# Trust in the Circular Economy: What is the Role of Blockchain?

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## ABSTRACT

The circular economy - a system that minimises resource inputs, waste, emissions and energy losses (Geissdoerfer et al., 2017) through recovery and regeneration process at the end of their life cycle (MacArthur, 2013; D'Amato et al., 2017) - emerges as an innovative business model in the context of sustainable development. In this context, digital tools, such as Blockchain technology, can play a crucial role (Khan et al., 2021; Govindan, 2022; Tang et al., 2022;). Using a non-systematic literature review (Kraus et al. 2022) and a multiple-case study (Yin 2009) that analyses three companies selected from the Ellen MacArthur website (Telefónica Tech, the Suez Group and Electrolux) based on secondary data obtained through Desk Research, the aim of this paper is to contribute to the debate on an emerging topic: the integration of Blockchain in circular economy systems. In particular, the study explores the potential of this technology in optimising the exchange of data and resources throughout the circular supply chain and in enhancing trust in both B2B and B2C relationships. The results indicate that Blockchain serves as an effective operational tool for facilitating the exchange of data and resources among independent yet interconnected businesses within a circular system. Additionally, this technology fosters stronger connections between companies and with consumers. By providing greater transparency and traceability regarding product sustainability, it contributes to enhancing trust—a critical element in building strong B2B and B2C relationships.

**Keywords**: Digital Technologies, DLT, Circular Practices, Traceability, Sustainability