

mobile

Journal of Organizational Knowledge Management

Vol. 2012 (2012), Article ID 584166, 42 minipages. DOI:10.5171/2012.584166 www.ibimapublishing.com

Copyright © 2012 Barbora Jetmarová. This is an open access article distributed under the Creative Commons Attribution License unported 3.0, which permits unrestricted use, distribution, and reproduction in any medium, provided that original work is properly cited.

The Value Position of the Role of Knowledge Management and Its Benefits for Benchmarking Application

Author

Barbora Jetmarová

University of Pardubice, Faculty of Economics and Administration, Pardubice,
Czech Republic

Abstract

The purpose of this research is to describe the value position and benefits of the role of knowledge management in benchmarking application. The paper also seeks to participate in the current debate on developing the theoretical basis for benchmarking concept and benchmarking cycle. Benchmarking is a valuable management tool, which provides an opportunity to learn from other enterprises. Knowing how the best enterprises conduct their business is a critical element of successful enterprise. In today's world, successful enterprises are those that are innovative, flexible and are able to handle rapid change. This can be achieved by continuously learning from others, doing benchmarking studies to create new knowledge, adapting new best practices, and innovations, establishing a knowledge

management infrastructure to capitalize on and disseminating results gained from benchmarking studies widely throughout the organization. On the one hand managing knowledge and effective knowledge management play an important role in successful benchmarking studies, on the other hand benchmarking has the potential for development of knowledge management in the enterprise. The paper finds that it is important to understand the systematic relationship between knowledge management and benchmarking and be aware of the value that can be generated in

Keywords: benchmarking, benchmarking cycle, knowledge management.

creating sustainable competitive advantage.

Introduction

An economic environment is characterized by globalization of market, strong competition, technology advancement, increasing uncertainty and discontinuity. The World economy is getting more service driven and knowledge oriented. The main drivers of the worldwide change are innovations, which have been occurring at an unprecedented rate. The complexity of innovation has been increased by growth of knowledge, evolving technology, shorter product lifecycles and higher rate of new product development. (Du Plessis, 2007) Specially, technological developments and innovations in IT area have caused a substantial increase in customer knowledge. Customers are now more educated and more demanding than ever. Harrington and Harrington (1995) state: "With intense competition in industry

today, simply meeting or beating past performance will not result in the level of improvement necessary to remain competitive." In the fast changing business world of today, managing knowledge has become the basis of every organization.

Managers, owners and investors need to know the current situation of the company, business environment and competitors, in order to promote and maintain its position in the market. Appropriate knowledge allows them to take the right decisions when obtaining financial resources, in determining the optimal financial structure, in allocation of available funds, in the provision of trade credit, in the distribution of profits, etc. Adapting knowledge management itself is not enough. The current environment of globalization and economic turbulence has increased the challenges executives face and, therefore, the

need to find the right tools to meet these challenges. Enterprises are constantly looking for new ways and methodologies to improve their performance and gain competitive advantage. Next to the knowledge management, enterprises have to consider and in many cases adapt or implement a wide range of innovative management philosophies, approaches, tools and techniques. To choose the right management tool, executives must be more knowledgeable than ever as they sort through the options and

select the right management tools for their enterprises. Among the most popular management tools such as Strategic Planning, Mission and Vision Statements, Customer Relationship Management, Outsourcing, Balanced Scorecard etc. benchmarking has emerged as a useful, easily understood, and effective tool for remaining competitive. Many organizations already recognized the importance of benchmarking. According to Bain & Company, benchmarking is the most used management tool worldwide since 2009 (Rigby and Bilodeau, 2011).

Benchmarking

Benchmarking presents continuous, systematic monitoring and evaluation of how well and effectively the enterprise carry out the service or produce the product, as compared with enterprises that produce best practices. In case that the procedures are better elsewhere, the enterprise is trying to apply them to themselves, so that its efficiency match to the benchmark efficiency or even better is higher than the benchmark efficiency. Benchmarking is the process of comparing the enterprise with its competitors besides that, benchmarking is also active in seeking the best ideas, methods and approaches, and generating knowledge that

are applicable to the enterprise and could contribute to increase its efficiency. (Patton, 2001) If the benchmarking is done correctly, it is one of the most effective techniques for identifying and optimizing opportunities for implementing change and improving performance and thereby for increasing competitiveness.

Defining Benchmarking

Benchmarking as a management tool has many definitions. Robert. C. Camp, who stood at the birth of benchmarking, defines benchmarking as: "The search for organizations best practices that lead to superior performance". He also states: "Benchmarking is your key to become the best of the best." (Camp, 2006) Zairi (1994) defines benchmarking as continuous

and systematic process of evaluating organizations recognized as leaders by their peers determining business and work process that represent best practices and establishing rational performance goals. Benchmarking has been variously defined and classified by different authors. As evidenced in literature, most authors have provided almost similar views on

benchmarking. According to literature review, benchmarking definitions can be characterised into following major areas: measurement via comparison, identification of best practices, implementation, continuous improvement and systematic process in carrying out benchmarking activity. (Sarkis, 2001; Tölösi and Lajtha, 2000; Hodgetts et al., 1999; Ramabadron et al., 1997; Cooper et al., 1996; Voss et al., 1994; Anand and Kodali,

2008) Therefore, it is believed that these areas encompass pertinent aspects of any benchmarking process. After analysis of

various benchmarking definitions, benchmarking can be described as: a management tool for attaining or exceeding the performance goals by learning from best practices and understanding the process by which they are achieved.

History and Types of Benchmarking

First comprehensive benchmarking project was carried by The Xerox Corporation. They used performance benchmarking for the first time in 1979. (Camp, 2006) Since that date, benchmarking procedures are constantly improving. Benchmarking is influenced by the development of management systems, statistical methods and information technology. In recent years, enterprises have recognized that focusing simply on performance measures and metrics leads to frustration because it is not clear

as to how the leading performer achieves that performance. Nowadays, benchmarking is about improving competitive position, and using 'best practice' to stimulate radical innovation rather than seeking minor, incremental improvements on historic Performance. Benchmarking is a critical business process that is being continuously improved within most major organizations. (Zairi and Al-Mashari, 2005) Therefore, the term benchmarking

describes numerous different activities. Several authors defined

and classified many types of benchmarking.

The most commonly accepted types of benchmarking are described by Zairi and Al-Marshari (2005). They define two main types of benchmarking: performance and best practice benchmarking (process benchmarking). Performance benchmarking refers to comparison of process output as a means

of identifying opportunities for improvement, setting performance targets and understanding relative positioning in comparison to other organizations. Best practice benchmarking refers to the comparison of the actual processes, practices and procedures in order to gain detailed knowledge of how improvements can be made. Both mentioned benchmarking types

are closely linked and are widely used. While metric benchmarking answer the question "what" or "how many", process benchmarking seek the answer to "how" the organization achieves excellent performance. Metric benchmarking measure and compare the consequences, while process benchmarking look for the causes. Comparing the results is important to identify activities that need to improve, conversely comparing activities and processes shows activity that leads to better results. The process benchmarking can be internal, competitive, functional or

generic. Global Benchmarking Network (GBN, 2011) asserts the same classification, but adds two main categories: informal and formal benchmarking. Informal benchmarking can be defined as an unstructured approach to learn from the experience of other organisations; therefore not following a defined process. Formal benchmarking is conducted consciously and systematically by organizations and is divided in two already mentioned categories: performance benchmarking and best practice benchmarking. Each benchmarking type has different requirements for knowledge management.

Knowledge Management

In the current decade knowledge as competitive asset is accepted universally and interest in knowledge management continues to

grow. Benchmarking is very dependent on the availability of information and knowledge. To ensure successful benchmarking knowledge has to be identified and managed. Managing knowledge and effective knowledge management is very important for doing benchmarking studies. Key activities of knowledge management are creation of new knowledge, knowledge storage, knowledge distribution and knowledge application. Specially knowledge distribution is important for benchmarking. On the other hand, benchmarking is useful in creation of new knowledge.

Definition of Knowledge Management

Many Knowledge management definitions exist. For the purpose of this paper, only selected definitions will be focused on. Alavi

and Leidner (1999) define knowledge management as a systemic and organizationally specified process for acquiring, organizing and communicating knowledge of employees so that others may make use of it to be more efficient and productive. According to Patton (2001) knowledge management is a collaborative management discipline that aims to make employees smarter, more innovative, and better decision makers. Daroch and McNaughton (2002) indicate that knowledge management is a

management function that creates or locates knowledge, manages the flow of knowledge and ensures that knowledge is used effectively and efficiently for long-term benefit of the organization. Organization that demonstrates competence in knowledge management has knowledge-oriented and that knowledge management therefore becomes a guiding business philosophy that influences strategies undertaken by

organizations managers. The ideal knowledge enterprise is the enterprise where people exchange knowledge across functional areas of the business by using technology and established processes. All the knowledge workers are in an environment where they can freely exchange and produce knowledge assets by using various technologies.

Knowledge

One of the sources for lasting competitive advantage is knowledge. Acquisition, exchange and creation of knowledge are crucial for benchmarking. Acquisition, creation and exchange of knowledge depends on the type of knowledge and takes places in various sources such as individual level, group level, and organizational level. Different types of knowledge can be learned

and transferred by various ways. Lundvall and Johnson (1994) developed distinctions that are useful for understanding the different channels and mechanisms through which learning different types of knowledge takes place. Learning the four types of knowledge (know- what, know-why, know-how, know-who) tends to take place in different ways and through different

channels. Important aspects of know-what and know-why may be obtained through reading books, attending lectures and accessing data based. Know-how and know-who are more entrenched in practical experience. Written manuals may be helpful, but in order to use them some prior basic skills are needed. Know-how is typically learnt in apprenticeship-relationship where the apprentice follows the master. Know-how is what characterizes skilled worker and artisan but it is also something that distinguishes the first-rate from the average manager and

scientist. Know-who is also learnt in social practice and some of munities of engineers and experts are kept together by reunions, conferences, professional societies, etc. giving the participants access to discussion of experiences and information battering with professional colleagues (Carter, 1989).

Not all types of knowledge can be transferred and learned, but they can be transformed into another form of knowledge. There is difference between explicit and implicit knowledge. Implicit knowledge is a knowledge which hasn't vet been codified but that can be codified. One way to make implicit knowledge explicit is to write it down. Knowledge that is written down may be passed on to others and be absorbed by those who can read and understand specific language. Even if the knowledge is written down, people need to have some prior knowledge about the topic, to

understand the message. There is also tacit knowledge, which represents the valuable and highly subjective insights and intuitions that are difficult to capture and share because people carry them in their heads.

Difference is also between local and global knowledge. From the point of view of the whole economy, the transformation of local knowledge into global knowledge is of great interest. Education and training systems generalize knowledge and embody knowledge in people. One way to generalize knowledge is to codify it. Codification and efforts to make explicit what is implicit may be seen as one important way to enhance the capacity to share knowledge in society. Another important mechanism for spreading experience-based knowledge is the mobility of workers. Other way to distribute knowledge is by benchmarking.

Benchmarking Cycle with Aspect to Knowledge Management

Benchmarking is the continuous learning process. In order to get useful results from benchmarking it is necessary to keep a systemic approach and respect benchmarking cycle. To initiate such cycle, management support is required. Over time, various methodologies were developed. Different sources describes phases and steps of benchmarking differently. The most important is the approach developed by four organizations, which are extensively involved in benchmarking (Boeing, Digital Equipment, Motorola and Xerox). This approach establishes the general context for the creation of a model, uses the four phases of benchmarking - planning, data collection, analysis and

improvement through adaptation.

Figure 1 presents benchmarking model, which shows benchmarking cycle and was developed pursuant to wide literature research based on a comparison of several benchmarking models. It shows the benchmarking cycle and displays four phases of benchmarking - planning, data collection, analysis and adaptation. These phases are mutually intertwined. The left side of the picture shows what happens within own enterprise. The right side shows the steps which happens within the competitor's or benchmark's enterprise. More detailed description in Jetmarová, (2011).

Knowledge management has its use in all phases of benchmarking. The two firs phases: planning and data collection are phases, which benefits from knowledge management most. Knowledge management might be helpful

in planning phase. Before starting a benchmarking programme, the enterprise must decide what to compare – what will be the subject of benchmarking. The subject should be chosen with reference to key criteria such as volume, cost, and value. If enterprise manages its knowledge, it is easier to set the subject of benchmarking as managers have good cognizance of different enterprises needs. Very important and sometimes problematic benchmarking phase is data collection. Some enterprise finds it difficult to get data from benchmarks. Collecting reliable data can be time consuming and requires thorough knowledge about own enterprise and also about

benchmark as it is necessary to collect internal data in own enterprise and also external data from benchmark. Knowledge management helps greatly in internal data collection and is useful in external data collection. Knowledge management can

facilitate collaboration with other enterprises and knowledge transfer across boundaries.

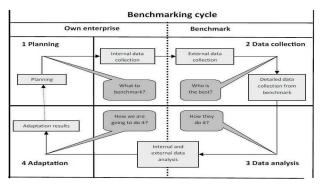


Fig 1. Benchmarking Cycle

Benefits of Benchmarking and Knowledge Management Co-Operation

Benchmarking and knowledge management are useful tools itself, but together they greatly benefit from each other. Benchmarking is extremely useful in developing knowledge management in organizations. On the other side, managing knowledge and effective knowledge management is very important for doing benchmarking studies.

The Value Position of the Role of Benchmarking in Knowledge Management

• One of the primary purposes of benchmarking is to evaluate, implement and spread information and knowledge.

Benchmarking is useful in creation of new knowledge in enterprises. Best practices obtained by benchmarking have become the most sought out form of knowledge. (Not effective practices, or decent practices - but best.)

Best practices and lessons learned due to benchmarking
presents intellectual capital, which is meaningful form of
knowledge. Acquiring knowledge and skills through
benchmarking is efficient way of gathering better results and
improving enterprises capacity without spending lot of time
and money on developing innovations. Innovations - the main
drivers of the worldwide change become more costly and risky
due to pressure from market and fast technological changes.

- Knowledge management provides an overview of what is available in the enterprise. This allows enterprise understand which areas of knowledge are lacking and by benchmarking systematically gain the knowledge. In case that there are knowledge gaps in enterprise, benchmarking can fulfil them.
- Benchmarking, best practice research and leadership can be named as a knowledge management tools for gaining and sharing knowledge. Even if benchmarking is useful management tool for sharing knowledge, there are barriers influencing successful knowledge transfer. Main barriers are as follows: First biggest barrier to the transfer is unawareness on both ends of the transfer. Employees in most companies, neither the source nor the recipient know someone else have knowledge they require or would be interested in knowledge

they have. Second biggest barrier to transfer is the absorptive capacity. Even if they know about better practice, they might not have the resources or enough practical detail to implement it. The third barrier is lack of pre-existing relationship between the source and recipient of knowledge. Fourth barrier is lack of motivation to transfer the knowledge. (O'del and Grayson,

1998)

 In many countries, numerous national initiatives continue to encourage organizations to benchmark, as they realize that current and future competition will be knowledge-based.
 Benchmarking is important aspect regarding to knowledge management. Transfer of best practice is the most common and most effective knowledge management strategy. Persistent to benchmarking company can develop a route map guiding the organization in the initial steps of implementing knowledge management. The instruction is derived from a study of successful knowledge management implementations in other enterprises that are successful in this area.

The Value Position of the Role of Knowledge Management in Benchmarking Application

 Benchmarking is using knowledge and experience of others to improve the enterprise. To ensure successful benchmarking knowledge has to be identified and managed. Therefore, benchmarking is very dependent on the availability of information and knowledge. Without knowledge management in organization, it is very difficult to carry out benchmarking. Knowledge management provides knowledge driven culture, which is helpful in benchmarking. Knowledge management helps to spread and transfer the useful practices around the enterprise acquired by benchmarking.

Knowledge management assists in identifying gaps in the

Effective management of knowledge inside an organization is important for benchmarking application. Doing benchmarking

knowledge base and benchmarking provides information to fill

important for benchmarking application. Doing benchmarking and transferring best practices within an enterprise is much more effective, when it is part of an overall environment, which values the sharing of knowledge. O'del and Grayson (1998) state that when eneterprise does not have knowledge

management, results from benchmarking will have only local benefit or will spread by luck.

- Knowledge management can facilitate collaboration with other enterprises and knowledge transfer across boundaries through ensuring that experts with relevant expert knowledge have opportunity to share their tacit knowledge through collaboration, which is needed for particular types of benchmarking. While doing external benchmarking enterprise have to work collaboratively across organizational boundaries to ensure sustained innovations and competitive advantage.
- Knowledge management assists in converting tacit knowledge to explicit knowledge. This adds a lot of value to the organization as it is known which knowledge is available, and it

is retrievable for future re-use. (Du Plessis, 2007) Knowledge management also assists in generation tools, platforms and processes for tacit knowledge creation and sharing in organizations, which plays important role in benchmarking.

One of the ambitions of knowledge management is to capture the tacit knowledge required by a business process and encourage knowledge workers to share and communicate knowledge with colleagues. With such knowledge, it is easier to determine which processes are more effective or less effective than others and helps to identify which processes should be benchmarked. Too often employees in one part of a business

start from beginning on a project because the knowledge needed is somewhere else but not known to them.

Conclusion

Successful companies are those that consistently learn from others, do benchmarking studies to create new knowledge. disseminate it widely throughout the organization, quickly embody it in new technologies and products, establish a knowledge management infrastructure and adapt new best practices, in other words, enterprises that apply knowledge management and benchmarking. Based on this article, it is clear that knowledge management and benchmarking are useful itself. Both of them have great potential, but together they greatly benefit from each other. It is important to understand the systematic relationship between knowledge management and benchmarking and be aware of the value that can be generated in creating sustainable competitive advantage. It is clear that

managing knowledge and effective knowledge management play an important role in successful benchmarking programme. In contrast, developing best practice and improving performance through benchmarking is a vital approach for sharing and transferring knowledge and developing knowledge management in the enterprise. Further research is required how the value of knowledge management can be maximized to ensure a more efficient and effective benchmarking results.

The article was supported by the "Student Grant Competition" at University of Pardubice - the project "Science and research activities supporting the program Economics and Management" - SGFES03/2012.

References

Alavi, M. & Leidner, D. E. (2001). "Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues," *MIS Quarterly*, 25 (1), 107-136.

Anand, G. & Kodali, R. (2008). "Benchmarking the Benchmarking Models," *Benchmarking: An International Journal*, 15 (3), 257 - 291.

Camp, R. C. (2006). Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance, *ASQ Quality Press*, Milwaukee.

Carter, A. P. (1989). "Know-How Trading as Economic Exchange," *Research Policy*, 18 (3), 155-163.

Cavusgil, S. T., Calantone, J. R. & Zhao, Y. (2003). "Tacit Knowledge Transfer and Firm Innovation Capability," *Journal of Business & Industrial Marketing*, 18 (1), 6-21.

Coopers, B. J., Lejny, P. & Mathews, C. M. H. (1996). "Benchmarking a Comparison of International Audit in Australia, Malaysia and Hong Kong," *Managerial Accounting Journal*, 11 (1), 23–29.

Daroch, J. & Mcnaughton, R. (2002). "Examining the Link between Knowledge Management Practices and Innovation Performance," *Journal of Intellectual Capital*, 3 (3), 210-222.

Du Plessis, M. (2007). "The Role of Knowledge Management in Innovation," *Journal of Knowledge Managemet,* 11 (4), 20-29.

Global Benchmarking Network, (2011). Global Survey on Business Improvement and Benchmarking. [online], GBN [Retrieved 2011-08-20].

http://www.globalbenchmarking.org/images/stories/PDF/2010 _gbn_survey_business_improvement_and_benchmarking_web.pdf.

Benchmarking: 20 Steps to Success, *Mcgraw-Hill*, New York.

Harrington, H. J. & Harrington, J. S. (1996). High Performance

Hodgetts, R. M., Kuratko, D. F. & Hornby, J. S. (1999). "Quality Implementation in Small Business: Perspectives from the

Baldridge Awards Winners," *SAM Advanced Management Journal*, 64 (1), 37 - 47.

Jensen, M. B., Johnson, B., Lorenz, E. & Lundvall, B. A. (2007). "Forms of Knowledge and Modes of Innovation," *Research Policy*, 36 (5), 680-693.

Jetmarová, B. (2011). "Benchmarking – Methods of Raising Company Efficiency by Learning from the Best-in-Class," *E+M: Ekonomics and Management*, 14 (1), 83-96.

Moriarty, J. P. & Smallman, C. (2009). "En Route to a Theory of Benchmarking," *Benchmarking: An International Journal*, 16 (4), 484-503.

O'dell, C., Grayson, J. R., Jackson, C. & Essaides, N. (1998). "If Only We Knew What We Know: The Transfer of Internal Knowledge and Best Practice," *Free Press,* New York.

Patton, M. Q. (2001). "Evaluation, Knowledge Management, Best Practices, and High Quality Lessons Learned," *American Journal of Evaluation*, 22 (3), 329-336.

Ramabadron, R., Dean, J. W. & Evans, J. R. (1997). "Benchmarking and Project Management: A Review and Organizational Model," *Benchmarking: An International Journal*, 4 (1), 47 - 58.

Rigby, D. & Bilodeau, B. (2008). Management Tools & Trends 2011[online], *Bain & Company* [Retrieved 2011-09-08],

http://www.bain.com/publications/articles/management-tools-trends-2011.aspx.

Sarkis, J. (2001). "Benchmarking for Agility," *Benchmarking: An International Journal*, 8 (2), 88-107.

Tölösi, P. & Lajtha, G. (2000). "Toward Improved Benchmarking Indicators," *Telecommunication Policy*, 24 (4), 347-357.

Voss, C. A., Åhlström, P. & Blackmon, K. (1997). "Benchmarking and Operational Performance: Some Empirical Results," *International Journal of Operations & Production Management,* 17 (10), 1046 – 1058.

Zairi, M. (1994). Measuring Performance for Business Results, Chapman & Hall, London.

Zairi, M. & Al-Mashari, M. (2005). "The Role of Benchmarking in

Best Practice Management and Knowledge Sharing," The Journal

of Computer Information Systems, 45 (4), 14-31.