Linden Labs Second Life: Understanding the Business Model and Sources of Commercial and Social Success or Decline of Second Life

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Abstract

The online virtual world, Second Life, has been described by its developers, Linden Lab, as a 'free' online Virtual reality application with which residents (users) can imagine and create their respective virtual worlds. The degree of 'freedom' of use of Second Life by residents as described by the developers comes into question as it would rather imply that it is a charity-based online application; therefore, creating a lacuna as to how its existence is being sustained. This paper discusses the business model of Second Life as it affects its potential sources of commercial and social success and decline, and we have skewed our discourse more to the potential sources of decline than that of success, with some solutions offered along the lines.

Keywords: Linden Lab, Second life, Virtual reality

1. Introduction

Several years after the emergence of the World Wide Web (www) and its subsequent explosion, the web browser has been acting as an interface to the internet despite drastic shifts in technology and culture over time. This phenomenon has changed the world at a geometric rate, and the world has brazened up for new frontiers in technological advancement. Further, a generation of computer users now in their twenties cannot do without a world of networked 3D video games like Doom, Quake, Halo, or World of Warcraft - WoW (Macedonia, 2007). This generation is indeed comfortable in the www with inherent ability to navigate between virtual and real worlds.

In a departure from the general composition and characteristics of videogames (including the aforementioned), Linden Labs (a company founded by Philip Rosedale in 1999) created a large-scale online virtual world known as Second Life for social networking (Driver, 2010). Second Life is a 3D internet virtual world that can be visited by people who are signed up to it to take advantage of its business, experiential, and entertainment opportunities. The user (known as a resident) creates a virtual version of his or herself (known as an Avatar) in Second Life, which can be transported to different locations within the virtual environment.

The Second Life grid provides the platform where the Second Life world resides and offers the tools for businesses, educators, nonprofits, and entrepreneurs to develop a virtual presence (Macedonia, 2007). It has attracted advertisement and increased online presence from businesses such as IBM, Ben, Jerry Ice Cream. IBM has been a leader in experimenting with Second Life and other virtual worlds as a forum for business collaboration and they tend to tap from the opportunities provided by these virtual worlds to become more integrated into many aspects of business and society.

The first part of this paper outlines the characteristics of Virtual Reality of which Second Life's characteristics are based on, followed by a discussion on its business model. These are followed by an expose on the challenges of Second Life with respect to its commercial and social potentials, and how these challenges could lead to its success or decline.

2. Virtual Reality (VR): The Precursors to Second Life

In order to obtain an understanding of the characteristics of Second Life, one must first of all be acquainted with the characteristics of Virtual Reality (VR) of which second life is a shorn. Bricken, (1991) stated that VR, among other characteristics, is experiential, allows natural interaction with information, allows unique capabilities, a shared experience, and can be tailored to individuals.

In summary, the user experiences the VR environment as though it were real, while still being fully aware that it is computer generated. A user is both physically and perceptually involved in the experience; he/she feels a sense of presence within a virtual world. They are disposed to entirely new capabilities, such as the ability to fly through the virtual world, occupying any object as a virtual body to observe the environment from different perspectives (Bricken, 1991). This is evident with Second Life which allows the user to create a 3D version of himself as earlier mention in section 1.0, which he controls from the real world with peripheral devices such as mouse, keyboard, etc.

3. The Business Model of Second Life

The Second Life platform consists of a broad range of users which includes various categories of businesses, students, educators, entertainers, etc. Hence, its business model should accommodate these broad spectrum of users. This section discusses the various services that form the core of Second Life business model in relation to its commercial potential.

3.1 Voice Services:

One of the core components of Second Life is the delivery of voice services to provide unique monetization opportunities. Apart from providing a more realistic and meaningful platform for education, business meetings, simulations, training and casual conversations, voice is also an important aspect of Linden Lab's business model and strategy for moving forward (Mitchell, 2009). The adoption of voice services in Second Life has created the opportunity for its evolution and helped in strengthening Linden Lab's Second Life business model. One might be of the view that the attribution to voice services as a core in Second Life's business model could be as a result of its percentage of usage and the revenue that is accruable to the company from such usage.

The importance of voice as a core part of Second Life's business model cannot be overemphasized as different products have been devised to attract users to the Second Life voice service. One of the voice services provided by Second Life (AvaLine) enables users (known as residents) to receive voice calls from outside numbers while they (residents) are logged on to Second Life. This platform provides every user in Second Life a customized audio stream, which requires a robust back-end infrastructure and enables features such as a 3D proximity-based communication. This service allows friends, customers, colleagues and business associates to be connected to the Second Life viewer from any of landline, cell phone or VoIP application, thereby making communication between a non-Second Life user and a Resident Second Life user possible; this is a major source of income and revenue driver for the Second Life platform (Mitchell, 2009). From the foregoing, we are of the opinion that the voice facility is a source of commercial success for Second life.

3.2 Introduction of Virtual Currency in Second Life – Linden Dollars:

As part of its strategy to remain a major player in the virtual world, Linden Lab also introduced its virtual currency (Linden Dollars) in Second Life; the Linden Dollars is used for transaction in the online and social networking world of Second Life (Jeffreries, 2009). At the time real-world currencies were on the downward slide, virtual currencies like Linden Dollars have shown significant increase in value. For instance, in the second quarter of 2009, an estimated $144 million (£91 million) was traded on the official currency exchange market of Second Life – LindeX, where Linden Dollars are bought and sold for the United States Dollars (USD) by residents, indicating a 20% increase over the first quarter of the same year (Jefferies, 2009).

The trading of Linden Dollars as a currency unit in Second Life has also enabled its conversion to USD in real life (Jefferies, 2009). However, the trading of Linden Dollars in Second Life also has its challenges, as discussed below.

3.2.1 Concerns of trading in Linden Dollars:

Accumulation of cash in the system results in inflation. For instance, some entrepreneurs hold significant balance in their virtual accounts, whereas others have a relatively small amount stored online. Hence, Linden Lab applies certain measures to control the exchange rate in Second Life, which includes ensuring that the exchange rate of Linden Dollars is relatively stabilized at about 265 Linden Dollars to a USD; pricing and promotion of strategies which removes currency from circulation such as the cost of uploading content or posting classified advertisements, and adjustment of the volume of new Linden Dollars that is available for purchase. In addition to

the above strategies, residents of Second Life in Europe are made to pay Value Added Tax (VAT) on some purchases in sync with European Union tax regulations, and it is expected that further taxation would be exerted on virtual economies in the future if these virtual currencies are to be adopted as a serious platform for commerce (Jefferies, 2009).

Financial theft is also an issue; due to the fact that any business involving money (especially buying and selling - commerce) cannot be totally immune from financial theft, but the measure put in place by the system to curb such acts is what matters. In the past, there have been several allegations of theft in Second Life which led to the prohibition of residents from offering interest or any direct return on an investment without prove of relevant registration statement with government or financial institution charter (Jefferies, 2009). These issues are inimical to the commercial success of Second Life and if not properly addressed, could lead to its decline.

3.2.2 Concerns on breach of trust:

The problem of breach of trust on the part of in-world banks in Second Life threatens the gains made by Linden Lab in this arm of their business model. Some of these banks default on their promises as a result of offering high interest rates of between 20 to 60 percent per annum. This is a potential risk to Second Life's commercial operations which could lead to its decline. Linden Labs took steps to curb this menace by prohibiting interest offering or any form of direct return on investment (whatever the currency) from any object (such as virtual Automated Teller Machine) within Second Life, except there is a proof of an applicable government statement or financial institution charter. The enforcement of this regulation was done by the removal of virtual ATMs or other objects that facilitate the operation of in-world banking. Other sanctions for residents that breach this policy include suspension, termination of accounts and loss of land within Second Life (Kend, 2008).

The success of Second Life's commercial arm depends on how well financial transactions carried out in-world and out-world on its platform are secured and protected from fraudulent practises. User confidence is boosted when he or she has a sense of security over what he does with the platform, thus, encouraging blind marketing of the product by users to others that are yet to discover such a virtual world like Second Life. Also, competition from other virtual economies such as Eve Online, World of Warcraft, etc, is such as could lead to its commercial decline if comparatively these competitors are found to be more secure and protective in their handling of financial transactions than Second Life.

4. The Social Potential of Second Life:

As stated in the introductory part of this paper, we will be focusing more on the potential sources of decline of Second Life than sources of success. The subsequent sections highlight some of the sources of decline from the social perspective on the Second Life platform.

4.1 Intellectual Property (IP) Protection In Second Life: The Menace of Content Theft

The issue of content theft is a social menace on businesses that operate on electronic media such as the internet. Hence, the importance of intellectual property protection on Second Life cannot be overemphasized because it is also a user content creation platform. However, there are loopholes to its copy-protection facility which does not seem to be protecting users' content from being copied and resold. These loopholes are mainly drawn from alternative viewers (such as CopyBot and CryoLife) which are designed to substitute the standard viewer provided by Linden Lab, thus availing a user with unrestricted content copying functions. Protection is made available for some items on Second Life so that content owners can prevent other people from copying, modifying or transferring ownership of items. For instance, one can sell a *virtual chair* and apply the no-copy, no-modify, and no-transfer protection to it, so as to protect against a person buying the chair and populating their *virtual house* with a single chair or copying and placing it for sale in their own network. Linden Lab has applied some degree of protection in Second Life although the system is relatively rudimentary (Ssieth, 2009).

As suggested by Ssieth (2009), one of the ways to curb this menace would be to ban all viewers not built by Linden Labs, which would unfortunately disable all the functionalities and possibilities that alternative viewers offer, but it might help in restraining content theft. Content theft is therefore a potential source of social decline of Second Life; it is capable of frustrating users who design, develop, and sell virtual items on this platform.

4.2 Effect of Second Life on Human Social Interaction

The influence of virtual environments on the social life of human beings is both negative and positive (Blascovich et al., 2002). Bailenson and Yee (2006) posited that our virtual selves shape our offline attitudes and behaviour positively, whereas Bushman and Anderson (2007) believe the virtualized human has a negative impact on the real being. Therefore, in designing a platform for virtual reality, one needs to embark on user studies to ascertain which of the divide (negative or positive) such a platform would skew to. Second Life is a conglomeration of nearly all

that is obtainable from every strata of our social space. This section discusses the social success of Second Life with respect to user requirements and highlights some factors that could weaken this platform based on user interactions.

A recent study performed by Harris et al. (2009) on a sample population of 80 Second Life users over a period of six weeks revealed that events such as classes/learning, community outreach, cultural events, gambling, parties, religious ceremonies, sexual activities, and sporting events were common among users. They also rated the events based on popularity as follows: The most popular events were parties (nightclubs, dances, bars) which comprised 34% of all attended events, 19% of activities were reported from classes and learning environments, 14% of activities revolved round cultural events (music shows, museums, poetry), 14% of activities were also reported for gambling, sporting events took 6%, sexual activities accounted for 6%, religious ceremonies accounted for 5%, and community outreach accounted for 2% (Harris et al., 2009).

The above data gives an indication of how the Second Life business model has been able to balance the societal needs of its users; such as learning and cultural activities, and entertainment activities (partying and gambling) – this is a social success. The virtual environment of Second Life therefore provides a platform that mirrors the type of balance in activities that occur in the real world. According to Harris et al. (2009), the nature of social interaction in Second Life is such that the change in people's social lives over time stabilizes their interactions. Users often revert to real animations that are more typical in the physical world, such as walking between two points instead of applying the unique methods of movement in Second Life such as teleporting and flying. This implies that the fantasy of possessing the abilities to outdo the real world physics as presented in Second Life becomes vague and unappealing to the human mind over time, thereby resulting in the disuse of these functions.

In addition, Second Life and indeed other virtual environments have been viewed as a useful tool to aid learning and research (Williams, et al., 2008; Bailenson and Yee, 2006) in that there is a relative natural spread of behavioural patterns of people (Harris et al., 2009). Many educational institutions worldwide are at different stages of adopting Second Life for learning and research. Professors are realising that students can be guided through the inside of cell structures with medical simulations, or present other imaginative teaching exercises in virtual worlds that cannot be done in a physical classroom (Young, 2010). The University of Sussex is not left out, as they also developed a campus on the Second Life platform for administrative and academic purposes (Bulletin 2008), which is currently not fully functional to meet its development objectives. Linden Lab makes these services available to institutions by selling server spaces at discounted rates in Second Life.

Regardless of the adoption of Second Life for teaching and learning by educational institutions, some of those that are already using it are at different stages of opting out of it to find alternatives. Young (2010) posited that the stress of navigating through Second Life to find other residents (for instance, one must be patient to wait for his avatar to walk between virtual classrooms) has led to some professors and students deciding to work out on the platform. Also, issues of online vandalism and the lack of adequate restriction to limit access to a particular event allow non-academics to stroll into classrooms, while students are prone to stumbling into areas meant for *virtual pornography*. Furthermore, the quest for more control for tutors and students than is available in Second Life is leading to an exodus from the platform. Hence, there are ambitious attempt to developing an education-friendly virtual world such as Open Cobalt being developed by Duke University (Young, 2010). It is clear that Linden Lab is losing ground in the education aspect of their business service because of their inability to completely divorce other activities that goes on in the Second Life platform from this sensitive area.

In summary, this section indicates how that Linden Lab have been able to develop a package that enhances social interaction by touching on relevant real life social activities, which in our opinion is a potential source of social success. Nonetheless, the incorporation of celestial capabilities (such as flying) for users, as shown by Harris et al.'s study, leads to social decline in the long run. Finally, the lack of restrictions on the different areas (e.g. the education and entertainment areas) on the platform as discussed above is a recipe for social decline of its business model.

5. Recommendations

Based on the various issues raised in this paper with respect to the potential sources of commercial and social success or decline of Second Life business model, it is pertinent that suggestions be made to improve its business model. Our recommendations are mainly aimed at issues of decline as they appear in this paper. With respect to the issue of accumulation of Linden Dollars in the in-world banks, it has been stated in section 3.2.1 that the financial regulations in Europe is binding on Second Life's in-world banks through taxation to discourage cash accumulation; we therefore suggest that Linden Lab should tax users in all parts of the world, as this is a viable means of curbing this menace in line with international financial best practices. Regarding the issues of financial

theft and breach of trust, we encourage Linden Lab to sustain their adopted regulatory framework as mentioned in section 3.2.1 and 3.2.2 respectively, which in our opinion is in sync with global standards. The continuous enforcement of these regulations would help sustain the commercial arm of Second Life.

Regarding issues that could lead to its social decline, the available approaches adopted by Linden Lab to curb content theft through alternative viewers as outlined in section 4.1, we suggest that they should develop a more user friendly standard viewer by incorporating the additional functions that are inherent in alternative viewers, and also embed suitable security features that disallow copying of virtual items (such items could be enabled as read-only) for reuse elsewhere. This will discourage users from patronising alternative viewers – when there is no loophole, users will conform to the standard viewer and the social menace of intellectual property on the platform would be reduced if not completely eradicated.

Also, the issue having unrestricted access to different areas on the platform (e.g accessing virtual pornography while receiving lectures simultaneously and vice-versa) as elaborated in section 4.2 is anti-social and we are suggesting that restriction mechanisms be designed on the Second Life platform to allow for privacy. This would encourage institutions and organizations to opt for the Second Life platform instead of seeking to develop their own specialised (for instance, Universities would not have need for casinos on the same virtual platform) platforms tailored to suit their needs.

6. Conclusions

In this paper we have highlighted some of the potential sources of commercial and social success or decline of Linden Lab's Second Life business model. Firstly, we highlighted some characteristic features of Second Life as a branch of virtual reality, and subsequently elaborated on the commercial aspect of Second Life followed by its social aspect. We have laid more emphases on the potential sources of decline than that of success, which enabled us offer suggestions on how the platform could be sustained commercially and socially. Some of our recommendations reinforce the steps (such as regulation of operation of in-world banks) that are being taken by Linden Lab to checkmate some of Second Life's operational setbacks (potential sources of decline) as contained in the literature, while others are drawn mainly from the shortcomings (such as loopholes created by the use of alternative viewers) of its existing model as highlighted in this paper. As it is with other virtual worlds, Second Life is here to stay and it will definitely make an impact on our lives and that of generations yet unborn.

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