

THE SYSTEM OF ANALYTICAL TOOLS OF INTEGRATED MANAGERIAL ANALYSIS FOR THE ACTIVATION STRATEGY OF THE ENTERPRISE INNOVATIVE-INVESTMENT DEVELOPMENT

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In work questions of development the management tools for the strategy of activating the innovation and investment development of the enterprise on the basis of functional and competency principles are considered. The methodological approaches to the strategy of innovative and investment development of industrial enterprises, in particular, its budgetary basis and methodological basis of the managerial analysis of the innovative and investment activity of the enterprise, are substantiated. This proved that the strategy of activation of innovative and investment development is part of the strategic development of the entire process of industrial enterprise development, which is characterized by a functional outline and tools. In particular, the management analysis of innovation and investment activity of the enterprise systematically uses traditional and new methods of financial and economic calculations (investment, marketing and financial and investment analysis) and considers the efficiency criteria for activating innovation and investment development around the four poles of strategic management (internal coordination mechanism, procedures incentive system, information system, decision-making structure). Results of research can be used for acceptance of justified managerial decisions of innovative development of enterprises, administrative control of functioning of the organisation.

Key words: competencies, administration, innovation and investment development, securities portfolio, structural content, professional competence, investment, investment activity, innovative activity, activation, model of maximization of profit, the model of risk minimization.

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1 Problem setting

There are many different components of difficult and purposeful process, such as transformational period in Ukraine economy, constant process of structural reconstruction of economy, the condition of dynamic and turbulent nature of genesis of competitive market sphere. These process dictate necessity of innovative way of domestic enterprises regeneration, promotes an economical and social development of the country. Modern Ukraine economy requires radical structural changes at the expense of formation and implementation of innovative model of enterprises development.

The high level of economic development, as shown by the experience of the industrialized countries of the world, is provided by a number of conditions, the main of which is the accumulated scientific and technical, industrial, investment potential, institutional factors of technological progress, and state support for innovative transformations. Economic deformations are convinced of the expediency of activating and increasing the effectiveness of the investment and investment processes in the industry and minimizing the influence of the factors that are decomposing them. Significant influence on innovation and investment activity, ensuring of leading positions, competitiveness in industry has the power of its innovative

potential. Under such conditions, the substantiation of the theoretical foundations and practical measures for the development of domestic production through the formation and realization of its innovative potential on a competent basis becomes of special significance¹.

2 Recent publications analysis

Analysis of research and recent publications that discuss this perspective suggests that the economic literature in recent years, the attention paid to the organization of enterprise management system, cost management, the financial structure of the company. Research of innovation potential production, its structure and methods for evaluation, innovation investment into enterprises development was conducted in the studies by foreign and domestic scientists: I.Blank, M.Bondar, I.Boyarko, L.Hrytsenko, V.Grinoва, E.Dobrovolsky, N.Ilysheva, S.Krylov, V.Koyuda, B.Mizyuk, D.Pierce, V.Prihodko, O.Suharev, F.Fabozy, S.Filyppova, N.Hrusch, A.Yakovlyev, O.Yastremskaya and others. Analysis of the recent scientific materials indicates the results of comprehensive research on the development and implementation of the elements of innovation and investment mechanism, improvement of the investment climate, some economic and statistic calculations. However, some issues need to be more mainstream, is of interest to develop a conceptual approach to the formulation of the administrative management at the enterprise, or “How to make the administrative work”. A number of researches are devoted to problematic issues of attracting investors at an initial stage of implementation of the project. A considerable part of innovative projects are left without financing owing to the lack of confidence of the investor on timely return of financial means.

3 The goal of this work

The aim of the work consists of develop the management tools for the strategy of activating the innovation and investment development of the enterprise on the basis of functional and competency principles.

New tasks of strategy create new requirements of the company to the competencies and competencies of the staff. It is about strategic vision, statement of current tasks, development of strategic alternatives, strategic analysis, etc. The purpose of the work is to study the competence of the administration of the enterprise innovation and investment development in the coordinates of sustainable development, in particular: systematization of the totality of management personnel competencies as part of the innovation component, which should ensure the formation of directions of innovation activity, the definition of strategic innovation goals and innovative strategy of the enterprise; studying the process of forming a securities portfolio and managing them in accordance with the requirements of competence in terms of the procedures implementation of each of its stages; analysis of the structural content of professional competencies in administering the strategy process of innovation and investment development at industrial enterprises in terms of performing scheduling, forecasting, organizing, analyzing, controlling functions.

4 Key research findings

The strategy of activating innovation-investment development of an enterprise applies all the basic functions of management, including planning, forecasting, organization, motivation, control, according to certain administrative procedures.

However, the main process as an object of strategy is the activation of innovation and investment development, which is to accelerate the organization of innovation and investment activities at a distance and in time, which requires:

¹ EDVIN J. ELTON, MARTIN J. GRUBER (2014): Modern Portfolio Theory and Investment Analysis. 7-th Edition. USA: New York University, 2014.728 pages

- firstly, the formation of an effective organizational mechanism that defines the relationship between the objectives of the strategy and the means of their solution for the managerial staff of the enterprise in the process of innovation and investment development of the enterprise for a long time – the horizon, defined in its strategy;
- secondly, laying the stimulating (economic) and competent (knowledge) basis for both the strategy and the intensification of innovation and investment development in general;
- thirdly, the application of the administrative approach, the combination of the administration process and compliance control, since the strategy is related to the mandatory formalization of its procedures, which are new for management personnel².

Formation of an organizational mechanism that determines the relationship between the objectives of the strategy and the means of their solution for the managerial staff of the company in the process of innovation and investment development of the enterprise for a long time, in our opinion, it is advisable to implement through the organization of strategic management of innovation activities on the basis of Balanced Scorecard (LSS) and the results of applied strategic analysis. In essence, we are talking about the formation of an innovative component of a balanced system of indicators and the analysis of indicators included in it. Activation of the innovation and investment development of the enterprise will take place under conditions of acceleration of the innovation process. Therefore, the latter is also subject to strategy based on the recommended steps:

- the first: definition of the strategic goals of the innovation process;
- the second: construction of a strategic map of the innovation process;
- the third: the selection of indicators of the innovation process;
- the fourth: the definition of target (standard, planned) values of the indicators of the innovation process;
- fifth: development of strategic innovation measures³.

The first and fifth stages are sufficiently elucidated by the authors, so just add that the strategic goals of the innovation process are not independent and separated from each other. On the contrary, they are closely linked and affect one another. A balanced system of indicators involves the justification of causal relationships between individual strategic innovation goals. Formed causal relationships show the degree of functional dependencies between individual strategic innovation goals⁴.

Let's consider the second stage in detail, since intuitive representations of managerial staff on innovations about the existence of causal relationships between individual strategic goals of the innovation process over time are transformed into explicit and reflected clearly (documented) in the strategic maps of the innovation process, the model of which is shown in Fig. 1.

This example demonstrates that the strategic map of the innovation process determines the interrelation of the tasks of the strategy of the innovation process and the means of their solution for the managerial staff of the enterprise. It reflects the relationship between previously formulated strategic goals, which are largely universal for all types of enterprises.⁵

² MIZYUK, B. M. (2013): Competitive strategies of trading companies: [monograph] / B.M. Mizyuk, I.I. Tuchkovsky // Lviv: View of the Lviv Commercial Academy, 2013. 192 p.

³ FRANK J. FABOZZI, CFA (2008): Investment management / Frank J. Fabozzi. 2nd ed. USA, New Jersey 07458, 2008. 837 pages.

⁴ CASIDY, R. (2014): Linking Brand Orientation with Service Quality, Satisfaction, and Positive Word-of-Mouth: Evidence from the Higher Education Sector / R. Casidy // Journal of Nonprofit and Public Sector Marketing. 2014. № 26 (2). P. 142-161.

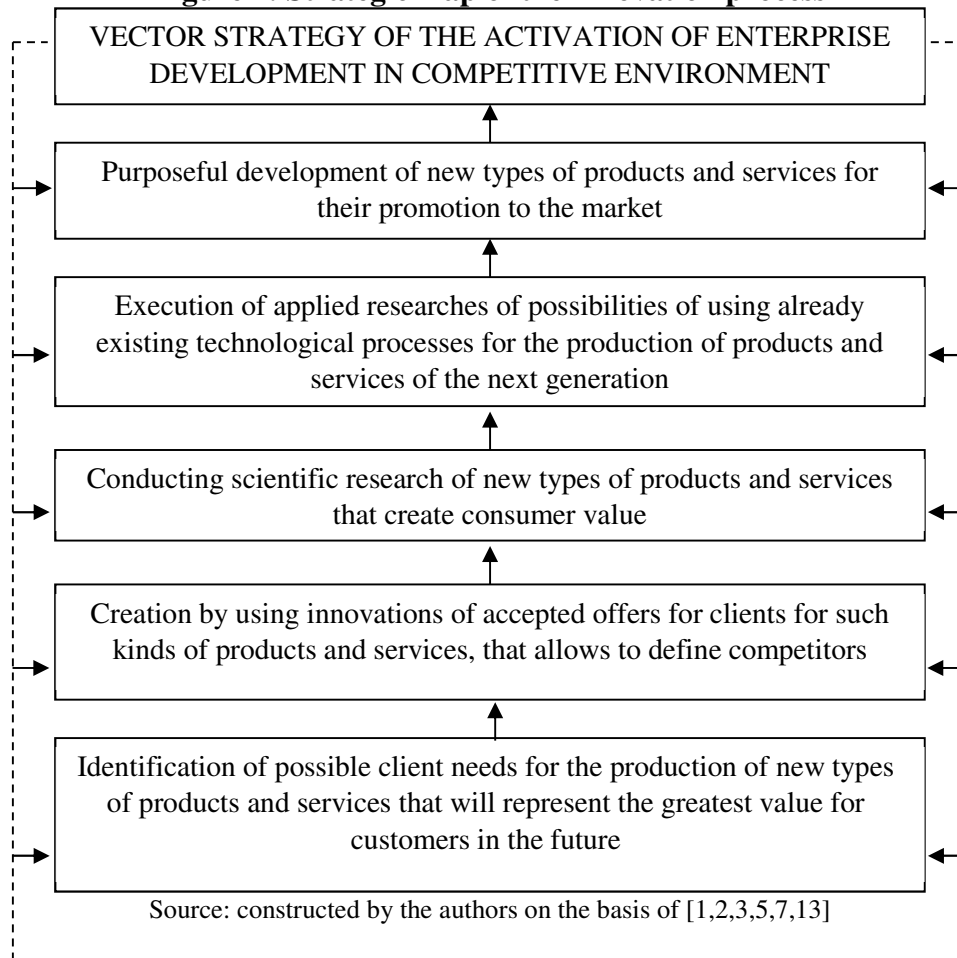
⁵ KARPENKO, L. N. (2015): Multi-index models and methodological base for innovative and investment analysis of enterprises / L.N.Karpenko // Institutional framework for the functioning of the economy in the context of transformation: Collection of scientific articles. Montreal, Canada, 2015. P. 287-292. ISBN 978-1-926711-20-8

The strategic map of the innovation process is a graphic document that reflects the causal relationships between the individual strategic goals of the enterprise's innovation process. In practice, a strategic map is constructed in the form of a flowchart, where the strategic goals of the innovation process are synthesized based on the results of causal relationships between them. The strategic map of the innovation process is one of the components of a strategic map of internal business processes and, accordingly, a common strategic map.

The significance of constructing strategic maps of the innovation process for the formation of the innovative component of the CSP is that they:

- reflect the nature and logical link between the individual strategic goals of the innovation process of an industrial enterprise;
- explain the commercial result of combining the strategic goals of the innovation process;
- justify separate strategic goals of the innovation process;
- promote the construction of an innovation strategy;
- explain the significance of managerial indicators of the innovation process;
- promote better understanding and better communication of the strategic goals of the innovation process of an industrial enterprise;
- promote the formation of favourable working conditions between the structural units involved in innovation;
- contribute to the process of modelling the successful innovation activity of an industrial enterprise.

Figure 1: Strategic map of the innovation process



The third and fourth stages of the strategy of the innovation process are related to the choice of its indicators and the definition of their target (benchmark, planned) values. Thus, the completion of the construction of the strategic map of the innovation process allows us to proceed to the selection of indicators of the innovative component of the balanced system, which are necessary for a clear and unambiguous expression of the content of its strategic objectives, determining the degree of their achievement.

The stimulating (economic) and competency (knowledge) basis for the strategy and activation of innovation and investment development in general are of a different nature. The economic basis forms the economic efficiency of innovation and investment development, which is measured by the relevant indicators and the competence base, has a knowledge-education, that is, intellectual nature. Common in them is: first, the administration process, and secondly, the overall result – to ensure acceleration of the innovation process and, ultimately, innovation and investment development of the enterprise.

Competence is a component of the intellectual resources of the enterprise, or rather of human capital. A certain set of capital of an enterprise is formed, which includes: patents, licenses, know-how, unique R&D and competencies. Specifics of the use of intellectual resources are revealed in the fact that their value is not depreciated, but increases, is capitalized (self-growth function). Therefore, they themselves have a strategic character.

As part of the continuous process strategy, the building of general or functional strategies becomes an intermediate stage and a document that constantly needs to be adjusted and is a mechanism for coordinating the efforts of all levels of management of innovation and investment development of the enterprise to give it new impetus for activation.

The components of the competence of the managerial staff involved in the strategy of activating the innovation and investment development of the enterprise are: a) qualification (professional level of training, which corresponds to certain types of work); b) creativity (ability to develop new technological, organizational and other decisions, their implementation in the course of their activity); c) flexibility (the ability to adapt to internal and external changes in the enterprise).

However, the new tasks of strategy require new requirements of the company to the competencies and competencies of the staff. It is about strategic vision, statement of current tasks, development of strategic alternatives, strategic analysis, etc. They have to provide the results of preliminary training in general and formulate typical tasks of professional activity. It is said that the results of the preliminary training form the basic level of competence of the managerial staff that will carry out the strategy at the enterprise, and the typical tasks of professional activity indicate additional competencies that can be divided into groups according to:

- innovative management on theoretical understanding and application of tools in the directions: innovation, innovation renewal, innovation activity, innovation process and its elements, innovation development, innovation activity, innovative solutions, innovation products, innovation cycle, functions of innovations, psychogenetic laws of innovation development, innovation , innovative, active and innovation-oriented enterprise;

- investment management on theoretical understanding and application of tools in the areas: investments, and their types of investment activity (its forms, objects and subject), investment, investor, participant in investment activity, investment market, investment cycle, investment cycle phases, investment process, investment complex.

Competent principles of administration of the process of strategy of innovation and investment development of an industrial enterprise in the practical activity on administration are consistently transformed and integrated into the general system of professional development and application of theoretical knowledge and practical skills. As the strategic management of the innovative development of industrial enterprises is based on the implementation of promising plans (gaining competitive stability in all aspects of activity) as reflected in the system of strategic plans, the competence of planning, forecasting, analyzing and controlling tools is equally important⁶.

Thus, the set of competencies of management personnel in the part of the innovation component should ensure the formation of directions of innovation activities, the definition of strategic innovation goals and innovation strategy of the enterprise.

The process of forming a portfolio of securities and management imposes a requirement for competencies in terms of the implementation of the procedures of each of its stages, which are systematized in the Table. 1

Table 1: Systematization of the stages of the investment portfolio management process

Stage	Contents of the procedures of the stage
1. Determination of the investor's goals	The investment strategy is determined. Local goals of investment activity: achievement of certain level of current profitability, capital growth, minimization of investment risks, provision of necessary liquidity. Contradiction of the presented goals is solved by their ranking in accordance with the investment strategy.

⁶ KARPENKO, L. N. (2016): Modernization in the administration management decisions of innovative development of industry enterprises / L.N. Karpenko // Economy and management: collection of scientific works. Vinnitsa, 2016. V. 1 (21). P. 109-118

2. Analysis of securities	One of two approaches to the choice of securities is selected: 1) a fundamental analysis based on the study of the general economic situation, the state of the industries, the situation of individual companies whose securities are rotated in the market; 2) technical analysis related to the study of the dynamics of prices for financial instruments.
3. Portfolio Formation	Securities are selected for inclusion in the portfolio. It takes into account the hierarchical structure of goals, the principles of the formation of the portfolio.
4. Portfolio Monitoring	In order to maintain the balance of the portfolio, its audit (monitoring) is monitored. It is monitored that its composition does not conflict with the constantly changing economic situation, the situation of sectors and industries, the investment qualities of individual investment objects.
5. Estimation of actual efficiency, comparison with planned	The achieved values of profitability and portfolio risk are determined. Possible deviations from the planned magnitudes and ways of their solution are detected.

Source: systematized by the authors [3,4,5]

Strategies for the investment component of innovation and investment development on a competency basis require competencies in managing an investment portfolio and knowledge of its principles, the main of which are:⁷

- ensuring implementation of the investment strategy;
- ensuring the correspondence of volume and structure of the portfolio of volume and structure of the melded sources;
- optimization of profit / risk ratio;
- optimization of the ratio of profitability and liquidity;
- ensuring portfolio management.

One of the main problems in the Ukrainian economy is an unsatisfactory financial situation, which manifests itself in the inefficient allocation of financial resources, unsatisfactory payment discipline, arrears to the budget and other contractors of the market, insufficient financial support for further development due to unfavourable trends in operations, wrongly selected financial strategy and tactics, inadequate managerial decisions in accordance with the conditions of the enterprise. Different approaches to enterprise management, the definition of effective financial and investment planning are needed to solve these problems. Management accounting of each enterprise usually consists of planning (budgeting), control and decision-making. The introduction of a clear budgeting system at the enterprise is one of the most important functions of effective financial management.

Economical efficiency of the activity of enterprises, ensuring high rates of their development is determined by their investment activity level and range. Investment activity of enterprises is one of the most difficult and risky kinds of business. Therefore, regulation and management of investment activity and economic processes, connected with it, takes main place in solving problems of structural alteration of economy of Ukraine, scientifically and technical progress activation, increase of efficiency of enterprise activity.

In the reality of today's economy there is an urgent need for the creation of information-analytical system as an effective means of managing and developing the business processes that can provide managers the primary information needed for determining the areas for further development and address current issues of industrial activity. Interaction of elements of such a system should be directed to the formation of information and analytical framework for a timely

⁷ ILYSHEVA, N., KRYLOVA, S. (2014): Accounting, Analysis and Strategic Management of Innovation Activity. Moscow: Finances & Statistics, 2014. 216 p.

response to the changing circumstances of the management and anticipation of critical situations of financial and economic activities, as well as being the basis for operational and strategic planning.⁸ The absence of effective systems of information and analytical support of managerial decisions in enterprises, inevitably leads to a decrease in their competitiveness, and as a consequence the loss of the market. In this connection there is need for an integrated presentation of information and analytical support management decisions, the study of its essence, methods of determining its effective implementation.

Next, consider the process of budgeting as a technology for administrative management processes in the enterprise. The purpose of this research part is to examine how the budgeting management technology in a flexible development of the company, the development and review of patterns of interaction of different budgets, conceptual description and systematization of production stages of budget management in the enterprise, the organization of budgeting in complains control.

Management and Budget in the system plans the company is in a key position – that OMB (Own Management and Budget) is responsible for implementing the strategy, the effectiveness of the current operating and financial activities, and feedback control system. Content of the budget is different from the content of other plans of the enterprise. In the generalized interpretation, budgeting can be called activities related to the drafting, review, and approval of the budget, its implementation and control over its implementation, consideration of various reports on budget execution, which regulate the budget system of the enterprise⁹.

In turn, budget planning is a process of joint work of units and employees of the enterprise, aimed at achieving the goal of developing and approving the plan of work of the enterprise in the “forecast” period, as a result of which all measures of economic activity are indicated in the form of a budget, in terms of the financial structure enterprises (taking into account centres of financial responsibility). The budget is called a financial document of a certain format, which is approved appropriately in the enterprise, and on which the planning and accounting of financial results of economic activity is carried out.

Budget – a financial plan that covers all aspects of the organization that allows to compare all the costs incurred and the results in financial terms for the coming period as a whole and for individual sub-periods. In highly developed countries, budget – the basis of in-house management. Accordingly budgeting – a technology preparation, updating, monitoring and evaluating the performance of financial planning, budgeting and therefore becomes very foundation of all the technology in-house management.

Budgeting begins at the moment when the plans and budgets of the Company are allocated to the centres of financial responsibility (CFR) that make up the financial structure. The distribution can occur in very different ways both "from the top" and «from the bottom». It is important that each of the CFR makes or gets the articles each of three basic budgets relating directly to him it:

- incomes and (or) expense articles from the budget of income and expenses;
- articles which reflect the inflow and outflow of funds from the budget of cash flows;
- articles containing the changes of assets and liabilities.

The Data Merge on the proper articles of each CFR gives the Account of profits and losses (income and expenses), the Cash flow budget (receipts and payments) and the Balance (changes of assets and liabilities). If this merge happens during the activity planning, the received documents are predictive, and if during the control – they are actual.

⁸ KARPENKO, L. M. (2016): Strategic competitive analysis of innovative enterprises development: predictive validity / L.M. Karpenko, S.V. Filyppova // Actual problems of the economy. 2016. № 6 (180). P. 392-404. ISSN 1993-6788. SciVerse Scopus

⁹ DOBROWOLSKIY, E., KARABANOV, B., BOROVKOV, P. (2011): Budgeting: step by step. 2nd ed., Optionalp. St.: Peter, 2011. 480 p.

Predictive and actual data allow to conduct a full financial analysis and to evaluate the liquidity, profitability and enterprise value in advance or in fact. At the planning stage these indices are necessary to understand how possible for the company is to achieve its goals.

Budgeting is the lowest level of planning, on which the costs of actions are directly planning. The whole vertical of plans – either strategic, or operational, is realizing by means of this actions. Each level of the planning system forms a separate outline of management its substantive content. For example, at the level of goal setting is discussed what exactly the company wants to achieve; at the strategic level is planned, how the company wants to achieve its goals; and at the operational level – how strategy will be implemented.

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Consider strategic planning issues in terms of strategic management on a competent basis. Here are the strategic requirements that we can deduce from the practice of strategy, which constitute an additional new level of knowledge of managerial staff that will engage in strategic planning on an ongoing basis:

- for effective strategic planning it is necessary to have a long-term strategic management system with experience;
- the strategy is effective only from a strategic position. That is, its effectiveness is at risk of noncompliance strategic imbalance, the impossibility of taking a strategic position;
- the strategic system includes: the actual strategy, the centre for making strategic decisions, the system for their implementation and support;
- the centre for making strategic decisions does not coincide with the centre for making managerial decisions. The system of strategy should be the ratio of systems tactical or current management and strategic management;
- the centre for strategic decision making can be varied (strategic committee, strategic group, strategic management unit, etc.), which should work continuously;
- strategy is the orientation of the system throughout space and over time through the whole set of reality that allows you to overcome a strategic opponent. The strategy consists of conceptual stratagems, that is, the principles of rationing reality in order to achieve certain goals. It needs programs, projects and plans, but basically does not include them in its content and is not limited to them;
- the strategy as a tool is for a public announcement. It is being developed by a narrow circle of experts. Strategic communication is not through the media and not through round tables, but in a different place and in a different format;

¹⁰ GRISHOVA, I. Y. (2017): Implementation of the principles of consumerism in the strategy of business development [Text] / I.Y. Grishova, P.V. Voronzhak, T.L. Shestakovskaya // Scientific bulletin Polesie. No. 2 (10), part 1. 2017. P. 41–48.

- to solve the problem of combining competence and legitimacy, three-level strategy is applied. These are: owners of the enterprise, senior management (top management);
- strategy is based on the chosen theory, since it has a paradigmatic difference. A more fundamental theory of strategy has a dominant character over a less fundamental one.

When forming a structural unit for the implementation of a complex of strategies, the existing standard norms are taken into account, according to which the number of administrative staff is established, based on:

- typical standards of manageability (5-10 persons per managerial staff with complex functions and up to 20 persons with standardized duties);
- organizational structure of management (linear, linear-functional, staff, divisional or matrix);
- functions and tasks of the enterprise management system;
- life cycle of the enterprise;
- the need for modernization of the main processes at the enterprise.

It is very important to substantiate the qualification of the administrative staff, the requirements for his competencies (see Table 2). Practice shows that the number of administrative staff should not exceed 20% of the total number of employees of the enterprise. Otherwise, administrative functions and processes prevail over production.

Structural content of professional competencies in administering the process of strategy of innovation and investment development of an industrial enterprise in terms of performing planning, forecasting, organizing, analyzing, controlling functions is systematized in the Table 2.

With the development of outsourcing, part of administrative work is entrusted to external specialized enterprises. This allows you to improve the quality of work, removing part of the administrative and freeing time for more productive or creative work of administrative staff (accounting, legal support, etc.). The current level of specialization and automation of the implementation of auxiliary types of work strategy should be entrusted to professionals or partners, where the quality, the time frame is much more attractive than the performance of these works by own forces. This can significantly reduce the staff of the staff. First of all it concerns software and office equipment management. Skills, which are part of the organizational competencies of the staff, should provide for the solution of professional tasks, which are part of the tasks of a higher level. In particular, it is about:

- Development of staffing: a structural unit (working group, committee, etc.) on strategic management (strategic planning, strategic planning, etc.) in terms of the functional contour, responsibilities and communications, as well as its personnel;
- Evaluation of candidates for a vacant position, selection and selection of personnel;
- Development of administrative procedures for the implementation of functional tasks of strategy within the relevant processes;
- Comparison of the planned indicators of the changed management structure and the definition of the need for additional employees according to their qualifications and professional requirements;
- Analysis of personnel potential, its compliance with development plans;
- Clarification of job descriptions for employees according to new staffing units;
- Connection with external sources provided by the personnel of the enterprise (transfer of information about vacancies and conditions for their replacement);
- Current periodic certification of managerial staff involved in strategic planning.¹¹

¹¹ Individual Competence Baseline for Project, Programme & Portfolio International Project (2015): 4th edition. – Management [Text] – Management Association, 2015. 415 p.

Table 2: Structural content of professional competencies of the manager concerning the administration of the process of strategy of innovation and investment development of the industrial enterprise

Function performed by management personnel	Competence (characteristic of the potential manager's ability to carry out successful activities within certain competencies)	Competency components
1. Planning	Ability to draw up promising strategic plans and develop targeted integrated programs, route maps for strategy implementation	<ul style="list-style-type: none"> – qualification; – management skills; – mathematical logic; – creativity; – flexibility; – professional ethics; – language culture as a culture of doing business.
2. Forecasting	Ability to make reliable, reasonable predictions using the prognostic validity and mathematical statistics	
3. Organization	The ability to centralize and decentralize managerial competencies in the management apparatus; to compile the methodological principles of designing organizational structures of administrative management; use design tools in horizontal, functional division of labour and vertical specialization of administrative management; to develop and implement the concept of design work and its modelling	
4. Analysis	Ability to analyze the economic, legal and social environment in which business entities, public administration bodies operate and financial and economic policies are implemented.4. Analysis Ability to analyze the economic, legal and social environment in which business entities, public administration bodies operate and financial and economic policies are implemented	
5. Controlling	Ability to apply administrative controls, using administrative control tools and implementation of components of compliance control, namely: budget control, administrative audit, economic and statistical evaluation of dynamic changes in performance	

Source: systematized by the authors)

In essence, the prerogatives of administration are basically general system-building powers. Their implementation combines a set of organizational and methodological functions that provide the authority of the staff, since it forms and reforms the organization, directs and

accompanies its functioning, controls and provides the established reporting. The complex of powers distinguishes a set of linear and functional administrative tasks, the development of strategic decisions in the process of strategy activation of innovation and investment development of the enterprise. Administration complements existing specific competencies, provides functional management procedures and a system of procedures for assessing the innovation and investment development of an industrial enterprise.

The application of the administrative approach involves a combination of the administration process with compliance control, as the strategy requires formal formalization of its procedures.

Applying the administrative approach and administration as a management tool for the strategy of activating the innovation and investment development of the enterprise is appropriate, since the direct and indirect involvement in the impact on the process of activation is based on an adequate understanding of the unified conception, perception and use of its construction. But it, in its turn, provides for a clear mastering of the basic elements and rules of presentation of the composition, content and design of the construction and implementation of the process by an administrative procedure. Accordingly, the possibilities of effective control and management depend on how the object of control represents the object in details. The degree of detail is determined by the capacity of the available source information and how the methods of its analysis are developed.

The primary element of constructing any procedure objectively is the action that is the main constructive element of the organization of strategy, which can also be represented by an administrative procedure. In the sequence of merging its components into the administrative procedure, the design process is most closely reflected.¹²

Operations and other informative and structural elements of the administrative procedure (Table 3) are consistently combined during the management activity, creating:

- stages as parts of the process, determined by obtaining an intermediate result, and the phases that distinguish parts of the cycle of the procedure with the most characteristic external features;
- stages in the form of a set of homogeneous operations;
- cycles as periodically repeated sequences of the implementation of all the above components.

Each of the components, united on the basis of certain criteria, ensures the formation and use of enterprise resources, the improvement of the construction and implementation of the appropriate administrative procedure, embedded in the overall management and performance of individual functional tasks.

Table 3: Criteria for determining the components of the administrative procedure

Component	Criteria for determination
1. Action	– primacy, elementally, uniqueness, completeness;
2. Operation	– professional orientation, specialization, adaptation;
3. Stage 1	– functional homogeneity, community, consistency;
4. Stage 2	– intermediate video ability, efficiency, controllability;
5. Phase	– clearly formulated, which characterizes imagery;
6. Cycle	– periodically relevant sequence of work.

Source: systematized on the basis of [1,2,5,12,13])

¹² VORONZHAK, P. V. (2014): Systematization of indicators of innovative development atinnovation-active industrial enterprise / P.V. Voronzhak // Socio-economic problems of the modern period of Ukraine: Sb. sciences works. Lviv, 2014. Vip. 6, (110). P. 215-220.

Presented in Table 3 defining criteria not only allows them to be identified, but also determines the purpose and content of the possible application of each of the elements of the administrative procedure. Thus, the phase separation is used to identify the characteristic states of the development cycle of the strategy process based on external observations. This is important for synchronizing the reactions of organizers, users and process observers, assigning actions and results of analysis and evaluating their status to a particular part. It is clear that such phase identification of the process cycle becomes a necessary basis for the administrative binding and orientation of all subsequent actions.

The division of the cycle into stages allows laying the foundations for the formation and application of the process management mechanism with the evaluation of intermediate results of the activation of innovation and investment development and correction on the basis of which the implementation of the process of activation.

This allows, without completing a deliberately ineffective cycle of strategy, to return to the still unfulfilled or incompletely conducted actions and operations of the administrative procedure.

Unlike phases, the duration and boundary of the stages are not clearly defined, even if they can be allotted at all. The filling of stages by homogeneous operations determines the functional content of the activities of the relevant management units. This homogeneity allows us to combine the information base, personal composition, vocational training, methods, communication of interaction and other resources into purposefully operating structural education entities (subdivisions of working groups for strategic planning, strategic committee, etc.). All this allows not only to clearly determining the administrative procedure, but also purposefully, constructively, on the general administrative basis, to build and optimize the sequence and content of its construction and implementation.

The process of activating the innovation activity of the enterprise relies on the use of the apparatus of economics and mathematical statistics, modelling the results of the company's activation development. For example, there are the *Model of maximization of profit and the Model of risk minimization*.¹³

The considered models will be reduced to the following mathematical formulations:

1. *Model of maximization of profit:*

$$Z = \sum_{j=1}^N \eta_j x_j \rightarrow \max, \text{ at limitations: } \sum_{j=1}^N x_j \leq C, x_j \geq 0 \quad (1)$$

where:

Z – the value of the total income;

x_j – the capital value invested in the j -th project;

$\mu_j = \frac{1}{T} \sum_{t=1}^T r_j(t)$ – the expected return on the j -th investment project;

r_j – the value of income (profits) in year t for the j -th project per unit investments;

T – the total term of portfolio realization, for which are available yield statistics per unit portfolio object investments;

C – the total amount of investment resources;

N – the number of investment projects in a portfolio (to the investment program).

2. *Model of risk minimization:*

¹³ KARPENKO, L. N. (2017): The Activation of Innovation and Investment Development of Industrial Enterprises and its Strategy : [моногр.] / L.N. Karpenko. Schweinfurt: Time Realities Scientific Group UG (haftungsbeschränkt), 2017. p.471

$$Z = x^T * K_x \rightarrow \min, \text{ at limitations: } \sum_{j=1}^N x_j \leq C, x_j \geq 0, \mu^T x \geq R \quad (2)$$

where:

$K = [\sigma_{ij}^2]$ – covariance matrix for the N types of investment projects;

R – minimal expected return;

Z – in this model the value which characterizes the overall risk.

The value of the covariance is determined by a formula:

$$\sigma_{ij}^2 = \frac{1}{T} \sum_{t=1}^T (r_i(t) - \mu_i) * (r_j(t) - \mu_j) \quad (3)$$

Today, virtually every industrial enterprise lags in the development or lack of advanced technologies; most of the technological processes have high energy and expenditure costs, which prevents export-oriented, competitive products. The apparent reason for such a situation is the low investment activity in the real sector of the economy. Despite the fact that in the beginning of 2016 in the domestic economy there were opportunities for stabilization, to admit that the crisis is not complete yet, because ensuring economic sustainability of the national economy is achieved in conditions where the growth of key macroeconomic indicators is stable at least three years.

Conclusions

Integration of knowledge from strategic, innovative and investment management, as well as the obligatory availability of the ability to put you in different positions according to the "consultant-theoretician-expert-client" scheme, is the most important new competence of the managerial staff that will carry out the strategy. It is actualized as the ability: a) the theorist – to develop the theory, to participate in the theoretical search, which is responsible for: scientific substantiation of innovation-investment development and its components, methods, tools, etc., and the introduction of theoretical innovations in the strategic development of experts and consultants through seminars and resolving problem crises; b) the consultant – to combine the positions of the theorist, expert, analyst, organizer and develop a certain strategy of strategy. He discusses theoretical approaches, promotes new knowledge, new approaches, new strategic steps – both publicly and publicly – for their use as effective solutions. Consultants using the products of analysts and experts directly communicate with the client, deal with his old knowledge, and promote new knowledge in direct communication and in the form of applied strategic steps for the client's activities. The consultant's activity has a public and non-public client component; c) expert – to obtain new knowledge from the real object on the results of the analysis of the experience of other enterprises and provide recommendations. In the strategic area of innovation and investment development, experts study the reality, the goals of competitors, the consistency of different goals; offer their variants of strategy of activating innovation-investment development in general or its components, own tools and methods; d) analytic – to search and justify the connection of the trends and processes of the object, to build models, to develop scenarios and to make forecasts; e) organizational or project manager – to organize client-service activity of analysts, experts and consultants within the framework of separate innovation-investment projects and in general. His duty is the organization of round tables, internal seminars, PR-actions, etc.; e) service personnel – to establish means of communication, to check the state of administration techniques. Integration of these positions takes place at the level of professional tasks and corresponding competencies.

Consequently, new tasks of the strategy result in new requirements of enterprises to the competencies and competencies of management personnel on innovation management, investment management and strategic management, which will allow intensifying innovation

and investment activity and accelerating the innovative development of the enterprise. Therefore, competency principles of strategy of activating innovation and investment development of an industrial enterprise should be formed in three directions: a) the strategy of innovation component of innovation and investment development (innovation activity, innovation potential, innovative development); b) strategy of investment component of innovation and investment development (investment portfolio management, determining the effectiveness of investment activity and the economic effect of the introduction of new technologies and products), (c) Strategies in strategic management, whose competencies will ensure the effective administration of the strategic process. Integration of knowledge from strategic, innovative and investment management, the ability to apply them from different positions (consultant, theoretician, expert, client) to solve professional problems - this is the most important new competence of the managerial staff, who will conduct the strategy.

Therefore, the strategy of activating the innovation and investment development of an enterprise applies all the basic functions of management under certain administrative procedures, but the main object of the strategy is to intensify innovation and investment development, which is to accelerate the organization of innovation and investment activities in the distance and in time. Its efficiency ensures systemic implementation:

a) an organizational mechanism that defines the relationship between the objectives of the strategy and the means of their solution for the managerial staff of the enterprise in the process of innovation and investment development of the stimulating (economic) and

b) the competence (knowledge) basis for both the strategy and the intensification of innovation and investment development in general; the application of the administrative approach, the combination of the administration process and compliance control, since the strategy is associated with the mandatory formalization of its procedures, which are new for management personnel.

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