2009

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ABSTRACT

Second Life is the most popular 3-D virtual world in use worldwide. The authors describe the complete process that was employed in incorporating the use of virtual world technologies in a graduate level course on e-commerce corporate strategy. A description is given of the genre of virtual world simulations, the traditional way the course was given startup issues, course project, milestones ,the assessment process and feedback.

INTRODUCTION

A course on e-commerce strategy has been offered in the graduate program of the Hagan School of Business at Iona College for the past five years. During that period two member of the faculty have taught the class. One of the authors inherited the course three years ago. Part of the assessment process for the course was a course project that was Internet-based research in a "hands-on" environment. In the previous two offerings of the class, the project was based on setting up a business on eBay and documenting the implementation process. Included in the project was the requirement for multiple screenshots that captured the visual dimension of the activity.

For the third offering of the class, Fall, 2008, a different approach was taken. In keeping with current technology advances in 3-D virtual world applications and the interest of many real-world organizations to implement a presence in this environment, it was decided to design a "hands on" component to the class on e-commerce strategy that would give the students experience in this phenomenon. The challenge was how to design a meaningful project and develop an appropriate assessment vehicle all in the context of a distance learning modality where the students would have no direct contact with the instructor. Any logistical or technical problems would have to be adjudicated by the instructor since there was not support staff trained in Second Life on the staff of the university.

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Choice of a 3-D Virtual World Platform

There are several organizations that have ventured into the virtual world of 3-D simulation. The authors selected Second Life from Linden Labs for several reasons. The first was that the client software could be downloaded to a desktop or laptop at no cost to the student. This is an important factor to consider and it was made easier by the availability and cost. The client version is in contact with the server version and virtually all data is stored by Linden Labs. A second reason was that Second Life was the market leader in the sense that more business organizations have established an e-commerce presence of its platform than on any other. There is a rich history going back several years of companies that have a virtual world presence in Second Life. Another factor was the potential staying power of the platform. Second Life which is the largest virtual world environment and has had the most aggressive e-commerce presence, is financially backed by some of the IT industry's heavyweights. Some of these backers are as follows: Mitch Kapor (Lotus 1-2-3 fame), Pierre Omidyar (eBay founder), Jeff Bezos (Amazon) and Ray Ozzie (Microsoft Chief Technology and Lotus notes inventor) (Ortiz, 2008). Clearly, these gentlemen have made a major investment in the development of a virtual world environment and its potential for the future.

There have been periods when Second Life was a media darling and, more recently; the company has had its share of negative press. A great deal of the criticism has been based on the statistics that demonstrate that the level of traffic at several of the virtual world sites has not been high enough to warrant an investment in it by corporations. However, if you consider that the World Wide Web contains billions of web pages but only a very small proportion is accessed, then this argument does not seem too strong. Companies might not consider "traffic" to the site the only definitive measure of value in a strategic sense.

Getting Started

The authors climbed the learning curve for Second Life mechanics during the Summer of 2008 which was just a couple of months before the course started. However, one of the authors had a familiarity with the platform via previous exposure to the product at professional conferences. Two books on Second Life were purchased and studied in a "hands on" fashion during this period. (Robbins & Bell, 2008; Rymaszewski et. al ,2008) There is also an extensive collection of video tutorials available by Linden Labs that are on Youtube. These brief tutorials covered basic orientation issues to some more complex building tools that the students would not be expected to do as part of the project.

The first step is to download a copy of the client software. As part of this process, you are asked to check your hardware capability and network connection availability. All 3-D virtual worlds are very demanding on the video card and memory requirements of the hardware. Poor video cards will result in the virtual world moving in a sluggish, slow motion manner. If the bandwidth is insufficient, similar problems will occur in running the simulation on the host computer of the student.

Once the hardware and network requirements are satisfied, it is time to download the client version to your hard drive for rapid installation on the C-drive of the host computer. The next

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step is to create an avatar. An avatar is how you are represented in the simulation's virtual world. It will last with you forever so some care should be taken in its creation. You choose a first name voluntarily but then your second name must be selected from a limited drop down list provided by the simulation. This restriction is present because your avatar name is your account tag. Your students should be warned in advance that your name and image will create a first impression on everyone you come into contact with in the virtual world. Once you have selected your name, you are asked to select a persona or image that your avatar will carry. Again, students should be advised to select a persona consistent with their mission in Second Life. In the context of the class, they will be visiting business sites and might need to make inquiries of professional staff so their image should be reflective of a business professional. The cost of the downloading and creation of the avatar is nothing since the student is considered to have a "basic membership" in Second Life. However, at a small cost per month, the membership can become a "premium" one that allows you to purchase land in the virtual world. Since I had only limited requirements for the course regarding avatar activity, it was not necessary to upgrade the membership status.

As part of the avatar creation process, you must supply an e-mail address. We suggested that all students create a gmail, msn, aol, or hotmail account and then have any emails forwarded to their regular account if they so desired. All of the aforementioned activity should not take anyone more than 10 minutes. Remember, you have not entered the virtual world as yet, but, instead, are only setting up the administrative subject matter.

First Real Challenge - Navigation

It is very important to get the students to "buy in" to the whole process of learning a virtual world platform, to some, may not appear at all relevant to learning about e-commerce strategy. So the first step for the instructor is to "sell" that notion that the 3-D virtual world is part of an evolutionary process that started with the web and progressed to Web 2.0 technologies and will eventually be found in 3-D web modalities. Fortunately, the course textbook (Turban, 2008) supports this argument. Fortunately, the students accepted this premise since several articles and books were used to supplement the instructor's position (Haag, Baltzan, & Paige, 2006; Laudon & Traver, 2008).

From past experience in teaching the course, it was apparent that some students chose to delay the start of their course projects for too long and then had to "rush" to complete the assignment in a timely manner. In order to combat this tendency, the instructor decided to split the assignment into two parts. The first part's objective was to climb the proverbial steep learning curve for first time Second Life users that some have documented in the literature. To achieve our objective, the first assignment was to download the software, create your avatar and then visit several business sites in the virtual world. Each student had to capture inworld screen shots showing his/her avatar visiting different corporate sites and interacting with other avatars. It was made very clear in the grading rubric that the purpose of this exercise was to "get started" and avoid late minute histrionics and panic that would be the result of trying to do too much in too short a period.

At the completion of the exercise, students submitted the WORD document with all the screen shots included. There were several advantages to this process. It gave the instructor early feedback on two issues of potential difficulty. First, it showed if the student had any difficulty learning and mastering basic navigation skills in Second Life. Second, it identified any hardware limitations that might impact the completion of the project. Students always had the option to use the college's facilities. Third, and perhaps most importantly, it gave the instructor a sense of which students were very enthusiastic about the whole assigned project. After evaluating all the submissions, it became very clear which students were enthusiastic, which ones were neutral, and which ones were skeptical and needed greater care in the remainder of the assignment.

As an aside to the original assignment, the instructor was pleasantly surprised at how several of the students "bought into" the whole virtual world experience. Several upgrades to premium status and improved on their avatar image as well as shopped for new clothes that better expressed who they were. Some ever changed the "skin" of their avatar to resemble their actual physical appearance. The net result from this first phase was that the instructor believed that the stated objective was met and, in many, instances were surpassed. He was looking forward to the final project submissions.

THE COURSE PROJECT

The following is the rubric as taken from the Blackboard course management system:

Objectives and Deliverables

The research project in this course requires you to do "hands on" research project using the skills that you acquired in the first avatar-creation exercise.

The **objectives** of this project are as follows:

(1) Ascertain the commercial e-commerce potential for virtual 3-D world applications;
(2) Experience first hand the challenges and opportunities of Web 2.0 technologies in e-commerce;
(3) Determine the approaches taken by companies that have become involved in 3-D virtual world initiatives to capitalize on new approaches to consumerism.

Task

Research those companies that have a presence on Second Life. Identify the nature of their presence (informational, e-commerce). Choose 3-5 companies (nice to stay in 1 industry if possible) that will be the basis for your detailed study. Compare and contrast (using tables, charts, graphs where feasible) the approaches taken. Discuss how explicit the e-commerce activity is (within site or a hot link to any e-commerce component).

Summarize your results.

Evaluation criteria

    (1) Direct tie in to Chapter 18 of the text as well as other chapters.

    (2) Relevance and success of screen shots of various Second Life web sites utilized in the project.

    (3) Professionalism and packaging of final presentation documentation.

    (4) Articulation of lessons learned about the current and future potential of this technology for global businesses.

All projects are to be submitted via the DDB (pdf or WORD format) and hard copy. Submit by November 18th.

From the above information, the students were given the objectives of the assignment, the rationale for the assignment, the tasks to be executed and how their work will be evaluated.

COURSE DEMOGRAPHICS

The course is part of a certificate program in e-commerce offered and part of the MBA program. It could also be taken as an elective by an interested student or by a visiting student. Students in the course are expected to have a facility with computers but , not necessarily, at the level of an Information Systems major. Some students are full-time while others are part-time. Twenty-one students were enrolled in the class. Nine were female and twelve were male. Only two were Information Systems majors.

RESULTS AND FEEDBACK

The overall assessment of the course project was extremely positive. In fact, it far surpassed previous course projects that were assigned in past offerings of the course. The students saw the significance of the assignment in understanding how corporations are using e-commerce in a virtual world environment. They were able to see how those corporations chose varying strategies to implement their virtual world presence. Some stayed close to replicating a real world storefront while others engaged in more entertaining aspects of the customer's visit to the virtual world. This was especially true in those sites representing car companies. By completing the exercise, they actually visited the sites and experientially acted as a customer would with all the positive and negative situations. They combined their understanding of the subject matter of the course with the design parameters of each site visited and were able to differentiate the better designed experiences from the inferior ones.

Another benefit from completing the course project was that each student became immersed in the world of 3-D virtual gaming. By active engaging in the simulation they could make inferences on the viability of the modality as used by businesses in not only an e-commerce manner but as a training and collaboration vehicle. For some of the students, this was the first

time they ever experienced a serious "computer game" while .others, were able to compare it with other video games that they have experienced.

Second Life employs an exchange system for currency in the virtual world. It has a set exchange rate against the dollar-about 266 lindens per U.S. dollar. All transactions inworld are done in lindens and you can either purchase them with your credit card using dollars or euros or you can work inworld to earn lindens. An entire million dollar economy is, therefore, experienced by the student. Entrepreneurs in Second Life have taken risks, opened businesses and engaged in e-commerce totally within the virtual world. Most students were amazed at this aspect of the virtual world. They realized that established corporations were competing side-by–side with virtual competitors for the consumers' attention and dollars.

Students in the course feedback liked the idea that many of the theoretical concepts inherent in the course "came to life" with the course project. Many expressed the thought that they have never completed a project of this type in any previous classes. They also stated that completing the preliminary exercise was crucial to the successful completion of the main project. It gave them time to gradually climb the learning curve instead of creating a panic situation towards the end of the term.

Another interesting observation came from several students who felt that Second Life was too cumbersome to learn to be effective in an e-commerce environment for the typical consumer. Significant improvements in the user interface were required before it would be truly useful for corporations to use effectively. Some student s also felt that the fact that some corporations gave up their virtual world presence was a sign that it was not a good business model to pursue.

STUDENT COMMENTS ON THE EXPERIENCE

The following ten items are representative of the student comments that were made after completing the virtual world project.

1.   Over the past several weeks, as I have teleported from my life to Second Life, I was constantly reminded of my ignorance-there's a whole world out there that I had no idea existed.

2.   Having a presence in Second Life is a quintessential example of the avant-garde thinking that has gotten them where they are today.

3.   In such a highly social environment, communication, collaboration, and spontaneous customer/student reactions are encouraged.

4.   Second Life provides users a visually stimulating and fully interactive environment by combining blog spots, instant messaging; media exchange forums and e-commerce into a 3-D universe.

5.   Second Life businesses offer the convenience of e-commerce in tandem with the interactive shopping experiences of brick and mortar shops.

6. V-commerce encompasses the interactive and sensual experiences of browsing in a real store.

7. The Second Life is not just about hanging around and "killing time", in Second Life there is an opportunity to actually learn something. Now I understand why businesses, governments, non-government organizations, and especially universities are interested in being represented in Second Life.

8. Second Life can be seen as a marketing or advertising tool or simply a new market to research and expand to.

9. Albeit, I do not believe that our global business world will go entirely virtual, I find that testing the method is worth a shot. The next step in global business is most likely going to be Web 3.0 technologies which will deliver a new generation of on-demand business applications. Again, in my opinion, these Web 3.0 technologies might be more successful, as well as practical. I look forward to the opportunity to engage in v-commerce.

10. SL allows both users and consumers to try a "hands on" experience without the pressure from the average sales professional. The entire "transaction" is done online. Eventually, if the customer wished to purchase a product they saw on SL, they would have to go to a retail location. SL allows the customer to see, "drive", and own a vehicle which is stored in their inventory. This new virtual world explores what may be "impossible" in the real world, but is entirely possible in the virtual world.

SUMMARY AND SUGGESTIONS

Overall, the decision to implement a 3-D virtual world component to the graduate course on e-commerce strategy was a valid one. The instructor was energized by the challenge and the students responded in a manner that exceeded expectations. They learned by doing and that has been demonstrated by learning specialists to be one of the most effective modes of learning for people. Preliminary concerns regarding the assignment and the overhead on the course were overcome. The quality of the projects as submitted and the student feedback was excellent.

There are some very clear lessons that are critical for a successful implementation of 3-D virtual simulation project in a course. Some are as follows and have been discussed in the case study:

- Get student "buy in" early in the course,

- Use milestones to avoid last minute panic attacks,

- Properly assess all hardware and network limitations,

- Be sure that "gaming" is allowed on your campus,

- Manage expectations and try to raise student excitement levels, and

- Do not underestimate faculty overhead in terms of learning and student support in early stages.

There are a few more issues that should be considered that we have not discussed in the paper. Some observers have characterized Second Life and other virtual worlds as being in the "wild west" phase of evolution. Since Second Life is an environment that contains sites that are PG - rated and Mature-rated, the student should be warned that navigation should be governed by common sense. Just as on the web, a simple click can take you to a site that can be uncomfortable the same is true in Second Life. There is a self-enforced etiquette that is expected to be followed by all inhabitants to the virtual world. Common sense should prevail.

Do not underestimate the social networking aspects of Second Life to students. Several students were born outside the USA and found themselves visiting Greece, Italy, The Czech Republic and Ireland. Some even visited places that they had been to in the real world. They found themselves socializing, often in a foreign language, with their fellow inworld visitors. This is one thing that had not been considered in formulating the course project.

Finally, it should be remembered that this was a distance learning class. Any concerns about the modality were quickly put to rest and the instructor had no unusual difficulty with this situation. Did all involved feel that the Second Life project enhanced their understanding of how companies used virtual worlds as part of their e-commerce strategy? The answer is a resounding YES

REFERENCES

Alter, A. (2008). My Virtual Summer Job, *Wall Street Journal*, May 16, W1,W12.

Haag, S., Baltzan,P., & Phillips, A. (2006). *Business Driven Technology*. New York, NY: McGraw-Hill Irwin.

Laudon, Kenneth C., & Traver, Carol Guercio. (2008). *E-Commerce*. Saddle River , NJ: Prentice-Hall.

Ortiz, Sixto. (2008). Online Communities Go Corporate. *Processor.com*, March 21, 27.

Robbins, S. & Bell, M. (2008). *Second Life for Dummies*, Indianapolis, Indiana; John Wile

Rymaszewski, M., Au, W. J., Ondrejka, C., & Platel, R. (2008). *Second Life: The official guide*. Indianapolis, Indiana; John Wiley.

Turban, E., Lee, J. K., Lee, J. K., & Chung, M. (2008). *Electronic Commerce: A Management Perspective*. Upper Saddle River, NJ:Prentice-Hall.

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