Empirical Economics Letters, 25 (Special Issue 1): pp. 9-31, (March 2026) ***ISSN 1681 8997***
https://doi.org/10.5281/zenodo.20598377

Leveraging Blockchain Technology for Sustainable Business Model Innovation: Implications for Transparency, Accountability, and Long-Term Value Creation

Dhirendra Kumar Jena
Department of MBA, BCET, Balasore, Odisha
Email: 2nabls@gmail.com

Abstract: This paper investigates the connexion between blockchain technology (BCT) use and sustainable business model innovation (SBMI) with specific attention paid to the mediating effects of corporate transparency and accountability. A cross-sectional research design was used where 412 respondents in various industries were surveyed. The hypothesised relationships based on resource-based view (RBV), dynamic capabilities framework, and the stakeholder theory were tested using covariance-based structural equation modelling (CB-SEM) through IBM SPSS AMOS 29.0. The results indicate that BCT implementation has a strong positive effect on transparency (β=0.78, $p < .001$) and accountability (β= 0.65, $p < .001$) of the organisation, which further translates into SBMI and long-term value creation (LTV). The model shows good fit (CMIN/DF = 2.14, CFI = 0.96, RMSEA = 0.051) and 65.4% of variance in long-term value creation. Findings affirm the mediating roles of transparency and accountability between BCT-SBMI relationship, which makes the theoretical contributions to digitalization-sustainability nexus.

Keywords: Blockchain Technology, Sustainable Business Model Innovation, Corporate Transparency, Accountability, Long-Term Value Creation, Structural Equation Modelling

JEL Classification Number: O33, M15, Q56, G34