



UNIVERSITY OF  
LINCOLN

## Assignment Cover Sheet

---

Name	
Enrolment ID	
Unit/Module Code	
Unit/Module Title	
Unit/Module Co-ordinator	

---

### **DART – The University's Disability Service**

Are you in receipt of a DART report/academic memo?      Yes      No

---

### **Submission Regulations**

The Department of Computing and Informatics requires that all submissions adhere to the guidelines as articulated in the *Presentation of assessed written work* document which can be found on the Assessments of every module/unit site on Blackboard.

By checking the confirmation box below you are acknowledging that you have read these guidelines and adhere to the conditions within it.

---

### **Plagiarism**

Part B of the University Regulations is concerned with Academic Offences, including collusion, use of misleading material, plagiarism and cheating. Please ensure you read these regulations.

You are required to keep an electronic copy of any text or code-based coursework and may be asked to resubmit this at any time.

Your work may be copied and stored for the purposes of assessment, which may include double and second marking, review and/or moderation by external examiners approved by the University, and plagiarism detection.

---

### **Extensions**

Extensions may be granted for extenuating circumstances. Only the Extensions Officer can grant extensions. Applications will only be accepted if they are printed on the *Blank proforma for Extension Requests* form which can be found on the Useful documents area of your Technology Level Site on Blackboard.

EXTENSIONS WILL NOT BE GRANTED AFTER THE DATE OF THE HAND IN

Are you in receipt of an Extension Authorisation for this assessment?      Yes      No

**By checking this box you are confirming that you have read the University's regulations and that you understand them and that the work that you have submitted is your own.**

Date of submission \_\_\_\_\_

---

# THE EVOLUTION OF SOCIAL NETWORKS & GAMING

Jason Gunn

Dept of Computing and Informatics, University of Lincoln  
Brayford Pool, Lincoln, UK. LN6 7TS.  
06039966@students.lincoln.ac.uk

## Abstract

**Social Networking has unarguably become prevalent within the online community in recent years, and with the onset of Web 2.0 new features have evolved introducing a much more interactive experience for the user. This paper talks about current technologies relating to this field, and the basic social aspects of MMO(Massively Multiplayer Online) games, with suggestions on the probable future of social networks.**

## Introduction

As defined [1] a social network is a group of people who interact in a social manner, and in relation to this topic could be a family playing a board game, or a group of friends playing a game over XBOX Live.

With the ever rising popularity of social networking sites such as Facebook, and Myspace, online socialisation is becoming a much more popular option for keeping in touch with friends, playing multiplayer games, marketing, development etc. Also the progress of new technologies which incorporate ever increasing functionality such as the Apple iPhone make it even easier for people to socialise, play games, update information etc even on the move.

Developers are constantly producing new content for social networking sites, and casual gaming is becoming much more popular. For example Texas HoldEm Poker on the Facebook network has an average of over 9 Million monthly users [2].

Popular MMO games such as World of Warcraft are reported to have over 11.5 Million monthly subscribers [3], showing not only that this is a popular format for gaming and social interaction, but also that a monthly subscription can be applied while still ensuring the popularity of a product. Sales figures taken from [4] show that online gaming is a popular format, and suggest that it may be a good investment area for future developments.

## MMO Social Structures

As can be seen in a paper about MMO societies [5] "living social networks" are formed, which are constantly changing dependant on specific elements, much like the social structure of any group. In an MMO world many things must be taken into account, for example the politics of a city which in itself can cause divisions within player groups. While having less effect on the social structure of an MMO these worlds tend to have real time economies, which suffer from inflation and other problems much like the real world.

Moral standards as well as rules must be formed for these structures in order to ensure that appropriate actions and content are produced for the user base, in other words removing the threat of antisocial behaviour which negatively effects or harms the experience of others.

People will generally form interest groups which can then turn into small friendships, and even in game guilds which can be comprised of 1000's of players. As can be seen in a study [6] guilds comprise of complex social structures, with leaders who manage the guild, and members who work together in order to advance in the game, or just enjoy their time online more.

A study [7] talks about the connection between social relationships and online cooperation between players. This can be seen especially where factions are formed, where two players are in essence rivals, this can also be seen in guilds. In itself this causes a change in the social structure between groups of players, who under normal circumstances could benefit greatly from interacting in a positive social manner.

MMO's offer several tools to promote social interactions, for example Star Wars Galaxies offers both voice and text chat, as well as multiplayer mini games. There are also specific professions that players can undertake which are used to promote socialisation between players [5] User generated content is becoming more common, even though it generally simple things like user organised fashion shows or adventures. However more complex MMO style applications such as Second Life even incorporate user created assets, such as 3D Models, which is fairly similar to producing applications for Facebook.

## Current Technologies

Currently gamers can interact via applications such as XBOX Live, this is a service which allows the user to create a custom avatar as a representation of themselves, to manage a friends list, experience rich media content and to arrange online gaming sessions within their social group. While these functions may not be as in depth as those offered by sites such as Facebook, in some ways they are more advanced especially when taking into account features such as custom avatars which make the overall experience much more interactive and personal.

Facebook as mentioned supports the development of custom applications and games, one application which stands out is "Vivaty Scenes" [8] This application introduces the ability to create a custom avatar, chat, share images, movies etc with friends in a 3D interactive environment. While this is a step in the right direction, Facebook is still a website at heart.

## The Evolution

3D Environments are already in development, for example Playstation Home which is current in testing, offers the ability to play mini games with friends such as bowling, customisation of an avatar, to decorate the users own personal house, even to watch streaming media with others.

Then there are more dedicated applications such as Nuriem [9] Classed as a social networking application this uses the Unreal Engine 3 to provide players with a social playground. Again integrating custom avatars, mini games and chat, showing that even in the near future this platform will become more popular.

The prospect of offering users a fully interactive experience is an exciting one, and while it will require a large amount of work to do well, it should pay off in the long run. This will allow users to interact in a much more personal way, while still being able to share information about their day to day lives. It will also make playing games more interesting; instead of clicking a link the user will be able to sit on a virtual sofa with a virtual chess board.

It will be necessary to produce a clear set of rules as guidance to keep content relevant to the target audience however if done correctly these new networks would benefit greatly from continuing to offer support for developers wishing to add applications or games for users to try out. It would also offer a great new platform for advertisement, and potentially profit making, with for example streaming media.

## References

- [1] Social network definition  
<http://dictionary.reference.com/browse/social%20network> Accessed 24/02/09.
- [2] AppData  
[http://www.appdata.com/facebook/mostpopular/redirect/category/9/mau/1/group\\_by/1/page/1/sort/mau](http://www.appdata.com/facebook/mostpopular/redirect/category/9/mau/1/group_by/1/page/1/sort/mau)  
Accessed 25/02/09
- [3] World Of Warcraft Subscriber Base Reaches 11.5 Million Worldwide  
<http://eu.blizzard.com/en/press/081223.html>  
Accessed 17/02/09
- [4] Games sales figures show online is key  
<http://www.joystiq.com/2006/05/25/games-sales-figures-show-online-is-key/> Accessed 18/02/09.
- [5] MMO's Building Whole Societies  
[http://www.amd.com/us-en/Processors/ProductInformation/0,,30\\_118\\_9485\\_9488%5E9563%5E9599%5E9990,00.html](http://www.amd.com/us-en/Processors/ProductInformation/0,,30_118_9485_9488%5E9563%5E9599%5E9990,00.html)  
Accessed 22/02/08
- [6] Ducheneaut N, et al (2007) The Life and Death of Online Gaming Communities: A Look at Guilds in World of Warcraft. pp. 1 - 10
- [7] Cao Y, et al (2003) A case study on social network in a computer game. pp. 954 - 955
- [8] Vivaty <http://www.vivaty.com/> Accessed 22/02/08.
- [9] Product News [http://www.gamasutra.com/php-bin/news\\_index.php?story=17526](http://www.gamasutra.com/php-bin/news_index.php?story=17526) Accessed 21/02/08
- [10] Virtual worlds set for sake-up  
<http://news.bbc.co.uk/1/hi/technology/6431207.stm> Accessed 21/02/08

As stated in a BBC article [10] if social networking sites do not adapt this new method of social interaction they will be left in the past.

## Conclusions

There are considerable similarities between the social networks in MMO's and those found on sites such as Facebook, user groups, mini games, user generated content, chat functions etc. While there are also key differences it can be seen from this study that both applications are very similar in terms of features. Current technologies are trying to make social networks more interactive, and with applications such as flash and SilverLight this has been somewhat accomplished.

As shown it is likely that the future of the social networking sites will take a leap into the realm of the MMO. This system will offer much more interactivity to the user than current networks such as Facebook, while still retaining the key features such as the ability to socialise, share content and play multiplayer games, this will however be delivered in a much more game like environment in the first place.