기부활성화를 위한 이더리움 기반 게임 플랫폼 설계

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Ethereum-based game platform design for revitalizing donation

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● 요 약 ●

In this paper, we propose a donation game platform using blockchain to revitalize the shrinking donation market. The platform is designed to ensure transparency and user reliability in the use of ethereum's smart-track function and to attract interest from donors and encourage continued donations by introducing games into the donation process through donor organizations to address the opaque nature of the donation and use of the funds and the result of the donation portfolio. It also develops a donation ecosystem that benefits donors, donors and sponsor companies alike by platforming them.

키워드: 블록체인(Blockchain), 스마트 컨트랙트(Smart Contract), 기부(Donation), 게임(Game), 퍼네이션(Funation)

I. Introduction

Recently, requests for donations have diversified, but the contribution participation rate has been decreasing. According to the 2017 survey by the National Statistical Office, 68.3 percent said the reason for the donation group's transparent management of funds was "the most necessary thing for the spread of donation culture."This paper presents a new method of donation platform utilizing the transparency of blockchain on donation platform. The 2019 donation trend presented in the fruit of love can be largely divided into four.
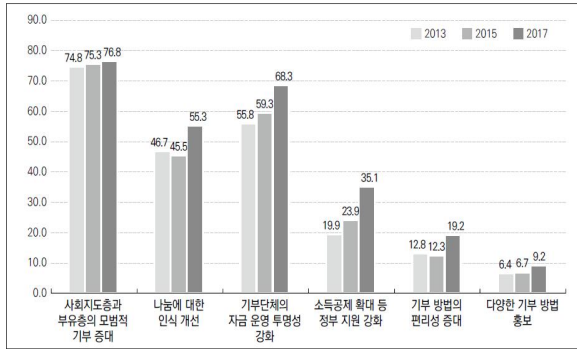
The first is the coexistence of traditional and new ways of giving. Many experts believe that new ways of donating money through online fundraising, crowdfunding and donations through one-person media, along with the decline of the traditional way of fundraising (street fundraising, broadcast fundraising, etc.), will gradually expand the scope. However, donors are still familiar with the traditional way of raising money, so the traditional way of donating money is likely to be in an important position, and for a while there will be a mix of traditional and new ways of donating.

Second, donations are focused on social contribution rather than charity itself. According to a survey by the Sharing Institute, 80.1 percent of those who agreed to the question that "the change has changed into an atmosphere where they want to know what happened by donating," with the overall social mood for donations focusing on purpose and performance rather than on the act of the donation itself. Examples of corporate social responsibility, the Corporate Social Responsibility (CSR), show that while the proportion to social welfare or philanthropy is declining, efforts are being made to establish a new business model regarding environmental issues and other issues. As a result, the scope

of donations seems to be diversifying away from stressing only the charitable aspects and emphasizing the performance and impact of projects.

Table 1. What is needed for the expansion of donation culture[1].

II. Preliminaries

1. Block chain

The blockchain is distributed data storage technology that stores data in blocks and links it in a chain, Replicating it to numeric computers at the same time.

2. Exmple of Donation with blockchain(Funation)

Funation is a combination of "Fun" and "Donation," with the aim of boosting donations by lowering the threshold for donations in an interesting way, focusing on how much they donate rather than how much. Examples of Pernation include tvN's "Coffee Friends" and "Spain Lodging," which donated proceeds from broadcasting programs, and "NaeSanne Rice," which provides motivation for diet and provides rice aid to children who eat meals.

III. The Proposed Scheme

his paper spreads 'easy and interesting donations' through the game. Through the game, it aims to attract potential donors who are not interested in donations that were looked at in previous introductions and to secure transparency through blockchain to solve the cause of the donation-for-povia phenomenon.

Following is implementation environment.

Game Production: Unity
Production of smart contact: solidity
Electronic wallet: meta-mask
Development tool: Hanache
GUI: Spring framework

Fig. 1. Use environment

It will raise funds by making simple games such as making its own tank, decorating fish, and buying items, and when the amount of fundraising is collected, it will create a donation platform that will be donated through a donation group automatically linked through the smart platform of the ethereum platform. Smart Compound is a contract function supported on Solidity, the programming language of ethereum, that automatically performs a set function on a blockchain when certain conditions are met, and, in line with the security of the blockchain, this can be a powerful way to "promise" in the donation system.

IV. Conclusions

The purpose of this study is to design a program to induce donation while enjoying a game based on funation using blockchain technology.Through this study, we expect that many donors will easily and interestingly participate in donations and check transparent donation details to increase the rate of future donation diffusion.

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