STATEMENT

From prof. Georgi Tuparov, PhD,
Department of Informatics at New Bulgarian University

on a dissertation work for the acquisition of the educational and scientific degree "Doctor" (PhD) in the field of higher education 4. "Natural sciences, mathematics and informatics", professional field 4.6 "Informatics and computer sciences", doctoral program "Informatics"

Author of the dissertation: Penko Zhelev Ivanov

Topic of the dissertation: Analytics in IT Projects

By order No. 3-PK-295 dated 10.07.2024 of the Rector of the New Bulgarian University (NBU), I have been appointed as a member of the scientific jury for the defense of Penko Zhelev Ivanov, doctoral student in professional field 4.6 "Informatics and computer sciences", doctoral program "Informatics" for awarding the educational and scientific degree "Doctor" (PhD).

My opinion has been prepared on the basis of the ZRASRB, the Regulations for the Implementation of the ZRASRB and the Ordinance on the Development of the Academic Staff of the NBU.

The submitted documents for the procedure, the dissertation work and the abstract meet the requirements of ZRASRB, the Rules for its implementation and the Ordinance for the development of the academic staff of the NBU.

Doctoral student Penko Zhelev Ivanov was enrolled in the doctoral program of the Department of Informatics of the NBU by order No. 3-RK-70 of 11.11.2015 and was dismissed with the right of defense by order No. 3-RK-48 of 09.11.2018 . of the Rector of NBU.

The dissertation is written in English and has a total volume of 340 pages. The main text is 298 pages long and consists of nine chapters, including 80 figures, 12 tables, eight program code listings, and a bibliography. The appendixes are organized into three parts of 42 pages. References include 149 sources in English. The sources are correctly cited in the text of the dissertation. In general, up-to-date literary sources were used, which shows that the doctoral student knows well the current state of the issues of the dissertation work. Additionally, a statement of claims for scientific and applied contributions and a list of publications related to the dissertation work are presented.

Timeliness of the problem

Today's dynamic business environment generates a huge amount of data, which is a major asset supporting the innovation, efficiency and competitiveness of organizations. The avalanche-like growth of data generated daily requires the integration

of analytical approaches in IT projects. As a result, there is a need for new methodological frameworks for analytics to support the successful use of data to optimize processes, improve decision-making, and increase project effectiveness. In light of this development, educational institutions must adapt to the growing demands of the labor market, which is looking for professionals with knowledge and skills in applied analytics.

The main goal and tasks of the dissertation work

The aim of this dissertation is to develop and validate methodological frameworks for analytics, which will support the successful integration of analytics in the management of IT projects and support the improvement of education in this field. To achieve this goal, the following tasks are set:

- To analyze existing methodologies and standards for integrating analytics into IT projects.
- To propose a methodological framework that effectively incorporates analytics into IT project management processes, consistent with leading industry standards.
- To develop an educational framework to meet the growing demand for professionals with practical skills in applied business analytics.
- To validate the proposed methodological frameworks through their application in real IT projects and educational programs.

Contributions to the dissertation

The PhD student has presented his claims for scientific and applied contributions clearly enough in the English version of the abstract. I accept the claims for contributions as stated in the English version of the abstract, leaving them for detailed evaluation by the reviewers, with the proviso that I would classify the claims for scientific contributions as applied science. In my humble opinion, in the Bulgarian version of the abstract, the translation of some terms were not successful enough. This omission is insignificant, especially since the main text of the dissertation is in English and there is no established terms in the Bulgarian language corresponding to the English ones.

Reliability of the obtained results

Based on the presented materials, I can accept the obtained results as reliable.

Publications that reflect the dissertation work

On the dissertation, 12 publications were made in English, sufficiently reflecting the results of the dissertation work. All of them are indexed in various scientific publication databases, one of which is indexed in Web of Science with IF. In this way, the doctoral student fully covers the minimum scientometric indicators for acquiring the the educational and scientific degree "Doctor" (PhD) in professional field 4.6

"Informatics and computer sciences".

Critical notes and recommendations

I recommend the doctoral student to continue with publications in indexed scientific publications in accordance with the scientometric requirements in professional field 4.6 "Informatics and Computer Sciences".

Abstract

The abstract consists of 28 pages. It has been prepared in accordance with the requirements of the ZARASRB and the Regulations for the Implementation of the ZRASRB. As a content, it sufficiently accurately and fully reflects the content and results of the dissertation work.

Conclusion

Dissertation work, abstract and publications submitted for review meet the requirements of ZRASRB, the Regulations for the Implementation of the ZRASRB and the Ordinance on the Development of the Academic Staff of the NBU. My assessment of them is positive.

The achieved scientific-applied and applied results give me reason to recommend to the respected scientific jury to award to Penko Zelev Ivanov the educational and scientific degree "Doctor" (PhD) in the field of higher education 4 Natural sciences, mathematics and informatics, professional field 4.6 Informatics and computer sciences.

08.09.2024   Referee:

Prof. Georgi Tuparov, PhD