, we calculate (3):

$$A_i \times D_i = \begin{pmatrix} d_1 a_{11} + d_2 a_{12} + \dots + d_j a_{1j} \\ d_1 a_{21} + d_2 a_{22} + \dots + d_j a_{2j} \\ \dots \\ d_1 a_{j1} + d_2 a_{j2} + \dots + d_j a_{jj} \end{pmatrix} = \begin{pmatrix} \alpha_1 \\ \alpha_2 \\ \dots \\ \alpha_j \end{pmatrix} \quad (3)$$

Next, we will form a matrix of weights for the indicators of each factor (4):

$$Y_i^{(1)} := k Y_i, k = (\sum_j \alpha_j)^{-1} \quad (4)$$

Further calculations of the indicators we have formed according to these formulas will be made in the following sections of the study.

4. RESULTS OF RESEARCH

Having carried out calculations in accordance with the formulas presented in the methodology section, we will determine the value of the weighting coefficients (Table 3).

Table 3. Matrix of SWOT analysis (developed by the authors).

№	The name of the Indicator	Weighting Coefficient Value
1	Cases of ignoring threats in the system of ensuring sustainable development of an enterprise	0,1664
2	Coefficient of coverage by the management system of the need for sustainable development of the enterprise	0,1295
3	Personnel security level index	0,2096
4	Proportion of disengaged personnel involved in the sustainability system	0,0743
5	Share of income aimed at ensuring sustainable development of the enterprise	0,0981
6	Share of crisis events in the sustainable development system	0,1043

Analysis of the weight coefficients indicates the dominance of such indicators as «Personnel security level index» (0,2096) and «Coefficient of coverage by the management system of the need for sustainable development of the enterprise» (0,1295) in the integral level index dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security.

The smallest share in the calculated index is made up of indicators «Share of income aimed at ensuring sustainable development of the enterprise» (0,0981) and «Proportion of disengaged personnel involved in the sustainability system» (0,0743).

The next stage involves determining the scalar values of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security (4):

$$I = \prod_{j=1}^n z_j^{\alpha_j}, \sum_j \alpha_j = 1 \quad (4)$$

$$\alpha_j > 0 \quad n \in N$$

The calculated values of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security are in Table 4.

Table 4. Integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security (developed by the authors).

The Name of the Index	Year				
	2018	2019	2020	2021	2022
Integral index of dependence of the sustainable development of an enterprise on the effectiveness of personnel security	0,9642	0,9147	0,8712	0,8827	0,8808

A graphical representation of the of Integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security in Fig. (3).

Now we carry out an integral convolution for indicators of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security based on the calculation of the dynamic series of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security and integral indices of threshold values in multiplicative form.

As can be seen from the Fig. (3), the level of sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security based is quite high, although minor positive trends have emerge.

Negative trends identified when calculating the above integral index indicate the need for changes in the system of sustainable development of the «Ecoveist» enterprise. Moreover, we are talking not only about the «Ecoveist» enterprise we have chosen. Most businesses face similar problems every day. Therefore, in our opinion, the best solution in this case is the introduction of new models of the process of sustainable development of enterprise intellectualization of project management.

Our attention was focused on two levels of intellectualization, including society and enterprise management, when a generalization was made in relation to others based on related parameters and a general idea of the content of this process (Fig. 4). Our understanding is based on the priority of using the intellect of the individual to solve the tasks assigned to it, while concretizing the importance of stimulating the intellectual activity of the employees of the enterprise, in particular its management for ensuring sustainable development.

Intellectual potential and intellectual capital are associated with intellectual resources, which in the field of enterprise management can be considered knowledge, information, and resources. These resources, when given proper attention, are characterized by growth, increase in value, and improvement. The effective implementation of these resources must

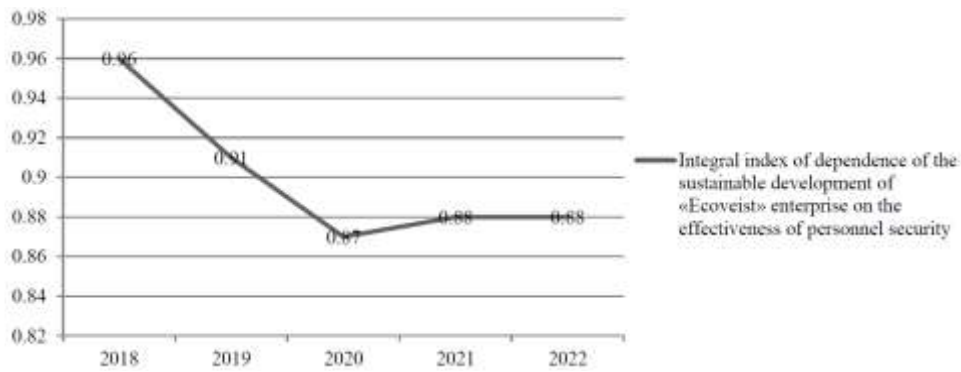


Fig. (3). Dynamics of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security (developed by the authors).

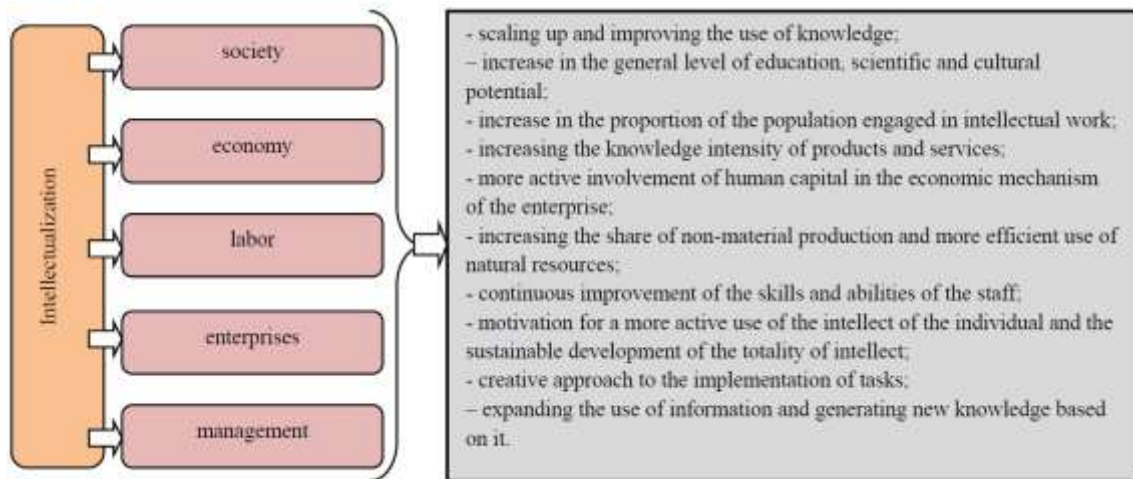


Fig. (4). The theoretical basis for determining the essence of the term "intellectualization" at different levels of sustainable development (developed by the authors).

ensure the fulfillment of the tasks assigned to the company's management system (Fig. 5).

It is also necessary to single out one more perspective for solving the fundamental difficulty of intellectualizing the company's project management, taking a systematic approach as a basis (Fig. 6).

The control subsystem continuously influences the controlled subsystem based on the information received about the change in the enterprise's activities through the development and adoption of management decisions. The effectiveness of the impact for sustainable development depends on:

- the intellectual activity of the subjects of management (control subsystem), their creative approach, the availability of new ideas, the ability to assess the situation and develop alternative solutions;
- the intellectual activity of control objects (controlled subsystem) for the efficient use of available resources to achieve the interests of the enterprise;
- objectivity in assessing the personal intellectual characteristics of all participants in the system;
- the results of the search for reserves of intellectualization and the effectiveness of the implementation of measures aimed at increasing personal and organizational intelligence;

- the ability of the control subsystem to activate the intellectual activity of the controlled subsystem through the motivation system;

- the availability of the necessary resources for the implementation of management actions.

In our understanding, intellectualization of project management within the framework of sustainable development should refer to both managed and managing subsystems. Only under this condition is synchronism achieved in the growth of the intellectual characteristics of all participants in the interaction. It is a mistake to think that only subordinates need training, and that the leader, through his experience and intuition, is able to solve any problem. The modern environment is rapidly changing within the framework of sustainable development, the level of uncertainty is critically high and knowledge is rapidly aging, and their renewal requires self-education, regardless of position. For a leader, the stimulating factor should be the need to match his position through a systematic increase in professional and general educational knowledge, increased competence in all key issues, the ability to adapt and be creative in solving problems.

Summing up intermediate conclusions, it can be argued that ensuring sustainable development through the intellectualization of project management of enterprise management

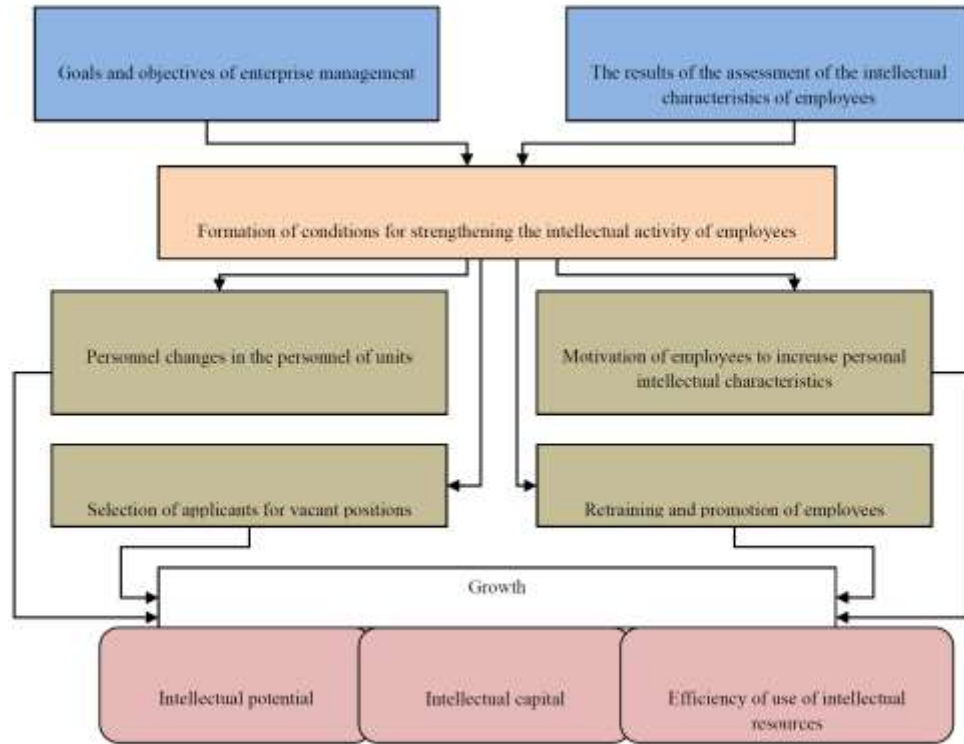


Fig. (5). Model of the process of sustainable development of enterprise intellectualization of project management (developed by the authors).

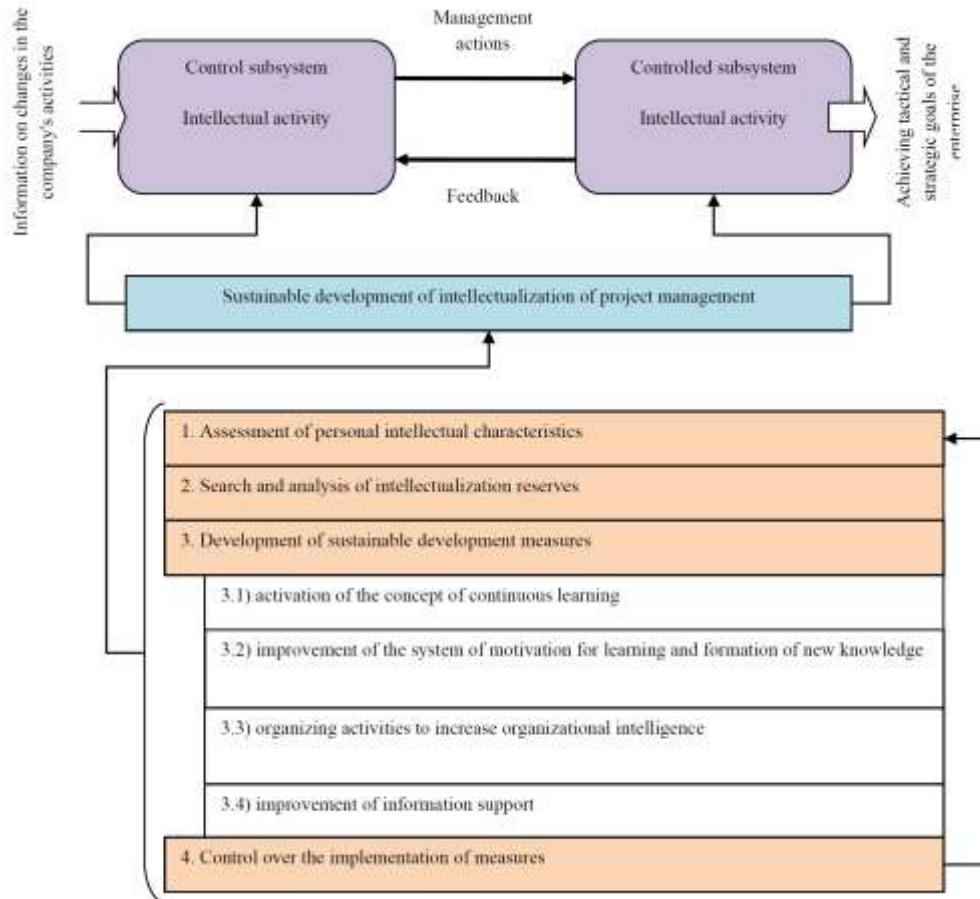


Fig. (6). The model program of intellectualization of project management within the framework of sustainable development (developed by the authors).

involves focusing on the implementation of intellectual potential through the available intellectual resources for the formation of intellectual capital. Intellectualization for sustainable development should include a focus on the development of human resources, the generation of new knowledge and the effective use of information. In accordance with this position, attention should be focused on the issue of intellectual stratification of the employees of the enterprise.

It should be noted that within the framework of the article's stated goal, the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security was calculated, and the dynamics of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security were also formed; the model of program of intellectualization of project management within the framework of sustainable development was formed; model of the process of sustainable development of enterprise of project management intellectualization.

5. DISCUSSIONS

When discussing the results of the study, one should compare them with similar ones. So, for example, other scientists (Halkiv, et.al., 2022; Guk, et.al., 2022), in the context of working on a new paradigm, substantiated that intellectualization of project management within the framework of sustainable development consists not only in focusing on the creation of innovative products but also in the application of methods, functions, technologies, mechanisms in the interaction between the control and managed systems. which are based on a creative approach; the ability to generalize information, generate new knowledge and apply it to achieve common interests; the transition from a template solution to current problems to the development and implementation of atypical solutions in accordance with the experience gained, the knowledge gained and the combination of factors for the development of an enterprise as a system; prioritizing the growth of professional and general educational knowledge of each participant in the relationship

Another group of scientists (Melnyk, et.al., 2023; Nikonenko, et.al., 2021) noted that today in scientific circles there is a discussion not only about the interpretation of the intellectual potential but also about its structure. One of the most common positions involves the allocation of the following components: "... personnel, scientific, logistical, socio-informational and organizational." Without denying the importance of other components, we believe that the most valuable is personnel, the level of which is determined by the personal intellectual characteristics of employees, that is, their knowledge, competence, qualifications, skills, abilities, and motivation for sustainable development.

Discussing the ideas of other scientists (Chornenka, et.al., 2021; Azzam, 2019), it should be noted that the idea of most scientists is to divide the employees of the enterprise into groups, i.e. (requires new knowledge, experience, characterized by an increase in the share of intellectual work) and "elite" (requires a creative approach to the implementation of

complex and new tasks, consists in working with significant amounts of information, involves a systematic increase in knowledge, the presence of a desire for self-improvement). It is advisable to agree with this approach and consider its application in the process of ensuring the sustainable development of the intellectualization of enterprise management from two perspectives: first, for grouping employees; secondly, to develop measures to change the actual structure in favor of one that would ensure the fulfillment of the tasks set, in particular from the perspective of strengthening competitive advantages.

So, the well-known position of various scientists (Nahoma, et.al., 2023; Yong, et.al., 2019), which corresponds to the resource approach, on understanding the intellectual potential as an opportunity to create, accumulate, and use the abilities, skills, and experience of the organization's personnel. It can be argued that such an approach is appropriate in application in the management of an enterprise since it involves purposeful activities to form and maintain the necessary level of intellectual potential of the enterprise's employees to fulfill their tasks. A certain disadvantage of this approach is that attention is focused exclusively on the resources available to the enterprise (personnel, logistics, intangible assets, etc.). We believe that in relation to sustainable development, it is advisable to talk about the possibility and efficiency of the use of resources that form the basis of the intellectual potential of an enterprise. In turn, another approach - effective - involves a focus on achieving certain goals, that is, in the management of an enterprise in today's realities, these should be: achieving sustainability and stability, maintaining balance, and obtaining a certain level of profit (Garzia, et.al., 2018; Saleh, et.al., 2020).

Discussed the obtained results of the study, it should be noted that we presented innovation within the framework of the following models: a model program for the intellectualization of project management; a model of the process of sustainable development of management intellectualization. Also the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security was calculated, and the dynamics of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security were also formed. This method was used to correctly form the model and the integral assessment method was chosen.

The results of the structuring of employees (their division into groups according to the level of intelligence ("ordinary", "extraordinary" and "elite")), the implementation of organizational changes, and the use of motivators can be defined as follows: the growth of personal intellectual characteristics and organizational knowledge, an increase in intellectual potential and intellectual capital, strengthening the interaction between all departments and more efficient use of intellectual resources, which together should contribute to the growth of intellectualization of project management of enterprise management.

The implications of our research are their potential practical value for the leaders of such socio-economic systems as en-

terprises seeking to change their own sustainable development strategy and bring intellectualization of project management into it.

The results obtained by us improve knowledge in the field of sustainable development through the proposed methodological approach to modeling and introducing elements of intellectualization of project management and security into the sustainable development system.

6. CONCLUSIONS

Summing up, it should be noted that the intellectual activity of the individual within the framework of sustainable development should include the possibility and ability to use the acquired experience, knowledge, skills, and abilities to perform current tasks and the ability to develop, improve, increase the intellectual potential in accordance with the need to be prepared for atypical situations that are new and need some creativity.

Also in conclusion, we note that the intellectualization of project management of such a socio-economic system as an enterprise in the context of sustainable development should be aimed at improving the level of creativity in solving atypical problems; raising the qualification level of the management staff; maintaining the activity of each employee for self-improvement, in particular in terms of professional and digital competencies; development of vertical and horizontal communication skills for the integration and better use of human resources; more complete use of information to generate knowledge with their subsequent formalization.

The intellectualization of project management of enterprise management was relevant before the war and will be important after the war through the ability to form a team of specialists capable of creating competitive advantages based on the generation of new knowledge and the production of innovative products. During the war, the intellectualization of management should be aimed at preserving workers with extraordinary and elite intelligence by creating safe working conditions for them and improving motivation; searching in the labor market in conditions of high unemployment for applicants with elite intelligence to strengthen the competitive position of the enterprise in the medium and long term.

As a result, the main model for achieving personnel security through ensuring the sustainable development of intellectualization of project management of the socio-economic system (enterprises) is presented. The study is limited by taking into account only one type of security (personnel security) and only one type of socio-economic system (enterprise). Prospects for further research will include taking into account these aspects.

In general, in summary, two key models can be distinguished that laid the foundation for fulfilling the stated purpose of the article: The model program of intellectualization of project management within the framework of sustainable development. Also the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security was calculated, and the dynamics of the integral index of dependence of the sustainable development of «Ecoveist» enterprise on the effectiveness of personnel security were also formed.

The proposed methodological approach of modeling the intellectualization of management in the system of sustainable development of socio-economic systems contributes to the advancement of knowledge. For the correct formation of the model, the integral assessment method was chosen.

There were also limitations to the study. The models were saturated with information, but not all aspects of managing the socio-economic system were taken into account. For example, the planning system. We recommend to further develop aspects of intellectualization of project management and provide opportunities for its implementation not only at the stage of direct provision of sustainable development, but also at the stage of its planning. In our opinion, it is necessary to constantly call on the leaders of such socio-economic systems as enterprises to take action to ensure sustainable development and security, not to ignore threats and constantly plan and model.

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