

HABILITATION THESIS REVIEWER'S REPORT

Masaryk University

Applicant

Ahad Zareravasan

Habilitation thesis

The Business Value of Business Intelligence & Analytics (BI&A)

Reviewer

prof. RNDr. Michal Munk, PhD.

Reviewer's home unit, institution

Department of Informatics
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The topic of the habilitation thesis is current; with the development and increasing availability of tools, methods and techniques for processing big data the issue of Business Intelligence and Analytics (BI&A) is becoming an integral part of the functioning of many companies.

The work summarizes the results of eight research articles of which the candidate/applicant is the author, and/or co-author. I positively evaluate the transparent approach to the summarization of the articles itself. There is no lack of information on the scientometric indicators of the journals where the mentioned articles were published, as well as on the impact of the relevant articles, expressed by the number of citations and, last but not least, on the author's contribution to individual papers, which is extracted not only quantitatively, but also qualitatively. The applicant states that he is the main author of five publications, it would be more accurate to state that he is the main author, and/or corresponding author of five publications. However, this does not in any way reduce his contribution to the mentioned articles.

From the above-mentioned, I can conclude that the applicant's share of cited articles is significant, the articles were published in prestigious journals and have a significant impact, expressed by the number of citations in the databases WoS, Scopus, and Google Scholar.

I appreciate the applicant's systematic, several-year work in the subject area (BI&A). I also positively evaluate the mutual correspondence of the articles as well as correspondence with the BI&A business value framework, which makes the submitted work significantly clearer.

The aim of the habilitation thesis is not clear. The applicant/author states only brief information about the aim in the introduction and partially in the abstract. It would be desirable to focus on the main objective in more detail as well as to determine the tasks which solutions are necessary to achieve the defined aim.

The second chapter offers an overview of the Business Intelligence & Analytics issues and the state of the art. The applicant offers an important insight into the problematics. The applicant also describes a framework that is needed to provide a detailed view of the process of extracting business value from BI&A. Based on this framework the applicant has divided his own contribution of the eight research articles into three categories. This is a very interesting approach and contribution by the applicant to the field.

The third chapter deals with the summary of the eight research articles of the applicant. The publications were written with the intention to fill gaps in the research field. The applicant has described each of the categories and the contribution of the articles to them. I positively evaluate that the applicant summarized the conclusions of each article from the given category. On the other hand, I highlight the lack of a short discussion for each category; it would be desirable to reasonably conclude the individual categories.

- In the first category of BI&A Conversion Process the applicant identified the lack of practical guidance including factors, criteria, and processes to assess systems for their BI&A capabilities. Papers #1 and #2 were written as a part of research project in which the applicant played a key role, aiming to select and acquire an ERP system, considering the BI&A features of the system.
- The second category addresses Critical Success Factors in the BI&A implementation which helps to focus on the key areas and mitigate the risks for organizations. The downside of the presented research are its limitations. Even the applicant states that generalization cannot be made based on the article's results.
- The third category deals with conditions and factors that are critical for BI&A impacts to improve organizational performance. The applicant describes the benefits of his article to help to fill the missing gap in this category. On the other hand, all the articles contain many limitations that make it hard to see the generalization of the benefits. Sometimes the applicant is so focused on the limitations that the main benefit of the articles is lost.

At the end of the work, the applicant is limited to current and future work. In this part, I lack a summary of the results, their connections, which is probably related to the absence of a more precisely defined aim of the habilitation thesis.

Finally, the thesis is well written. The utilized BI&A business value framework helps to better comprehend the presented articles and their positions within the BI&A field. However, the applicant could have focused more on the discussion and benefits of the eight presented articles. Half of the articles were published in journals of prestigious publishers with high impact factor. The applicant significantly contributed to most of the mentioned articles and played a key role in an associated project.

Reviewer's questions for the habilitation thesis defence:

- Briefly state the main contributions and benefits in each of the categories.
- To what extent can the obtained results be generalized for the BI&A field?

Conclusion

When evaluating the applicant's overall original contribution to the BI&A issue, I positively evaluate not only the results of the habilitation thesis, but also the results published so far in terms of their original, scientific and interdisciplinary value.

The chosen topic of the thesis is current, the obtained results are original and scientifically substantiated. I appreciate the significant contribution of this work to the development of interdisciplinary relations of management, informatics, and data science.

The habilitation thesis entitled *The Business Value of Business Intelligence & Analytics (BI&A)* by Ahad Zareravasan **fulfils** requirements expected of a habilitation thesis in the field of Business Management.

Date: 14.02.2023

Signature: