

A Framework Based Blockchain for the Development of a Social Economy Platform

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Abstract : Outlines: The social economy is a moral approach to solidarity applied to the projects' development. To reconcile economic activity and social equity, crowdfunding is as an alternative means of financing social projects. Several collaborative blockchain platforms exist. It eliminates the need for a central authority or an inconsiderate middleman. Also, the costs for a successful crowdfunding campaign are reduced, since there is no commission to be paid to the intermediary. It improves the transparency of record keeping and delegates authority to authorities who may be prone to corruption. Objectives: The objectives are: to define a software infrastructure for projects' participatory financing within a social and solidarity economy, allowing transparent, secure, and fair management and to have a financial mechanism that improves financial inclusion. Methodology: The proposed methodology is: crowdfunding platforms literature review, financing mechanisms literature review, requirements analysis and project definition, a business plan, Platform development process and implementation technology, and testing an MVP. Contributions: The solution consists of proposing a new approach to crowdfunding based on Islamic financing, which is the principle of Mousharaka inspired by Islamic financing, which presents a financial innovation that integrates ethics and the social dimension into contemporary banking practices. Conclusion: Crowdfunding platforms need to secure projects and allow only quality projects but also offer a wide range of options to funders. Thus, a framework based on blockchain technology and Islamic financing is proposed to manage this arbitration between quality and quantity of options. The proposed financing system, "Musharaka", is a mode of financing that prohibits interests and uncertainties. The implementation is offered on the secure Ethereum platform as investors sign and initiate transactions for contributions using their digital signature wallet managed by a cryptography algorithm and smart contracts. Our proposal is illustrated by a crop irrigation project in the Marrakech region.

Keywords : social economy, Musharaka, blockchain, smart contract, crowdfunding

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