Notions on Knowledge from Networks: Benchmarking in Public Sector

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Abstract: Today many organizations have come to value knowledge as a production factor. Thus, there is a constant need for getting the information in and sorted. The knowledge is based on the own operation and the knowledge from external sources. Organizations are no islands but rather a part of their ecosystem. This means they need data and information from within but also from outside. One way to acquire this is benchmarking, done in networks, national and international. Organizations are advised to have a process for systematic acquiring, analysing, and disseminating data and information from various sources to gain understanding about their environment. This is needed to support decision-making to achieve organization's objectives. However, as environments and technologies evolve in a rapid pace, newer ways emerge and not all of these are possible to be tried out. Benchmarking is a way to gather experiences from various directions so that the own decision-making is able to make informed decisions. Benchmarking should be embedded in business processes, so that the full effects thereof may benefit the operation. The paper is based on two studies investigating development schemes in a city operation where benchmarking is a part of the development tools. This paper brings up notions of the city's way of approaching the organizational development and especially benchmarking, but there are still questions to be answered. Literature on different approaches and findings of these studies are to be combined to form a vision to better match with reality. Various issues like users' active involvement, and further analysis are needed to fully grasp the big picture. Practitioners can use the approach to assess their current state of activities or planning the organization of benchmarking program.

1 INTRODUCTION

Public sector is about providing services (De Vries et al., 2016; Higgins, 2017). This raises questions like by and to whom, how, and for what price? This scrutinizing manifests itself in having multiple angles to the phenomena under scrutiny. The individuals performing the tasks, knowledge workers, need constantly reinvent themselves, innovate, to meet the requirements set by various stakeholders (Shujahat et al., 2018). A group of 'customers', i. e. taxpayers as well as other funding sources form only one of these angles and stakeholders; what do they get for the money they pay. Other factors, such as reducing resources, citizens' expectations, and public pressure result in the development need of operations (Gunasekaran, 2005; Hellsten and Pekkola, 2019). To operationalize all previous, not to mention measure

them, may prove to be difficult. One is advised to optimize the use of existing knowledge in order to make the best of it. Knowledge management (KM) is about utilizing the knowledge assets and enable rethinking the existing organizational structure in order to do better (Alavi and Leidner, 2001; Ferreira et al., 2018). KM is a recognized approach and tool for public sector organizations and its importance is growing constantly (Massaro et al., 2015).

Keeping in mind that as 'one tends to get what one measures' and 'one can develop what one can measure', it is advisable to scrutinize critically the proceedings and their connection to the bigger picture (Bouwers et al., 2012; Ward, 1996). In order to accomplish this, various networks have emerged (Carlsson, 2003; Loukis et al., 2016; Popp et al., 2014). Public sector organizations, such as the city in question, belong to various networks. The city we

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observe confers with its immediate neighbours: cities, towns and municipalities. The city, being one of the largest in the country, belongs to a so-called Group of Six, i.e. the six biggest cities in the country that are thought to share some of the issues they each confront. As a Finnish city it has a connection to the Nordic network of cities and then there is also a larger community, European community of cities in which the city is a part of.

The objective of belonging to these networks is to share experiences, learn from others, get new ideas and even share forces in mutually beneficial initiatives. Optimally to gain experiences from this knowledge acquired from the networks means not having always to make the same mistakes oneself and to share one's own experiences one has gathered means the same for the other parties. Benchmarking may be seen as a way to cover these activities (Gunasekaran, 2005). Benchmarking is also a tool in a larger repertoire of KM toolset.

We offer answers to the question: "How is benchmarking perceived in Finnish public sector?" by studying a large city in Finland and its decision makers in relation to their networks. The aim is to learn how and for what the city officials utilize the networks in which the city is a part of. We point out possible targets where there may still be room for improvement. One contribution of this paper is that the further discussion may find initiatives to start the developments based on the notions we point out. We collected spearhead-like issues where one might want to start the improvements. The results of a qualitative study show impacts, with a need for explicitly articulated goals. Section 2 presents our theoretical background. Sections 3 and 4 present the research setting and methods, and our findings. Section 5 discusses the results.

2 THEORETICAL BACKGROUND

Knowledge management is understood to mean a process or a set of activities to collect, process, organize, store, share and utilize knowledge in a way that supports the decision-making in the best possible way. That means activities on the individual and the organizational level (Jääskeläinen et al., 2020). With knowledge management the tacit knowledge in the organization may be identified and later combined with explicit knowledge. This may or may not include also knowledge from external sources. The overall objective is to support the organizational problem solving, decision making and strategic development. Thus, it may be stated that knowledge management is a systematic and a holistic process that integrates and combines technology and human aspects (Valkokari and Helander, 2007). In today's public sector operation, in addition to mere improving the operation, knowledge management aims to provide means to better understanding of the needs of the people and also to provide the people of the city with better and more inclusive services in the most resource-efficient and sustainable way. This is rather often related to introducing newer ways of working. The newer ways of working may refer to using modern tools e.g. digitalization or merely to the feature not having to do all on their own, being a part of a network instead of being alone and operating in complete isolation. Digital transformation refers to rethinking the business models (Hellsten and Paunu, 2020). This covers executing daily practices, processes, routines, and tasks. Digital transformation affects resource allocation and operational execution and may also prove to be an invaluable tool also in utilizing organizations external networks (Agutter et al., 2017). The use these tools with a network-related activities and indeed operating as a part of a network may translate to sharing information, experiences, but also giving back from one's own experiences, thus keeping up a steady knowledge flow back and forth.

Benchmarking has established its place and justification in organizations tool set when the development activities are concerned (Kyrö, 2003). Benchmarking is there to help the organization to improve its performance and consists of phases (Figure 1).
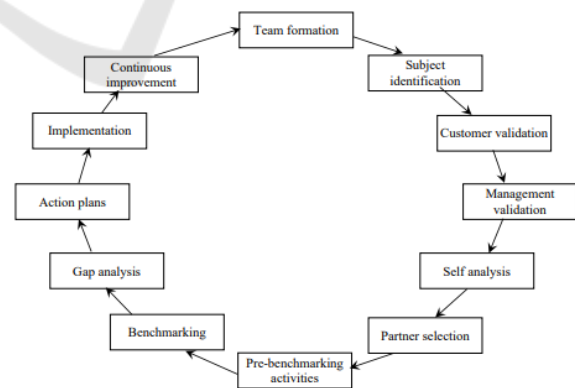

Figure 1: Benchmarking (Anand and Kodali, 2008).

As depicted in Figure 1. the phases include an organized approach to the actions, e. g. various validations and internal information gatherings, and internal planning. The actual comparisons are only a part in the process. There are numerous prerequisites

for these actions laying the foundations. In practise the full use of the model may prove to be challenging due to other organizational issues, such as the primary task and its demand of resources. (Bhutta and Huq, 1999).

Benchmarking may be applied to organizations whether they are large or small in size, and either in public or private sector. Benchmarking means originally simply to compare one's development scheme to that of good, well-chosen counter-parts (Gunasekaran, 2005). These comparisons may be made with competitors, peers or similar from the same or from a neighbouring branch, and in public sector especially, organizations of the same size and form.

3 RESEARCH SETTING

The case organization, city of Tampere, is the third largest city in Finland. Tampere is situated in middle Finland and is the largest inland centre in the Nordic countries. Tampere and its neighbouring municipalities together called Tampere Region are home to close to half a million inhabitants. Tampere mentions in its city website that "Tampere is one of the three most rapidly developing regions in Finland. It is a centre of leading-edge technology, research, education, culture, sports and business." (tampere.fi).

The case study concentrates on how the knowledge and data acquired from benchmarking is gathered, processed and utilized across the city's decision-making processes. The paper deals with the usage of benchmarking, its benefits, challenges and process in a city's organization. The studies behind this paper contain interviewees who are representatives of different service areas of the city but also contact persons to various national and international networks. The interviewees' positions in the organization's hierarchy vary from coordinators on the operational level to the upper management formulating the strategic decisions including both 'corporate executives' and political position holders.

The city has expressed the explicit wish of making its network activities properly. The work and learning in and from the (inter)national networks should be of high standard. Equally this should be integrated to city's organizational processes. The aim is to more effectively use learning from peers, national and international, to support the city's development schemes be it on strategic or tactical level. The university was engaged to study the related programs and initiatives to clarify the present state and to formulate possible operation re-directing actions.

The interviews were semi-structured and thematic both face to face and electronically executed (MS Teams -tool) interviews. The interviews were conducted during the two research initiatives, first during the spring 2018 and the second between December 2020 and January 2021. First batch of interviews entailed 20 interviews each lasting about 60 min. and the second one entailed 30 interviews of similar duration. The interview material was analysed with content analysis by multiple researchers and discussed through to see whether the message and answers as a whole were understood unanimously. Before and during the interview period the relevant documented materials were studied to provide the researchers with the background information but also to clarify the basic settings more thoroughly.

Additionally, a virtual seminar with the above-mentioned Group of Six was conducted. The aim of the workshop was to discuss and gather experiences from various cities concerning benchmarking; how cities benchmark, how new knowledge is disseminated, how well new ideas and experience take root in different cities.

4 FINDINGS

The possible benefits of benchmarking are widely acknowledged in the city of Tampere as are the positive outcomes of networking activities. The interviewees brought up many concrete ideas on how to improve operation on multiple levels. The level here refers to the individual tasks, activities in an office but also the operation on even larger scale, sometimes they may concern the whole service area, depending on which level the network and the discussions there are concentrated on.

Very important feature regarding the benchmarking is the support and a mandate from the highest level. The similar notion is known from the change management literature, to offer the true justification to the activities (Kotter, 2007). This gives a backrest for the individuals taking part in the network activities but also for presenting the emerged thoughts and ideas to the 'home office'. The interviewees reported this being the case. They felt that the organizational support was there. Having said that, the interviews tell us that the activity is not managed to perfection. This applies similarly to the reporting of the experiences gathered in the network events. All the activities are roughly based on the city strategy but the implementation varies and clear guidelines are missing. In addition, the various service areas and their managers have a slightly

different view on how to make benchmarking happen and how to make the full use of it. Similarly, the reporting varies; should an individual be a more organized person perhaps s/he makes the paperwork after an international meeting more thoroughly and may even report to the supervisor whereas the person not quite so, may just give an oral report of the proceedings at an opportune moment. The discrepancy causes uneven realization of the activity. To summarize, it may be stated that the early parts of the Benchmarking cycle (Figure 1.) the following conclusion may be drawn: in team formation, subject identification, and validation the recognized benefits include coming up with new ideas, piloting, clarifying the big picture of the proceedings. However, there are also recognized challenges in these early phases: scarcity of resources, the actions are more likely to be random and not systematic. Also, the tacit knowledge which resides in individuals is not easily exploited for the organizational objectives. Language and cultural issues may also cause additional challenges.

The resources are one obvious factor affecting the benchmarking in all phases of the cycle. The resources here mean financial, temporal, and personal issues. The service areas all have their budgets which may or may not limit the activities and their width. Similarly, the time each person has for networks and benchmarking there in addition to her/his other routines, varies. Thirdly, the attitude towards this kind of networking activity and the mere personality of the individual in question seems to affect the outcome of the benchmarking activities too.

This gives the feeling that even if the persons are the representatives of the city in a network, benchmarking is not always seen as a valuable part of the actual tasks one's job description entails but rather an add-on to the multitude of other tasks that one has to execute.

Pre-benchmarking and benchmarking phases in the middle of the cycle present as benefits the strengthening of international networks, increased trust in and of the cooperation amongst them. Also, the sense of developing operation and actions together, the change in individuals' attitudes are counted to be among the benefits and lessons learned. However, there are also challenges in the realization of these phases: cultural and system differences, comparability, bureaucracy, resources, all of which may dampen the eagerness to execute benchmarking effectively.

In the latter phases of the cycle, action plans, implementation, outcome and continuous improvement following features emerge as recognized benefits: new ideas, learning, trust,

networks, positioning. Similarly, some challenges are to be acknowledged: how to ensure systematic data collection. Also, the neglected use of applications and executed documentation are recognized as worrisome points. Matchmaking (regarding both knowledge and actors) is challenging, how could it be ensured that the right forums are found and right individuals are participating in them.

One crucial feature in making benchmarking successful is the courage of the network members to present also the failed attempts on developing the operation. If there was an experiment that went bust or initiative that proved to be costly, or resource demanding, and one is willing to share these experiences really delving into the causes and circumstances, true lessons are to be learned. One is more prone to present success stories, which are also good, but the lessons learned from cases how not to do something, are always welcomed warmly. In one instant, on the grass-root level where the activity was well received and organized this was not a problem even if the individuals were different. This varies quite a bit. We, the people, are different: some are more courageous to admit our imperfections and some are not. Should this be written down in a manual on how to do benchmarking it might ease the actual process.

5 DISCUSSION

Knowledge management is an invaluable tool for public sector organizations where the various stakeholders present conflicting pressures for the operation and the development thereof. The constant competition where the financial restraints, various increasing demands and political aspirations meet means dire straits indeed. The possibilities to make mistakes in the chosen way of operating under the fluctuating circumstances is notable. Thus, it becomes evident that the more information, and that refined to knowledge, is available, the better.

To save the scarce resources and to learn newer, better, ways of working, forming networks and benchmarking, provides appropriate tools. Public sector organizations are rarely in a directly competing position with one another. Also, the word 'public' bears significance, the financials tend to be public. This means that they may share the information and learn from one another without having to fear the exposing major business critical data to others.

As mentioned, the six biggest cities have similar mode in operating, have more or less same issues, and wrestle with similar problems. Their strategic

objectives, their networks and methods are quite same. Similarly, the concrete operation in these cities proved to be much the same. There is no one organized way of how the benchmarking is to be conducted. From the knowledge management practises there is the gathering of the data, sometimes referred to as empirical material, and the organizing thereof (Choo, 2002; Hellsten and Myllärniemi, 2019). Each area may have a different way of doing this, even inside of one city. The systematic way, or a model, is not there. We offer a possible approach for the future benchmarking activities (Figure 2.).

Figure 2: Proposed approach for public sector benchmarking.

This is a condensed version of the theoretical models found in the literature and presents a simplified way of organizing the actions. A notable detail is that the outcome includes also the decision-making based on discovered results of the inquiries.

This might offer an answer to the issues found in the interviews where the systems and applications are reportedly being used sporadically. In some cases there are some form of tool sets in use, however, quite often this is not the case. The applications are not utilized to their full capacity to say the least. The effective organization of the knowledge forms the basis for the effective knowledge dissemination, which in turn, is a starting point of well executed knowledge-based management. Based on the research the knowledge sharing, the results from the benchmarking, are unevenly distributed and sometimes in an occasional manner. Of course, there are weekly meetings in teams, in some cases in service areas, and a bit more seldom management teams where these issues may come up. Or not.

As a summary, the amount of tacit knowledge is large. This means that the knowledge indeed resides in people. The phenomenon is recognized and only when acknowledged it may be addressed so that the organization may benefit from the vast knowledge base that is the employees (Nonaka and Takeuchi, 1995).

The future step may be to define the present state of knowledge management by e.g. employing a questionnaire regarding this and elaborate the findings thereof and thus formulate a road map for the future endeavours in this area. Benchmarking is an obvious asset of implementing KM in the city's operation and especially the improvement of the operation.

REFERENCES

Agutter, C., van Hove, S., Steinberg, R., England, R., 2017. VeriSM-A service management approach for the digital age. Van Haren.

Alavi, M., Leidner, D.E., 2001. Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. MIS Q. 107–136.

Anand, G., Kodali, R., 2008. Benchmarking the benchmarking models. Benchmarking Int. J.

Bhutta, K.S., Huq, F., 1999. Benchmarking–best practices: an integrated approach. Benchmarking Int. J.

Bouwers, E., Visser, J., Van Deursen, A., 2012. Getting what you measure. Commun. ACM 55, 54–59.

Carlsson, S.A., 2003. Knowledge managing and knowledge management systems in inter-organizational networks. Knowl. Process Manag. 10, 194–206.

Choo, C.W., 2002. Information management for the intelligent organization: the art of scanning the environment. Information Today, Inc.

De Vries, H., Bekkers, V., Tummers, L., 2016. Innovation in the public sector: A systematic review and future research agenda. Public Adm. 94, 146–166.

Ferreira, J., Mueller, J., Papa, A., 2018. Strategic knowledge management: theory, practice and future challenges. J. Knowl. Manag.

Gunasekaran, A., 2005. Benchmarking in public sector organizations. Benchmarking Int. J.

Hellsten, P., Myllärniemi, J., 2019. Business Intelligence Process Model Revisited., in: KMIS. pp. 341–348.

Hellsten, P., Paunu, A., 2020. Digitalization: A Concept Easier to Talk about than to Understand.

Hellsten, P., Pekkola, S., 2019. The Impact Levels of Digitalization Initiatives. EGOV-CeDEM-EPart 2019 109.

Higgins, B., 2017. Reinventing human services: Community-and family-centered practice. Routledge.

Jääskeläinen, A., Sillanpää, V., Helander, N., Leskelä, R.-L., Haavisto, I., Laasonen, V., Torkki, P., 2020. Designing a maturity model for analyzing information and knowledge management in the public sector. VINE J. Inf. Knowl. Manag. Syst.

Kotter, J.P., 2007. Leading change: Why transformation efforts fail. Harv. Bus. Rev. 85, 96.

Kyrö, P., 2003. Revising the concept and forms of benchmarking. Benchmarking Int. J.

Loukis, E., Janssen, M., Dawes, S., Zheng, L., 2016. Evolving ICT and governance in organizational networks-Conceptual and theoretical foundations. Electron. Mark. 26, 7–14.

Massaro, M., Dumay, J., Garlatti, A., 2015. Public sector knowledge management: a structured literature review. J. Knowl. Manag.

Nonaka, I., Takeuchi, H., 1995. The knowledge-creating company how Japanese companies create the dynamics of innovation. Oxford University Press, New York.

Popp, J., Milward, H.B., MacKean, G., Casebeer, A., Lindstrom, R., 2014. Inter-organizational networks: A review of the literature to inform practice. Calg. IBM Cent. Bus. Gov.

Shujahat, M., Ali, B., Nawaz, F., Durst, S., Kianto, A., 2018. Translating the impact of knowledge management into knowledge-based innovation: The neglected and mediating role of knowledge-worker satisfaction. Hum. Factors Ergon. Manuf. Serv. Ind. 28, 200–212.

Valkokari, K., Helander, N., 2007. Knowledge management in different types of strategic SME networks. Manag. Res. News.

Ward, J.A., 1996. Measurement management: what you measure is what you get. Inf. Syst. Manag. 13, 59–61.