Abstract

This survey research examines the extent of public trust in blockchain-based assets and technologies, as this field develops very rapidly, providing a wide scope of possibly disruptive implementation scenarios. It is established on the suggestion that it is reasonable to measure perceived trust in blockchain-based technologies and services separately, dividing them in two iterations. Such categorization reflects on conceptually different scopes of application: blockchain-based assets (First Iteration) and blockchain-based databases, registries, and provisioning systems (Second Iteration). Most interestingly, such categorization allowed for comparison of the trust extent between 2 iterations. In the literature review, a vast array of existing and potential challenges and concerns has been presented. Suitable trust measurement model and questionnaire were found and adapted for the purposes of this research. Generally, 2 dependent aspects of trust were derived from the model mentioned above. Those were Trusting Beliefs (perceived benevolence, competence, integrity), which influence Trusting Intentions (willingness to depend). Statistical analysis of data gathered from 100+ respondents confirmed the initial suggestion that degree of trust differs between 2 iterations of blockchain-based technologies. It was statistically proven that degree of Trusting Intentions differs significantly between 2 iterations, with Second Iteration being more trusted, judging by mean values. Alongside that, it has been attempted to detect the most important aspect of Trusting Beliefs by means of linear regression analysis. It was found that competence aspect has a particularly predominant influence on Trusting Intentions, in comparison with benevolence and integrity. Possible areas for further analysis and examination by other researchers have been proposed.