

Online Gaming Communities as Non-traditional Social Networks

Introduction

Social networking sites such as ***MySpace*** and ***Facebook*** have become extremely popular, especially for the so-called “*Generation X*” (Gen-X) and “*Generation Y*” (Gen-Y) age groups. In July 2007, social networking sites occupied five of the top fifteen visited websites according to Alexa.com¹. Interestingly, as the adoption of Web 2.0 technologies become more pervasive in society, users will continue to see a convergence of approaches that are applied to problem spaces formerly considered separate. Many of the Gen-X and Gen-Y users who frequent the “traditional” social networking sites like Facebook also play online computer games. While not the primary driver for membership, these online game communities provide rich social interaction avenues for players to collaborate and socialize with their peers. This paper will examine online gaming communities as social networking enablers, while comparing them to “traditional” (non-game-system) social networking sites.

“Traditional” Social Networks: An Overview

Since Web 2.0 is still evolving, and is a recent evolution of Web 1.0, it is probably a difficult task to label anything Web 2.0 as “traditional”. However, for the purpose of this paper, the term “traditional” as applied to social networking will refer to non-game sites whose key design goal is to enable content sharing (e.g. photos, videos, etc), connections with friends, and hosting small applications. Using this loose definition, most traditional social networking sites “*typically provide users with a profile space, facilities for uploading content, messaging in various forms and the ability to make connections to other people*”²

Traditional social networking sites (SNS) typically have one or two overarching goals. Firstly, for business endeavors, there is the business goal of making a profit. This is typically accomplished through some combination of membership fees, banner advertising, or associated “click through” rates. To that end, social network site owners are keenly interested in understanding “*what interests the different types of users....,and how they can stimulate this interest to incite existing members to re-visit the site and new members to join up*”³

Table 1 displays survey results from Facebooks users examined by Joinson in order to understand the key motivators behind usage.

¹ Joinson, pg 1

² Joinson, pg 1

³ Arjan et. al, pg 2744

Theme (<i>sample user generated items</i>)	Number of mentions
'Keeping in touch' <i>Contacting friends who are away from home</i> <i>Chatting to people I otherwise would have lost contact with</i>	52
Passive contact, social surveillance <i>Virtual people-watching.</i>	19
'Re-acquiring lost contacts' <i>Reconnecting with people I've lost contact with</i> <i>Finding people you haven't seen for a while</i>	15
'Communication' <i>Being poked</i> <i>Private messages</i> <i>Writing on walls</i>	15
Photographs <i>Tagged in picture</i> <i>Posting pictures</i> <i>Sharing pictures</i>	11
Design related <i>Ease of use</i>	4
Perpetual contact <i>Seeing what people have put as their 'status'</i> <i>The continuous updates</i> <i>Seeing what my friends have been up to today</i>	4
'Making new contacts' <i>Talking to singles</i> <i>Getting new friends</i> <i>Joining groups</i>	5

Table 1: Facebook Motivators from Joinson study

Secondly, social networks provide the framework and infrastructural fabric for user collaboration, communication, and networking. This second goal is often less tangible than the first as social networks can “*serve a number of functions in offline life – for instance, providing social and emotional support, information resources and ties to other people*”⁴. Lamp et. al, found that sites like Facebook were used for the concept of ‘*social searching*’ (finding out information about offline contacts) as well as ‘*social browsing*’ (using the site to develop new connections for online or offline interaction).

⁴ Arjan et. al, pg 2744

Social browsing is of particular importance for an SNS, since connections (or “friends”) are key components of any viable SNS. A friends list is *“the public display of one’s entire social network in which the connections are reciprocated. A friends list can be comprised of hundreds of friends, but only a subset of these friends appear on the front page of a member’s profile. This selective display of friends is called “My Friends” in Friendster and “Top Friends” in MySpace”*⁵.

Successful SNS are also mindful of their target user base. While demographics suggest that more people under the age of 40 utilize many traditional social networks, some specialized sites have predominantly older users. For instance, the site LinkedIn, which focuses on networking white-collar professionals is by nature a site geared towards older users as opposed to Facebook – which was started on a college campus originally for college students. Even within a particular SNS, age is a factor in how the users actually utilize the site and expand their network. For example, Arjan et. al examined two sets of users on MySpace: teenagers (13-19 years of age) and users older than 60. They found that *“older users tend not to have many friends. Also, the distribution of the friends’ ages is a lot more spread out. This shows that older people tend to have friends from various age groups, compared to teenagers whose friends tend to be within their own age group”*⁶.

Finally, it is recognized that *“the success and sustainability of social networking sites is highly dependent on user participation”*⁷. To address this, some SNS focus on incentivizing users for their participation by offering a type of “bonus points” for participation. This is of particular importance when the benefit of using the site is not immediately evident to the target population, or to boost adoption quickly. Farzan et. al describe a number of types of incentive systems ranging from reward points (Beehive) to reputation (Flickr). Regardless, the common theme amongst the incentive plans is to reward and acknowledge high-quality contributions, and to encourage participation by others.

Overview of Online Gaming Communities

As with the overview of “traditional” social networks, the discussion on online gaming communities will be targeted to a subset of available possibilities. The online gaming communities examined in this paper will be those known as Massive Multiple Online Role Playing Games (MMORPGs). MMORPGs are a subset of online games that *“provide a graphic environment that resembles the real world in functionality (in the sense of possible actions) and appearance. The players control their online personae...this thereby creates a parallel space of social interactions among the characters in the gameworld”*⁸.

⁵ Lee & Bruckman, pg 371

⁶ Arjan et. al, pg 2740

⁷ Farzan et al, pg 563

⁸ Kolo and Baur, pg 1

When participating in MMORPGs, users must initially create their online personae (player-characters or avatars). These characters typically have a number of skills, attributes, physical characteristics and such that are applicable to the gameworld at large. In addition to these player-characters, many MMORPGs also have non-player characters (NPCs) which are automated actors used by the system to fill out any sub-plots or story lines, or assist in player interactions. In order to be successful, players must interact with both in-world elements (e.g. monsters, quests, NPCs) and other players to gain wealth, improve skills and achieve goals. To that end, Kolo and Baur – when examining the *Ultima Online* MMORPG – noted that “*the evolution of social formations among the game characters is stimulated by the design of the game environment and, indeed, most game characters do not remain loners for long*”. Player characters not only interact – they actually coexist in the gameworld. Some eat together, wed (assuming the appropriate gender differentiators), work and fight together. This “virtual social networking” sometimes spills over into the real world as players desire to connect beyond the game system. Kolo and Baur found that 88% of the players on Ultima Online not only connect in the game, but simultaneously contact each other through ICQ and Instant Messaging during gameplay⁹. Further “*Many players already knew some fellow players offline. Thirty-four percent knew one-quarter or more of their fellow players offline...A further interesting result is that the more players were advanced in their offline careers, the more partners of Ultima Online they knew online....we presume that the latter fact is at least partly due to the extension of relationships from the workplace to relationships as fellow players*”.¹⁰

While in gameplay, MMORPG small groups of players often to meet in well known locations at agreed upon times. These players tend to form (or be part of) in-world “clubs” (often called guilds or associations). When examining Ultima Online, Kolo and Baur found there to be three distinct levels of player associations: 1) the social micro-level of individual players – typically focused on acquiring skills and objects for trade with other players, 2) the meso-level of social formations amongst other players – e.g. player clubs and guilds, and 3) the social macro-level which spans the community of all Ultima Online players – including offline discussion groups and such.¹¹

Guild membership	80 %	85 %	80 %	89 %	84 %
Shared house	37 %	38 %	65 %	25 %	40 %
Married in <i>Ultima Online</i> ⁷	0 %	8 %	5 %	11 %	6 %
ICQ communication	73 %	92 %	95 %	89 %	88 %
Relatively fixed group of playing partners in <i>Ultima Online</i>	73 %	73 %	95 %	89 %	82 %

Table 2: Social Relations in the Virtual World: (from Kolo and Baur)

⁹ Kolo and Baur, pg 5

¹⁰ Kolo and Baur, pg 6

¹¹ Kolo and Baur, pg 2

The strong interaction between players of MMRPGs in both gameplay via their characters and other communication channels leads to the conclusion that social networking of players is supported by MMORPGs in various forms. Unlike pure SNS however, MMORPGs have a key focus on entertainment. After all, if the game is not fun to play, no one will sign up, and there won't be anyone to play with. So, while collaborative gameplay in MMORPGs encourages interpersonal networking – does not enforce it. Nevertheless, beyond experiencing the “fun” of being immersed in a game environment, players find that social interaction in various forms helps enhance their experience, and assists them in being more successful in the games. When examining the *World of Warcraft* players, Sherlock found that “*players have turned to online writing communities to discuss game activities, strategies, and problems. Message boards and blogs are devoted specifically to these topics, and players can even locate more specific communities based on criteria such as character class...*”¹². These associated social interactions include player-generated material that goes beyond the framework of the gameworld itself. This includes Frequently Asked Questions, game walkthroughs, strategy guides, and other material that enhances the overall gaming experience. The social collaboration that is required to create, maintain and update this material is not part of the game proper, but is evidence of a thriving social community beyond what has traditionally been thought of as a solitary activity by adolescent males.

Comparison

When comparing traditional SNS and MMORPGs, a number of obvious differences are immediately apparent. This section will compare and contrast a number of the key differences and similarities between the platforms.

Goals

The key objective of each type of platform differs. Traditional SNS focuses on user-centered connectivity and collaboration for the sake of networking and sharing ideas, media, and relationships. While this can be considered a type of “entertainment” (much like the Citizens’ Band (CB) and Ham radio craze in the U.S. in the late 1970s), the “fun factor” comes from the interactions themselves, not from playing in a virtual world simulation. MMORPGs on the other hand, have the primary goal of entertainment through a type of escapism. Playing in a virtual simulation is a key part of the entertainment; playing with others in a virtual social setting simply enhances that entertainment factor. In fact, single player Role Playing Games (RPGs) have been in existence for decades; the move to MMORPGs is simply the next step in the game evolution. Bruce Damer describes the comparison thusly: “*Gameplay worlds, while supporting social interaction and user created content, have as their primary purpose structured play. For the most part, in a social virtual world, users are asked to ‘make it all*

¹² Sherlock, pg 15

up' for themselves."¹³ In essence, traditional SNS users participate to connect and share; MMORPG users participate to have fun; by playing with others, they connect and share as a by-product of that primary goal.

Rules

Rules in games refer to a set of guidelines that describe relationships that exist between players and the game world. The "*guidelines specify the extent, nature, sequence, and causality of allowable player actions*"¹⁴. Traditional SNS have rules, constraints and a culture of what's allowed in terms of content, discussions, acceptable use and such. While having all of the above for users subscribing to the game system, MMORPGs also layer on another set of game world rules that are specific to the game environment. In a fantasy game like *EverQuest* for example, spellcasting, monsters, and the ability to fly may all be part of the in-world rule system.

Setup Time

Both traditional SNS and MMORPGs require some up-front investment time. Participation in an SNS requires sign-up, profile creation, and possibly the specification of a "friends" list. MMORPGs require sign-up, character creation, and time to learn the in-world rules. Both systems require continued participation to learn the cultural norms and build connections.

Financial Basis

Many SNS are sponsored by banner ads and other forms of commercials – at least for lower levels of participation. Some sites like *LinkedIn* also offer Premium membership which offer more capability in return for user payment. On the other hand, most MMORPGs are commercial endeavors that require user subscriptions or monthly payments for continued participation.

Incentive/Reward Systems

As previously mentioned, many SNS use some type of bonus or reward points to motivate users and encourage participation. This type of recognition encourages users to contribute to the online society, and expands the amount of content for the network. MMORPGs reward players by increasing their standing in the gameworld – either through in-world monetary assets (e.g. gold pieces, land, etc) and/or rank (e.g. ascending from level 10 to level 11 warrior, etc.). In both SNS and MMORPGs, more rewards may unlock features or functionality not accessible to other, lower-level participants.

Content

Although some gameworld content is generated by player (or through player interactions), most MMORPG content is provided by the developer. SNS, on the other hand, have a large portion of their content provided by participants. While

¹³ Damer, pg 17

¹⁴ Rarayanasamy et al, pg 1

both systems require a relatively painless way to be updated by administrators, the difference in content sourcing has particular technical implications which are described below in the technical considerations section.

Technical Considerations

Design Philosophy

Both Traditional SNS and MMORPGs seek to present an interesting experience that engages the participant. Additionally, MMORPGs seek to provide excitement, and immerse the player in action and challenging (and perhaps “dangerous”) situations. To this end, the design of MMORPGs must be both technically feasible and creatively imaginative. To a certain extent, MMORPGs are like interactive movies or screenplays; a weak storyline and/or poor gameplay will doom an MMORPG to failure even if cutting edge technology is used for implementing the idea.

The design of an SNS must facilitate the communication and collaboration of participants without making any task too time consuming or difficult. Since an SNS participant is more likely than an MMORPG player to be a “casual user”, the ease of performing basic tasks is of prime importance.

Technical Architecture

Traditional SNS do well to leverage the strengths of the web, and in particular Web 2.0. The use of hyperlinks, asynchronous page updates (via Asynchronous Javascript and XML [AJAX] and Representational State Transfer [REST], etc.) can give a rich and responsive user environment for collaboration. Here again, the emphasis on linkability and usability typically outweigh the use of specialized technology or non-standard “tricks” for implementation. In contrast, MMORPGs may take extra liberties with their user interfaces and opt to use non-standard UI elements to either enhance gameplay or create visible differentiators from the competition. Keeping in mind the key goal for MMORPGs is playability and not interoperability with the rest of the web ecosystem, this technical approach is often acceptable for those users willing to pay for an immersive experience that is disconnected from the “real world” and “real web” anyway.

MMORPGs also have more flexibility in doing things differently from an architectural style and implementation perspective. Since the gameworld is interactive and must manage not only player actions, but computationally intensive NPC activities for the simulated environment, MMORPGs may choose not to track to industry standards for the sake of performance. Further, since MMORPGs are essentially games on a large scale, they are subject to the possibility of becoming “stale” and require updates and expansion packs to keep users interested with new material. This fact requires that MMORPGs support a pluggable architecture for these types of updates. Note that the expansion updates are not simply bug-fixes; they include significant new content that expand the gameworld in size, scope or playability.

Additionally, MMORPGs must use a layered architecture that addresses three key domains: the “real” world of players, player statistics, etc, the data layer of software (and the pluggability required for the expansion discussed above), and the gameworld for play. Figure 1 displays a simple graphic of this layering.

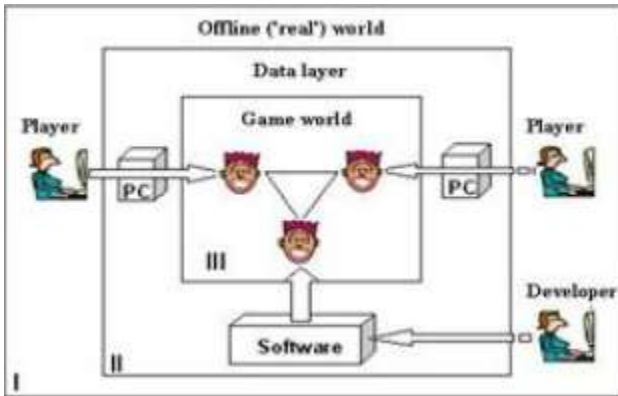


Figure 1: Online Game System Architecture (from Kolo and Baur)

Many SNS follow a typical web-oriented Model-View-Controller style architecture. Using Ruby on Rails as an exemplar, a simple SNS architecture can be pictured:

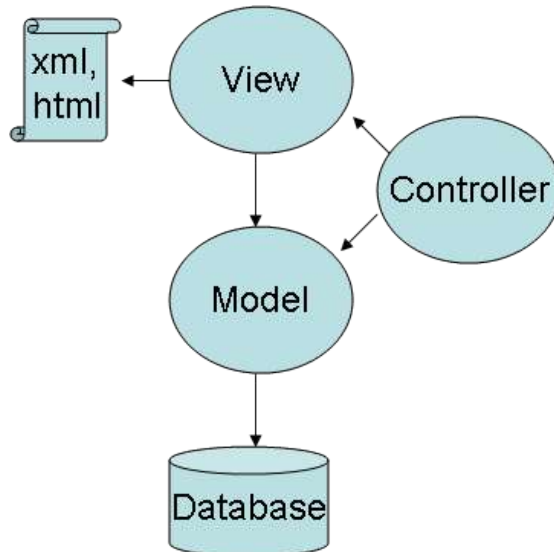


Figure 2: MVC for SNS



Figure 3: Interface for SNS - Common UI Elements

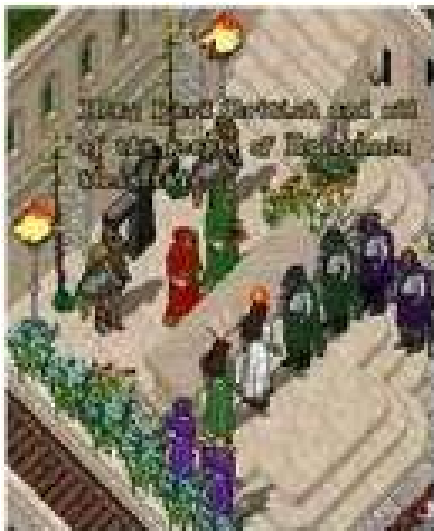


Figure 4: Interface for MMORPG (Ultima Online) - Non standard UI

Future Trends

Looking towards the future, one can see a class of systems that have begun to combine elements of SNS and MMORPGs for a composite experience. Most notable among these systems is Second Life by Linden Labs. *“Second Life emerged to reenergize the social virtual-world space”*.¹⁵ Second Life combines the virtual world immersive experience of MMORPGs and the collaborative nature of traditional SNS. In Second Life, participants collaborate and contribute to the virtual society through business ventures, virtual marriages, virtual businesses and other contributions in-world. Out-world in “real life”, Second Life has spawned a large community of object makers, builders, and marketers. “A

¹⁵ Damer, pg 17

*fascinating extension to the object economy was the ability of users to clothe avatars in configurable animated garments, creating a fashion industry that attracted a whole new clientele*¹⁶. The Second Life phenomenon has taken hold so completely that real-life companies (like Coca Cola and IBM) maintain a presence in Second Life, either for marketing and awareness purposes, or to simply not miss out on an up and coming trend in cyberspace.

Interesting enough, as a future trend, Second Life had its origins in past ideas. The inventor of Second Life (Rosedale) initially focused on the development of hardware that would enable computer users to be fully immersed in a 360 degree virtual world experience, primarily for gaming and entertainment. *“During a 2001 meeting with investors, Rosedale noticed that the participants were particularly responsive to the collaborative, creative potential of Second Life. As a result, the initial objective-driven, gaming focus of Second Life was shifted to a more user-created, community-driven experience”*¹⁷.

Currently, users (called “Residents”) can explore, meet other residents, socialize, and participate in activities with each other. In the future, Second Life and other virtual meeting places may replace the need for physical proximity in some situations, while retaining the benefit of “being there”. Ritzema and Harris have already examined the use of Second Life for distance education¹⁸. Additionally, Sweden has opened an embassy in Second Life. And, as mentioned previously, a number of companies retain a Second Life presence. The logical next step would be to host other social interactions in such an environment. This could include arts and entertainment performances (e.g. the opera), visiting a distant museum, geographically dispersed colleagues meeting in a common virtual coffee shop, and other unforeseen opportunities for social interactions. Finally, businesses already utilize some forms of remote meeting technology (video meetings, WebEx, etc). It is not hard to imagine a future in which business meetings amongst geographically distributed teams gather in an environment like Second Life to conduct meetings, or just shoot the breeze and socialize around a “virtual water cooler”.

Conclusion

This paper examined and compared “traditional” social networking sites with online gaming communities as social networking enablers. Certainly, there are different forms of social interaction and the key goals of the two systems examined in this paper are different. Without a doubt, online games focus on the entertainment and fun aspect, and bring social collaboration into the picture to enhance that experience. Traditional SNS, on the other hand, focus primarily on the collaborative desires of people to communicate, share, and contribute to the social community.

¹⁶ Damer, pg 17

¹⁷ Wikipedia.org

¹⁸ Ritzema and Harris

However, as this paper has shown, there is increasing overlap and convergence in the overall SNS space, with online games providing a unique and viable social networking experience. Future “virtual world” offerings (akin to Second Life) will continue to meld the entertainment and social networking aspects into a coherent whole. Glimpsing into the future, it is probably not a stretch of the imagination to say that many of our “social proximity” activities: gaming, entertainment, business and education will be offered in a number of virtual worlds supporting a holistic online collaborative environment.

References

‘Looking at’, ‘Looking up’ or ‘Keeping up with’ People? Motives and Uses of Facebook, Adam N. Joinson CHI 2008, April 5–10, 2008, Florence, Italy. Copyright 2008 ACM 978-1-60558-011-1/08/04

Age Differences in Online Social Networking, Rajiv Arjan, Ulrike Pfeil, Panayiotis Zaphiris, CHI 2008, April 5 – April 10, 2008, Florence, Italy, ACM 978-1-60558-012-8/08/04.

Judging You by the Company You Keep: Dating on Social Networking Sites, Adeline Lee, Amy Bruckman, GROUP'07, November 4-7, 2007, Sanibel Island, Florida, USA. Copyright 2007 ACM 978-1-59593-845-9/07/0011

Results from Deploying a Participation Incentive Mechanism within the Enterprise, Rosta Farzan, Joan M. DiMicco, David R. Millen, Beth Brownholtz, Werner Geyer and Casey Dugan, CHI 2008, April 5–10, 2008, Florence, Italy. Copyright 2008 ACM 978-1-60558-011-1/08/04

Living a Virtual Life: Social Dynamics of Online Gaming, Castulus Kolo and Timo Baur, International Journal of Computer Game Research, Volume 4, Issue 1, Nov 2004, <http://gamestudies.org/0401/kolo>

User Centered Game Design: Evaluating Massive Multiplayer Online Role Playing Games for Second Language Acquisition, Yolanda A. Rankin, McKenzie McNeal, Marcus W. Shute, Bruce Gooch, Sandbox Symposium 2008, Los Angeles, California, August 9–10, 2008, © 2008 ACM 978-1-60558-173-6/08/0008

The Sims 2: Open for Business: Lessons Learned about Business and Life, Chris Dondanville, Crossroads Magazine, © 2008 ACM

When Social Networking Meets Online Games: The Activity System of Grouping in World of Warcraft, Lee M. Sherlock, SIGDOC'07, October 22–24, 2007, El Paso, Texas, USA. Copyright 2007 ACM 978-1-59593-588-5/07/0010

Distinguishing Games and Simulation Games from Simulators, Viknashvaran Rarayanasamy, Kok Wai Wong, Chun Che Fung, and Shri Rai, ACM Computers in Entertainment, Vol. 4, No. 2, April 2006

Meeting in the Ether, Bruce Damer, Interactions of the ACM, September/October 2007, © ACM 1072-522/07/0900

Virtual Worlds as a Medium for Advertising, Stuart Barnes, The DATA BASE for Advances in Information Systems Volume 38, Number 4, November 2007

The Use of Second Life for Distance Education, Tim Ritzema, Billy Harris, The Consortium for Computing Sciences in Colleges, Copyright © 2008

Second Life, Wikipedia.org