MANAGERS' EXPERIENCES CONCERNING KNOWLEDGE MANAGEMENT IN SERVICE ENTERPRISES IN THE ASPECT OF CONDUCTED RESEARCHES

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Abstract

This paper presents the results of a survey carried out among service-based businesses in terms of employees' knowledge management. The survey was based on experiences of the managers who could identify and indicate the main processes of knowledge management which function in their businesses and other related partial activities taken by the employees. The activities connected with knowledge management in terms of their identification, use, transfer, and development were also presented. The opportunities for use of information tools, systems, and technologies to support the processes of communication, and transfer of knowledge within the framework of the discussed concept were also emphasized.

Almost every enterprise has opportunities for storage and dissemination of information and knowledge within an enterprise. These activities are also supported by Intranet networks which allow for constant access to current information about the enterprise. These tools impact on maintaining a coherence of information which is transferred and proper coordination of the process of knowledge management which allows employees to use the same documents, spreadsheets, reports and analyses independently. Effective management of contemporary enterprises calls for complex and consolidated rather than fragmentary knowledge of key processes. The enterprises which manage knowledge require direct communication between the employees and any entities from the environment, which allows for fast transfer of information and knowledge in the form of a feedback. Therefore, inflow of information and knowledge should be a continuous process supported by modern information technologies available in the enterprises.

Key words: information, knowledge, knowledge management, knowledge management processes, information technologies.

Classification JEL: M12 – Personnel Management

1. Introduction

The whole contemporary civilization today is based on knowledge, and humans participate in creation, flow and use of knowledge at each moment of their lives. Present and future years are termed by some management theorists as an era of information and data processing, era of knowledge, new economy or a new type of knowledge-based society that exhibits the capacity to acquire, understand, process and create new values on the basis of knowledge. Since knowledge management is more and more often viewed as a prerequisite for fast and proper economic growth, the majority of the most developed countries base their economies on incessantly growing dependency on information and knowledge. Ability of companies to fast implementation of technological and organizational changes, creation of innovative solutions and use of collected knowledge and know-how in the company is also gaining in importance.

Knowledge is considered to be a decisive attribute of providing services and skilful knowledge management is becoming an instrument opening new horizons for the enterprise. Thus, there are two difficult tasks that enterprises have to face. The first one is to constantly gather, process, and make contemporary knowledge available. The second one is having abilities that enable knowledge application in order to win a competitive position and secure enterprise's survival on the global market (Grudzewski, Hejduk, 2003).

2. Knowledge as a company value

The number of enterprises today is increasing rapidly, with their value marked out by intellectual capital i.e. employees with their knowledge rather than machines, equipment and buildings. Previous concept of value has been redefined because market value of many enterprises is higher (even several times in some cases) than their book value. This situation results from the fact that each enterprise has some resources, but they do not realize their potential. These resources are knowledge, which is the entirety of employees' knowledge and the knowledge about products, customers, services and competitors (Sankowski, 2000, p. 1).

Therefore, the intangible resources in the enterprise and its *intellectual capital are based* on *knowledge* which is a source of proper utilization of other resources in the enterprise and development of its value. Without suitable knowledge, it is impossible to properly use physical or financial resources. However, in order to skilfully use the potential provided by knowledge, its concept and importance should be thoroughly recognized.

Knowledge, as an effect of processing of information, experience and the processes of learning, is increasingly more often deemed to be not only a resource but also as a product which determines the financial success of the enterprise. It constitutes the basis for creative behaviour patterns, creating new solutions and solving problems which arise (Kulej-Dudek, 2009, pp. 43-52).

Knowledge is a much wider concept and has superior position in relation to both data and information. According to many authors, knowledge leads to wisdom, viewed as a whole of knowledge and skills necessary to use this knowledge (Skyrme, 1999, p. 47). It is also defined as a whole of information and abilities used by people to solve problems. It covers both theoretical and practical elements, overall principles and detailed guidelines for actions. The basis for knowledge is provided by information and data, but unlike them, knowledge is always associated with a particular person. It consists in creation of entities and represents their beliefs concerning cause-effect relationships (Probst, Raub, Romhardt, 2002, p. 35).

Knowledge is the biggest capital in contemporary enterprises and a determining factor which is a prerequisite for generating value in modern business. It is a resource in an enterprise which is elusive and difficult to be copied, and it includes all sort of useful information that other do not have or cannot use. Knowledge is formed through discussion, exchange of views and criticism. Thus it is based on cooperation (Koźmiński, 2001).

A definition of knowledge proposed by T. H. Davenport and L. Prusak is one of the most comprehensive and distinguishing definitions. According to these authors, knowledge is a stream of experiences, values, contextual information and professional outlook, which provides the basis for assessment and acquisition of new experiences and information. It originates and develops in human minds. In organizations, it is not only stored in documents and databases but also in customs, processes, practices and standards (Davenport, Prusak, 2000, p. 5).

The literature in the field covered by the present paper emphasizes a number of definitions and divisions of knowledge. One of them is division proposed by M. Polanyi, popularized by other researchers, such as I. Nonaka and H. Takeuchi. This division of knowledge includes:

- explicit knowledge,
- tacit knowledge (Nonaka, Takeuchi, 2000).

Explicit knowledge means externalized knowledge, which is definite and systematized, and can be presented in a formal manner by means of words, numbers, symbols and signs. This knowledge includes in particular documents and databases. It is any form of information which can be verbalized, codified, deemed to be permanent and popularized (Grudzewski, Hejduk, 2004a, p. 23).

Tacit knowledge is accumulated in each person with experience, used in everyday activity; however, it is not easy to be defined and its formalization and transfer to others is very difficult. Conventionally, it is passed on verbally and through common experiences. Tacit knowledge is identified with sensual cognition, based on subjective sensations, beliefs, intuition, characterized by higher applicability based on human experience. Definition of the areas of existence and the scope of impact of tacit knowledge might lead to considerable rise in effectiveness of use of this knowledge in the enterprise (Kowalczyk, Nogalski, 2007). This knowledge is difficult to be verbalized, used subconsciously, and connected with practical knowledge transferred in direct contacts in the form of stories and common experiences (Grudzewski, Hejduk, 2002, p. 20). It is often of experimental character, constitutes an unwritten code of ethics, attitudes and opinions conveyed subconsciously. It is estimated that tacit knowledge constitutes ca. 80% of knowledge in the company, which makes it also necessary to emphasize management of these resources (Daft, 2001, pp. 257-266). Division into explicit and tacit knowledge was adopted in both Western and Eastern philosophies of knowledge management.

Explicit knowledge is usually the only form of knowledge which can be noticed in an enterprise. Therefore, identification and use of both types of knowledge is a fundamental problem of creation of knowledge in enterprises. The way of creation and application of either explicit or tacit knowledge varies considerably and depend on the profile of a particular enterprise, its environment, organizational culture, management methods and competencies of managers.

3. Knowledge management in the apect of maintaining a competitive edge

The basis for building competitive advantage in an enterprise is information. However, the value of individual pieces of information varies. Its character and importance depends on the essence of company's activity, adopted strategies, and time factor (Kwieciński, 2004, pp. 384-385). Skilful use of information and knowledge is becoming a trump card for competitiveness and enriches the area of manager's influence on management in the company. Dynamic development of organizations requires communication at a number of planes for information exchange, using available information technologies. Both interpersonal communication and communication between the enterprises or institutions requires use of techniques and technologies that use procedures for sending information and knowledge (Kiełtyka, 2008, p. 17).

Under conditions of new economy, a source of innovation is in organizational knowledge, tacit knowledge and employees' competencies. The permanent process of economic transformations determines searching and implementation of innovations and management methods which enhance company's capacity of fast and complex adaptation to changes that occur in the environment. Searching for the sources of a competitive edge in the enterprises involves more intensive use intangible assets in the form of employees' competencies, their knowledge and skills, whereas market value of a company depends on factors which can be divided into two categories. First of them involves material assets in the form of financial and physical resources, whereas the other one concerns knowledge, information intellectual property, intellectual capital i.e. non-material assets which can be found on a virtual plane of company management (Kaczmarek, 2007, p. 15).

From the *strategic standpoint*, knowledge management is an art of building a knowledge-based organization, with strategy, organizational culture, policies or procedures subjected to knowledge. *Cognitive approach* to knowledge management focuses on the knowledge alone in order for it to be available to all that need it, in right place, time and form. *Technical approach* to knowledge management sets the main goal as optimization of flow of knowledge within current organizational processes between employees, using information technology. *Culture-based approach* concerns forms of codification and expression of knowledge in the enterprise

and expressing, in employees' activities, their own values, beliefs, and use of organizational norms (Glińska-Neweś, 2007).

Knowledge management, particularly in the entities of high level of variability, under conditions of turbulent business environment, is a rather complex concept. Adaptation of suitable instruments to the specific nature of the company is of essential importance since it determines the success and proper functioning of initiatives of knowledge management. Therefore, it is essential to properly select and utilize the instruments which contribute to the course of main processes connected with application of knowledge at all the levels and areas in the enterprise (Grudzewski, Hejduk, 2004b, p. 63). Managers must know all the suitable mechanisms of support for knowledge management process at its different stages.

4. Characteristics of the study

Dynamics of the environment and the necessity to introduce changes also concerns the aspects connected with perception of employees and management of their knowledge potential which becomes the most precious capital in each enterprise. Economic transitions observed in recent years have caused shift in focus towards human resource management (HRM) in companies. This also caused intensification of activities in the field of participation of employees in a number of areas of company management.

This situation contributed to starting investigations connected with knowledge management in service-based enterprises. Before the investigations were initiated, it was necessary to identify key employees and managers who are characterized by long and high-level professional experience, improved professional and interpersonal competencies and ability to cooperate with others. These employees constituted the core of each enterprise and the source of its knowledge and were informed about any activities of their companies. These aspects are of huge importance since the success of an enterprise under conditions of variability, globalization and turbulent changes in the company environment requires activities based on employees' knowledge and experience, with particular focus on the area of management.

The survey on a target group of enterprises (142 enterprises) was carried out based on a questionnaire survey and by means of individual interviews with representatives of the enterprises who represented a suitable level of knowledge about the presented research problem.

The proposed survey was carried out among managers with a wide knowledge and experience, who support their work on experience of other employees, a number of knowledge sources, both external and internal ones, and use (to a varied degree) information technology because they see growing importance of modern technologies and development of information society. Therefore, the questionnaire survey was aimed at well-educated employees with high qualifications and skills. The interviews were carried out individually with the owners, presidents and directors or the authorized employees. Therefore, acquisition of the data which reflect holistic assessment of knowledge management came from suitably selected respondents, who, being managers, were able to identify main processes and activities connected with initiatives taken in the area of knowledge management in their enterprises. In terms of gender of the respondents included in the study, the majority of them were men and this number is similar to the men being owners of the enterprises. The most of the people studied were included in age ranges of 31 to 40 years (72 respondents) and 41 to 50 years (126 respondents). Total professional experience ranged from 11-20 years (65 respondents) and 6 to 10 years (42 respondents), whereas experience in current workplace was dominant in the range from 6 to 10 years (62 respondents).

It was essential for the proposed approach to identify actual initiatives taken in the domain of knowledge management in service-based enterprises rather than declarations and opinions about these problems. These initiatives go into the making of separated processes of knowledge management which facilitate integration of tacit and explicit knowledge of employees, teams or an enterprise and constitute a component of the stages of getting the enterprises involved in knowledge management.

5. Research areas within the selected processes of knowledge management

Enterprises' activities, with particular focus on services-based enterprises, are composed of tangible and intangible resources and processes. These resources are used for performing business processes in enterprises. Each of the elements of the process is comprised of a series of activities and operations which represent the full view of the area of knowledge management in an enterprise. Based on the analyses, pilot studies and literature overview, the following **fundamental processes of knowledge management** were separated:

- localization of knowledge,
- acquisition of knowledge,
- use of knowledge,
- accumulation of knowledge,
- development of knowledge,
- sharing of knowledge,
- dissemination of knowledge,
- storage of knowledge.

Apart from the main processes connected with knowledge management, the respondents were asked to indicate the level of performance of activities (on a scale of 0 to 5) connected with formation of organizational culture, cooperation with external environment, support for development of the entity and more detailed functioning of processes and activities connected with knowledge management in the enterprise. Analysis of replies concerning performing the activities in the area of the discussed problems was used for description of practical experiences of managers responsible for human resource management in enterprises.

The survey, conducted among a group of service-based enterprises concerned the **following areas of knowledge management:**

- cooperation with external environment in the enterprise through exchange and transfer of internal and external knowledge,
- coexistence of the identified processes of knowledge management inside the enterprise,
- formation of knowledge-based organizational culture as a key resource of an enterprise,
- stimulation and support for development of an entity,
- support for the processes of knowledge management through application of tools, technologies and systems of knowledge management.

6. Managers' experiences in terms of knowledge management in the survey

The most important capital in a company is human factor, because it is connected with other areas and elements of company's functioning. All the activities are initiated in human minds, their attitudes, preferences, cognitive opportunities and competencies. Attitudes towards knowledge management are predominantly formed by the systems of values typical of a particular society. The results of the survey demonstrated that 81.7% of entrepreneurs see knowledge as one of the components of enterprise resources, however, knowledge management is an object of lower interest (43.7%), yet only 4.2% of the respondents are not interested in this area. The survey showed that only 14 enterprises implemented knowledge management systems, whereas 55 enterprises do not have these systems, although 27 of them consider the need for this implementation. Other enterprises show small manifestations connected with the elements of this concept. The respondents from the studied enterprises pointed to the existence of relationships

between gaining a competitive edge in an enterprise and the enterprise's intellectual capital and knowledge. The respondents deem knowledge to be an essential factor which affects the company's success: this answer was indicated by 52.8% of the respondents who gave the maximal number of points on a scale (5 points), with 31% giving 4 points. Also, the vast majority of entrepreneurs positively evaluated the effect of information technology on improved functioning of an enterprise and effective knowledge management: 38% of the respondents gave 5 points, whereas 32.4% gave 4 points. Distribution of points in the range from 0 to 2 points, reflecting lack of low effect amounted to 4.9% of the answers.

In the most of the entities studied no analysis concerning resources of knowledge and processes connected with knowledge management was carried out (73.2% in total from 0 to 2 points). However, the managers positively evaluated easiness of localization and access to knowledge (71% with 4 and 5 points) which allows for making important decisions. Nearly 17% of the respondents pointed to transparency and easiness of the use of knowledge sources such as: paper documents, databases and management systems. However, only 7% of the respondents think that transparency of information and knowledge resources is maintained in their enterprises. Managers should focus on the fact that there is no person or a division in the enterprise that would be responsible for transparency of knowledge resources on a scale of the whole enterprise. Hence each employee should take care of the method of using, collecting, selection and updating knowledge. Entrepreneurs also indicated the opportunity of acquisition of knowledge from different sources at the same time, whether from the outside, experts or employees (15.5%). These activities allow for comparison and supplementation of necessary information and knowledge, determination of gaps in knowledge, and making decisions in terms of the manners of acquisition and development of knowledge under condition of existence of a suitable infrastructure for searching for necessary resources, either inside the enterprise or in its environment.

As results from the survey, 66 enterprises *do not have any definition* books or fundamental concept concerning knowledge management, necessary in operation of each enterprise. The problem is both knowledge representation and creation of a formal language of description for semantic environment due to use of different sets of concepts and descriptions during the process of communication. Almost half of the enterprises included in the study do not have documents in the form of knowledge maps which would help employees find knowledge available from certain people. However, the most of the entrepreneurs studied assessed the use of knowledge they have as high (27.5%: 5 points; 44.4%: 4 points).

Managers assessed investments in employees' knowledge very well, at the level of 4 and 5 points, which accounted for 43.7% of indications in total. Trainings carried out by other more experienced employees with expert competencies should also be emphasized, with nearly 20% of indications. These training help make tacit knowledge 'go outside' through creation of trust-based relationships, exchanges of views, experience and information while working together. Unfortunately, 44.4% of the enterprises do not stay in contact with previous employees, whose experience and knowledge would help new employees perform their duties and make decisions. Few entrepreneurs (4.9%) take care of passing knowledge from the employees who leave jobs to new employees or other co-workers. Furthermore, the custom of writing of observations, conclusions and experiences after completion of implementation of a project or other activities is an everyday practice in only 11 enterprises.

Although knowledge sharing is deemed to be a desired trait of an employee, which was indicated by 26.8% of the respondents who gave 5 points and 41.5% giving 4 points, the fear of losing the position that results from knowledge is very difficult to overcome. This is confirmed by the fact that 46 representative of the enterprises declare their willingness to share their knowledge to others, whereas 33 of them indicate the actually available knowledge.

Transfer of best solutions, being an important element of dissemination of knowledge, is actively used in only 11 enterprises, whereas 17 businesses gave 0 points in this area. The entrepreneurs must remember that knowledge management involves striving for optimization of flow of knowledge in the economic processes in the enterprise. This can be achieved through shortening of time of access to a particular source of knowledge, which in practice means delivery of necessary knowledge to the location where it is required at a particular time and in a particular amount. This requires development of suitable procedures for behaviour in the case of lack of necessary knowledge. The employees should know which **user of the process** they can turn to and notify the need for knowledge if it is unavailable directly in the performed process. These activities will affect improvement in the processes of knowledge transfer (Zalech, 2003).

A number of enterprises do not implement systems of rewarding for innovative solutions and behaviours which are conducive to development of knowledge and employees connected with knowledge management. The supervisors do not accept the risk and making mistakes by the employees during new initiatives, which translates into lower involvement of the employees in the process of knowledge management. Organizational culture conducive to stimulation of creativeness and generation of new knowledge was positively assessed by only 15.5% of managers.

In 62 enterprises, cyclic information about the enterprise or selected problems from a variety of domains (legal, accounting or economic areas) is passed. Unfortunately, not all the employees can actively and skilfully participate in creation and dissemination of knowledge, but they attach great importance to selection of information and knowledge: this answer was assigned 4 and 5 points by 119 enterprises in total. Furthermore, selected knowledge should be regularly updated, which is confirmed by 83.8% of the enterprises, as a total of indications at the level of 4 and 5 points. Updating knowledge is one of the main stages in the process of maintaining knowledge and is a prerequisite for the use of proper and current knowledge in all the activities taken by the users.

According to the respondents, the highest manifestation of knowledge development is the processes of employees' learning, which was given the highest number of points, with an average of 4.2 points (Figure 1). They affect the capacity of enterprises to survive and develop through entrepreneurial, well-educated employees who are aware of the necessity of continuous improvement in their skills through the processes of learning. The processes of communication and interaction and acquisition of skills were given 3.7 points each. It is efficient processes of communication that allow for fast exchange of necessary information and knowledge in all activities taken by the employees, whereas interaction helps knowledge owners confront their experiences and ideas in order to develop joint solutions. It is also essential to create new knowledge resources (3.5 points) and facilitation of previous products and services (3.4 points). These elements are also connected with the processes of employees' learning, which allow for creation of new knowledge. Moreover, ability of employees to generate new ideas and solutions affects appearance of new and useful knowledge in the company. The fewest points, although accounting for a half of points possible to be given, were obtained by communities of practice and employee networks (2.3 points). The communities or groups of employees combine theoretical and practical knowledge as well as personal skills and experiences of their individual members. Therefore, the entrepreneurs must remember that a team of employees is able to achieve the goals which are frequently impossible to reach by individuals.

Knowledge is not always created as a result of activities oriented towards purposive development of knowledge, but can be a result of everyday work. This is confirmed by the results of 23 enterprises which pointed to active increase in joint competencies through utilization of knowledge acquired during current activities. Entrepreneurs from 43 enterprises do not implement consistent policies of externalization of tacit knowledge. Ability to externalize

knowledge and transfer it to other employees is an essential component of the process of knowledge development and depends on the atmosphere of trust, proper intentions and awareness of having precious resources of knowledge and skills which are useful to others.

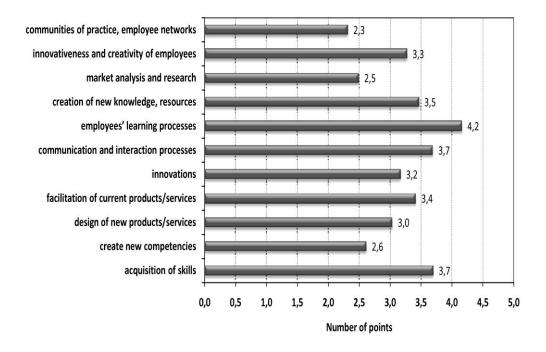


Figure 1: Activities which reflect the process of knowledge development in the enterprise Source: own study

Employees' learning is usually not dedicated too much time in enterprises. This occurs irregularly and is typically identified with time consumed for formal trainings; however, newly employed staff is supported by older and more experienced workers. The respondents assessed support for competence centres that collect and develop know-how relatively low: they are not created in as many as 39 enterprises, whereas 23 entities indicated the assessment at the level of 1 point. This low popularity of this phenomenon is connected with being convinced of limitation of this activity only to research and development centres and forgetting about other areas of company's activities, which might generate valuable knowledge resources.

Growing number of relationships of enterprises with business partners, external environment or customers should make enterprises depart from individual work and aim towards teamwork, where the priority of activities should be employees' and enterprises' knowledge management through implementation of core processes connected with knowledge. These activities can encounter a number of obstacles connected with employee motivation or a type of knowledge, method of distribution as well as organizational culture in an enterprise. The development of advanced information technologies opens up opportunities for affecting the process of knowledge management through the use of a variety of tools for support of this concept.

7. Use of information technologies in knowledge management

With development of information society today, dynamically rising amount of data and information requires using suitable tools which allow collect, process, transfer, storage, and utilize these resources. New information technologies allow for functioning of knowledge management processes and affect the enterprise's activity through implementation of changes in the systems of information.

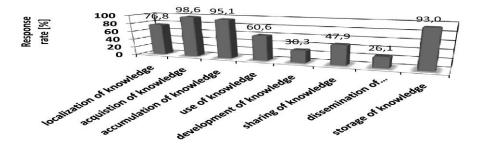


Figure 2: Use of information technology in the processes of knowledge management Source: own study

Therefore, in order to realize the principles of knowledge management it is necessary to have not only suitable knowledge resources but also a particular management infrastructure, frequently connected with information technology (IT), (Kisielnicki, 2004).

The managers who were included in the survey indicated use of information technologies in individual processes of knowledge management.

The respondents indicated the use of information technologies in all the listed processes of knowledge management (Figure 2). The most of indications concerned the use of information technology during the processes of acquisition of knowledge (98.6%), accumulation of knowledge (95.1%) and storage of knowledge (93%) due to the opportunities of use of Internet browsers and electronic databases. Furthermore, the respondents indicated the processes of localization of knowledge (76.8%), use of knowledge (60.6%0 and knowledge sharing (47.9%). Information technology is used to the lowest degree during the processes of knowledge dissemination and development (26.1% and 30.3%, respectively). These results might confirm greater emphasis on human aspect, forms of cooperation between the employees, coparticipation in performing current activities during transfer and generation of new knowledge.

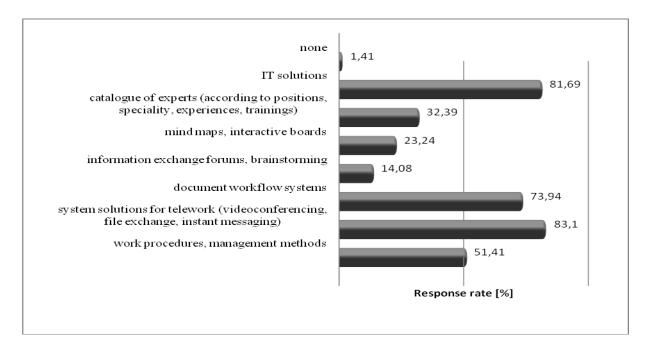


Figure 3: Methods of support for knowledge management implemented in enterprises Source: own study

It was also essential from the standpoint of application of information technologies to obtain information about implementation of the methods for support of knowledge management in enterprises, which is presented in Figure 3. Entrepreneurs are more willing to use system solutions for telework, which included such tools as videoconferencing, file transfer or instant messaging, which accounted for 83.1% of the answers. Use of IT tools was also assessed very high (81.7%). The respondents also emphasized systems of document workflow (73.9%) as well as document workflow and methods of management (51.4%) as methods of support for knowledge management in enterprises. The least popularity was found for information exchange forums and brainstorming because they obtained only 14.1% of the answers. Only 1.4% of the respondents answered that none of the methods of knowledge resource management are used in their enterprises.

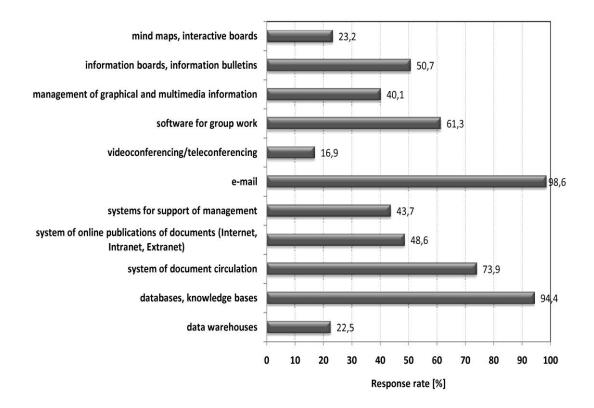


Figure 4: Use of information and communication tools and systems in enterprises Source: own study

The respondents also indicated use of information and communication tools or systems during business activity. The results of this analysis were presented in Figure 4. Nearly all the enterprises use electronic mail (98.6%) and use databases or knowledge bases (94.4%), i.e. data repositories from a number of sources, which allows for formulation of queries and creation of reports. Among other information and communication tools, the respondents indicated systems of document circulation (73.9%), software for group work (61.3%), information boards and information bulletins (50.7%), systems of document publication through the Internet, Intranet and Extranet (48.6%) and the systems for support of management (43.7%). The employees use tools which allow for management of graphical and multimedia information, but they use mind maps, interactive boards, data warehouses or videoconferencing to a considerably lesser extent. These results suggest that the enterprise use a number of facilities to support knowledge management. Almost every enterprise has opportunities for storage and dissemination of information and knowledge within an enterprise. These activities are also supported by Intranet

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networks which allow for constant access to current information about the enterprise. These tools impact on maintaining a coherence of information which is transferred and proper coordination of the process of knowledge management which allows employees to use the same documents, spreadsheets, reports and analyses independently.

Effective management of contemporary enterprises calls for complex and consolidated rather than fragmentary knowledge of key processes. The enterprises which manage knowledge require direct communication between the employees and any entities from the environment, which allows for fast transfer of information and knowledge in the form of a feedback. Therefore, inflow of information and knowledge should be a continuous process supported by modern information technologies available in the enterprises.

8. Conclusion

Dynamic changes in world economy force enterprises to permanently improve their business processes and the methods of functioning. Unfortunately, few enterprise managed to develop and then to implement effective methods of knowledge management. Each enterprise has knowledge resources, but only few of them are able to use them effectively and efficiently. Therefore, proper human resource management is a key element of success in an enterprise. The processes which occur in the enterprises are connected with participation of human resources based on knowledge and competencies of employees. Hence it was necessary for this chapter to present knowledge management viewed from the aspect of human resources, i.e. employees, their views, beliefs, attitudes as well as the methods of work organization, exchange of information and knowledge within an effective use of available knowledge by means of information technologies.

Development of information and communication technologies caused that in knowledge-based economy, information and knowledge capital has become the basis for development and economic growth. Therefore, broadly understood success of an enterprise is predominantly achieved based on knowledge foundations and effective management of this resource. It does not only depend on the processes of acquisition, dissemination and use of information and knowledge at a particular time, but also on abilities of employees to interpret and to modify the collected and disseminated information and knowledge. Because knowledge is generated in the network of values, i.e. through interactions between employees, these interactions should be supported by instruments, tools and information technologies which function in the enterprise and are possible to be adapted.

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