

OPPINON

**to the dissertation for awarding scientific degree "Doctor",
field of higher education: 3 "Social, Economic and Legal Sciences", professional
field 3.8. Economics, PhD in Marketing**

From: Prof. Dr. Sci. Prof. Rumen Georgiev, Sofia University "St. Kliment
Ohridski"; Scientific specialties: "Economics and Management (by industry)", code
05.02.18 and "Organization and management outside the field of material production",
code 05.02.24

Author of the dissertation: Dimitar Georgiev Trichkov

Dissertation topic: **PRODUCT DIVERSIFICATION USING BIG DATA
ANALYTICS**

The review is in accordance with the Order № 1083 / 15.12.2021 of the Rector of SA
"DA Tsenov "Svishtov.

I. General presentation of the dissertation

The preparation of this opinion is based on the provided package of documents, namely: the dissertation of the doctoral student, abstract, declaration of originality, list of publications on the topic of the dissertation and autobiography of the doctoral student.

The total volume of the dissertation is 218 pages. It consists of an introduction, 3 chapters and a conclusion. A list of terms used, tables, figures and references are available. The main text includes 46 tables and 50 figures, and the list of cited sources contains 108 titles (including websites) in Bulgarian and English. The citation of the literature is correct according to the APA standard with minor omissions.

The abstract correctly represents the content of the dissertation in a volume slightly larger than the recommendations, scientific contributions and publications of the doctoral student on the topic. The submitted publications - two articles, one in Bulgarian and one in English and one study in English correspond to the issues of the dissertation.

II. Assessment of the form and content of the dissertation

1. The scientific problem researched in the dissertation has significant practical and scientific potential and significance on a national and to a greater extent, global level. The doctoral student's approach is interdisciplinary, connecting digitalization in the

field of financial institutions, telecommunications companies and the application of statistical models for processing large marketing data in these industries.

2. The author demonstrates deep practical knowledge and skills in handling scientific sources, but in some places the language used does not have the necessary formality and rigor of scientific work, but is close to popular science style and expression.
3. The doctoral student gives appropriate examples to justify his thesis, uses comparative tables and graphs in appropriate places in the text. Minor weaknesses include repeatability of information (especially in points 1.2 and 3.2), the use of long sentences, foreign words, and discussion of foreign language terminology.
4. The author correctly uses scientific instruments and tools, but in terms of its volume it is quite realistic to present it in a reduced form, without losing elements of its main theses and reasoning.
5. With regard to the observance of scientific ethics, the doctoral student correctly uses the rules for citing the used literature on APA. A significant part of the cited sources (especially in Chapters II and III) are from websites and company reports, and not from scientific articles and researches.
6. The abstract correctly represent the content and meaning of the dissertation. In some places it is too detailed, presenting directly texts from scientific work, rather than a synthesized exposition of the main ideas in it.

III. Scientific and scientific-applied contributions of the dissertation

The contribution report reflects both the areas on which the applicant has focused his attention and their scale and focus:

- A new concept for cross-sectoral business models based on the alternative use of big data.
- Empirically approved relationship between the consumption of mobile telecommunication services and the income of individual customers by demographic.
- Author's developed model for the process of work and distribution of responsibilities in a platform for financial services, based on the combined information resources of telecommunication and banking institutions.

These contributions have actually been realized, emphasizing the importance of what has been achieved in terms of the originality of the ideas presented and their practical and practical significance.

IV. Critical remarks and questions

Some insignificant critical remarks can be made but they in no way change the relevance and significance of the contributions received in them.

Without referring to gaps in the dissertation, but rather in the interest of professional discussion, I offer to the attention of the doctoral degree candidate the following questions:

- 1) The proposed concept - as a methodology for characterizing the behavioural specifics of consumers, does market segmentation contribute from a theoretical and methodological point of view or only from a practical point of view?
- 2) Does the practical application of the concept pose risks related to the invasion of consumer's personal data and if the resulting claims are acceptable, how can they be avoided?
- 3) The dissertation considers the declared income as a key element in determining the credit risk of an individual client. To what extent is this a reliable measure and a major factor in determining risk clients?

V. Summary and conclusion

I express my firm opinion that the dissertation of doctoral student Dimitar Georgiev Trichkov meets the explicit legal requirements and regulations, has the necessary publications, original practical ideas and clearly identified and authorial contributions. This allows me to recommend to the members of the esteemed scientific jury to vote "yes" for the award of the candidate of educational and scientific degree "Doctor" in the professional and scientific field 3.8. "Economics." This is also my personal decision.

Reviewer: Prof. Dr. Sci. R. Georgiev

Date: 17.01.2022