
Exploring the barriers in adoption of blockchain technology: a study of cryptocurrency

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Abstract: The speed of adoption of a new technology is one the most challenging question we face when looking into the rewards of innovation. The article explores the barriers in buyer's adoption of bitcoin based on blockchain technology and discusses factors that drive and inhibit their adoption. Our result concentrates only on the barriers to adoption which includes complexity of the system, absence of regulatory authority, trust deficit and speculation in value. In this article, perceived risk structure was proposed based on perceived risk theory, prospect theory, and perceived value theory. Exploratory factor analysis and six regression machine learning techniques were compared and applied on the captured data to examine the degree and direction of relationship among the latent variables used to test the research model. It was found that perceived financial performance risk, perceived trust risk and perceived government risk have major impact on the adoption intention of the investor in India and the result clearly indicates that Kernel Support Vector Regression is the best ML technique to predict bitcoin adoption intentions.

Keywords: fintech; blockchain; distributed ledger; technology adoption.

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