

ARTICULATING VALUE PROPOSITION THROUGH VIDEO GAMING

KAH CHAN

Victoria University

Kah.chan@vuw.ac.nz

ABSTRACT

Video gaming is emerging as a strong communication medium. As its adoption becomes more widespread, corporations that are looking at alternative methods of internal and external communications would benefit from participating in conversations facilitated by gaming. H.E.R.B. is an experimental interactive narrative that aims to communicate the unique value proposition of Servodan's flagship Luxstat LED Luminaire system. Simultaneously, H.E.R.B. is also a proof of concept that suggests that there are other potential practical applications of games to help assist using the language of gaming.

INTRODUCTION

The corporate environment is increasingly recognizing the value of design competencies. The UK Design Council researched the tangible value of design in business (Design Council, 2005), tracking a number of companies termed as the Design Index that had integrated design practices into their business. These companies displayed a significant increase in share value compared to the FTSE 100 over the 1994 to 2004 period, gaining a 200% difference in share prices. Design strategy is now a necessary core component in a business infrastructure rather than a peripheral addition.

Game design, particularly with video games' increased proportion of consumed media, now holds an important role in the continued diversification of media. Video games as a medium is emerging as the dominant contemporary communicative para-

digm as demonstrated by video games sales surpassing box office and DVD sales in the United Kingdom in 2009 (Chatfield, 2009). The corresponding increase in game literacy and familiarity with the ubiquitous video game phenomenon means that games are becoming more relevant to newer communication methods. This signals a strong communication scheme for engaging a new audience as they spend more time absorbed in this media.

Video gaming has the potential to be a very persuasive medium (Bogost, 2007, p.46-64) that utilizes empathic connections to the audience through the interactivity and engagement inherent to the medium. In this case, it is also adaptable to facilitate multiple audiences to engage with a variety of abstract business model discussions. The flexibility allows it to fit in to a wide variety of internal and external corporate communications.

H.E.R.B. explores the early potential of using the language of video gaming for the facilitation of business dialogues. Specifically, H.E.R.B. is an interactive conversation designed to communicate Servodan's unique value proposition. H.E.R.B. also explores the core values of the product, and helps articulate the Luxstat LED Luminaire System's position within the company's product portfolio.

As an early proof of concept, H.E.R.B. is an active method that currently visualizes the Luxstat LED Luminaire System's value proposition, particularly its health and productivity benefits (Servodan, n.d.), and sets it within the larger, more holistic context of a healthy building environment. This conversation starts to actively engage players with Servodan's value proposition. This interactive dialogue can leverage video gaming's communicative platform to build stronger connections with the player.

Other examples of game-facilitated conversations already exist as training simulations that are already in use for more technical training aspects within an organization. Union Pacific's *Rail Operations Simulation* program (Davis, 2009), which trains employees on how to maneuver rail carts in a rail yard is a great example of virtual training, as is IBM's INNOV8 program, a game designed to teach graduate students business and IT skills (IBM, 2010). These are early examples of how corporations

are increasingly exploring the potential of gaming in a technical capacity.

H.E.R.B. diverges from the technical training paradigm by applying gaming principles to other more abstract business dialogues. By choosing to engage with these higher-level business discussions, H.E.R.B. can be an early pre-cursor to more in-depth and transparent presentations of company processes, high-level strategies and goals.

H.E.R.B.

H.E.R.B. is an interactive visualization designed to communicate Servodan's unique value proposition from an alternative perspective. It also functions as a proof of concept of the potential for a wider engagement with external business partners through game design. H.E.R.B. focuses on how the Luxstat LED Luminaire System plays a key role within a holistic view of a healthy building eco-system. The game implicitly articulates the productivity and health benefits of a comfortable indoor working climate through what Bogost calls "procedural rhetoric" (Bogost, 2007, p.28): a method of communication through engagement with processes. In this case, player engagement with the game reveals the multiple components required for a healthy building.

As part of the initial design challenge, this design researcher was assigned with addressing the specific issues facing Servodan. These challenges included: positioning the Luxstat system within the Servodan product portfolio, considering the value proposition, clarifying the respective product scenarios and value offer, and the core

needs of the identified target markets (Wozniak, 2010) among others. After researching the company's challenges, the design research team decided that the value proposition challenge stood out as the most salient issue that the company was facing. An interactive narrative to articulate the unique value proposition of Servodan's LED Luminaire system was proposed as an interesting experiment. This approach had the potential to engage the external audience that Servodan had identified, such as building managers, interior architects, or lighting designers that were the parties that could specify and implement Servodan's system.

Multiple game mechanics were explored during the ideation phase, such as a building-centric 3D isometric *Sim City*-esque game play, where the player gets construct a model of a building lit with the Servodan product and test it out, and a role-playing game where the player embarks on a quest to discover the Servodan product. Ultimately, H.E.R.B. was designed as a simple 2D side-scrolling platform game. This was to leverage the ubiquity of the game genre. Most players possess enough game literacy to immediately understand the mechanics of a 2D platform game, and this low threshold of player ability required (Andersen, 2010)(Juul, 2010, p.40-42) allows for maximum participation of a wider audience with the game. The interface is however primarily mouse-centric, a small deviation from the standard keyboard controls to allow for minimum hardware requirements.

Player engagement is encouraged by rewards at the end of each success-

fully completed task. The rewards are subtle changes in the game environment, which mark the progression of the building through its improving health states. These moments of delight, where the player recognizes these patterns of progression (Koster, 2005), are immediate positive feedback for appropriate actions.

H.E.R.B. was inspired by contemporary re-interpretations of 2D platform games from the 1980s. These games inspired a new generation games with similar game mechanics and aesthetics for mobile platforms. Games like the *Super Mario* series (Miyamoto, 1981) have unique aesthetic sensibilities and a defined interactive paradigm. The constant left to right scrolling, easily accessible game mechanics, and the height, distance and timing of the character's jumping motion are ingrained into most players. Their successors such as *Canabalt* (Saltsman, 2009), or *Little Big Planet* (Healey & Smith, 2008) have introduced slight variations in game play and mechanics, but the core interactions remain similar.

These video games are part of our mainstream cultural vernacular. As more popular games emerge with their simple mechanics and lower knowledge threshold, they are reaching a more extensive audience beyond the traditional digital gaming fraternity. This position of influence is reflected not only in a general increase in game literacy, but also signals a strong new communication scheme for engaging a wider audience.

H.E.R.B. is currently a speculative and untested prototype that is attempting to extend gaming's cultural capi-



Figure 1: Final H.E.R.B. color palette and proportion concept art

tal into a new application. Play testing and user evaluation of the game, particularly around the user interface and communicative properties of the game, is the next phase of the iterative design process. Specifically, user testing on players from inside and outside the company is necessary to ensure that the value proposition is understood and communicated from the inside out. Play testing in this case was not achievable within the pre-existing time restrictions.

GAME AESTHETICS

H.E.R.B. has a consistent aesthetic language that is designed to be easily legible. The art direction prioritized stylistic off-kilter proportions as opposed to realistic visual assets following concept developments from the original precedents. The game's visual assets were designed to be consistent, with aesthetic constraints guiding the design of every asset.

The main character is deliberately simplified to help players identify with his motivation. This allows the players to project their own mental image on to the abstracted caricature (McCloud, 1993). At the same time, the character's silhouette and movement hint at the character's role the game progression. The game environment primarily uses a generic indoor office setting contained within a larger cityscape that magnifies the working conditions and its effects on productivity. The desaturated grainy pessimism of the early levels is designed to set a depressed atmosphere for the game. In contrast, the player transitions to later levels that introduce a brighter color palette with a finer surface. The variably textured treatment softens the hard-edged aesthetic typical to vector-based games and introduces visual tactility to the game. The game audio subtly supports the narrative by progressing from the amplified office cacophony to sounds that are more natural and soothing.

The aesthetic precedents for this project were projects such as the critical *Every Day the Same Dream* by Mollindustria (Experimental Gameplay Project, 2009), a game designed for the Experimental Gameplay Project and *Gentrification Battlefield* (Beekmans, 2010), a video-based installation by Golfstromen in collaboration with

Coen Rens. *Gentrification Battlefield* is currently on display at the Mediamatic in Amsterdam.

GAME MECHANICS

The player's goals are to improve the building health appearance and workers' productivity. They achieve this through installing building upgrades that they get from an external source. The player interacts with the game through a mouse-centric interface. This slight variation allows for a click-drag interaction, where the player can select an item and drag it to the target location.

The player progresses through the levels by adding lights, indoor plants and providing water, which are all required for a more productive environment. Lighting conditions in particular plays an important role in office occupant productivity and well being (Bege-mann et al, 1997)(Partonena, 1999) (Fisk, 2000).

Discrete upgrades mark the progression through the multiple states. At the completion of each upgrade, the player is rewarded with a change in the level of illumination. This instant feedback helps the player to construct their understanding of improving building health and office productivity. The game ends with the addition of Servodan's Luxstat LED Luminaire System. The final win screen allows for a simple virtual demonstration of the product's controllable lighting system, allowing the player to tweak the tint and intensity of the installed lights.

CONCLUSION

Video gaming is an excellent medium to not only reinforce corporate values, particularly in communication to a business's many partners, but to also strengthen the engagement with a brand's value proposition. The interactive medium is flexible enough to engage in various conversations within and without a corporation.

Video game inspired thinking can function as an alternative design strategy. The internal value network gets to apply design thinking to their processes, and begin to approach traditional business discussions with a framework that includes principles of play. As gaming further permeates the mainstream, this method of applying

game thinking is going to extend to more areas.

H.E.R.B. serves as a prototype interactive visualization of Servodan's Luxstat LED Luminaire System, which initially explores the benefits of the system within a generic indoor office setting. The game places the Servodan product within a more holistic view of healthy indoor spaces. H.E.R.B. aims to communicate the specific benefits of Servodan's flagship product in an alternative medium.

H.E.R.B., in its current form, is an extension of videogame rhetoric that Bogost terms as demonstrative advertising (Bogost, 2007, p.153-154), as it articulates the tangible benefits of the product. It is taking traditional marketing rhetoric, and re-applying it through an interactive medium that can convincingly convey the value proposition of the Luxstat LED Luminaire system. By utilizing the interactive medium to let a player actively discover the message (Bogost, 2007), the player is allowed to digest the emergent narrative (Salen, 2004, p.382-387) that is embedded within the game.

This game has scope to be extended beyond the generic office environment discussed here. Other potential practical applications include focusing on target markets that Servodan has already identified, such as hospitals and schools, and other public consumer spaces such as supermarkets and shopping complexes. Further refinement in different revisions of the game can help articulate the specific benefits of the Luxstat LED Luminaire System for each space.

These revisions can be modular packages within a larger game to assemble a more holistic view of the company's product portfolio, as well as a more transparent view of the company's many processes, such as the relevant target markets or strategic marketing initiatives. This larger collage of experiences can help communicate a consistent brand vision for the company, both internally and externally.

Games can be designed to challenge players to approach abstract discussions, such as clarity around the product's value offering or an appropriate business model. Future developments branching off H.E.R.B. could include a more participatory design phase,

where multiple iterations are discussed with appropriate stakeholders. A valuable development phase where input from internal stakeholders is during the ideation of how a game might articulate the position a product has in the company portfolio. A strong internal understanding will help solidify an external communication. Another valuable phase is the identification of the target market. Gaming has a stereotypical demographic that is rapidly expanding. If gaming were to be used as an approach, the game design needs to be tailored to consider the needs and abilities of the target market. These conversations do not necessarily have revolve video games specifically, but the development and thinking around this problem-solving process could be informed by the principles of play and engagement.

REFERENCES

- Andersen, N. 2010, *Why Are So Many Indie Darlings 2D Platformers?*, viewed 16 November 2010, <http://www.above49.ca/2010/07/why-are-so-many-indie-darlings-2d.html>
- Beekmans, J. 2010. *Gentrification as a strategy game*, viewed 17 November 2010, <http://popucity.net/2010/09/gentrification-as-a-strategy-game/>
- Begemann, S.H.A., van den Beld, G.J. , & Tenner, A.D. 1997, 'Daylight, artificial light and people in an office environment, overview of visual and biological responses', *International Journal of Industrial Ergonomics*, vol 20, no.3, pp. 231-239
- Bogost, I. 2007. *Persuasive Games: the expressive power of video games*, MIT Press, Cambridge, Massachusetts.
- Chatfield, T. 2009, *Video games now outperform Hollywood movies*, viewed 17 November 2010, <http://www.guardian.co.uk/technology/gamesblog/2009/sep/27/video-games-hollywood>
- Davis, M. 2009. *Union Pacific Turns Rail Yard Training Into a Virtual Reality*, viewed 15 November 2010, http://www.uprr.com/newsinfo/releases/safety/2009/0129_rail-training-simulator.shtml
- Design Council UK. 2005, *Design Index: The Impact of Design on Stock Market Performance*, London, Design Council, viewed 17 November 2010, <http://www.designcouncil.org.uk/publications/Design-Index/>
- Experimental Gameplay Project. 2009, *Every day the same dream*, viewed 17 November 2010, <http://experimentalgameplay.com/blog/2009/12/every-day-the-same-dream/>
- Fisk, W.J. 2000, 'Health and productivity gains from better indoor environments and their relationship with building energy efficiency', *Annual Review of Energy and the Environment*, vol 25, pp. 537-566.
- Healey, M & Smith, D. 2008, *Little Big Planet*, Surrey, Media Molecule/ Sony Computer Entertainment, United Kingdom.
- Juul, J. 2010, *A Casual Revolution: reinventing video games and their players*, MIT Press, Cambridge, Massachusetts.
- Koster, R. 2005, *A Theory of Fun for Game Design*, Paraglyph Press, Arizona.
- IBM. 2010, *INNOV8 2.0: A BPM Simulator*, viewed 17 November 2010, <http://www-01.ibm.com/software/solutions/soa/innov8/index.html>
- McCloud, S, 1993, *Understanding Comics: the invisible art*. HarperCollins Publishers, New York, New York.
- Miyamoto, S. 1980, *Mario*, Nintendo, Japan.
- Salen, K. & Zimmerman, E. 2004. *Rules of play: game design fundamentals*, MIT Press, Cambridge, Massachusetts.
- Saltsman, A. 2009, *Canabalt, Semi Secret Software*, Austin, Texas.
- Servodan. N.D., *People need Daylight*, viewed 28 November 2010, http://www.servodan.com/sites/default/files/filarkiv/Brochurebestilling/brochure_-_people_need_daylight_%5Bgb%5D.pdf
- Partonena, T., Lönnqvist, J. 1999. 'Bright light improves vitality and alleviates distress in healthy people', *Journal of Affective Disorders*, vol 57, no. 1-3, pp. 55-61.
- Wozniak, B. 2010. *Daylight Systems of Servodan*, Paper presented at the Participatory Innovations Conference, Sønderborg, Denmark.