

PhD Thesis Review

Title of the thesis: Role of the digital leadership, digital technologies and Dynamic capabilities to influence big data analytical capabilities for data-driven decision-making

Author: Syed Muhammad Shariq

Reviewer: prof. Boris Popesko, Ph.D.

Degree Programme: P0413D050013 Economics and Management

Date: 9th of May, 2024

General evaluation:

The evaluated PhD thesis represents the original research work of the author and is written according to the standard requirements. PhD thesis also includes all components of the scientific work and the structure of the text is outlined according to the scientific standards. The evaluated PhD thesis is based on a quantitative approach and the author was able to perform all necessary steps necessary for quantitative research which includes a proper problem statement, the definition of the research aims and objectives, a deep literature review, the definition of the research question and hypotheses, explanation of the research methods, the data collection and processing and critical discussion on results.

On the other hand, the author was not able to avoid several limitations of his work, which will be discussed in the further part of the review.

Despite the few limitations of the thesis, the evaluated work meets all requirements for PhD thesis.

The topicality of the scope and theme of the thesis

The evaluated PhD thesis deals with the very up-to-date topic of firm digitalization, which is decomposed into several topics, such as digital leadership, digital technologies, the Internet of Things, and data-driven decision-making. All these topics are currently the object of intensive scientific debate as the author presents in his literature review section. The author was also able to very precisely advocate the topicality of his work, by referencing the relevant literature and present the current research problems. As the author states, the majority of those studies use qualitative research methods and the author claims his originality in utilizing the quantitative ones.

However, the overall literature analysis and problem statement are relatively vague. I miss stronger arguments, why the study is needed, or why we need to employ the quantitative approach in order to measure the relationships among the constructs. For instance, chapter 1.4, which is titled "Research Questions", shows, in fact, the list of related studies without stronger conclusions. On the page 18 the author states, that "...it also emphasizes the need for future research...". I am not sure whether such a statement could be made based on the previous references. In chapter 1.5 author summarizes the findings and defines the research objectives of his work, Again, I miss stronger arguments as to why are defined investigations needed. Some arguments are presented in the previous section, but they should be better linked with proposed objectives.

My overall evaluation is that the topicality of the work is presented, but the author could present better arguments for the necessity of the study.

The procedure of the problem solution and PhD thesis outputs

As mentioned before, PhD thesis includes all essential parts of scientific work, including the problem statement, deep literature review, research questions and hypothesis development, methods section, presentation of the results, and critical discussion. The author presented the ability to perform good quality research work and follow the appropriate methodological steps. The author presented the proper literature review, with references to the most relevant studies, proper hypothesis development, with presented arguments for their use based on the literature. The author also presents an explanation of the used measures and proper research framework. The author also explained the data collection procedure and provided a detailed presentation of the results, with the use of the appropriate statistical tools. Finally, the author was also able to make a proper interpretation of the results which were adequately discussed.

However, I see some limitations in the structure of the work and chapter layout. For instance, chapter 1.4, titled Research Questions, doesn't include a defined research question but is focused on the presentation of the previous studies on the topic. The literature review section includes also the development of the hypotheses, which should be presented in the separate section. Another problem I see in the methods section, which is written more in the sense of presentation of general research techniques and only partly focuses on the methods used in the thesis. Another concern is about the used sampling techniques. Chapters 4.8.- 4.12 explain the theory of sampling but gives little attention of how data was practically collected in the study. It is not clear, what was the structure of the respondents. How many firms did they represent? Could the results of the study be biased due to the sampling technique?

On page 81 and 82 author presents the final evaluation of the hypotheses and following chapter discusses the results. The author was able to present an explanation of the results, but I miss a deeper discussion about how the study contributed to the understanding of the problem, and almost nothing is said about the limitation of the study. Do the results of the study represent reality? Aren't they biased by the selection of the participants? This deserves to be better discussed.

Formal features of the work

Evaluated PhD thesis and its presentation meet all requirements for research work in the area of its formal structure and content. The thesis are written in a correct and appropriate language with use of suitable English terms and words. References and information sources discussed by the author are sufficient and form a proper theoretical background for the authors' research outputs. There are some limitations in chapter structure, and content as mentioned above. There are also some limitations in the use of abbreviations. Not all used abbreviations are listed in the abbreviation list, which makes some parts of the thesis difficult to read.

Publication activity of the student

Publication activity of the student is very rich and exceeds the typical standards. Students published a high number of research papers. Research papers are in most cases connected to the PhD thesis. I have to highlight the several excellent papers published by the student, especially in journals such as the Journal of Knowledge Management of the Journal of Business Research

Conclusion

The presented PhD thesis represents good-quality research work, with use of appropriate research techniques, methods, and concepts. The thesis covers an interesting and up-to-date topic and employs the appropriate research techniques. Despite the several limitations of the study, in the structure and presentation of the thesis, description of used scientific methods, or deeper discussion, the study brings the appropriate scientific contribution and meets the standards for the PhD thesis.

Questions

1. Provide better arguments, for why the study is needed. What is its major contribution?
2. Explain in detail the process of data collection. Who were the respondents? How many firms did they represent?
3. What are the major limitations of your study?

According to above mentioned facts **I recommend this thesis for the defense.**



Prof. Ing. Boris Popesko, Ph.D.
Faculty of Management and Economics
Tomas Bata University in Zlín
Czech Republic
popesko@utb.cz

