

REVIEW

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Regarding: Dissertation for obtaining the academic degree of "Doctor of Science"

Professional field 9.1 "National Security"

Author: Dr. Teodora Licheva

Topic: "Transformation of the Management Cycle in Intelligence and Counterintelligence through the Integration of Modern Technological Solutions"

1. General characteristics of the dissertation work

The dissertation is dedicated to a current, complex and socially significant scientific problem - the transformation of management processes in the field of intelligence and counterintelligence protection of national security, imposed by the total penetration of modern digital technologies into public life and people's everyday lives.

The work is distinguished by its significant volume, wide thematic range and marked interdisciplinary nature. The author explores the possibilities for optimizing the interrelationships between the general theory of management, national security, the institutional development of intelligence and counterintelligence structures and the new opportunities provided by modern information and communication technologies.

The dissertation is structured in an introduction, three asymmetrical chapters (82, 224 and 104 pages respectively), conclusion, independently formulated contributions and bibliography. The chapters themselves are unusually fragmented into a total of 24 sections and 65 paragraphs. Such a structure, set out in the content of the manuscript, in conjunction with the formulation of the topic, presupposes an expectation of an extremely broad scope of the study and an effort to cover almost all modern technological directions, which is an undoubted merit of the goal set by the researcher. But the question also arises "will it not be possible to see the forest for the trees?". Does the accumulation of numerous facts, technologies, classifications and examples allow us to identify basic trends, to reveal deeper cause-and-effect relationships and to achieve the necessary theoretical depth of the essential scientific synthesis.

2. Relevance and significance of the study

The relevance of the chosen topic is beyond doubt. Digitalization, the development of artificial intelligence, the increase in the volume of information arrays and the emergence of increasingly complex cyber-physical systems are changing the nature of threats to national security, the methods for their detection and the possibilities for preparing, making and implementing management decisions.

The author rightly links the need for management transformation with the modern hyperconnected environment, in which traditional, mostly reactive models, are increasingly difficult to provide the necessary quality of forecasting, coordination and control. The subject of the development is the management of national security protection activities, and the subject is focused on management models, processes and practices and the influence of technologies on the transition from an analog to a digital basis for processing and analyzing information and its use in forecasting, planning, decision-making and control for their implementation in intelligence and counterintelligence activities.

The significance of the work is enhanced by the effort to examine the Bulgarian organizational and regulatory environment in the context of global technological trends. The conclusion highlights problems such as fragmented information infrastructure, insufficient technological integration, staff shortages, and delayed introduction of innovative management models.

3. Purpose, objectives and methodology

The main goal of the dissertation is to identify trends in the development and improvement of intelligence and counterintelligence management in the transition from traditional and analog to technologically intensive and digital. processes.

The tasks set are logically related to the goal. They include comparing analog and digital management information systems, examining the role of individual technological directions, assessing their applicability to the phases of the management cycle, and analyzing the possible synergy between them.

The methodological toolkit is broad and includes analysis and synthesis, induction and deduction, systemic and structural-functional approach, management analysis, documentary and legal-analytical method, historical and comparative approach, scenario and prognostic analysis, and creation of descriptive models.

This set of methods is in principle consistent with the interdisciplinary nature of the topic. A strong point is the aspiration to build a common methodological matrix through which heterogeneous technologies can be assessed against the same management stages and levels.

At the same time, the practical application of the methods is uneven. The analytical, comparative and critical element is not developed to the same extent in all parts. In places, the description, classification and presentation of technological possibilities prevail, while the critical comparison of the sources used and the evidentiary substantiation of a number of statements, especially prognostic ones, remain more limited.

4. The concept of the management cycle

The author presents the management cycle as a sequence of interconnected stages:

- collecting and analyzing information;
- preparation of forecasts, estimates and solution options;
- decision making;
- planning;
- organization;
- implementation;
- feedback and control.

This universal model has practical value because it creates a common basis for assessing the impact of different technologies, as it allows one to trace how individual technological tools and methods support the process from initial information provision to control and formulation of subsequent tasks.

The dissertation distinguishes between strategic, tactical and operational levels of management. The strategic level is associated with long-term forecasts and structure-defining decisions, the tactical level with the allocation of resources and the configuration of capabilities, and the operational level with the immediate planning and execution of specific operations.

The distinction made between the general management cycle and the classical intelligence cycle, which includes the formulation of information needs, collection, processing, analysis, dissemination and feedback, is particularly useful. The author assumes that the management cycle "overlays" the intelligence cycle and complements it.

However, further conceptual refinement is possible in this part. A sufficiently concentrated definition of the concept of "management cycle in intelligence and counterintelligence" has not been formulated, in which a clear distinction can be made between:

- management of a special service;
- management of its structural unit;
- management of a specific operation;
- the intelligence information cycle;
- the management cycle in the operations worker's activities.

The operational level is presented primarily as the level of the immediate conduct of operations and missions. The daily management activity of the operational worker in assessing the operational situation, working on a specific signal or form of operational report, interacting with different categories of sources, and planning, coordinating, implementing, and controlling operational activities is examined to a more limited extent.

This feature does not devalue the general framework, but indicates a possible direction for its subsequent concretization and practical development.

5. Nature and scientific value of the development

By its nature, the dissertation work approaches a large-scale scientific compendium, combined with an independent conceptual study. It collects, arranges and systematizes a significant amount of information on the development and application of modern technologies in security, intelligence and counterintelligence. The very systematization of knowledge, which is scattered across various scientific disciplines, institutional practices and technological directions, represents a useful scientific and applied result.

Labor can be used as:

- systematized source of information on security technologies;
- basis for specialized further research;
- methodological aid in developing strategies and policies;
- reference framework for training and technological planning;
- base for assessing the technological maturity of individual structures and processes.

At the same time, the significant internal fragmentation of the exposition. Especially in the second chapter, which includes 12 sections and 34 paragraphs, inevitably fragments the research narrative and rapidly redirects attention to a large number of different technologies. This creates a wide scope, but reduces the possibility of each direction being subjected to sufficiently in-depth critical and comparative analysis.

Fragmentation also affects the connections between the individual parts. In places, the exposition acquires the characteristics of a technological catalog, a process map, or an encyclopedic reference book. Functions, capabilities, advantages, and risks of individual technologies are described, but how they change subordination, responsibility, coordination, professional judgment, and the real content of the management process is not always followed consistently enough.

The dissertation includes 94 tables and 34 figures, which contribute to the clarity, systematization of the significant information material and the practically-oriented nature of the work. Some of them contain explicitly indicated sources, while in a significant number it is not noted whether they represent author's developments, adaptations or reproductions of materials from other publications. In some cases, the source is cited in the accompanying text, but its connection with the specific table or figure is not clearly indicated. Scientific traceability requires that this inconsistency be removed before the possible publication of the dissertation as a monographic work.

The source base is broad, but predominantly public. The author herself acknowledges the limited access to verifiable information about the activities of the special services, the fragmentary nature of the data for Bulgaria, and the prognostic nature of some of the conclusions. These objective limitations explain why in some parts the evidentiary basis is rather indirect and comparative than the result of her own empirical research.

Nevertheless, the work is by no means just an exhaustive collection of data and descriptions. The author has managed to transform the collected material into a single analytical framework, correlating technologies with the stages of the management cycle, management levels, and the areas of intelligence and counterintelligence.

The essential conclusion is that the scientific and practical novelty does not lie in the creation of a new management cycle, but in the technological transformation of its familiar stages. As a result

of this transformation, the sequence of management activities becomes a more dynamic, information-based, automated and forecast-oriented system.

Therefore, scientific novelty is primarily synthetic, integrative, and model-applied, rather than empirically-discovery. Existing knowledge, technologies, and management approaches are rearranged and unified into a common conceptual architecture.

6. Major scientific and applied scientific contributions

I accept the main thrust of the contributions formulated by the author, and I believe that they should be assessed moderately and in accordance with the integrative and model-applied nature of the development. The following can be highlighted as more significant results:

- first, a large-scale interdisciplinary systematization of scientific, technological, legal and organizational knowledge related to the digital transformation of security management has been carried out;

- secondly, a common analytical framework has been created in which different technologies are mapped to the stages of the management cycle and its strategic, tactical and operational levels.

- third, matrices, tables and models have been developed for the application of big data, artificial intelligence, cloud services, blockchain, drones, nanotechnologies, geotechnologies, virtual and augmented reality, digital twins, zero-trust architecture and space technologies.

- fourth, the conceptual direction for moving from reactive to proactive and predictive management, based on data, automation and integrated technological platforms, is argued.

- fifth, technological modernization is considered in unity with the legal, ethical and organizational conditions for its application.

- sixth, practice-oriented guidelines have been formulated for strategic planning, phased digitalization, assessing technological maturity, developing human resources, and improving the regulatory environment.

Practical contributions include analytical tools for strategic planning, performance measurement frameworks, training guidelines, regulatory development, and assessment of technological lag. It should be noted here that not every description of a technology and not every individual application of it should be qualified as an independent scientific contribution. The contribution lies primarily in their systematic unification, in the common model construction, and in the possibility of using the created framework for further research and practical solutions.

7. Notes and recommendations

The following notes may be made to the dissertation:

- the basic concept of "management cycle in intelligence and counterintelligence" could be defined more precisely by clearly distinguishing the subject, object and level of management.

- the significant internal dissection of the text supports the thematic scope, but fragments the presentation and limits the possibilities for more in-depth analysis and synthesis.

-in some parts, the descriptive and encyclopedic presentation of technologies prevails over the critical comparison of sources and the assessment of their real practical applicability.

-it would be useful to more clearly distinguish between established practices, the author's analytical summaries and prognostic scenarios.

-the model can be further developed to the level of immediate operational activity, including when working on a specific form of operational report, with different categories of sources, when coordinating special events and interaction between different structures.

-practical value would be increased by developing measurable indicators of efficiency, technological maturity, reliability, legality and degree of human control.

- before possible publication as a monographic work, additional linguistic, terminological and technical editing is necessary.

The above remarks do not devalue what has been achieved. They outline opportunities for further concentration and development of research results.

8. Question to the author

As a basic question for the scientific discussion during the public defense, I would pose:

How does the author define the management cycle in intelligence and counterintelligence at the strategic, tactical and operational levels and how can the proposed technologically transformed model be applied to the immediate activities of the operational officer – when working on a specific object or form of operational report, with different categories of sources and when planning, coordinating, implementing and controlling operational activities?

The answer would allow for further specification of the scope and practical applicability of the proposed model.

9. Conclusion

Dr. Teodora Licheva's dissertation is a large-scale, current and interdisciplinary study. It collects, systematizes and comparatively presents a significant amount of information on the development and application of modern technologies in management in the field of national security, intelligence and counterintelligence.

The development has pronounced characteristics of a scientific compendium. The broad scope and significant structural dissection determine the predominantly descriptive nature of individual parts and limit the depth of analysis in some areas. The source base is mainly public, and some of the statements, especially those of a prognostic nature, require subsequent empirical verification and theoretical justification.

At the same time, the author has united the diverse technologies into a common conceptual and model framework, compared them with the stages and levels of the management cycle, and developed a significant number of practically oriented matrices and comparative constructs.

The scientific novelty is primarily systematizing and integrative. It is not expressed in the creation of an entirely new theory of intelligence and counterintelligence, but in the

development of a broad-ranging conceptual architecture for assessing the technological transformation of management processes.

When evaluating a dissertation for the degree of Doctor of Science, systematization alone would not be sufficient if it only represented a bibliographic or encyclopedic summary. In this particular case, the collected material was used to build a general model, to formulate scientific and applied frameworks, and to derive guidelines for the transformation from analog and reactive to digital, proactive and predictive management.

Taking into account the relevance and complexity of the problem, the scale of the work performed, the independent systematization of scattered scientific and practical-applied material, the developed analytical tools, and the possibilities for further scientific and practical application, I assume that the dissertation possesses the necessary qualities for a positive assessment.

Based on the above, I propose to the esteemed scientific jury to award Dr. Teodora Licheva the scientific degree "Doctor of Science" in Professional Field 9.1 "National Security" .

03.08.2026

V a r n a

Signature:

(Prof. Dr. Petar Hristov)