

**TO THE MEMBERS OF THE SCIENTIFIC JURY
ON THE PROCEDURE FOR ACQUIRING THE
EDUCATIONAL AND SCIENTIFIC DEGREE "DOCTOR" IN THE DOCTORAL
PROGRAM "FINANCE, MONEY CIRCULATION, CREDIT AND INSURANCE
(FINANCE)"**

OPINION

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Topic of the Dissertation: "DIGITAL TRANSFORMATION IN BANKING - RISKS AND FINANCIAL EFFICIENCY"

This statement has been prepared in accordance with the requirements of the existing Academic Staff Development Act, the Regulations for its implementation and the Regulations for the Development of Academic Staff at the "D. A. Tsenov" Academy of Economics - Svishtov.

I. General presentation of the dissertation.

The dissertation is 195 pages long. In terms of composition, it consists of an introduction, three chapters, conclusion, bibliography, and appendices. There is a balanced and logical classical structure.

The selected topic is distinguished by its relevance, significance, and dissertationability.

The relevance of the study is determined by the significant impact of digital transformation on credit institutions, including the impact of technological innovations on the risk management framework and financial efficiency. The topic is key to formulating better strategies for bank management in the context of digitalization.

The object of study is the digital transformation in banking.

The subject of study is focused on the risks and financial efficiency associated with the digital transformation in banking.

The main objective of the dissertation is to analyze the opportunities for successful implementation of digital banking in the context of the Bulgarian banking market, while at the same time examining the problems that may arise along the way of this innovative process.

The following tasks have been formulated to fulfill the main objective:

- presentation of the evolution of information technologies in the banking sector;
- tracking the transition from multi-channel through omni-channel to optical-channel banking;

- deriving the main prerequisites for digital transformation in banking in modern conditions;
- outlining the risk profile of digital banking;
- studying the effectiveness of digital transformation in banking and offering a toolkit for its assessment;
- analyzing the state of digitalization in the banking sector in Bulgaria;
- studying the problems facing risk management and increasing the efficiency of digital transformation in banking in our country;
- searching for optimization solutions related to risk management and efficiency in the digitalization of banks in Bulgaria.

The main research thesis that the author defends in the dissertation is that in the process of digital transformation, banks in Bulgaria face challenges related to the use of relatively outdated banking systems, which limits their ability to provide the necessary flexibility and innovative functions, and they are of key importance for competitiveness in a digital environment.

The following research methods were chosen for the dissertation: the methods of analysis and synthesis, the observation method, the comparative method, the inductive and deductive methods, the descriptive method and the survey method. To more clearly illustrate the results and conclusions from the study, graphics and tables are used.

In the development of this dissertation, some limitations in the scope of the study were adopted. The research searches in the dissertation, in their theoretical and empirical part, are limited in scope to precisely defined aspects of the digital transformation in the banking sector with an emphasis on the implementation and development of omnichannel banking in Bulgaria for the period 2017-2024. This period covers the essential part of the dynamic process of digital transformation that the sector is undergoing. The examination of the digital transformation in non-banking financial institutions, as well as the analysis of the legal and regulatory frameworks related to digitalization, remain outside the scope of the dissertation.

The scientific literature used is cited correctly. Current Bulgarian and foreign specialized publications have been thoroughly studied and analyzed.

II. Assessment of the form and content of the dissertation.

The research logic and structure of the dissertation are well-constructed. The dissertation is based on research on scientific developments by Bulgarian and foreign researchers in the related field.

In the structuring, the doctoral student first of all (in the first chapter "THEORETICAL AND APPLIED ASPECTS OF DIGITAL TRANSFORMATION IN THE BANKING SECTOR") clarified key issues regarding digitalization in the banking sector and presented an author's review of the specialized literature and banking practice in the field of the researched issue. The transition from multi-channel to omni-channel and optical-channel offering of banking services in the sector was presented. The financial, economic and socio-demographic prerequisites for the digital transformation in the banking sector were analyzed.

The second chapter "RISK MANAGEMENT AND ASSESSMENT OF EFFICIENCY IN DIGITAL TRANSFORMATION IN BANKING" has a clearly analytical and research character - it examines the scope and specificity of the risk profile of banks in the process of their digital transformation. Special attention is paid to the main risks associated with the

digitalization of banks, a related factor analysis and the author's tools for managing them and assessing the effectiveness of the digital transformation in banking are presented.

The third chapter "CHALLENGES TO THE DIGITAL TRANSFORMATION OF THE BANKING SECTOR IN BULGARIA" is dedicated to the author's empirical study of the state of digital transformation in banking in Bulgaria. Based on the results obtained, significant challenges facing the Bulgarian banking sector have been identified and innovative solutions for risk management and increasing the efficiency of the digital banking transformation in our country have been proposed to the bank management.

The arguments formulated in the concluding paragraph give completeness to the work, and the summarizing conclusions and statements presenting the author's views at the end of each chapter further emphasize its qualities. In the conclusion of the work, the doctoral student systematizes the main generalizations, conclusions and achieved results, which can be considered as scientific contributions - the essence of any study of this type. This, in turn, provides grounds for confirming the research thesis set at the beginning of the work.

Following the above research logic, the abstract is developed in accordance with the main points of the dissertation work, emphasizing the author's contributions. It reflects in a synthesized form the content, the main results and conclusions achieved in the research process. It contains all the necessary elements for compiling an abstract for a dissertation work, including substantiation of the relevance of the topic, outlining the object, subject, goal, tasks, research thesis and methodology of the study, presentation of the structure and content of the work, as well as guidelines for future research on the topic of the dissertation, a reference for contributions, a reference for compliance with national requirements, a list of the doctoral student's publications, a declaration of originality of the dissertation work.

4 issues are presented as publications on the topic of the dissertation - proof that key aspects of the research have been made available to the scientific community, including through participation in scientific forums, as well as that the national requirements for a minimum number of points according to the Regulations for the Application of the Law on the Development of the Academic Staff in the Republic of Bulgaria have been met.

III. Scientific and applied contributions of the dissertation work.

The dissertation work builds on existing and presents new scientific ideas with scientific and practical significance. A careful reading of the dissertation work gives grounds to highlight the following as scientific and applied contributions:

First. As a result of examining theoretical, normative and practical statements identified in the process of the research, the author synthesizes a generalized and multi-faceted risk profile of the digital transformation in banks, defines the concept of "digitalization risk in banking" and examines in detail the elements of digitalization risk management. A complex systematization of the types of risks is presented, possible ways of protecting against them are studied and specific indicators for their quantitative assessment are proposed.

Second. An empirical comparative analysis of banks in Bulgaria in terms of digital transformation has been carried out and a critical assessment of the state of this process in recent years has been made. A system of specific quantitative indicators for assessing the

effectiveness of digitalization in the banking sector and the cause-and-effect relationships between them has been argued.

Third. As a result of an empirical study (author's survey among specialists from Bulgarian banking practice), a systematization of the challenges facing the digital transformation of the sector has been carried out. The key problem in this regard is the discrepancy between the relatively outdated infrastructure of banks in our country and the rapid pace of technological development, which necessitates the need for strategic investments and organizational changes.

Fourth. Based on a detailed SWOT analysis, the strengths, weaknesses, opportunities and threats of digitalization in the banking sector have been assessed. Specific opportunities for optimizing the processes for managing the effectiveness and risk of digital transformation of banks in Bulgaria have been outlined.

IV. Critical notes, questions and recommendations on the dissertation work.

Regarding the dissertation work, including the main presentation and the author's argumentation, I have no significant critical notes and recommendations.

Questions on the dissertation work:

1. Comment on the main priorities in managing the digital transformation of banks in Bulgaria.

V. Summary conclusion and opinion.

The dissertation work submitted for opinion has the characteristics of a comprehensive, in-depth and completed scientific study on a significant economic problem. I believe that the goal and objectives of the dissertation work set out in the introduction have been achieved in the course of the study. The scientific and scientific-applied contributions formulated in the conclusion and the results of the practical study conducted can be defined as real achievements of the doctoral student.

For the purposes of making a decision by the Scientific Jury to award the ONS "doctor" in the doctoral program "Finance, Money Circulation, Credit and Insurance" (Finance), I give a positive assessment of the dissertation on the topic "DIGITAL TRANSFORMATION IN BANKING - RISKS AND FINANCIAL EFFICIENCY" and propose to the members of the Scientific Jury to award the educational and scientific degree "doctor" (in economics) to Tsvetomira Georgieva Veleva.

Date: 20.08.2025

Prof. T. Dimitrova, PhD