

REVIEW

From: *Prof. DSc. Nikolay Hristov Sterev;*

Industrial Business Department, UNWE-Sofia;

*scientific specialty: 3.8 Organization and management of production (industry);
05.02.18 Economics and management (industry)*

Subject: dissertation for the award of the educational and scientific degree "Doctor" in professional field: **3.7 Administration and Management**, scientific specialty: **Administration and Management (Business Administration)**

Reason for submitting the opinion: participation in the scientific jury for the defence of the dissertation work according to Order No. 228 /02.12.2025 of the Rector of the International Business School of Bulgaria.

Author of the dissertation: *Iliyan Iliyanov Kostov*

International Business School of Bulgaria

Topic of the dissertation: *MANAGEMENT OF THE COMMUNICATION PROCESS AND
DIGITALISATION OF ORTHODONTICAL DENTAL SERVICES*

1. Candidate information

The PhD student: **Iliyan Iliyanov Kostov**, studied in the doctoral program **Administration and Management (Business Administration)** at the International Business School of Bulgaria from 2023 having been enrolled in an independent form of study by Order No. 116 /05.06.2023 of the Rector of the International Business School of Bulgaria. Currently, the doctoral student has a Master's degree in *Business Administration and Innovation in Healthcare* from the International Business School (2022) and a Master's degree in *Digital Marketing* from the University of National and World Economy (2021).

Professionally, he started as an office organizer at the GreOrto Dental Clinic EOOD in 2015 and is currently the Manager of the Dental Clinic (since 2024). During the period 2018 – 2023, she was in charge of Customer Support and Training Organizer in two other companies.

2. Relevance of the problem

Undoubtedly, the topic of the dissertation can be defined as relevant in the modern conditions of the "emergence" of Industry 5.0 and the expanding digitalization of business and its management (in all possible dimensions and aspects), incl. in the field of public health. Moreover, the need for the correct management of digital marketing tools is not to be underestimated at all: they are aimed at creating a personalized "experience" and support the visualization of the future product in the field of services. All this is a prerequisite for healthcare providers to seek optimization of these digital marketing solutions, which are related to the change in patient (client) expectations and the introduction of digital tools for attracting and retaining customers.

According to the author's motivation presented in the Introduction to the dissertation, as well as in its overall content, it can be assessed that **the doctoral student has presented and argued with appropriate author's theses** the need to develop a *digital marketing and management strategy for the modern positioning of the dental practice in the dental services market*.

3. General characteristics of the dissertation work

The dissertation on the topic "*MANAGEMENT OF THE COMMUNICATION PROCESS AND THE DIGITIZATION OF ORTHODONTICAL DENTAL SERVICES*", presented by **Iliyan Iliyanov Kostov**, is structured in an introduction, 3 chapters and a conclusion. With the structure set in this way, the dissertation is 168 pages long, of which 160 pages are the main part and 8 pages are appendices, using a total of 77 literary sources, including 73 in English and 4 in Bulgarian. The dissertation is illustrated with a total of 53 figures and 15 tables. An additional 3 appendices are presented in a total of 8 pages, which improve the understanding of the work done by the doctoral student.

In terms of structure and content, the dissertation presented by **Iliyan Iliyanov Kostov** is balanced, presenting:

- First, a presentation of the main theoretical points defining the subject of the dissertation work is made, and specifically: the essence of digitalization and digital transformation; and the management of the communication process in dentistry. This chapter draws out and defines the differences between digitalization /as an organizational problem/ and digital transformation /as a business model problem/. On this basis, the means and tools of digital marketing /based on digitalization/ are presented, as well as the features of modern digital communication in public health and dentistry /based on digital transformation/. An additional focus is the use of communication and communication "patient - dentist", brought to a new basis in digital healthcare.
- Secondly, the doctoral student has presented a detailed description of the digital transformation in the management of the object of research: the dental clinic. The main challenges, digital and organizational, related to the acceptance, implementation and use of digital healthcare in dentistry are presented. Additionally, this chapter has made an appropriate synthesis of the possible interrelationships between the use of digital tools in dentistry and the competence of digital doctors in the field of modern digital technologies. On this basis, the need for a specialist is deduced on digital advertising and positioning of dental activities, whose competencies include issues of digital transformation and digital communication of a dental practice. This chapter presents results of an empirical study conducted among 53 dentists, 192 dental students and 251 patients of dental services.
- Thirdly, based on the theoretical (first chapter) and applied (second chapter) analysis and synthesis carried out in the previous chapters, the author has derived and described basic digital tools that are suitable for use in dentistry and increase

both customer /patient/ satisfaction and are associated with improved patient-dentist communication. Additionally, the author systematizes the features of digital transformation in modern dental healthcare by presenting the author's model for the digitalization of a dental practice. On this basis, he expands the organizational aspects of digital dental healthcare by systematizing appropriate communication skills of the dentist related to the use of digital tools in dental practice.

The structural integrity and logical connection of the individual structural elements of the dissertation are well presented and protected by a clear and understandable conceptual framework. Moreover, the overall concept on which the dissertation research is built can be highly evaluated. The grounds for the high evaluation are:

- The object: *Specialized orthodontic dental centre*, and the subject: *communication management and digitalization of orthodontic dental services*, are correctly defined;
- The main goal: *to study communications in the facility and, based on the results obtained, to develop a digital marketing and management strategy for a new positioning of the dental practice in the dental services market*, and the extended 5 tasks are precise, clear and logically linked to the leading research thesis: *the management of digitalization and the use of AI in the main treatment processes, as well as the entry of social media into communications with patients, are an opportunity to achieve competitiveness and increase the potential of a dental orthodontic clinic*;
- The two hypotheses defined by the doctoral student are accurate and can be verified using the selected methodological tools.

4. Evaluation of the obtained scientific and applied scientific results

The main results that stand out when reviewing the dissertation can be summarized as follows:

- The theoretical and methodological foundations of the digitalization of dental services and the attitudes towards their implementation of the various participants in the processes have been analysed. In addition, comparative analysis has been successfully used to compare traditional and digital marketing and communication in dental healthcare.
- Main elements and features of the management of the communication process in the dental clinic and assessment of the level of patient awareness have been identified.
- Applied models for using digital marketing tools and digital communications management in a dental practice have been systematized. On this basis, possible guidelines for training dentists to acquire appropriate communication skills in a digital environment have been identified.
- Based on the applied analysis, as well as the analysis of existing theories and practice in the field of digital transformation, the author has proposed a fully reasoned system of recommendations for improving the digital management strategy and positioning of the dental practice in the dental services market. In

addition, a toolkit for the digitalization of orthodontic dental services and a digital communication strategy in the dental practice has been proposed.

The specified theoretical and practical results are available and clearly highlighted both in the content of the dissertation submitted for review, and in the additional materials submitted: abstract, articles and reports. They are the personal work of the author and are the basis for deriving the scientific and applied scientific contributions achieved by the doctoral student.

5. Evaluation of scientific and applied scientific contributions

The content of the dissertation allows for a high assessment of the doctoral student's competence in terms of the theory, methodology, and applied aspects of the chosen topic.

The materials submitted for review: dissertation, abstract and publications on the topic of the work fully confirm the scientific and applied scientific contributions contained in the dissertation.

Regarding **scientific contributions**, there is confirmation of:

- Based on a critical analysis, author's formulations covering the digitalization and digital transformation of dental healthcare have been systematized. On this basis, the benefits of digital healthcare and the modernization of the dental clinic with digital processes have been derived and defined.
- An author's innovative model is proposed, reflecting the creation and use of new protocols in the type of communication and service in dentistry, acceptable to every user (traditional and digital).
- An author's methodology is proposed for studying the degree of personalization of dental treatment and the overall digitalization of processes (diagnostic, treatment, administrative and marketing) in a dental practice.

Regarding **applied contributions**, there is confirmation for:

- The doctoral student has proposed an author's model for digitization and digital transformation of dental practice, tested in practice. On this basis, recommendations have been made for the development and implementation of educational programs and trainings for dentists and dental students in the areas of: business planning, management and participation in externally funded projects, digital transformation and investing.
- The requirements for digital marketing in dental healthcare are systematized and the author's toolkit for the digitalization of orthodontic dental services and a digital communication strategy in dental practice is proposed.

The above contributions are of high importance for theory and practice, and they could be attributed to the following two groups:

- enrichment, concretization and refinement of existing scientific and applied knowledge on the subject of the dissertation research;

- application of existing methods to solve a specific problem for a specific object with formulated conclusions and recommendations for practice.

6. Evaluation of dissertation publications

The list of publications on the dissertation includes **4 publications**, of which: 3 articles in international journals and 1 study in the Scientific Proceedings of the MVBU. The presented publications reflect essential parts of the dissertation work and show that the main scientific and scientific-applied contributions of the doctoral student have received their public recognition.

An abstract is attached to the dissertation. My assessment of the abstract is high as I believe that it correctly systematizes the main theses, conclusions and results presented in the dissertation. The structure and content of the abstract are in accordance with the legal and regulatory requirements.

7. Critical notes, recommendations and questions

Regardless of my overall positive opinion and high assessment of the achievements in the dissertation, as well as the fact that no significant gaps or inaccuracies are found in the dissertation, the following question may be raised for reflection in the future activities of the doctoral student:

- To what extent can artificial intelligence be involved in the evaluation and selection of appropriate digital marketing tools in improving patient-dentist relationships in a digital environment?

8. Conclusion

The proposed dissertation work by **Iliyan Iliyanov Kostov** on the topic "*MANAGEMENT OF THE COMMUNICATION PROCESS AND DIGITIZATION OF ORTHODONTICAL DENTAL SERVICES*" fully meets the requirements of the Act on the Development of Academic Staff in the Republic of Bulgaria (ADRB) and the Regulations for its implementation.

My overall assessment is that the dissertation represents an independently completed author's research, in which the research tasks have been successfully completed, and the main goal has been achieved. Moreover, the main theoretical and applied results of the dissertation, as well as the highlighted real scientific and scientific-applied contributions in it, allow for a high overall assessment of the dissertation.

Considering the above-listed characteristics of the dissertation work, as well as the contributions mentioned therein, with full conviction I recommend to the esteemed members of the Scientific Jury to award **Iliyan Iliyanov Kostov** the educational and scientific degree "**DOCTOR**" in the professional field: professional field: **3.7 Administration and Management**, scientific specialty: **Administration and Management (Business Administration)**

January 09, 2026.
city- Sofia

Member of the SJ: .

Заличена информация съгласно ЗЗЛД и регламент (ЕС) 2016/679 / проф. Николай Стоев /
--