



D. A. TSENOV ACADEMY OF ECONOMICS - SVISHTOV

Review, prepared by a member of a Scientific Committee, for awarding the educational and scientific degree of Doctor at the D. A. Tsenov Academy of Economics – Svishtov

Reviewer: Assoc. Prof. Plamen Ivanov Petkov, Department of Statistics and Applied Mathematics, Faculty of Economic Accounting, D. A. Tsenov Academy of Economics – Svishtov, habilitated in the scientific field 3.8 Economics in the scientific specialty "Statistics and Demography"

Author of the dissertation: Hristo Simeonov Vasilev

Dissertation title: Formulating horizontal and vertical integration strategies in business

Justification for writing the review: Order № 77/23.01.2025 г. of the Rector of D. A. Tsenov Academy of Economics – Svishtov, requirements of the Law for the Development of the Academic Staff in the Republic of Bulgaria, the Regulations for the Implementation of the Law for the Development of the Academic Staff in the Republic of Bulgaria and decision of the first meeting of the scientific committee on 05.02.2025.

I. General characteristics of the dissertation

The presented dissertation titled "Formulating Horizontal and Vertical Integration Strategies in Business" by author **Hristo Simeonov Vasilev** is 272 pages in total, including 204 pages of body text, 2 pages with a list of figures and tables used, 1 page list of abbreviations and acronyms used, 10 pages of works cited list and 49 pages of appendixes, which present the results of the processing of the data obtained from a survey of companies in the metalworking sector, the questionnaire, reports with financial indicators of the surveyed companies, proposals for the integration of best practices, ISO certificates.

Structurally, the dissertation consists of a table of contents, a list of figures and tables used, a list of abbreviations and acronyms, an introduction, argument in three chapters, a conclusion, a works cited list and appendixes.

A total of 120 sources are included in the bibliography. There are 24 publications in Cyrillic, of which 22 are in Bulgarian and the other 96 are in English. The correct use of others' opinions and comments is demonstrated.

II. Assessment of the form and content of the dissertation

1. Relevance of the research and formulated object and subject of the research, aim and objectives of the dissertation

The relevance of the topic researched is undeniable and is related to the importance of horizontal and vertical integration for business. Combining the two types of integration leads to more efficient management of internal processes, better "visibility" of the supply chain and to a more profitable management of the global structure. On the other hand, integration strategies provide the opportunity for more complete control over operations and for more efficient business operations with key business partners. Based on a brief review of the research literature, the degree of elaboration of the research issue is diagnosed and on this basis the **research thesis** is defined, which states that formulation of horizontal and vertical integration strategies, combined with consideration of sector-specific influencing factors, helps to overcome complex problems in product-market and technological innovation, and business expansion and thus favors the achievement of growth, sustainable development or business recovery

The object of research in the dissertation are the strategies for vertical and horizontal integration of business, and the subject - the main methodological approaches for the development of these strategic decisions in companies from the metalworking industry. The main aim of the dissertation is related to the study of the process aspects of formulating and implementing horizontal and vertical integration strategies for companies in the metalworking sector and to synthesize measures and mechanisms to improve the applicable activities to support business change and development. In order to specify the aim, three research objectives of theoretical-methodological and practical-applied nature are set. The theoreticalmethodological objective is related to the evaluation of the specific characteristics of strategic business integration performed in the framework of strategic management and planning. The practical-applied objectives are associated with conducting an empirical study of the peculiarities of the formulation of horizontal and vertical integration strategies in Bulgarian business organizations and with generating solutions for the formulation of horizontal and vertical business integration strategies and for the assessment of benefits and potential problems. The limiting conditions that characterize the present study are listed and a logical argument for each of the listed limitations is provided, as well as a listing of the methods and methodologies applied in the dissertation.

Chapter one discusses the connections between business integration and strategic planning. A theoretical review of models for business organization development is made, which reveals the features of the relation "conceptualizing-strategizing-planning". The main opportunities for development through strategic integration are presented, and the advantages and disadvantages of horizontal and vertical integration strategies are analyzed in the necessary depth. Chapter two is methodological and empirical. The focus is on the study of the specificity of the formulation of horizontal and vertical integration strategies in Bulgarian business organizations. It clarifies the methodological foundations of the empirical study describing the aims, motivation, methodological framework, expected conclusions and contributions. Appropriate statistical visual tools were used to present the data collected from the empirical study and adequate statistical and economic analysis of the results was performed. General conclusions were formulated that can be used as a basis for improving certain methodological choices in the formulation of strategies. Chapter three analyses the different technologies for strategic integration decision-making. A complex integration methodology developed by the dissertator is approbated by analyzing its possibilities. Its potential for assessing the managerial impact of key factors on business process reengineering is evaluated. In the end, the main aim of the dissertation has been fulfilled - concrete proposals have been made for measures and mechanisms to improve the implemented activities in support of change and business development based on the formulation and implementation of horizontal and vertical integration strategies between companies in the metalworking sector, and the research thesis has been proven.

2. Volume of the dissertation, degree of elaboration of the studied issues, expression of own opinion and illustrative material used

The dissertation is of sufficient volume, has a clear structure and follows the logic of a complex scientific study. There is a relative balance in the volume of the individual chapters as the focus is on the empirical part. The statement is presented in a logical sequence that develops the research ideas, proves the author's hypotheses, and achieves relevant contributions. A considerable number of Bulgarian and foreign literature sources have been studied. They have been systematized in an appropriate way by the author, which on the one hand demonstrates a thorough knowledge of the contemporary scientific research in the field of vertical and horizontal integration of business entrepreneurship, and on the other hand is a tool for presenting his own views on the researched issues. The opinions of other authors have been cited faithfully and correctly, and technically meet generally accepted requirements. The diagrams, tables, graphical representations and appendixes used are drawn up according to the

rules of statistical theory. Their number is sufficient and they adequately illustrate the texts, conclusions and interpretations of the results obtained in the presentation.

3. Style and correctness of the toolkit used

The dissertation is characterized by a strong thoroughness of the scope of the research, which is observed both in theoretical, methodological and practical-applied aspects. Significant efforts have been made in the study of the issues in the field of formulation of vertical and horizontal integration strategies among the enterprises of the metalworking sector in Bulgaria, the peculiarities and specific features of the object and subject of the study have been revealed, and the unsolved problems related to the implementation of horizontal and vertical integration strategies in metalworking enterprises have been successfully identified. The fact that after each chapter private conclusions are formulated, which are summarized in the final part of the dissertation, deserves positive evaluation. In terms of style, the information is presented correctly, in the necessary depth and corresponds to a complete scientific work. The inclusion of a list of figures and tables used, as well as a list of abbreviations and acronyms used is commendable. In order to verify the defined research thesis, aim and objectives, a combined approach is used, which relies on both secondary analysis of information from similar empirical studies conducted on the topic, as well as on the collection and analysis of primary information about companies in the metalworking sector in Bulgaria using the in-depth interview and survey method. Data were processed using IBM SPSS Statistics. In conducting the empirical study, all formal requirements were met and the results obtained were adequately described and interpreted. All this allows the dissertation to correctly fulfill the defined thesis, aim and specific research objectives.

4. Abstract, publications related to the topic and compliance with the rules of scientific ethics

The abstract is 33 pages and accurately presents the dissertation work, providing a complete picture of the research conducted. It is written in a succinct and refined style, demonstrating the doctoral student's skill in presenting the main stages and results of the research in a synthesized, balanced and compact form.

Six publications – three articles and three papers – are appended to the dissertation. Two of the articles are individual – one from participation in the annually organized Scientific Doctoral Sessions at D. A. Tsenov Academy of Economics and one in the E Journal of Varna Free University. The third article was published in co-authorship. The three papers are the result of the doctoral student's participation in the organized by D. A. Tsenov Academy of

Economics international scientific forums and conferences. The publications are directly related to the topic, object, subject and main thesis of the dissertation, reflecting to a significant extent the main ideas presented in the dissertation. They exceed the minimum scientific requirements for a dissertation in scientific field 3 "Social, economic and legal sciences". No violations of the usual rules of scientific ethics have been reported. All literature sources are cited correctly in the exposition and are included in the reference list.

III. Scientific and scientific-applied contributions of the dissertation

The dissertation contains scientific and scientific-applied contributions that upgrade the theoretical and empirical research on the integration of vertical and horizontal management systems in business activities. These are correctly defined by the doctoral student in the abstract and correspond to the results achieved. Their number is modestly reduced to three as two of them are a direct result of the empirical research conducted. Based on the analysis of the respondents through an in-depth interview, the main attitudes regarding the integration strategy are identified and the claim is substantiated that, considering the specificity of the enterprises in the metalworking sector in Bulgaria, the most suitable for use is the hierarchical approach to corporate planning. Based on the results obtained from the survey, the aim and objectives of the dissertation are fulfilled by clarifying the nature and specifics of business integration management in the metalworking sector in Bulgaria, revealing the main challenges in decision-making and generating opportunities for creating a reference bank for business leaders, through which more effective cooperation, interaction and improved levels of competitiveness are achieved. The last but not least contribution is related to the proposal for the implementation and justification of the main guidelines in which the author's Smart Integra complex methodology can be used, including structured steps such as current state analysis, goal identification, action plan development and continuous monitoring. The results of the research have potential to be used in making effective management decisions related to the implementation of systems for horizontal and vertical integration in production processes not only in the enterprises of the metalworking sector in Bulgaria, but also in enterprises from other industries and sectors of the economy. The exposition demonstrates that the doctoral student has the necessary knowledge and skills to use appropriate research approaches in researching the problems and challenges of contemporary business operations and the implementation of management strategies based on vertical and horizontal integration.

IV. Critical remarks, questions and recommendations

I have no comments or recommendations for the doctoral student, but I would like to ask a question. In presenting the profile of the organizations in the metalworking sector participating in the study, a grouping is made according to their size, the share of exports in trade turnover and the values of the vertical integration ratio. The relationship between the most preferred approach to vertical integration and company size in Bulgaria was analyzed and it was found that large and medium-sized companies in the metalworking industry (Class 24.2 and Class 24.3) showed a clear preference for integrating an ERP system into their operations (p. 81). No analysis of export orientation is available and in this regard I would ask what the relationships are between export share and the preferred approach to vertical integration?

V. Summary conclusion and opinion

Considering the complete nature of the presented dissertation, furthermore its merits and positive aspects, I believe that the doctoral student has the theoretical knowledge and skills for practical application of appropriate tools for the analysis of business strategies in the field of horizontal and vertical integration and has demonstrated to the necessary extent the ability to argue his own views and to carry out a critical analysis of theory and practice. This gives me reason to assess the dissertation **positively** and I propose the members of the Scientific Committee **to award** the educational and scientific degree of Doctor in the Professional Field 3.8. Economics, scientific specialty "Planning" to **Hristo Simeonov Vasilev**.

21.02.2025	Reviewer:
	(Assoc. Prof. P. Petkov, PhD)