
Rewarding Contributions in a User-Generated Video Online Community

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Abstract

With the aim to create an active, sustainable, and self-maintained user-generated video online community, this paper proposes a reward scheme to enhance users' intrinsic motivations towards participating in the community and contributing content. The proposed reward scheme features a system of points, the accumulation of which achieves higher membership levels in the community, which in turn "unlock" specific privileges. Status points can be collected through users' content contribution and rating activity in the community, fostering thus the community's self-moderation. Following a gamification approach, the scheme provisions for badges which can be collected by users, according to their activity in the community. User rewarding is also accomplished by means of reputation, ensuring that the status, contributions, ratings, and badges of a user are visible to the entire community.

Author Keywords

User reward; User motivation; User-generated content online community.

ACM Classification Keywords

H.1.m Models and Principles: Miscellaneous; H.5.3 Information Interfaces and Presentation (e.g., HCI): Group and Organization Interfaces.

The User-Generated Video Online Community

The OC aims to assist the process of professional video productions by integrating UGC, enriching thus the conventional broadcasting experience. To achieve the aforementioned objectives, two main target user groups are involved, i.e., professionals and end-users who are requested to submit their video recordings of various events (e.g., a football match or a music festival).

The proposed reward scheme pursues to engage a large number of dedicated UGC contributors, who will also have the opportunity to continuously evolve through professional assistance and evaluation of their work by professionals. On the other hand, professionals will gain access to a vast and systematically improving content, which will originate from the simple users.

Introduction

The life cycle of an Online Community (OC) involves several stages beginning with the inception, its birth, further growth, leading on to maturity, and (hopefully not) death. Keeping an OC vivid and alive requires among others the contribution of good quality content in quantities adequate for the members' needs.

Several factors have been found to influence a user's intention to use and continue using, as well as sharing knowledge in an OC. In more detail, specific characteristics of an OC can act as knowledge sharing motivators, including system quality and information quality [9, 19], as well as features that promote users' privacy and trust in the community [12, 18]. Furthermore, several intrinsic motivators have been identified, such as the users' sense of belonging to the community [20], altruism [8], self-efficacy [6], the expected outcomes and reciprocity [4, 3], reputation and identification with the community, or the social interaction with members of the OC [15, 1]. On the other hand, focusing on User-Generated Content (UGC) communities and users' motivators, literature confirms that sharing in such communities is mostly ruled by intrinsic user motivations, such as identification within the community, the possibility for future reciprocation, and the user's self-efficacy [11, 14], while it is also affected by users' individual characteristics [17, 16].

Although the exact motivators for participating in an online community may vary among individuals, a well-designed reward scheme may enhance users' intrinsic motivations towards participating in the community and contributing content, supporting thus the prosperity and longevity of the community. This paper presents a reward scheme for a UGC video community aiming at

motivating users towards knowledge sharing (i.e., video contributions), encouraging active engagement through participation in the community and rating content, and fostering high quality contributions. The good quality of contributions and user participation beyond mere content sharing is expected to keep the OC flourishing and provide at the same time a quality-control management mechanism by the community itself.

Related Work

Several studies have considered the impact of specific rewards in OCs. One type of reward, which was found to have an impact on the quantity and not the quality of contributions [10], includes reputation (or status markers) and is based on historical information of a user's contributions [7], such as experience points, level in the community and ranking. Such a reputation system provides track records of knowledge contributors' past activity, thus promotes trust to knowledge seekers and also acts as a positive feedback to users' competence [10]. Respective rewards may also include attention, recognition, commendations, compliments, and praise, and they can be extremely powerful incentives, as long as they are public, infrequent, credible, and culturally meaningful [13].

Another type of reward are tangible rewards. These may include money, specific prizes (e.g., a T-shirt for the ten best contributors), or points that can be redeemed for a limited set of prizes or charitable donations to causes that the recipients support [7, 13]. It should be noted that although extrinsic rewards usually help raise the number and quality of contributions, two caveats are observed as common side-effects [7]. Firstly that rewards sometimes create

Co-design workshop

Two workshops were organized, each involving six participants, making sure to have an as-wide-as-possible distribution and balance among ages and genders (Table 1).

	First	Second
20-30	2	1
30-40	2	2
40-50	1	2
>50	1	1
Male	3	3
Female	3	3

Table 1: Participants' demographic information for the two co-design workshops

The workshop was structured in four main sections:

- *Familiarization* with the topic and the goals of the online community
- *Presentation* of the initial reward scheme
- *Review and refinement* of the reward scheme
- *Mock-ups creation* to roughly illustrate the final reward scheme

the wrong incentives, causing some people to “game the system” by undertaking actions that will be rewarded but do not actually contribute to the community. Secondly, tangible rewards undermine free-choice intrinsic motivation for activities that people find interesting. Finally, another mechanism for rewarding users is via privileges, which may include access permissions to the activities of the community (such as read-only access, permission to post content, privilege of moderating others' content, uploading a personal photo to their profile) and can serve as a status symbol or a validation of a member's competence and loyalty to the community [7].

Given the above, a popular reward mechanism may involve a point system, through which the community members are rewarded according to their contributions. Such a point-based system, featuring four membership levels is described in [5], while an adaptive mechanism offering rewards according to the value and timeliness of users' contributions is presented in [2].

The Proposed Reward Scheme

The user reward scheme was designed through an iterative process, according to which an initial scheme was designed, taking into account the related literature review regarding knowledge contribution motivators, as well as specific rewards and reward schemes, and best practices in well-known OCs. The initial scheme was then assessed, refined and polished in a co-design workshop setting, during which several paper prototypes illustrating the reward scheme were also produced. With the aim to provide incentives by means of reputation and privileges, and further enhance user motivation through gamification the reward scheme features the following attributes:

- **Points:** Users accumulate points by contributing content and rating material.
- **Membership levels:** Users advance to higher membership levels, according to their points.
- **Badges:** Users may collect badges according to their activity in the community.
- **Privileges:** Users enjoy a variety of privileges according to their membership level.
- **Reputation:** Rewarding is also achieved by means of reputation, which is by identifying and making visible to the community the status and badges of each user.

In more detail, users will be able to collect points according to their video contribution and rating activity. The number of points to be collected is relevant to the importance of the activity for the community. An important parameter that will determine points is the timeliness of a contribution (as defined by the professionals who will issue content calls): (i) timely contribution (e.g., during the event) which will award users more points, (ii) rather timely contribution (e.g., a while after the event) (iii) quite some time after the event (threshold after which the contribution is of no importance to the producer). Additional point-earning user activity includes: having one's video used in a professional production, uploading high quality videos, content exclusivity (awarded by the professionals), and highly rated contribution by the user community.

On the other hand, a user will lose status points for violating terms and conditions regarding the video content. The exact number of points to be removed will be decided on a per case basis, according to the violation. Nevertheless an algorithm for deducing points will be in place. The professional that will determine

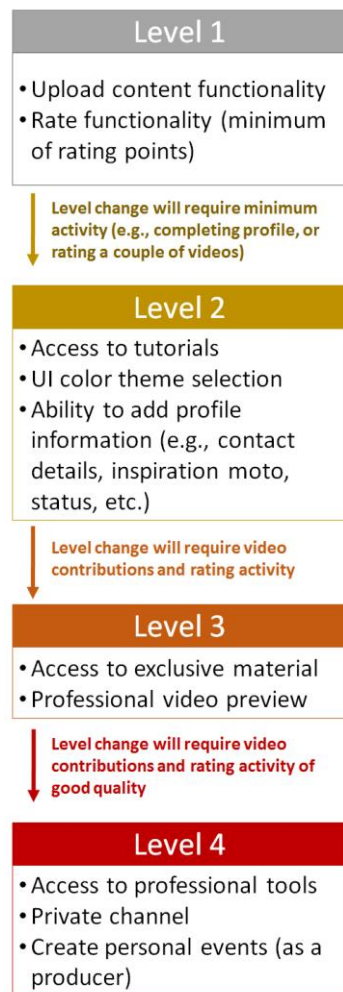


Figure 1 User privileges across the four envisioned membership levels

that the video has violated terms and conditions will select a characterization from a predefined list and points will be automatically deducted. Illegal actions may also result in users being banned from the community, however such decisions will be made by the community moderators (e.g., professionals).

With the aim to make users revisit the OC often, each user will also receive points for registering to the community (once) and one point for every log-in (once daily). On the other hand, users should lose points for long periods of no log-in or long periods of inactivity, in order to be continuously motivated to participate in the community and preserve the privileges they have already received. Moreover, users should be motivated to participate, even though they may have no videos to contribute. Therefore, they will also be rewarded for their rating activity, and more specifically for: accurately rating a video, receiving a rating for one of their videos and correctly reporting inappropriate videos. Repeated false reporting of material/users will result in losing some status points, to deter users from gaming the system. As users earn status points, they will be able to advance their membership level and enjoy a number of privileges. Four membership levels are foreseen, with different privileges per level, as illustrated in Figure 1.

Besides privileges, users will be rewarded through their reputation in the community. To this end, one's membership level status will always be visible via their profile. Additionally, and with the aim to include gamification features and further enhance fun and user involvement, the reward scheme involves badges and a "Hall of Fame". Badges will be awarded to users according to their contribution in the community, in

terms of video quantity and quality, as well as regarding their rating activity. A user may collect one or more badges of each type, and add them to their collection which will be available through their profile page. Furthermore, a "Hall of Fame" will be available in the home page of each user, showing the most competent community members. Aiming to support identification, each user will have a profile page, which will showcase their contributions to the OC. For instance, it will feature all the user's video contributions (acting at the same time as a personal repository), it will showcase all their badges, it will indicate their membership level and provide prompts as to how to advance to the next level, while it will also provide access to the user to privileged material.

Conclusions

This paper has presented a reward scheme designed for a User-Generated Video Online Community addressing end-users and professionals. In summary, the reward scheme that will be applied in the context of the OC aims to motivate users towards sharing video and encourage their active participation, by rewarding high quality contributions, as well as active and loyal members. Future work will focus on the implementation and deployment of the proposed reward scheme in the OC, as well as its evaluation with users.

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