SOFIA UNIVERSITY "ST. KLIMENT OHRIDSKI" FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION

REVIEW

by

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PhD Programme "Analytical data research (Data Science)" in Sofia University "St. Kliment Ohridski"

1. Introduction and general information

I have been appointed as a member of the scientific committee reviewing applications for associate professor in the field of 3. Social sciences, Economics and Law, 3.8. Economics, PhD Programme "Analytical data research (Data Science)" by order № РД 38-326 from 04.07.2022 of the Rector of Sofia University "St. Kliment Ohridski".

Gloria Ventzislavova Hristova, a PhD student, has presented her thesis and supplementary materials for the defense. All submitted documents are following legal requirements. Research papers submitted are relevant to the PhD thesis topic and are accepted for review.

Table 1 provides a compliance summary in accordance with PhD requirements at the Faculty of Economics and Business Administration, Sofia University "St. Kliment Ohridski":

Group	Minimal requirements	Gloria Hristova
Educational program	60 credits	60
Teaching and research	50 credits	80
experience		
PhD thesis related scientific	40	110
papers		

Table 1. Compliance summary in accordance with PhD requirements at the Faculty of Economics and Business Administration, Sofia University "St. Kliment Ohridski"

2. Relevance of the PhD thesis topic, goals and tasks

The thesis addresses contemporary and important problems. A special note should be made with regard to thesis application and relevance for improving the decision-making processes. The combination of qualitative and quantitative indicators employed by the author, as well as the automation of the analysis, allow to integrate research findings in various scenarios and to solve different business problems.

Placing an emphasis on the study of communication in Bulgarian language is very important for the dissemination and applicability of the thesis findings.

3. In-depth knowledge

Chapter I provides a systematic and up to date review of existing research and indicates that the PhD student is very well aware of recent developments in the area. The presentation is structured in a way that not only examines the most recent achievements in the field, but also presents the personal view and proposals of the doctoral student related to solving a number of existing problems.

The ability of the PhD student to bring creative and useful combinations is demonstrated also by the suggested methodological steps and modules developed in Chapter II.

4. Research methodology

In the dissertation research, tools and approaches adequate to the assigned tasks were selected and used. In Chapter II, an interesting methodology for automated structured processing of information from the collected communication messages is proposed and is later used to test some of the research hypotheses.

The analytical tools used are accompanied by a careful selection of software libraries and auxiliary solutions. I believe that the research will gain an even greater recognition if the PhD student also publishes freely some of the code that was used in the empirical part.

5. Assessment of the PhD thesis

The dissertation has 281 pages, of which 244 pages as the main body (consisting of introduction, three chapters, a conclusion, a list of the used research), a single appendix and a reference. In total, 220 sources have been used – most of them in English language.

The study puts emphasis on "online chat communication between customers and employees of a large Bulgarian enterprise", with major research interest defined as "fundamental topics that are important for customers and influence their satisfaction from interacting with the contact center".

In order to achieve the main research goal, three major tasks and eight sub-tasks (3-3-2) have been defined.

The author has specified four hypotheses, which are thoroughly tested in Chapter III "Empirical research". Hypothesis No. 3 could be divided into two parts, the latter essentially being a boundary in the verification step. In Chapter II "Methodology", the author has identified specific measures used in testing the hypotheses. This part of the study represents an interesting output on its own.

The content of the individual parts of the dissertation research is balanced and subordinated to the achievement of the main goal and the testing of the specified hypotheses. The careful ordering and fluent logic in thesis parts is a proof of good planning, consistent and careful conducting of the study, as well as to good interaction with the scientific supervisor.

6. Research contributions

The PhD thesis, as well as the publications attached to it, contain interesting scientific and applied contributions. In my opinion, the following items deserve special attention:

- a methodology for the analysis of online communication with clients in Bulgarian has been developed and tested;
- methods have been developed to examine the content of exchanged messages to assess overall satisfaction and areas of specific customer interest;
- a combination of qualitative and quantitative criteria and information analysis methods are proposed to improve the decision-making process using the study of recorded online customer communications.

I have no reason to doubt the personal contribution and original developments of the PhD student.

7. Assessment of submitted research papers

Five research papers have been submitted along with the PhD thesis. Three of them are indexed in Scopus and/or Web of Science. Two papers have been published in scientific journals and two papers are in print (appropriate acceptance notes have been submitted).

The content of the publications presents important aspects of the dissertation research and presents the methods applied, the results achieved and the new ideas developed.

8. Abstract

The abstract has a total of 51 pages and reflects all the major results and achievements of the dissertation research. Its structure and content fully meet the requirements laid down in the relevant regulations.

9. Remarks and recommendations

The dissertation research was done with great attention to details. I would recommend that the PhD student continue the good practice of publishing code and results of her research with open access - this deserves respect and admiration.

CONCLUSION

The dissertation contains original and interesting scientific and applied results. The submitted PhD thesis and research papers meet all the national and internal legal requirements and regulations.

The submitted research papers and thesis prove that the PhD student Gloria Ventsislavova Hristova possesses in-depth theoretical knowledge and serious professional skills in the field of data analysis. She has also shown qualities and skills for independently conducting scientific research.

I would like to state my **positive** assessment of the conducted research, PhD thesis, abstract and scientific results. I would also like to propose to the scientific committee **to award** the educational and scientific degree "doctor" (PhD) in 3.8 Economics (Analytical data research (Data Science)) to Gloria Ventzislavova Hristova.

17.08.2022	Reviewer:	
	/ prof. Stanimir Kabaiyanov. P	hD /