I Knowledge management in theory and practice: case Raahe City Library

Terhi Mustakangas
Oulu University of Applied Sciences
School of Business and Information Management
Oulu, Finland

Abstract:

Knowledge management (KM) is a timely and an important issue in the comprehensive development of the organisations. Knowledge management is also related to information management. Knowledge management is a competitiveness factor in professional service organisations. With core competences can be increased value for customers.

Developing of knowledge management has been done in case organisation Raahe City Library. In Raahe City Library have 18 employees. Most of them have a vocational education. Also most of the employees have a long carrier in Raahe City Library.

There has been done survey of knowledge resources in case organisation. On base of the survey there has been planned the education and other development actions for the employees. In the future there be needed more education in public libraries. On base of the survey it would be developed with a better way.

The objective of this development work is to bring new information about developing of knowledge management in public libraries. In theoretical framework is discussed about knowledge management and learning, core competencies, creating knowledge and knowledge management in public libraries.

Contents

1. INTRODUCTION

Knowledge management (KM) is a timely and important issue in the comprehensive development of the organisations. Knowledge management is also related to information management. Knowledge management is a competitiveness factor in professional service organisations. Core competencies are as a key element in improving the competitiveness. With core competences can be increased value for customers.

The challenge of the development of service business is how knowledge can be used for the development of the customer oriented approach of the services and increasing the value. The second challenge is that of how physical products or services would be created to total service packages. At the moment it can be discussed about the service society from which the information and knowledge are the fuel of the development. (Grönroos 2005, 11.)

Developing of knowledge management has been done in case organisation Raahe City Library in Finland. In Raahe City Library have 18 employees. Most of them have a vocational education. Also most of the employees have a long carrier in Raahe City Library. Knowledge management is not done of a comprehensive way and all the possibilities of the information system of the human resources are not used.

There has been done survey of knowledge resources in case organisation. On base of the survey there has been planned the education and other development actions for the employees. In the future there be needed more education in public libraries. On base of the survey it would be developed with a better way.

Research of knowledge management gives a base for marketing of Raahe City Library. Providing services of professional service organisations calls for a strong knowledge and a systematic management. This will make it possible to provide a high-quality service, which will provide a competitive edge in the market. The customer value increases with systematic knowledge management.

2. OBJECTIVES OF THE RESEARCH

Knowledge management has been researched for a long time. Knowledge management is a comprehensive action. The objective of this study is to bring new information about developing of knowledge management in public libraries. The research cases from knowledge management are concentrated mainly to information intensive companies. This study is trying to bring a new vision to the research of knowledge management with the new research through the different case organisation.

The gap in the research of knowledge management is that there is a little research of knowledge management in libraries. Second gap is that how knowledge management can help to improve organisations' competitiveness with defining the core competencies. Third gap is how knowledge management is linked to the customer value.

3. THE FRAMEWORK OF THE RESEARCH

Through knowledge management organisations can be developed as a whole. In particular, in abstract professional services and, more generally speaking, in the service business it is very important to have a visible knowledge, as well as within the organisation and to the outside world. The core competencies of the organisation must be clearly defined.

Knowledge management

Malhotra (2006) defines knowledge management like that: "Knowledge management refers to the critical issues of organizational adaptation, survival and competence against discontinuous environmental change. Essentially it embodies organizational processes that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings." The knowledge management is a combination of information systems, learning, competencies and know-how. All these things should be managed in professional service organisations.

Knowledge management and learning

From knowledge management (KM) has been written much and it is defined in various different ways. Ståhle and Grönroos (2001, 17) are defined knowledge management to the idea to harness, to develop and to make the best use the organisation intellectual capital. Knowledge management is not the method or the project. It is a process which has its starting point, but it has not the end. The intellectual capital of the business is both an invisible and a dynamic concept. Invisible it is for that reason, that the relations, contacts and links represent the capital which is invisible and hardly any visible in companies. The concept of the intellectual capital is dynamic, because it covers continued new knowledge and innovation development. (ibid., 33 - 34, 85 - 86.)

Knowledge management is based on the concept of the organisational learning. Sydänmaanlakka (2004) combined with the development of the intelligent organisation the information, the knowledge and performance management. The performance management concentrates to the individuals and it is based on work and tasks. Knowledge management leaves from the organisation's vision and strategy. Often the organisation´s team based knowledge and information are on the basis of information management. With these is a learning process, which is proceeding from understanding to application, experience and evaluation. In the changing world the continuous learning is essential. (ibid., 22 - 23.)

Sydänmaanlakka (2004, 30) defines the learning in this way: "The learning is a process in which the individual acquires new knowledge, skills, attitudes, experiences and contacts, which will lead to change in his action". Learning reinforcing factors are motivation to learning, internal successes (aha experiences), experimenting with learning and documentation of learning, either recorded on the memory, on the paper or on the database. In addition, the attitudes and the previous experiences affect to the learning (ibid., 36.)

Supporting elements in learning at the work are the structure of the organisation, culture and values, the same vision, human resource management and the learning environment (Sydänmaanlakka 2004, 71). Performance management of the individuals is made up of the positioning the objectives, of the follow-up or coaching, of the feedback and development. In performance management is used in addition to daily management meetings and design- and development discussions. (ibid., 76.) Also these factors will be considered in this research.

Sydänmaanlakka (2004, 51) defines the learning organisation in this way: "Learning organisation will have the ability constantly to adapt, change and creative in accordance with the requirements of environment. That will learn from its experiences and is able to change rapidly its procedures". The organisation's learning circle is made up of the organisation's common interpretation of information (the vision, the strategy, the objectives), of the organisation's thought- and policy models, as well as of the development of knowledge to the organisation's operation and feedback systems. Intelligent organisation sees its demands of change soon, learns more quickly than competitors and it will take new things in practice more quickly than competitors. (ibid., 51 - 52.)

So, knowledge management is mainly based on the principles of the learning organisation. In knowledge management there are important the organisation's areas of the know-how, which strengthen the organisation's activity and competitiveness. Knowledge management is a dynamic process, which requires creativity and the clear strategy basis in the organisation. Next I will speak about core competencies.

Core competencies

Hamel and Prahalad (1994, 16) emphasize to seeing to the future. When there is quests the competitiveness it's a matter of restructuring the portfolio and downsizing the headcount. Also it is important to reengineer processes and improve continuously. Further it's a matter of reinventing industries and regenerating strategies. It shall concentrate on that what customers want and of which the competitiveness consists of in the future. (ibid., 16 - 17.) A core competence is a combination of technologies and skills that allows a company to provide a specific benefit to customers (ibid., 219). Understanding of what is or is not a core competence can perceive with decisions of what to outsource or what to own. (ibid., 232). Hamel's and Prahalad's (1996) findings are related to the discussion of abilities.

Speaking from the service aspect the company's core product or -service must be good enough for a source of the competitive advantage. That is not enough either as a guarantee for the success on the market. In order to achieve the lasting competitive edge, all the elements of the customer relationship have to develop and to bring them into a single service package. In this case in addition to the core product or -service are offered the accompanying- and ancillary services. (Grönroos 2001, 28 - 30.) There are services to students and to the representatives of working life in educational organisations. The services differ from each other and the symmetry is necessary with them.

Definition of competence is according to Tikkanen (2005, 208): "Organisation's ability to constantly and in a coordinated manner to use resources and capabilities to achieving strategic targets and achieving or maintaining a competitive advantage". Besides Grönroos, Pearson says that by analyzing company's service or product can be identified the company's existing core competences. It shall be found the fundamental knowledge and skills on which successful products are based. The company shall acquire relevant core competences and apply them effectively. So the company can develop core products. Ability to do so gives for a company capacity for competitive innovation. The company shall define the competences required in the future, in addition to what competences the company already has. (Pearson 1994, 82 - 84.) Also in library organisations should be define the core competencies.

Knowledge management is one organisation's one of the most important strategic regions. It combines all the business areas from marketing to financial management. A successful business is based on data collection and recovery. For marketing strategy shall be defined company's information needs. The same will to define ways to collect, interpret and share information to network. (Tikkanen 2005, 155 - 160.) Company's core competences need marketing to organisation stakeholders. With core competencies will be achieved competitive advantage on the market, so that do not sustain to be hidden from view. High-quality competencies should be marketed.

Also, customer relationships can be assessed from the point of view of abilities. The ability is related to partner's production of added value to the other party of the relationship and to know-how and resource base. The ability is that what company can to make for one party's award. A genuinely effective and parties to optimally benefiting customer relationship requires also reciprocity and specificity. Specificity is that what it is to be prepared to make in relation in comparison with other relations. Activities of the parties must also be consistent. (Tikkanen 2005, 49 - 50.)

In addition to Tikkanen's point of view of abilities, one Gummesson's (2004) relationship marketing model's relationship is a knowledge-based relationship. Information shall be considered

to be the most important background of competitiveness. Knowledge-based relationships are alliances between companies that will be set up more for learning and information creation purposes. They are closer than the product relationships. The information relationships consist of complex networks and there is a great potential joining them. The product is only one application of information. (Gummesson 2004, 235 - 240.) Also the service is highly knowledge-based.

Creating knowledge

Polanyi (1966, 4) says that people can know more than they can tell. According Polanyi (1966, 24): "Tacit knowing is shown to account 1) for a valid knowledge of a problem, 2) for the scientist's capacity to pursue it, guided by his sense of approaching its solution, and 3) for a valid anticipation of the yet indeterminate implications of the discovery arrived at in the end." This is information management, and it is as a basis on knowledge management.

Nonaka and Takeuchi have researched creating the knowledge for a long time. In theirs knowledge spiral the knowledge-creation process includes socialization, externalization, combination and internalization (SECI) (Nonaka and Takeuchi 1995, 71). They are also developed the SECI to the spiral of organizational knowledge-creation. In the spiral is represented the individual-, group-, organization- and inter-organisation levels in addition to the knowledge-creation process. The knowledge-creation process proceeds like the spiral through all these processes. (Nonaka and Takeuchi 1995, 73.) The model is very usable: it considers all the aspects of knowledge transfer and also the people.

Nonaka and Takeuchi have also five-phase model of the organizational knowledge-creation process. The process starts with the sharing of tacit knowledge. In the second, tacit knowledge is converted to explicit knowledge and further the created concept has to be justified in third phase. After that the concepts are converted into an archetype. The knowledge created in extends in the last phase. (Nonaka and Takeuchi 1995, 84.) This model is a good basis when it is planned knowledge management in the organisations.

Further, Watson and Hewett (2006, 141) have researched knowledge transfer in organisations. According them there are two key factors which the effectiveness of intra-firm knowledge transfer based on the reuse of existing knowledge depends on. The first is the willingness of individuals to bring their knowledge to the system. The second is the state at which individuals access and re-use knowledge within the system. (Watson and Hewett 2006, 141.) That is another application of Nonaka's and Takeuchi's (1995) model.

Same says Ulrich (1996, 18): according to him the human resource practices in the company shall create value by adding the intellectual capital inside the company. The leadership in the future shall be shared and team-focused. Also sharing information and ideas throughout the company shall be occurred more quickly. It's important to learn rapid and get the improved information-flow processes in the organisation. So the innovations and ideas can spread quickly across borders. Human resource professionals shall find, seek and use the new measurement processes to focus to intellectual capital. (Ulrich 1996, 13 - 14.) Ulrich keeps important the groups in the organisations: the knowledge moves inside these.

Liao, Chuang and To (2011, 728) are examined how the knowledge management combines with company's environment and organisational structure. Knowledge management skills are related to the organisational structure and operate in one way or another, together with it. In the continually

changing business environment is calling for a new conceptualizing of knowledge management. In the uncertain business environment with knowledge management can be strengthen the company's decision-making processes and to develop employee's problem solving skills. (Liao, Chuang and To 2011, 733 - 734.) This finding is also important view in knowledge management.

Melancon, Griffith, Noble and Chen (2010, 400) have looked into the enterprise's know-how's benefits from a competitive advantage of the service sector organisations. They saw that employee's knowledge from customers and competitors will help to respond to customer's demands. They therefore support staff training, and to making sure that they can be able to share their know-how with the leadership and with other workers. (Melancon, Griffith, Noble and Chen 2010, 405 - 407.) This suits very well to the library organisations. Responding well to the customer's demands can be created value to them.

Ricceri (2008, 4) classifies knowledge resources into three parts: human resources, structural resources and relational resources. The human resources include e.g. managers' and employees' knowledge, skills and abilities. The structural resources consist of e.g. information and networking systems, a culture, processes and routines. The relational resources are e.g. an image, a brand and a relationship with stakeholders. Further, she assembles activities in strategic management of knowledge resources (SMKR). They are strategization (i.e. strategy formulation and implementation), utilization of SKRM information and reporting. A stakeholder analysis and a resources analysis are related to strategization. (Ricceri 2008, 4 - 7.) With applying this classification could be systematically managed knowledge in organisation.

Knowledge management in public libraries in Finland

Greenwood, Li, Prakash and Woodhouse (2005, 661) define professional service firms (PSFs) as "those whose primary assets are a highly educated (professional) workforce and whose outputs are intangible services encoded with complex knowledge." So the libraries are also the professional service organisations.

Saarti and Juntunen (2011, 581) have been studied describing the tools and methods used and developed within the University Library of Kuopio, Finland. These consist of tools which have been used in managing the personnel, their well-being and their personal professional and skills development. (Saarti and Juntunen 2011, 581.)

They studied for example the following methods: benchmarking, working visits, networking and workgroups, strategic management, development of the working methods, mapping of the field of know-how, management training and internal training. (Saarti and Juntunen 2011, 583.)

They found out that the main challenge for the management is the strategy work: how to make a clear and concrete strategy and how to commit the staff with the strategy. They also found out that it is important to know the optimal use of the resources. In this work is needed the increasing the skills and know-how of the staff. There should build a distinct and working learning organization. In this work is needed the documentation, staff training and team-work is. Also is relevant to define the specific core competencies. This makes clear what the tasks of the library are. In addition, the atmosphere of trust is important in the library. (Saarti and Juntunen 2011, 586 - 587.)

According Pohjalainen (2006, 50 - 51) there is very much tacit knowledge in the libraries. The challenges of management are management of the changes and learning new things. Also important are the strategic planning and developing the libraries. There is needed openness in the

communication, dialog and co-operation. The identity of managers should be strengthened and there is needed time for the management work. (Pohjalainen 2006, 59.)

4. THE PRACTICAL CASE – RAAHE CITY LIBRARY

The qualitative case study is suitable for this study because with it can be got acquainted in a comprehensive and deeply way to the organisation which is the object of the study. Yin (2009, 18) defines: "A case study is an empirical inquiry that, 1) investigates a contemporary phenomenon in depth and within its real-life context, especially when, 2) the boundaries between phenomenon and context are not clearly evident." The case study has some strengthens. The most important is its ability to deal with a full variety of evidence: interviews, observations, documents and artifacts. (Yin 2009, 11.)

Raahe City Library

Developing of knowledge management has been done in case organisation Raahe City Library in Finland. In Raahe City Library have 18 employees. Most of them have a vocational education. There are the director of the library, four librarians, 12 library assistants and a doorkeeper in the library. Three librarians are also heads of departments. Most of the employees have a long carrier in Raahe City Library.

There are about 22 500 habitants in Raahe City. The library is in the center of the city. There are also three local libraries. The head library is open from Monday to Friday 10.00 a.m. - 19.00 p.m. and 10.00 a.m. - 16.00 p.m. in Saturday.

There are big changes in Raahe City Library. The library will be renovated and enlarged in year 2013. In this renovating time the library will work in other place and the moving there is a hard work.

The developing knowledge management started with a project. The project concerned also strategy work, marketing and quality. So the project was very comprehensive. The strategy work gave a good basis for the developing knowledge management.

There has been done survey of knowledge resources in case organisation. On base of the survey there has been planned the education for the employees. In the future there be needed more education in public libraries. On base of the survey it would be developed with a better way.

Survey of know-how

There was carried out the survey of know-how in spring 2012 in Raahe City Library. The survey based on the form. There were three main expertise areas in the form: the basic know-how of library area, interaction and communication skills, and information technical skills and controlling of devices. The basic know-how of library area consists of: information retrieval, collection and content know-how and acquaintance of collection. Also there were open questions in the form.

The evaluation grade was 0 - 5 in skill level (5 = Very well, 4 = Well, 3 = Moderate, 2 = Weak, 1 = No skill, 0 = I don't need this skill). Need for the education was in grade 1 - 3 (3 = Busy need, 2 = Some need, 1 = No need for the education).

In the survey was research the core competencies and also the special competencies. All the staff should have the core competencies. All the staff does not need the special competencies.

Results of the survey

The core competencies evaluated very well or well in the basic know-how of library area. The special competencies were well or moderate. Information retrieval was very well or well in core competencies, and in the special competencies very well or moderate. Collection and content core know-how was very well and well. Special competencies were well or moderate. The acquaintance of collection was very well or well.

There was variation in the answers of the interaction and communication skills. For example there was need to study languages and guidance skills. The core competencies of information technical skills and controlling of devices was well and moderate. In the special competencies there was variation in the answers.

The open questions told that there is interesting for the education and the learning of new skills. At the summary the core competencies was well or moderate. Some people have the special competencies, which was very well or well.

Developing of knowledge management

In the future, when the library is renovated, the service culture would be changing. For example there would be need to guidance skills and marketing. The know-how should be diverse and the mind for learning new skills positive. All the staff should have the core competencies.

The survey gives a basis to developing knowledge management. The survey tells what kind is the know-how of the staff now and how it should be develop in the future. Also the staff sees what kind of skills the work needs.

The survey of know-how gives a basis for developing discussions in the organisation. Also it is linked in the strategy. When the organisation hires new staff, it can use the survey of know-how in supporting this action. The survey of know-how is also self-evaluation. The survey brings out needs for the education and other developing actions. Skillful staff is a basis for the quality of library services.

There is also a new library decree in Finland. It determines how much high-educational staff should be in the library. 45 % of the staff should have the higher education. In Raahe City Library the number is now 30 %, so there is need to education. Also the education days are in a low level.

How the know-how could be developed? For example there could be used coaching, mentoring, job rotation, dialog and team work. Of course the education is very important part of developing work. There would be good thing to plan the knowledge management in Raahe City Library. The results of the survey can be adapted also in other libraries.

5. SUMMARY

The research is a case study from knowledge management in Raahe City Library. The results of the study will serve a basis for the development of the organisation's knowledge management. Knowledge management (KM) is a timely and an important issue in the comprehensive development of the organisations. Knowledge management is also related to information management.

Knowledge management is a competitiveness factor in service business organisations. This research will disseminate information about the importance of knowledge management in developing professional service organisations. Finding out the core competences will improve competitiveness. With defining the core competences and developing knowledge management can serve value for the customers.

Developing of knowledge management has been done in case organisation Raahe City Library. In Raahe City Library have 18 employees. Most of them have a vocational education. Also most of the employees have a long carrier in Raahe City Library.

There has been done survey of knowledge resources in case organisation. On base of the survey there has been planned the education and other development actions for the employees. In the future there be needed more education in public libraries. On base of the survey it would be developed with a better way.

Knowledge management has been researched for a long time. Knowledge management is a comprehensive action. The objective of this development work is to bring new information about developing of knowledge management in public libraries. The research cases from knowledge management are concentrated mainly to information intensive companies. This case is trying to bring a new vision to the development of knowledge management through the different case organisation.

REFERENCES

Greenwood, R., Li, X. S., Prakash, R. and Woodhouse, D. L. (2005). Reputation, Diversification, and Organizational Explanations of Performance in Professional Service Firms. Organization Science, Vol. 16, No. 6, 661 - 673.

Grönroos, C. (2001). Palveluiden johtaminen ja markkinointi. Helsinki: WSOY.

Grönroos, C. (2005). Service Management and Marketing: A Customer Relationship Management Approach (2. ed.). Chichester: John Wiley & Sons Ltd.

Gummesson, E. (2004). Suhdemarkkinointi 4P:stä 30R:ään (2., uud.p.). Helsinki: Talentum.

Hamel, G. & Prahalad, C. K. (1994). Competing for the Future. Boston: Harvard Business School Press.

Liao, C., Chuang, S.-H. & To, P.-L. (2011). How knowledge management mediates the relationship between environment and organizational structure. Journal of Business Research, 64, 728 - 736.

Malhotra, Y. (2006). Worldwide Impact on Information Technology and Knowledge Management Practices. Luettu 11.9.2006. http://www.brint.com/casestudies.html.

Melancon, J. P., Griffith, D. A., Noble, S. M. & Chen, Q. (2010). Synergistic effects of operant knowledge resources. Journal of Service Marketing, 24/5, 400 - 411.

Nikola, R. 2012. Osaamiskartoitus. Raahe: Raahen kaupunginkirjasto.

Nonaka, I. & Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York: Oxford University Press.

Pearson, G. (1994). The Marketing/Strategy Interface. In book: Wilson, I. (edit.). Marketing Interfaces: Exploring the Marketing and Business Relationship. London: Pitman Publishing.

Pohjalainen, M. 2006. Osaamisen johtaminen yleisissä kirjastoissa. Helsinki: BTJ Kirjastopalvelu.

Polanyi, M. (1966/1983). The Tacit Dimension. Gloucester: Peter Smith.

Ricceri, F. (2008). Intellectual Capital and Knowledge Management: Strategic Management of Knowledge Resources. New York: Taylor & Francis Group.

Saarti, J. & Juntunen, A. (2011). Bringing out the best of everyone: A systematic approach to the workplace coaching and learning at the Kuopio University Library, Finland. Library Management, 32 (8), 579 - 588.

Ståhle, P. & Grönroos, M. (2001). Dynamic Intellectual Capital^{TM}: Knowledge Management in Theory and Practice. Helsinki: WSOY.

Sydänmaanlakka, P. (2004). Älykäs organisaatio: Tiedon, osaamisen ja suorituksen johtaminen (7. p.). Helsinki: Talentum.

Tikkanen, H. (2005). Markkinoinnin johtamisen perusteet: Tehtävät, perusprosessit ja markkinointistrategia. Helsinki: Talentum.

Ulrich, D. (1953/1996). Human Resource Champions: The Next Agenda for Adding Value and Delivering Results. Boston: Harvard Business School Press.

Watson, S. & Hewett, K. (2006). A Multi-Theoretical Model of Knowledge Transfer in Organizations: Determinants of Knowledge Contribution and Knowledge Reuse. Journal of Management Studies, 43:2, 141 - 173.

Yin, R. K. (2009). 4th ed. Case Study Research: Design and Methods. Applied Social Research Methods Series, Volume 5. Thousand Oaks: SAGE Publications, Inc.