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From Automation to Innovation: Redefining Accounting Practices with Artificial Intelligence in the Western Balkans

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ABSTRACT: This study examines the factors influencing the adoption of artificial intelligence (AI) in accounting practices in the Western Balkans. It focuses on AI familiarity, organisational readiness, and the regulatory environment, while considering ethical concerns and training availability. A quantitative approach using SEM-PLS analysis was applied to survey data from accounting professionals in the region. The results show that AI familiarity positively affects organisational readiness but negatively influences perceptions of the regulatory environment. Ethical concerns were found to reduce training opportunities. The findings indicate that while AI familiarity supports adoption readiness, regulatory uncertainty and ethical challenges remain key barriers. The study highlights the need for clearer regulations, ethical governance, and professional training to support effective AI integration in accounting practices.

KEYWORDS: accounting, artificial intelligence, ethics, organisational readiness, Western Balkans.

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Introduction

Artificial intelligence (AI) is transforming accounting practices by automating processes, improving data accuracy, and supporting strategic decision-making. Globally, AI is redefining the role of accounting professionals and creating new opportunities for efficiency and innovation. However, its adoption varies across regions. In the Western Balkans, AI integration in accounting is shaped by economic transition, institutional development, and regulatory frameworks. Despite significant economic transformation, countries in the region continue to face governance, infrastructure, and regulatory challenges that influence digital innovation. In this context, AI adoption represents both an opportunity for efficiency and a challenge that requires institutional readiness. This study aims to analyse the key factors influencing AI adoption in accounting practices in the Western Balkans.

Research Aim and Research Questions

This study aims to examine the determinants of AI adoption in accounting practices in the Western Balkans, focusing on AI familiarity, organisational readiness, and the regulatory environment, and to examine the mediating role of ethical concerns and training availability.

The research addresses the following questions:

RQ1: How does AI familiarity influence organisational readiness for AI adoption?

RQ2: What is the impact of the regulatory environment on AI adoption?

RQ3: How do ethical concerns affect training availability?

RQ4: What are the main barriers and enabling factors for AI integration in accounting?

Research Results

The study builds on literature on digital transformation, technology adoption, and AI in accounting, which highlights improvements in efficiency, accuracy, and decision-making (Liao et al., 2020; Lee & Tajudeen, 2020), as well as the importance of regulatory and ethical factors (Zhang et al., 2023).

A quantitative research design using SEM-PLS was applied to survey data from accounting professionals in the Western Balkans. The model includes AI familiarity, organisational readiness, and regulatory environment as key determinants, with ethical concerns and training availability as mediating variables.

The results indicate that AI familiarity positively influences organisational readiness ($\beta = 0.3461$), suggesting that increased awareness supports readiness for adoption. However, AI familiarity negatively affects perceptions of the regulatory environment ($\beta = -0.3052$), indicating perceived regulatory barriers. Ethical concerns negatively affect training availability ($\beta = -0.3498$), showing that issues such as job displacement and data privacy reduce investment in training.

The findings indicate that while AI familiarity supports readiness, regulatory uncertainty and ethical

challenges remain key barriers to AI implementation in accounting practices in the Western Balkans. The main structural relationships are presented in [Table 1].

Table 1

Structural Model Results (SEM-PLS, N = 50)

Relationship	β (Original)	95% CI (perc.025 – perc.975)	Interpretation
AI Familiarity → Org Readiness	0.346	−0.575 to 0.617	Positive, but CI crosses 0
AI Familiarity → Reg Environment	−0.242	−0.624 to 0.448	Negative, CI crosses 0
Reg Environment → Training Availability	0.297	−0.357 to 0.532	Positive, CI crosses 0
Ethical Concerns → Training Availability	−0.350	−0.528 to 0.578	Negative, CI crosses 0

Conclusions

This study provides empirical insights into AI adoption in accounting in the Western Balkans. The findings confirm that AI familiarity enhances organisational readiness, while regulatory challenges and ethical concerns limit effective implementation. The study contributes to the literature by providing evidence from an under-researched region and highlighting the importance of regulatory clarity, ethical governance, and professional training. Future research should examine larger samples and conduct comparative regional analyses.

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