Addressing Corporate Unethical Practices: The Role of Blockchain and AI in Enhancing Compliance and Governance

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Abstract

Corporate unethical practices have triggered catastrophic consequences, from billions in financial penalties and shareholder value destruction to corporate bankruptcies, widespread job losses, and the depletion of employee retirement funds. High-profile cases like the Boeing 737 Max crashes, the Wells Fargo Fake Accounts Scandal (2016), the Facebook-Cambridge Analytica Data Scandal (2018), and the Johnson & Johnson Opioid Crisis Lawsuits (2019) —underscore the severe impact of corporate malfeasance on stakeholders' lives. This PhD project seeks to investigate whether and in what ways recent technological advancements—specifically the corporate integration of blockchain and artificial intelligence (AI)—can influence corporate misconduct. The research will focus on how these innovations can enhance transparency, accountability, and governance to reduce unethical practices and safeguard stakeholder interests.

Further Details

The recent surge in incidences of corporate stakeholder abuse has resulted in significant physical and financial consequences for society. Examples include breaches of anti-money laundering regulations (e.g., Commonwealth Bank's $700 million penalty in 2018 and Westpac Inc.'s $1.3 billion fine in 2020), fraudulent superannuation management practices (e.g., National Australia Bank's $57.7 million fine in 2020 and Statewide Super's $4 million fine in 2022), and the destruction of a 46,000-year-old Indigenous heritage site by Rio Tinto in 2020. These incidents illustrate the widespread ethical and regulatory violations perpetrated by corporates, which have provoked public outcry and eroded trust in business processes and institutions at both national and international levels. The financial ramifications of these transgressions are profound, resulting in billions of dollars in penalties, diminished shareholder value, and substantial financial losses to third parties. In some instances, such malpractices have precipitated bankruptcy, corporate collapses, mass job losses, and the depletion of employee retirement funds. The growing prevalence and notoriety of corporate misconduct have led organizations like PwC and other independent bodies (e.g., Corporate Research Project) to systematically monitor and track these violations.

In response to the severity of these incidents, recent scholarship has increasingly focused on identifying the determinants of corporate stakeholder violations and ethical transgressions (e.g., Jain & Zaman, 2020; Nardella et al., 2022; Neville et al., 2019). However, existing studies have predominantly concentrated on examining the relationship between formal corporate governance structures—such as the composition of boards of directors (Jain & Zaman, 2020) and CEO characteristics, including compensation (Jain, Zaman & Harjoto, 2023)—and the propensity of firms to engage in stakeholder violations (Zaman et al., 2022; Nardella et al., 2022). Additionally, research has explored the influence of informal governance mechanisms, particularly corporate culture, on unethical organizational behavior (Zaman, 2023).

Despite the significant relevance of internal organisational processes and controls in mitigating stakeholder violations, and the considerable divergence in corporate enforcement regimes across jurisdictions, our understanding remains limited regarding how these processes—particularly the adoption of contemporary digital technologies, such as blockchain and artificial intelligence—affect corporate malpractices. It is argued that these technologies enhance transparency and traceability within organisational operations, which is crucial to stakeholders concerned with issues such as environmental protection, sustainability, transparency, and social responsibility (Centobelli et al., 2022; Izzo et al., 2022; Xu et al., 2019). Furthermore, these technological advancements hold great potential for improving accounting practices by enhancing the measurement, recording, analysis, and communication of an expanding range of data, thereby fostering greater accountability and supporting transparency—key factors in mitigating corporate malpractice.

Given the significant negative consequences of corporate malpractices on society, the question of how the adoption of contemporary digital technologies, such as blockchain and artificial intelligence, influences these practices is one of practical urgency. Considering this, this research project seeks to explore whether and how recent technological advancements—specifically the corporate integration of blockchain and artificial intelligence (AI)—can influence corporate malpractices. To address this, the study proposes the following research questions:

- RQ1: What factors drive listed companies to adopt modern technologies such as blockchain and artificial intelligence?
- RQ2: How does a company's use of blockchain and artificial intelligence (AI) impact its behaviour towards stakeholders? Can the adoption of these technologies facilitate compliance and promote responsible business practices?
- RQ3: What underlying mechanisms mediate the relationship between the integration of blockchain and artificial intelligence (AI) and corporate malpractices?

The study intends to employ a mixed-methods approach, combining quantitative analysis with qualitative insights to provide a comprehensive understanding of these issues. The following articles help provide a backdrop of the literature pertaining to this field.

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