What do I get out of it? Reflection on the use of incentives for civic engagement

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ABSTRACT

Incentives are a popular element among gamification approaches. They specifically aim to increase people's motivation in an activity or topic. However, offering incentives and giving out rewards can backfire as they only add to extrinsic motivation and might even replace the intrinsic interest. This paper reflects on the usage of incentives as part of the strategy of gamifying civic engagement in an attempt to foster participation. A case study is presented where the potential impact of offering incentives in a participatory contexts are investigated. The case study is essentially a field trial that has been conducted with a number of participants using/evaluating a pervasive mobile participation application that pushes polls to participants' devices. We analysed which type of an incentive is the most likely to motivate participants to complete the survey, and whether there is a correlation between a user's trust in the sending institution and the likelihood of answering the poll. Our findings show that incentives do influence participation. Some participants, however, reported concerns with respect to handling of personal information and location tracking. Based on the results of this study we discuss potential opportunities and challenges of providing incentives in the context of digital participation. We argue that offering those people incentives is not ethical as it resembles persuading them to do something against their will.

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Gamification, civic engagement, incentives, rewards, m-participation, motivation, trust, trustworthiness, privacy

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INTRODUCTION
When we want people to do something, we often resort to offering incentives. In most cases, incentives become necessary when someone's own initial (i.e. intrinsic) motivation for the task is not strong enough to make him or her perform the task. Therefore we need to provide something else, something external (extrinsic motivation)

to *persuade* him or her to do something. In an optimal situation, the person does not even realize that his or her motivation has been boosted. This would be optimal in a sense that the person would believe that he or she is performing the task out of their own free will. When afterwards asked for the reasons of performing the task, the person would try to find factors that are in line with his or her own viewpoints instead of saying that he or she wanted to get the rewards. By linking their motivation to their own believes, people often tend to have a more positive attitude towards the task they performed or the underlying purpose and context. On the other hand, if people can claim that they only did something because they were told to do so or because they were aiming to gain rewards or claim incentives, they are distancing themselves from the actual cause, which suggests that they did not really care about the underlying purpose in the first place.

People who already possess intrinsic motivation for a task and hence would do something anyway, but are offered incentives on top might react in two ways: 1) they gladly accept the incentives or 2) they reject the incentives.

Some studies suggest that offering rewards as an external (additional) incentive, might in the long run replace intrinsic motivation (e.g. Lepper et al., 1973). In that case people would to some extend lose their initial interest in the activity or even not carry out a task when not being offered something in return. Following this thought, it is further difficult to stop providing rewards once they have been given out. People will expect something in return for their action. This circumstance is referred to as the "reward loop" (Nicholson, 2013). It is worth mentioning that not all incentives are effective in encouraging someone to do something. Different people might be tempted by different things. Contrary to that, appealing to someone's intrinsic motivation is a more reliable approach as this method does not try to *persuade* someone but more *convince* or making people realize that they also want a specific action to be taken.

Another reaction of being offered could be that people feel that they are being controlled as to what they should do and thus suspect that they are losing their autonomy. Autonomy is one of three important principles in the "self-determination theory" by Deci and Ryan (1985), which describes innate needs for intrinsic motivation. If these factors are missing in a system, this application will most likely not be able to foster intrinsic motivation within a user. Moreover, rewards can also devaluate the

activity. By having to offer something additional in order for people to take action, it is suggested that the activity is not valuable enough by itself to be worth undertaking. People who have an intrinsic interest in the activity might then feel offended by being offered incentives.

In games where people are used to receiving rewards for certain activities, reactions to incentives are arguably much less pronounced than in real-world contexts. Typically in-game activities have little to no influence on the real world. Performing in-game actions is in most cases completely voluntary and is arguably to some extent based on a person's intrinsic motivation. Therefore we argue that the influences of incentives (such as the replacement of intrinsic motivation) are not as severe as in real-world contexts. Moreover, we postulate that in some contexts people are more likely to respond and accept incentives than in others. This paper aims to explore the influence incentives can have when being offered in civic engagement contexts.

This is of particular relevance, as being faced by a decreasing political participation, municipalities all over the worlds are looking into new methods to foster participation. One of those novel methods is to implement digital participation platforms (so called e-participation), where citizens can raise their voice and discuss urban topics among each other and governmental officials. As of now the emergence of e-participation did not result in an increase of civic engagement. While there might be several explanations for this (e.g. the novelty of the phenomenon), some researchers claim that is due to the fact the majority of these new tools are not designed in a way that would encourage people to use them. The most common critique is that these platforms only implement a one-way communication channel instead of enabling a dialogue between citizens and a city (cf. Thomas & Streib, 2003; Ertiö, 2013). A popular response to the low acceptance or usage rate (here evaluations are also scarce) has been to incorporate game elements into e-participation platforms. This approach is known as "gamification" (cf. Deterding et al, 2011). As often in the domain of gamification, business applications were the first to experiment with this approach to increase the usage of the respective system. Only recently scholars began to explore the use of gamification in civic engagement contexts (cf. Thiel & Lehner, 2015). The majority of studies have been focusing on the general effects of applying game elements (cf. Bowser et al., 2014; Poplin, 2012). We however are interested in the influence specific elements can have on participation. While there is a great variety of game elements and mechanics, this research concentrates on the use of incentives.

This paper begins with a section on incentives, describing the challenges and opportunities of this game element. Consecutively, present a case study where a mobile application was used to ask people for their participation in a number of different polls. It was investigated whether and what kind of incentive does have an influence on participation. We also assess the privacy concerns of the users in adopting a pervasive participation application.

We conclude the paper with a discussion of our findings and their implications.

INCENTIVES IN CIVIC ENGAGEMENT

Incentives are physical or conceptual artefacts offered to a user to increase his or her motivation to perform an interaction within a system. In the context of civic engagement, these activities could for instance be posting an idea or commenting an entry. In general, incentives can be categorised based on three aspects of outcome: monetary and non-monetary rewards; virtual and real (or material); and rewards based on altruism. Most common in games but also in gamified applications are non-monetary virtual rewards such as life-bonus or badges.

Kohn provides a comprehensive overview of for whom rewards can be effective, for how long they work and the aspects at which they can be effective (Kohn, 1999). He also emphasizes the drawbacks of using rewards as motivation. Kohn argues that after having been offered something in return for an action, people would a) lose their intrinsic motivation for the tasks (an effect that has been verified and named "overjustification" (Lepper et al., 1973)) and b) would expect to get rewards for every interaction they perform. Thus, people would not carry out tasks without receiving something in return. Furthermore, Kohn found that tasks are performed more poorly than when not being offered incentives. Apart from Kohn, other scholars have also highlighted that incentives are a "tricky" element to apply in order increasing a system's usage. Their concerns are connected to the influence this element is said to have on motivation. On the contrary, another study did not find any significant changes in users' behaviour when being offered rewards (Flatla et al., 2011). Taking the different contexts of the cited studies and their sometimes contradictory outcomes into account, the influence of rewards might be dependent on the domain in which the application is being applied. Accordingly, some domains or people might be more sensitive to the use of such game-related elements in certain contexts. This further adds to the significance of investigating the influence of incentives in civic engagement systems.

Some people compare gamification and especially the use of rewards to "brain-washing". They argue that by using game elements, the true purpose of the platform is masked and users are tricked into doing actions of which they are not fully aware of the implications. Apart from scepticism targeted against the general use of rewards and incentives, making use of these elements in the domain of civic engagement and thus trying to increase someone's involvement in democratic topics is debatable. By default, democracy is something that should come from people's own free will. Hence, some scholars argue that offering something in return for their democratic participation goes against democratic principles and using incentives or even game elements in general is not appropriate in this domain. Their concerns are mainly that being incentivized to do something (e.g. vote on a poll) leads to people not stating their true opinion based on their intrinsic motivation and belief but rather by being motivated by the wish of getting the reward. Taking this

thought further, their activity might mirror somebody else's opinion, something that the participant has not entirely thought through or in the worst case reflects something that the person does not really want but could not think of anything else to put in order to claim the reward.

Concerns regarding the detrimental effect of incentives arguably might not hold true for everyone. Yet, if true for even a small portion of the population, it would still falsify results of for instance ideation processes and therefore be not representative for the general public opinion. This again – from a democratic and political perspective – calls for a thorough evaluation of the effects of using rewards and incentives in civic engagement tools.

CASE STUDY: METHODOLOGY AND MEASURES

To study gamification in a real-life context, we conducted a case study evaluating the effect of various incentives on participation frequency. We also assessed the effect of different senders and their trustworthiness on participation frequency. Finally, we evaluated the reasons why the some participants decided not to install the application.

The study was conducted as a two-week field trial using a mobile participation platform called FlashPoll. The study was introduced to the participants as market research rather than as a user study to encourage as natural usage patterns as possible. Within the fourteen-day period, each participant received eight polls with seemingly varying senders and incentives. The deception was clarified after the trial within a short debriefing. The study received ethical clearance by the Ethics Board of Department of Psychology and Ergonomics of TU Berlin. An incentive of 15€ was given for participation in the study. Participation in the field study was not mandatory; the non-participants were asked for the reason for not installing the application, and given an incentive of 5€ for filling out a questionnaire.

Four different types of incentives for participation were introduced in the eight polls:

1. Direct personal benefit (monetary)
2. Indirect personal benefit (improved service)
3. Benefit for the greater good (e.g. helping science or the homeless)
4. Benefit for the organization that sent the poll

After each interaction with the application, the users were presented with a short questionnaire that appeared automatically on their phones. Within the questionnaire the participants were asked what they had done with the application, and in the case of a participated poll, about their reasons for having participated in the poll. The questionnaire also asked how trustworthy the participants rated the organization that had sent the poll.

In total 36 smartphone users participated in the field study. 27 of these received polls, 11 either had some technical issues or revoked their participation.

We measure participation frequency as a percentage of the responded polls over the received ones. The participation frequency is measured per incentive type. We found the given incentive to play little role in the decision to participate using a mobile application, as no differences were found in participation irrespective of the incentive. Trustworthiness of the sender was reported by the participants within the short questionnaire after having responded to a poll. The participants could give their response on a continuous scale anchored with "Very untrustworthy" and "Very trustworthy". Based on our initial results, it seems that the trustworthiness of a sender is not a deciding factor in participation frequency.

In the case a participant stated that they would prefer not to download the application and participate in the market study, we asked for the reasons for non-participation. The participants gave their reasons in free text.

There were altogether 11 participants who filled out the questionnaire regarding their non-participation. Of these, six could be identified as privacy concern, three found the installation of the application too complicated, and two declared having been too busy to participate. The comments that we interpret as privacy concern included statements[1] such as

"[…] I don't want to […] show and share where I am at the moment. Nowadays there is already enough espionage."

"Insecurity in relation to my personal data."

"[…] I'm very careful what apps I install with respect to location positioning on my phone, and am reluctant to let much information being shared (even if I believe that my information would be used meaningfully, I'm still cautious)."

DISCUSSION AND CONCLUSION

Being faced with a growing alienation of citizens from institutional politics which results in low engagement and decreasing voter turnout, several municipalities have started to create digital participation platforms. Although these arguably mitigate barriers to participation (Amichai-Hamburger, 2008), they also pose challenges. Among the greatest challenge is the activation of users. One approach to increase the motivation of citizens is the integration of game-inspired elements. While there are already studies that suggest of positive influence of gamification on the usage of systems, it is yet rather unclear which elements cause this effect. This study investigated the impact of rewards and incentives on the level of participation. Our preliminary results show that incentive does not influence participation using a mobile participation application. These findings have to be verified in more focused studies (e.g. in a real-world setting involving authorities). If they prove to be representative, it would mean that rewards in e-participation platforms are superfluous which in turn will settle the concerns towards gamified engagement tools.

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[1] All comments are translated from German.

We have further explored whether the sending institution and the trust in the same impacts the willingness to participate. According to our results, there are significant differences in the perceived trustworthiness of the various institutions behind polls. Nevertheless, the trustworthiness does not seem to have any impact on whether the poll is participated in or not.

Finally, even though the used participation platform attempts at being highly transparent with privacy practices, we identified the information privacy concern being a prominent reason for non-participation. This potentially leads to unrepresentative sample if the most privacy concerned users do not feel safe to install the application, which is a real problem for democracy.

Many users seem to have strong privacy concerns that might be inhibiting them from using this kind of an e-participation application. It is ethically questionable to expect them to use this kind of platforms anyway, or even more so, use persuasion to make them participate. By offering them incentives, it is basically hoped to overshadow their doubts by sparking a different kind of motivation (the extrinsic longing for the reward). When using incentives and rewards as an approach to increase users' willingness to perform an interaction, it has to be made clear to the user that his or her actions are still voluntary and the user has remains his or her autonomy. To achieve this we suggest to only offer small incentives of low value outside the system, meaning that the incentive should primarily be targeted towards user's intrinsic interests (e.g. succeed in the game, support a cause). The incentives should remain secondary and only *add* to an already existing initial motivation.

Based on our results, offering incentives does not seem to be beneficial in terms of enhancing participation activity. In addition, it is still unclear whether incentives deteriorate the quality of democracy through falsified statements. In this light, introducing incentives to a democratic process does not seem to be advisable.

The contribution of this research is twofold. First, it advances game research by providing insights to the influence of specific game elements as well as contributing to the definition of a common terminology. Second, it helps practitioners such as city officials design effective and sustainable tools to increase civic engagement.

Future work will include more focused studies with a larger sample rate on the impact of rewards.

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