

# Gamification – Literature review and guide

## Intro

### What is a digital game?

The process of gamification is nearly always being applied on a digital platform, so for the purposes of this review and guide, only digital games are included in the discussion.

What distinguishes a digital game from other applications is that a digital game creates meaningful play. The meaning that emerges from play is a product of the relationship within the game between actions and outcomes. There are two specific relationships required. The first is that actions must have immediate outcomes, for which the player can *discern* the outcome's causation and nature. The second is that the outcomes of actions must *integrate* with the outcomes of other actions in that they all have effects on the larger context of the over-all game. (Salen and Zimmerman 2004)

Games create meaningful play by having actions with *integrated, discernable* outcomes. Another way to consider those relationships is to say that, in a game actions provide immediate *feedback*, which then helps the player in her *progress* toward a goal. The terms “feedback” and “progress” show up often in the literature about gamification, presumably because they map directly to the core characteristics of what distinguishes a game from undirected play.

### What is gamification?

Gamification is taking something that isn't a game and making it somehow more game-like. The reason for doing so is “to motivate desired behaviors” and to increase “engagement” (Deterding 2012). A commonly cited definition for gamification is:

“‘Gamification’ is the use of game design elements in non-game contexts.” (Deterding *et al.* 2011)

But that would seem to be more of a way of identifying when gamification has happened, since it really only considers the results, and not the process or the goal. A similar sort of exclusive focus on the resulting mechanics has led to a commonly quoted gamification criticism:

“You'll be able to tell when something's been gamified because it will have points and badges. And this is the nub of the problem... gamification isn't gamification at all. What we're currently terming gamification is in fact the process of taking the thing that is least essential to games and representing it as the core of the experience. Points and badges [are] great tools for communicating progress and acknowledging effort, but neither points nor badges in any way constitute a game. Games just use them... to help people visualise things they might otherwise lose track of. They are the least important bit of a game, the bit that has the least to do with all of the rich cognitive, emotional and social drivers which gamifiers are intending to connect with.” (Robertson, Margaret. 2010)

As Elizabeth Lawley writes, for the process of gamification “to be successful, it must include game design, not just game components. Games are not a replacement for thoughtful experience and interaction design; they are an alternate lens for framing that process” (Deterding 2012).

So, while elements of game design are indicative of an attempt at gamification, successful gamification will foster “cognitive, emotional and social” motivations and create a game-like experience. Huotari and Hamari have proposed that gamification should be defined in terms of that experience, not the mechanics that are used to create it:

“Past definitions rely on the notion that gamification is based on the use of game elements. However, there doesn't seem to exist a clearly defined set of game elements which would be strictly unique to games, neither [do] they automatically create gameful experiences. We can find similar elements from a variety of non-game contexts as well. ...We argue that the definition of gamification... cannot be based on a set of methods or mechanics, but instead it has to be understood more broadly as a process in which the gamifier is attempting to increase the likelihood for the gameful experiences to emerge by imbuing the service with affordances for that purpose (be it badges or more implicit cues).” (Huotari and Hamari 2012)

A useful definition of gamification, it would seem, should include not only the resulting elements, but also the process by which those elements were chosen, and the goals for which those elements were chosen. Such a definition doesn't seem to exist in the literature.

For this review and guide:

Gamification is using game-like design to make the outcomes of user actions easily discernable; to show the user how outcomes integrate into achieving goals; to foster the user's own cognitive, emotional and social motivations; and to increase the likelihood of the user becoming a player through having a gameful experience.

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## References

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