

Why Virtual Job Recruitment Is Not Well Accepted by Generation Y?—A Case Study on Second Life

Eleanor Loiacono¹, Soussan Djamasbi¹, Bengisu Tulu¹,
and Oleg Pavlov²

¹ School of Business, Worcester Polytechnic Institute,
100 Institute Road, Massachusetts, USA

² Department of Social Science, Worcester Polytechnic Institute,
100 Institute Road, Massachusetts, USA
eloiacon@wpi.edu

Abstract. Generation Y (Gen Y) forms a sizeable workforce in today's economy. Because this generation is tech savvy, it is likely that virtual worlds would serve as an ideal medium for recruiting such employees. Our research, however, showed that the participants in our study, who were part of the Generation Y population, had very little prior knowledge about recruiting in virtual worlds. Further, very few of them were familiar with Second Life, which is the major virtual world for recruitment. Even after being introduced to and spending some time looking for job fairs and job leads in Second Life, many of the participants expressed high levels of skepticism about the effectiveness of a virtual job search. Thus, Second Life is not well-known among Gen Y. There is an overall lack of awareness and thus virtual worlds are not perceived by Gen Y to be a suitable medium for job recruitment.

Keywords: Virtual Worlds, Second Life, Employee Recruitment, Generation Y, Virtual Job Fairs.

1 Introduction

The Internet and the many new technologies it affords have transformed traditional business models. Today it is difficult to imagine a world without e-mailing, online shopping, news blogging, online marketing or peer-to-peer music sharing. With the inception of virtual worlds, computer generated environments in which users participate by the means of avatars, it is quite possible that we are now witnessing the next evolutionary change of online business models [1][2][3]. Through virtual worlds, companies can potentially tap into unique talent across the globe, while keeping their costs down.

Traditional companies, encountering difficult economic times and wishing to be green, are interested in how virtual worlds can enhance their business [4]. For example, many companies have expanded their channel of communications to virtual worlds for important activities such as public outreach [5], training, and job recruitment to name a few [6]. One key factor in the success of such expansion is that the virtual world and the service that it offers are accepted by the intended target

audience. In this paper, we examine one such virtual world (Second Life), one service (job recruitment), and one specific target audience (Generation Y).

We focused on Generation Y as the target audience for the recruiting efforts through Second Life. This generation, which is the largest generation in the past 50 years, is an important segment of the workforce for organizations [7]. Generation Y, also simply referred to as Gen Y, consists of those 18 to 32 years of age [8] and is the second largest demographic group (with 82 million people) after the Baby Boomer generation [9][10]. Because this formidable population is tech savvy and is expected to “push technology to new levels” [7, p.2], virtual worlds may particularly serve as a suitable channel of communication for this generation.

Because Second Life is one of the most popular virtual worlds (Virtual Worlds Review, 2008c) it served as a suitable medium for the purpose of our study. The results of our exploratory study using 29 subjects showed that besides World of Warcraft, which does not have business participants or an actual currency, Second Life was by far the most well-known virtual world (7 out of 29 or 24.14%). Additionally, Second Life is already being utilized by many businesses for recruitment [11].

In order to investigate the research question, is virtual job recruitment acceptable to Gen Y, we began by looking into the background of virtual worlds. Next, we conducted studies 1, 2a, and 2b. The results of these studies are presented in the results section of this paper and their meaning highlighted in the discussion section. Finally, our conclusions outline how companies may better harness the potential of the virtual world environment for recruiting Gen Y.

2 Background

2.1 Virtual Worlds

Virtual worlds are persistent computer-generated environments that simulate physical spaces and users participate and interact through digital actors which they control. The idea of virtual worlds has been around for some time and, currently, there are several environments that can be classified as virtual worlds. Second Life, There, Kaneva and Active Worlds are just a few. In this study we focus on Second Life, which is one of the most popular virtual worlds and is especially of interest to many businesses.

Second Life, created by Linden Labs, is a multi-user virtual environments (MUVes) with approximately 15 million inhabitants and a user-to-user economy predicted to reach \$450 million by the end of 2009 [12]. Further, Second Life is one of the best examples of a virtual world where social and economic interactions are the main drivers [13]. Monthly resident transactions for September 2009 added up to more than 3 million Linden dollars. Given the growing size of virtual worlds in general and Second Life’s ability to provide a virtual world where making real money is possible, businesses and entrepreneurs around the world have become interested in gaining a presence in Second Life. Large organizations from a variety of industries, such as IBM, Cisco, Coca Cola, BMW, Adidas, Reuters, Sears, Intel, have already established their presence in Second Life (Figure 1). Many have done so as part of their recruitment process.



Fig. 1. Screenshot of Avatar visiting Cisco Headquarters in Second Life

2.2 Recruitment Process

Typically, recruitment includes “organizational practices and policies” developed to encourage applications, sustain a good candidate pool, and motivate the best candidates to accept job offers [14, p. 72]. The first step in the process is signaling. Here the company announces the availability of a position. This is followed by job applicants interested in the position submitting material. In the third step, information is exchanged between the applicants and company. This is often referred to as the selection process where particulars about the job are conveyed to the candidates and additional candidate information is communicated to the company. In the fourth and final step, a company makes a job offer to the appropriate candidate and is either accepted or declined. Applicant perceptions of the source of recruitment may determine whether or not a job seeker responds to a job ad or accepts a job [14]. In fact, ‘negative recruitment experiences...[are] enough to completely eliminate the organization from further consideration’ [15, p.515] and therefore applicant perceptions are important to use in evaluating the recruitment process” [14, p.83].

The traditional sources of job applications are employee referrals, print and radio ads, college campus recruitment and job hunters. The Internet, however, has become an important element in the recruiting process [16]. The source of recruitment will also be influenced by the experience needed, location, job type, etc. [14]. Support or manufacturing jobs are typically advertised locally, however, other jobs call for national or even global advertising.

Applicant perceptions of the recruitment process may determine whether or not a job seeker responds to a job ad or accepts a job [14]. Given that virtual worlds enable organizations to reach out to a new group of users that are not restricted by physical boundaries; companies can be considered as a potential recruitment venue. The three studies in this paper measured the reaction of Gen Y toward the recruiting in a Virtual World.

2.3 Recruitment in Virtual Worlds

As mentioned earlier, several organizations have begun to utilize virtual worlds for recruitment. Virtual worlds are thought to enhance the first three stages of the recruitment process. They allow recruiters to efficiently and inexpensively signal job

openings to new talent (Stage 1) and gather (Stage 2) and exchange information from prospective candidates (Stage 3). Specifically, virtual worlds have allowed the collection of international applications and onboarding (an HR term for preparing a new hire for his/her job responsibilities) [4]. The U.S. Air Force is using MyBase, a multipurpose virtual world in Second Life, for recruiting civilians [5]. KPMG hosted a successful virtual job fair that had 20,000 attendees and resulted in nearly 10,000 job applications for offices in 40 countries [11]. Accenture has used its own island for virtual recruiting events as a supplement to regular job fairs and reports that it has recouped the cost of the initial investment [17]. The advantages of the virtual event are broader reach, lower cost, and standardization of events for across global offices [17]. A number of other large companies, such as EMC², GE, U.S. Cellular, eBay, HP, Microsoft, Sodexo, T-Mobile, and Verizon have participated in Second Life job fairs as well.

In hard economic times, such as the one we are experiencing today, new technologies that allow decreases in costs and increases in return on investment (ROI) are even more critical to a company's competitiveness and survival. Virtual worlds, including Second Life, are such technologies and are being pointed to as the next Web-like revolution [1][2]. Further, some tout virtual world environments as a good future medium for recruitment [18]. As one observer points out "companies can leverage virtual recruitment to significantly enhance their ROI in Real Life" (<http://talesfromthedigitalside.com/>, 2009).

Attracting job seekers to virtual recruiting events is a fundamental step in creating a successful recruitment effort. While it is argued that the use of interactive technology in business and daily activities is of particular interest to the tech savvy Generation Y [7], anecdotal evidence suggests that the soon-to-be college graduates, one of the groups companies are actively targeting through virtual worlds, may not be aware of the possibility of job recruitment to search for jobs in virtual worlds and/or such events on virtual worlds are not easy to use. For example, according to anecdotal evidence, "[v]irtual job fairs and islands of employment are not well-known...and...[e]ven if a non-technical person did find a job fair and decide to participate, there is the challenge of operating within a virtual world, such as Second Life. [Since] it takes time to become adept at controlling your avatar and getting the right appearance for an interview" [19]. Despite this anecdotal evidence little work has been done to examine this possibility directly. Hence, in this research we examine the adoption process of Second Life as recruitment tool by Generation Y. To do so we use Rogers' Theory of Innovation Adoption.

2.4 Innovation Adoption Process

According to Rogers, [20] all innovations (in our case Second Life as a recruitment tool) follow a five stage process before becoming fully adopted. In stage 1, *knowledge*, a person becomes aware that the technology exists. However, s/he usually lacks detailed information on the innovation. Further, s/he has not yet been "inspired" to gather more information about it. In stage 2, *persuasion*, a person learns how the technology works. The person's interest in the innovation is peaked and s/he actively seeks information about it. It is common for people during this stage to experience frustration and a lack of confidence in the innovation. In stage 3, *decision*, a person

starts to consider the advantages and disadvantages of the innovation before determining whether to adopt or reject it. S/he struggles to determine if using the innovation would actually be advantageous in her/his life. The process may require seeking advice and assistance from trusted sources before moving to the next stage.

In stage 4, *implementation*, a user gains a sense of confidence in using the innovation. S/he is not currently committed to the innovation and its continued use. S/he is, in a sense, “test driving” the innovation. An evaluation of the ease of using and interacting with the innovation is being made. If the innovation is not easy to learn and use, a person is likely to reject it. In stage 5, *confirmation*, a user makes a final decision to adopt the innovation. There is no more consideration of the value of the innovation. The user has determined it is valuable and incorporates it into her/his work or personal life environment [20].

3 The Studies

As suggested above, any successful innovation must proceed through the five stages of adoption. This research looks at virtual worlds as an innovation and, in particular, their use as a medium for job seeking by Gen Y. To investigate this issue more directly and rigorously, we examine the current stage of Second Life as a job recruitment tool by Generation Y in the innovation adoption process and the factors that are likely to motivate Generation Y to move from its current stage to the next stage in the process. In particular, we conducted three exploratory studies which are discussed in the following sections.

Study 1: The objective of the first study was to test Gen Y’s position in regards to the first step in the innovation adoption process, namely knowledge. Forty-five Gen Y subjects responded to questions regarding their familiarity with virtual worlds and in particular Second Life. All subjects were between the ages of 18 and 28 years of age. Over half of the subjects (60%) were male. The subject pool was drawn from technically fluent college students attending a northeastern university. In return for their participation, subjects were given extra credit in a course. Data was collected using an online questionnaire which focused on their current knowledge and use of virtual worlds, such as Second Life. *Results:* After analyzing the data, it became clear that, although technically fluent, Gen Y users are not very familiar with Second Life. Though Second Life is the most prominent online virtual world used by companies to recruit Gen Y users, this target audience has little to no knowledge that it exists, let alone would provides possible job opportunities. Out of the 45 subjects included in the study, only three (7%) were familiar with Second Life. These results, which confirm prior anecdotal evidence, suggest that the participants in this study were in the first stage of the innovation adoption process.

Study 2a: According to Roger’s model an individual can be persuaded to use a technology if learning about the technology peaks his/her interest. Thus, we conducted a second study, which tested whether knowledge about job recruitment through Second Life captures users’ interests. To do so we looked more specifically at job fairs in Second Life and subjects’ willingness to attend, such events even if they were not familiar with virtual worlds. Included in this study were 21 subjects, who ranged in age from 18-28 (average age of 20.05 years). Of the total subjects, nineteen

were males. Though multiple questions were collected, the two questions of greatest interest to this study were: 1) Have you ever attended a job fair in Second Life and 2) If you are not a current member of Second Life, would you consider joining Second Life as part of your job search process? *Results:* The results of this study confirm those of Study 1, but add additional insight. All 21 subjects replied that they were not familiar with job fairs in Second life. This is consistent with Study 1. If those in Gen Y are not familiar with Second Life in general, they are even less likely to be familiar with job fairs held within Second Life. Interesting, however, nine (43.86%) of the subjects were willing to consider joining Second Life as part of their job search process. This suggests that the prospect of increasing one's recruitment possibility is likely to persuade Gen Y to use Second Life as a recruitment tool.

Study 2b: The results of the previous study inspired a further exploratory study. The results of the first two studies show that Generation Y is in the knowledge state of the innovation adoption process. A major goal of this study was to determine if subjects, given the opportunity to try out and thus evaluate Second Life as a job recruitment tool (guiding students through knowledge to persuasion), would decide to accept it rather than reject it. Another goal was to determine possible factors that may entice our participants to adopt Second Life as a potential recruitment tool, as well as, those that may prevent its adoption. To do this, 68 Gen Y subjects were recruited to participate. The subjects came from the same pool as in Study 2a. They were college students attending a northeastern university who were tech savvy. The participants were 73.5% male and their average age was 20.9. The subjects were first asked to go to Second Life and create an account, if they did not already have one. They then created an avatar, completed the avatar training process, and finally found as many recruiting events as possible. Subjects spent an average of 14.5 minutes training their avatar in Second Life and 40.14 minutes looking for a recruiting event. The average number of recruiting events visited by subjects was 3.8.

After finishing the task, subjects' overall opinion of the virtual world (Second Life) was captured through the System Usability Scale (SUS) commonly used in industry laboratories [21]. Finally, they were asked to rate the effectiveness of several job search methods (such as job fairs, direct employee contact through websites, internet job boards, college career centers, newspaper, and classified ads) and a virtual world (Second Life). *Results:* Consistent with the results of the two previous studies, the results showed that only a few of the participants were active Second Life users. Of the 68 respondents, only 8 (11.76%) had a Second Life account. Further, of those who had a Second Life account, 62.5% could not remember the last time they visited Second Life. Interestingly our analysis showed that most of our tech savvy Gen Y participants were not using virtual worlds in general; only 17 (25.00%) of the respondents had participated in any massively multiplayer online games (MMOG), such as World of Warcraft, Final Fantasy, or EverQuest.

Participant's perception of usability of Second Life was calculated through SUS measures. As recommended (Brooks 1986) an overall SUS score was calculated. The calculated SUS score (37.94) was well below the average usability score which ranges from 65 to 70 for websites. Participants' captured comments, regarding their interactions with Second Life further corroborate the low SUS score that reflects less desirable interactions. These comments will be discussed later.

Another exploratory test of the SUS items provided interesting insight about usability of Second Life. Three measures, which get at the heart of how easy the system is to learn and use, showed that the participant did not find the system particularly easy to use. These items, which were all captured on a 7 point scale, were: "I thought Second Life was easy to use" (3.67); "I would imagine that most people would learn to use Second Life very quickly" (3.85); and "I need to learn a lot about Second Life before I could effectively use it" (4.97). Further, the SUS item particularly focused on whether a user would use Second Life in the future had an average of 2.00 out of 7.

An additional questionnaire was used to compare users' evaluation of Second Life as recruitment tool to other job search methods. This survey asked user to rate the effectiveness of several recruitment methods on a 7 point Likert scale with 1 indicating the least favorable response and 7 the most favorable response. The analysis of this data showed that the job search method thought to be most effective by a majority of subjects was the "traditional" real world job fair (5.52 out of 7 point Likert scale). It was followed by college career centers (5.21) direct employment contact through a company's website (4.94), private employment offices (4.34), internet job boards (4.14), classified ads (3.64), and Second Life recruiting (3.01). Subjects' comments indicated that they believed that "real-life job fairs allow[ed] job candidates to present their skills better than a virtual career fair would." An ANOVA test showed ($F = 35.02$, $p = 0.000$) that there was a significant difference in the ratings for the seven job search methods. A subsequent t-test ($t \text{ stat} = 2.95$, $p = 0.004$) revealed that Second Life recruiting was rated significantly lower than classified ads in newspapers and journals and thus significantly worse than any other job search tool rated in this study.

"I only found empty job recruitment centers" and "I disliked the lack of people there." This sentiment was echoed by numerous other subjects.

Focusing on enticements that would encourage Gen Y's participation in virtual world recruiting events, subjects ranked (1) "meet current employees," (2) "hear about current work projects," and (3) "get a feel for the "real" headquarters" as the most important incentives. They did not consider give-aways or monetary rewards to be much of an incentive and ranked them as the least effective ways to induce attendance at recruiting events.

When considering whether to use Second Life as a job search tool, most subjects (60%) revealed that they would not use Second Life as a job searching tool at all and the rest said they would only use it sparingly. Comments were mixed about the value of a virtual pre-screening interview. Some felt that, "Second Life [could] be used as a very powerful tool in preparing for interviews and would let [the subject] know more about the company" and that they would be willing to attend an event." However, others felt that, "presentation is very crucial in an interview and this requires a personal presence...an avatar won't be able to portray...personality traits in an effective manner to the employer". One comment conveyed the overall sentiment of caution, yet excitement for Second Life, "I [would] need to explore a little more to see the pros and cons of the interview process in Second Life. But, using it for the first time, I found it quite interesting."

Even given these positive comments, the majority of subjects preferred face-to-face interviews over any other form of interviewing. However, if asked to participate in a prescreening interview through a virtual world, 60% agreed they would.

The most important factors in determining a company's presence in Second Life for Gen Y are related to the event itself. Of utmost importance is the quality of the event (6.21 on a scale of one to seven). Next is the frequency of events (5.37) and number of people attending events (5.16).

4 Discussion

Overall, what the results of the three studies suggest is that Gen Y is not overly enthusiastic about virtual online world recruitment. Referencing Roger's model, it appears that Gen Y is simply not very aware of virtual worlds. As mentioned earlier, only 25% of respondents had actually participated in MUVES and less than 12% had a Second Life account. Even though Gen Y is quite aware and familiar with many technologies in general and Web-based applications specifically [7], their awareness of Second Life and other MUVES, is quite low. An effective way to make Gen Y aware of a phenomenon is by publicizing in places that they often visits, such as social networking sites, YouTube, and concerts [10]. Thus, companies may benefit from cross-advertising their recruitment efforts in this way. They will increase awareness and their image as a tech savvy company. Although some within Gen Y are familiar with virtual worlds, indicating a move to Stage 2, learning how a virtual world works, they do not seem to be able to make that leap to Stage 3 where they can really see virtual worlds, such as Second Life, as a benefit in their job search. Although Gen Y is very motivated to complete their job search, they found maneuvering and intuitively feeling their way around Second Life to be somewhat difficult. This lack of usability is very frustrating to many and resulted in a number of respondents leaving the world frustrated.

So, what do companies looking to recruit applicants in virtual worlds need to do in order entice Gen Y applicants? Firstly, it is important that if a company makes the leap into recruitment via virtual worlds, it make a full commitment. Most of our participants mentioned the lack of "a real person" at organizational sites they visited. In addition, they found the frequency of announcements which simply directed them to static web sites to be unhelpful. In order for organizations to gain value from these new technologies, they need to first show their own commitment by having a real and strong presence. Secondly, companies can improve recruiting efforts by having avatars at their sites. The absence of such a representative is the equivalent of having a "contact us" link/form on a webpage, but no one to respond to the user's feedback. Thirdly, companies must convey to Gen Y that there is a value to using this new way of recruitment. One way to do this is to cross-connect with existing social networking sites. As many subjects stated, they would use it, "if it was easier than person-to-person or gave me more opportunities". Further, they would like to see it, "linked with current social network[s] [such as] Linked In. Finally, virtual worlds have the unique ability to increase the job pool of candidates, not only by extending their reach

to different geographical location but also by making their recruiting efforts more accessible to those with various disabilities, such as those with mobility issues.

5 Future Research and Limitations

This subject pool is an appropriate group to sample for several reasons. First, college students are typically active job seekers, who are seeking either internships or full-time employment, and thus serve as a good source of evaluators of recruitment tools. In fact, over half (55.55%) of the subjects in this study were actively seeking a job at the time of the study. Secondly, college students (in particular Gen Y) tend to accept new technologies quicker than other groups. For this reason they are a good source for evaluating new technologies for job recruitment. That said, however, our subjects tend to be on the younger-side of the Generation Y. We plan to expand the pool of Gen Y to include a larger span of ages in the future. Further, in this study, we assumed that subjects, given that they were senior level college students, were in a similar stage of job search. In future studies, we plan to ask subjects specifically to identify where they are in their job search process. Finally, we examined Second Life from the perspective of job seekers, however, future work would benefit from investigating company perspectives, such as how accurately an avatar is representative of the job seeker.

6 Conclusion

Our results, however, are still very relevant and informative. Second Life, one of the most popular virtual worlds, is not necessarily well-known among Gen Y. There is an overall lack of awareness and thus virtual worlds, Second Life in particular, are not perceived by Gen Y as a suitable medium for recruiting. That said, subjects' responses did indicate that they were still open to further investigation of virtual worlds as a recruitment tool. To them, it "depends on the amount of effort to build and maintain the avatar and the quality of the possible employers." If they see virtual worlds as a benefit to their job search, they are much more likely to adopt it. Further, they are more likely to encourage their peers to use it as well. As pointed out earlier, there are several steps that companies can take to improve their recruitment within virtual worlds, but all require a true commitment by the company to follow through on its initiative.

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