DESIGNING EVENTS AS GAMEFUL AND PLAYFUL EXPERIENCES

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Abstract

This paper outlines the outcome of our experiment with applying game design elements to a festival event with a strong conferencing component, to help facilitate attendee networking, enhance learning outcomes and provide a platform for collaborative problem solving. We provide an outline of potential key factors in how similar events might be gamified so that organisers can create engaging and playful experiences that can be used for practical purposes, rather than passive attendance.

Keywords

Gamification, events, conference facilitation, games with a purpose, game design, experience design, motivation, mass collaboration, games for change, knowledge city, urban liveability.

ACM Classification Keywords

H.5.1 Multimedia Information Systems

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Introduction

With the inaugural launch of the Games for Change movement in Australia in 2012 (www.gamesforchange.org.au), we as the producers of the event were looking to design the first Games for Change Australia-New Zealand festival as a holistic experience by using gamification or "the use of game design elements in non-game contexts" [1] to achieve the curatorial objectives (a) to engage attendees in meaningful playful and gameful activities, and (b) to engage in collaborative problem solving aligned with the topic of the event.

There is nothing new in the notion of 'event games' per se, however most reported examples of events have been focused on one or two of these factors, but not all combined. In particular, using a gamified event experience for collaborative problem solving is uncommon. The closest examples we profiled in our background research for our gamification design decisions included the GDC Metagame in 2012 [2], the SAP GoGame in 2012 [3] and the GMIC Sustainability Conference in 2011 [4]. Our particular interest was the use of a gamified experience to "crowd-source" collaborative ideation and problem solving. Specific examples that inspired us included the gamified Spigit platform (www.spigit.com) which uses a specific organisation or location for ideation and problem solving; the Kaggle platform (www.kaggle.com) that runs competitions to solve enterprise challenges and 'FoldIt" a game designed by the University of Washington to crowd-source solutions to folding the proteins of a strain of the AIDS virus [5]. Similar research on games with a purpose (GWAP) has reported several case studies where online games can be designed to solve large-scale problems [6] [7] [8]. Furthermore, using games and game-like environments to solve problems has received wide attention in the popular media [9] [10] [11]. This attention has raised public awareness and willingness to using games and gamification experimentally in nonentertainment contexts.

The common denominator of these gamified collaboration platforms and GWAPs is that they engage and motivate people into playing a game or activity to solve a meta problem. They all belong into what had previously been identified as the wider trend of a "ludofication of culture" [12].

Experiment Goals

The goal of our experiment was to test whether a low cost and low-tech gamified intervention could take a typically passive, listen-only event and turn it into a proactive, engaging experience for attendees. The objective of this experiment would be achieved while participants contributed ideas to a meta challenge embedded in the conference's topic. The host city for Games for Change ANZ, the City of Melbourne (www.melbourne.vic.gov.au), agreed to participate by posting three questions to attendees that were of significance and of interest to the City, and relevant to a Games for Change ANZ audience. The three questions were (1) "How do we make Melbourne a Knowledge City?"; (2) "How do we make Melbourne an Entrepreneurial City?"; and (3) "How do we make Melbourne a Playful City?" These questions formed the objectives for the gameful web-based City Challenge Quest (CCQ), which we specifically created for the festival, see http://www.gamesforchange.floktu.com.

Gamification Design Decisions

For the design of CCQ, and the overall gamification of the event, we considered the findings that have emerged out of decades of research in GWAP, and it became clear that the motivation for people to play a game was not driven by the fact that they will solve a problem, but to be entertained [6] [7] [8]. Therefore, fun, entertainment and enjoyment, while not detracting from the focus of the event, were given priority to meet our objectives of (a) engaging attendees in meaningful playful and gameful activities and (b) engaging them in collaborative problem solving. Therefore, some of the challenges that were added to the gamified elements included participating in playful improv activities as well as playing games during the breaks. This was facilitated through the addition of a Games Arcade to the festival, in which 30 different games were exhibited. Each attendee was given a QR code and each game's booth in the arcade was equipped with a QR code. As each attendee played a game, their code was scanned to add to their overall point score.

In the development stage, we considered the achievement goal framework [13] [14], thus leading to the setting of relevant and attainable goals as part of the event game. Furthermore, we investigated motivation design [15] and persuasion design [16] to ensure that considerations such as user interface, specific mechanics used and tasks/behaviours that were being encouraged (such as networking, playing physical games and

answering city challenge questions) were engaging, simple to understand and reduced friction.

The game ran as follows:

- Attendees were emailed with details about the game with a link to the web app to opt-in. Reminders were also given during the event
- The app contained pages that included quests, the leader board, a list of attendees and a survey
- Attendees were encouraged to add ideas, comments and 'likes' to the City Challenge Quest and to scan the QR codes of attendees they met as well as games they played.

Basic game mechanics used included:

- Achievement: Points were earned for adding an idea, comment, liking an idea, meeting attendees
- Socialisation: Encouraging networking, participating in social games and playful activities
- Recognition: Running a leader board
- Reward: A prize of an iPad mini was offered to the person that topped the leader board

Points that were awarded included:

- Post ideas = 30 points; Post comments = 20 points;
 Post likes = 10 points
- Play games, any of 30 different games = 20 points

• Meet attendees & view their profiles = 10 points We debated the use of an extrinsic motivator such as the iPad mini to reward the top player for activities that were essentially intrinsically motivating. However, given that recent research suggests that extrinsic rewards can increase intrinsic motivation where the tasks to be performed require specific high task performance of personal and social significance [13] we decided to go ahead and integrate an external reward into this experiment.

Results

A total of 56% of attendees opted-in to play (N=125 n=70). This compares to a 15% opt-in for the GDC Metagame in 2011 or a total of 2,500 players [2]. This also compares to a 15% opt-in for the GoGame SAP Knowledge Quest in 2011 or 900 players out of 6,000 attendees [17].

In a post- event interview, leading contributors said the reward had provided an incentive to keep going, not only to win, but to remain in the top section of the leader board while still being seen as a quality contributor among their peers. The distribution was that the top 5 players (or 7% of players) accumulated 70% of the points, or, the top 18 players (25% of players) accumulated 90% of the points. This distribution of contribution compares well to the results of the GDC Metagame [2] where 5-10% of players were considered "hardcore generals". Summary results of the City Challenge Quest were as follows:

City Challenge Quest	Ideas Posted	Comments Posted	Likes Posted
1.Knowledge City	22	193	1144
2.Entrepreneurial City	23	126	610
3. Playful City	30	141	726
Total	75	460	2480

Table 1. Attendee Contribution to the City Challenge Quest

Preliminary feedback from the City of Melbourne was very positive about the results as they could see a

connection between this type of engagement and their community participation objectives. The attendee survey questionnaire asked: *What did you think about our event game and the City Challenge Quest?* The following responses were received:

A. How it	B. How it didn't	C. How to
engaged	engage	improve
Interesting way to engage Good example of gamification Cool Nice idea It was fun	The game lacked urgency or real purpose I felt disconnected with the game It lacked appeal Inadequate explanation of the game Material prize was inappropriate	More people needed to play to make it compelling More polish was required to the app Tweak and fix bugs in the app

Table 2. Attendee Written Responses to the Event Game

Discussion

The experiment was affected by usability issues and this was a limiting factor on engagement and participation. These types of issues are supported by research that shows that aesthetics and technology interaction have an important impact on player motivation and enjoyment [18] [19]. Feedback on where the gamification elements did engage supports prior research [6] [7] that players were motivated by the promise of entertaining experience, rather than a problem solving activity. Finally, in a post-event interview, the top three contributors commented on the friendly, collaborative

and playful interactions between them during gameplay despite the fact that they were all were competing to win. This speaks to the importance of collaborative competition and is in keeping with the findings of the FoldIt gameplay [5].

Conclusion

An event experience can be designed to (a) generate greater engagement through gameful and playful design and (b) to contribute to collaborative problem solving of a meta-challenge. Our experiment showed that the two critical components of running a gamified event experience to meet these objectives are (a) enjoyment and fun in user interfaces [6][19][21] and (b) the effective set up of a problem-solving environment [8][19][20][21] for players or attendees. When these two elements are developed in tandem with the objectives of the broader event, the requirement for the use of game mechanics is minimised to a select few. The only mechanics required are those that close the feedback loop with minimum friction, so participants remain focused on the activity rather than the underlying mechanics of the game.

Future Research

It is not clear whether the use of an extrinsic motivator as a reward inhibited participation in the City Challenge Quest, as feedback was divided. While non-participants quoted this as a detractor, the leading players cited it as the key motivator for their participation and contribution. There is scope to further explore the role of extrinsic rewards to help drive intrinsic motivators for meaningful challenges in a collaborative event setting.

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