

CONTRIBUTIONS REGARDING THE IMPROVEMENT OF LOCAL ADMINISTRATION MANAGEMENT

Doctoral Thesis – Abstract

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Nowadays, public administration is facing a variety of changes, with legislative modifications having a substantial impact on institutional development. The personnel in public administration plays a crucial role in achieving its objectives. However, often, the motivation of public administration personnel is lacking. The causes of this motivation issue are discussed in the following chapters of this research. Management and leadership present different and challenging aspects compared to the private sector. The management process includes aspects that require careful control and handling. Resources in public administration are frequently limited and understaffed. All these aspects contribute to the emergence of certain deficiencies that need to be addressed through effective management. Among the encountered deficiencies we can find the following: the lack of staff motivation, the challenges experienced during the selection process, employee performance, the institution's image, digitalization level, the financing of institutions and others.

The purpose of this doctoral thesis is to develop a comprehensive model that contributes to the improvement of local administration management, based on the characteristics of the area, on the research done and taking into account the guidelines from the specialized literature.

In order to achieve this purpose, the following operational objectives have been established:

1. Evaluation of public administration management at the European Union level (Ob1).
2. Evaluation of public administration management at the Romanian level (Ob2).
3. Identification of crucial aspects contributing to the development of an effective local management (Ob3).
4. Evaluation of diagnostic methods and the establishment of a research theoretical framework (Ob4).
5. Analysis of employee satisfaction (both in executive and leadership positions) regarding local administration management (Ob5).
6. Development of a comprehensive model contributing to the improvement of administration management (Ob6).
7. Testing, validating, and refining the proposed model based on local characteristics (Ob7).

From the perspective of the questions that this doctoral thesis aims to answer, the following can be formulated:

1. How can public administration management be improved?
2. What are the critical aspects underlying the development of innovative management?
3. Can local administration management in the Western Region be enhanced?
4. Are there any chances for the local administration management in the Western Region to be improved?

The theme of this doctoral thesis is essential because recent challenges have significantly impacted societal and national well-being. Among these challenges, we can mention the COVID-19 period, various economic situations, the development of new work directions, adaptation of education to online teaching systems and many others.

To carry out the research, there have been utilized two questionnaires: one administered to employees and one for in-depth interviews, conducted with managers from public administration. The questionnaire administered to employees in executive positions received 1035 responses. In-

depth interviews were conducted with 99 employees in leadership positions within the public administration of the Western Region. These instruments were administered online using the Google Forms platform and face-to-face interviews as well.

The doctoral thesis comprises 249 pages, 186 bibliographic references, 165 figures, and 45 tables. The logical structure of this doctoral thesis contributes to advancing research in this field and emphasizes the necessity of improving local administration management.

The first chapter, titled "Introduction: Motivation and the Significance for the Research Theme," opens this doctoral research. It provides an introduction to the current doctoral research, emphasizing the significance and motivation behind it. Public administration plays a vital role in society and now, more than ever, leadership and dedication in this area are essential. This research marks a significant starting point for improving local administration management and identifying areas within public institutions that can be enhanced.

It is mentioned that the responsibilities and activities of public administration play an important role in society, contributing to the development of well-being, maintaining balance and improving current conditions. Public administration implements government public policies by coordinating people's efforts, allowing them to work together to achieve established objectives, managing, leading, and supervising the activities of thousands of individuals who achieve the planned results through their personal efforts.

This chapter concludes with the author's conclusions.

Chapter 2, titled "Evaluation of the Contextual Framework and Research Concept," aims to assess the characteristics and performance of public administration at both the national and international levels. It presents the main directions contributing to the improvement of the local administration management and concludes with an evaluation of the capacity and performance of public administration for the selected countries. Among the directions explored in this chapter, there can be found the following: the classification of government functions, the analysis of the characteristics and performance of public administration at the European Union level, the analysis of public administration characteristics and performance in Romania, and the analysis of the

selected countries. Furthermore, it lays the groundwork for a theoretical framework for public administration performance.

The research presented in this chapter contributes to achieving the operational objectives of evaluating public administration management at the EU level (Ob1) and evaluating public administration management in Romania (Ob2), which will contribute to shaping the image of administration management at both European and Romanian levels.

The first subchapter includes the classification of public administration functions. At the level of the European Union, there exists a classification of government functions, which is presented and evaluated in this subchapter.

The chapter continues with the analysis of the capacity and performance of public administration at the European Union level, offering a real and highly relevant perspective. All activities that include efficient governance and the execution of qualitative tasks are in the interest of European Union (EU) citizens and member states. The goal of these activities is to maximize the value of limited public funds and create a public-private interface that boosts employment and economic growth. The quality of government is an essential dimension that cannot be overlooked. Government size matters to accommodate administrative needs. A series of expenditures and implications at the EU level or in selected countries are evaluated.

It can be easily seen that public administration performance is an important dimension that is periodically evaluated. The capacity of administration can contribute to the development of effective management that achieves its objectives.

Public spending at the EU and selected countries' levels follows an action that can be improved. This chapter has presented the distribution of expenses across major divisions. At the same time, there was also carried out an evaluation of the total public general expenses. They were presented both from a quantitative point of view, as well as the total amount registered at the level of each country of the European Union, but also related to the total number of inhabitants of each country, in order to obtain a common reference. It is noted that Luxembourg and Norway have the highest expenses per capita. The following subchapter evaluates the characteristics and performance at the national level, with subsequent sections presenting situations observed in seven selected countries (Hungary, Czech Republic, Greece, Slovenia, and Bulgaria, which are

considered similar to Romania in terms of expenses, population dynamics, but also Portugal and Ireland, which are considered important in the public administration literature).

The chapter concludes with the author's conclusions.

Chapter 3, titled "Local Administration Management," contributes to the identification of aspects related to local administration. It addresses topics such as workspace ergonomics, employee satisfaction, characteristics and advantages of local administration, the role of leadership, crisis management, sustainability, and the approach to the management process in local administration. Each of these topics is presented within a subchapter.

The management approach of the local administration is crucial for shaping a high-performing and results-oriented administration. This chapter delves into various aspects of management, emphasizing the importance of management at all levels of administration. These are important aspects that must be consolidated and can be included in the development of a model for improving the management of the local administration.

This chapter also contributes to achieving the objective of identifying significant aspects that contribute to the development of effective local management (Ob3) and will present definitions and approaches to public administration, employee satisfaction, characteristics and advantages of public administration, the role of leadership, crisis management, and the sustainability of the public sector.

Public and private entities collaborate and work together to provide services and products that individuals want and need to live their lives. Local administration management refers to the leadership and control of the interests of a collective, such as society (citizens) (Grimmelikhuijsen et al., 2017). Managers in the public sector are concerned with public welfare, education, healthcare, natural resources, legislative proposals, and workforce development (Bose, 2020).

This chapter presents various aspects related to local administration management. It begins with a series of theoretical aspects and an inventory of specialized literature, offering several definitions and approaches to provide an overall understanding of this concept.

In the specialized literature, there is a focus on employee satisfaction and workspace ergonomics. This chapter addresses these concepts, providing an up-to-date view of public administration. Concerns about ergonomics are present in both the public and private sectors. The activities carried out are numerous and often vary in intensity. Ergonomics has a number of positive effects on organizations and it turned out to be of particular importance to employees. All these aspects are presented in the relevant subsection.

Employee satisfaction has become an increasingly complex and important topic for all institutions. It is used to build and modify motivation systems. The level of satisfaction shapes the employee's attitude toward the organization and describes the relationships between colleagues and superiors. Employee satisfaction is a prominent theme in the specialized literature, and the entire approach is presented in the corresponding section.

The characteristics and advantages of public administration are presented in a comprehensive approach, emphasizing the significant aspects of public administration. Leadership involves the dedication of managers and the formation of complete working teams that can contribute to achieving established objectives. This concept of leadership is evaluated in this chapter, further solidifying the image of public administration.

Important aspects of crisis management, sustainability, and the various implications of innovative management systems are also being presented. Sustainable development involves maintaining a balance between economic, social, and environmental responsibilities. The entire process must be in line with the organization's vision and mission and accepted by stakeholders.

The management process is crucial and contributes to the achievement of the institutions' objectives. The capacity of employees, but also their performance, are important directions in achieving organizational goals and fulfilling tasks towards society.

Chapter 4, titled "Theoretical Research and Research Framework Definition," presents the results obtained on both theoretical and practical fronts. The research presented aligns with the achievement of the operational objective: "Evaluation of diagnostic methods and establishment of the theoretical research framework (Ob4)," which enables the application of the proposed tools and methodology.

This chapter begins with the presentation of management analysis methods that contribute to decision-making in local public administration. Subsequently, PESTLE, SWOT, and POPIT analyses are conducted for local public administration. The results serve as the basis for developing the comprehensive model proposed as a result of this research. The chapter covers aspects of theoretical research and defines the framework for applied research. It identifies the ten working hypotheses and conducts a literature review. The research methodology is presented, highlighting its necessity. This chapter outlines the theoretical process of the research undertaken. All the methods and tools used in the applied research are logically and progressively explained within this chapter. After the theoretical definition of the research framework, the subsequent chapters will present market research, testing, validation, and consolidation of the proposed framework model for improving public administration management.

This chapter also presents the tools that formed the basis for the two research initiatives: the questionnaire administered to employees and in-depth interviews conducted with managers in public administration.

Concerning the questionnaire administered to employees, ten hypotheses were established and subsequently validated or invalidated in the following chapter. These hypotheses are the following:

H1: Service quality positively influences institutional performance.

H2: Communication positively influences institutional performance.

H3: Working conditions positively influence institutional performance.

H4: Professional development positively influences institutional performance.

H5: Labor relations positively influence institutional performance.

H6: Digitalization positively influences institutional performance.

H7: Performance positively influences innovative organizational management.

H8: Performance positively influences sustainable management.

H9: Communication negatively influences innovative organizational management.

H10: Digitalization positively influences sustainable management.

Chapter 5, titled "Applied Research on Local Administration Management," presents the applied research and the results obtained, including the validation of established hypotheses. The chapter details the outcomes of the questionnaire administered to employees and in-depth interviews conducted with managers in public administration.

The research involved two distinct studies: a questionnaire administered to employees in executive roles, which received 1035 valid responses, and in-depth interviews conducted with 99 managers in the public administration of the West Region. Both of these research tools were applied online using the Google Form platform and also face-to-face discussions.

Simultaneously, fuzzy modeling was also used to identify which variables influence local administration management. The following six input variables were used for modeling: Service Quality, Employee Performance, Workplace Digitalization, Professional Development, Employee Relations with Superiors, and Working Conditions. The inference process was conducted using MATLAB's Fuzzy Logic Toolbox due to its complex and comprehensive system for modeling and simulating fuzzy systems through a powerful and intuitive graphical interface.

For the evaluation of local administration management, there was elaborated a model with six aforementioned input parameters and one output parameter, "Evaluation of Local Administration Management" (Manag_admin_local). A total of 413 rules were utilized, which were developed and accepted by the 99 experts from the public administration of the West Region.

The questionnaire administered to individuals in executive roles encompassed various dimensions, including: respondent identification, entrepreneurship, private sector, attributes of public administration (service quality, employee performance, workplace digitalization, professional development of employees, professional relations with superiors and working conditions), aspects of development in public administration, appreciation attributes in public administration).

The doctoral thesis presents the results obtained from this questionnaire and provides corresponding interpretations for the development of the model aimed at improving local administration.

The questionnaire applied to people holding management positions in public organizations included 5 open questions and 4 closed questions. This questionnaire served as the basis for the

in-depth interviews. These questions offered respondents the opportunity to express their own ideas and opinions on improving management. The targeted areas included:

- quality and reliability of public services within the institution
- employee performance
- main future actions proposed for improving public administration management
- primary projects related to digitizing the institution
- major difficulties or barriers encountered
- additional information for respondent identification.

These in-depth interviews were evaluated and analyzed by the doctoral candidate, and the results are presented in the doctoral thesis.

The results show that managers are actively involved in digitizing organizational systems and improving the quality of services for the welfare of society. The chapter continues with the statistical analysis of the data obtained to validate the ten hypotheses formulated. An analysis was conducted on the data collected from both categories of employees.

This chapter concludes with the proposal of a comprehensive model for improving local administration management. This model takes into account all the results obtained and the entire body of literature in the field. Finally, this model was tested within two public organizations, and thus we obtained the final model of the improvement of public administration management.

Among the results obtained, it can be emphasized that addressing service quality positively influences institutional performance – this hypothesis was validated for both respondent categories. Service quality impacts both institutional and employee performance positively. There is a positive effect at both the executive and managerial levels. When it comes to communication, it has a positive influence on institutional performance. This hypothesis was validated for both respondent categories. Employees must communicate effectively to contribute to organizational performance improvement. If there are communication deficiencies, much information may not reach the correct recipient. When evaluating working conditions, it can be affirmed that they have a positive impact on institutional performance. This hypothesis was validated for both respondent categories. Working conditions are important for increasing efficiency in the workplace and, in turn, improving organizational performance. In this way, all the established theoretical hypotheses

are present. The chapter concludes with the proposed comprehensive final model following validation, aimed at enhancing local public administration management.

Chapter 6, titled "Conclusions. Personal Contributions. Research Perspectives," includes the research conclusions, personal contributions and future research prospects. This doctoral thesis represents the culmination of the relevant literature, the author's experience, and multiple research efforts. The six chapters contribute to improving the management of local administration and serve as a foundation for future research.

This chapter presents the structured and consolidated version of the results claimed by the doctoral candidate in both theoretical and practical research directions.

1. In the field of theoretical research on the literature review, the contributions can be structured as follows:
 - analyzing the current state of government functions.
 - analyzing the characteristics and performance of public administration at the European Union level, highlighting the government dimension, the number and size of entities, and the distribution of general public expenditure
 - analyzing the characteristics and performance of public administration in Romania
 - analyzing the characteristics and performance of public administration in selected countries
 - researching specialized literature and formulating the ten working hypotheses
 - evaluating methods for analyzing the internal and external environment
 - presenting the importance of ergonomics and sustainability for the public sector
 - evaluating the importance of leadership for public administration
 - evaluating the importance of crisis management for public administration
 - evaluating the importance of an innovative management process for public administration
 - evaluating the importance of employee satisfaction for public administration
 - evaluating European Union reports to identify the characteristics of public administration.
 - other evaluations and tangential analyses related to public administration.

2. In the field of practical research, the contributions can be structured as follows:
- application of a questionnaire to the 1035 employees with executive functions in public administration
 - application of a questionnaire to the 99 managers in public administration
 - evaluating the results of the applied questionnaires
 - interpreting the data obtained from respondents' answers
 - analyzing and presenting the data using SPSS for the purpose of validating or invalidating the ten hypotheses set for employees in executive positions
 - analyzing and presenting the data using SPSS for the purpose of validating or invalidating the ten hypotheses set for employees in managerial positions
 - developing a comprehensive model for local administration management
 - conducting a pilot study and applying the developed model in two public organizations
 - critically analyzing the results obtained from the pilot study
 - substantiating and improving the proposed model to achieve a stable version
 - conducting simulations using fuzzy logic to determine the variables influencing the improvement of local administration management. As a result of these simulations, based on input parameters such as working conditions, service quality, service performance, digitalization, professional development and relationships with superiors, it was observed (as some results presented in previous figures) that relationships with superiors have no major influence on the improvement of local public administration management, while working conditions have a medium-level impact
 - systematizing the 413 fuzzy rules based on specialized literature, subsequently validated by the 99 managers in local administration
 - developing the comprehensive model for assessing local administration management
 - testing, validating, and consolidating the comprehensive model.

The thesis concludes with a bibliography that includes 186 references and five appendices, which present the research tools used, national and international data and abbreviations.

The list of publications (8 scientific articles) with affiliation to UPT (Politehnica University of Timisoara):

1. Scientific papers published in ISI-indexed journals:

1. Ivascu Larisa, Ardelean Ben-Oni, Muddassar Sarfraz, **Trocan Ciprian**, Interpretive Structural Modelling Application for Evaluating Ergonomics Factors of the Public Sector, Acta Technica Napocensis Series – Applied Mathematics Mechanics and Engineering, ISBN 1221-5872, vol. 64(1), ianuarie 2021, pp. 145-150, ErgoWork 2020.

1. Scientific papers published in the proceedings of scientific events (ISI Proceedings):

1. Ivascu Larisa, **Trocan Ciprian**, Mocan Marian, Ardelean Ben-Oni, Assessment of Students' Perception on the Teaching Process, Distance Learning in Applied Informatics (DIVAI2020), ISSN 2464-7470, pp. 339-349, 4-6 mai 2020 (replanificat 21-23 septembrie 2020), Štúrovo, Slovakia.

2. Scientific papers published in specialized journals indexed in BDI:

1. **Trocan Ciprian**, Mocan, Marian , Ivascu Larisa, Balan Monica, Popa Calin, Overview of European Financing in Romania in the 2014-2020 Period, Review of Management and Economic Engineering (AMIER), ISSN 1583-624X, vol.18, nr. 3(73), 18 pagini, Cluj-Napoca. – revista indexata BDI
(http://rmee.org/abstracturi/73/03_sin_Articol_503_Paper_Trocan_Mocan_Ivascu_Balan_Popa_final.pdf)

2. Ivascu Larisa, Balan Monica, **Trocan Ciprian**, Evaluating the Consumption of Fast-Food Products Among Young People, Review of Management and Economic Engineering (AMIER), ISSN 1583-624X, vol. 18, nr. 3(73), 14 pagini, Cluj-Napoca. – revista indexata BDI
(http://rmee.org/abstracturi/73/07_Stud_Articol_504_Paper_Ivascu_Balan_Trocan.pdf)

3. Ivascu Larisa, Ianasi Mirel, Monica Balan, Elfriede Bobia, **Ciprian Trocan**, Sustenabilitatea în domeniul energiei electrice în românia - Sustainability in the field of electrical energy in Romania, Review of Management and Economic Engineering (AMIER), ISSN 1583-624X, vol. 19, nr. 1(75), martie 2020, Cluj-Napoca (<http://rmee.org/75engleza.htm>)

3. Scientific papers published in proceedings of international scientific events abroad

1. **Ciprian Trocan**, Marian Mocan, Lucian-Ionel Cioca, Larisa Ivascu, Rebeca Ardelean, A review of the impact of mining operations on sustainable development, 10th International Symposium on Occupational Health and Safety (SESAM2021) - 18 octombrie 2021, MATEC Web of Conferences, vol. 354, 2022, pp. 00075, Petrosani, Romania.
<https://doi.org/10.1051/mateconf/202235400075>

https://www.matec-conferences.org/articles/mateconf/abs/2022/01/mateconf_sesam2022_00075/mateconf_sesam2022_00075.html

2. **Ciprian Trocan**, Marian Mocan, Ben-Oni Ardelean, Larisa Ivascu, Social impact assessment in the mining industry, 10th International Symposium on Occupational Health and Safety (SESAM2021) - 18 octombrie 2021, MATEC Web of Conferences, vol. 354, 2022, pp. 00023, Petrosani, Romania. <https://doi.org/10.1051/mateconf/202235400023>

https://www.matec-conferences.org/articles/mateconf/abs/2022/01/mateconf_sesam2022_00023/mateconf_sesam2022_00023.html