EXPERT OPINION ON A DISSERTATION FOR OBTAINING DOCTORAL DEGREE

Author of the Dissertation: Apostol Ustyanov Mushmov

Dissertation Topic: INNOVATIVE GAMIFICATION MODELS AND TOOLS USED

IN CORPORATE CRM STRATEGY

Member of the Scientific Committee: Prof. Dr. Ivan Yochev Boevski

Grounds for Presenting the Opinion: Participation in the scientific defence committee, according to order № 3-PK- 88/06.01.2022, issued by the Rector of NBU Prof. Dr. Plamen Doynov

1. Significance of the researched problem in scientific and scientific-applied relation

The doctoral dissertation submitted to me for the preparation of an opinion is a total of 174 pages. It is structured in an introduction, an exposition in four chapters, a conclusion, a bibliography (a total of 173 sources, of which 34 in Cyrillic and 139 in Latin), appendices and a glossary. In addition, it is supplemented with adequate and appropriate visualization material (15 tables, 28 figures and 3 appendices).

A well-known fact is the lack of sufficient and adequate involvement and engagement of employees in organizations and especially in the context of the demographic dynamics of the problem. On the other hand, the business approach of gamification is an innovative and promising way, which obviously when used creatively and with understanding gives practical and applied results. In this sense, every touch added to his tools to increase the levels of success of employees is of high scientific and scientific-applied interest. Since this development is dedicated to gamification, with its models and tools as a means of implementing corporate CRM strategy, it is undoubtedly relevant. In this context, the statements, concepts and proposals contained in the dissertation are both scientific and scientifically applied.

2. Justification of the goals and tasks in the dissertation

In the introduction, Mr. Mushmov presents a single main goal, from which four sub-goals are derived. The latter shows the candidate's desire to dive into the depth of the study and to cover as many as possible lines of interaction of the object of study. The research thesis has also been stated and three research hypotheses have been formulated to support its proof. The research tasks are related to the fulfillment of each of the sub-goals. They are completely justified and in a sense more than sufficient for this type of scientific work. There are also well formulated and grounded object, subject and scope of the research, as well as the limitations and the expected scientific contributions are commented. These introductory details definitely support the consistent presentation of theories, scientific facts, scientific results and scientific summaries. This forms the basis for the development of relevant and adequate recommendations. All the above gives me reason to make a convincing conclusion that the goals and objectives of the dissertation are fully justified.

- 3. Correspondence between the chosen methodology and research methodology and the set goal and objectives of the dissertation Methodology includes a set of research, tools, models, techniques, according to specific goals, sub-goals, hypotheses and tasks. There are many quantitative studies, but there are also qualitative ones. In this sense, the presented methodology meets the requirements for sufficiency and compliance with the achievement of the set scientific goals and objectives.
- 4. Scientific and scientific-applied contributions of the dissertation
 The dissertation contains scientific and applied research results, which I can define as an original contribution to the science and practice related to human management. Author's processes, methodology and socio-economic effect are proposed and founded. These contributions are clearly summarized and systematized in the final part of the dissertation. I think they realistically describe the results achieved.
- 5. Evaluation of the publications on the dissertation: number, nature of the

editions in which they are published

The content of the presented seven scientific publications shows that they are directly related to the doctorate. Five of the works are independent, two articles are co-authored with other researchers. The works build on the overall research and professional profile of the doctoral student, which is evident from his autobiography. The published materials have been presented both at renowned scientific conferences at the international level and in specialized journals with a habilitated editorial staff. They reflect all the main points of the dissertation, which shows that the results of Mr. Mushmov's development have reached both the scientific community and the general public of experts, practitioners and other stakeholders.

- 6. Citation from other authors, reviews in the scientific press, etc.
- Without claiming to be exhaustive, my desk-top research found over 10 citations of various scientific publications and works of Mr. Mushmov in the field of gamification, CRM and applied mathematics. The candidate's autobiographical reference also shows many appearances and media coverage related to the topic of the doctorate. I find the above evidences to meet expectations in the defense of a doctoral dissertation.
- 7. Opinions, recommendations and notes on the activity and achievements of the candidate

Mr. Mushmov uses precise, understandable and accurate scientific language, clearly defines the important concepts for work and structures his work logically and consistently. Therefore, I believe that this is enough for the requirements of a doctoral program. The author himself in his Discussion related to the limitations of the research, raises many questions of scientific interest for the continuation of current and development of future research in the field. In this regard, I will not make critical remarks or ask questions, although the scientific process is continuous and there are always elements that could be improved and / or further developed. In this sense, I would only recommend the candidate

to continue his research and try to publish and promote his results in world-famous journals.

8. Summary and conclusion

Mr. Mushmov's doctoral dissertation is an expertly constructed and detailed scientific structure that logically follows the chronology of mutually building parts with clearly determined concepts and interpretations and summaries made on their basis. In this regard, he formulates and obtains important and valuable scientific and theoretical results with a high degree of practical applicability in the field of human management in organizations. The general impression I gained from the doctoral dissertation presented to me for preparation of an opinion gives me reasons to conclude with full conviction that the work of Apostol Ustiyanov Mushmov is characterized by significant qualities and meets all the requirements for such. In addition, I was convinced that he has in-depth theoretical knowledge on the subject and demonstrates the necessary skills to conduct independent research. This allows him to take into account and interpret scientific data in an adequate way and to formulate the relevant scientific summaries and conclusions. All the above merits of both the doctoral dissertation on "Innovative gamification models and tools used in corporate CRM strategy" and the doctoral student Apostol Ustiyanov Mushmov, give me convincing arguments to evaluate them POSITIVELY and to suggest to the distinguished members of the scientific jury to take decision for awarding the educational and scientific degree "DOCTOR" to Apostol Ustiyanov Mushmov in the scientific specialty "Business Administration" in professional field 3.7 "Administration and Management".

23.02.2022

Prof. Ivan Boevsky PhD