

Social Media, Data Analytics and Videogames Development: Halfbrick Case Study

Abstract

Social media platforms are of interest to interactive entertainment companies for a number of reasons. They can operate as a platform for deploying games, as a tool for communicating with customers and potential customers, and can provide analytics on how players utilize the; game providing immediate feedback on design decisions and changes. However, as ongoing research with Australian developer Halfbrick, creators of *Fruit Ninja*, demonstrates, the use of these platforms is not universally seen as a positive. The incorporation of Big Data into already innovative development practices has the potential to cause tension between designers, whilst the platform also challenges the traditional business model, relying on micro-transactions rather than an up-front payment and a substantial shift in design philosophy to take advantage of the social aspects of platforms such as *Facebook*.

Keywords

Video Games; Organizational Theory; Innovation; Casual Games

Games & Social Media

Games and Social Networks are not new bedfellows; Facebook employee Bob Trahan launched “The Friend Game” in September 2006. However, the launch of games on social media platforms and indeed mobile devices by mainstream gaming companies such as Electronic Arts and Zynga has drawn attention to both potential benefits and challenges inherent in developing for these platforms.

Zynga’s relationship with Facebook highlighted many of these factors. Whilst the two companies had been seen as heavily intertwined, tensions arose over the launch of Facebook credits, and the associated 30% cut Facebook was taking on transactions. Zynga attempted to reduce their reliance on Facebook with the launch of ‘Zynga Live’ (Arrington, 2010), however Facebooks continued dominance in the marketplace means it remains the dominant platform for Zynga products, with the BBC reporting that 80% of Zynga’s revenue comes from Facebook users. However, it is significant that the business model of companies such as Zynga differs greatly from both traditional game development and development for platforms such as iOS and Android, with developers expected to make their games freely available and rely on the purchase of micro-transactions to provide revenue.

Halfbrick

One of the major current players in the Australian games industry is Brisbane based Halfbrick Studios, developer of the hit game *Fruit Ninja*. Halfbrick moved rapidly from developing licensed properties to publishing in-house titles, generating revenue both through App downloads and merchandise sales. By utilizing platforms such as Apple’s App Store, Halfbrick is able to realize \$0.69/\$0.70 from each \$0.99c purchase of *Fruit Ninja*; a significant increase on the percentage of revenue received when developing licensed properties.

Ongoing research with Halfbrick has included interviews with senior staff and employees at all levels of the company, and has provided us the opportunity to consider how social networks and data analytics are viewed by games developers. This research has also been focused on establishing the innovative capacity of the company, an approach based on the concept of dynamic capabilities (Teece, 2007 & Ellonen et al., 2009) and inspired by studies of the innovation processes of companies such as Linden Labs (Malaby, 2009) and Valve (van der Graaf, 2012).

Malaby's (2009) ethnographic study of Linden Labs foregrounds that control and authority over cultural production are at stake in these workplaces. To develop the open-ended worlds that increasingly characterize interactive entertainment professional developers need to give up some aspects of managerial control. By embracing the contingency of these relationships with their consumers they are remaking cultural production firms and organizations in a less hierarchical, less top down fashion (Banks, forthcoming). Malaby hopes that his book contributes to our being:

... in a better position to understand the emerging institutions that are ever more able to shape and govern our increasingly digital lives. It explores how an organization that set out to create a deeply and complexly contingent environment is itself then remade by its creation through that domain's emergent effects, in a constantly reiterative process, but without losing its position of greatest influence (p. 9).

Halfbrick CEO Shaineil Deo recognizes the importance of enabling integration between games and players across social networks, and is in the process of developing both infrastructure and tools to utilize both the platform and the data provided more efficiently. However, they acknowledge this is not a simple task, noting the challenge of constructing a coherent user experience which connects disparate games across social media platforms. Deo believes that their current games, such as *Fruit Ninja* on *Facebook*, seem stand alone, without a lot of social interaction.

Goddard, a former employee of Halfbrick who was responsible for developing social networking technology, described how the company was trying to provide social features for games that are not naturally related:

Jet Pack Joy Ride and Fruit Ninja have no relationship in terms of the game but they have other relationships and what we want to do is allow people to find those games, because [if] you like this game you might like that one. [...] Things like leader boards are very simplistic and they're not very engaging to the user [...] If you've ten million people playing Fruit Ninja and you're ranked 9million out of 10 million that doesn't mean much to you and you know to be honest [it's] a bit demoralising and it's not very engaging.

Another capacity of social networks, and one that has been exploited by Zynga, is the ease of generating analytics. Fisher et al. (2012) state that "Zynga create games and studies data on how its audience plays them in order to update the games immediately", quoting Ken Rudin – a Zynga Vice President – as stating that "We're an analytics company masquerading as a games company" (p. 91).

Halfbrick are currently in the process of taking advantage of such data, with Deo noting:

[...] One of the things we are doing, as I mentioned, [is] adding a lot of analytics to our game so we can understand what's actually going on.

However, there remains some internal resistance to a dependency on analytics, with Deo arguing that many companies within the industry have allowed analytics to drive design:

[A] lot of our competitors [have] analytics drive a lot of, all of their decisions about [...] the game and the game design. Game design comes second to analytics. [...] But we want to still be driven by making fun, creative, quality games. I think that's always been our strength. And I think they're the sorts of games that will endure.

Challenges

In dealing with the challenges and opportunities offered by data analytics, Halfbrick is arguably involved in processes of organizational innovation (Malaby 2009; van der Graaf 2012). Simultaneously, Halfbrick is reinventing fundamental practices within the video game industry, particularly those relating to workplace culture and professional identity (Neff, 2012). How these processes, practices and professional identities can incorporate big data have yet to be established, and is the core of current ethnographic research within the company, as we explore how data analytics is

reshaping workplace cultures at the pragmatic and grass-roots level of daily practices in project teams, particularly when a number of the professional designers at Halfbrick, as with the CEO, have reservations over the use of big data in the game design and development process.

Game developers' use of social networks to host and launch games for new and growing markets of gamer consumers also challenges the traditional business model. Gaming products on social media platforms have relied heavily on micro-transactions, and the use of this business model is beginning to draw regulatory attention (Schneider, 2012). The increasing use of real money as a de-facto currency within these games has drawn increased attention to the use, ethics (Kelly, 2010), and legal status (Purewal, 2012; Department of Broadband, Communications and the Digital Economy, 2013) of gaming mechanics built around micro transactions. As such, it is not merely the organizational disconnect between analytics and design that requires attention, but also the potential risks of building a business model solely reliant on micro-transactions.

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