

**ECONOMIC SECURITY IN THE ACTIVITY
OF ENTERPRISES: MANAGEMENT ASPECT**

Iлона Семенча¹

DOI: <https://doi.org/10.30525/978-9934-588-15-0-43>

Abstract. This article considers an integral part of the economic security of an enterprise which is management security. An analysis of recent studies has shown that economic security has not been considered in terms of management aspects before. In this article we suggest that management security should be considered as the state of the management system of an enterprise, in which the influence of the system is carried out in an optimal way, with the dynamics of the external and internal environment changes taken into account, having possible risks, problems and deviations from the set objectives foreseen, in order to maintain the balanced state of all enterprise subsystems. The purpose of the article was to consider the components of the management security of an enterprise, to give a general description to each of these elements, and also to consider the most important aspects which can be used to prevent management threats. In this research there were used such general scientific methods as analysis, synthesis, and generalization; methods of set theory, graph theory, semantic and mathematical modeling when considering competence and situational management security. In the process of the research, there were determined the components of management security in the management system: target security, methodological security, functional security, competency-based security, security of management impact, implementation security, situational security. For each component of management security, the characteristics are formulated and the most important security aspects for management threats prevention are identified. To ensure functional management security, the implementation of the organizational function is very important for each enterprise. On the one hand, it has been noted in the article that the organizational function should involve clear alloca-

¹ Doctor of Economic Sciences, Professor,
Professor at Department of Finance, Banking and Insurance,
Oles Gonchar Dnipro National University, Ukraine

tion of all the resources of the enterprise. On the other hand, this function implies coordinating all elements interconnections in the enterprise system in order to achieve certain objectives at any given time and, as a result, to fully realize what was laid down at the planning stage. In the research, a diagram of the implementation of the organizational function in the management of the enterprise at all stages of its operation was created and examined in detail. It was proposed to introduce an author's approach to assesment of the managers competence to ensure competency-based security of the enterprise. Thus, a universal structural model of the general level of manager competence and the coefficient of the manager's individual competence were developed for practical use. In the article it was also noted that in order to ensure the security of management influence, the most important is not so much its content as the selection of an adequate form of influence for a specific objective and characteristics of the control object. For this purpose, there was considered in detail the model of compliance of the workplace requirements with the employee's qualities. In order for this approach to be applied to management personnel, a more detailed model for specific management situations was developed. In the course of research we have also come to the conclusion that for achieving the implementation security, it is necessary to streamline the structure of the enterprise, make or adjust the description and formalize all procedures, carry out engineering or reengineering of processes in the enterprise on a regular basis, and work on the level of personnel motivation. Furthermore, for situational management security, an efficient marketing strategy is crucial for an enterprise. Among other things, it is important to determine the stage of enterprise development and then, in accordance with it, to select adequate management methods and develop appropriate strategies. For this purpose, a semantic model of changes occurring in the enterprise, which is considered as a socio-economic system here, was designed. The recommendations formulated as a result of the conducted research are targeted at management personnel at all levels of management hierarchy. Practical recommendations can be practically applied for enterprise management at all stages of the management cycle. In addition, the theory of management security and its components can be used in managers training in the framework of MBA programs in the areas of «Strategic Management», «Enterprise Security», «Enterprise Management» and others.

1. Introduction

The modern enterprise, which is developing its economic strategy to be used on the markets, with the further efficient operation as well as development of such company, cannot but pay special attention to its security. The very concept of economic security of the enterprise today has a wide range of notions. With modern realities taken into account, this concept includes:

- state of protection of his vital interests from threats of the internal and external environment;
- state of efficient usage of corporate resources;
- ability to confront threats;
- ability to provide reproduction;
- ability to meet the objectives of its operation.

The concept of economic security of the enterprise includes a number of components: financial, personnel, informational, technological, technical, marketing, management, others. We believe that in this sphere a specific scientific research is required, with each general security component of the enterprise operation described and examined in detail.

With regard to the analysis of publications on the topic of security in the activity of enterprises, it can be said that there is a rather large number of such publications released over the last few years.

Some of them are devoted to information system security. In the articles by Mayer, N., Aubert, J., & Grandry, E. [1], Kauspadiene, L., Ramanauskaitė, S., & Cenys, A. [2] technical and technological aspects of enterprise security and ways of their achievement were discussed.

Financial aspects of security of enterprises of different types in performing different management functions were examined by such scientists as Zwolak, J. [3], Rushchyshyn, N., Nikonenko, U., & Kostak, Z. [4], Sylkin, O., Shtangret & Ogirko, O. [5], Vasilenko, M.E., & Titova, N.Yu. [6]. For example, Vasilenko, M.E., & Titova, N.Yu. believe that the economic security of each organization depends on a properly formulated policy for accounting, taxation and the development of contracts with counterparties [6, p. 254].

A number of articles are devoted to innovative activity of the enterprise, implementation of innovations as signs of economic security of the enterprise. A research by Ianioglo, A. & Polajeva, T. [7] proposes new mechanism of increasing the innovative activity of enterprises. The authors note

that the main areas of economic security of the enterprise: financial, personnel (human resources), production, technological and innovative components are four distinguished functional components [7, p. 1232]. Article written by Shypulina, Yu.S., & Illiashenko, N.S. [8] is devoted to innovative culture as a natural means to adapting to changes in the macro-and microenvironment of the enterprise in a permanently changing modern economy. In the article the author also notes that the innovative culture is an important component of a mechanism for achieving economic security.

Special attention should be paid to researches that illustrate the complex of indicators of economic security of enterprises as well as analysis of the whole system of indicators. Thus, we can give note importance of the research conducted by Cherchyk, L., Shershun, M., & Khumarova, N. [9], which offers groups of indicators of economic security of the enterprise. Such indicators were listed for timber processing companies. Among the groups of indicators, the authors distinguished financial, technical and technological, and social security indicators [9, p. 1788-1799].

An analysis of the economic security of enterprises has shown that none of the researches focused on management security indicators only. We consider this as a gap in the studies of economic security, since it is the enterprise management system that ensures planning, implementing and efficient achievement of those economic tasks that are set by its owners. Without taking into account the issues of management security, there is no full enterprise's capacity for confronting various internal and external threats, realizing of the decisions made or ensuring the efficient usage and allocation of resources. This is the issues that this research addresses.

Therefore, *the purpose* of this article is to investigate the content and peculiarities of the management component of enterprise economic security.

Therefore, such tasks were set:

- to consider the content of management security of the enterprise;
- to distinguish management security components in the management system;
- to give a general description of each management security component;
- to consider the most important aspects for management threats prevention for each management security component.

In this research following *methods* were used:

- general scientific methods of cognition, namely methods of analysis and synthesis as well as scientific generalization;

- methods of set theory, graph theory, method of mathematical modeling – to study competence security
- a method of semantic modeling – to consider the content of situational security.

2. The concept of management security of an enterprise and management danger areas

To begin with, it is necessary to figure out what should be considered as “management security” and what this concept means.

Management security of an enterprise is the state of the management system in which the influence of the system is carried out in an optimal way, with the dynamics of the external and internal environment changes taken into account, foreseeing possible risks, problems and deviations from the stated objectives, which ensures maintenance of the balanced state of all enterprise subsystems.

Now we suggest you looking at the diagram, presenting the management process, and ,thus, it will help to identify the danger areas that may occur in this process. There are 7 such zones (Figure 1).

It is the task of management to switch these dangers into the more stable and less risk-prone areas, because the imbalance of each area will not only lead to danger situations but ,in some cases, even to catastrophic consequences for the enterprise operation.

Thus, by using this approach to enterprise management, it is necessary to achieve the following types of management security:

1. Target security.
2. Methodological security.
3. Functional security.
4. Competence-based security.
5. Security of management impact.
6. Implementation security.
7. Situational security.

It should also be noted that when it comes to the interaction of subjects and objects of management (as we can see from Figure 1), we will always refer to the “subject – subject” relationship in this research. That is to say, both subjects and objects will be represented by people (individuals or specific groups of people). We believe that if we were to consider a “subject – object” relationship system where one of the parties is a machine or

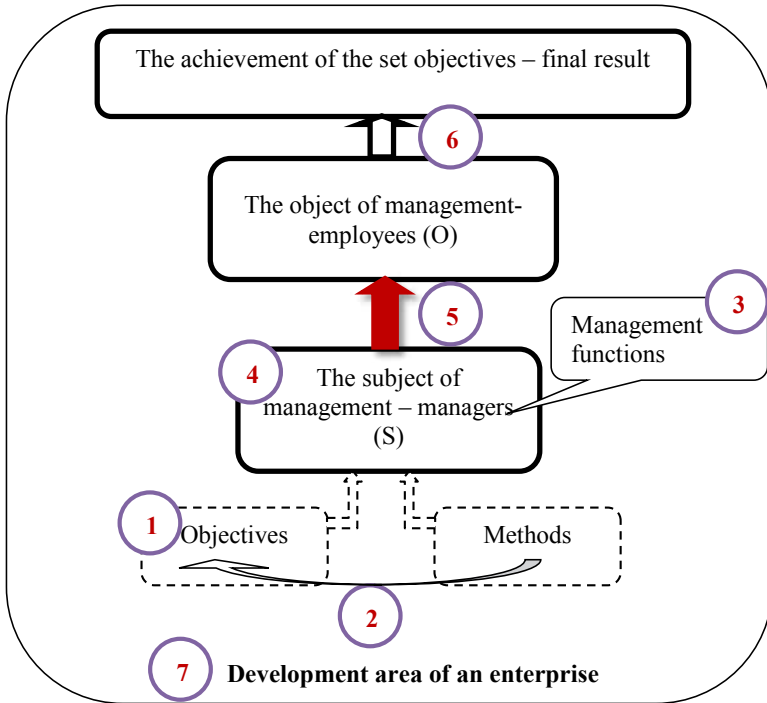


Figure 1. Danger areas occurring in the management process

computer, we would also have to consider the additional characteristics and conditions of such interaction, which is a topic for another study.

Next step will be to examine the general characteristics of each management security component and to distinguish the most important aspects for management threats prevention for each management danger area, depicted in Figure 1.

3. Target security

The efficient operation of the management must begin with identifying, clear formulating, and understanding the objectives (Area 1 in Figure 1). The objective is the starting point that helps one to understand what final result of management should be like.

When working with objectives, it is important to formulate them properly. This means not only defining the content, i.e. what exactly the enterprise wants to achieve, but also articulating the objective which would involve all necessary aspects and, therefore, be considered as a complete one. The overall objective should have certain components:

- 1) the content of the objective;
- 2) the size of the objective (what should be achieved as a minimum and what should be reached as a maximum);
- 3) timeline (when the objective should be met);
- 4) spatial characteristics (where the objective is to be realized , i.e. on the basis of which departments of the enterprise or at what markets, with spatial boundaries clearly defined);
- 5) personal responsibility (who will be fully responsible for meeting the goal);
- 6) the rank of the objective in the objectives hierarchy of the enterprise.

In terms of formulation, an example of such a complete tactical goal could be: the head of marketing (personal responsibility) has to increase the turnover of the enterprise by selling products (content) not less than by 20% (the size of the objective) in the Donetsk region (spatial characteristics) by the end of 2019 (timeline).

Neglecting any component of the goal will cause the results of management activities being distorted or inadequate, the directions of enterprise operation not being clear enough, and as a whole the objective might be unattainable from the outset. Using given approach will not help to reduce the risk that the objects of the management will not perform their tasks, which in its turn might lead to the reduction in the effectiveness of management activities of an enterprise or to a complete failure in achieving economic effects.

In addition, target security provides the enterprise with sustainability and stability. Objectives, if properly formulated, eliminate uncertainty and, as a consequence, delineate clear boundaries, determine directions, timeline, ways of performing different functions and activities. Therefore, it gives an enterprise the opportunity to avoid dramatic fluctuations that are possible if the system operates under conditions of uncertainty, unpredictable situations.

In addition, the existence of a system of objectives allows one to understand how the management of the company sees further its further development.

Finally, it is necessary that one should realize that without a system of objectives, management function is impossible itself.

4. Methodological security

Methodological security of enterprise management is achieved through two types of actions.

First course of actions. One needs to know and have a variety of methods and techniques that could help one maximize their goals. The larger the set of methods the subject of management has, the more prepared they can be for various situations that may occur. Moreover, it provides more opportunities to choose the most effective and appropriate method among the whole set of methods. In case very dynamic situations or abrupt changes take place, a manager (or executive) may choose the best from his point of view method from the set of available alternative methods.

Second course of actions. Regardless of how large the number of methodological tools of a manager is, without a second course of actions, it is merely possible to achieve complete methodological security. The methods chosen by a manager must correspond to the objectives, most of all in terms of their content. That means that a subject of management should always think about how appropriate a chosen method for exercising managerial influence would be, i.e. whether it would achieve and correspond to the very content of the purpose of influence.

5. Functional security

Functional security of enterprise management (area 3 in Figure 1) involves clear performance of a sequence of basic management functions: planning – organization – supervision and motivation. The next question is what should be considered in this case to achieve functional security? For this purpose, it is desirable that we should address the issues related to management functions performing.

First and foremost, what is important is not to underestimate the role of the function of planning in running a business. Despite the fact that in the course of enterprise operation both the conditions of the internal and external conditions may change, paying specific attention to planning will give the management of the enterprise a clear idea of what the enterprise should be, how it should perform its economic activity, what results will or will not satisfy the expectations of the owners of the enterprise, how to implement ideas that were embodied by the owners since the period when the enterprise was registered in further periods. At this stage, the management of

the business should not only emphasize objectives and plans formulating, but also define clearly by what parameters they will understand that these objectives are met successfully. In addition, it is necessary to establish very clearly the rules that would indicate the limitations in the process of system development, maximum and minimum values in evaluating the enterprise operation at its each stage, restrictions in business relationships, limitations in using or not using certain methods or means, as well as in choosing certain alternatives when making decisions. This work is painstaking, but if carried out properly, and if all indicators and standards are laid down thoroughly and reflected in bylaws of the enterprise, we can say that implementing the function of planning ensures the future reliability of the enterprise.

Performing organizational function is highly important for achieving functional security in enterprise operation. On the one hand, organizational function should encompass an improved allocation of all resources available in the enterprise. On the other hand, it includes coordinating the activities of all elements of the enterprise system to achieve at each moment of time certain tasks and, consequently, it should lead to complete implementation of what was laid down during the planning stage.

The scheme of implementation of the organizational function in enterprise administrating is presented in Figure 2:

Effective performance of the organizational function eliminated duplicative processes and functions, prevents gaps in different areas of the enterprise hierarchy, provides comprehensiveness of all processes, completeness in involvement of all systems of the enterprise, and, thus, reduces the performance risk.

As for supervision, we have to note here that it is necessary to remember that the main task of providing supervision is to have all points of failure in any system of the enterprise foreseen, rather than to correct errors afterwards. In this case, costs are reduced and the economic security of the enterprise increases.

6. Competency-based security

Area 4 in Figure 1. represents the subject of management itself, which is a manager or managers of a business, with their personal qualities, professional knowledge, skills and abilities, experience in performing various and, sometimes, complex management tasks, as well as in solving prob-

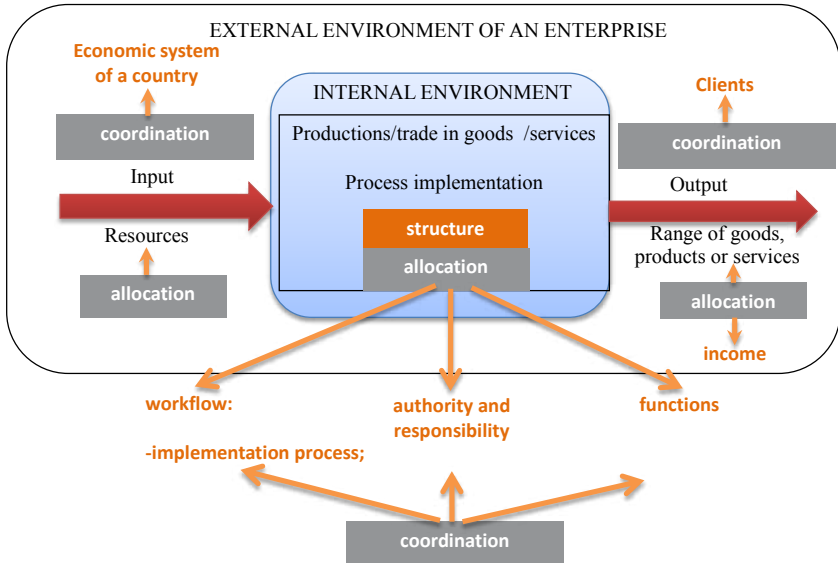


Figure 2. The scheme of performing organizational function in enterprise management

lems which may occur in enterprise operation. The managers' competence is something on which the company's ability to achieve the best results in economic activity depends, with all factors of the external and internal environment taken into account.

We suggest to consider the competence of the manager as applying his/her functional and personal qualities and features of an employee in accordance with the specific job requirements in the most efficient way.

To achieve a certain level of efficiency in the manager's job, it is necessary to take into consideration qualitative characteristics of his activity, which are studied by the role, personal, behavioral and situational branches of modern management. All these fields of study highlight certain aspects of the management processes and determine the content and form of work of an individual manager. These areas consider managerial roles, individual traits (qualities) of a manager, management styles and his or her production behavior accordingly.

By using set theory, we propose a method for determining the influence of the level of competence of enterprise managers on the economic efficiency of using results of their work. The application of this approach will lead to increased economic security, because we can see that this approach provides the maximum correspondence between the qualitative characteristics of a personality and the job requirements for the position of manager at any branch of the enterprise.

The relation of qualitative indicators of manager's activity was shown by the ratio: $p: "x_i \text{ influences the action of } x_j"$ on the set $N = \{x_1, x_2, x_3, x_4\}$, where $x_i \in N, x_j \in N$ (Fig. 3), which made it possible for us to note that these qualitative components can be classified as the primary (roles, traits and styles) and secondary (production behavior), as well as to establish a hierarchical correspondence between them: 1 – personal qualities of a manager ($\rho(x_2)=3$); 2 – management roles ($\rho(x_1)=2$); 3 – management styles ($\rho(x_3)=1$); 4 – production behavior ($\rho(x_4)=0$):

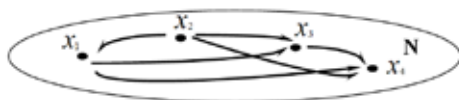


Figure 3. Graph, representing qualitative indicators of manager's activity: x_1 – management roles, x_2 – personal qualities of a manager, x_3 – management styles, x_4 – production behavior

Using graph theory, the set of the primary qualitative indicators of a manager's activity were defined as the root tree $T = (M, A)$, where $T_1 \cup T_2 \cup T_3 = M, T_1 \cap T_2 \cap T_3 = \emptyset$.

This approach made it possible to justify the methodology for assessing the level of manager's competence. Thus, models of role, personality and style structures of competence were developed, and subsequently a universal structural model of a general level of competence was formed (Figure 4).

Various methods of research (theoretical analysis, expert evaluation, testing, etc.) have been used to find out the numerical coefficients of the elements of these structures.

On the basis of figures, weight coefficients were determined by the formulas: $n' = \sum_i^m n_i$, $m = \sum_i n(a_i)$ and $W'_i = \frac{n_i}{n'}$, where n' – the sample size

received; m is the number of verges; $n(a_i)$ is the number indicator of the a_i verge of the graphs $T_1 = (X, A)$, $T_2 = (K, AT_3 = (S, A))$; W'_i is the relative frequency of a_i variation; n_i – frequency of the a_i verge.

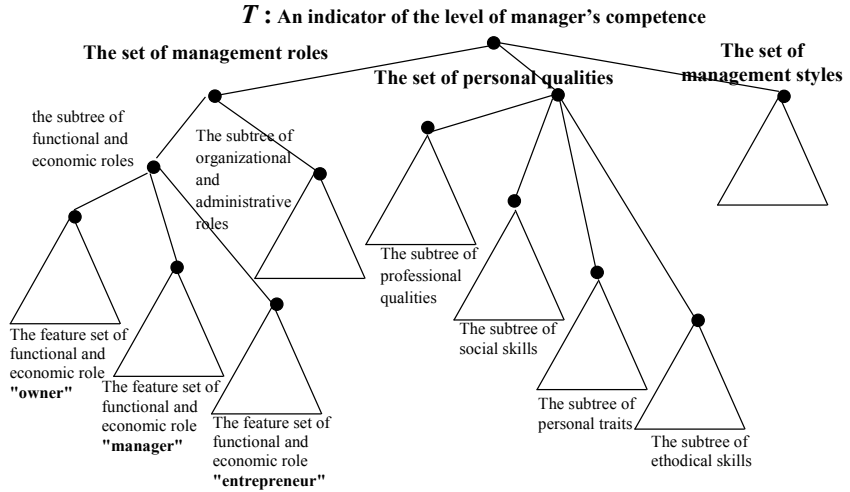


Figure 4. Universal structural model of a general level of manager's competence

The general level of manager's competence according to each component was obtained by the formulas: $W'_g = \sum_{i=\{34, \dots, 312, 51, \dots, 537\}}^m W'_i$, $W''_g = \sum_{i=\{31, \dots, 359\}}^m W''_i$, and $W'''_g = \frac{n_a + n_l}{n^m}$, where n_l – the numerical coefficient of the "personnel orientation (liberality)" indicator; n_a – numerical coefficient of the "focus on business (authoritarianism)"; W'''_g , W'_g , W''_g are the corresponding relative frequencies of the variations of style, personal and role manager's competency structures, each of which must correspond to the relational matrix:

$$\rho_i = \begin{cases} \text{high if } W'_g \rightarrow 1 \\ \text{low if } W'_g \rightarrow 0 \end{cases}$$

Taking into account the correlation between the qualitative indicators of the manager's activity (Fig. 3) and the evaluation order proposed above, there was defined mathematical model for assessing the level of a manager's competence:

$$K_{ic} = 3W_{g.}'' + 2W_{g.}' + W_{g.}''' \rightarrow \max, \quad (1)$$

where K_{ic} is the coefficient of the manager's individual competence.

As a result, the developed coefficient of individual competence K_{ic} allows one to obtain systematically and comprehensively quantitative information about how each manager implements qualitative indicators of activity when carrying out their professional duties. It also provides the opportunity to influence the performance of management staff and, as a consequence, to prevent dangers and risks in this area of enterprise management.

7. Security of management impact

At the stage when the subject on the management exercises management influence on the object of management (area 5 in Figure 1), it should be understood that the management influence itself not only embodies the content (i.e. the objective) of what should be achieved as a result of management, but also has a certain form. That is to say, the same type of influence in terms of its content can take many forms. And this very factor would predetermine the success or inability of a manager to exercise influence:

$$\text{Efficient management influence} = \text{Content} + \text{Adequate form} \quad (2)$$

And at this step, it is highly important to choose the right form of management influence. The question is what the right form means. Our answer is that the form has to correspond to the peculiarities of the object of influence.

We suggest addressing the general model of correlation between job requirements and qualities of an employee of an enterprise:

As we can see, through description of duties and their specifics, a specific job requires from an employee to have a certain set of professional and socio-psychological features and skills.

Looking at Figure 5, we can conclude that in order for effective management influence to be performed, it is necessary to study constantly and deeply both the typical and individual characteristics an object of management influence. It is also vital to study both their personality characteristics and professional features: abilities, skills, experience, i.e. how successfully and independently the employee, who is under the management influence, can accomplish his/ her tasks. In addition, it is necessary to examine their external environment, which directly affects their motivation, efficiency, capacity for work, competence, loyalty and involvement in those processes that occur in the enterprise.

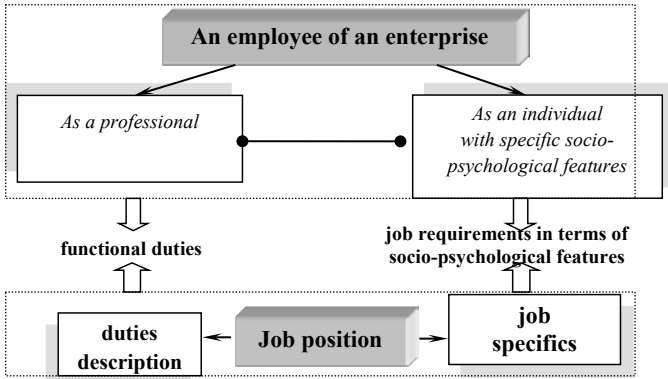


Figure 5. Model of correlation between job requirements and qualities of an employee of an enterprise

As for the activity of the management personnel of the enterprise, the range of qualities to be taken into account will be wider, because the job specifics include interaction with the subordinates (Figure 6).

The given set of qualitative components will have to be considered for manager's efficient work (Figure 7).

8. Implementation security

It is clear that any management influence must result in the final implementation of what was planned, what was expected when the management objective was set (area 6 in Figure 1).

But successful completion of the management process can be disturbed with a number of dangers. Now we will address these dangers in detail.

Firstly, successful implementation can be hindered precisely by the poor structure of the enterprise. It can be very cumbersome, including a large number of management levels, with intricate relationships, with poorly developed management decision-making lines.

Another disadvantage of the enterprise structure may be the inadequacy of its construction to the system of objectives that were established at the planning stage. It is very important that the structure should always suit the objectives system of an enterprise. Another drawback of the structures may be duplicated functions of different departments, or, even the situation

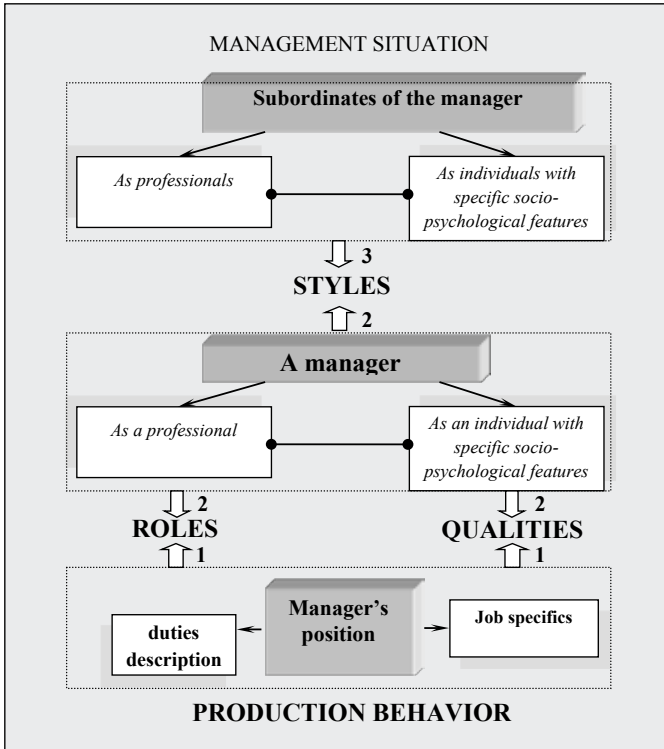


Figure 6. A detailed model for management situation:
1 – the set of general characteristics which a job requires;
2 – the set of real characteristics and skills of a manager; 3 – feedback

when none of the departments perform a number of tasks that have been assigned.

Secondly, vague, unclearly formulated and unregulated procedures may also interfere with the implementation of different functions. Each business at a certain period of time performs a series of, typically, standard procedures. All of them, first of all, should be studied, described, prolonged in terms of importance, in order of their implementation, also the effectiveness of each procedure and its significance in achieving overall results have to be determined. It is also obligatory to optimize

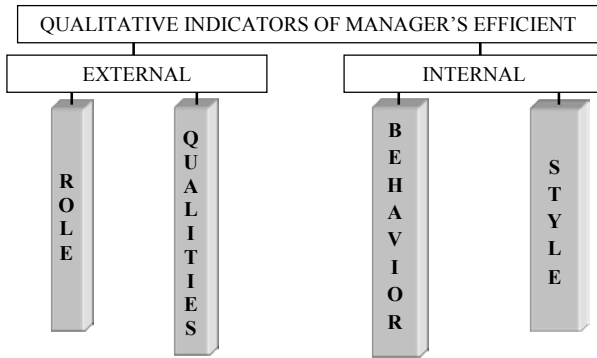


Figure 7. A model of qualitative components of manager's efficient work

all the procedures chains and formalize them as company regulations and bylaws.

The certainty of the procedures will directly affect 3 factors of performance efficiency. By tis we mean certain processes. The processes at the enterprise should be capable of corresponding to changes occurring both within the framework of enterprise operation and in the external environment. Processes must be established in a way that would make it possible to readjust them quickly if necessary, i.e. they must be flexible. The engineering or re-engineering processes are used for this purpose. Nowadays there exist a lot of areas of business process engineering and reengineering. We will consider them with in a more detailed way in Figure 8.

The last, fourth factor that influences performance, and, incidentally, not only performance as a fact, but the quality of performance itself, is the staff motivation.

In order to understand what has to be considered when it comes to motivation, first of all, as mentioned above, we need to constantly study the personnel, its individual characteristics. And in the process of exercising motivational influence we have to take into account these individual characteristics of an employee. What are some of the features that require special attention? In our opinion, the most important features that directly motivate employees are: traits of their character, level of their self-esteem, level of ambition, as well as the type of orientation of an employee in determining their responsi-

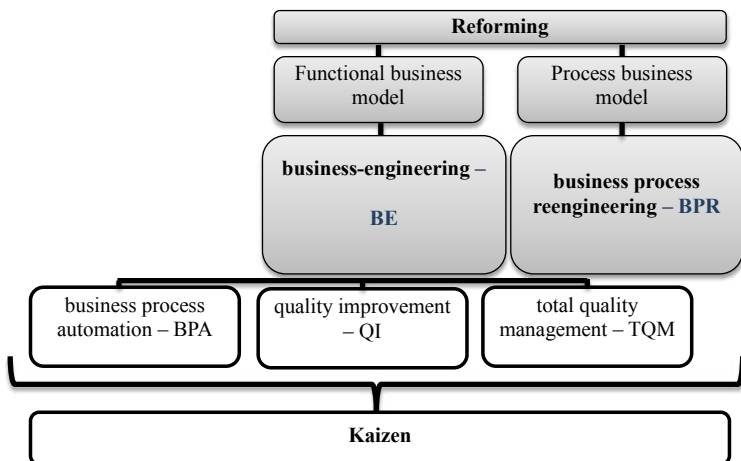


Figure 8. Types of enterprise reforming: engineering and reengineering

bility. The last factor considers whether the employee takes all responsibility (self-orientation), or whether the employee believes that everything that is taking place in a company is beyond their responsibility but all the responsibility lies with someone or something else, for example, when it comes to circumstances beyond his/her control (external orientation).

Taking into account all these individual characteristics of an employee, the manager should develop his motivational portrait and determine in accordance with this motivational portrait:

- 1) how motivated the employee is at the moment;
- 2) what kind of leverage can be applied to this employee in order to increase his/her motivation level;
- 3) how to exercise managerial influences on this employee so that he/she would not lose acquired level of motivation in the future.

Also, the level of employee's motivation will be greatly influenced by how much the employee identifies with the enterprise. If this relation is weak, then it is necessary to implement a number of activities so that these employees could find personal interest in enterprise operation, realize their own significance as representatives of an enterprise, and also so that they would define their place in the team of colleagues.

Therefore, improved and optimized enterprise structures, clearly described and formalized procedures, business processes engineering or reengineering and the level of personnel motivation will be able to ensure effective performance of different tasks, create stability in enterprise operation, and contribute to results that will greatly increase the economic effects of the enterprise operation.

9. Situational security

Each employee creates certain situations as a result of his activity. Besides, any general situation occurring in enterprise operation is related to external factors. And these factors are the area of responsibility of marketing department of the enterprise. The external environment both for an employee and for the enterprise as a whole, involves constant changes. Therefore, in order to show great results of efficient work under conditions of these dynamic processes, the management of the enterprise has to take a number of measures and perform a number of specific activities.

Firstly, the management must be able to constantly analyze the economic state of the enterprise and changes in the environment, which are market changes, changes in competition, changes in customers' perception of goods or services, changes in expectations of customers' needs and wants. These activities are necessary in order to define and understand the position of the enterprise in the market, its competitive potential, its market opportunities and its ability to obtain certain competitive advantages.

Secondly, the next question is at what stage of development the enterprise is at a certain point in time, at a certain point in its activity. Any enterprise, as a socio-economic system, is known to take part in different, in terms of their peculiarities, processes. A model of changes occurring in the socio-economic system, designed and represented in Fig.9, demonstrates possible ways of enterprise development.

According to the law of systems development, as can be seen from the semantic model in Fig. 9, the enterprise may be at different stages of its development:

1. Formation.
2. Dynamically stable state.
3. Unstable state:
 - a. the stage of progressive development;
 - b. the stage of regressive development.

Depending on the stage, executives, or managers of an enterprise need to know which policy to choose, what business strategy to choose, what tactics and operative actions to take in order to successfully move on to the next stage of its development. Once the status of the enterprise and its position in the development process is defined, appropriate management methods must be selected to successfully implement all these processes, which are taking place at the given moment and will occur afterwards in enterprise business life.

10. Conclusions

This research proposes a new author's approach to the economic security of the enterprise, with a management component emphasized.

In the course of this research the following results were obtained:

1. The content of management security of the enterprise is defined as the state of the enterprise management system, in which the influence of the system is exercised in an optimal way, with the dynamics of the external and internal environment taken into account, foreseeing possible risks, problems and deviations from the set objectives, in order to maintain the balanced state of all subsystems of the enterprise.

2. There were determined components of management security in the management system, such as target security, methodological security, functional (operational) security, competence-based security, security of management impact, implementation security, situational security.

3. For each component of management security, the characteristics were formulated and the most important security aspects for management threats prevention were identified.

4. To ensure competence-based security, we proposed to introduce and implement a specifically developed authors' approach to assessing the competence of managers working for the enterprise. Thus, there were created a universal structural model of the general level of competence of a manager (Fig. 4) and the coefficient of manager's individual competence (Form. (1)).

5. For the security of management impact to be achieved, the model of correlation between job requirements and qualities of the employee of the enterprise was developed and considered in detail (Figure 5). For applying this approach to the management staff of an enterprise, we suggested a more detailed model, which provides for management situations (Figure 6).

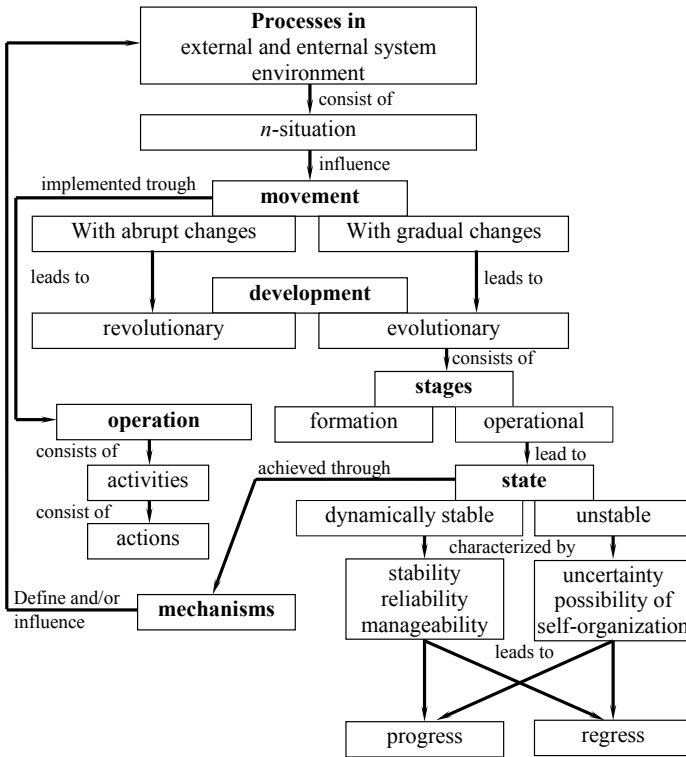


Figure 9. A semantic model of changes occurring in enterprise, regarded as socio-economic system

6. It is determined that in order to achieve implementation security, it is necessary to streamline the structure of the enterprise, make or adjust the description and formalize all procedures, plan processes engineering or re-engineering, work on the level of personnel motivation and morale.

7. It was emphasized that efficient marketing is important for situational management security. Among other things, the most important is to determine the stage of development of the enterprise and, in accordance with it, to select adequate management methods and to develop appropriate strategies. For this purpose, a semantic model of changes occurring in the enterprise, regarded as a socio-economic system, can be used.

References:

1. Mayer, N., Aubert, J., & Grandry, E. (2019). An integrated conceptual model for information system security risk management supported by enterprise architecture management. *Software and systems modeling*, 18(3), 2285–2312.
2. Kauspadiene, L., Ramanauskaite, S., & Cenys, A. (2019). Information security management framework suitability estimation for small and medium enterprise. *Technological and economic development of economy*, 25(5), 979–997.
3. Zwolak, J. (2017). The financial security of small- and medium-sized enterprises in Poland. *Ekonomski pregled*, 68(4), 399–412.
4. Rushchyshyn, N., Nikonenko, U., & Kostak, Z. (2019). Formation of financial security of the enterprise based on strategic planning. *Baltic Journal of Economic Studies*, 3(4), 231–237.
5. Sylkin, O., Shtangret, A., & Ogirko, O. (2018). Assessing the financial security of the engineering enterprises as preconditions of application of anti-crisis management: practical aspect. *Business and economic horizons*, 14(4), 926–940.
6. Vasilenko, M.E., & Titova, N.Yu. (2019). Accounting policy the system of enterprise economic security. *Amazonia Investiga*, 8(22), 254–260.
7. Ianioglo, A., & Polajeva, T. (2017). Innovative component of economic security of enterprises: a case of the Republic of Moldova. *Journal of Business Economics and Management*, 18(6), 1228–1242.
8. Shypulina, Yu.S., & Illiashenko, N.S. (2015). Optimization of the enterprise's innovative culture level from the standpoint of ensuring its economic security. *Marketing and Management of Innovations*, 2, 159–169.
9. Cherchyk, L., Shershun, M., & Khumarova, N. (2019). Assessment of forest enterprises' performance: integrating economic security and ecological impact. *Entrepreneurship and sustainability issues*, 6(4), 1784–1797.