Integrating Artificial Intelligence and Green Management Accounting for Resource Efficiency in GCC Industrial Firms: "A Resource-Based View (RBV) theory"

Dr. Ahmed A. M. AlAfifi

Assistant Professor of Accounting Management Department of Business Administration and Accounting Al Buraimi University College, Sultanate of Oman

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ABSTRACT

The GCC countries are undergoing a radical transformation towards digital sustainability as a cornerstone of economic and climate security. Oman Vision 2040 is at the forefront of this transformation, strategically focusing on building a diversified and sustainable economy based on innovation. Oman's Vision 2030 has set ambitious goals within the "Environment and Natural Resources" pillar, aiming to elevate the Sultanate's Environmental Performance Index to be among the top 20 globally, in line with the goals of Saudi Vision 2030 and the UAE Vision 2071 to reduce emissions and achieve carbon neutrality. Given this momentum, PwC reports (2023) indicate that adopting green, technology-enabled solutions could contribute up to $2 trillion in added value to the Gulf economy by 2030. However, IFAC reports (2024) reveal that 62% of organizations struggle to accurately link financial data with environmental impact. This underscores the critical need to integrate artificial intelligence (AI) with green management accounting (GMA). Based on Resource-Based Value (RBV) theory, AI is no longer merely a technological tool but a vital "strategic asset" that enables Omani and Gulf companies to transform big data into predictive insights, enhancing resource efficiency and bolstering global competitiveness.

JEL Codes:

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