Chapter 27 Eye of the Beholder: Analyzing a Gamification Design Through a Servicescape Lens

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ABSTRACT

Gamification, the idea of using game design elements to make tasks more engaging, is used in many contexts. The enthusiasm for gamification and its potential uses can be seen in different research—as well as business fields. As of this day, there exists no dominant design principle or standard on how to construct a gamified solution. However, there seem to exist generic dogmas on what a gamification solution should include, look, and feel like. The theories used to explain the gamification techniques often originate from the field of game design and psychology. It is possible that more research fields could be used as a lens to magnify the effects of gamified information systems. In this report, we use the theories from environmental psychology and the servicescape methods to construct a lens to suggest improvements in gamification design for a learning management system used in higher education.

INTRODUCTION

According to the researchers O'Donnell, Deterding, Kappen, Fitzpatrick, Nacke and Johnson (2017) the use of gamification is multidisciplinary. Research about gamification has been conducted within a broad range of different areas, such as marketing (Hamari & Lehdonvirta, 2010; Huotari & Hamari, 2012; Hofacker, De Ruyter, Lurie, Manchanda, & Donaldson, 2016), learning (Cruaud, 2017; Dichev & Dicheva, 2017; Denny, 2013) digital health (Johnson et al., 2016; Von Bargen 2016) and human resources (Armstrong, Landers, & Collmus, 2015). The above-cited studies show through various research

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methods that gamification can be somewhat useful in increasing user engagement through the use of game elements. However, the design process of gamification is yet vague. There are suggestions that the methods of how to design gamification come from game design and various psychological theories (Robson et al. 2015; Morschheuser et al. 2017; Shahri et al. 2019). There are approaches that suggest other theories from the field of informatics and behavioral economy (Liu, Santhanam, & Webster, 2017), as well as learning and communication (Treiblmaier, Putz, & Lowry, 2018), could be used as lenses for viewing, explaining or magnifying gamification design. This chapter adds a servicescape lens to the multidisciplinary research approach of gamification design theories, as well as a perspective for practitioners when designing a gamified implementation.

An early Gartner report claims that 80 percent of current gamified applications will fail to meet business objectives primarily due to poor design (Mora et al, 2015). Despite the existence of good and poor gamification design, only a few studies have been conducted on a variety of gamification design choices (see Sailer et al, 2017). It seems that previous studies have discussed gamification as a generic construct, neglecting the fact that different game designs can result in very diverse applications of game design elements. However, even if the technology and methodology have proven to be useful (Hamari, Koivisto, & Sarsa, 2014), questions about why they work, how they work and how they can be improved have been raised (Landers, Bauer, Callan, & Armstrong, 2015).

Gamification and servicescape are new terms for old ways of affecting people's behaviors. By altering the design of an existing system, both methods aim to affect people's retention and engagement. Even though there are related purposes of the two methods, the design of the servicescape and the design of gamification have been sparsely discussed (Huotari & Hamari, 2017). This chapter examines whether a case of gamification design for a learning management system (hereafter LMS), with the purpose to increase students' completion rates, could benefit from the use of a servicescape lens. The constructed lens in the chapter examines the design of gamification elements in a studio specialized in gamification design. The gamification design in this chapter undergoes a servicescape analysis to see how the lens theoretically can improve the design outcome. The real-world case is a research project conducted in 2018-2019, with the purpose of increasing the student retention and completion rates in higher education, with the aid of gamification.

BACKGROUND

The Student Retention Crisis and the GARFIEID-Project

Student completion rates in higher education are a growing problem. In the last decade, the completion rates in higher education have suffered from a downward trend (European Commission, 2015). According to the OECD, an average of 39% of students complete their bachelor's program within its theoretical duration (three years), increasing only to 67% given three additional years (OECD Indicators, 2019) within tertiary education of OECD-countries in 2017. This is problematic in relation to the development of society as a whole. As more and more workplaces become increasingly digital and automated, there will be a significant need for individuals to attend tertiary education (Manyika et al., 2017).

In the EU 2020 education strategy, one of the goals is to have more individuals completing higher education. Reducing dropout- and increasing completion rates in higher education is one of the key strategies for achieving this goal. This is regarded as crucial, both for the high-level skills that Europe's

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