

Dissertation thesis review

Title of the thesis: **INDUSTRY 4.0 AND PREPARING COMPANIES FOR IMPLEMENTING IT**

Author: **Ing. Majid Ziaei Nafchi**

Supervisor: doc. Ing. Hana Mohelská, Ph.D., Faculty of Informatics and Management,
University of Hradec Králové

Structure and content of work

The thesis has 95 pages and consists of 6 basic chapters. The chapter 1 Introduction - provides very brief overview. The chapter 2 Analysis of the current state of the subject of the proposed dissertation provides good panorama view of solved area and basic conceptual apparatus. The review is done carefully and based on vast range of modern and prestigious information sources. The chapter 3 defining the objectives of the dissertation based on the analysis of the current state formulates goals of (objectives) the dissertation formulates hypothesis and outlines basic methods and attitudes used to meet them. The chapter 4 Results - concerns results, testing of hypotheses, the chapter 5 Discussion - provides additional facts. The chapter 6 Conclusion - is brief summary.

Next chapters are 7 References, 8 List of students' publications related to the topic, 9 List of Tables, 10 List of Figures.

Goals (objectives) of the dissertation, methods and approaches intended

The main objective of the thesis:

To examine the level of organizational culture in organizations in organizations to seek appropriate managerial approaches and methods for the development of organizational culture in a manner that could support the environment for innovation in the organization, in order to facilitate entrepreneurship in the Industry 4.0 concept.

The sub-objectives of this thesis:

O1: To explore and present the concept of Industry 4.0 in relationship with the use of suitable managerial approaches for the development of an organizational culture that is supporting to the process of innovation in organizations.

O2: To analyse the level of organizational culture in organizations based on the organizational culture index.

O3: To argue and formulate recommendations in order to reinforce organizational culture that is supporting Industry 4.0 based on the findings.

The author defines 4 steps to meet the objectives:

To analyse the existing state of implementing industry 4.0 – research of literature as well as business case studies.

To identify benchmarks and factors within individual pillars of implementing industry 4.0 – search of foreign specialized literature and description based on a questionnaire survey.

To identify the level of organizational culture in organizations in the Czech Republic – search of foreign specialized literature and description based on a questionnaire survey.

To answer the identified research question, based on primary research.

Three research questions RQ1 - RQ3 and two hypotheses H1 and H2 are formulated in connection with the goals:

- RQ1: Does organizational culture in organizations support the introduction of the Industry 4.0 concept?
- RQ2: Which determinants of organizational culture motivate an organization to implement Industry 4.0?
- RQ3: What is the difference in organizational culture according to the organizational culture index in 2013, 2015 and 2017?

- H1: The innovative organizational culture according to the index of organizational culture depends on the size of an organization in question.
- H2: The innovative organizational culture according to the index of organizational culture depends on the type of an organization in question (domestic, international, transnational, state/state-funded).

Evaluation of the thesis positive aspects

Subject matter of the thesis belongs to the field of doctoral studies. The theme of the thesis is modern and widely solved. The topic and objectives of the work are interesting and useful and also demanding for understanding and applying. The intending steps are adequately chosen and lead/tribute to achieving of the goals.

The hypotheses and research questions also tribute to understanding/ explaining of the objectives.

The dissertation is based on analysis of extensive literary sources on the subject matter. In accordance with the literature, classical and verified general empirical methods (observation, polling, measurement, experimentation) and logic (deduction induction synthesis analysis, concretization abstraction) are used. There are intended special statistical methods and approaches and other adequate methods. It can be traced the use of elements of system approach and the theory of systems and elements of knowledge approaches.

Methods and the whole approach can be considered as reasonable, appropriate, mainly classical, but lead to meeting the main goal of the work.

The author adequately contributed to the objectives.

Positive feature is based on link with research and publication tradition of the faculty, department and supervisor, participation of Ing. Majid Ziaei Nafchi in grant projects SPEV of the department (doc. Sokolová).

Question

In your opinion, which kind of organizations should consider implementing Industry 4.0?

Possibility of achieving the goals of the work and creation of good thesis

It can be said that the objectives of the thesis can be met.

The same holds about the quality and formal attributes of the text.

Hradec Kralove 3-rd June 2019

doc. Ing. Hana Mohelská, Ph.D.