

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

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### Abstract

Social media platforms are of interest to interactive entertainment companies for a number of reasons. They offer a platform for deploying games, a tool for communicating with customers and potential customers, and provide analytics on players interactions with the game and with each other. However, as ongoing research with Australian developer Halfbrick, creators of *Fruit Ninja*, demonstrates, the use of these platforms and associated data analytics is often contested within game development teams and studios. Research with Australian developer, Halfbrick, provides an opportunity to consider many of these issues and challenges confronting games developers as they seek to adapt to and with Big Data analytics.

### Keywords

Video Games; Organizational Theory; Innovation; Casual Games; Big Data analytics

### 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 (Arrington, 2010) to both potential benefits and challenges inherent in developing for these platforms.

Qualitative case-study research we are undertaking with Australian developer, Halfbrick studios, involving extensive semi-structured interviews and less formal discussions with company employees provides an opportunity to both describe and explore the ways in which games developers adaptively explore the opportunities and challenges of Social Media and Big Data analytics. The authors’ research relationship with the company commenced in 2009 and has culminated with 11 extensive semi-structured interviews with 9 staff, and many more informal discussions. The research team are currently developing the research into a more fully-fledged ethnographic engagement building from the interviews we have conducted. This research is still very much a work in progress and this paper outlines initial tentative findings and observations that we are in the process of testing and refining through further fieldwork with Halfbrick.

### Halfbrick

Brisbane based Halfbrick Studios, developer of the hit game *Fruit Ninja*, is one of the recent success stories in the Australian videogames industry. The Australian videogames industry suffered a significant decline over the past few years with many of its leading developers closing studios, including Krome, THQ and Pandemic. From 2009 Halfbrick shifted 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.

Malaby's (2009) exemplary ethnographic study of Linden Labs foregrounds that control and authority over cultural production are at stake in workplaces such as game development studios. 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 relationships with their consumers and the profound uncertainty that characterizes these markets they are also sometimes remaking cultural production firms and organizations in a less hierarchical, less top down fashion (Banks, 2013). 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 across the game development process. However, Halfbrick's developers 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 to stand alone, without the required element of social interaction that is now needed for successful games on mobile devices and more broadly, social media platforms.

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.*

Social networks also provide data and associated analytics that developers increasingly exploit and use as is apparent with companies such as Zynga. 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, the role and place of data analytics to inform the craft of making and designing games is debated and contested among Halfbrick's designers and developers. Deo himself notes 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.*

## Adapting with Big Data

Games for mobile devices and social media platforms increasingly rely on a freemium, micro-transaction based, business model. The implications of this model for games design is also currently debated and contested across Halfbrick. There is also awareness at Halfbrick that this business model is beginning to draw regulatory attention (Schneider, 2012). It is beyond the scope of this overview paper to adequately describe and unpack all of the various aspects and implications of social media and big data that we are seeing at Halfbrick.

In dealing with the challenges and opportunities offered by data analytics, Halfbrick is arguably involved in organizational innovation (Malaby 2009; van der Graaf 2012). Halfbrick adaptively experiments with how to organize and coordinate the practice of making videogames in the context of a rapidly changing and volatile market environment. How do they dynamically adapt to these waves of change so they retain a robust and sustainable studio that is also characterized by the workplace culture that they share and value? Indeed, can they harness the opportunities and affordances of big data analytics to maintain and improve the organizational adaptability that arguably is Halfbrick's strength as a games developer studio. This experimentation includes how big data and analytics impacts on the craft of making videogames. This concerns workplace culture and professional identity (Neff, 2012; Banks 2012). Describing and then analyzing how developers such as Halfbrick explore and negotiate the emerging relationships among the craft of making videogames, social media platforms and big data, is at the core of our current ethnographic research with the company. Big data analytics potentially transforms studio workplaces and professional game developer identities.

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