



Design Strategies of Corporate Gamification Systems that Evokes Employee Motivation – Creative Process of Gathering Game Design Elements into Working System

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Abstract. In the paper Author will describe outcomes of his interviews with focus on how certain game elements are chosen and compiled into working gamification systems. Most popular elements which can be found in current gamified platforms and literature reviews are leaderboards, points, badges and levels. It seems that designers are using it over and over again as it would be the only possibility when one thinks about boosting engagement. What is the reason that designers won't take advantage of other combinations of game design elements? How they are guiding the creative process of game design construction in gamification design process? Following poster will try to deliver answers basing on data gathered during the research.

Keywords: Gamification design · Game design

1 Introduction

Following article will summarize research project about the strategical perspective of gamification system design in the area of employee engagement. The target group of the research was 15 experienced gamification designers with at least 2 finished and implemented projects in the past. Basing on cross-analysis of multiple case study that will gather the design perspective of corporate gamification systems the expected result will be a set of best working design guidelines in corporate area. Guidelines will be corrected by the end-user perspective and will state open perspectives for future development.

Hamari positions gamification in the field of hedonistic-utilitarian information systems (Hamari and Koivisto 2015). Within such systems, each interaction that takes place is by definition seen as an awakening pleasant feelings. Birth of that systems can be connected to the mutual interest of software developers (software like office application) and video games developers. Software developers appreciated the effectiveness of modeling engaging user experience in games. Game developers on the other hand use knowledge about building the correct architecture of information and deliver features according to recipients expectations (Ferrara 2012).

One of the reasons why gamification is treated as a negative phenomenon is too shallow design perspective that uses constantly the same game mechanics

(Bogost 2014). Current state of art of gamification research in enterprise area is confirming that revelations (Cardador et al. 2016; Hamari et al. 2014; Rapp et al. 2016; Robson et al. 2016). Unfortunately, none of the reviewed research papers takes account designer perspective nor knowledge or skill of their gamification designs. The way of how next iterations of gamification systems will be created have crucial meaning not only for that area but also for the quality of its influence inside organizations.

2 Project Description

Scientific problem of that project is the design strategies of gamification systems. Basing on cross-analysis of multiple case study that will gather the design perspective of gamification systems the expected result will be a set of best working design guidelines. Guidelines will be corrected by the end-user perspective and will state open perspectives for future development. The initial study will involve a thorough examination of circumstances for building well-functioning gamification system for employee engagement improvement and management. Results will come from the literature review of research domains and gamification design guidelines described by respondents.

Main findings from the literature review were positioned around two works. Raftopoulos (2014) analyzed what are the effective approaches to enterprise gamification and what can be potential tools that assist such gamification. Having scope on the corporate environment doesn't mean it can't be related to learning. One of the enterprise activities where employees are gamified is in-house learning (about the company, product, skills). An outcome of her study presented a framework based on more than 300 gamification artifacts and their design.

Second work by Morschheuser et al. (2017) again tries to set a framework for proper gamification design. With the use of design science authors conceptualized and then build artifact of the gamification design process. Based on literature review, desk research and most important – in-depth interviews with gamification designers, they prepared a comprehensive method of gamification.

Both sources have a rather limited view of what are the game elements that should be used in gamification systems. Raftopoulos mentions key mechanics and core gameplay groups as design elements, but there are no guidelines on how to connect elements of those groups into working and engaging system that will answer the problem. Second work brings ideation toolbox which is a guide of best practices about combining game elements in gamification design.

3 Methodology

Research methodology in the following project is positioned in interpretative-symbolic paradigm (Konecki 2000). Qualitative methods can be sufficient to explain a phenomenon that appears in reality. The research will be constructed upon a grounded theory which assumes that research area can be understood best by engaged in actors (Glaser 1992). Research hypothesis will emerge during the collection of research

evidence. There is also an assumption that some elements or areas, that were not stated at first, will appear somewhere during the research and will have important meaning for research problem.

That methodology results from a relatively fresh area which is gamification. Because of its characteristic of long-term influence on implementing subjects (Herger 2014) and a small number of long-enough implementations, state of art of gamification in employee engagement management is still open for new findings. Qualitative methods that explore research area have better application in the following project than explanative ones. As for now - broadest knowledge of the research area still lies in the hands of practitioners and using their experience this research project will deliver new and structured information.

Research method will be an exploratory case study (Yin 2017) in the form of group case analysis. A juxtaposition of a couple of cases will help with a deeper understanding of the research problem. To strengthen qualitative results I will use questionnaire method with employees who took part in gamification activities. That group perspective will help with the supplement of knowledge and experience of the designer by adding conclusions which they could overlook.

The research was structured as design science research. Gasparski (1988) distinguish design science subdisciplines like design phenomenology (background, taxonomy, technology); design praxeology (analysis of design activities and organization) and design philosophy (axiology, epistemology, and pedagogy of design). Here Author will analyze how the design is processed, so the praxeology of that action is in the main focus of the research. When it comes to design methodology then it will be covered different types of design activities and its analysis, description of design tasks and procedures which Gasparski titles as a pragmatic design methodology.

Research group:

- 15 gamification designers

Research tools:

- IDI script,
- Observation diary,
- Data from designers (design documents, guidelines, frameworks)

IDI script was divided into three parts: questions about gamification, questions about design, and questions about game design. Then each chapter of the interview was covered with a couple of question starting from general topics and finishing with specific ones. Each of the interviews has followed the same script, but the characteristics of IDI allowed Author to sometimes ask additional questions if something emerged during the talk.

4 Results

The outcome of this research project was to present multiple case study of gamification design strategies and gather best practices in one framework that can be a guide for other designers. The following poster will cover the latter with a focus on the creative

process of gathering game design elements. It was the first idea of the Author to research what are the real purposes of combining such elements and why is that so popular to use often similar elements (i.e. points, badges, leaderboards) when there is the much broader choice.

General analysis of the interviews was conducted with use of Johnny Saldana method that uses two cycles of coding (Saldaña 2015). Figure 1 covers categories and codes that emerged after the first cycle of analysis. The second cycle will be shown on the poster.

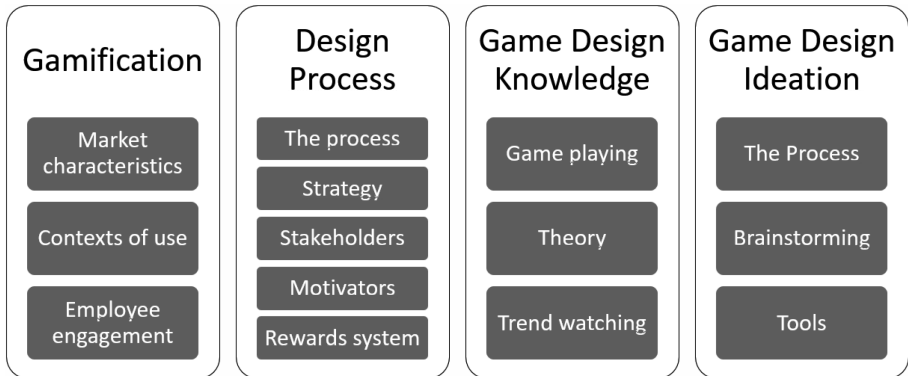


Fig. 1. Categories and codes

Although some insights about design strategies should be presented as well. To make it more clear for the purpose of this paper it will be presented as list with short description of each element.

1. Project vs product approach. There are those two styles of thinking and working on gamification solutions. Project work assumes that each solution will be build up from scratch, with ground research of the problem and tailor-made mechanisms. It is more costly and time-consuming but the results are generally better. Product means that the company has some already existing gamification ‘engine’ which is prepared and modified accordingly to clients requirements.
2. Generic vs mature gamification. Generic gamification is the easiest way of using points, badges, and leaderboards as a layer on existing activities that gain new instruments to measure the performance of its peers. Mature gamification states to be more immersing, uses other – often experimental – elements for engaging user behavior.
3. The user is less important than some stakeholders. That is something that was observed in some interviews, designers were not interested in the user perspective on the first place. It was dictated by the business objectives of the project and end users were involved in the project only at the testing phase or in one case – not at all!

4. Rewards should fit user characteristics and needs. Different levels of employees in the organization have different needs and expectations about the prizes. Managers were more into using their gamification capital (like virtual currencies) for charity or knowledge enhancers (books, training). However, lower level employees love physical goods and rewards that can improve their status.
5. Heavy use of tools known in human-computer interactions design (user journey map, user stories, storyboards, personas). It can also lead to other connections with user experience design and the general image of how gamification blends with UX.
6. Brainstorming while playing games can deliver innovative mechanics. Most of the respondents stated that there is the positive influence on design process when playing video (or tabletop) games.

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