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PROCESS MANAGEMENT OF THE COMPANY AS A STANDARD OF THE HOLISTIC VIEW OF RISK

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Abstract

Risk management in a holistic perspective leads to an improvement of business performance. Such concept of the enterprise management may become a fundamental way to achieve a success. A consequence of the paradigm is a close correlation between an enterprise management risk (manager's risk) and enterprise risk management structure. Modelling such a system structure, with a use of the process approach, is essential for the sake of coherent manager's decisions across business at planning and implementation levels. Process approach to management was described in the article. A scheme of map of ideological processes presents a model of the structure of enterprise. Risk problems in the organizational processes were described.

Introduction

It is a cliché that any economic venture is burdened with risk. Nevertheless, the main problem for an entrepreneur is to locate the risk, determine its dimension and its impact on the enterprise as well as, in the following phase, verify what actions may be undertaken in order to eliminate of decrease the risk, if elimination of risk is not possible (Czekaj, Dresler, 1995). ISO 9001:2015 norm defines process as *a set of correlated actions or mutually influencing one another that transfer inputs into outputs.* Certain reminders are to be found in the comments to the aforementioned definition stating that *process inputs are usually outputs of other processes* and also that *the processes in an organization are usually planned and implemented in supervision conditions in order to increase value.*

Enterprises, therefore, can be modelled as a holistic set of processes correlated in such way to enable meeting the goals of an organisation. Due to the necessity of adjusting of organisations to the changing macroeconomic conditions and verified goals of an organisation this coordination should be liable to changes – flexible. Flexibility should be the main characteristics of the processes in their internal structure. The process character of the organization impacts a high level of its flexibility. Its implementation requires a spectrum of changes in the entire organization, indispensible cultural changes included (Grajewski, Nogalski, 2004).

Process risk in an economic system (enterprise) can be understood as a phenomenon of parting of an expected and factual level of reaching the goal of a given process. The process approach to the management of organizations shows the way of how to improve the enterprise: improvement of processes. This improvement can occur in a radical way – in the form of *reengineering*, or relatively through systematic improvement.

The management of a number of processes identified in an organisation and the mutual relations between them can be described as *process approach.* It assumes that each work leads to achievement of goals, and these goals are achieved more effectively if actions and resources necessary in their achievement are managed as a process. *Process approach* encompasses the outlook on all processes within an organisation as a system; therefore it has a systemic character. The rule, paradigm of system approach is holism – comprehensive apprehension. System approach in management proposes treating an organisation as a unified, purposeful system, which is composed of interconnected parts.

The idea of enterprise management by processes

The enterprise is the whole consisting of processes of different type, which take place in it. At present, the enterprise is less and less perceived as being a set of functions and professional specializations, structured hierarchically, but as being a set of horizontal processes in the cross-section of these functions and specializations. Also coordination and solution of problems gradually changes its character from top to bottom in terms of processes, regulated by the client-supplier relationship. Such a reformulation of the concept of the enterprise was caused by the changing environment, the necessity of constantly trying to improve indicators of value for the client, and also new management techniques (Brilman, 2002).

The process, in system terms, is a set of action and means transforming input into output. There are many disturbances that impact system. Production processes proceed according to specific rules of conduct, in the conditions of volatility and production, which results from having to perceive them in dynamic terms. Processes are broad-spectrum, from very big and complicated ones to very simple ones. Each work is the process. Production processes include the process of preparing production, manufacturing processes, and also distribution processes and service of clients.

The process approach in the management of the organization consists in describing processes, ascribing responsibility, aims and measures for those processes, and also systematic identification of the sources of risk

and modification of the style of management and the culture of the organization, conducive to the management of the course of processes in the organization with regard to the phenomena of risk. In order to manage mutually interlinked processes and increase efficiency and effectiveness the system approach is applicable. A volatile character of the phenomena of risk requires adopting a dynamic attitude to the problems of the functioning of processes, and constant improvement should refer to the entire organization – in all its areas of activity – both at the level of processes, and also at the level of the management of its structure.

Defining the processes occurring in an enterprise, their connections and progress is related with building a map of processes. It illustrates in a clear way the implemented processes and staff involved. Obtaining clear information about the current state, or in other words, the real progress of processes provides the information whether they are implemented in an optimal manner allowing for reaching the set goals. If their progress does not guarantee an optimal level, therefore the processes require redesign for an improved effectiveness and efficiency. Redesigning may be connected with the change of progress in the actual processes or with a brand new design of a process that is not currently implemented.

Risk analysis in enterprise processes

Detailed knowledge about the character and scope of potential risk makes it possible to select preventive activities early enough (e.g. insurance against some kinds of risk) relatively minimizing its impact and effects. Risk management deals with the whole of such activities. Depending on the concrete industry, or organizational culture of the given enterprise, it can take different shape. However, it should always mean organization and a comprehensive approach to risk in the entire enterprise and in its business surrounding. Risk management in the enterprise is important for the whole economic system, according to the principle as follows: an ill organism "infects" a healthy one. For instance: if one of the suppliers fails to supply in time even insignificant, but indispensible detail in the production process, the enterprise can face serious trouble.

All the processes in the given organization are present in order for the organization to be able to achieve business strategies. The strategies should be planned, organized and realized according to needs.

The above-mentioned statement speaks volumes about having to practically use in the management of production systems, the theory of reliability and risk in terms of realizing process tasks, i.e. implementation of reliability engineering and risk. Managers at all the management

levels in all their managerial activities face the risk-related problems. Manager's responsibility concerns not only the responsibility for the successes of an organisation (related mainly to the productivity of resources) but it also relates to products, workforce rights, as well as employment planning, health and safety security and pollution matters.

The above account substantiates the system approach to risk management, which has been depicted by the author in her earlier work (Bizon-Górecka, 2002). International Organisation for Standardisation (ISO) were also preparing the framework of risk management normalisation, which will focus on organisation's security (ISO 31000:2009).

The problems of risk in the process perspective are included in Table 1.

Table 1. Risk factors in the processes of the manufacturing enterprise

No.	Process	Aims of processes	Risk factors
I. PROCESS ES OF MANAGEMENT			
I. 1	Management of policy and strategy	Ensuring coherence of the Policy of Risk with the policy of the enterprise. Ensuring the unity of planned strategic tasks and aims of processes.	- Volatility of the political and economic environment, - Computer science system, - Assessment of success factors (adequacy of the SWOT analysis), - Predilection of the management staff to take risk, - Knowledge and engagement of employees
I. 2	Management of finances and results	Ensuring financial liquidity and plus financial results of the enterprise.	- Fiscal changes, - Changes to banking regulations, - Punctuality of paying invoices by clients, - Stability of the market, - Investment decisions of the management, - Computer science system, - Knowledge and engagement of employees
I. 3	Management of the organizational structure	Ensuring the adequacy of the organizational structure and operational tasks and requirements of the legal environment of the enterprise.	- Computer science system, - Volatility of legal relationships, - Resistance to change, - Organizational culture, - Knowledge and engagement of employees.

No.	Process	Aims of processes	Risk factors
I. 4	Management of the system of risk management (maintenance and development of the system)	Maintenance of the system of risk management.	- Qualifications of managers, - Decisions made by the management staff, - Databases, - Computer science system
II. IMPROVEMENT PROCESSES			
II.1	Internal audits	Ensuring the effectiveness of the functioning of the system of risk management through current monitoring processes and indications about increasing the quality of their functioning.	- Computer science system, - Engagement and capabilities of auditors.
II.2	Corrective and preventive action	Aim is to correct the faults of processes, and prevent them with the use of the results of internal audits.	- Databases, - System of internal communication, - Elasticity of processes, - Employees' qualifications
III. PROCESSES OF CREATING ADDED VALUE			
III.1.	Marketing	Recognition of the needs of the construction market and behavior of clients (needs, requirements, satisfaction) and the market of suppliers of raw materials and materials and services. Additional aim is to build a good image of the enterprise.	- Computer science system, - Volatility of demand, - Market potential, - Competitive position, - Impact of promotools, - Marketers' qualifications.
III.2.	Designing and development of products	Ensuring the application of modern solutions of goods and services, being in the scope of the enterprise operation.	- Computer science system, - Assessment of the possibilities of fulfilling clients' requirements, - Employees' qualifications, - Technical possibilities, - Elasticity of production lines, - Assessment of the impact of products on the natural environment, - Availability of modern technologies, - Financial means.

No.	Process	Aims of processes	Risk factors
III.3	Production planning	Ensuring that the process of planning production should proceed in controlled conditions so as to fully achieve the compliance of goods/services with the set requirements between clients and suppliers (internal and external ones).	- Computer science system, - Databases – including normative indispensible work resources (workload, materials, equipment), - Employees' qualifications, - Precision in specifying client's requirements.
III.4	Logistics	Aim of the process is to ensure purchases, supplies and transport of raw materials, materials and services of features meeting the requirements of respective processes.	- Assessment of material needs (quantitative and qualitative), - Relationships with contractors , - Change of the prices of materials, - Change of supply terms and conditions, - Punctuality of supplies, - Stock, - System of the quality control of materials, - Compliance with technical and environmental norms by suppliers, - Breakdowns of machines and appliances, - Conditions of storage of raw materials and goods.
III.5	Manufacturing of goods	Aim of the process is to realize manufacturing processes in a safe way for employees and their environment, and also to guarantee the required quality of products.	- Guarantee of material production factors, - Possibility of the recruitment of employees, - Engagement of employees in work, - Qualifications and experience of employees, - Breakdowns of technological machines and appliances, - Safety of people – safety and hygiene of work (lighting, noise, vibrations, temperature, chemical factors, stress), - Environmental pollution.
III.6	Service of clients	Aim of the process is to create added value for	- Computer science system, - Procedures about signing an

No.	Process	Aims of processes	Risk factors
		clients through ensuring high-quality service in all phases of the contact with external clients.	agreement, - Communication and relationships with the client during production of goods or providing services, - Punctuality of supplies, - Aftersales service, - Qualifications and engagement of employees.
IV. SUPPORT PROCESSES			
IV.1	Management of technical infrastructure	Aim of the process is to ensure the proper functioning of the technical infrastructure in order to fulfill the quality requirements of processes.	- Technical progress, - Thefts, - Environmental pollution.
IV.2	Management of human resources	Aim of the process is to ensure the proper adjustment of the number and qualifications of employees to the fulfillment of set tasks.	- Numerical selection of employees, - Qualifications and engagement of employees, - Job market, - System of internal communication.
IV.3	Oversight over the work environment and natural environment	Aim of the process is to ensure the required work environment for employees to enable the proper execution of production works (safety and hygiene of work). Aim of the process is also to minimize dangers for the natural environment and enhance independence.	- Computer science system, - Exposure of employees to the process, - Update of cards of vocational risk, - Pollution of the natural environment, - Volatility of environmental requirements, - National policy about the environment.
IV.4	Management of internal communication – computer science system	Aim of the process is to streamline of the management of internal communication to ensure unambiguity of the requirements of internal and external clients.	- Computer science system, - Organizational culture, - Stability of staff.

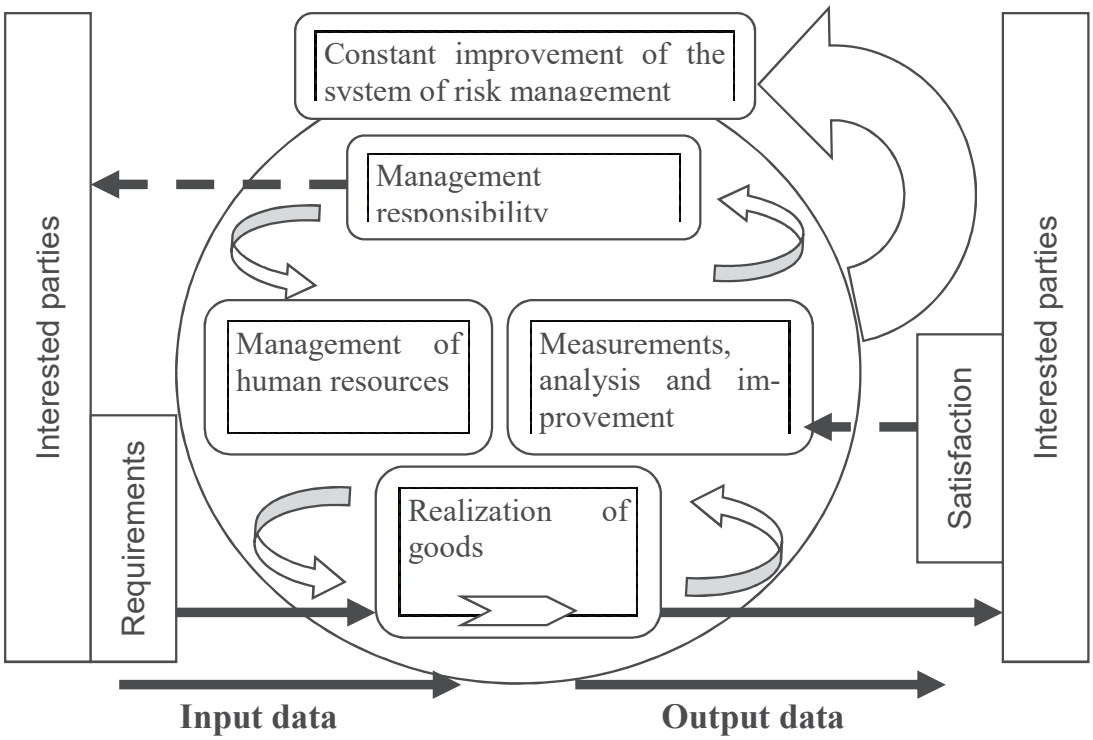
Source: own elaboration

The realization of all the processes in the enterprise consumes resources. The process picture of the functioning of the enterprise can indicate the centers of costs in connection with sources of their origination. Sales of products (goods and services), as a source of revenue, should be monitored in such a way as to be able to identify their centres.

To guarantee the constant improvement and development of is an important element of the process approach. This idea can be treated as a paradigm of management regarding any areas of the management of the organization, in which important considerations of the improvement of its functioning (Myszewski 2004).

The constant improvement of processes is also inscribed into quality management, according to ISO standard. In Figure 1 the idea of constant improvement of all the areas of the organization is shown.

Fig. 1. Scheme for constant improvement of all the areas of the enterprise



Source: elaborated on the basis of norm ISO 9001:2015.

The improvement of processes consists in a constant analysis of their course and assessment of compliance with set aims, and also correction of all kinds of deviations in order to realize their set provisions. In order to take such action, one uses all the sources available, e.g. sources of information, internal audits, corrective and preventive action, management overviews, clients' complaints etc. Such information enable to take deci-

sions about how to improve the process and achieve higher targets. If, as a result of improvement, there are new parameters of the process, the cycle of development returns to the stage of the analysis of the process. It is connected with the fact that changes were made, that is why one should confirm the stability of the process once again (its confirmation is the overriding aim of maintaining the process). After formulating the plan, one should assess compliance of its results with the planned ones. The moment the results are different to those of planned before, then the initial plan needs changing and implementing and checking once again, so the cycle of improvement begins from scratch.

Conclusions

Designing risk management should include the current state of the structure of the system of enterprise management. In connection with the popular management of organizations, according to ISO standards, risk management can be integrated with quality management, environment management and safety management. The process approach accompanies such a solution in the enterprise. The divisions of processes are an attempt at seeing the organization as a whole consisting of these processes. The map of processes should be consistent with the accepted aims of the organization as well as reflecting all the processes realized in the enterprise. The map makes it possible to visualize a set of tasks, assess the structure of each process and subprocess at its present stage and also at the desired stage. When properly made, the map enables to identify major links of the process and to specify time necessary to do successive tasks and to indicate poor links: faulty and redundant actions. The implementation of the process approach to the management of the organization requires such radical changes. Improvement and development through evolutionary changes should be inscribed into the reformed system of management.

In conclusion may be appropriate following comments:

- Action about risk management must be compatible with action about management in the given organization.
- The process approach in management means to take into account a number of activities as processes with a clear aim, and also relationships occurring between processes. The approach can be indicated as a useful toll for the holistic consideration of problems connected with risk and implementation of total risk management in economic entities. The map of processes enables to illustrate the geography of risks, both original and consecutive ones.

- One should indicate at this point the correlation of processes at all organizational levels and resulting phenomenon of risk interference, occurring in different areas and at different levels in the given organization.
- Model of the process approach to risk management in the organization emphasizes the necessity of considering original risk occurring usually in the course of realizing respective processes, as well as risks of consecutive character resulting from relationships between specific processes.
- Mapping risk, in the sense of specifying geographies of risk in the organization, makes it possible to react quickly to materialized risk. The map of risk thus understood can be built on the basis of the map of processes.
- Risk analysis of individual processes increases the economic and environmental efficiency of the enterprise and therefore contributes to sustainable development.

References

[1] Bizon-Górecka J. (2007), *Modelowanie struktury systemu zarządzania ryzykiem przedsiębiorstwie – ujęcie holistyczne*, TNOiK, Bydgoszcz.

[2] Bizon-Górecka J. (2002), *Systemowe zarządzanie ryzykiem jako panaceum na ryzyko zarządzania organizacją*, Przegląd Organizacji Nr 9/2002, ss. 33-35.

[3] Brilman J. (2002), *Nowoczesne koncepcje i metody zarządzania*, PWE, Warszawa.

[4] Czekaj J., Dresler Z. (1995), *Podstawy zarządzania finansami firmy*, PWN, Warszawa.

[5] Grajewski P., Nogalski B. (2004), *Podejście procesowe jako filozofia ograniczania ryzyka i zwiększania bezpieczeństwa funkcjonowania organizacji*, [in:] *Strategie zarządzania ryzykiem w przedsiębiorstwie – ryzyko a bezpieczeństwo organizacji*, red. J. Bizon-Górecka, TNOiK, Bydgoszcz, ss. 41-46.

[6] ISO 31000:2009, *Risk management – Principles and guidelines*, International Organization for Standardization.

[7] ISO 9001:2015, *Quality management systems – Requirements*, International Organization for Standardization.

[8] Myszewski J. (2004), *Paradygmat doskonalenia systemu Shewarta-Deminga*, Organizacja i Kierowanie, Nr 1/2004.