Skoltech
Skolkovo Institute of Science and Technology

Jury Member Report – Doctor of Philosophy thesis.

Name of Candidate: Maksim Malyy

PhD Program: Engineering Systems

Title of Thesis: The data-driven model of technology-based new ventures growth

Supervisor: Associate Professor Zeljko Tekic, HSE University

Name of the Reviewer:

I confirm the absence of any conflict of interest	
	Date: 15-02-2022

The purpose of this report is to obtain an independent review from the members of PhD defense Jury before the thesis defense. The members of PhD defense Jury are asked to submit signed copy of the report at least 30 days prior the thesis defense. The Reviewers are asked to bring a copy of the completed report to the thesis defense and to discuss the contents of each report with each other before the thesis defense.

If the reviewers have any queries about the thesis which they wish to raise in advance, please contact the Chair of the Jury.

Reviewer's Report

Reviewers report should contain the following items:

- Brief evaluation of the thesis quality and overall structure of the dissertation.
- The relevance of the topic of dissertation work to its actual content
- The relevance of the methods used in the dissertation
- The scientific significance of the results obtained and their compliance with the international level and current state of the art
- The relevance of the obtained results to applications (if applicable)
- The quality of publications

The summary of issues to be addressed before/during the thesis defense

The submitted thesis is generally of very high quality. The structure is well laid out and comprises 10 chapters that include significant content. The thesis content is well aligned with the theme of the research and present the analysis is great depth and breath for the domain.

The thesis comprises well formulated research questions and a few appropriate hypotheses.

The methods of analysis are well adapted to the topic; in the first part, the methodology is presented in a condensed format which could be further developed for better precision of the content. As an example, the following statement on page 53 is not clear: "I selected the type of correlation measure, which provides the most reliable results in such uncertain scenarios (Allen, 2017)." This is a most important statement for the thesis, but the reason why it is considered the "most reliable" must be explained in detail. The same applies for the relationship between the Kendall's tau coefficient and the Pearson's rho coefficient, where a formula is given but is not explained. More precise explanations must be included in this part of the thesis.

The research work presented is significant for the field and the publications in high level journals and conferences prove the importance of the results for the field.

The results are also closely related to application, and I estimate that there could be interesting software applications developed based on the proposed approaches.

I have included a few comments and small corrections in the pdf document.

Provisional Recommendation

☒ *I recommend that the candidate should defend the thesis by means of a formal thesis defense*

☐ *I recommend that the candidate should defend the thesis by means of a formal thesis defense only after appropriate changes would be introduced in candidate's thesis according to the recommendations of the present report*

☐ *The thesis is not acceptable and I recommend that the candidate be exempt from the formal thesis defense*