



## OPINION

from

ASSOC. PROF. DR. GEORGI TOSKOV,

"Associate Professor" in the field of higher education 3. Social, economic and legal sciences, professional field 3.8 Economics from the University of Food Technologies – Plovdiv, member of the scientific jury in the procedure for acquiring the ONS "doctor: by Pavel Georgiev Chervenkov, appointed by order of the Rector of the University of Plovdiv, RD-16-519/22.04.2025;

This opinion was prepared based on the documents submitted for doctoral student Pavel Georgiev Chervenkov, including a dissertation on the topic "Strategy for the Digitalization of the Viticulture and Wine Sector", an abstract of the dissertation, a list of publications, a curriculum vitae (CV) and an order for a scientific jury.

### I. Biographical data

Pavel Georgiev Chervenkov was born on March 17, 1980. He holds Bulgarian citizenship. He received a bachelor's degree in economics from the Agricultural University - Plovdiv (2014 - 2018). He holds a master's degree in agricultural marketing from the Agricultural University - Plovdiv (2018 - 2019). He is a full-time doctoral student at the Department of Management and Marketing of the Agricultural University - Plovdiv in the scientific specialty "Organization and management of production (by industries and sub-industries)".

He has very good communication and teamwork skills. He has experience in presenting complex technical information in understandable language. He speaks English at level C1 for reading and B2 for listening, speaking and participating in a conversation, as well as Russian at a good level. He has technical skills such as PLC programming, working with SCADA systems and CAD design.

### II. Professional experience

Pavel Georgiev Chervenkov's professional experience includes positions as Automation Engineer at "Industrial Solutions" EOOD (March 2017 – present), Technical Specialist at "RoboTech BG" OOD (April 2012 – February 2017) and Trainee Engineer at "Energoproekt" AD (September 2010 – March 2012).

### III. Scientific research work

The dissertation work of Pavel Georgiev Chervenkov is on the topic of "Strategy for the Digitalization of the Viticulture and Winemaking Sector". The research is for the award of the educational and scientific degree "Doctor" in the scientific specialty Organization and Management of Production (by industries and sub-industries). The dissertation is 137 pages long, contains an introduction, an exposition in three chapters, a conclusion and used literature. The analysis is illustrated with 5 tables and 48 figures. The abstract is 134 pages long, includes 13 tables and 26 figures, and 45 literary sources are used.



**Topic relevance:**

The topic of the dissertation is relevant, as the sustainable competitive development of the wine sector requires digitalization of business processes. Digitalization is considered a key competitive factor. Despite the existence of a strategy for the digitalization of agriculture in Bulgaria, there is no such strategy for the wine sector.

**Purpose and objectives of the dissertation:**

The aim of the dissertation research is to develop a strategy for the digitalization of the wine industry, taking into account the specifics of the industry.

To achieve the goal, the following research tasks have been set:

- Clarifying the essence of competitiveness in the context of digitalization of business processes.
- Analysis of digitalization processes and their impact on the competitiveness of wine-growing enterprises.
- Identifying the challenges for implementing the digitalization of the industry and the application of precision agriculture in winemaking enterprises.
- Development and validation of a strategy for digitalization of the wine sector.

**Object and subject of research:**

The object of the scientific research is the wine-growing enterprises on the territory of the Republic of Bulgaria. The subject of the scientific research is the critical factors for the digitalization of the wine-growing sector in Bulgaria.

**Conceptual thesis of the dissertation:**

The main hypothesis being defended is that the digitalization of the sector is a critical factor for achieving competitiveness and competitive development of the wine sector in Bulgaria.

**Methods of dissertation research:**

The methods used include: system analysis, situational analysis, comparative analysis, diagnostic analysis and statistical methods. A survey was conducted among 197 business owners/managers, as well as 2 focus groups with 30 participants. The data were processed using MS Excel and regression analysis.

**Main content of the dissertation:**

The dissertation consists of an introduction, three chapters and a conclusion.

- **Chapter one:** Examines the role of digitalization in managing sectoral competitiveness. An analysis of the concepts is presented



- competition and competitiveness, the role of innovation and precision agriculture, as well as the methodological approach of the study.
- **Chapter two:** Analyzes the strategic planning process Digitalization to enhance sectoral competitiveness. The challenges facing digitalization are identified, the demand and supply of digital services are analyzed, and the impact of digitalization on the competitiveness of enterprises is assessed.
  - **Chapter Three:** It is dedicated to strategizing the digitalization process of agriculture to increase sector competitiveness. Strengths and weaknesses, opportunities and threats are identified through SWOT analysis, strategic goals and solutions are defined and a methodological approach for attracting stakeholders is presented.

#### **Contributions of the dissertation:**

As a result of the dissertation research, the following contributions have been formulated:

- The essence of the role of digitalization in the management of business processes in the sector has been clarified.
- The processes of digitalization and their impact on the competitiveness of wine-growing enterprises are analyzed.
- The impact of digitalization on the competitiveness of the wine sector has been analyzed and assessed.
- The challenges for implementing the digitalization of the industry and the application of precision agriculture in winemaking enterprises have been identified.
- A strategy for the digitalization of the wine sector has been developed and validated.
- A strategy has been developed to attract stakeholders to the process of digitalization of the wine sector.

#### **IV. List of publications on the topic**

Publications resulting from Pavel Chervenkov's dissertation research include:

- Chervenkov, P. (2022). Digitization processes in precision farming and their role in sectoral competitiveness. *Journal of Bio-based Marketing* vol. 2, 2022, 59 – 75, ISSN 2683-0825.
- Chervenkov, P. (2023). Impact of digitalization on the competitiveness of viticulture enterprises. *Journal of Bio-based Marketing* vol. 2, 2023, 11 – 19, ISSN 2683-0825.
- Chervenkov, P. (2023). Main determinants of demand for digital services in viticulture. *Journal of Bio-based Marketing* vol. 2, 2023, 21 – 28, ISSN 2683-0825.

#### **V. Critical remarks and recommendations**

Although the dissertation successfully identifies the relevance of digitalization for the wine sector and proposes a strategic framework, recommendations for its further development include: expanding the empirical base for quantitative analysis to increase its statistical power and objectivity; more detailed development of specific plans and mechanisms to overcome clear



the identified barriers to the implementation of digital technologies, especially in financial and infrastructural terms for small farms; examining the long-term economic effects of investments in digitalization, going beyond short-term observations; more specifically defining the roles and mechanisms for the participation of the various stakeholders in the strategy implementation process; and possibly including comparative analysis or benchmarking with regions more advanced in digitalization to enrich the perspective and identify good practices.

## **VI. Conclusion**

The dissertation work of Pavel Georgiev Chervenkov represents an in-depth and up-to-date study of the strategy for digitalization of the viticulture and wine sector. The study was conducted with an adequate methodology, and the results obtained and the formulated contributions have scientific and practical significance. The developed strategy and the identified critical factors and opportunities are an important basis for the future development of the sector in the conditions of digital transformation.

The presented materials show that doctoral student Pavel Georgiev Chervenkov has conducted independent scientific research that meets the requirements for awarding the educational and scientific degree "doctor".

I believe that the dissertation meets the requirements of the ZRASRB and the Regulations of the University of Plovdiv for its application and, based on the materials submitted for review, I give my POSITIVE assessment and recommend to the esteemed jury to award the ONS "doctor" to Pavel Georgiev Chervenkov.

Prepared by: /Assoc. Prof. G. Toskov/