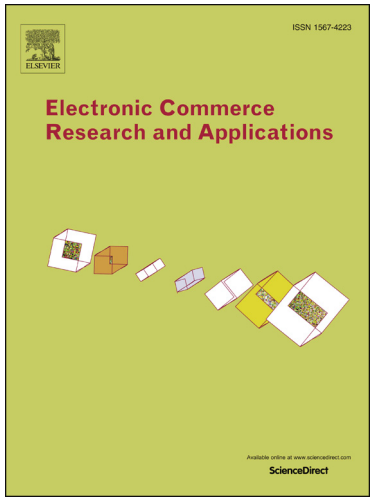

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The limits of trust-free systems: A literature review on blockchain technology and trust in the sharing economy

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Abstract
At the tip of the hype cycle, trust-free systems based on blockchain technology promise to revolutionize interactions between peers that require high degrees of trust, usually facilitated by third party providers. Peer-to-peer platforms for resource sharing represent a frequently discussed field of application for "trust-free" blockchain technology. However, trust between peers plays a crucial and complex role in virtually all sharing economy interactions. In this article, we hence shed light on how these conflicting notions may be resolved and explore the potential of blockchain technology for dissolving the issue of trust in the sharing economy. By means of a dual literature review we find that 1) the conceptualization of trust differs substantially between the contexts of blockchain and the sharing economy, 2) blockchain technology is to some degree suitable to replace trust in platform providers, and that 3) trust-free systems are hardly transferable to sharing economy interactions and will crucially depend on the development of trusted interfaces for blockchain-based sharing economy ecosystems.

Keywords *Blockchain, Sharing economy, Trust, Trust-free system, Literature Review*

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