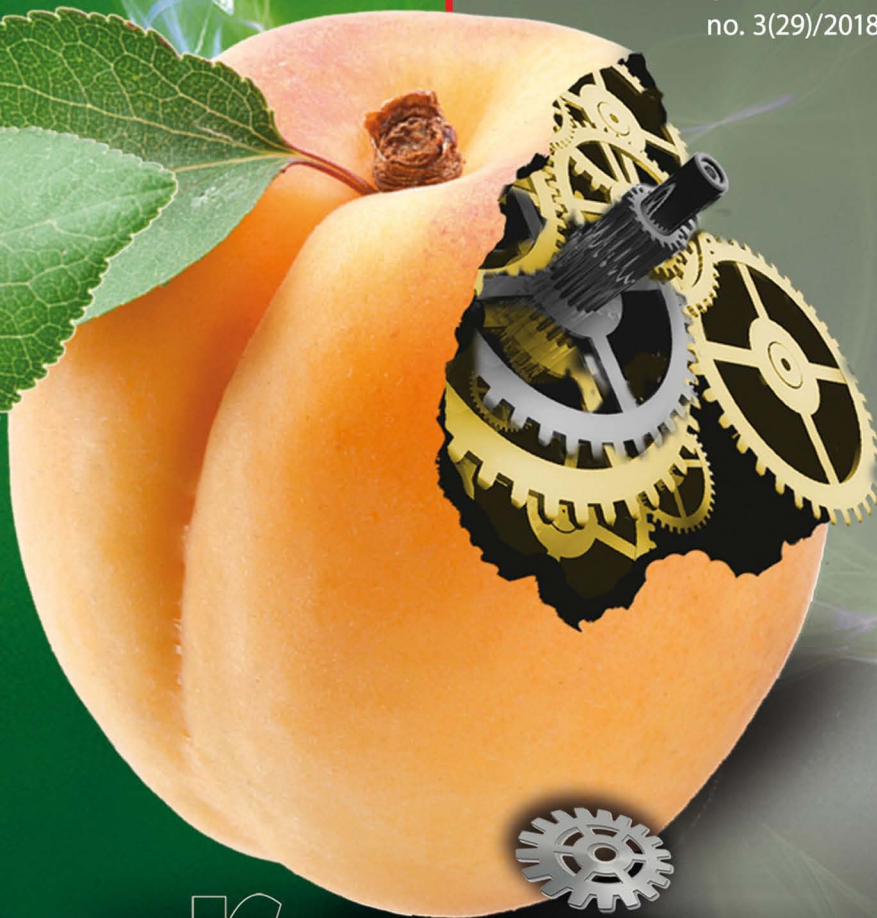


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# **KNOWLEDGE AND INNOVATIONS AS FACTORS OF ORGANIZATIONAL DEVELOPMENT — AN INTEGRATED APPROACH**



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## KNOWLEDGE AND INNOVATIONS AS FACTORS OF ORGANIZATIONAL DEVELOPMENT — AN INTEGRATED APPROACH

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### Summary

Contemporary organizations function in a stormy and competitive environment, that's why they have to look for efficient methods for own development. One of such methods is the systemic creation of facilitating and radical innovations, as well as implementing them in particular functional areas. Efficient creation of innovations treated as an important factor for the development of organizations, is determined by access to appropriate resources of knowledge. In the publication the author proposes a new concept of managing organizations which are focused on development. The essence of this concept is covering innovation management and knowledge management with one management system. This concept is enriched with some model solutions.

In this publication an attempt was made to achieve two goals: 1) cognitive goal, which involves highlighting: the essence of development of an organization; the essence of innovations and their role in the development of an organization; the essence of knowledge and its role in the creation of innovations; as well as mutual relations between knowledge, innovations and the development of an organization, 2) utilitarian goal, which involves proposing a few model solutions in the area of innovation management, knowledge management and an integrated approach to managing knowledge, innovations in the context of development of an organization. Managers by following these models can contribute to the rationalization of the information/decision-making processes focused on the development of an organization based on knowledge and innovations.

The goal of this publication is showing that between the elements of the proposed concept of management there are mutual cause and effect relations. Two research methods were used to prepare this article: cognitive-critical analysis of literature and the projective method.

**Keywords: innovation, organization, development, system, knowledge, management**



## Introduction

Economic systems of each country consist of a big, number (changing in time) of organizations associated with production, services and regulations. These organizations function in a particular environment, which can be divided into: 1) internal, covering the conditions found within an organization and the forces working within it: owners, management, employees, physical work environment, organizational culture 2) external, covering general and task-related environment. The general environment is formed by various dimensions and forces creating the general context of the functioning of an organization. This environment has the following dimensions: economic, technical, social-cultural, legal-political and international. At the same time the task-related environment is formed by particular institutions that can influence organizations. Elements of this environment are: competitors, clients, suppliers, strategic allies and regulators (Griffin, 2007, p. 73–89).

Every organization can be treated as a part of the reality surrounding us, distinguished according to goal and resources needed to achieve it. The goals of an organization serve important functions (Griffin, 2007, p. 212–213):

- 1) they show a uniform direction of activity to people employed in an organization, they make it possible to understand where an organization is heading and why achieving the intended state is important,
- 2) they facilitate rational planning of the process of achieving these goals,
- 3) they constitute a source of motivation for the employees of an organization, as well as rationality of their actions,
- 4) they integrate people around particular goals,
- 5) they constitute an efficient mechanism of control and assessment of all actions.

Taking into consideration the time horizon, we can talk about strategic goals (long-term goals), tactical goals (medium-term goals) and operational goals. Creation of particular goals should take place in the context of a particular environment in which an organization operates, for which it works and with the awareness of the management that there has to be a balance between the organization and the environment, that is, if elements

of the environment change, the organization has to change to maintain balance. It is because the environment is a place where not just the resources necessary to carry out goals, information about the directions of changes taking place within it, about the current and future needs of clients are obtained, but it is also a source of economic value (profit) obtained for goods, or services delivered to the clients. Rational utilization of such information in the decision-making processes conducted in organizations is an important condition for the formation of partner relations of an organization with the environment (market).

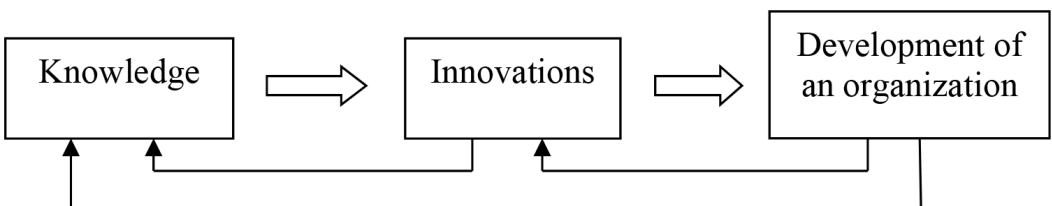
The behaviours of organization managers are dominated by two perspectives of thinking: thinking from the perspective of the organization, thinking from the perspective of clients. According to the first perspective shaped by routine behaviours, earlier experiences, processes, motivational systems formed within the traditional frameworks of value creation, managers focus mostly on the inside of an organization, on the creation of technological innovations which are the carriers of value, at the same time interactions with clients, the need for co-creation are treated marginally. Thinking from the perspective of the client requires creating conditions enabling the clients to establish systemic cooperation with the organization. As a result of such cooperation clients would acquire experience in creation of the expected value materialized in innovations. One of the conditions of cooperation (interaction) is forming an innovative environment of experiences, in which clients individually and in teams could develop their own experiences in co-creation of values (Prahalad and Ramaswamy, 2005, p. 59–62).

As a result of a change of the way of thinking the emphasis in the creation of value materialized in innovations is moved from technological innovations to innovations in the environments of experiences. In traditional thinking (from the perspective of the organization), the organization is focused on the creation of value and exchanging it with clients for an economic value. At the same time, in modern thinking (from the perspective of the client) the organization focuses its attention on value as personalized experience and on co-creation of value. As a result, innovations are identified with a systemic formation of the clients' expectations and with reacting continuously to the changing experiences, behaviours and needs of this group of people (Prahalad and Krishnan, 2010, p. 10–12).

What should be a trait of a contemporary organization is the ability to selectively articulate the relations existing between its moving parts (material, non-material, financial resources) and to react to the needs of an individual client using the resources of various owners dispersed around the whole globe, in a way profitable for the organization in real time, which can be a source of competitive advantage. Thus, we can talk about a new paradigm of management focused on the creation of an innovative environment of experiences, co-creation of value materialized in innovations.

A new approach to organization management requires changing the mentality of managers, thinking in terms of the future and not past, regarding clients as a source of knowledge and experience and not just as providers of economic value. What is necessary is common utilization of modern concepts of management focused on the development of the organization, on the growth of its competitiveness, innovativeness and economic efficiency. One of them is the cause and effect concept. It assumes that the main goal of every organization should be its development and development in the stage of progress. Innovations are becoming the main factor behind such development (Fernando and Dasanayaka, 2018, p. 53). It is systemically created and implemented innovations that guarantee continuous development in the stage of progress (Nonaka and Takeuchi, 2000, p. 21). At the same time the lack of innovations and industrial applications constitutes one of the main reasons for slow growth and development of organizations, regions and countries. Meanwhile, preparing innovations requires the acquisition of appropriate resources of knowledge, as shown on picture 1.

Picture 1. Diagram of integration of knowledge and innovation in the context of development of an organization



Source: Own materials.

Management based on the above concept assumes systemic approach to the problem and connecting two important areas of activity with the main goal of an organization, namely, its development in the stage of progress, as well as co-creation of value materialized in innovations.

An organization cannot develop, cannot co-create value in a rational way without systemic creation of innovation. At the same time creating innovations is determined by the possession of appropriate resources of knowledge.

In the publication an attempt was made to achieve two goals: 1) cognitive, which involves showing: the essence of development of an organization; the essence of innovations and their role in the development of an organization; the essence of knowledge and its role in creating innovations; as well as mutual relations between knowledge, innovations and the development of an organization, 2) utilitarian goal, which involves proposing a few model solutions in the area of innovation management, knowledge management and integrated approach to managing knowledge, innovations in the context of development of an organization. Managers by following these models can contribute to the rationalization of information/decision-making processes aimed at the development of an organization based on knowledge and innovations.

For the preparation of the article two research methods were used: cognitive-critical analysis of literature and the projective method. The first one of them was used to show the purposefulness and originality of the research problem under scrutiny, to show the current state of knowledge concerning the development of organizations, as well as its chosen factors, to show the existence of a knowledge gap in this area and to draw conclusions leading to the proposal for a few model solutions concerning knowledge and innovation management in the context of the development of an organization, which was achieved by means of the projective method.

## The essence of development of an organization

The efficient functioning of every organization has to be directed by a bundle of goals, among which the most important ones are general goals (strategic), created at the highest level of an organization, for its top management. They concern broad and thus general issues, which at the same



time are very important both from the perspective of employees themselves and the clients of a given organization. Without going into the complexity of the problem of classification of goals formulated for organizations, it is possible to conclude that literature highlights such main goals as: maximization of profit (Puto, 2017, p. 377), survival and development (Buczowska, 2012, p. 9), creating value for clients, co-creation of value with clients, using their knowledge and experience, creating knowledge and its materialization in innovations etc. (Baruk, 2018, p. 87). In the context of the content of this publication, it was assumed that the general (strategic) goal of an organization should be its development, as an organization focused on development and development in the stage of progress, creatively managed, is inspired to improve its interior and to improve its relations with the environment in which it functions, with existing and potential clients — providers of economic value, which constitutes the main source of financing for development factors. An organization focused on development pays particular attention to systemic improvement in the following areas: organization's market position, flexibility of organizational structures, material, non-material and financial resources, profitability, development of personnel, modern management, innovativeness, acquisition of knowledge, organizational and innovative culture, relations with clients, co-creation of value etc.

Convincing managers to build a goal focused on the development of an organization in the phase of progress has to be based on deep understanding of the essence of development itself and the factors forming this development. The development of an organization is one of the most complex processes covering its lifecycle. It belongs to holistic, long-term processes of a strategic character for an organization and its basis is formed by changes covering particular elements of the organization and the methods of handling particular functions (Matejun, 2015, p. 26).

From the philosophical point of view, development includes: 1) every long-term process of directed changes covering logically following stages of transformations of a particular object leading to an observable diversification of the object in a particular respect; 2) the process of directed changes causing a transition to more complex forms, or states, more advanced in a particular respect (Encyklopedia, 1987, p. 46). Such development is achieved through the gradual accumulation of quantitative changes and their transition into qualitative changes going in a particular

direction. As a result, material and non-material systems of particular qualities merge into more complex wholes distinguished by new features.

The development of an organization can also be understood as a process of changes leading to the elimination of the development gap (development divergence), or as a process of perfecting the position occupied by an organization in the environment. Development gap is the difference between the potential of operation of an organization (passive forces: organizational culture, resources, skills in management and logistics) and the potential of influence (active forces generating changes: efficiency-related and cultural aspirations, structure of authority, traits of cultural leadership characteristic of an organization). This gap can be eliminated in a comparably short time through rationalization, harmonization and intensification (operational gap) or through creativity and innovations (strategic gap), which requires more time (Zakrzewska-Bielawska, 2007, p. 29-30). The essence of development is change (qualitative) of the existing situation. The occurrence of any change is determined by the time needed for its formation. The change and time needed to design and implement it gives development the traits of a process.

As development is not subject to valuation, it should be considered from the perspective of particular stages of its development such as:

- 1) progress — expressing changes assessed positively, according to the assumed criteria of assessment,
- 2) stabilization — expressing the phase of development characterized by the lack of positive, or negative changes,
- 3) regress — expressing changes assessed as negative, according to the assumed criteria of assessment.

Every organization should aim at development in the phase of progress.

This is possible, if the basic spheres of its activity: pre-production, production and post-production form a coherent whole and conscious changes introduced in these spheres bring effects assessed as positive, according to the technological, economic, social and environmental criteria.

The implementation of the processes of development may favour the awareness of concepts explaining the essence of development of an organization. This concerns mainly (Baruk, 1992, p. 11):

- 1) the concept using the analogy of development for the stochastic process assuming the lack of possibility of describing an organization on the basis of distinguishing a single factor of development. At the same time it is possible to define the relations between variables describing an organization at the initial and final moment of the considered period. This concept assumes the utilization of the statistical apparatus and the division of the lifecycle of an organization into the phases of: birth, growth, stabilization and decline. Among the parameters defining the development of an organization we can name: the volume of turnover, number of clients, number of served markets, share in the market etc.,
- 2) the concept emphasizing the cause and effect character of development and the analogy of organization to natural systems. It is assumed that an organization develops according to defined phases: birth, growth, maturity and decline. The assumptions of this concept make it possible to introduce product innovations at the right time, as well as withdrawing them in the final phase of the lifecycle,
- 3) the concept assuming that the dynamics of an organization's development depends mainly on the entrepreneurial attitudes of managers. An organization is able to develop, if its leaders display the will to systemically identify needs, rationally assess possibilities, inspire and implement changes, motivate employees and clients to actively participate in such processes.

Nowadays, the development of an organization is not spontaneous, intuitive, random, just the opposite — it is determined by development processes carried out in particular subsystems of an organization, as well as in all spheres of the environment which influence directly, or indirectly the approach of an organization to changes and the possibility of forming and implementing these changes. Generally, the reasons, or conditions for the creation and implementation of changes leading to development can be found in the internal and external areas of functioning of every organization. Such reasons, or conditions stimulating development processes are called organization development factors. Without going into the detailed classification of factors of development, it is possible to divide them into quantitative and qualitative, internal and external, economic and non-economic, stimulating and threatening factors. Undoubtedly, external factors create opportunities, or threats for the development of an

organization, while internal factors point to strong and weak sides of an organization. It is only the analysis of a dynamic system of opportunities and threats, as well as strong and weak points of an organization that can constitute a basis for defining the directions of development and using its basic factors such as knowledge and innovations, which should be reflected by the strategy of development of an organization (Baruk, 1992, p. 21; Joaquim, 2017, p.111; Zhen and Junwen, 2013, p. 112–113). The development of an organization may be focused on: 1) raising your own efficiency of functioning, 2) improving your market position.

### **The essence of innovation as a factor of development**

The association of innovations with development is emphasized in documents of the European Commission. One of them is the "Europa 2020" strategy, which is a programme for the social-economic development of the European Union in the years 2010–2020. One of the priorities of this strategy is development based on knowledge and innovations and one of its leading initiatives is the "union of innovation", which aims at improving the framework conditions for innovations and using them to solve the most important social and economic problems (Strategia, 2015, p. 1).

Thus, innovations are regarded (at least in declarations) as an important factor for the development of organizations, regions and whole economies, that's why it is necessary to manage them rationally. Including innovations in management processes is determined by the change of mentality of managers, understanding the essence of innovations and their role in development processes, in the formation of positive relations with the institutions from the market environment, clients as well as in the process of creation of modern technological, organizational, economic and social solutions within an organization. Innovations deliver economic and non-economic value, they contribute to the growth of competitiveness of an organization, protection of the environment, work safety, health of societies, they constitute a carrier of values for clients.

On the scale of an individual organization innovations lead to: raising the quality of products and services, growth of production of existing

products, launching the production of new goods, reducing the number of production shortages,, growth of automation, robotization and computerization of production, saving materials, growth of the quality of products and services, growth of the efficiency of machines and equipment, reduction of spending on investments, reducing the costs of maintenance, improving the safety and hygiene of work conditions, growth of employees' skills, favourable organizational changes, growth of the employees' feeling of attachment to their workplace, growth of empowerment of the employees etc. Such a broad scope of benefits achieved thanks to innovations should inspire managers to systemically create and implement innovations in particular areas in which an organization functions.

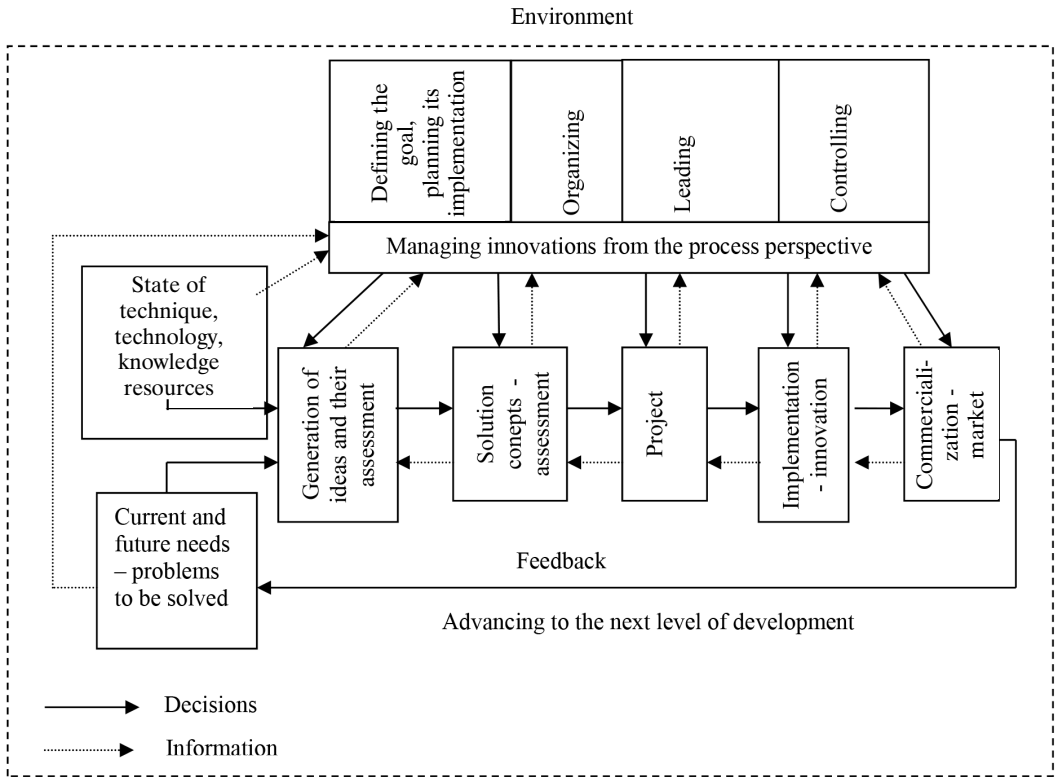
One of the conditions for systemic utilization of innovations is understanding their essence. In literature on the subject there is no uniform definition of innovation, as the following examples show. Innovation appears when a company introduces a new, or substantially improved product, process, marketing strategy, or organizational method (Innobarometer, 2016, p. 7). Innovations are about shaping the expectations of consumers, continuously reacting to their changing needs, behaviours and experiences (Prahalad and Krishnan, 2010, p. 12). Innovation means: regularly cutting off what belongs to the past; continuously looking for opportunities in weaknesses of technologies, processes, market, readiness to organize yourself for entrepreneurship, creating new businesses, separating an innovative venture from the existing structure of management (Drucker, 1995, p. 65–66). Innovation is an implementation of a new, substantially improved product, process, marketing method, or a significant organizational change (Eurostat, 2004, p. 4). Innovation is the way an organization adapts to contextual changes in order to improve its services, procedures, practices and products. Innovation means generating and implementing new ideas (Wallace, Butts, Johnson, Stevens and Smith, 2013, p. 2 and 19). Innovation is a new product, service, idea, technology, process and structure. It covers their formation, acceptance, approval, implementation (Uzkurt, Kumar, Kimzan and Eminoglu, 2013, p. 95). Innovation is defined also as the process of learning taking place between the members of different communities, in the process of problem solving (Barbaroux, 2012, p. 233).

The above-mentioned definitions only show that innovation is a change concerning product, process, marketing method, or method of organization. At the same time, it is not known, whether this change is supposed to satisfy some criteria, whether it should bring beneficial effects to an organization, economy, society, if yes than what should these effects be? That's why for the purpose of this publication the following understanding of this term was assumed. Innovation is a change designed on purpose by a human, concerning: 1) product (launch of production and introducing to the market goods, or services which are new, or substantially improved), 2) methods of production (using new, or substantially improved methods in production), 3) organization of work, or production (new organizational solutions in the structural and process-related meaning, or significant improvement of already existing solutions), 4) methods of management, marketing methods.

The conditions that have to be satisfied to make it possible to recognize such a change as innovation are: the fact that it is applied for the first time in a given community (the smallest community is an organization) for the purpose of achieving social-economic benefits and satisfying the assumed technological, economic and social criteria (Baruk, 2016, p. 30).

Understanding of the essence of innovations, their association with the development of an organization constitutes a basis for covering them with systemic management. Managing innovations is an ordered set of actions such as: defining the goal, planning and making decisions, organizing, leading and controlling organizations focused on resources (material resources, human resources, information and financial resources), actions taken to efficiently achieve goals of an organization within the scope of acquisition and implementation of innovations. In particular, these actions are taken to carry out the adopted goals in the area of: choice of innovation, methods of acquisition, utilization and development of innovations, choice of knowledge and the ways of using it for the implementation of particular stages of the process of creation, implementation and commercialization of innovations (Baruk, 2015, p.). A model view of such management is presented on picture 2.

Picture 2. Model of innovation process management



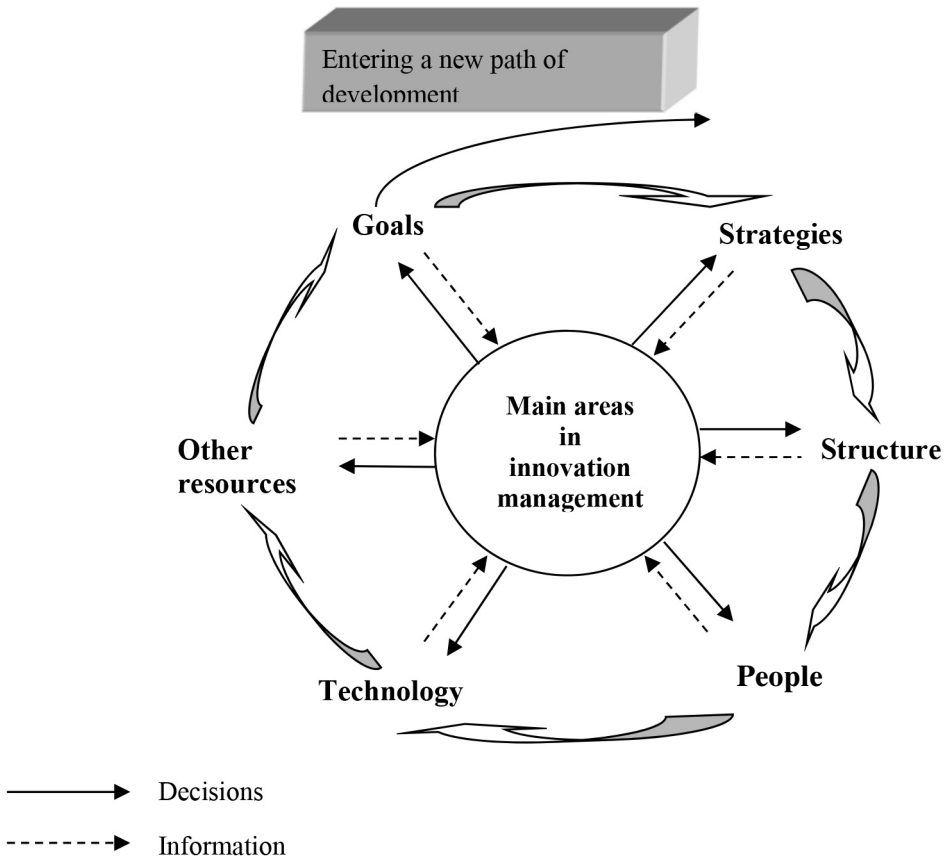
Source: Own materials.

It presents conventionally distinguished stages of formation of innovations and management functions forming the process of innovation management in the context of information about current and future internal and external needs, as well as information about the state of technique, technology and the available knowledge resources. Information about the current knowledge resources, necessary for the efficient course of the process of creation of innovations makes it possible to define the knowledge gap that should be filled.

For the interpretation of innovation management we can also use systemic approach in which the innovative process is analysed in the context of the following elements of the action system: goals, strategies for

achieving them, structures, people, technologies and other resources necessary for the rational course of the process of creating and implementing innovations (picture 3).

Picture 3. Structural model of innovation management



Source: Own materials.

In this model the information-decision-making process should be focused on the following partial activities: 1) defining the goal that an organization wants to achieve by taking up innovative activity, 2) working out the strategy for achieving the assumed goal. This is mainly about the choice of: category of innovation, methods of acquiring innovations (choice of sources), methods of using innovations, 3) choice and creation of the



most favourable organizational structure for the conduct of the innovation process, 4) attracting people with appropriate knowledge and experience, 5) acquiring appropriate technologies in the material and methodical sense needed for the implementation of the innovative process, 6) acquiring other resources (financial, technical, knowledge, etc.).

## **The essence of knowledge and its role in the creation of innovations**

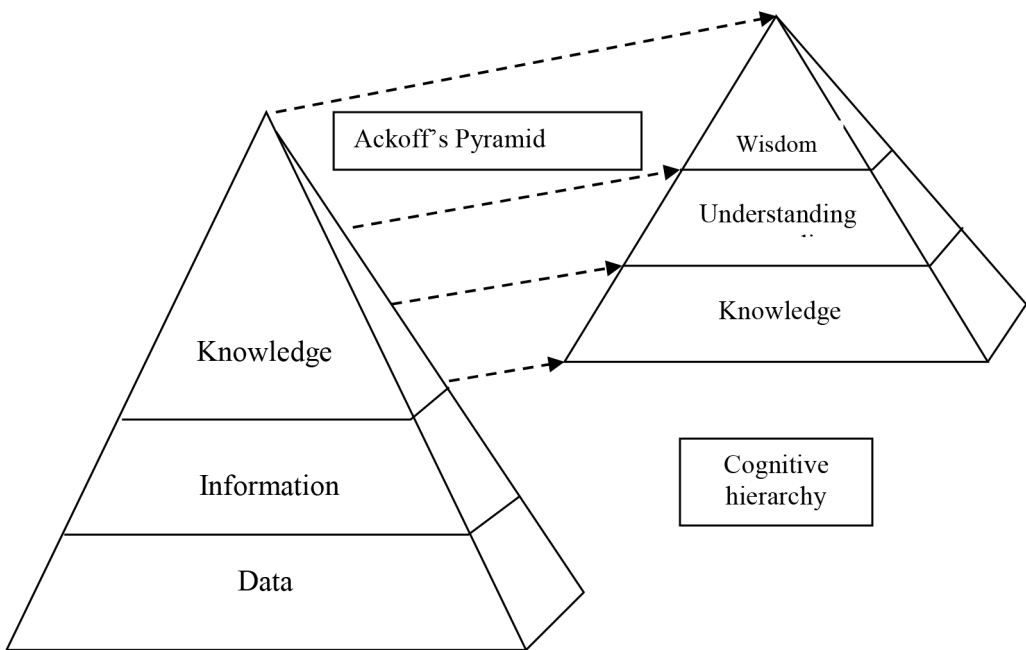
Innovative activity constitutes a set of actions of a scientific (research), technical, managerial, organizational, financial and commercial character, which are aimed at the development of and practical utilization of new, or substantially improved technological (products and processes), organizational, marketing and managerial solutions leading to the development of an organization and elements of its environment (Baruk, 2009, p. 82). An effect of such activities are facilitating, or radical innovations. Facilitating innovations are usually created through the recombination (repeated combination) of existing knowledge resources, while radical innovations require the acquisition of new knowledge.

Efficient conduct of innovative processes is determined by the acquisition (creating, or obtaining) of already existing knowledge, or creating new knowledge. Acquisition of knowledge alone is not sufficient for the efficient conduct of the processes of creating and implementing innovations. Also, the diffusion, distribution, absorption, storage, updating and management of knowledge are necessary.

As knowledge is the basic causal factor for successful innovations, economic development, it is necessary to manage it in a rational way. This activity is determined by managers' awareness of the meaning of knowledge, who possesses it, what its categories are, how you can acquire and process it, how you can rationally use it in innovative processes and how to manage it. In literature on the subject there is no unequivocal definition of knowledge. This term can be interpreted in a general way as a justified and truthful conviction, as a product of the stream of messages, rooted in the convictions and expectations of the recipient of the message (Nonaka and Takeuchi, 2000, p. 40 and 81). A similar image can be found

in the statement that knowledge constitutes the totality of messages and skills used by individuals to solve problems. Its basis are data and information, it is a creation of individuals and it reflects their convictions concerning cause and effect relationships (Probst, Raub and Romhardt, 2004, p. 35). The concept of hierarchy of data, information and knowledge is presented on picture 4.

Picture 4. Pyramid of data, information and knowledge enriched with the cognitive hierarchies, according to Davenport and Prusak



Source: Prepared on the basis of (Girard, 2006, p. 23).

This is a construct enriched with additional elements such as: understanding and wisdom.

Knowledge is a liquid mixture (structure) consisting of experience, value, contextual information, expert intuition, delivering grounds for the assessment and utilization of new experiences and information. Knowledge is set in the minds of people, while in case of an organization — in documents, procedures,

processes, practices and norms (Girard, 2006, p. 24). Knowledge is an individual ability to make distinctions within a particular field of activity, based on the understanding of the context, or theory (Tsoukas and Vladimirous, 2001, p. 983).

Selectively quoted definitions suggest that it is easy to talk about knowledge, but it is hard to define it. There is popular consent with regard to the position of knowledge in the chain of value, but there is no agreement with regard to its precise meaning.

In the context of the assumed structure of this publication, knowledge is understood as the ability to interpret data and information and to give them new, creative meaning in the process of creation and implementation of innovations, in the process of managing innovations (Baruk, 2014, p. 238). In literature on the subject various categories of knowledge needed for the implementation of innovative processes are named. One of the classifications divides knowledge into the following types: what?, why?, how?, who?, when?, from what?, where?, with what? From the general perspective we can talk about: 1) hidden knowledge — individual, specific-contextual, it is hard to formalize and communicate about such knowledge, 2) available knowledge — codified, which can be conveyed by means of a formal and systematized language. Human knowledge is created and disseminated through social interactions between hidden and available knowledge, which forms the so-called conversion of knowledge, which is a social process taking place between various people. As a result of the process of "conversion", hidden and available knowledge develop both in the qualitative and quantitative meaning (Nonaka and Takeuchi, 2000, p. 85). This process can take one of the following forms: 1) from hidden knowledge to hidden knowledge (socialization), 2) from available knowledge to available knowledge (combination), 3) from hidden knowledge to available knowledge (externalization) 4) from available to hidden knowledge (internalization).

Creating new knowledge is favourable for innovations, systemic transformation of organizations and its particular employees in the process of individual and organizational renewal. Creating knowledge requires not just spontaneous, but also organized interactions between organization members, which leads to the conclusion that knowledge should be managed. In a general view knowledge management can be treated as an integrated set of actions aimed at rational formation of knowledge resources meaning intellectual assets constituting the sum of knowledge of

individuals and teams of employees, used by an organization in its operations (including for the purpose of creating innovations). Also data and information belong to knowledge resources and constitute a basis for the creation of individual and collective knowledge. Creating knowledge resources is a symptom that an organization is learning (Probst, Raub and Romhardt, 2004, p. 35). Knowledge management is a process of preparation, transfer, sending, storing, identification, acquisition and implementation of knowledge in an organization (Okwemba, 2018, p. 17).

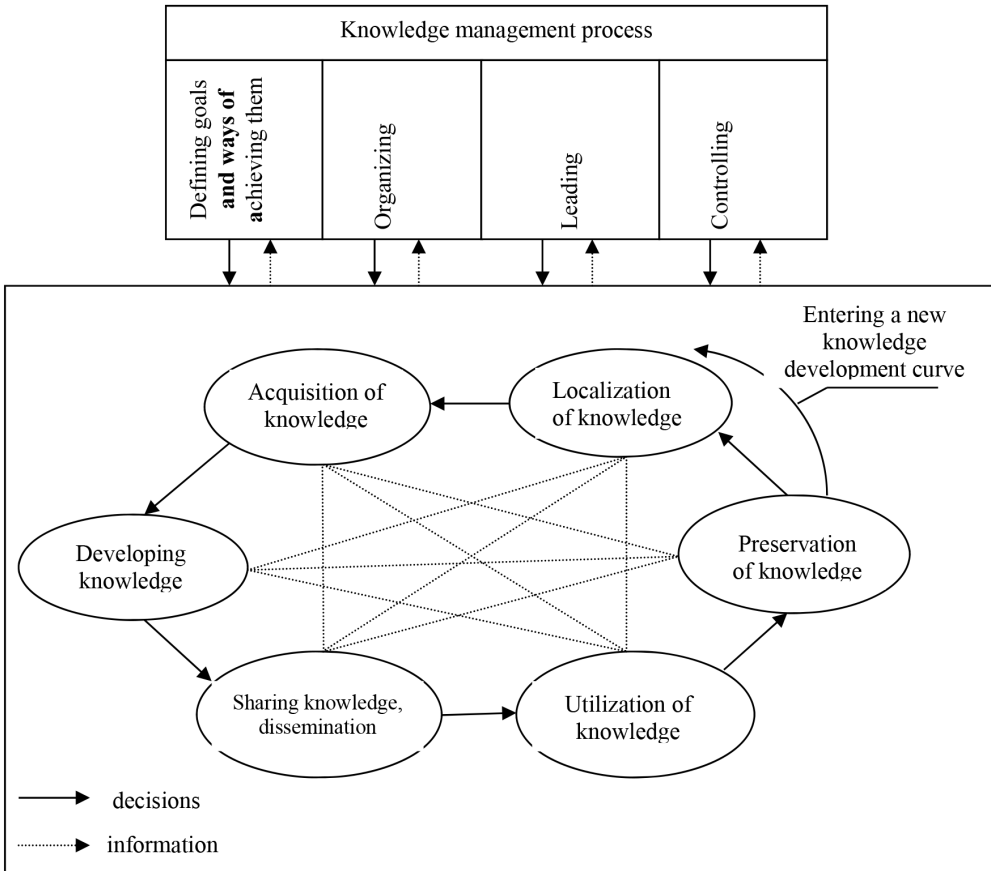
Knowledge management should be focused on key processes such as: acquiring knowledge, localizing knowledge, preserving knowledge, using knowledge, sharing knowledge and dissemination of knowledge, developing knowledge. The concept of such management is presented on picture 5. It presents a model association of the management function with partial processes (areas) forming the process of knowledge. Among such processes there are: localization of knowledge, acquisition of knowledge, developing knowledge, sharing knowledge and disseminating it, using knowledge, preservation of knowledge (Probst, Raub and Romhardt, 2004, p. 42–43).

Thus, managing knowledge involves extending the functions of management to each of these processes. It leads to the acquisition of knowledge assuring efficient solving of problems emerging at particular stages of the innovative process. As soon as a problem is identified, it becomes justified for managers to look for rational answers to the following questions: 1) what knowledge is necessary to solve the problem?, 2) is such knowledge available?, 3) where is the knowledge located?, 4) what is the knowledge gap?, 5) how can you acquire the necessary knowledge?, 6) how can you develop specialist knowledge?, 7) how can you publish the needed knowledge?, how can you rationally use knowledge?, how can you preserve knowledge?, how can you update knowledge?

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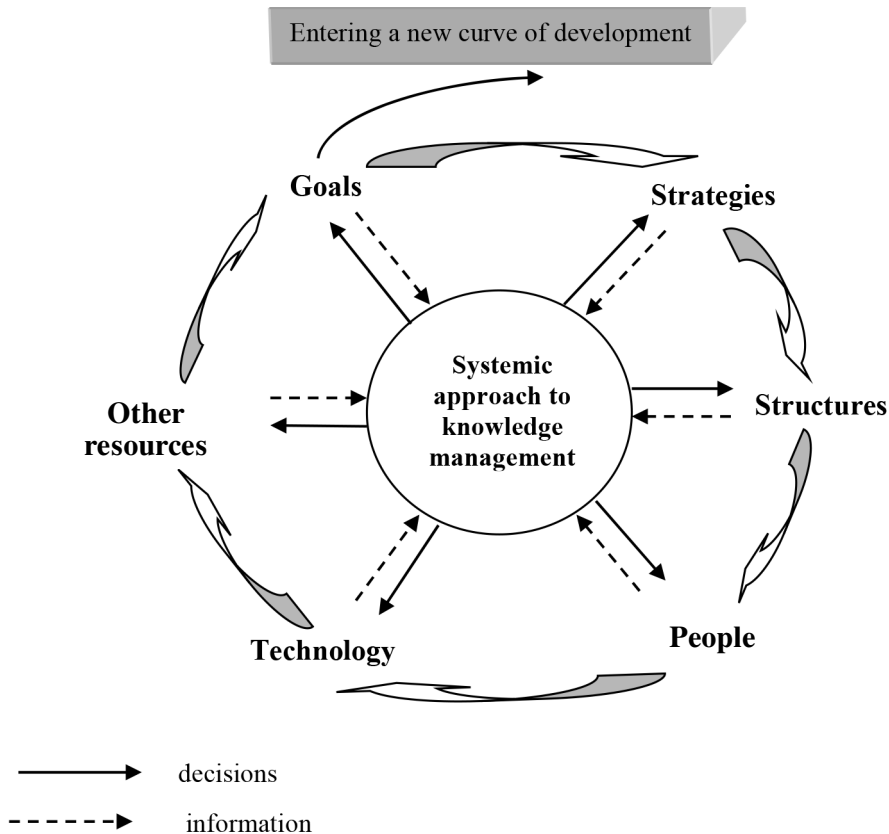
Picture 5. Model of knowledge management focused on the rational conduct of partial processes



Source: Own materials.

Another one of the possible concepts of knowledge management is the concept based on systemic approach in which the activity covering: localization of knowledge, acquisition, development of knowledge, sharing knowledge and its dissemination, using knowledge and preservation of knowledge treated as a system of activity consisting of elements: goals, strategy for achieving them, structure, people, technologies and other resources (picture 6).

Picture 6. Model of a systemic approach to knowledge management



Source: Own materials.

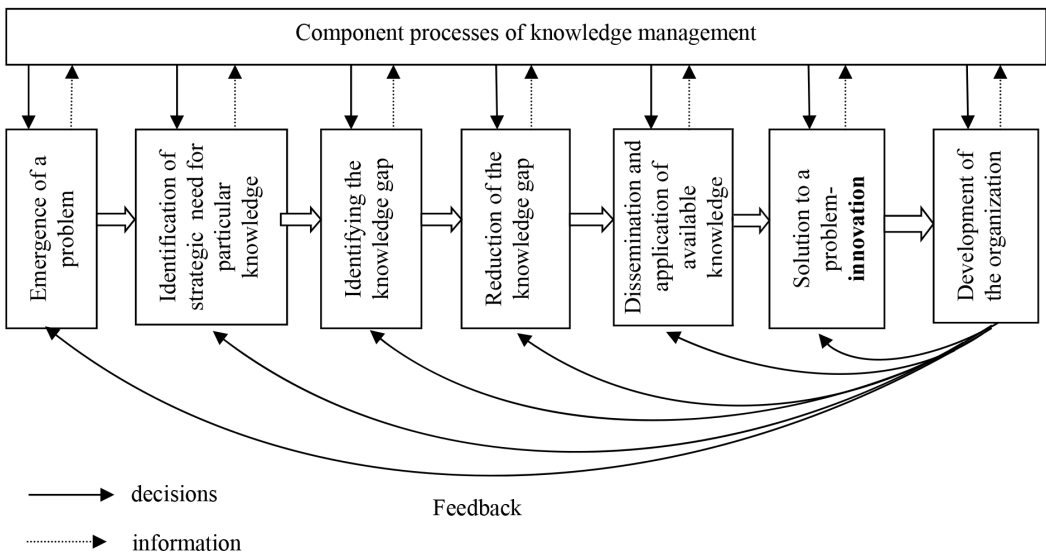
The first logical action contributing to the structure of knowledge management is the definition of goal/goals that an organization intends to achieve. The next step is preparing the strategy for achieving these goals. This action includes: the choice of knowledge necessary to solve a problem, the choice of methods of acquiring knowledge (what sources of knowledge you should use to achieve the biggest benefits from this knowledge?), the choice of methods of using knowledge.

The next action involves adapting the structure to the optimum implementation of the goal under particular conditions. It includes organizational forms (in the structural and process-related view) favouring

the management of knowledge, decision-making processes, division of authority and structure of roles, solving conflicts, system of communication etc. The structure has to stimulate inter-functional, integrating communication.

A very important element of the model of knowledge management are people who are the carriers of knowledge and its source, that's why the information-decision-making process has to be aimed at the acquisition of employees possessing knowledge, able to share knowledge with other people, able to expand knowledge (learn) and materialize it in form of innovations. "People of knowledge" have to be equipped with modern technologies facilitating the creation of knowledge and its materialization in innovations. This concerns mastering methods and techniques useful in the implementation of particular stages of creation and utilization of knowledge. The last element of the model of knowledge management are "other resources" covering everything that hasn't been taken into consideration in the remaining elements, that is: financial resources, technical resources, organizational culture, innovative culture, ability to cooperate etc.

Picture 7. Component processes of knowledge management in the context of strategy and the process-related character of management



Source: Own materials.

Knowledge is undoubtedly the basic factor determining the efficiency of innovative activity, which results from the definition of innovation itself suggesting that this is novelty. Creating something new requires scientific, technological, market, economic, organizational and managerial knowledge. Acquiring and using rationally such knowledge is not a spontaneous process and has to be managed to efficiently launch the process of creating innovations leading to the development of an organization, as illustrated by picture 7.

This concept involves defining the operational processes in the chain of knowledge value and such management of these processes, that enables joint aspiration of knowledge, as well as defined strategy and the goals of an organization resulting from it.

## Conclusion

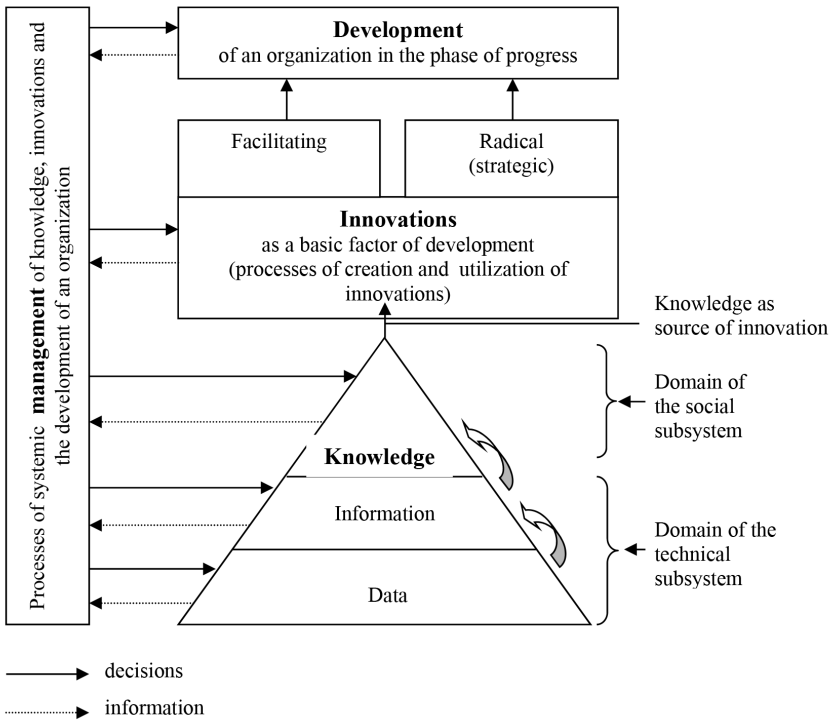
The goal of this publication was showing the nature of the development of an organization, innovations, knowledge, what the mutual relationships between these terms are, why they should be taken into consideration together and managed in a systemic way. If these issues are treated separately and are subject to partial influence of managers, there is a real threat of emergence of contradictions reducing the efficiency of such management, imbalance between the technical and social subsystems (domination of the technical subsystem). The result is shortage of knowledge necessary for efficiently solving the emerging problems (creating innovations), comparably low level of the culture of innovation, culture of knowledge, creating value from the perspective of an organization and not the client, low dynamics of organization's development etc.

At the same time, a contemporary organization should be a "thinking" organization learning by means of the fact that its employees learn, which leads to the growth of their engagement in co-creation of value materialized in innovations and their identification with the goals of the organization. Systemic creation of knowledge and innovations based on it leads an organization to development in the stage of progress and its members to individual and collective renewal. These actions have to be supported by



rational management aimed at the future of an organization and utilization of modern management methods, including knowledge management and innovation management. What can be helpful in such management is the concept presented on picture 8.

Picture 8. The concept of systemic, integrated approach to knowledge, innovation management in the context of development of an organization



Source: Own materials.

According to this concept, integrated management covers two subsystems: subsystem of knowledge and subsystem of innovations. An inspiration for the launch of processes of creating innovations in the subsystem of innovations are the goals of organization's development. As every innovation requires recombination of existing knowledge, or generation of new knowledge, it is necessary to launch the component processes of knowledge management in the subsystem of knowledge leading to the delivery of knowledge necessary for the start of the innovative processes. Managing these subsystems means that managers

have to serve the following managerial functions: defining goals, managing the ways of achieving goals and making decisions, organizing, leading and controlling. It is necessary to remember that the emergence of innovations is determined by the mutual influence of hidden and available knowledge. The basic condition for management according to the proposed concept is a change of mentality of managers from conservative to creative, the conviction that knowledge and innovations can become factors of development if they are rationally managed and individual (hidden) knowledge is systemically included in the system of organizational knowledge.

In practice the issue of knowledge management and managing innovative activity doesn't constitute a priority in the information-decision-making processes of many organizations. The main reasons for managers' limited engagement in the development of the highlighted subsystems are: risk associated with this form of activity and uncertainty with regard to future achievements; managers' reluctance to face emerging difficulties; comparably low awareness of the essence of knowledge, innovation and their influence on the development of an organization; fear of the unknown, hard-to-define final effect of the processes of knowledge and innovative processes; insufficient support for the processes of knowledge and processes of creating innovations from organizational and financial solutions; limited engagement in the formation of an innovative environment of experiences allowing clients to co-create values materialized in innovations and to use the possessed knowledge and experience for this purpose. We should presume that the proposed solutions in the area of a methodical approach to knowledge and innovation management will contribute to changing the attitudes of managers in this respect.

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