

Disrupting Traditional Industries: A Scenario-Based Experiment on How Blockchain-Enabled Trust and Transparency Transform Nonprofit Organizations

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Abstract : Based on principle-agent theory, an information asymmetry exists in the traditional donation process. Consumers cannot comprehend whether nonprofit organizations (NPOs) use raised funds according to the designated cause after the transaction took place (hidden action). Therefore, charity organizations have tried to appear transparent and gain trust by using the same marketing instruments for decades (e.g., releasing project success reports). However, none of these measures can guarantee consumers that charities will use their donations for the purpose. With awareness of misuse of donations rising due to the Ukraine conflict (e.g., funding crime), consumers are increasingly concerned about the destination of their charitable purposes. Therefore, innovative charities like the Human Rights Foundation have started to offer donations via blockchain. Blockchain technology has the potential to establish profound trust and transparency in the donation process: Consumers can publicly track the progress of their donation at any time after deciding to donate. This ensures that the charity is not using donations against its original intent. Hence, the aim is to investigate the effect of blockchain-enabled transactions on the willingness to donate. **Sample and Design:** To investigate consumers' behavior, we use a scenario-based experiment. After removing participants (e.g., due to failed attention checks), 3192 potential donors participated (47.9% female, 62.4% bachelor or above). **Procedure:** We randomly assigned the participants to one of two scenarios. In all conditions, the participants read a scenario about a fictive charity organization called "Helper NPO." Afterward, the participants answered questions regarding their perception of the charity. **Manipulation:** The first scenario (n = 1405) represents a typical donation process, where consumers donate money without any option to track and trace. The second scenario (n = 1787) represents a donation process via blockchain, where consumers can track and trace their donations respectively. Using t-statistics, the findings demonstrate a positive effect of donating via blockchain on participants' willingness to donate (mean difference = 0.667, $p < .001$, Cohen's d effect size = 0.482). A mediation analysis shows significant effects for the mediation of transparency (Estimate = 0.199, $p < .001$), trust (Estimate = 0.144, $p < .001$), and transparency and trust (Estimate = 0.158, $p < .001$). The total effect of blockchain usage on participants' willingness to donate (Estimate = 0.690, $p < .001$) consists of the direct effect (Estimate = 0.189, $p < .001$) and the indirect effects of transparency and trust (Estimate = 0.501, $p < .001$). Furthermore, consumers' affinity for technology moderates the direct effect of blockchain usage on participants' willingness to donate (Estimate = 0.150, $p < .001$). Donating via blockchain is a promising way for charities to engage consumers for several reasons: (1) Charities can emphasize trust and transparency in their advertising campaigns. (2) Established charities can target new customer segments by specifically engaging technology-affine consumers in the future. (3) Charities can raise international funds without previous barriers (e.g., setting up bank accounts). Nevertheless, increased transparency can also backfire (e.g., disclosure of costs). Such cases require further research.

Keywords : blockchain, social sector, transparency, trust

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