

OPINION

on PhD dissertation submitted for obtaining the educational and scientific degree
"Doctor" at the D. A. Tsenov Academy of Economics, Svishtov

Prepared by: **Assoc. Prof. Plamen Hristov Milev, PhD,**

Department of Information Technologies and Communications, University of National and World Economy – Sofia. Grounds for writing the opinion: **Order 636 / 28.06.2024** of the Rector of the D. A. Tsenov Academy of Economics, Svishtov, for the appointment of a Scientific Jury and the decision of the first meeting of the Scientific Jury held on 04.07.2024.

PhD Candidate: **Martin Olegov Aleksandrov.**

The PhD Candidate has been enrolled in a doctoral program in Area of study 3. Social, economic sciences and law, Field of study 3.8. Economics, doctoral programme "APPLICATION OF COMPUTING IN ECONOMICS" at the Department of Business Informatics at the D. A. Tsenov Academy of Economics, Svishtov.

Title of the dissertation: **Business Model for Competitive Open Science.**

I. General presentation of the dissertation

The dissertation addresses an important and relevant issue in the contemporary scientific environment – the adaptation of the business models of scientific journals to the concept of open science through the implementation of Open Journal System (OJS). The application of this approach is examined using the example of the "Business Management" journal. The topic is especially significant in the context of the global trend towards increasing access to scientific research and enhancing its visibility on an international scale, particularly for countries like Bulgaria, where scientific publications still face challenges in being included in major scientific databases such as Scopus and WoS.

The dissertation consists of 188 pages (excluding appendices), which is appropriate given the stated research goals and objectives. The volume is logically distributed between the theoretical section, which analyzes the concepts of open science and the business models of scientific journals, and the practical section, which outlines specific steps for adapting a scientific journal to the open science paradigm.

The structure of the dissertation is well organized and logically coherent. The work is divided into three main chapters. The first chapter covers the theoretical foundations of open science and the challenges facing scientific activity in a transforming economy. The second chapter provides a detailed analysis of the business models of scientific journals and explains the steps for transitioning to a new business model within the context of open science. The

third chapter presents the specifically developed business model for the "Business Management" journal and the stages of its implementation using OJS. This makes the structure clear, consistent, and easy to follow.

The dissertation uses a rich set of references, including 148 sources that are current and relevant to the research topic. The references include key publications in the fields of open science, business modeling, and the digitalization of scientific communication. The sources include both international and Bulgarian publications, reflecting the author's understanding of both global trends and local specifics.

The appendices provide valuable supplementary materials that are essential for visualizing the results and the process of implementing the OJS system. They are clearly presented and support the analysis in the main text, making it more accessible and easier to comprehend.

II. Assessment of the form and content of the dissertation

The researched problem – the adaptation of scientific journals to the principles of open science – is highly relevant in the context of global efforts to expand access to scientific results. The dissertation thoroughly examines this issue, with the author conducting a comprehensive analysis of the open science concept, open access, and the role of scientific journals in this process. The challenges facing Bulgarian scientific journals in a globalized context are also discussed, and the work explores how they can better integrate into international scientific databases.

The dissertation is written in clear academic language, and the author successfully presents complex concepts in an accessible manner. The volume of the text is appropriate for an in-depth discussion of the researched problem. The research tools used include economic analysis, business process modeling, and comparative analysis, all of which are suitable for the study's objectives. The author employs modern scientific methods that contribute to the validity and reliability of the results.

The abstract accurately reflects the key points of the dissertation, including the research goals, objectives, methodology, and results. It provides clear and precise information about the essence of the research, without omitting any of the key contributions.

III. Scientific and practical contributions of the dissertation

The presented dissertation contains new scientific ideas and results of both theoretical and practical significance. I would divide the proposed contributions into two groups:

- Scientific contributions:

1. The author has conducted an in-depth analysis of the business models of scientific journals within the context of open science. Key issues related to the management and publication of scientific articles, which can be addressed through the implementation of software technologies like the Open Journal System (OJS), have been identified. The analysis focuses on the integration of Bulgarian scientific journals into the global scientific space, which is a highly relevant problem.
 2. The author has studied various modern software platforms for managing scientific journals and has made a reasoned choice of OJS as the optimal platform. This decision is based on a thorough analysis of the functionality and integration potential of the system with international scientific databases like Scopus and Web of Science. The proposed solution has the potential to significantly improve the visibility and effectiveness of Bulgarian scientific journals.
- Practical contributions:
 1. The author has proposed universal and functional models of a web application that processes real-time data and is suitable for scientific publishers and journals. These models can serve as a foundation for developing software solutions that meet the needs of scientific journals while addressing key technological problems related to content management, peer review, and the publication of scientific papers.
 2. A method for implementing electronic open-access journals based on the Open Journal System (OJS) has been developed and described in the dissertation. This method covers all stages, from the initial setup of the platform to the operational management of an open-access journal. The method has been successfully tested in the "Business Management" journal, demonstrating the applicability and effectiveness of the proposed solution.

IV. Questions regarding the dissertation

The following questions could be addressed to the PhD candidate:

1. What are the major challenges facing Bulgarian scientific journals in their transition to open science?
2. To what extent is the proposed methodology applicable to journals from other scientific fields outside economics?

3. What are the long-term prospects for funding and the sustainability of scientific journals transitioning to open access?

V. Summary evaluation and conclusion

In conclusion, I believe that the presented dissertation meets all the regulatory requirements, and the contributions described in this opinion are clearly identifiable within the work. I express my **positive assessment** and recommend that the established scientific jury **award** the educational and scientific degree "Doctor" in the scientific specialty "Application of Computing in Economics" to Martin Olegov Aleksandrov.

Sofia

August 26, 2024

Prepared by: .

 Assoc. Prof. Plamen Milev, PhD/