

Game Professional Awareness

Scenario One: Business Innovation in Games.

1. Introduction

There are many aspects to consider when attempting to innovate in the games industry. This report focuses on three: mental health of employees, recent trends in independent game design and the rising importance of Twitch and YouTube.

The mental health of employees in the games industry is explored in terms of work environment and company culture. The games industry is notorious for stressful working conditions, unpaid overtime and mass layoffs - leading many to abandon the industry altogether. A strong focus on improving these practices will make the company well known and respected within the industry.

Several trends in popular indie games are considered: comedy simulators, 'walking simulators', local-multiplayer arena combat, games about games and open-world survival. Each of these trends has seen huge popularity in recent years. Building on the success of others and further innovating in these areas will lead to improved sales turnover and raise awareness of the company with consumers.

Lastly, the impact of Twitch and YouTube on the industry is considered. These are very powerful tools for creating a strong community around the company and its games. The potential of these platforms for increasing the company profile with consumers and therefore improving sales turnover should not be underestimated.

2. Research

2.1 Creating a healthy work environment

It has been shown that committed employees are an essential part of success as a business (Peters and Waterman Jr 1982). Herriot (1992) states that employees are only willing to give this commitment to the company if the company is also committed to them; one of the main ways a company can show commitment to its employees is to foster and encourage a healthier work environment.

Warr (1987) identifies 9 environmental factors which influence an employee's mental health:

1. **Opportunity for control** - decision making regarding one's own actions or the actions of others
2. **Opportunity for skill use** - using skills one already has as well as developing new ones
3. **Externally generated goals** - job requirements which generate structure and goals
4. **Variety** - not doing the same thing over and over
5. **Environmental clarity** - feedback on performance, explicit job expectations
6. **Availability of money** - ability to pay bills and pursue leisure activities
7. **Physical security** - comfortable, permanent and safe working environment

8. **Opportunity for interpersonal contact** - social contact to fulfil social needs
9. **Valued social position** - public perception of the status derived from one's job

Warr then goes on to develop a vitamin model for these factors. To sustain physical fitness a person must receive the right amount of all of their vitamins; too little or in some cases too much will lead to poor health. The amount of vitamins a person needs is specific to them. Similarly, an employee not adequately receiving appropriate amounts of these environmental factors will suffer negative effects on their mental health. It is also possible to have too much of some of these factors, namely factors 1-5 and 8. Having too much of factors 6, 7 and 9 is unlikely to damage mental health but won't provide any additional mental benefits either.

A company which focuses on ensuring all of these factors are met appropriately for its staff will create and sustain a working environment that brings out the best in its employees and inspires commitment and loyalty, thereby improving employee effectiveness and increasing both efficiency and sales turnover.

2.2 Company culture

A recent study of more than 1800 CEOs and CFOs worldwide demonstrates how important company culture is to business success (Popadak, et al. 2015). 90% of executives stated that culture is an important part of their company and 78% said that culture is one of the top five factors that make their company valuable (52% put it in the top three). 46% of CEOs stated that they would not make an acquisitional offer to a company with a culture misaligned with their own.

McGregor and Doshi (2015) argue that a positive company culture can be actively worked toward by considering the reasons why people are motivated to work in the first place. They base their discussion on the six main motivational reasons identified by Deci and Ryan (1985):

1. **Play.** Motivation from enjoyment of the work itself.
2. **Purpose.** Motivation from value perceived in the work being done or its wider impact.
3. **Potential.** Motivation from the possibilities afforded by doing the work (e.g. promotions).
4. **Emotional pressure.** Motivation from the desire to avoid disappointing oneself or others.
5. **Economic pressure.** Motivation through the need for monetary gains or to avoid monetary losses.
6. **Inertia.** Motivation due to the history of doing the job.

The first three of these reasons can be considered as direct motives and are deemed positive motivations, while the latter three are considered indirect motives and are deemed negative motivations. They found that companies which maximize positive motivations and minimize negative motivations perform better. Taking surveys of employees at airline companies and grocery stores, they found that companies which positively motivate their employees enjoyed significantly greater customer satisfaction.

This ties into what Pink (2009) describes as intrinsic versus extrinsic rewards. Extrinsic rewards are the traditional 'carrot on a stick' approach - "to entice people with a sweeter carrot, or threaten them with a sharper stick". A much more effective model of motivation comes from the intrinsic rewards: "**autonomy** - the urge to direct our own lives; **mastery** - the desire to get better at

something that matters; and **purpose** - the yearning to do what we do in service of something larger than ourselves”.

The idea of motivating employees through play, purpose and potential is further supported by considering the mental health benefits attributed to employment. Jahoda (1982) identifies the benefits of employment as being split into manifest functions and latent functions. Manifest functions are the objective purposes of work such as monetary rewards and relate to negative motivations. The removal of latent functions has a much greater impact on mental health than the removal of manifest functions; latent functions relate to positive motivations and include:

1. **Time structure.** Regular daily structure helps with personal organization.
2. **Regularly shared experience and contact.** Social contact with those outside the family.
3. **Goals and purposes that transcend one’s own.** Feeling of purpose through contribution to society.
4. **Defining of status within society.** Personal identity is often tied to one’s job.
5. **Enforced activity.** Requirement to be productive at work leads to productivity at home.

McGregor and Doshi define company culture as “the set of processes in an organization that affects the total motivation of its people”. In trying to identify what specific elements of the workplace effect total motivation they found that role design was by far the most important factor. Designing a role to provide the most satisfaction to an employee relates back to Warr’s (1987) set of environmental factors that affect mental health. Creating a healthy work environment and fostering a positive company culture work hand-in-hand to give the most satisfaction, motivation and mental health benefits possible to employees, in turn maximizing their effectiveness and commitment to their job and benefitting the company as a whole.

2.3 New genres and trends

Ferguson (2011) describes the basic elements of creativity as being copy, transform and combine. Building on the success of others reduces risk and caters to proven markets. Iterating on existing ideas while introducing new concepts will allow the company to innovate while still turning a profit. With statistics showing that gaming is now truly mainstream (Entertainment Software Association 2015), even niche products can find considerable audiences.

In a retrospective of 10 years as a professional game designer, Youngman (2015) states that “innovation is evolutionary, not revolutionary”. He stresses the importance of slow evolution in progressing the medium and discourages reinventing the wheel, instead encouraging designers to focus on just one or two clever innovations per game.

Comedy ‘simulators’

Sparked by *Surgeon Simulator 2013* (2013) in which the player performs surgery through an unwieldy control scheme, the comedy ‘simulator’ trend has proven popular with streamers and YouTube personalities. There are currently 4 gameplay videos of *Surgeon Simulator 2013* on YouTube with more than 10 million views (PewDiePie 2013a,b,c; Rooster Teeth 2013). The game has sold over 2 million copies (Makuch 2015).

Other examples capitalising on the ‘simulator’ trend include *Goat Simulator* (2014), *Octodad: Dadliest Catch* (2014), *I Am Bread* (2015) and *Home Improvisation* (2015). *Goat Simulator* has sold

over 2.5 million copies, including 1 million copies on iOS (Ibrisagic 2015). These games all share a theme of asking the player to do simple tasks in a 3D physics-based environment, made harder by awkward control schemes and silly interactions.

The trend has proven popular enough for UK retailer GAME to publish *Christmas Shopper Simulator* (2014) as a publicity stunt; the game was free to download, exclusive to their website and featured digital versions of their stores.

'Walking simulators' or 'First-person exploration games'

The term 'walking simulator' was applied as a derogatory term at first but has since been reclaimed to describe a new genre of first-person games where the focus is very much on environmental narrative, with minimal interactivity. *Dear Esther* (2012) was the first of this new genre. Other games include *Proteus* (2013), *Gone Home* (2013), *Sunset* (2015) and *Everybody's Gone to the Rapture* (2015). *Dear Esther* has sold more than 750,000 copies (Curry 2013) while *Gone Home* has sold over 250,000 (Conditt 2014) including 50,000 in its first month (Gaynor 2013).

Local-multiplayer arena combat

In recent years there has been an increasing audience for competitive single-screen multiplayer combat, with numerous releases such as *TowerFall* (2013), *Samurai Gunn* (2013), *Gang Beasts* (2014), *Nidhogg* (2014), *STARWHAL* (2014) and *#IDARB* (2015). These games are often mechanically simple but deceptively deep and are popular as party games (Henry 2015). *TowerFall* has grossed \$500,000 (Matulef 2014) and it is estimated that at least 440,000 Steam users own *Nidhogg* (Steam Spy 2015a).

Games about games

One way of raising the company profile within the industry is to comment on the industry itself or on the many feelings and processes developers go through in creating a game. The most effective way to gain attention for such commentary is of course to do so within the context of a game itself.

For example, Davey Wreden created *The Stanley Parable* (2013) and *The Beginner's Guide* (2015) and catapulted himself into the public eye. *The Stanley Parable* explores the relationship between the narrator and the player in an often comedic way and has had great critical and commercial success: "A few years ago no one had any idea who I was. Today the stanley parable has sold a million copies. Thank you" (Wreden 2014b), though it's worth noting this success has had negative effects on Wreden's mental health (Wreden 2014a). *The Beginner's Guide* is a much more personal story about creative expression in games and the interaction between a creator and their audience. The game created a huge amount of thoughtful discussion among developers (England and Kalman 2015; Graft 2015; Hudson 2015; Keogh 2015).

The Magic Circle (2015) is another recent title, this time set in an 'unfinished' game and focusing on the conflict between story and gameplay in first-person games and the role of auteurs in game development (Cameron 2015). It allows the player to 'hack' the characteristics of objects and apply them to other entities. As well as games about game development, there are also games about the medium itself. *Evoland* (2013) models the history of video games; the game begins with simple black and white pixels and as the player progresses through the game the graphics, sounds and mechanics all evolve to show how games have changed over the years. There are estimated to be at least 370,000 owners of *Evoland* on Steam (Steam Spy 2015b). Double Fine's *Hack 'n' Slash* (2014) pays

homage to top-down action-adventure games but allows the player to change the value of variables in various entities such as scale, attack strength or health points.

There are also games that are purely satirical in nature. *Progress Quest* (2002) parodies online role-playing games and their focus on increasing arbitrary statistics by automatically playing itself, giving text output over time of quests, items, enemies and upgrades. *DLC Quest* (2011) mocks the AAA trend of producing huge amounts of additional downloadable content after a game's release by making the player use in-game currency to buy DLC to unlock almost all of the game's functionality. Most famously, Ian Bogost created *Cow Clicker* (2010) to show the Skinner-box nature of popular Facebook games and their abuse of human psychology. The game became unexpectedly popular, reaching 50,000 players (Bogost 2011) including many who were playing it genuinely and not as a piece of parody. Bogost later reflected on the game and claimed to hate it (Bogost 2010).

Open-World Survival

These games thrive on having sparse resources shared between many players on a server with a large map and NPC enemies (usually zombies). The player has various metrics to balance in order to survive such as food, water, warmth and health and players can either co-operate or compete with each-other, often in cruel ways. Edge magazine (Mott 2015) explored the reasons for the resurgence in popularity, stating the player-limiting scripted-action design trend of the last decade of games and the film industry's recent obsession with zombies as contributing factors.

Regardless, survival games were brought back into the mainstream consciousness by *DayZ* (2013), a modification by Dean Hall for *Arma 2* (2009) which then saw release as a standalone project under Steam's Early Access program. *DayZ* standalone has sold over 3 million copies (Bohemia Interactive 2015) despite still being in Early Access.

Other games of this ilk include *Rust* (2013), *H1Z1* (2015) and *ARK: Survival Evolved* (2015) which replaces zombies with dinosaurs. *H1Z1* has sold over 1 million copies (Smedley 2015) and *Rust* has sold over 2 million (Facepunch Studios 2015). *ARK: Survival Evolved* sold over 400,000 units and generated \$10 million in revenues in its first week of release (Brightman 2015) and has gone on to sell over 2 million copies (Handrahan 2015). It is interesting to note that none of these games have officially been released; they are all available as part of Steam's Early Access program and are still in active development.

These games have proven very popular with streamers and YouTube personalities even long after their initial Early Access release, as detailed in Table 1 and Figure 1.

Game	YouTube gameplay videos with more than 5 million views
<i>DayZ</i>	3 (FRANKIEonPCin1080p 2012,2014; TheSyndicateProject 2014)
<i>Rust</i>	4 (elrubiusOMG 2014,2015a,b,d)
<i>H1Z1</i>	2 (elrubiusOMG 2015c; VanossGaming 2015a)
<i>ARK: Survival Evolved</i>	2 (elrubiusOMG 2015e; VanossGaming 2015b)

Table 1: Popularity of survival games on YouTube.

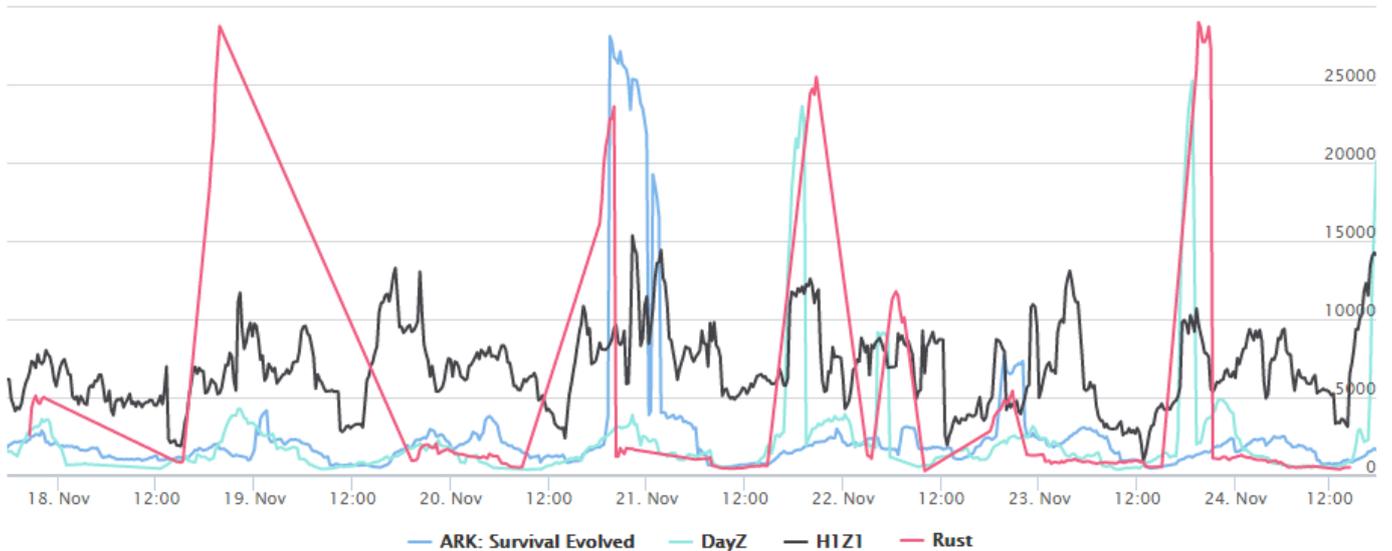


Figure 1: Concurrent viewers on Twitch for survival games Nov 18-24th 2015 (Twitch Apps 2015).

2.4 Twitch and YouTube

The importance of gameplay videos on YouTube and livestreams on Twitch should not be underestimated. In October 2015 the top 100 gaming channels on YouTube alone amassed more than 5.9 billion views (Cohen 2015). In 2014 Twitch reached 100 million unique viewers per month (Twitch 2015) and in August 2015 Twitch broke the 2 million concurrent viewers mark (Calvin 2015). In the latter half of 2014 Amazon acquired Twitch for \$970 million (Amazon 2014). Both the Xbox One and PlayStation 4 directly support streaming gameplay to Twitch and uploading recordings to YouTube.

Smaller studios have been able to capitalise on this popularity to fund and market their games.

Figure 2 (Santos 2015) shows the number of backers per day on Kickstarter for *Shovel Knight* (2014):

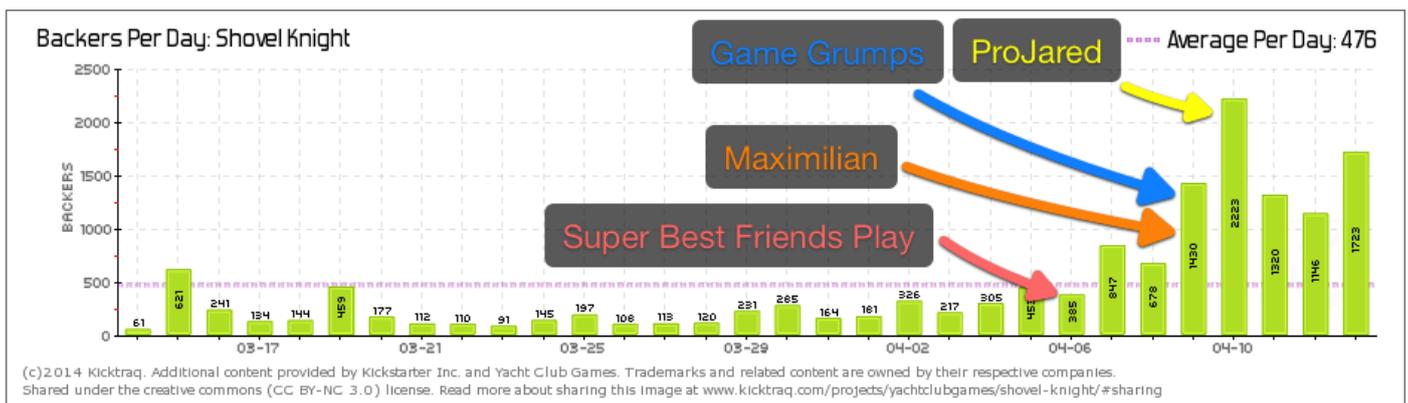


Figure 2: *Shovel Knight* backers per day on Kickstarter, with popular YouTube videos highlighted.

Seven months after release *The Binding of Isaac* (2011) was selling around 150 copies a day until it became popular on YouTube, at which point it began selling 1500 copies a day (McMillen 2012). A single YouTube video generated over \$35K in sales for Muse Games on its first day (Tsao 2014). The monthly sales of their game were hugely influenced by YouTubers, as seen in Figure 3. Some developers have used Twitch streams to draw attention at conventions (RareSloth Games 2015). Studio Bean developed *Choice Chamber* (2015) and received Kickstarter funding and coverage from Twitch (Tach 2014) because the game featured integration with Twitch chat and let viewers interact

with the game while a streamer played it. Vlambeer have been streaming development of *Nuclear Throne* (2013) since the start of the project and partnered with Twitch so that viewers can buy the game by subscribing to their Twitch channel (Grayson 2014). Twitch and YouTube are now essential components of digital word-of-mouth marketing.

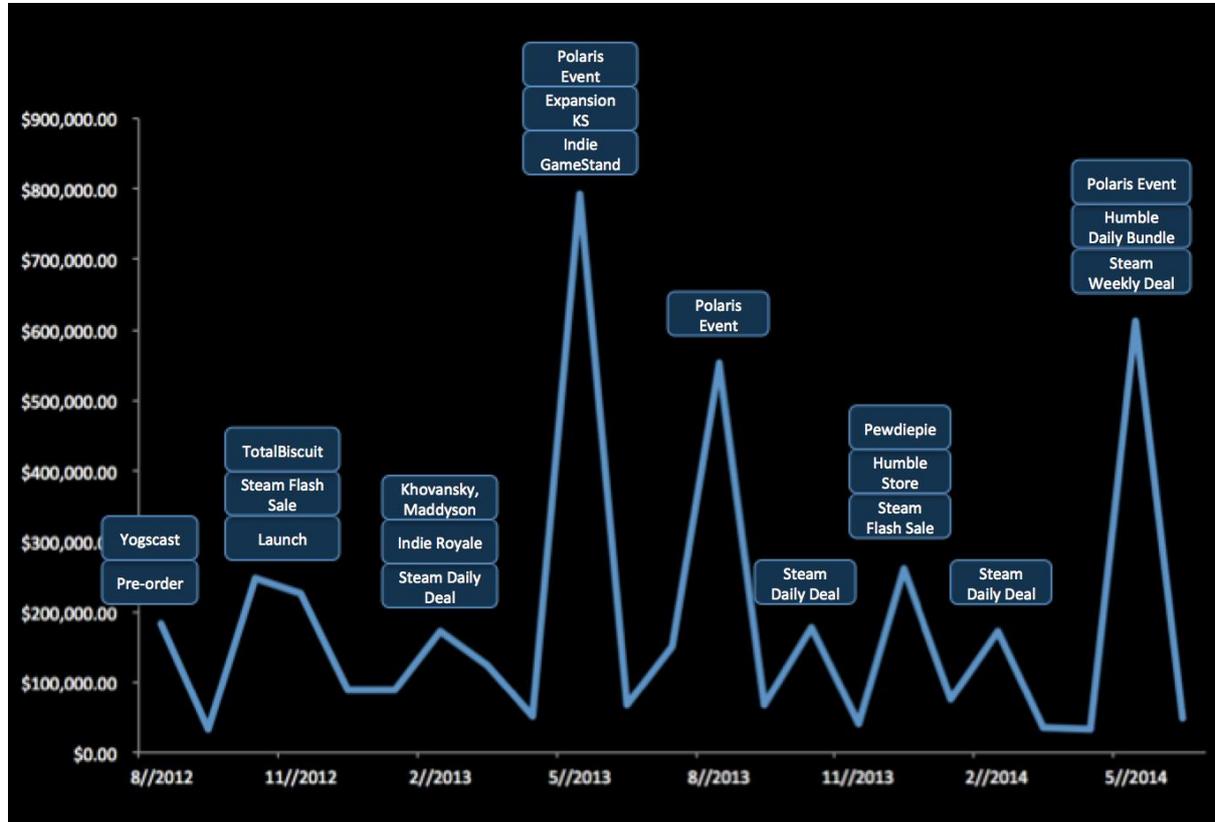


Figure 3: Monthly sales of *Guns of Icarus Online* (2012) and the impact of YouTubers (Tsao 2014).

Twitch and YouTube also provide huge amounts of direct user feedback. The co-founder of the studio behind *ARK: Survival Evolved* (2015) has said “Watching people stream the game is better than the best focus group money could buy. We catch bugs, hear concerns, check our assumptions, and collect gameplay notes at an insane pace. I have never experienced anything like this on another project” (Brightman 2015).

Developers are starting to take Twitch and YouTube into account and designing games that are as fun to watch as they are to play (Gamasutra 2014; Nutt 2014). One popular YouTuber identified replayability, variety, something which is different every time you play it, and support for many different play styles as key aspects to make a game more attractive to these content creators (Letourneau 2014).

Rose (2015) identifies these key points when dealing with streamers and YouTubers:

- Streamers and YouTubers receive *significantly* less work emails than traditional games press. This makes emailing them much more likely to lead to successful coverage.
- Don’t waste time asking if they’re interested; just give them a Steam code or free download immediately to make it as easy as possible for them to invest in the game.

- YouTubers and streamers often play what other content creators are playing. This means initial successes can snowball forward.
- Don't just target the top few channels; there are many channels with tens or hundreds of thousands of followers (rather than millions) which can collectively add up and may well influence the larger channels.
- Make sure there are no recording/streaming issues with the game by testing compatibility with the most popular pieces of software.
- Giving streamers codes for viewer giveaways helps build both the streamer's and game's communities.
- It is important to understand the tone of a channel and what kind of content they create. Have they covered similar games in the past?

Developers should capitalise on the free publicity, focus testing and community building provided by YouTube and Twitch personalities by focusing not only on how entertaining a game is to play, but how entertaining it is to watch.

3. Conclusions

Based on the research conducted above, the following are the key recommendations for the company to improve business efficiency, sales turnover and position as an innovator in the games industry:

- Balance environmental 'vitamins' to create and sustain a healthy work environment
 - Provide employees with feedback on their performance
 - Make job expectations explicit
 - Encourage employees to take responsibility for their work and have input on what work they do
 - Ensure fair pay (reduce/eliminate unpaid overtime) and fair work hours (reduce/eliminate the need for massive overtime at all)
- Foster and sustain a positive company culture and positive work motivations
 - As much as possible, ensure employees work on projects they actually enjoy
 - Make meaningful games which progress the medium or are otherwise important or culturally valuable in some way
 - Make career progression and other opportunities clear and accessible
 - Reduce the use of emotional and economic pressures as a means of motivation
- Follow successful design trends of recent games
 - Capitalise on ready-made market with proven consumer base
 - Symbiotic marketing relationship with other developers
 - The key components of creativity are copy, transform and combine; iterating on the ideas of others while adding new ideas to the mix is the essence of innovation
- Develop with Twitch and YouTube in mind
 - Ensure games are fun to watch as well as play
 - Make sure there are no compatibility issues with popular streaming and recording software

- Encourage streamers and YouTubers by giving explicit permission to profit from their endeavours, giving away copies of games to them and their audiences and engaging with them as key parts of the community

4. References

#IDARB. 2015. [computer game]. Microsoft Xbox One. Other Ocean.

Amazon. 2014. *Amazon.com to acquire Twitch*. [online]. Available from: <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1960768> [Accessed 27 November 2015].

ARK: Survival Evolved. 2015 (early access). [computer game]. Linux, Mac OS X and Windows PC. Studio Wildcard.

Arma 2. 2009. [computer game]. Windows PC. Bohemia Interactive.

Bogost, I. 2010. Making a mockery: ruminations on Cow Clicker. [presentation]. *Game Developers Conference Online 2010*. Austin, TX: October 5-8. Available from: <http://www.gdcvault.com/play/1013828/Making-a-Mockery-Ruminations-on> [Accessed 25 November 2015].

Bogost, I. 2011. *Cowclickification*. [online]. Available from: <http://bogost.com/writing/blog/cowclickification/> [Accessed 27 November 2015].

Bohemia Interactive. 2015. *3,000,000 Survivors have arrived in DayZ*. [online]. Available from: <http://www.bistudio.com/mailling/html/dayz-standalone-exceeds-3-mil-sales.html> [Accessed 23 November 2015].

Brightman, J. 2015. *ARK: Survival Evolved has already generated \$10 million*. [online]. Available from: <http://www.gamesindustry.biz/articles/2015-06-09-ark-survival-evolved-has-already-generated-usd10-million> [Accessed 23 November 2015].

Calvin, A. 2015. *Twitch bullish about games video market leadership as YouTube Gaming launches*. [online]. Available from: <http://www.mcvuk.com/news/read/twitch-responds-to-youtube-gaming-launch/0154921> [Accessed 27 November 2015].

Cameron, P. 2015. *Exorcising game development demons with The Magic Circle*. [online]. Available from: <http://www.gamasutra.com/view/news/245154/> [Accessed 27 November 2015].

Choice Chamber. 2015. [computer game]. Windows PC. Studio Bean.

Christmas Shopper Simulator. 2014. [computer game]. Mac OS X and Windows PC. Freak Storm Games.

Cohen, J. 2015. *Top 100 most viewed YouTube gaming channels worldwide • October 2015*. [online]. Available from: <http://www.tubefilter.com/2015/11/19/top-100-most-viewed-youtube-gaming-channels-worldwide-october-2015/> [Accessed 27 November 2015].

- Conditt, J. 2014. *Gone Home finds 250K sales, most on Steam*. [online]. Available from: http://www.engadget.com/2014/02/06/gone-home-finds-250k-sales-most-on-steam/?ncid=rss_truncated [Accessed 20 November 2015].
- Cow Clicker*. 2010. [computer game]. Facebook. Bogost, I.
- Curry, J. 2013. *The Humble Bundle has pushed #dearesther sales well over 750,000 copies. Thank you so much to everyone for the support. Amazing*. [twitter post]. 7 June. Available from: <https://twitter.com/jessicacurry2/status/342960081916284929> [Accessed 20 November 2015].
- DayZ*. 2013 (early access). [computer game]. Windows PC. Bohemia Interactive.
- Dear Esther*. 2012. [computer game]. Windows PC. The Chinese Room.
- Deci, E. and Ryan, R.M. 1985. *Intrinsic motivation and self-determination in human behavior*. New York, NY: Springer.
- DLC Quest*. 2011. [computer game]. Microsoft Xbox 360. Going Loud Studios.
- elrubiusOMG. 2014. *HOMBRES DESNUDOS AMABLES | Rust*. [online]. Available from: <https://www.youtube.com/watch?v=zFJhLBxhjBk> [Accessed 23 November 2015].
- elrubiusOMG. 2015a. *LOS VECINOS TROLLS | Rust*. [online]. Available from: https://www.youtube.com/watch?v=i4wFgpR_5Hg [Accessed 23 November 2015].
- elrubiusOMG. 2015b. *TODO EL MUNDO CONTRA MI | Rust*. [online]. Available from: <https://www.youtube.com/watch?v=3MChzLonZha> [Accessed 23 November 2015].
- elrubiusOMG. 2015c. *SALSEO EN ZOMBIE LAND | H1Z1 Random*. [online]. Available from: https://www.youtube.com/watch?v=zL-MnP5O_d4 [Accessed 23 November 2015].
- elrubiusOMG. 2015d. *NUEVAS MANERAS DE TROLEAR | Rust*. [online]. Available from: <https://www.youtube.com/watch?v=nQxvM65adtw> [Accessed 23 November 2015].
- elrubiusOMG. 2015e. *DINOSAURIOS AGRESIVOS | Ark Survival Evolved*. [online]. Available from: <https://www.youtube.com/watch?v=qH70JtdfFGA> [Accessed 23 November 2015].
- England, L. and Kalman, S. 2015. *The game dev letters: a series on The Beginner's Guide*. [online]. Available from: <http://www.gamasutra.com/view/news/258342/> [Accessed 27 November 2015].
- Entertainment Software Association. 2015. *2015 sales, demographic and usage data: essential facts about the computer and video game industry*. [online]. Available from: <http://www.theesa.com/wp-content/uploads/2015/04/ESA-Essential-Facts-2015.pdf> [Accessed 04 December 2015].
- Everybody's Gone to the Rapture*. 2015. [computer game]. Sony PlayStation 4. The Chinese Room.
- Evoland*. 2013. [computer game]. Mac OS X and Windows PC. Shiro Games.
- Facepunch Studios. 2015. *Sales figures*. [online]. Available from: <http://www.facepunchstudios.com/sales-figures/> [Accessed 23 November 2015].

- Ferguson, K. 2011. *Everything is a Remix Part 3*. [online]. Available from: <https://www.youtube.com/watch?v=wq5D43qAsVg> [Accessed 30 November 2015].
- FRANKIEonPCin1080p. 2012. *SNIPER KILLER! - Arma 2: DayZ Mod - Ep.1*. [online]. Available from: <https://www.youtube.com/watch?v=gPJ37khFJWI> [Accessed 23 November 2015].
- FRANKIEonPCin1080p. 2014. *ROOFTOP SNIPER! - DayZ Standalone - Ep.3*. [online]. Available from: <https://www.youtube.com/watch?v=a87ff5Ppbwc> [Accessed 23 November 2015].
- Gamasutra. 2014. 'How has the rise of YouTubers affected how you make games?'. [online]. Available from: <http://gamasutra.com/view/news/219367/> [Accessed 30 November 2015].
- Gang Beasts*. 2014 (early access). [computer game]. Linux, Mac OS X and Windows PC. Boneloaf.
- Gaynor, S. 2013. *Updates: IGN, Fantastic Fest, Indiecade, and initial sales numbers*. [online]. Available from: <http://fullbright.company/2013/09/11/updates-ign-fantastic-fest-indiecade-and-initial-sales-numbers/> [Accessed 20 November 2015].
- Goat Simulator*. 2014. [computer game]. Windows PC. Coffee Stain Studios.
- Gone Home*. 2013. [computer game]. Linux, Mac OS X and Windows PC. Fullbright.
- Graft, K. 2015. *Creativity as an open question: random thoughts on The Beginner's Guide*. [online]. Available from: <http://www.gamasutra.com/blogs/KrisGraft/20151012/255997/> [Accessed 27 November 2015].
- Grayson, N. 2014. *Swimming upstream: Twitch sells, funds indie games*. [online]. Available from: <http://www.rockpapershotgun.com/2014/04/17/twitch-selling-nuclear-throne-choice-chamber/> [Accessed 27 November 2015].
- Guns of Icarus Online*. 2012. [computer game]. Linux, Mac OS X and Windows PC. Muse Games.
- H1Z1*. 2015 (early access). [computer game]. Windows PC. Daybreak Game Company.
- Hack 'n' Slash*. 2014. [computer game]. Linux, Mac OS X and Windows PC. Double Fine Productions.
- Handrahan, M. 2015. *Ark: Survival Evolved hits 2 million sales*. [online]. Available from: <http://www.gamesindustry.biz/articles/2015-10-09-ark-survival-evolved-hits-2-million-sales> [Accessed 23 November 2015].
- Henry, J. 2015. *The 9 Best Party Video Games for All Ages*. [online]. Available from: <http://gamerant.com/best-party-video-games-325/> [Accessed 20 November 2015].
- Herriot, P. 1992. *The career management challenge: balancing individual and organisational needs*. New York, NY: Sage.
- Home Improvisation*. 2015. [computer game]. Linux, Mac OS X and Windows PC. The Stork Burnt Down.

Hudson, L. 2015. *The Beginner's Guide is a game that doesn't want to be written about*. [online]. Available from: <http://boingboing.net/2015/10/02/the-beginners-guide-is-a-gam.html> [Accessed 27 November 2015].

I Am Bread. 2015. [computer game]. Mac OS X and Windows PC. Bossa Studios.

Ibrisagic, A. 2015. *Holy shit, Goat Simulator just reached 1 million sales on iOS. Combined with Android and PC sales, that makes a total of 2.5m copies sold!*. [twitter post]. 14 January. Available from: <https://twitter.com/Arminposts/status/555310873221550080> [Accessed 20 November 2015].

Jahoda, M. 1982. *Employment and unemployment: a social-psychological analysis*. Cambridge: Cambridge University Press.

Keogh, B. 2015. *On The Beginner's Guide*. [online]. Available from: <http://brkeogh.com/2015/10/03/on-the-beginners-gude/> [Accessed 27 November 2015].

Letourneau, R. 2014. Using YouTube to market your indie game. [presentation]. *Game Developers Conference 2014*. San Francisco, CA: March 19-21. Available from: <http://www.gdcvault.com/play/1020499/Using-YouTube-to-Market-Your> [Accessed 29 November 2015].

Makuch, E. 2015. *Wacky Operation Game Surgeon Simulator Sells 2 Million*. [online]. Available from: <http://www.gamespot.com/articles/wacky-operation-game-surgeon-simulator-sells-2-mil/1100-6425076/> [Accessed 20 November 2015].

Matulef, J. 2014. *Towerfall sold best on PS4 and grossed \$500K overall*. [online]. Available from: <http://www.eurogamer.net/articles/2014-04-28-towerfall-sold-best-on-ps4> [Accessed 20 November 2015].

McGregor, L. and Doshi, N. 2015. *How company culture shapes employee motivation*. [online]. Available from: <https://hbr.org/2015/11/how-company-culture-shapes-employee-motivation> [Accessed 27 November 2015].

McMillen, E. 2012. *Postmortem: McMillen and Himsel's The Binding of Isaac*. [online]. Available from: <http://www.gamasutra.com/view/feature/182380/> [Accessed 27 November 2015].

Mott, T. ed. 2015. Hunger games. *Edge Magazine*. [print]. 9 April. 279: pp. 86-93.

Nidhogg. 2014. [computer game]. Windows PC. Messhof.

Nuclear Throne. 2013 (early access). [computer game]. Linux, Mac OS X and Windows PC. Vlambeer.

Nutt, C. 2014. *Gamasutra explains: the YouTuber phenomenon*. [online]. Available from: <http://www.gamasutra.com/view/feature/222136/> [Accessed 30 November 2015].

Octodad: Dadliest Catch. 2014. [computer game]. Linux, Mac OS X and Windows PC. Young Horses.

Peters, T. and Waterman Jr, R.H. 1982. *In search of excellence: lessons from America's best-run companies*. New York, NY: Harper & Row.

- PewDiePie. 2013a. *Surgeon Simulator 2013 (Full Version) - MOST TRAGIC GAME EVER MADE (A love story)*. [online]. Available from: <https://www.youtube.com/watch?v=y4-imnzPINM> [Accessed 20 November 2015].
- PewDiePie. 2013b. *Surgeon Simulator 2013 (Full Version) - BRAIN SURGERY SUCCESS! - Part 3*. [online]. Available from: <https://www.youtube.com/watch?v=KsdtuH8HcoA> [Accessed 20 November 2015].
- PewDiePie. 2013c. *ALIEN SURGERY! - Surgeon Simulator 2013 (Pewdsball Success)*. [online]. Available from: <https://www.youtube.com/watch?v=0QX28cOzAjg> [Accessed 20 November 2015].
- Pink, D. 2009. The puzzle of motivation. [presentation]. *TEDGlobal 2009*. Oxford: July 21-24. Available from: http://www.ted.com/talks/dan_pink_on_motivation?language=en [Accessed 04 December 2015].
- Popadak, J., et al. 2015. *How corporate culture affects the bottom line*. [online]. Available from: http://www.fuqua.duke.edu/news_events/news-releases/corporate-culture/ [Accessed 27 November 2015].
- Progress Quest*. 2002. [computer game]. Linux and Windows PC. Fredricksen, E.
- Proteus*. 2013. [computer game]. Mac OS X and Windows PC. Key, E. and Kanaga, D.
- RareSloth Games. 2015. *Get more viewers for your twitch channel or indie game*. [online]. Available from: <http://www.raresloth.com/business/get-more-viewers-for-your-twitch-channel-or-indie-game/> [Accessed 27 November 2015].
- Rooster Teeth. 2013. *Rage Quit - Surgeon Simulator 2013*. [online]. Available from: <https://www.youtube.com/watch?v=Y2F3ZWEEbF4> [Accessed 20 November 2015].
- Rose, M. 2015. How YouTubers and Twitch streamers can help sell your games. [presentation]. *Game Developers Conference 2015*. San Francisco, CA: March 2-6. Available from: <http://www.gdcvault.com/play/1022063/How-YouTubers-and-Twitch-Streamers> [Accessed 29 November 2015].
- Rust*. 2013 (early access). [computer game]. Linux, Mac OS X and Windows PC. Facepunch Studios.
- Samurai Gunn*. 2013. [computer game]. Windows PC. Teknopants.
- Santos, A. 2015. *Tips for marketing indie games on YouTube*. [online]. Available from: <http://www.binpress.com/blog/2015/01/09/how-to-market-indie-games-on-youtube/> [Accessed 27 November 2015].
- Shovel Knight*. 2014. [computer game]. Nintendo 3DS, Nintendo Wii U and Windows PC. Yacht Club Games.
- Smedley, J. 2015. *We have sold over 1M copies of H1Z1 on Steam!*. [twitter post]. 23 March. Available from: https://twitter.com/j_smedley/status/580161545021186048 [Accessed 23 November 2015].

- STARWHAL. 2014. [computer game]. Linux, Mac OS X and Windows PC. Breakfall.
- Steam Spy. 2015a. *App Data: Nidhogg*. [online]. Available from: <http://steamspy.com/app/94400> [Accessed 20 November 2015].
- Steam Spy 2015b. *App Data: Evoland*. [online]. Available from: <http://steamspy.com/app/233470> [Accessed 27 November 2015].
- Surgeon Simulator 2013*. 2013. [computer game]. Linux, Mac OS X and Windows PC. Bossa Studios.
- Sunset*. 2015. [computer game]. Linux, Mac OS X and Windows PC. Tale of Tales.
- Tach, D. 2014. *Twitch donating to help fund Twitch-powered Choice Chamber*. [online]. Available from: <http://www.polygon.com/2014/4/16/5620270/choice-chamber-twitch-kickstarter-matching-funds> [Accessed 27 November 2015].
- The Beginner's Guide*. 2015. [computer game]. Linux, Mac OS X and Windows PC. Everything Unlimited Ltd.
- The Binding of Isaac*. 2011. [computer game]. Mac OS X and Windows PC. McMillen, E. and Himsf, F.
- The Magic Circle*. 2015. [computer game]. Linux, Mac OS X and Windows PC. Question.
- The Stanley Parable*. 2013. [computer game]. Windows PC. Galactic Café.
- TheSyndicateProject. 2014. *GETTING KIDNAPPED & TORTURED!!!! - (DayZ)*. [online]. Available from: <https://www.youtube.com/watch?v=PLveMFmNTmw> [Accessed 23 November 2015].
- TowerFall*. 2013. [computer game]. Ouya. Thorson, M.
- Tsao, H. 2014. *Guns of Icarus Online post-mortem - epilogue: how YouTube, Steam and our players got us this far*. [online]. Available from: <http://www.gamasutra.com/blogs/HowardTsao/20140626/219785/> [Accessed 30 November 2015].
- Twitch. 2015. *Two thousand MOREteen*. [online]. Available from: <http://www.twitch.tv/year/2014> [Accessed 27 November 2015].
- Twitch Apps. 2015. *Top Game Trends*. [online]. Available from: <http://stats.twitchapps.com/> [Accessed 24 November 2015].
- VanossGaming. 2015a. *H1Z1 Adventures - The Police Station & My Name Jeff (H1Z1 Funny Moments)*. [online]. Available from: <https://www.youtube.com/watch?v=4qaixDsCS6I> [Accessed 23 November 2015].
- VanossGaming. 2015b. *Survival of the Freaks & Dinosaurs! (Ark Survival Evolved Funny Moments)*. [online]. Available from: <https://www.youtube.com/watch?v=f4o1ED0xMiw> [Accessed 23 November 2015].
- Warr, P. 1987. *Work, unemployment, and mental health*. New York, NY: Oxford University Press.

Wreden, D. 2014a. *Game of the year*. [online]. Available from: <http://www.galactic-cafe.com/2014/02/game-of-the-year/> [Accessed 27 November 2015].

Wreden, D. 2014b. *A few years ago no one had any idea who I was. Today the stanley parable has sold a million copies. Thank you.* <3. [twitter post]. 17 October. Available from: <https://twitter.com/HelloCakebread/status/523277627608424450> [Accessed 27 November 2015].

Youngman, J. 2015. *Ten lessons over ten years*. [online]. Available from: <http://gamasutra.com/blogs/JamesYoungman/20151201/260631/> [Accessed 04 December 2015].

5. Bibliography

Alexander, L. 2014. *Twitch plays everything: designing for a new frontier*. [online]. Available from: <http://www.gamasutra.com/view/news/217075/> [Accessed 30 November 2015].

Chase. 2014. *TPP victory! The Thundershock heard around the world*. [online]. Available from: <http://blog.twitch.tv/2014/03/twitch-prevails-at-pokemon/> [Accessed 30 November 2015].

Devolver Digital. [unknown]. *Can I post and monetize videos of Devolver games?*. [online]. Available from: <http://canipostandmonetizevideosofdevolvergames.com/> [Accessed 30 November 2015].

Getomer, J., Okimoto, M. and Johnsmeyer, B. 2013. *Gamers on YouTube: evolving video consumption*. [online]. Available from: <https://www.thinkwithgoogle.com/articles/youtube-marketing-to-gamers.html> [Accessed 30 November 2015].

Maestas, J. 2014. *Recent chat issues and TwitchPlaysPokemon*. [online]. Available from: <http://blog.twitch.tv/2014/02/recent-chat-issues-and-twitchplayspokemon/> [Accessed 30 November 2015].

Newell, S. 1995. *The healthy organization: fairness, ethics and effective management*. London: Routledge.

Ramdurai, G. 2014. *Think gaming content is niche? Think again*. [online]. Available from: <https://www.thinkwithgoogle.com/articles/think-gaming-content-is-niche-think-again.html> [Accessed 30 November 2015].

Rose, M. 2014. *Kerbal Space Program introduces affiliate links for YouTubers*. [online]. Available from: <http://gamasutra.com/view/news/219875/> [Accessed 30 November 2015].

tinyBuild. 2015. *The big tinyBuild list of livestreamers*. [online]. Available from: <https://docs.google.com/spreadsheets/d/1-CT6fCvY8XGU2joz5Lhw-b5dD2VsDVCWNalOKuDI2cs/edit?pli=1#gid=0&vpid=A2> [Accessed 30 November 2015].

Twitch. 2013. *Twitch Minecraft integration announced at Minecon*. [online]. Available from: <http://blog.twitch.tv/2013/11/twitch-minecraft-integration-announced-at-minecon/> [Accessed 30 November 2015].

VideoGameCaster. 2015. *Big list of YouTubers*. [online]. Available from: <http://videogamecaster.com/big-list-of-youtubers> [Accessed 30 November 2015].