

### Universität des Saarlandes Deutsches Forschungszentrum für Künstliche Intelligenz

### Thesis title

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Marko Vujić

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Saarbrücken, February 2017

Marko Vujić

### Abstract

## Acknowledgements

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### Chapter 1

### **Behaviorism**

The player forms the root of Gamification and, in any system, the outcome is affected and driven by his motivation (Zichermann & Cunningham, 2011, p. 15). Therefore, to understand the potentials and fundamental aspects behind Gamification, one important part is to understand what drives people's motivation. Thus, psychology is essential to Gamification in order to understand how human nature works and how it can be influenced in order to create an effective gamified system. For this reason, the next sections introduce different views from psychology about motivation and explain what has to be considered in terms of truly engaging individuals.

There are three main purposes of this section. The first part is to provide a good overview of the subject itself and to introduce terms that will be used later in the discussion. The second purpose is to present theories that show the engaging and motivating effect of games, while the third is to establish the frame that constitutes a game that was used when designing the Gamification system. Chapter 4 will be built upon this foundation, attempting to extend it by presenting some ground rules based upon the empirical findings and incorporating the perspectives and concerns of change managers and Gamification experts

#### 1.0.1 The Rules of Motivation

The word motivation originates from Latin motivus and stands for "serve to move". In other words, motivation can be interpreted as to be moved to do something. It can be defined as "those forces within an individual that push or propel him to satisfy basic needs or wants" [1]. According to Zichermann & Cunningham, there exist four underlying reasons why people are motivated to play games, which can be viewed together or separately as individual motivators (Zichermann & Cunningham, 2011, p. 20). These reasons are as follows:

• For mastery

- To destress
- To have fun
- To socialize

People play games not so much for the game itself as for the experience that the game creates: an exciting adrenaline rush, a vicarious adventure, a mental challenge; and the structure games provide for time, such as a moment of solitude or the company of friends. Nicole Lazzaro, an expert on player experience and emotions in games,

proposes three innate psychological needs to be crucial for optimal human development, functioning and well-being: competence, autonomy, and relatedness.SDT

#### 1.1 SDT

Another aspect to understanding player motivations is by questioning the source of one's motivation. One of the most influential motivational theories is the Self Determination Theory (SDT) introduced by Ryan & Deci. It is an empirically derived theory of human motivation that makes distinctions between different types of motivation in terms of reasons and goals that cause the respective action. In general, one can distinguish between intrinsic and extrinsic motivation. The first type of motivation, as the word *intrinsic* already suggests, refers to doing an activity for the inherent satisfaction and sense of drive that emerges from within. When intrinsically motivated a person is moved to act because the activity is challenging, interesting and enjoyable on its own rather than because of external prods, pressures, or rewards. On the other hand, extrinsic motivation refers to performing an action because it leads to *separable outcome*. That is, there is some external reward or influence which drives the person to accomplish the task (Deci & Ryan, 2000).

According to Ryan & Deci (2010), each person has different amounts and also different kinds of motivation. That is, each person is different in level (i.e. how much motivation) and orientation (i.e. what type of motivation) of their motivation, whereas orientation might be a goal which give rise to action.

# **Bibliography**

[1] Ronald L Pardee. Motivation theories of maslow, herzberg, mcgregor & mcclelland. a literature review of selected theories dealing with job satisfaction and motivation. 1990.