
Toward an Open Platform for Organized, Gamified Volunteerism

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Abstract

Gamification has been employed to enhance user attraction, satisfaction, and retention in a wide variety of applications. Its success suggests that nonprofit organizations and social causes could also exploit these techniques to enhance volunteer engagement and satisfaction. In this paper, we motivate the application of gamification to the activities of such groups, analyze the requirements of a gamified volunteer management platform, and present an overview of our prototype platform designed to address these needs.

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Introduction

Gamification is a design strategy wherein game-like elements are added to everyday situations with the goal of promoting repetitive behaviors. Through the use of rewards such as points and achievements, or competitive elements like leaderboards, an individual experiences greater satisfaction with the activity and is more likely to continue participating. Public familiarity with gamification has recently grown due to the popularity of mobile apps which employ it in contexts such as fitness and learning [7].

Gamification's success in attracting users to these apps as well as retaining them suggests that it can also be applied by nonprofit organizations (NPOs) and social causes in order to increase volunteer recruitment and retention rates, while simultaneously improving volunteers' subjective experiences. In this paper, we will explore our motivations for designing a gamified volunteer management system, share our insights into its requirements, and present our design for a prototype platform which addresses them.

Clary & Snyder' six functions of volunteerism [1]:

Values: To express important personal values.

Understanding: To learn more about the world.

Enhancement: To grow and develop psychologically.

Career: To gain career-related experience.

Social: To strengthen social relationships.

Protective: To reduce negative feelings or to address personal problems.

Motivation

Individuals' motivations to volunteer have traditionally been attributed to several internal catalysts, such as those enumerated in [1] (see margin note). However, external motivators such as rewards have recently been identified as more effective, particularly among Millennials [6]. Additionally, it has been observed that volunteer retention rates suffer once these initial motivations have been fulfilled [3].

In addition to issues with recruitment and retainment, many community efforts also suffer from a lack of appropriate organizational tools.

For example, consider the case of the Occupy Wall Street movement, which despite gaining a significant following after its formation in 2011, stagnated by the end of that year. Though social media was used for advertising and recruitment, it failed to function as an effective leadership or coordination platform. The uniquely decentralized nature of the movement, combined with a lack of appropriate organizational tools, ultimately culminated in a failure to mobilize ready-and-willing volunteers toward common goals [5].

However, the hardships experienced by Occupy Wall Street are not exclusive to its decentralized structure. One of the world's largest charities, the American Red Cross, experienced similar failures during its relief efforts following the 2010 Haitian earthquake. Despite having raised an impressive \$500 million USD (raised with the help of social media), the organization fell remarkably short of goals regarding the construction of permanent housing. This shortcoming has been attributed to poor organization as well as an inability to recruit effective workers [2].

To review, we have observed three major areas of inadequacy among volunteer efforts: recruitment, retention, and organization. We posit that gamification of the volunteering

process would improve retention as well as stimulate the recruitment of new volunteers. However, a gamified system for volunteerism must also address the unique organizational needs of NPOs and social causes (see Fig. 1). Thus, we believe there is a need for a holistic platform which encompasses all stages of a volunteer effort, from advertising and recruitment to real-world action and results.

Requirements

Most extant productivity, organization, management, and collaboration tools are targeted at for-profit businesses; addressing the needs of NPOs is not as lucrative, therefore they are forced to make do with inadequate means. For example, NPOs employ disjoint sets of tools such as social media, messaging platforms, mailing lists, and digital sign up sheets which have all proven to fall short of their requirements [4].

Our assessment of the requirements of NPOs, ascertained informally from our interactions with the organizers of several local community efforts as well as our observations of other groups at large, is summarized in the listing in the left column of the next page.

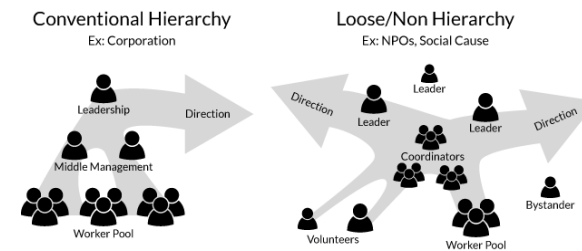


Figure 1: The decentralized organizational structure common to NPOs and social causes necessitates unique management tools.

The needs of NPOs:

- To promote a message or mission.
- To recruit qualified, skilled volunteers.
- To incentivize volunteers to complete tasks.
- To encourage continued participation from volunteers.
- To provide volunteers a variety of opportunities, allowing them to select tasks based on their own schedules and skillsets.
- To administer volunteer actions using a centralized management interface.
- To maintain accountability of participants.

Presently, these goals are not wholly met by existing tools or platforms, and the unique requirement of volunteer incentivization remains a major obstacle. Thus, we propose a design for an open, gamified task management platform which fits this niche.

An Open Platform for Gamified Volunteerism

Zeall is a Web-based platform we have designed specifically to meet the aforementioned needs of NPOs and social causes. It includes features related to task management, social media, and reward-based gamification, and is open in that it may be used by several organizations or causes simultaneously. Any user is capable of acting as either a volunteer or a coordinator; as a result, both highly-structured and decentralized efforts are capable of coexisting within.

From a coordinator's perspective, the fundamental aspect of Zeall is the management of *missions*, or sets of related tasks (representing, for example, the various steps involved in organizing a single event). Each mission can be administered either by a single user or a group of several.

Each mission is posted to relevant *channels*, or categories organized according to a common underlying cause. Volunteers may follow channels of their choice in order to discover missions of interest to them. A recommendation system is also employed to augment user feeds with additional missions that may fall outside their selections.

In order to sustain a volunteer's interest and motivation, we have made reward-based gamification a core feature of Zeall. Volunteers are awarded points for the completion of each task (which may be verified either manually by a coordinator or automatically by our system, depending on the task's nature and the coordinators' preferences).

To incentivize continued participation on short timescales, a large point bonus is issued to users who complete all of the tasks within a particular mission (see Fig. 2). In addition to the standard reward of points, coordinators may opt to offer additional bonuses or rewards to exceptionally meritorious volunteers. At the mission's conclusion, coordinators themselves are also awarded based on the mission's breadth and execution. This creates an incentive for effective leadership and enhances the reputation of capable leaders.

Long-term participation is encouraged by site-wide achievements and milestones, which may be reached only by a participant's repeated action. For example, completing ten missions for the same cause may result in an achievement designating a user as a "Zealot" for that cause (see Fig. 3). Since surveys indicate that competition among participants enhances volunteer involvement [6], Zeall also includes leaderboards ranking the most active contributors. As a result, rivalries between users may grow organically and then be exploited for the benefit of NPOs and social causes.

After a mission or task has ended, Zeall offers an extensive set of analytics for review by its coordinators. Metrics allow the leader to assess their own performance, as well as that

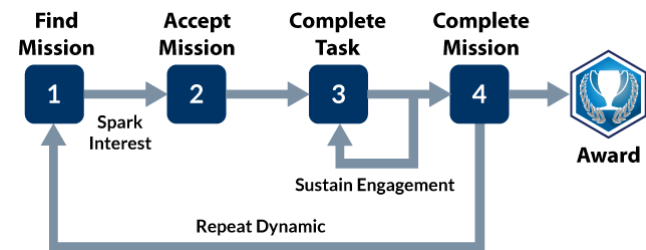


Figure 2: Zeall stimulates continued engagement among volunteers by incorporating awards and repetitive elements.



Figure 3: A sample achievement offering prestige, uniqueness, rarity, reward, and social incentives.

of their volunteers. For example, task success rates and volunteer retention rates for the duration of the mission elucidate whether they coordinated it successfully, and may point out areas where they can improve their management skills. Meanwhile, volunteers are held accountable for their performance and can be tagged with comments for consideration by other coordinators.

By offering volunteer recruitment, management, motivation, and assessment together on one platform, we believe that Zeall addresses the needs we have identified for the operations of NPOs and social movements.

Conclusions & Future Work

In this paper, we have identified several organizational and operational shortcomings of nonprofit organizations and social movements, and motivated that they be addressed by a gamified management platform. We have reviewed the requirements of such a platform and presented an overview of Zeall, a prototype which meets these specifications.

We are presently wrapping up the development of an alpha-stage prototype of our platform, and will evaluate it with real users in the near future. Many local community groups have confirmed interest in the platform, and we anticipate that several will participate in our alpha test. Potential metrics to evaluate the efficacy of Zeall are currently being explored.

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