

# Dissertation thesis review

## Industry 4.0 and Preparing Companies for Implementing IT

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Study program: Systems Engineering and Informatics  
Field of study: Information and Knowledge Management  
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Reviewed doctoral dissertation thesis "Industry 4.0 and Preparing Companies for Implementing IT" elaborated by Ing. Majid Ziaei Nafchi contains a total of 94 pages, including 81 pages of text and 2 pages of appendix.

### a) Overall timeliness of the dissertation

The thesis is devoted to highly topical issues related to the trends of recent years, referred to as Industry 4.0, respectively the Fourth Industrial Revolution. After the introductory period devoted to clarifying the whole subject of Industry 4.0 and the typology of the related emerging changes, the subsequent research interest has naturally shifted into questions of effective way of penetration and implementation of all these new trends into business practice. The reviewed dissertation thesis aims at this task and its need is harmonized with all these current demands.

### b) Fulfillment of the objective of the dissertation

Dissertation is in author's view "focused on the organization readiness for implementing Industry 4.0 from the point of view of the organizational culture". The author fills this goal in the form of a certain "information confederation" where key units like - organizational

culture - readiness for innovation - readiness for industry implementation 4.0 – are relatively separately described and not integrated in the usual way, including a applied questionnaire survey.

c) Problem solving process and dissertation results

In his elaboration, the author chose a relatively broad introduction in which he emphasized the area of knowledge management at the expense of the key topic of organizational culture that was to be the main point of view.

The starting point for fulfilling the aim of the thesis is the idea that the previous work has dealt with more technical aspects of the industry 4.0 preparation and therefore it is necessary to fill in the gap dedicated to the organizational aspects. However, it was not, in my opinion, sufficiently and conclusively formulated, and thus this initial idea becomes a certain axiom of the dissertation.

The description should also include a more detailed methodological description of organizational readiness for industry 4.0 from the perspective of organizational culture. Even in this case, it would be useful to make a more detailed use of the selected readiness model and to determine whether this dissertation thesis brings a completely new model, or that the work will be expanded and deepened of existing model to a selected dimension organizational culture. There was also the opportunity to formulate not only a dimension, but also an assessment scale for organization readiness for industry 4.0 implementation.

The applied questionnaire survey itself brings quite interesting findings in the time series, which is unique in terms of the duration of industry 4.0 trends, but the author could use it wider and integrate it more with readiness for industry 4.0.

d) Formal adaptation of the dissertation and its language level

Formally, work is well done and is written in a readable language.

e) Publishing activities

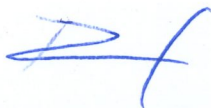
The author has been involved in the industry 4.0 topic lately, as evidenced by his publishing activities. The author's publication list also includes a presentation of the results related to the topic of the dissertation thesis.

f) Questions

For the own dissertation defense, I suggest the following questions in the discussion of the thesis and its results:

- 1) Express the theoretical and practical benefits of your dissertation thesis more pregnant.
- 2) What kind of risk could be connected with solution proposed by you?
- 3) Express in more details the meaning of the appendix in the context of the thesis.

In conclusion I recommend this dissertation to be defend before the examination commission for the defense of dissertation theses.



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