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KNOWLEDGE MANAGEMENT IN SMALL ENTERPRISES IN THE INFORMATION TECHNOLOGY SECTOR IN POLAND

Summary. The present article discusses the results of research focused on the condition of knowledge management in small enterprises active in the information technology sector in Poland. The assessment is based on selected aspects describing knowledge management, such as e.g. the degree of advancement regarding the implementation of the analyzed concept by a company, the reasons for becoming interested in that particular concept, barriers in its implementation and diagnosing the process of knowledge management.

The research involved 79 enterprises and a group of 242 managers and specialists employed in the analyzed sector.

Keywords: knowledge management, information technology sector

ZARZĄDZANIE WIEDZĄ W MAŁYCH PRZEDSIĘBIORSTWACH BRANŻY INFORMATYCZNEJ W POLSCE

Streszczenie. W artykule zaprezentowano wyniki badań, dotyczące stanu zarządzania wiedzą w małych przedsiębiorstwach sektora informatycznego w Polsce. Ocena ta opiera się na wybranych aspektach, opisujących zarządzanie wiedzą, np. takich jak poziom zaawansowania przedsiębiorstw we wdrażaniu analizowanej koncepcji, przyczyny zainteresowania nią, bariery jej stosowania, oraz na diagnozie procesu zarządzania wiedzą.

Badania zostały przeprowadzone wśród 79 przedsiębiorstw na grupie 242 kierowników i specjalistów zatrudnionych w analizowanej branży.

Słowa kluczowe: zarządzanie wiedzą, branża informatyczna

1. The essence of knowledge management

The literature on the subject offers numerous proposals for determining the essence of knowledge management, which suggests the complex character of this term. It reflects multifaceted and mutually related elements of creating and implementing knowledge management. It includes the issues of the foundations of the concept, practical actions on knowledge and developing conditions for such activities, the human and technical aspect of knowledge management, the practical character of knowledge in many areas of functioning of the organization and its management, as well as managing human resources. The issues presented in the definitions of knowledge management suggest that:

- it has got different faces which change depending on what becomes accepted as knowledge,¹
- it changes the perception of the organization and processes, all processes in an organization are perceived as processes related to knowledge,²
- it must be treated and implemented in the category of a comprehensive idea for management which includes in its structure – in the vertical arrangement – the concept and its development in the form of a general method, as well as techniques and tools for carrying out selected functions and processes,
- its nature is utilitarian and it supports solving problems related with knowledge, as well as decision taking,³
- it is based on the corporate strategy which assumes that knowledge as intellectual capital is a key resource, necessary for achieving economic aims,
- it makes use of the process-based approach within in which information is acquired, processed, organized, analyzed and synthesized, and then circulated in a form which is adequate for the users. Such an approach helps the organization to become horizontally integrated and provides conditions for co-operation between all the functional areas,
- it promotes the culture of sharing values and knowledge everywhere in the enterprise.⁴

¹ Panasiewicz L.: Kontrowersje w sprawie zarządzania wiedzą. „*Ekonomika i Organizacja Przedsiębiorstwa*”, No. 7, 2004, p. 42-49.

² Szaban J.: Zarządzanie wiedzą, [in:] Szaban J. (ed.): *Ze współczesnych problemów zarządzania ludźmi*. Wydawnictwo Wyższej Szkoły Przedsiębiorczości i Zarządzania, Warszawa 2003, p. 47.

³ Morawski M.: Wiedza jako przedmiot zarządzania w przedsiębiorstwie, [in:] Kobyłko G., Morawski M. (ed.): *Przedsiębiorstwo zorientowane na wiedzę*. Difin, Warszawa 2006, p. 39, 58.

⁴ Grudowski P.: Zarządzanie wiedzą w systemach zarządzania jakością. „*Ekonomika i Organizacja Przedsiębiorstwa*”, No. 12, 2007, p. 63.

Thus, developing a commonly accepted definition should take into account that complexity and emphasize such features of knowledge management as systematization, complexity, purposefulness or productivity.

The basic role of knowledge management is perceived mainly from the angle of the growing significance of knowledge resources in developing the competitive advantage. Managing knowledge in all its spheres has been suggested by numerous experts as a means of optimizing a company's efficiency and functioning in the situation of quickly growing complexity and ambiguity of our modern world.⁵ F. Land claims that we live in a world in which knowledge is the most significant source or agent of production and success in the stormy and competitive global system.⁶ Knowledge management consists of making use of and improving the knowledge capital of an organization in order to implement more effectively the activities related to knowledge, to improve organizational conduct, to make better decisions and enhance the organization's functioning.⁷ "Thus, the aims of knowledge management could be defined as an assistance in acquiring, accumulating and using knowledge in order to achieve success, competitive advantage and to increase the value and affluence of the company."⁸ Knowledge management reveals the excess of knowledge which is not taken advantage of by the organization or, on the other hand, its deficiency or insufficient acquisition. Possessing useful knowledge becomes a foundation for new knowledge which becomes materialized in the form of innovation.

In the awareness of those who popularize knowledge management, this concept becomes:⁹

- the basic tool for managing the future of the enterprise,
- a chance for radically changing the orientation in thinking,
- a tool for efficient identification and elimination of the competitive gap,
- a tool for supervising knowledge resources in order to facilitate accessing and using it,
- a plane for creating and absorbing new experiences and information,
- a set of specific activities and initiatives undertaken by companies in order to increase the amount of their corporate knowledge.

⁵ Smith P.: A Performance-Based Approach to Knowledge Management, „Journal of Knowledge Management Practice”, Vol. 3, 2002.

⁶ Land F.: Knowledge Management or the Management of Knowledge? [in:] King W.R. (ed.): Knowledge Management and Organizational Learning. Springer, New York 2009, p. 18.

⁷ King W.R.: Knowledge Management and Organizational Learning, [in:] King W.R. (ed.): Knowledge Management and Organizational Learning. Springer, New York 2009, p. 4.

⁸ Kotarba W.: Istota zarządzania wiedzą, [in:] Kotarba W., Kotarba M. (ed.): Ochrona wiedzy a kapitał intelektualny organizacji. PWE, Warszawa 2006, p. 27.

⁹ Skrzypek E.: Rola wiedzy we współczesnym zarządzaniu, [in:] Sitko-Lutek A. (ed.): Polskie firmy wobec globalizacji. Luka kompetencyjna. PWN, Warszawa 2007, p. 98.

The observation of economic tendencies provides us with a reflection, or view, that these are the aims for which companies are implementing the concept of knowledge management. Obviously, the intensity of this phenomenon varies in particular sectors of economy, but its influence is clearly visible in the information technology sector. This branch is characterized by its growing share in GDP, improved results on stock exchange listings and good practices of the enterprises active in this sector in using knowledge to achieve success.

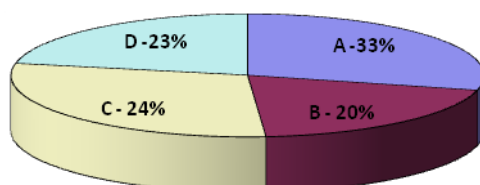
2. The condition of knowledge management in small enterprises in the Information Technology sector in Poland

2.1. Selected aspects of knowledge management in small enterprises in the IT sector in Poland

The starting point for analyzing the condition of knowledge management in the studied IT enterprises was to determine the degree of a company's involvement in applying knowledge management, resulting from the replies given by respondents asked if knowledge management was present in their companies (fig. 1). Among 242 managers and experts, 28.92% replied positively. The most numerous group of people (29.33%) decided that their enterprises were not involved in knowledge management, though there was a need for implementing this type of management. 21.9% of the respondents answered negatively.

Knowledge management was not an element of the adopted strategy in some cases. Out of 70 people who declared that their enterprises were involved in knowledge management, 60% expressed an opinion that knowledge management was not included in the strategy. A significant minority of the respondents (40%) believed that knowledge management was a component of the strategy.

The implementation of knowledge management should be carried out by people occupying positions directly related with this concept. Out of 70 people who claimed that their firms were involved in knowledge management, 52.85% mentioned the existence of such posts. The remaining 47.14% of the respondents were of the opposite opinion and said that their enterprises were not offering special positions for knowledge management.



Legend: A – we have implemented knowledge management, B – we are planning to implement knowledge management, C – there is no knowledge management, but we can see such a need, D – there is no knowledge management and we do not think it is necessary.

Legenda: A – zarządzamy wiedzą, B – planujemy wdrożyć zarządzanie wiedzą, C – nie zarządzamy wiedzą, ale widzimy taką potrzebę, D – nie zarządzamy wiedzą i nie widzimy takiej potrzeby.

Fig. 1. The degree of advancement in using knowledge management by enterprises

Rys. 1. Zaawansowanie przedsiębiorstw w wykorzystywaniu zarządzania wiedzą

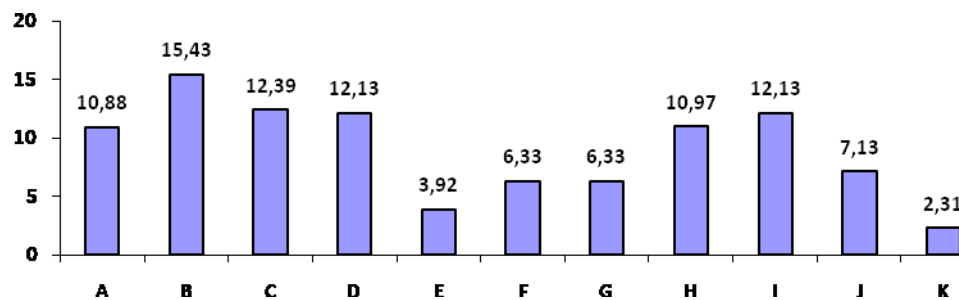
Source: own elaboration.

The efficiency of knowledge management can be measured using different systems (made up of indices). A definite minority (37.15%) of the 70 respondents confirmed the existence and the use of measurement systems in reference to knowledge management. Those who claimed not to use a system for measuring efficiency of knowledge management in their companies made up 62.85% of all the opinions expressed.

An interesting issue is the reasons for implementing knowledge management, which usually include a vision of improving some particular areas of the organization's functioning. Among the indices whose improvement was/could be the reason for applying the concept of knowledge management, 242 respondents mentioned the following ones:

- improved quality of the services offered – 15.43%,
- improved management – 12.39%,
- increased work efficiency – 12.3%,
- time saving – 12.13 %,
- higher competitiveness – 10.97 %,
- better satisfaction of client's needs – 10.88 %.

The remaining proposals regarding the indices whose improvement would result from knowledge management made up a small percent of the respondents' choices. The lowest approval in the respondents' opinion was given to the possibility of increased motivation and satisfaction of the employees (3.92%) and the acquisition of qualified employees (2.31%) as a result of practicing knowledge management. Detailed percentage values of the respondents' choices regarding the individual reasons for implementing the concept of knowledge management are presented in figure 2.



Legend: A – improved satisfaction of clients' needs, B – increased quality of services, C – improved management, D – higher work efficiency, E – increased employees' motivation and satisfaction, F – increased innovativeness, G – image creation, H – higher competitiveness, I – time saving, J – cost reduction, K – acquisition of well-qualified employees.

Legenda: A – lepsze zaspokajanie potrzeb klientów, B – wzrost jakości świadczonych usług, C – usprawnienie zarządzania, D – wzrost efektywności pracy, E – wzrost motywacji i satysfakcji pracowników, F – wzrost innowacyjności, G – budowa wizerunku, H – wzrost konkurencyjności, I – oszczędność czasu, J – redukcja kosztów, K – pozyskiwanie wykwalifikowanych pracowników.

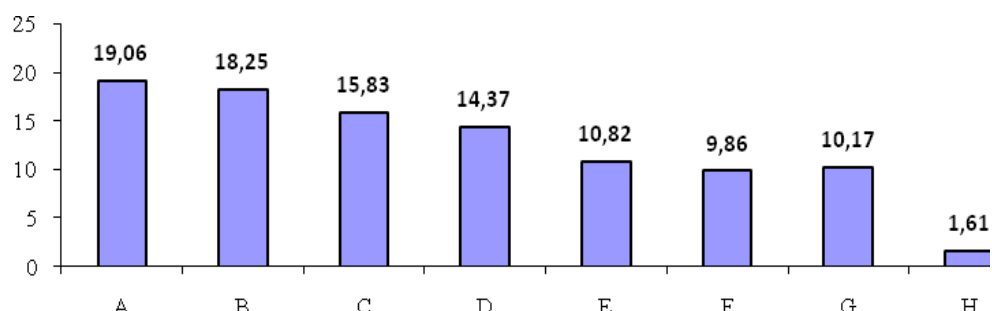
Fig. 2. Reasons for implementing the concept of knowledge management (%)

Rys. 2. Przyczyny wdrożenia koncepcji zarządzania wiedzą (%)

Source: own elaboration.

The implementation of knowledge management comes against barriers which reduce its efficiency. The employees of the IT sector were asked where the problems related to knowledge management in their enterprises resulted/could result from mentioned most frequently (19.06%) inefficient communication. A similar percentage, 18.25%, of managerial staff and experts pointed at an inadequate managerial style. Among other significant obstacles for the application of knowledge management, the respondents listed insufficient financial means (15.83%) and the lack of measurable profits resulting from the implementation of knowledge management (14.37%).

Detailed readings of particular barriers in knowledge management are presented in figure 3.



Legend: A – inefficient communication, B – inadequate managerial style, C – lack of financial means, D – lack of measurable profits from the implementation of knowledge management, E – fluctuation of specialists, F – poor information technology infrastructure, G – motivation system which does not favor team work and knowledge sharing, H – other.

Legenda: A – nieskuteczna komunikacja, B – nieodpowiedni styl zarządzania, C – brak środków finansowych, D – brak mierzalnych korzyści z wdrożenia zarządzania wiedzą, E – fluktuacja specjalistów, F – słaba infrastruktura informatyczno-technologiczna, G – system motywacyjny niesprzyjający pracy zespołowej i dzieleniu się wiedzą, H – inne.

Fig. 3. Barriers in the implementation of knowledge management (%)

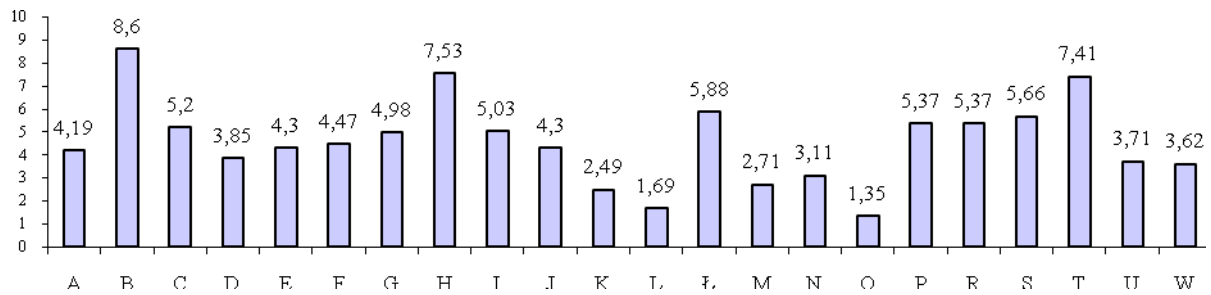
Rys. 3. Bariery wdrażania zarządzania wiedzą (%)

Source: own elaboration.

The foundation for knowledge management is provided by the sources in which data and information are stored. The respondents were offered 22 possible options and asked to select the sources they were making use of. According to the managers and experts, the most frequently used sources of knowledge were the data bases existing in their enterprises (8.60%), their own experience (7.53%) and the Internet (7.41%).

On the other hand, the sources that were least frequently used were strategic investors (1.35%), external employment of highly-qualified employees (1.69%) and the employees' own conclusions (2.49%).

Figure 4 shows the respondents' choices of the particular sources of knowledge.



Legend: A – system of document circulation in the enterprise, B – data bases in the enterprise, C – company’s own Research and Development Division, using company’s own patents and licenses, D – purchasing other patents and licenses elsewhere, E – benchmarking, F – interpersonal contacts with research-and-development centers, G – acquiring knowledge from external experts (consultants), H – learning from previous experience, I – employees of long standing with rich experience, unique knowledge and skills, J – meetings of managerial staff with employees, K – employees’ ideas collected e.g. in the form of suggestions, L – external recruitment of highly-qualified employees, Ł – external training courses, M – market research, N – co-operation with other companies within the sector, O – strategic investors, P – contacts with clients and using the feedback, R – contacts with deliverers and partners, and using the feedback, S – studying the literature and magazines, T – Internet monitoring, U – participation in trade fairs, W – participation in trade congresses.

Legenda: A – system obiegu dokumentów w przedsiębiorstwie, B – bazy danych w przedsiębiorstwie, C – własny dział badań i rozwoju, wykorzystywanie własnych patentów, licencji, D – zakup cudzych patentów i licencji, E – benchmarking, F – interpersonalne kontakty z ośrodkami badawczo-rozwojowymi, G – nabycie wiedzy od ekspertów (konsultantów) zewnętrznych, H – uczenie się na wcześniejszych doświadczeniach, I – wieloletni pracownicy firmy o dużym doświadczeniu, unikalnej wiedzy i umiejętnościach, J – spotkania kadry kierowniczej z pracownikami, K – pomysły pracowników zbierane np. w formie wniosków, L – rekrutacja z zewnątrz pracowników o wysokich kwalifikacjach, Ł – szkolenia zewnętrzne, M – badania rynkowe, N – współpraca z innymi firmami z branży, O – inwestorzy strategiczni, P – kontakty z odbiorcami i śledzenie ich uwag, R – kontakty z dostawcami i firmami współpracującymi oraz śledzenie ich uwag, S – studia literatury i czasopism, T – monitoring Internetu, U – udział w targach branżowych, W – udział w kongresach branżowych.

Fig. 4. Using the particular sources of knowledge (%)

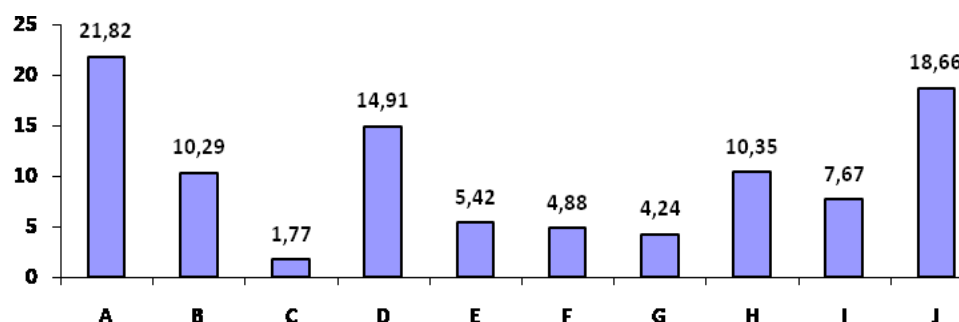
Rys. 4. Wykorzystywanie źródeł wiedzy (%)

Source: own elaboration.

Taking advantage of sources of knowledge is possible due to the tools which support quick penetration of the systems of information and its transmission. The results of the analyses suggest that two of them are particularly frequently used. These are the Internet, pointed out by 24.15% of the respondents, and the e-mail, marked by 22.62% of

the respondents. The managers and experts often pointed at data bases (12.89%) and systems supporting group work (10.03%) as tools facilitating knowledge management.

On the other hand, the least frequently marked option was the Extranet, with 0.61% of readings. The details of the percentage illustrating the use of the particular tools for knowledge management are presented in figure 5.



Legend: A – Internet, B – Intranet, C – Extranet, D – data bases, E – systems supporting management e.g. CRM, MRP, F – systems of document circulation, G – video conferences, H – teleconferences, I – systems for supporting group work, J – e-mails

Legenda: A – Internet, B – Intranet, C – Extranet, D – bazy danych, E – systemy wspomagające zarządzanie, np. CRM, MRP, F – systemy obiegu dokumentów, G – wideokonferencje, H – telekonferencje, I – systemy wspomagania pracy grupowej, J – e-maile.

Fig. 5. Usage of tools for knowledge management (%)

Rys. 5. Wykorzystywanie narzędzi zarządzania wiedzą (%)

Source: own elaboration.

2.2. The process of knowledge management in small enterprises in the IT sector in Poland

On the basis of the study results it may be concluded that individual stages of knowledge management are carried out with different intensity in the analyzed organizations (figure 6). The respondents gave the highest rating to knowledge generation and the lowest to its practical use. Arranging the stages of the knowledge management process on the basis of percentage readings, they could be listed as follows:

- Knowledge generation – 66.65%.
- Knowledge locating – 64.77%.
- Knowledge sharing – 60.63%.
- Knowledge maintenance – 60.48%.
- Knowledge acquisition – 53.73%.
- Practical use of knowledge – 47.42%.

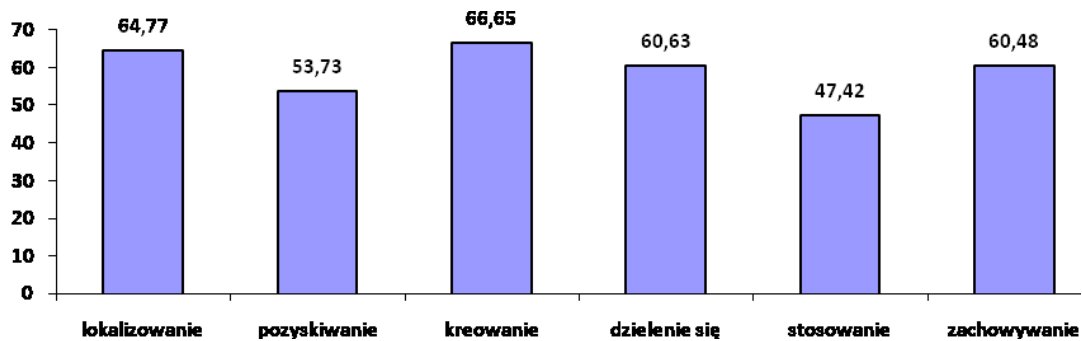


Fig. 6. The process of knowledge management (%)

Rys. 6. Proces zarządzania wiedzą (%)

Source: own elaboration.

Knowledge location was highly assessed by the respondents (64.77%). The managers and respondents believe that the only stage of knowledge management that is implemented more frequently is knowledge generation.

The diagnosis of knowledge locating is based on several issues. They concerned being familiar with the sources of knowledge which could be individuals or data bases, access to information, information protection and the relationships between data bases and key processes. Generally, the respondents' opinion on them was positive. The managers and experts very highly assessed the degree of adequacy between the content of data bases and the key processes implemented in their organizations. They had a positive perception of the employees correctly identifying both the individuals possessing specific knowledge and the information recorded in the data bases and the systems of document circulation. They also confirmed the practice of distinguishing knowledge which should be protected. Shortcomings in the sphere of knowledge location result from the lack of specific information in data bases.

The phase of knowledge acquisition in the studied organizations was assessed relatively poorly by the respondents (53.73%) in comparison to knowledge location, its generation, sharing and maintenance. Only the practical use of knowledge was given a worse assessment by the managers and experts.

The study of the analyzed stages in the knowledge management process concerned a few methods of knowledge acquisition, such as employee recruitment, services offered by consulting companies, co-operation with other organizations, outsourcing or purchasing products related to knowledge.

The assessment of the activities listed above and related to knowledge acquisition varied among the respondents. To the managers and specialists, a very important source of knowledge acquisition was the purchase of products related to knowledge. Another positively perceived source of knowledge acquisition was co-operation with other organizations,

services offered by consulting companies and outsourcing particular processes. On the other hand, the recruitment of employees equipped with specific knowledge was used insufficiently in the opinion of the respondents.

Knowledge generation is the most commonly applied stage of knowledge management (66.65%). In order to diagnose the stage of knowledge generation the following issues were considered: possessing a research-and-development base, purchasing of achievements in the area of R+D, an environment favoring knowledge generation by the employees, a possibility to make mistakes, and undertaking activities for developing employees' individual knowledge.

While analyzing the results of the study on the issues mentioned above, it is possible to notice the multi-directional activities which enable knowledge generation. The managers and specialists decided that purchasing the latest achievements in research and development was the main source of knowledge generation. Knowledge is also created through a company's own research and development base. Besides, creating new knowledge is favored, in the respondents' opinion, by an environment which encourages the employees to think independently, carry out experiments and develop their skills, which is reflected e.g. in work placements abroad, different forms of education or practicing problem-solving in groups. On the other hand, criticizing and punishing the employees acts as a hindrance.

The stage of knowledge sharing and circulating was highly rated by the respondents (60.63%).

The issues which helped analyze the stage of knowledge sharing focused on the scope of information spreading, the role of the unit dealing with information circulation, the forms of information exchange, activities facilitating knowledge sharing and the eagerness to share the knowledge.

The results of the analyses regarding the issues listed above create a very positive picture of the activities involved in knowledge sharing. The respondents assessed most highly the initiating activities and forms which facilitate knowledge sharing by the members of an organization. Besides, the studied enterprises tend to systematize the activities related to knowledge transfer through determining who should obtain a particular type of information and by limiting the range of circulating information to that which is indispensable for the employees to perform their duties. A positive signal is also the employees willingness to share their knowledge with others.

The stage of the practical usage of knowledge was perceived less intensely by the respondents (47.42%) among the other stages.

The diagnosis of the stage of knowledge usage was based on the following issues: the purpose of new knowledge, preferred methods of action, convenience of taking advantage of knowledge sources, and the activities stimulating the application of new knowledge.

The results of studies concerning the analyzed issues suggest a varied assessment of the stage of knowledge usage. Positive manifestations include well-organized sources of knowledge, regarding their accessibility, the environment inspiring employees to use new knowledge in their work and in encouraging inquiries. Knowledge application is limited, at the same time, by the employees' strong preference to use the existing methods and associating new knowledge only with its innovative uses.

The final stage of the process of knowledge management, its maintenance, was assessed relatively highly (60.48%) by the respondents. Knowledge maintenance was analyzed on the basis of the following aspects: information selection, data base updating, archiving the knowledge of the key employees, tests evaluating the utility of knowledge, personal data bases.

Summarizing the results of the study on knowledge preservation, it may be concluded that many activities are undertaken in order to record relevant information in the archives. The knowledge to be stored is subject to selection, data bases are systematically updated, the knowledge of the key employees in the organization is recorded and, besides formalized data bases, the employees create their own systems of knowledge storage. The weak side of knowledge preservation is the limited use of periodical tests meant to verify the employees knowledge and its utility.

3. Conclusions on the condition of knowledge management in small enterprises in the IT sector in Poland

The results obtained from the study let us claim that the conception of knowledge management is practiced among the analyzed enterprises. This is confirmed by a large group of managers and experts (28.92%) who regard the purposeful practice of having knowledge at their disposal in their organizations. The practice of knowledge management may also be supported by the opinions on the implementation of the analyzed concept, or planning such implementation, as expressed by 19.58% of the respondents. Also, the perception of the need to introduce knowledge management, declared by 29.33% of the respondents, is a positive symptom for the future of knowledge management.

In most cases (60%), practicing knowledge management was not related to the company's strategy, which means that knowledge management is not treated as a tool for strategy implementation. However, this conclusion is not isolated as in the studies conducted by

G. Gruszczyńska-Malec and M. Rutkowska, where only 34% of the respondents confirmed developing strategies for knowledge management.¹⁰

The results obtained in the study also show that the majority of the respondents (52.85%) see knowledge management as a systematized function in their organizations. Knowledge management was situated in the organizational structure, which was expressed by creating work positions specialized in knowledge management.

A negative symptom of knowledge management in the studied organizations of the IT sector is reflected by 62.85% of the managers and experts not being aware, or denying the existence and application of measurement systems in the area of knowledge management.

The results of the study also suggest a low differentiation in using the sources of knowledge. Among the potential sources of knowledge listed in the analyzed enterprises only a few are being exploited at a significant level (the Internet, internal training courses, own experience, data bases) and a few at a moderate level (literature studies, contacts with clients, acquiring knowledge from external consultants, managerial staff meetings with employees). The remaining dozen sources of knowledge were rarely or very rarely used by the respondents.

The degree of utilization of the tools supporting knowledge management looks similar. The most frequently used tools in the analyzed enterprises were the Internet and e-mail. The remaining tools were used less frequently or hardly ever.

While analyzing the results obtained in reference to knowledge management, a few observations can be made. The first one concerns the fact that all the studied organizations are implementing all the stages of the knowledge management process, yet with different degrees of intensity.

The respondents gave the highest rating to the activities related to knowledge generation, then to its locating, sharing, maintaining, acquiring and, finally, its application, respectively.

It can also be observed that among the studied indices for evaluating the process of knowledge management, 83.33% of them were positively evaluated by the respondents. Among them, the majority were related to knowledge generating and sharing. On the other hand, 12.27% of the manifestations reflecting the process of knowledge management were negatively assessed and they concerned mainly the practical use of knowledge.

On the basis of the results obtained in the study it is also possible to single out the best and the worst expressions of the process of knowledge management. The former ones include:

¹⁰ Gruszczyńska-Malec G., Rutkowska M.: Strategie zarządzania wiedzą w wybranych przedsiębiorstwach województwa śląskiego – wyniki badań empirycznych. Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań 2009, p. 215.

- adequate adaptation of data bases to the key processes implemented in the organization – 79.76%,
- isolating knowledge which requires protection – 70.60%,
- taking advantage of collaboration with other organizations to acquire knowledge – 75.18%,
- purchasing latest achievements in the sphere of research and development from specialist organizations – 77.59%,
- creating the environment favoring employees' independent thinking and experimenting – 70.18%,
- updating data bases systematically – 69.64%,
- archiving the knowledge of the employees who are of key importance for the course of the processes – 70.85%.

On the other hand, the most significant shortcomings of the process of knowledge management are connected with:

- data bases or systems with insufficient circulation of documents including the information necessary for the employees – 66.52%,
- insufficient use of sources of knowledge acquisition, such as recruitment – 52.77%, outsourcing – 53.01%, and products related to knowledge – 53.25%,
- applying new knowledge mainly in innovative solutions – 65.06%,
- lack of periodical tests verifying knowledge possessed by the employees, meant to evaluate its utility – 58.76%.

Considering the above conclusions, it may be claimed that the studied organizations are interested in knowledge management. Knowledge management is attributed, which is a positive phenomenon, with the implementation of specific purposes. The respondents most frequently mentioned enhanced quality of their services and improved management. In order to implement this concept organizations initiate activities in the form of creating posts for knowledge management or tools facilitating knowledge management. This in turn means the beginning of a systematic approach to knowledge management.

Obviously, knowledge management in the studied enterprises comes across some obstacles which reduce the efficiency of this conception. Among these hindrances, the most important ones are poor interpersonal communication and inadequate style of management. Significant limitations for implementing the initiative of knowledge management are also posed by insufficient financial means.

The practice in the scope of knowledge management in small enterprises in the IT sector in Poland is at the stage of becoming interested in this conception and developing the foundations for the system of knowledge management.

Bibliography

1. Grudowski P.: Zarządzanie wiedzą w systemach zarządzania jakością. „*Ekonomika i Organizacja Przedsiębiorstwa*”, No. 12, 2007.
2. Gruszczyńska-Malec G., Rutkowska M.: Strategie zarządzania wiedzą w wybranych przedsiębiorstwach województwa śląskiego – wyniki badań empirycznych. Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu, Poznań 2009.
3. Land F.: Knowledge Management or the Management of Knowledge? [in:] King W.R. (ed.): *Knowledge Management and Organizational Learning*. Springer, New York 2009.
4. King W.R.: Knowledge Management and Organizational Learning, [in:] King W.R. (ed.): *Knowledge Management and Organizational Learning*. Springer, New York 2009.
5. Kotarba W.: Istota zarządzania wiedzą, [in:] Kotarba W., Kotarba M. (ed.): *Ochrona wiedzy a kapitał intelektualny organizacji*. PWE, Warszawa 2006.
6. Morawski M.: Wiedza jako przedmiot zarządzania w przedsiębiorstwie, [in:] Kobyłko G., Morawski M. (ed.): *Przedsiębiorstwo zorientowane na wiedzę*. Difin, Warszawa 2006.
7. Panasiewicz L.: Kontrowersje w sprawie zarządzania wiedzą. „*Ekonomika i Organizacja Przedsiębiorstwa*”, No. 7, 2004.
8. Smith P.: A Performance-Based Approach to Knowledge Management. „*Journal of Knowledge Management Practice*”, Vol. 3, 2002.
9. Szaban J.: Zarządzanie wiedzą, [in:] Szaban J. (ed.): *Ze współczesnych problemów zarządzania ludźmi*. Wydawnictwo Wyższej Szkoły Przedsiębiorczości i Zarządzania, Warszawa 2003.
10. Skrzypek E.: Rola wiedzy we współczesnym zarządzaniu, [in] Sitko-Lutek A. (ed.): *Polskie firmy wobec globalizacji. Luka kompetencyjna*. PWN, Warszawa 2007.