


Chapter 11

Crowdfunding Serious Games: Towards a Framework

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ABSTRACT

In serious game design, addressing issues related to the value and opportunity of the development of a game is vital in the early stages, creating a more structured and robust approach by exploring the business case. Present frameworks provide an in-depth analysis of game design models but often fail to state the case of predetermined target markets and new funding options for serious game design. Crowdfunding is an emerging funding path for these games and one that leads the vanguard in breaking with traditional forms of raising funding. This chapter aims to help in addressing an existing limitation in the literature by reviewing an existing framework on game design and blending this with the concept of crowdfunding. This chapter proposes the extension of a framework that reflects the possibility for early crowdfunding of a serious game.

INTRODUCTION

With changes in the workplace promoted by the 2020's coronavirus (COVID-19) global pandemic (e.g., large adoption of remote and online working practices and the implementation of digital transformation within companies' cultural practices), there is an increased demand in the larger market for corporate training, that could be done online and remotely (Baker, 2020). This has not only affected the business sector, but also education. For instance, due to the pandemic, the online education market is expected to reach \$350 billion by 2025. Additionally, according to Sonawane (2017) by 2023 the serious games market is expected to be worth more than \$9.2 billion. As Kriz (2020) noted, with pupils having to

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study online, simulations and serious games can be a suitable and effective means to convey educational content that overcome the limitations of Virtual Learning Environments (VLEs). For example, serious games can help students face challenges in a simulated environment through multiplayer collaboration/competition strategies supported by game mechanics (de Gloria et al. 2014).

The global pandemic also caused economic hardship for consumers, businesses and governments, in which financial resources have become scarce (Barker & Russell, 2020). The very nature of crowdfunding results in value being created beyond funding a vision. Demonstrating expertise of the crowdfunding applicant, educating the crowd and engaging that crowd with the possibility to be included in the journey of the vision are some of the major justifications of using crowdfunding.

In fact, the use of crowdfunding by larger corporations is becoming recurrent (Grell et al., 2015) and with new ways of gaining entry to markets more generally are explored. This can be seen in the acceleration of firms like Microsoft moving from a device-centric (focused on hardware development) to a player-centric (focused on user nurture and engagement) firm (McGee, 2020).

The console video game industry is a complex behemoth that captures the creative and independent sole of the electronic game building community and networks them through their monopolised channels of distribution. This is in direct opposition to Benkler (2006) who summarised the two-way evolution and revolution of cultural artefacts through the use of The Web. This was to be a new era of fulfilment on behalf of the creator where they could choose to commercialise their cultural product or simply donate it to the world archive that is The Web (Lessig, 2004). For the video game sector more broadly, this process has been slow to materialise because of the monopolistic characteristic of the distribution process for games for entertainment purposes (Planells, 2015). Of the many elements and components that make up the ludic centred world, change is ever present as ludic constructs are presented and tested in real world conditions (Walz & Deterding, 2014). Game design and building is at the vanguard of this evolutionary process as it sits at the confluence of the academic and the industrial. Evidence of this morphogenesis in the design-to-build process can be witnessed through the various frameworks and models that have been proposed in the literature in the past few years (Robson et al., 2015). The Mechanic, Dynamic and Aesthetic (MDA) framework (Hunicke, LeBlanc & Zubeck, 2004) has a wide application in this space and is implicit in many of the additional frameworks which emerged (Dillon 2011; Kim 2015). The MDA framework has proven to be a stable building block for the implementation of game design (Hunicke, LeBlanc & Zubeck, 2004).

The components of the MDA framework will be explored in this chapter as evidence of the lasting cultural legacy of the original authors. So far, much emphasis has been given in the literature towards the design elements of a digital game. But chronologically these are lacking the design intent to build a game as an opportunity to fulfil a specific set of purposes for a specific audience; thus, here is a lack clarity when addressing the wider possible market opportunity that may exist in the very production of the game.

Using the MDA Framework (Hunicke, LeBlanc & Zubeck, 2004) and its extension, the DPE Framework (Design, Play, Experience) (Winn, 2009), this chapter demonstrates a new conceptual extension that affords the possibility for both a robust cultural product that fulfils needs on an open market and understanding as to how this product could be funded via a crowd of enthusiasts.

This chapter adopts Michael and Chen (2005)'s definition of a serious games as "...games that do not have entertainment, enjoyment, or fun as their primary purpose (p.17)." The specific term 'serious', in this context, is taken to mean non-entertainment as opposed to stern or not fun (Seaborn & Fels, 2015). De Lope and Medina-Medina (2017) offer one of the most comprehensive taxonomies of serious games,

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