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Blockchain in Saudi E-Government: A Systematic Literature Review

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Abstract : The world is gradually entering the fourth industrial revolution. E-Government services are scaling government operations across the globe. However, as promising as an e-Government system would be, it is also susceptible to malicious attacks if not properly secured. This study found out that, in Saudi Arabia, the e-Government website, Yesser is vulnerable to external attacks. Obviously, this can lead to a breach of data integrity and privacy. In this paper, a Systematic Literature Review was conducted to explore possible ways the Kingdom of Saudi Arabia can take necessary measures to strengthen its e-Government system using Blockchain. Blockchain is one of the emerging technologies shaping the world through its applications in finance, elections, healthcare, etc. It secures systems and brings more transparency. A total of 28 papers were selected for this SLR, and 19 of the papers significantly showed that blockchain could enhance the security and privacy of Saudi's e-government system. Other papers also concluded that blockchain is effective, albeit with the integration of other technologies like IoT, AI and big data. These papers have been analysed to sieve out the findings and set the stage for future research into the subject.

Keywords: blockchain, data integrity, e-government, security threats

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