

**ACADEMIA DE STUDII ECONOMICE DIN BUCUREȘTI**  
**DOMENIUL: CONTABILITATE**  
**ȘCOALA DOCTORALĂ: CONTABILITATE**



# **TEZĂ DE ABILITARE**

**Innovation and sustainability in the adoption and adaptation of  
smart technology-based solutions in the circular economy - a  
current and future paradigm**

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## Summary

The main objective of the habilitation thesis entitled “*Innovation and sustainability in the adoption and adaptation of smart technology-based solutions in the circular economy - a current and future paradigm*” is to present the main elements that characterize the evolution of my academic, professional and scientific career after obtaining the PhD degree in Accounting in 2022, as well as the directions I will pursue in the future to develop my academic career.

My entire scientific and research activity has been and still is focused on the field of IT and the challenges brought by AI that I study in correlation with the field of economics, especially accounting and its challenges in a modern economy undergoing a globalization process. IT and AI are intended to help through the international exchange of technologies and ideas to develop solutions in the economy and to foster economic, social and environmental sustainability.

Section I of the habilitation thesis presents the scientific, professional and academic achievements, structured along the three research directions.

In the first chapter, “*The Impact of Artificial Intelligence (AI) on the Modeling of Sustainable Economic Processes*”, I aim to explore the innovative role of AI in streamlining and modernizing economic processes, addressing:

- the impact of smart technologies on the correlation, execution and auditing of economic processes in a company (RPA, IoT, etc.);
- the use of software robots in various stages of economic processes.

The second chapter, “*Linking ERP IT solutions with innovative business and industry*”, contains the results of recent research on the integration of smart technologies alongside ERP systems in various economic domains. The integration of AI requires a combination of technical and economic knowledge which entails re-skilling of accounting professionals, such as:

- analyzing and interpreting complex data (Big Data);
- machine learning - building and training AI models;
- modeling and automating business processes.

The third chapter, “*Quality education and the integration of AI in accounting - benefits and opportunities*”, is on quality education. Thus, in this chapter we have made an analysis of what it means the response of the academic environment to the changes generated by new smart technologies and the need to adapt the curriculum in order to prepare future accounting professionals in line with the requirements of the business environment. The topics addressed are:

- increasing efficiency and productivity by automating repetitive tasks and detecting errors quickly;
- increasing competitiveness by acquiring relevant technological skills;
- rapid integration of innovations in the AI sphere.

Section II of the habilitation thesis covers future directions for educational and research career development. I will emphasize the correlation of teaching activities with current labor market requirements and smart technologies. Thus, in terms of educational activity development, I will continue to prioritize the following aspects:

- strengthening the relationship with students and helping them to develop the skills needed to access future jobs;
- creating and updating teaching materials based on international good practice;
- improving assessment methods, centered on competences;
- capitalizing on student feedback to adjust teaching materials;
- promoting student involvement in scientific research.

As regards the development of research activity, I will keep the following in the center of my attention:

- annual publication of articles in prestigious journals indexed internationally;
- participation in conferences to disseminate research results and exchange ideas;
- interdisciplinary collaborations with a predominance in academia, but also in business, to attract funding;
- publication of specialized books.

These objectives support excellence in teaching and research, contributing to the development of a quality educational process. My teaching career has been shaped on the basis of professional experience in business and IT consulting, coming to this educational field with a wealth of knowledge and theoretical skills, verified and supported by extensive practical experience. In these years, I have combined my teaching activity with experience in the largest companies in Romania, in various economic fields. I came to the students with challenges that stimulate them in the educational process, in the acquisition and understanding of new concepts and theoretical notions, which represent a springboard for a new stage in their lives, that of entering the labor market, either as employees in large companies or as entrepreneurs capable of managing and running their own businesses.

The Hirsch indexes from Google Scholar, Scopus and WOS - Web of Science platforms are used as an argument for the above:

- Hirsch index - Google Scholar - 7;
- Hirsch index - Scopus - 5;
- Hirsch index - WOS - Web of Science - 3.

Section III of the habilitation thesis was allocated to bibliographical references.