DIGITAL TRANSFORMATION CHALLENGE OF TRANSVERSAL COMPETENCIES OF INFORMATION SOCIETY: THE CASE OF THE NATIONAL LIBRARY OF LITHUANIA

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Saulė Jokūbauskienė. Digital transformation challenge of transversal competencies of information society: the case of the National Library of Lithuania

Abstract: Information society in our days displays digital transformation from both individual and organizational perspectives which explores the challenge of creation and need for transversal competencies to fit into changing world and state policies within strategic intelligence decisions in upcoming years.

The aim of the paper is related to strategic objectives emerging within public discourse in the case of the National Library of Lithuania determining the relation of public communication to strategic guidelines emerging during the process of such communication and collaboration and other important key transversal competencies.

Keywords: Digital Transformation, Transversal competencies, information society, Library

Introduction

According to K. Schwab – the Fourth Industrial Revolution heralds a series of social, political, cultural, and economic upheavals that will unfold over the 21st century. Building on the widespread availability of digital technologies that were a result of the Third Industrial, or Digital Revolution, the Fourth Industrial Revolution will be driven largely by the convergence of digital, biological, and physical innovations. Ubiquitous, mobile supercomputing, intelligent robots, self-driving cars, neuro-technological brain enhancements, etc. The evidence of critical change is all around us and it's happening at exponential speed. The complexity of the technologies driving the Fourth Industrial Revolution and the breadth of their impact means that all stakeholder groups work together on innovative governance

approaches[1]. and organizational transformation leading to transformational leadership.

Societal challenges and the transformation to a sustainable society may become the key to move forward to knowledge-based economy. Digital technologies are a critical enabler for attaining the sustainability goals of the Green deal as well as the digital transformation of transversal competencies of information society within many different sectors (COM (2019) 640 final). The librarian's professional profile consists of a set of professional and personal qualities, the tasks to be performed, and the satisfaction of requirements, interests, and needs according to the category of users of library and information services[2].

The aim of the paper is related to strategic objectives emerging within public discourse in the case of the National Library of Lithuania determining the relation of public communication to strategic guidelines emerging during the process of such communication and collaboration and other important key transversal competencies. The definition of the transversal competencies could be the Top 10 Job Skills of 2025 defined by the World Economic Forum in 2020 such as problem-solving, self-management, working with people, technology use and development. The European way to digitalized knowledge economy brings the digital transformation processes into action via the selected case of the National Library of Lithuania. The processes of the digital and sustainable economy have a notable influence on the organization's management of its behavior processes in different areas.

The main research question is stated: How do the transversal leadership competencies appear in the institutional stage and what challenges does the institution come into?

These various action trends are well seen in both national and international perspectives in the case of the National Library of Lithuania by owned transformational leadership among international projects and initiatives which require key transversal competencies within Entrepreneurial Competences Framework[3]. The development of information activities within information services and transversal competencies of information society in the case of the National Library of Lithuania and the results of an empirical qualitative research and its interpretation are discussed in the research.

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[1] See SCHWAB, K. The Global Competitiveness Report 2018. World Economic Forum, Geneva, 2018. ISBN-13: 978-92-95044-76-0

[2] DAVLATOV, Soyibnazar, NOSIROV, Uktam. The leading role of the librarian in the library - information services process. 2020. Middle European Scientific Bulletin, 5. https://doi.org/10.47494/mesb.2020.5.91

[3] Entrepreneurial Competences Framework. Challenge-Based Learning in Higher Education. European University Alliance Arqus. 2022

The National Library should be seen – as an institutional challenge which declares its Mission: "to be the Lithuanian space of knowledge creating value for the public". The value creation perspective comes from the ability to perform transformational leadership. And the Vision declares as follows "to become an integral part of the State information policy, culture, education, science and economic progress" (Strategy of National Library 2021-2023). The institutional transformation process might be analyzed by Challenge Based Learning framework. The Framework divides into three interconnected phases: Engage, Investigate, and Act. Each phase includes activities that prepare the Learners to move to the next stage. Supporting the entire process is an ongoing process of documenting, reflecting and sharing.

Research methods

The methods used in the research are as follows: A case study of the National Library of Lithuania, Analysis of Strategic documents: Strategy of National Library of Lithuania: 2021-2023, Qualitative Experts survey: 10 Heads of Functional Units of National Library of Lithuania.

Results

Competence is defined as the ability to meet challenges successfully and to implement complex tasks[4]. As well it is clear that the organizational learning framework which consists of knowledge acquisition, information distribution, information interpretation and organizational memory[5].

It must be noticed that examples of good practice by experts of the National Library, identification of existing problems and challenges and forecasting of strategic development directions, an adaptation of the situation to one's own experience and recommendations and suggestions for further research are particularly valuable. While indicating research data collection methods there was the semi-closed questionnaire of the author prepared in 2013[6] and applied internationally in today's research was used but in different surroundings – not in three different sectors but

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[4] In Defining and selecting key competencies. Eds. Rychen D. S.; Salganik L. H. Hogrefe & Huber Publishers, 2001. p. 93–120. ISBN 0-88937-248-9.

[5] JASHAPARA, A. Knowledge management. An integrated approach. 2004, 324 p. ISBN 0273 68298 9.

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just as in organizational – the case of the National Library. After almost ten years, the aim is to investigate how transversal competencies are formed in the National Library. The relevance of the list of competencies and directions is based on the 4 conditions of the Industrial Revolution and the assumptions of transformational leadership. 10 Heads of Functional Units of the National Library who took part in the survey are seen as experts in the organization. Qualitative interpretation of content and insights were used for data processing. The questionnaire consisted of three parts: A. Knowledge society strategies and initiatives; B. Leadership; C. Learning: acquisition and retention of knowledge.

The semi-structured questionnaire contains a total of 10 multiple-choice questions, and all 10 questions have a second open-ended question part. The purpose of the second, open part of the question is to find out the insights and experience of experts in the context of the knowledge society of strategic leadership competencies of information and communication specialists. The questions of the first part "Strategies and initiatives of the knowledge society" (questions 1-3) include naming the essential competencies of successful leaders of the knowledge society, naming the most important competencies of a successful organizational knowledge worker. The expected changes in the organization's competence development strategy over the next five years are also identified.

In the second part of the questionnaire, "Leadership" is understood as a part of the manager's personal achievements, which is influenced by creativity, general organizational competence and personal competencies in the organizational success matrix. A creative approach to the activities performed, the ability to manage and motivate the team, apply innovations, share knowledge and cooperate creates added value for the learning organization and increases competitiveness in the market. It should be noted that in this part special attention is paid to the selection of information applied in the organization – "filter" (open question). Experts are also asked to describe information and knowledge management practices in more detail.

Qualitative content analysis is characterized by the interpretation and evaluation of concepts, the reliability of qualitative content analysis is usually associated with the object of research and the competence of the researcher, i.e., how the processes of summarizing the results correspond to the object of the study.

The increasing degree of complexity of global processes in the knowledge society turns into digital complexity, the control of which largely determines the efficiency of the digital and sustainable economy. The management of a dynamic environment of new quality requires a different critical mass of exceptional competencies, dominated by the paradigm of digital competence.

These results are confirmed by the experts' comments, the first, as well as all 10 questions and the matrix table, in the opinion of the author, present the most important selected insights from both an organizational and individual perspective.

The main insights of the research are as follows:

1. What are the most important organizational competencies of knowledge workers, seeking the main goal of organization?

The most important organization competencies of knowledge workers.

Based on their own experience have identified the following most important competencies of a knowledge worker: 1) Ability to learn quickly 2) Information management: selection and analysis 3) Analytical and global thinking 4) Creativity 5) The ability to perform complex tasks.

A. What are the most important organization competences of knowledge workers, seeking main goals of organization?
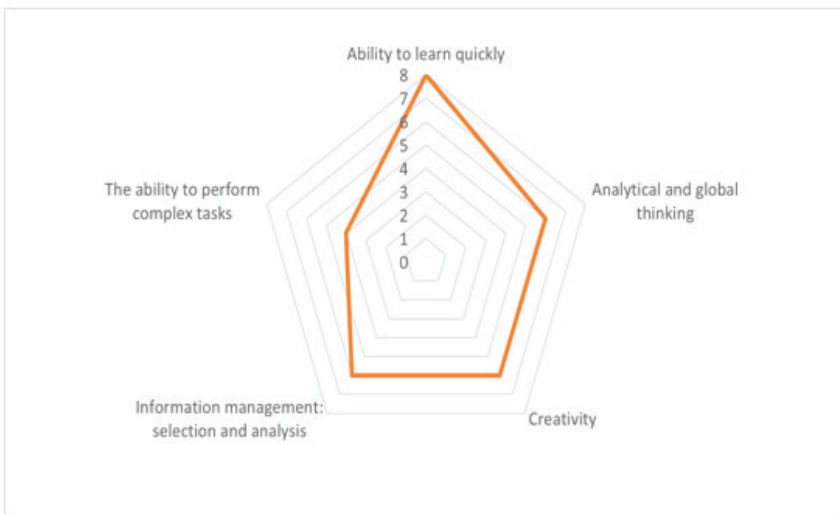

Diagram 1. The most important organizational competencies of knowledge workers

2. What creates organizational competence most efficiently?

Organizational competence.

Based on their own experience have identified the following most important list of organizational competence: 1) Effective problem solving 2) Collaboration 3) Responsibility 4) Focus on objectives 5) Teamwork 6) Creativity.

B. What creates *organizational competence* most efficiently?

Diagram 2. Organizational competence

3. What are the most important characteristics of knowledge workers, which may ensure successful activity of contemporary organization?

Based on their own experience have identified the following most important list of organizational competence: 1) Analytical thinking 2) Ability to solve problems on the digital environment 3) Collaboration 4) Critical thinking 5) Innovation 6) Creativity.

C. What are the most important characteristics of knowledge workers, which may ensure successful activity of contemporary organization?
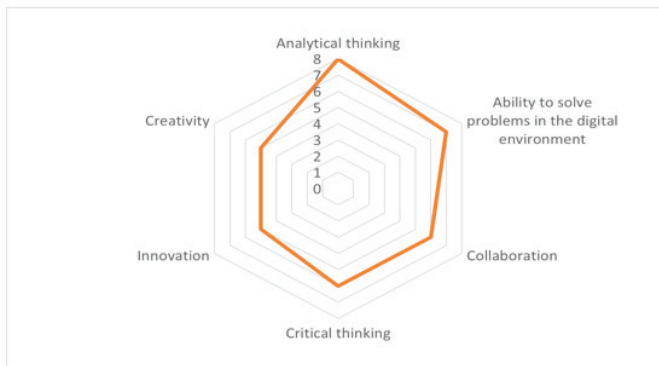

Diagram 3. The most important characteristics of knowledge workers

Category	Supportive Statements
Competencies of knowledge workers	**Expert A** states that "Bearing in mind the *complexity* of the information environment, it is, first of all, relevant to be able to manage this complexity - the competencies of *equipment management, selection methodology, analysis methodology, adaptation to various contexts (flexibility)* should be emphasized." **Expert B** describes that before mentioned adaption to situations is critical: "It is very (…) *broader trends* not only in Lithuania, but also in the world. Therefore, *cooperation, continuous learning, analytical and global thinking* are very important. I would classify the ability to solve problems as a systemic problem for the whole of Lithuania, as shown by PISA studies conducted with students: lower than the OECD average, students' achievements in *knowledge application*: critical and creative thinking, ability to solve complex problems, emotional intelligence."
Organizational competence	**Expert B** mentioned that "It is important for the organization not to close, *to cooperate*.". Expert A adds that "Having already created *an informational environment* and improved *informational behavior* and practices – to achieve the organization's internal goals, the most important thing to emphasize is a focus, not being distracted, cohesion, *community focus*".
Characteristics of knowledge workers	**Expert C** mentioned the idea of "The most important qualities of employees in this field are *the ability to capture essential, reliable information in the flow of information, and to be guided by critical thinking. Cooperate* with *the internal and external environment* in the processes of *receiving* and *transmitting* information." That points out *transformational leadership* as a concept of unexpected changes and continuity* while Expert C continues with the idea that "The main factor is the consistent implementation of *organizational policies* that promote personal and professional development.

1 Table. Competencies of knowledge workers in the National Library

Discussion

Challenge Based Learning is designed to be flexible, customizable, and allow for multiple points of entry[7] which declares that the global organization of strategic thinking implements its strategic goals regarding the creation of consistent transversal competencies, trust, and responsibility.

Information society our days display digital transformation from both individual and organizational perspective which explores the challenge of creation and needs of transversal competencies. The institutional leadership and cooperation with the internal and external environment have made the National Library seen worldwide.

Conclusion

Transversal competencies in the process of digital transformation of society transform the organization.

The National Library of Lithuania becomes an integral part of the country's progress in information policy, culture, education, science and economy.

The transformed National Library of Lithuania serves as a space for knowledge that creates value for information& knowledge society.

Thanks, given

I'm grateful to the National Library of Lithuania for the possibility to analyze the case of the organization and to the experts who took part in the survey. Also, thanks to the organizers of the conference for the possibility to participate and present the results of the research at the international conference of Communication and Media in the 21st Century: Educational and Professional Challenges in October 27-28th.

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