Vliv nových disciplín managementu na inovace v organizacích

The influence of new management disciplines on the innovation in organizations

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Abstract:
Purpose of the article: The aim of organizations is efficient management leading to a competitive advantage. In the current knowledge economy, employees, their knowledge and potential are considered to be an organizations’ main competitive advantage and their most important asset that determines organizations’ performance and success. By introducing modern areas of management, organizations can quickly identify and utilize knowledge, which enables the rapid application of knowledge in innovations and key processes and thus getting in front of their competitors and gaining a competitive advantage in the market. This article focuses on the impact of applying business continuity management, knowledge management and knowledge continuity management on innovations in organizations and their productivity.

Methodology/methods: The article has been prepared based on the analysis of primary and secondary sources, outcome synthesis and the evaluation of results of a questionnaire survey in organizations in the Czech Republic.

Scientific aim: The aim of this article is to identify the importance of the knowledge in the process of innovations and modern areas of management and to identify the impact of the implementation of these areas on innovative development that determines an organization’s performance.

Findings: The application of these new management disciplines and knowledge of employees has an impact on the organizational processes, innovation, customers, employees and their knowledge and organization’s financial results.

Conclusions: Organizations that have made a decision to apply new management disciplines may expect benefits not only in the area of knowledge utilization, innovations and innovative potential, but subsequently also in the increasing of efficiency of the entire organization.

Key words: business continuity management, knowledge continuity management, knowledge management, competitive advantage, innovation, performance

JEL classification: D83, O31
Introduction

In the present situation characterised by dynamic changes, organizations concentrate their effort on efficient management aimed at gaining a competitive advantage. In the course of its activities, organizations are threatened by both the external and internal environment. This is why organizations pay more and more attention to the so-called business continuity management whose task is to help anticipate potential threats and their consequences that might have a negative impact on organizations’ key processes as well as organizations as a whole. In order for an organization to be successful in the market and improve its performance, it is necessary to monitor all changes and ensure not only the continuity of processes, but also of knowledge as, in compliance with the resource approach, this contributes to achieving a competitive advantage.

Organizations wish to have efficient management in place. In order to achieve its goals, organizations have to ensure the proper and efficient functioning of individual innovation-based processes in which organizations’ employees who are the holders of knowledge take part. If employees change their positions, they take the knowledge with them and this may affect the quality of such processes. The problem of not ensuring the transfer of knowledge results in time and material losses in the quality of process management.

1. Objective and methodology

Based on the analysis of primary and secondary data, this article will attempt to identify the following:

- the importance of knowledge in the process of innovations and modern areas of management that also employ knowledge;
- the impact of the implementation of these areas on innovative development that determines an organization’s performance.

The primary sources have been obtained through a survey. The data for the evaluation of benefits has been gathered through a quantitative survey (i.e. a questionnaire survey), in which 167 higher and middle management managers from 580 various organizations took part. The questionnaire was distributed to 814 respondents. The overall questionnaire return was 20.52. The data have been processed by means of absolute and relative frequencies using the LimeSurvey application and the Microsoft Office Excel 2007.

The secondary sources include research works targeted at business continuity management (BCM), knowledge management (KM), knowledge continuity management (KCM) and innovations. Data obtained has been processed by methods of induction, deduction, analysis and synthesis of knowledge and through the review of outcomes of the survey carried out among middle- and higher-level managers in organizations in the Czech Republic. On the basis of the survey, there have been identified areas in which the application of BCM, KM and KCM turned beneficial.

2. Theoretical background of the article

2.1 Business continuity management

Currently the business continuity management is considered a managerial discipline that focuses on the identification of potential impacts arising from negative circumstances that can threaten organizations. BCM therefore creates a framework to ensure a certain level of resistance and ability to respond to unexpected events and thus to protect not only the key organization’s processes, but also its interests, for instance the market value of shares. The main areas of BCM implementation include: employee safety, internal communication in organizations, restoration of critical business processes and functions, efficient risk management and knowledge continuity. BCM may be implemented by all organizations regardless of their size or purpose of business (Erkan, 2010; Herbane, 2010). What is important is the support of the top management and anchoring BCM into the organizational culture in order to make all employees understand its role. BCM can be expressed by the so-called BCM lifecycle in which BCM is viewed as a continuous process (see Figure 1).

![Figure 1. Business continuity management life cycle diagram. Source: British Standards Institution, 2010.](image-url)
According to Wong (2009), the basic roles of BCM in strategic management deal with four basic factors, which are as follows: long-term character, achievement of a competitive advantage, adequate means to achieve an organization’s goals and organizational decisions. Strategic management is associated with a longer time horizon when goals and plans are set and directed, using organizational means, at the achievement of these long-term goals. It is therefore possible to say that BCM could be considered one of the organization’s crucial strategic goals that contribute to the competitiveness of this organization. Recently achieving a competitive advantage has meant being ahead of competitors, being in the lead and doing something that is difficult to copy. It is possible, for example, to place a strategy above the frame of accepted experience while paying more attention to knowledge strategies and innovation. These innovative approaches can, according to Wong (2009), be transformed into strategies ensuring business continuity and plans that maintain and protect organizations’ critical activities. Organizations that have incorporated BCM in their strategic management could achieve the so-called distinctive character, i.e. better performance compared to their competitors (Wong, 2009). In conclusion, it can be summarized that BCM is based on three essential aspects – technologies, people and processes.

2.2 Knowledge management

Knowledge management, like BCM, is another important area that an organization must focus on. According to Altmeyer and Georg (2002), Collison and Parcel (2005), Davenport and Prusak (1998), Seeley-Brown and Duquid (2000), Young (2003), knowledge management is the discipline of enabling individuals, teams and entire organizations to collectively and systematically capture, store, create, share and apply knowledge, to better achieve their objectives. Dalkir (2005) adds that knowledge management is the deliberate and systematic coordination of an organization’s people, technology, processes, and organization structure in order to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into organizational memory in order to foster continued organization learning. This is confirmed also by Anatan (2007), who perceives knowledge management is the foundation of organizational learning. Through the process of learning, knowledge ultimately provide the creative potential of innovation organization will find the ways to improve the innovative performance. As new outputs, innovations may come from new knowledge as well as from the combination of existing knowledge to create architectural innovations, using combinative capabilities. Radical and incremental innovations refer to high and low degrees of new knowledge, involving high and low degrees of organizational transformation.

With respect to the above said, the basic elements of successful KM can be summarized as follows: (1) Reliable common technological infrastructure that permits knowledge sharing. (2) Alliance of people who possess knowledge and are willing to share it, ask questions and listen to others. (3) Organizational culture and organizational structure encouraging knowledge sharing. (4) Proven processes to facilitate knowledge sharing, review and extraction.

2.3 Knowledge continuity management

Knowledge continuity management is a branch of knowledge management (see Figure 2). While knowledge management focuses on the capturing and sharing of know-how important for colleagues who have similar tasks in the organization, knowledge continuity management is targeted at the transfer of critical knowledge (minimum knowledge base, knowledge level decreased below this level leads to the knowledge discontinuity) from departing employees to their successors (Beazley, 2003; Beazley, Boenisch, & Harden, 2002; Levy, 2011).

If the leaving of an employee does not lead to changes in the original knowledge base, the successor has taken over all critical knowledge of the leaving employee. In other words, the aim of knowledge continuity is to maintain the original knowledge base of the leaving employee. As a result, newcomers who replace leaving employees spend more time to start working as important findings and information of their predecessors is lost. The problem of unsecured transfer leads to time and material losses in the quality of process management. This paralyses organizations’ abilities to act flexibly and keep track (Stam, 2009).

The above implies that managers have to pay attention to knowledge continuity and make this activity part of managerial roles in order to achieve an optimal level of business continuity since without knowledge employees holding knowledge critical for the organization it is impossible to ensure business continuity.

In other words, it can be said that knowledge management serves to develop the current potential of an organization’s knowledge employees and by then applying knowledge continuity management, the preservation of this potential by the organization
can be ensured despite personnel changes that involve the leaving of key knowledge employees. The efficient utilization of knowledge management in combination with BCM and knowledge continuity management leads to the improvement of productivity of organizations and the enhancement of their competitiveness in the market.

2.4 Innovation

Kiernan (1995) states that in the past there was no need for continuous innovation. The pace of competition used to be quite slow and innovations once in several years were sufficient. However, for a number of sectors this is no longer true in the present conditions. Today’s super-competition leaves no space for rest, requiring organizations to innovate on an ongoing basis. It is a competitive necessity.

The term of innovation originates from a Latin expression “innovare” (renovate). In the most general sense of the word innovation means a change (Drucker, 1993). Innovations are a series of scientific, technical, organizational, financial, business and other activities, the goal of which is to produce a new or significantly improved product (goods, technology or service) efficiently launched in the market (Švejda et al., 2007). Innovation also means re-launching and broadening of a range of products, services and related markets, developing new production, supply and distribution methods, introducing changes in management, organization of work, working conditions and labour qualification. Innovation is aimed at increasing the market value of the final product. It can be understood as an ongoing process of searching for resources and new results (Mlčoch, 2002). Innovation means a change in the resource profitability, a change of values and consumer satisfaction brought about by such resources (Drucker, 1993; Švejda et al., 2007).

The basis for innovation production lies in the generation of knowledge (Košturiak & Chaľ, 2008). Thanks to knowledge, employees come up with new, often better, solutions (Tsoukas, 2009; Tsoukas & Mylonopoulos, 2004).

Based on the summary of previous subchapters, it is possible to state that knowledge continuity ensuring has a significant meaning for and impact on the quality of processes, innovation and the quality of operational, tactical and strategic decision-making based on timely, precise and complex knowledge of the matter in question. The importance of knowledge continuity ensuring also follows from the fact that a leaving employee from an organization where knowledge continuity is not ensured will carry off with her/him not only the know-how, but also relationships s/he has established with his/her collaborators in the organization. Where knowledge continuity is ensured, if an employee with critical knowledge decides to leave, the organization will not lose the knowledge since it has been transferred to a different employee. Also the quality of organizational processes will be preserved. Systematic knowledge continuity ensuring is therefore aimed at the continuity of an organization’s development and decision-making. Thanks to new findings, innovati-
ons enhance or redesign an already existing process or add a missing element (Seeley-Brown & Solomon-Gray, 1995).

Innovative development which falls within the category of aggressive strategies can be, according to Pitra (1997), defined as measures in the internal environment of an organization that result in the improvement of the quality of products and services offered. However, it is necessary to add that innovative development in innovative processes is very costly and for a longer period of time consumes a major part of the funds that the given organization has available. The organization has to re-earn the effort and means employed; otherwise it has no chance of surviving in the strongly competitive environment (Drucker, 1993).

2.5 Mutual relations and the impact of applying these areas on innovations and subsequently on organizations’ performance

Innovative ability and performance are terms that are frequently interchanged and often “blend”. In terms of innovative process which is understood as the transformation of inputs into outputs (see Figure 3), both terms represent poles, with innovative ability standing at the beginning and innovative performance at the end of the innovative process (Drucker, 1993).

An organization’s innovative ability can be perceived as its potential, a basis of preconditions for the generation of innovations in the organization. These preconditions can be found not only inside the organization, but also in its surroundings. By improving
the organization’s innovative ability, the organization increases its chances of generating innovations. Innovative ability is represented by innovation process inputs.

Organizations that wish to survive in the competitive global market environment and attempt to strengthen their position in the market may not ignore product, service and process improvement (Tureková & Mičieta, 2003). It is necessary to respect all factors, not only of material and financial nature, but in particular the human factor needs to be present pro-innovatively (Tureková & Mičieta, 2003). The fact that the process of introducing innovations requires that focus be placed on employees stimulates organizations to build the environment of an innovative organization (Stachová & Stacho, 2010). According to Douglas and Seely-Brown (2011), Kiernan (1995), Stachová and Stacho (2010), the factors that influence innovative organizations include the following: involvement of management in innovations, creative leaders (innovators), innovative organizational culture, focus on customers, open efficient communication, learning organization, flexible organizational structure, intense engagement in innovations, talent management and team co-operation. It is possible to say that the higher is the level of the innovative organization factors in the organization, the higher the number of qualified and talented employees willing to work for it. And these employees will represent a competitive advantage for the organization.

The Figure 4 provided below shows space for the application of product and service innovations.

3. Results

Organizational measures directed at the application of research and development knowledge that contributes to the success of an innovation are theoretically grounded on three basic principles (Pitra, 1997). These measures, however, need to be respected by organizations as they may, in the final effect, contribute to a higher efficiency of individual processes and help gain a competitive advantage. The Figure 5 provided shows both the theoretical principals as well as practical recommendations for organizations.

The Figure 5 clearly shows that the measures regard the following:

1. Knowledge application – the success of an organization’s innovative efforts is determined by the ability of its employees to acquire and generate the necessary knowledge, but also to distribute it for the general benefit of the organization.

2. Creative skills – people’s creative skills are the decisive indicator of performance efficiency. In order to develop and exploit these creative activities, it is necessary to develop favourable conditions. The outcomes of the survey carried out in the Czech Republic reveal to the extent to which the decisive internal factors influence knowledge continuity ensuring that contributes to the improvement of the efficiency of individual processes. With respect to knowledge continuity ensuring, it has been found that organizational climate is the strongest factor in all organizations examined. Other important factors

![Figure 5. Organizational arrangements. Source: own elaboration.](image-url)
include stimulation and organizational culture. Organizational structure is the least important factor. At an individual level, motivation is the most significant factor, followed by the will to share knowledge and trust. It can be concluded that large organizations are more strongly influenced by factors at the organizational level while factors at an individual level play a more important role in small organizations. Knowledge continuity ensuring determines individual process in organizations. This means that knowledge continuity is one of the strengthening factors of an organization’s performance.

(3) Activity synergy – concentrating attention on the openness of relations between knowledge resources and consumers. In other words, it refers to an efficient transfer of all organizational resources and knowledge throughout the whole innovation process. Competitive advantage durability can derive from the fact that innovations based on new knowledge extend current knowledge in a unique way and thus provide an opportunity for achieving a synergic effect. The efficient management, strengthening, sharing and preserving of employees’ knowledge are likely to broaden the knowledge of individuals as well as the so-called organizational knowledge. On the global scale, the introduction of knowledge processes enhances the performance of the entire organization. There are also long-term advantages as there are activities in which the transfer of knowledge, experience and skills takes a longer period of time. This, however, requires respecting individual functional strategies that determine the implementation of the overall innovative strategy of the given organization, i.e. accomplishing the synergic effect from the combination of individual strategies (see Figure 6). By linking individual strategies, organizations can reach better results than by gradual implementation of individual strategies.

One of the factors that support an organization’s innovative activities is a functioning knowledge market within the organization, i.e. the sharing and transfer of knowledge between current employees as well as between generations of employees. The introduction of KM and KCM produces benefits that can be divided into two groups. One of them includes benefits associated with the implementation of knowledge processes and the other comprises benefits directly connected with the basic business goals of the organization that have an impact on the following:

- organizational processes;
- innovation;
- customers;
- employees and their knowledge and
- financial results.

The organizations engaged in the survey have benefited from the introduction of knowledge continuity management primarily in the area of employees, organizational processes and innovation. Based on the surveys carried out it can be stated that in the area of innovations major benefits include the application of new technologies (78 respondents, 52,7%), launch of new products and services (47,9%), introduction of new business segments (27%) and improvements in research and development (14,86%) and generally in all knowledge-based processes. While practice offers a number of examples of benefits arising from the implementation of knowledge management strategies in organizations (Jones, 2003), technical literature provides only limited background information concerning the methods of their measurement.

![Figure 6. Support of strategy. Source: own elaboration.](image-url)
In his survey, Jones (2003) tried to demonstrate the benefits of knowledge management by measuring its impacts through the Balanced Scorecard conception. This conception helps organizations link strategic goals with operational activities and allows for their measurement. Since its first publication by Norton and Kaplan in the early 1990’s, many organizations have applied it to measure four key aspects of their organizations’ performance: Financial, Customer, Internal Business Process, Learning and Growth. Simultaneously, it matches an organization’s vision and strategy and monitors the performance of the organization from five perspectives that were examined in the surveys carried out. Organizations should realize that this system of measuring of their performance is targeted at developing their future growth opportunities and should place emphasis on balancing all five perspectives. This means that for an organization to be successful in the long term, it has to focus not only on generating the biggest possible profit today, but also on satisfying future customers, an efficient arrangement of internal production and management processes and improving qualifications of its employees. In fact, many organizations are losing important opportunities to spur their research and development results by not being able to quantify the results of such collaborations. It was confirmed that a collaborative balanced scorecard is a very useful tool to measure, track and improve the impact of conducting collaborative projects with universities.

Based on the analysis of secondary data sources, in particular of scientific works focusing on the area of BCM, KM and KCM, innovations and the survey carried out, it can be stated that KM and KCM form a basis for BCM and together they support the development of innovative strategies, lead to a competitive advantage, efficiency, more efficient identification of potential threats and better decision-making with lower risks.

It is clear from the above that an efficient transfer of knowledge produces benefits and contributes to the improvement of processes and higher competitiveness of the given organization. If an organization decides to focus on ensuring BCM, KM and KCM, i.e. if it is able to anticipate potential threats and their impacts on the organization, realise that the knowledge of its employees is the greatest asset and efficiently support knowledge sharing and transfer between current employees as well as generations of employees, benefits are likely to occur not only in the area of knowledge utilization and team cooperation, but consequently also in the improvement of performance of the entire organization, cost decreasing and increasing of productivity, including economic and non-economic aspects.

In conclusion, it can be said that organizations are aware of the fact that an efficient transfer of knowledge generates benefits and helps increase competitiveness of the given organization. This is also confirmed by North and Hornung (2003) who also point out that benefits arising from knowledge management and knowledge continuity management are dependent on the organization’s acceptance and application of and adherence to the conception.

Discussion

Organizations’ managers have already started to realize that in the still faster competitive environment they cannot rely solely on the size of the organization and its capital strength, but in particular on their employees, i.e. knowledge employees, who are carriers of both explicit and tacit knowledge.

By applying knowledge management, successful organizations acquire the ability to readily utilize knowledge, which permits them an early application of knowledge in key production processes and thus keeping ahead of their competitors and gaining a competitive advantage in the market. Knowledge management thus becomes the basic prerequisite for innovation management implemented through knowledge employees who are, thanks to their creativity, involved in innovations.

Should these employees change their position, they take their knowledge with them and this may threaten the quality of processes. Therefore, it is important to ensure knowledge continuity management, which is a branch of knowledge management. Without the right process aimed at preserving this knowledge and its transfer to successors, organizations would lose this knowledge and its efficiency would be threatened. The problem of not ensuring knowledge transfer results in time and material losses in the quality of process management.

Based on the results (135 respondents – 91.2%) it is possible to state that knowledge continuity ensuring has a significant meaning for and impact on the innovations, quality of processes and the quality of operational, tactical and strategic decision-making based on timely, precise and complex knowledge of the matter in question.

According to Bersin & Associates research study (O’Leonard, 2009), succession planning is critical to the long-term health of any organization. Only 26 percent of organizations say they have successors identified for the majority their executive posi-
tions. It is troubling, given the number of impending retirements within most organizations. These organizations will likely find themselves responding reactively to changes in leadership, relying on the external market for succession candidates – or on ill-prepared internal candidates.

The main recommendations for organizations are thus to support innovations, develop strategies and mechanisms encouraging innovations in all processes and to make continuous attempts to surpass themselves. Innovations are part of all business segments, however, it is necessary to realise that it is manageable to accomplish excellent results once, but it is much harder to excel repeatedly and in the long term. Simultaneously, what distinguishes truly excellent innovators from competitors is their ability to develop such mechanisms that will continuously support innovations. Successful innovation also encompasses monitoring of key indicators, i.e. the growth rate of innovations, intensity of information and communication technology application, investments in education, ensuring knowledge continuity and business continuity.

It is important for organizations to increasingly realise and place more emphasis on their employees’ knowledge in order to prevent loss of such knowledge and ensure its preservation for the organization and for the purposes of employees’ successors, should an employee who is the holder of critical knowledge decide to leave the organization. Simultaneously, it is necessary for organizations to shorten and speed up the innovative process.

Knowledge-based innovations represent a source of relatively durable competitive advantage. Furthermore, it is necessary to focus on the development of managerial competencies and organization’s core competencies. With respect to the fact that managerial competencies also include explicit and tacit knowledge, the process of working with knowledge leads to continuous organizational learning. The durability of a competitive advantage therefore derives both from unique knowledge as well as the abilities to use this knowledge. The introduction of BCM, KM and KCM together with a suitably pre-set organizational culture will contribute to the increase of the innovative potential of the given organization.

Conclusion

BCM, KM and KCM ensuring has a substantial significance for and impact on the quality of processes, the quality of innovations and the quality of operational, tactical and strategic decision-making based on timely, precise and complex understanding of the situation. To achieve a better quality of processes, faster and correct innovations and thus increase efficiency leading to a competitive advantage, it is necessary for organizations to ensure BCM, KM and KCM. The reasons are as follows:

- Each employee in an organization takes part in its processes and needs knowledge for her/his activities => innovations are also based on knowledge.
- By ensuring KM and KCM, it is possible to eliminate the negative consequences of knowledge loss (due to personnel changes) and to maintain the quality of processes and knowledge necessary for further innovations.
- They improve and speed up the process of initial training of new employees, facilitate adaptation to changing internal and external conditions and thus increase the flexibility of decision-making in the field of innovations.

The respondents determined definitely that the application of KM and KCM have impact on the basic business goals of the given organization. A total of 105 (70,9%) respondents stated that the biggest benefit lies in the improvement of the organization’s performance, 74 (50%) respondents found that it was beneficial in terms of cost lowering, 67 (45,2%) respondents mentioned the introduction of new methods of work and 57 (38,5%) the increase of profit.

Organizations that have made a decision to apply BCM, KM and KCM may expect benefits not only in the area of knowledge utilization, innovations and innovative potential, but subsequently also in the increasing of efficiency of the entire organization. The goal of the future success of organizations in the strongly competitive environment is to develop knowledge- and innovation-based economy as knowledge, research, development and innovations are the pillars of competitiveness.

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