# Chapter 1 The Gamification Experience: UXD with a Gamification Background

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## **ABSTRACT**

Through this chapter, the authors aim at describing Gamification—the use of game elements in non-ludic environments—to identify its limits and lacks as well as its assets. Indeed, it has been developed to answer a need that arouses out of the Human Computer Interaction (HCI) field evolutions, and it could be valuable in that scope. The authors propose a definition of Gamification according to several different dimensions that are part of the HCI design field. They suggest it as a first step towards a guiding design framework aimed at designers. They mention future research directions that would help in going further and enriching the framework, leading to the creation of a design model for user experience design through Gamification. The authors finally raise some ethical concerns about the meaning of Gamification itself.

# INTRODUCTION

The Human Computer Interaction (HCI) design field has tremendously evolved from accessibility to emotional design and persuasive technology (Brangier & Bastien, 2010). This has lead designers to create more and more intuitive and hedonic interactions (Figure 1). That trend is not meant to come to an end as technologies and users are constantly evolving. In that scope, Gamification appeared as a new way to design for successful leisure and work systems.

It can be defined as "an informal umbrella term for the use of video game elements in nongaming systems to improve user experience (UX) and user engagement" (Deterding, Sicart, Nacke, O'Hara & Dixon, 2011b, p.2). The goal is to modify regular human-machine interactions and turn it into more engaging and motivating ones through the use of game elements in non-game contexts.

Albeit seductive, this idea is very controversial nowadays as it mixes user experience and game design, as well as activity tracking. Its attraction power might come from the game industry suc-

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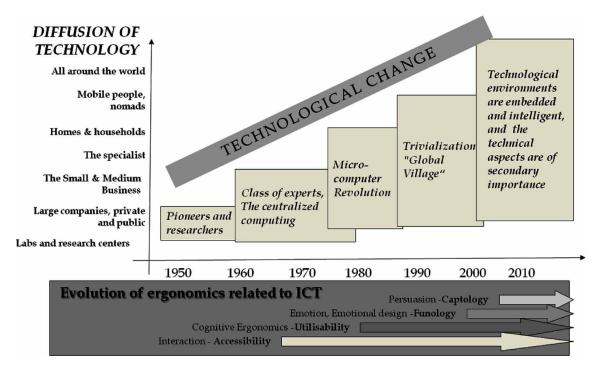


Figure 1. Technological change and evolution of software ergonomics (adapted from Brangier & Bastien, 2010)

cess. Indeed, many talks – whether marketing or scientific-oriented – do introduce that topic by mentioning stunning numbers. For instance, Mc-Gonigal's book (2011, p. 3-4) starts with: "Globally, the online gamer community - including console, PC, and mobile phone gaming - counts more than 4 million gamers in the Middle East, 10 million in Russia, 105 million in India, 10 million in Vietnam, 10 million in Mexico, 13 million in Central and South America, 15 million in Australia, 17 million in South Korea, 100 million in Europe, and 200 million in China." Besides, beyond those impressive figures, the immersive game experience is seductive. Being able to decipher and transfer Flow (Csikszentmihalyi, 1990) to non-ludic systems could be a tremendous asset for companies, whether by helping them sell more or by having more productive employees. A Gartner's study (technology research and consulting)

reflects that keen interest. Indeed, according to it (Gartner, 2011), more than 50% of innovative companies will take Gamification into account by 2015.

This chapter aims at describing Gamification through its definition, goal, underlying concepts and design methods. We first introduce it the way it is described in the literature to then highlight its limits and put it into its context of emergence. Indeed, Gamification is here to answer a need that arouses out of the HCI field evolutions and it can be valuable if well done. As a step further, we stand back in order to assess Gamification. This leads us to point out several lacks in its concept and design guidance. We finally define it according to several different dimensions as an answer to those lacks. We then mention potential research directions and open the debate of the underlying meaning of Gamification.

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