### **BUCHAREST UNIVERSITY OF ECONOMIC STUDIES**

# **Council of Doctoral University Studies Accounting Doctoral School**

## THE IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE ON THE ACCOUNTING AND AUDIT SECTOR

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**Key words:** Artificial Intelligence, accounting, audit, Technological-Organizational-Environmental framework

### **Thesis Summary**

The purpose of this paper is to analyze the implementation of solutions based on Artificial Intelligence in the accounting and auditing sector, both at Romania and European level. Through the Technological-Organizational-Environmental research framework, an extensive and complex study on the implementation of AI in the accounting and auditing sector was possible. The first chapter is represented by the introduction to the current state of knowledge regarding the influence of AI in accounting and auditing. The second chapter includes the review of the specialized literature, based the most relevant studies carried out in this field. The third chapter presents the results and conclusions for a qualitative analysis based on the results of a structured interview conducted with financial specialists in Romania. In the fourth chapter a qualitative analysis was carried out using a structured interview, based on the Technological-Organizational-Environmental framework. The interview was conducted in Romania with top managers in the field of accounting and auditing, as well as with representatives of technological companies. In chapter 5 the external technological context was analyzed through a qualitative content analysis, through which several technologies offered together with Artificial Intelligence by technology companies are analyzed. This study shows that solutions based on AI are always offered together with other technological ones, such as digitization, automation and cloud computing.

In chapter six, another unique element of the work is provided, represented by the statistical analysis of the impact of Artificial Intelligence in Romanian accounting and audit sector, data being collected through a questionnaire. Other unique elements of this study can be found in chapter seven and refer to the analysis at European level of the implementation of Artificial Intelligence in accounting and auditing, carried out through a qualitative analysis based on structured interview. The most relevant conclusions of the study along with its limitations and directions for future research are presented in the conclusion chapter eight. Artificial Intelligence is increasingly used in accounting and auditing and companies must adapt to this change.