



Oliver Momcilovic, Jasmina Rajakovic

Knowledge Management as Indispensable Factor in the Organizational Changes

In the history of the modern world, there were three great waves of changes: agricultural, industrial and technological revolution. In the agricultural era, the acquisition of land was the key to success. In the industrial era, it was a capital and investment in capital goods. In the current technological era or the era of "knowledge", it has become a most valuable resource that one organization may have. To be creative and innovative, to think more further than others, have become critical characteristics for success. Technology has facilitated access to information, contributing to the further globalization of markets, automate industry and exponential growth of the amount of information. Knowledge has become the currency of our time, the key to survival and success. Transition from the culture-based industry represents a challenge for the way that people and companies think, work and function.

Keywords: *knowledge management, change, intellectual capital,*

1. Introduction

Organizational learning is a process which enables the organization to change and move forward, acquiring new knowledge, skills or behavior, and so transform. In successful learning organizations:

- Individual learning is continuous,
- Knowledge is shared,
- Company culture supports learning,
- Employees are encouraged to think critically and take risks with new ideas, and
- Each individual is evaluated according to their contribution to the organization.

Organizations have the organizational knowledge - the ability to achieve collective goals which could not be achieved by an individual goal that are designed to create value for shareholders.

Organizational knowledge is explicit (knowledge based on technical drawings, procedure manuals, computer memory ,...) and implicitly tacit (includes opinion, the "feeling" and a deep understanding). Tacit knowledge is an essential part of "knowing how" and "knowing why", and also essential in order to become useful.

Companies are often evaluated and several times higher than its book value. Market value is often derived from the undetermined wealth that is hidden within the organization, the property that is not recognized nor described in traditional financial terms.

2. Organizational assumptions of strategic knowledge management

For successful implementation of knowledge management strategy, the unambiguous support of top management is required. Applying the top - down principles in the implementation of knowledge management strategy provides easier overcoming of the resistance to organizational changes which are necessary to implement, so it can be approached to the implementation of knowledge management within the organization. From this fact, it can be determined that the top management plays a key role in initiatives for implementation of knowledge management. That is not always the case, because the initiative may be arisen by workers or leaders from the lower hierarchical levels, however, the success of knowledge management is predominantly determined by readiness of top management to accept the initiative, to adjust the corporate strategy in relation to knowledge management strategy, to extract necessary funds, to appoint knowledge manager and to participate in the program.

Knowledge management strategy involves a whole set of strategic (long term) and tactical (middle-term) activities that are reflected in the following:

- improve the corporate intranet,
- formalization of common practice,
- implementation of mentoring programs,
- improving the management of documents and records,
- support the transfer of knowledge from retired employees,
- documenting the knowledge of employees,
- improving policies and procedures,
- implementation of a new approach to learning, including e-learning,
- Implementation of tools for collaboration and team- process,
- formalization role of "knowledge broker" within the organization.

Also, the organizational culture of enterprise, understood as a soft tissue organization, must be ready to absorb the challenges and efforts that carries the program of knowledge management.

Adaptation of the organizational structure and organizational culture for the purpose of knowledge management can be accompanied by a large degree of obstruction of existing formal and informal structures within the organization, for which is required a previous preparation for the implementation of organizational changes.

3. Knowledge management strategies

Strategy of knowledge management involves meaningful knowledge management in purpose of achieving competitive advantage. On that basis, it can be concluded that knowledge management strategy must be associated with business and corporate strategy. Their relationship is complementary and should result in the products and services that are based on knowledge and can be successfully placed on the market.

In general, most of classification of knowledge management strategy is based on the division of knowledge into two categories - implicit and explicit.

Implicit knowledge includes the wisdom, intuition and anticipation. This knowledge is difficult to express and formalize, and therefore it is very difficult to share with someone. Explicit knowledge refers to knowledge that is expressed in letters and numbers. Such knowledge can be formally and systematically shared with others in the form of data, specifications, instructions, graphics, audio and video, computer software, patents and so on.

In relation to the types of knowledge, it is possible to formulate three strategies of knowledge management:

1. Technological strategies of knowledge management - this strategy is designed for structuring and mapping organizational knowledge. Supports for this strategy are technology, systems and databases. It is focused on the information or explicit knowledge. Individuals must explicit their knowledge in the database. It is process of knowledge codification, in other words, the transformation of implicit in explicit knowledge. Explicit knowledge remains recorded in the database and, as such, is ready for storage and usage in the coming period without opportunities to lose;

2. Personalization as a strategy of knowledge management - this strategy is designed as appearing of knowledge. This strategy of knowledge is closely related to the person who creates it. The company focuses on dialogue and face - to - face technique, in order to share knowledge with others. The purpose of this strategy is to support learning through sharing experiences. On this basis, it can be concluded that the strategy supports the transfer of implicit knowledge from person to person. It is about learning the procedures of work, learning a certain

behavior, techniques, business processes and the like. Transfer of implicit knowledge is one of the most difficult tasks in the concept of knowledge management and includes a physical presence of sender and recipient of knowledge, willingness of sender to discover knowledge and the willingness and ability of the recipient to absorb knowledge;

3. Socialization as a strategy of knowledge management - this strategy is a combination of the previous two strategies. Knowledge societies are the groups of people who are "settled" the area of knowledge and interact mutually, representing socialization. Socialization as a strategy of knowledge management is designed for the exchange and accumulation of knowledge. Existing knowledge is being transformed to a new knowledge.

Respectable knowledge management strategy has the following components:

1. Articulated business strategy and tasks:
 - Products and services,
 - Target consumers,
 - Characterization of the regulatory environment,
 - Vision and mission.
2. Description of the knowledge-based business tasks:
 - The need for cooperation,
 - Allowed deviation performance,
 - The need for innovations,
 - Allowed redundancy of information.
3. Inventory of available resources of knowledge:
 - Knowledge capital (implicit and explicit knowledge, know-how, expertise, experience of individuals or society embodied in the work routines, processes, procedures, roles, artifacts such as documents and reports),
 - Social capital (culture, trust, context, informal networks, reciprocity),
 - Infrastructure capital (LAN, WAN, servers, PCs, workstations, organizational structure).
4. Analysis of the recommended knowledge levers which describe what can be done with the identified knowledge and a list of projects management knowledge that can be carried out in order to maximize return on investment and business value.

4. Effects of knowledge management strategies

Performance of knowledge management strategy is measured on the basis of the effects made by it on business organizations and the business results. The problem with the results of applying the knowledge management strategy is a long period of time of realization for a number of individual effects, so they often cannot be expressed quantitatively, therefore they can be only described. In addition,

although ROI indicator is often used as standard business performance etalon, there are certain problems with its calculation after the implementation of knowledge management strategy, which reflects primarily in the impossibility of precise calculation of any financial benefit from the implementation of the concept of knowledge management.

Regardless of the nature of the results (quantitative or qualitative) successful knowledge management strategy has a positive effect and profit for all stakeholders. Also, it must contribute to the creation of the new value within the organization. Possible problem on the route management - the owners of capital may be due to long-term effects of knowledge management strategy, which postponed the allocation of new shares.

In general, knowledge management should be contribute to the reduction of costs, increase customer satisfaction, profit growth, rising productivity of employees, increase the innovative capabilities, market leadership, organizational stability and cultural change.

5. Manager as a factor of organizational changes

In this paper, you will find some answers to the questions that could help to avoid the jaws of globalization. First you need to say at the mention of the notion of change is its clear definition. It is also very good question to start the debate, which is characteristic for each transition and changes in social, political and economic institutions that determine the basic values of every society.

- Democracy Change,
- Local government Change,
- Market economy Change,
- Open borders Change,
- Telecommunications Change (can you imagine a life without a mobile phone?),
- Multiparty system Change,
- collapse of large commercial systems Change,
- Insufficient Social Security Change,
- Introduction of new new currency Change,
- growing crime Change,
- the privatization of social property Change,
- overly enrichment Change.

Pretty terrifying, is it not? Chinese symbol for change clearly indicates its essence, as well as the definition. Namely, the word "change" in the Chinese language is composed of two words - danger and opportunity.

What represents changes when applied to the area of local government? Are they disturbing, are they difficult to control or dangerous. Or may mean danger and opportunity. The reality is, of course, always somewhere in the middle and

often depends on the mental framework of people involved in the changes. One thing is certain. Changes will continue to determine the parameters of political process in a country, its economic development, social institutions, technological development, ecological crisis, as a way of life and reality of each organization. Bearing in mind the well known wisdom that a change is always constant present of our life, it every effort directed to its planning sounds reasonable, or taking responsibility for changes which become part of your jurisdiction when you arise changes within the organization. Some of the steps in this regard only apparently small or appear overly important. Most managers are very well known with this fact. This is a permanent phenomenon that occurs in the stable systems (organization), which actually remain unchanged (which is called the first-degree change). These are the changes necessary if the local government wants to remain in the function and efficiently provide services to the local community. In contrast, the second-degree changes occur in terms of fundamental changes in the system.

The vision of the future and its creation are of key importance in the process of organizational changes. Changing the organization can be simple and essential as:

- Changing habits (treating people as service users),
- Changing the organizational norms and value systems (open meetings with citizens in order to prepare a long-term development plan),
- Change the way of functioning of the organization (project teams comprised of employees from different sectors, other organizations with the aim of solving the acute problem that affects all, for example, the use of drugs in the local community), and
- Changing the system of compensation of employees for the contribution to the achievement of long-term goals of the organization (the annual celebration for employees and members of their families as recognition of their work).

Fortunately, there are great experiences and rich knowledge on the phenomenon of change, how it affects the managers and the organization and how successfully is being implemented. The idea that organizational changes can be planned and managed has already been present for many years in practice. Professional books on management just say the most about the concept of planned change, management changes, organizational changes, factors, and recently the concept of master change. In other words, these theoretic postulates are being used in practice as a possible approach to the changes and their effective introduction to the benefit of the organization and its customers. In this paper we use some of the concepts as a basis for making effective strategies and tactical measures that can help you become more efficient factor of organizational changes. As already mentioned, the organizational changes and, in the broader sense, management of changes are already well-known historical phenomenon. Historians have dealt with this theme far before academics and scientists. This

time, instead of detailed description of the historical perspective of the management change, the authors mention one that has made a major impact on the modern concept. The author is Kurt Lewin, a sociologist who immigrated from Germany to America in the early 30's.

At least five of his postulates have found its place in the theory and practice of management. They are embedded in the foundations of the strategy and tactics explained in this paper. Its settings include the following elements:

- the role of democratic management in non-political environment, including the allocation of authorities, distribution of powers, responsibilities and joint decision-making at all possible levels of the organization and society (which is the main issue in considering the modern management practices),
- dynamics of the group (interpersonal relations) and its impact on the efficiency of individuals and teams in the workplace environment,
- Experimental learning (learning through practice), as access to skills development and changes in attitudes and behavior
- analysis of action, as a way of decision-making in practice and the process of problem solving,
- analysis of power dynamics that operate within and among social systems, as an important contribution to the concept of organizations as open systems. Open systems are those that are correlated with the environment.

Five mentioned settings have not always come on the understanding, even in years after the Lewin started with researches. Decades after his research and work, the obtained results became widely recognized as a valuable contribution to the modern concept of management of the organization. There are numerous schools of management that exist today thanks to Lewin's early research efforts to define the basic principles of management of organizational changes. In this paper, development of study that deals with the efficient management of the organization and is based in one of Lewin's settings - analysis of action.

6. Analysis of action and managing the changes and her features

Analysis of action is one of the operational strategies, probably more than is commonly thought that this is the academic activity. As operational strategy, it affects the acquisition of new knowledge and leads to better effects. In a dynamic environment in which most organizations and managers works, information and knowledge and understanding the problem are essential, while planning changes is considered. Analysis of action represents the approach that can contribute to the achievement of both goals.

- Analysis of action represents a conceptual framework of researching a problem combined with the philosophy of management which can be applied in order to achieve the concentration of required activities;
- Analysis of action involves broad participation and consultation. All involved in the problem are considered to be capable to contribute to its solving. The procedure is based on the thorough conviction that people are willing to change if they are involved in the research of the reasons why it is necessary to introduce changes as well as the ways of their introduction;
- This methodology puts emphasis on learning through experience. Learning and training are embedded in the essence of the process. The intention is not just solving a problem, but also the acquisition of knowledge and skills to resolve future problems;
- Analysis of action includes practical and direct approach. Is being implemented in the context of real problems that define all interested individuals;
- By its nature, this method is experimental. Encourages experiments and application in practice, consider the importance of applying what is learned in practice as guidelines for future activities;
- Analysis of action takes into account the cultural context of the environment. Although it may not be exempt from certain cultural prejudices, this methodology respects the cultural differences on the basis of the built-feedback mechanism and the possibility of self-correction;
- Analysis of the action can be formulated as a comprehensive conceptual framework of management of organizational changes, as a set of principles and value orientations involved in the process of change, and as a strategy that drives tactical mechanisms that discussed as an integral part of management changes.

7. Managing organizational changes is a strategic process which contains eight tactical moves

Analysis of specific measures defined as the tactics used in the process of managing change. How is it formulated in the vocabulary, skills and tactics is the ability of employing available forces or most valuable assets in the direction of achieving a certain goal. So, the tactic itself never ends, it is a mean to achieve the final goal. Edward Bono said that the tactics serves to strategy.

Management of organizational change involves employing eight inter tactical measures within the framework of a complete strategy. In addition to explanations, they are represented in the diagram of analysis and action:

- **Awareness and vision.** Awareness is the ability of observing the problem in the way they are. Vision is the ability of emphasizing the possibilities which does not exist in reality. Both are skills of the incomparable importance for the introduction of changes in the organization and efficient management. Awareness and vision include issues such as - who else can be included in solving problems and achieving the vision? This process is often called factor analysis. As Ming Chiu said before many centuries – one can win a war, if he knows the enemy. With more positive spirit, it can be said - to successfully manage the changes, one need to know the participants of this process.
- **Willingness to resolve the problem.** As the foundations of a house, mutual relations of people in problem solving are the basis for all future activities. Relations of trust and understanding influence in facilitating the process of decision-making and problem-solving. Building these relationships included:
 - Joint expectations and value orientations,
 - Setting up the basic rules,
 - Establishing roles and responsibilities for the implementation of useful targets, and
 - Learning teamwork.
- **Definition and analysis of the problem.** Defining the problems and possibilities for its resolving in general is not a simple task. Sometimes it is necessary to redefine the problem and the possibilities for a solution, even when the local authorities have made a decision about it. For example, local managers or elected officials can identify the symptoms of the problem (which is often the case). Problem is solved as the solution-symptoms, which means that the actual problem remains unresolved. Or, for instance, managers may define a solution as a problem which, of course, eliminate all other options as a potential solution. Defining the real problem for many managers is a complex task. This is probably because it is much simpler to resolve symptoms, even if the actual problem remains unresolved. After you define the actual problem and determine the possibilities of solving, task analysis of the problem becomes much simpler.
- **Planning activities.** After identification of the real problem (or the possibility of solving) and analysis of all aspects, the next step is to determine the implementation of solutions and most valuable plan, which includes:
 - narrowing the possible options and to define priority actions,
 - analyzing possible consequences (short and long-term effects), and

- Establishing a plan of action (most measures, or combination of activities).

Options are the best friend of the managers. Without them, management is not possible. If there are no options, there is nothing to be decided about. If there is nothing to be decided about, what is the purpose of the managers? Planning includes decision-making and because of that, it represents a significant commitment of management. Planning course of action means making decisions about: who will do what, with whom, in which time and with what resources?

- **Organization and mobilization of resources.** In most local governments, organizations and its employees are the most important and directly available resources. It is important also in which way they are organized and arranged for the implementation of the strategy change of the organization. Other resources as money, expertise, equipment, materials, time, commitment to goals, political will, good links (those that allow solving unexpected difficulties), citizens (users of products planned changes), as well as many other factors should be also mentioned.
- **Experimentation, testing and redesign.** Too promising solutions is implemented without prior review, the controlled experiment or test of functioning. Before you dive deeper in the previously untested major organizational changes, it seems reasonable to test your plan in the conditions - shallow pools. This will enable assessment of your team and your own performance in achieving the plan, as well as the possible redesign.
- **Implementation.** Implementation of your plan into action and managing the consequences possibly made during the implementation can happen even in case of well-designed activities. (don't forget Marfi's law - If anything can go wrong, it will). Consequently, it is necessary to make backup plans. Other important management responsibilities in this context are - management, training, support and delegate obligations (development and motivation).
- **Evaluation of the effects.** It represents a set of questions such as: is everything accomplished by the plan, if not - why? Whether the changes have the expected effect, if not, why? Summary evaluation of the consequences of planned change is also significant, although for the managers more important is formative evaluation. This is because they need feedback, information and insight into the process of change.

8. Conclusion

Strategic management of knowledge allows you to connect the current business and the concept of knowledge management into a single entity capable of ensuring long-term competitive advantage and survival of the organization.

With institutionalization of the position of knowledge manager, you can easily formulate and implement knowledge strategies because it is the mandate for the mission, embodied in one person who has the authority and responsibility to perform such tasks. Top management provides guidelines for formulating a strategy of knowledge management, having in mind the existing business strategy. The application of knowledge management strategy requires serious preparation and demands considerable funds which are often limiting factor. The effects of the implementation of knowledge management strategies acquire benefits for all stakeholders.

Previously said leads to the conclusion that companies in the era of knowledge must have precisely formulated strategy of knowledge management or will very quickly come to erode its core competence, which will brought into question the future business processes.

One of the concluding comments of this paper is the list of phases of management changes:

- renewal of the cycle is embedded in this approach. Once the cycle is complete, starts a new one, based on what has been learned and experienced;
- The process may start at any stage of life. In other words, the time point of view there are no restrictions in terms of budget planning stage, or justification as - we just passed the strategic planning process, or any other pronouncement that it is not the time for change;
- The process can often produce a mess, moving back and forth, and in some of its phases. It happens that sometimes it is necessary to return to step back for any reason. For example, because it is impossible to plan the course of activities (phase 4), no real insight into the problem or the possibility of solving (phase 3). In some other cases, it is possible to skip certain phases of the process. Also, the planned activities can be clearly defined (phase 4), but due to lack of time may seem that the test and redesign changes are not necessary. It is highly important to observe the process as a dynamic, flexible and appropriate in relation to the needs and desires of the participants.

References

- [1] Adamovic Z., *The theory of systems*, Technical Faculty "Mihajlo Pupin", Zrenjanin, 2004
- [2] Bacera-Fernandez I., Gonzales A., Sabherwal R., *Knowledge Mangement - Challenges, Solutions, and Technologies*, Prentice Hall, New Jersey, 2004.

- [3] Bergeron, B., *Essentials of Knowledge Management*, John Wiley and Sons, New Jersey, 2003.
- [4] Dalkir, K., *Knowledge Management in Theory and Practice*, Elsevier, Oxford, 2005.
- [5] Cernicek, I, *Theory of system*, Technical Faculty "Mihajlo Pupin", Zrenjanin, 1996
- [6] Momcilovic, O., Ph.D. thesis: *Knowledge management and changes in the decisive factors of IT Education*, Faculty of Management, Novi Sad, 2008
- [7] Momcilovic, O., Adamovic, Z., Milosevic, S., *Methodology of scientific research (aspects of systemic thinking)*, Belgrade, 2009
- [8] Nicolas, R., *Knowledge management impacts on decision making process*, Journal of Knowledge Management, Vol. 8, no. 1, 2004

Addresses:-

- Assist. Prof. Ph.D. Oliver Momcilovic, MEGATREND University, Belgrade, Serbia, oliomaster@gmail.com
- M. Sc. Jasmina Rajakovic d.o.o. PRIVILEG, Sabac, Serbia, yeya_m9@yahoo.co.uk