ABSTRACT

As the significance of donations in addressing social challenges escalates, enhancing donor trust through increased transparency and accountability in the charitable sector becomes more imperative. In response to challenges identified in prior research, this paper introduces a blockchain-based traceability model, specifically designed to address issues of donor traceability and fund mismanagement. Leveraging core features of blockchain technology, such as immutability, our model significantly enhances transparency and trust in managing and tracking charitable donations. Our proposed model employs a three-tier architecture that involves key stakeholders including donor, charitable institution, recipients, the Ministry of Social Welfare, and tax authority. This architecture enhances oversight and facilitates donor tax deductions, enabling direct tracking of how contributions are allocated and used, ensuring that funds fulfill their intended purposes. Our model has been validated through a satisfaction survey involving key stakeholders, demonstrating its alignment with the operational needs of the donation ecosystem.

Keywords: Donor Trust, Transparency, Charitable, Blockchain Traceability, Tax Deductions.