

Content analysis of Reddit and Blizzard.net to further understand user engagement

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ABSTRACT

Virtual communities are an important part of gamers lives. It is a major way for players to interact with each other. Through content analysis, we want to find why Overwatch players choice to participate in certain virtual community instead of others. So far, few researchers have concentrated on this topic. The Overwatch Official forum and Overwatch subreddit are selected in this paper since both virtual communities are active. We selected the Overwatch Official forum and Overwatch subreddit to collect, since both virtual communities are active. A qualitative content analysis was conducted on both forums. The results found that users prefer the official forums when discussing and sharing ideas about the game, whereas r/Overwatch is used to discuss that the players enjoy the game. These findings hope to help virtual communities tailor their design to their communities, as well as call to question the current definition being used when referring to virtual communities.

Keywords: qualitative research, content analysis, forums, Reddit, Virtual Community, Games research, Overwatch

1. INTRODUCTION

Virtual communities (VCs) are becoming more and more important to our current social circles. In 1985 Cohen defined communities as a shared set of ideas that exists in the mind of the people. In 1985 most communities were still bound by physical space. Someone in Glasgow Scotland could not discuss his shared love of vintage guitars with someone from East London, South Africa. With the creation of virtual communities people could find like minded individuals regardless of their geographic location.

Virtual communities, a group of individuals who interact online due to a shared interest, are becoming increasingly important to our daily lives, specifically in the video game community (Dholakia, Bagozzi, & Pearo 2004, Ho & Huang 2009). Video games and their surrounding communities are viewed as “third place”, a social space for informal sociability (Steinkuehler & Williams 2006) Virtual communities are often times important to users for the same reasons real communities are important (Ridings & Gefen 2004) SuperData, a media intelligence company, estimated that in 2017 games’ global market will reach over one-hundred billion dollars. Ho & Huang summarize other’s findings of why VCs are generally used in and around video games (2009). Players participate in VCs for many reasons including to share knowledge, get help, and socialize.

Fast-forward to modern day and one could argue that there are too many virtual spaces where one can discuss their passions and interests. Now if one is interested in vintage guitars they would have hundreds, if not thousands of different places to choose from. This conundrum has raises the question, “what’s the difference”? It is important to understand the difference between virtual communities to have a larger understanding on how virtual communities function. Why does a user choose one virtual community over the other?

To begin to understand these issues a content analysis was conducted with two virtual communities, who were interested in the same topic to discover the differences, if any, of the two communities. Two different communities

for Overwatch, a team based first-person shooter (FPS); r/PlayerOverwatch, a subreddit dedicated to Overwatch, and The Official Overwatch Forums, hosted on the developer's website, battle.net, were chosen for analysis due to their importance in the community and their high activity.

2. BACKGROUND (OPTIONAL FOR QUALITATIVE APPROACH)

Overwatch has many different VCs. Sites such as Giant Bomb, NeoGAF, IGN, and Gamespot as have places where discourse takes place surrounding Overwatch. However, the two most active VCs for Overwatch are the subreddit, r/Overwatch, and the official Overwatch forums on Blizzard.net. r/Overwatch is incredibly active with almost one million subscribers, and is currently the sixty-eighth largest subreddit (Reddit 2017). Overwatch's official forums (OOF) is not only one of the largest VCs but is also officially monitored by Blizzard, Overwatch's developer. People who worked on the game often times comment on threads or make their own posts to converse with the community. The two VCs, r/Overwatch and OOF, were chosen due to their size, popularity, and importance to the overall Overwatch community.

Overwatch is an objective based, team oriented, first person shooter with colorful characters often times animated in Pixar style animated shorts (PlayOverwatch 2017b). Overwatch has a dedicated fanbase with interests in esports and casual play (Activision 2017). Some fans of the game care less about the game and are more interested instead in the characters and world, so much so they create their own fiction in the Overwatch universe (Etelles 2017).

Overwatch was chosen for several reasons. One, the authors of this paper had a diverse familiarity with the game, ranging from hundreds of hours of playtime to very little knowledge of the game at all. This allowed biases to be limited. Secondly, PC Gamer, a video game news site, reported that as of April 2017 Overwatch had sold thirty million copies of the game (PlayOverwatch 2017a). This large players base heightened the chances to have active virtual communities inside, and outside of the game. Additionally, the Monthly Active User (MAU) count for Overwatch continues to grow (Activision, 2017).

Overwatch's official forums are run by the developer of the game, Blizzard, on their site company's website, Battle.net. Conversations range from users of Overwatch pointing out bugs, or requests for the developers to make changes to the game. These messages are monitored by Blizzard directly, as well as moderators, a group of volunteers who police the forums. Additionally, users can self-police the discussions by voting whether or not they like another user's comments.

Reddit "is a popular social news website with solely user-provided content (Skold 2015)". Reddit is further broken down into smaller "subreddits", each subreddit enables users to submit posts with text or video. Other users can comment on the post and or rate a post by giving the post a "downvote" or "upvote". Reddit is a very popular forum amongst the game community, one can find many subreddits about games that are active.

The core difference between Reddit and OOF is how they organize post in the front page. OOF, like most of the conventional forums, always put the post with latest comments on the top page. Reddit uses an algorithm, based on the upvote a post receives and the time of the post is made. Comments not relevant to how Reddit organize their front page.

3. METHOD

Context

Research was collected from two different websites Reddit.com, specifically the subreddit r/Overwatch, and the game developers official forum, the Official Overwatch Forum. The official Overwatch forum was analyzed due to the popularity of the forum and the significance it has in the community, due to there being interaction with the developers of Overwatch. The Overwatch subreddit was chosen because of its popularity in the community, as discussed in the background.

OOF is broken down into multiple sections. To get content with varied discussions posts from the “general” section were analyzed. r/Overwatch does not have subheadings for different topics and therefore we took them from the front page, an aggregated page of popular posts, further described in the background.

Data Collection

A total of eighty-three comments were collected and analyzed (33 from OOF and 50 from Reddit respectively). Data was collected from 22 September 2017 till 1 October 2017. Posts were chosen based off of the popularity and recentness of the post to get an accurate measure of what the communities deemed important. The number of posts was chosen by the researcher’s satisfaction with the data. More posts were collected from Reddit due to the low text count. Forums posts that were made by the game developers on OOF were omitted from the analyses due to the fact they are not apart of the virtual community being studied.

Data Analysis & Verification

Data was then coded and analyzed based on Koh, Kim, Butler, and Bock’s “seven key factors for a thriving virtual community”: knowledge sharing, usefulness, off-site interactions, enjoyability, satisfaction, loyalty, and intention of use. However, based on Ho & Huang’s 2009 analysis of these factors off-site interactions were omitted from the analysis. Even though their research was quantitative, the definitions made are still useable for qualitative research. After the initial coding of data, posts were then coded into more specific codes based off of a grounded theory detailed in the results. Two systems were put in place to ensure reliability in the coding. First, two different researchers coded and analyzed the data, afterwards comparing notes. Second of all the coding was analyzed for reliability using Cohen’s Kappa (Cohen 1960).

4. RESULTS

Overwatch Official Forums

Data was collected over a nine day period with thirty three comments in total from ten different posts. Data was coded by two separate researchers based on Ho & Huang’s Seven Key Factors of Satisfaction (2009). Cohen’s Kappa was used for inter reliability ($K = 0.87$) with a strong significance (Appendix A).

The majority of comments were coded as Knowledge Sharing (21), with Enjoyability (5) and Loyalty (5) also being discussed with some frequency. Intention to use, usefulness, and Satisfaction were not discussed at all in comments analyzed. For more information see Table A (Appendix A).

Virtual Communities “tend to focus on very specific topics with relationships among members being mostly intended for information exchange about specific topics(Ridings & Gefen 2004).” This would explain why Knowledge Sharing was the majority of what users discussed in. OOF There were two major way community members presented knowledge sharing. First, users present their own thoughts about the characters in the game. For instance, one user states his/her own view in the main content about the character Mercy that “is borderline op”, and Junkrats whose “riptide is way too fast”. Other users will offer their personal opinions of the hero that is being discussed in the main content. “I would much rather have Mercy, Junkrat and Roadhog on every team than Hanzo, Windowmaker and Genji on every team”. Second, users offer their own opinions about the Overwatch community. One community member discusses the negative influence of having smurf accounts. He states that

“Go boost your ego somewhere else, you’re spoiling fun.”

Furthermore, even though the majors of main contents and comments do not contain a lot of enjoyability, they cover lack of enjoyability, combining with knowledge sharing. For instance, “the punishment system should have been in the game from the very beginning and it was stupid for blizz to think that bad behavior wouldnt be a problem.” The user states his/her opinion about the punishment first and then uses the word “stupid” to express his/her lack of enjoyability to have of the system in Overwatch.

r/Overwatch

Data was coded by two separate researchers based on Ho & Huang’s Seven Key Factors of Satisfaction (2009). Cohen’s Kappa was used for inter reliability ($K = 0.72$, Appendix A). The users of r/Overwatch spent most of their time discussing their enjoyability with twenty-two of the fifty posts categorized as Enjoyability. With Knowledge Sharing (8) and Satisfaction (6) also being major discussion points for the users, for more detail see Table B (Appendix B).

Comments in r/Overwatch can be very confusing to users outside of the Reddit community. Most comments that described enjoyability were short and consisted of inside references, Comments such as “H LET’S BREAK IT- ... uuuuuurgh” and , “Haha I think I’ve got a video of an enemy hog pulling my nuke towards their team. Extremely satisfying.” are extremely self-referential, which is common in Reddit (Singer, Flock, Meinhart, Zeitfogel, & Strohmaier, 2014). Additionally, many of these comments are direct replies to videos. While there are posts in OOF with videos they are not nearly as common as they are in r/Overwatch. There were also comments that expressed the satisfaction of the posts, completely void of mentioning the game, “Man, you’re talented! :) Keep up the work! Post this to the Blizz forums so Papa Jeff can see it!”

Comparison

Upon initial analyses of r/Overwatch several issues arrised. First of all, comments were much shorter on r/Overwatch (19.14 words) than the comments from OOF (114.64 words). This resulted in data having to be coded by overall meaning rather than actual language used. The largest difference between the two forums is that r/Overwatch is primarily used for Enjoyability.

An issue arose during data analysis because of a confusion between Satisfaction and Enjoyability. The definitions that Ho & Huang provided were clear, however it could be easy to mistake the two definitions. For data analysis Enjoyability was seen as a user discussing how they enjoyed the game, and Satisfaction was when a user discussed their satisfaction with the virtual community.

5. DISCUSSION

The difference in users enjoyability and use of Reddit and the Overwatch official forums was stark. Users in the subreddit were much more interested in talking about how they enjoyed Overwatch. While they also discussed knowledge sharing, OOF discussed knowledge sharing aspect significantly more.

Additionally, there were issues with analyzing data from the Overwatch subreddit. The length of posts were shorter, as discussed in the results, therefore there was less data to analyze per post. This could be for multiple reasons. One, it is very easy to make a post on Reddit (Skold 2013). Second, because r/Overwatch is apart of the larger Reddit ecosystem it has certainly adopted some of the larger social norms of Reddit. Therefore, posts may be smaller on r/Overwatch because posts on Reddit may be smaller than other VC sites.

While this research is telling about how these two virtual communities function, it should be noted that this

research does not include lurkers. Lurkers are users of VCs that choose to not post but instead only read content. Research has indicated that lurkers have different reasons for using a VC (Lai & Chen 2014)

Originally, one researcher who was not familiar with Overwatch or Reddit coded the subreddit findings but they were unable to understand the metagame of Overwatch and the community of Reddit. Definition of metagame can be found in Carter, Gibbs and Harrop's (2012) paper on defining Metagame. Previous research has found that Reddit's self-referential community can be difficult to understand for newcomers (Singer, et al. 2014). A lack of expertise in a game or VC can be a common practice among game researchers, and scientists should be more cautious to collect data on virtual communities they are not familiar with.

Adapting Ho & Huang's research for qualitative findings provided interesting results. All codes were found in the language of users with the exception of Intention of Use.

The findings show that users prefer r/Overwatch when discussing how they enjoy the game, whereas users of the Official Overwatch Forums are used for Knowledge Sharing. Unfortunately, there is no way of knowing if users of OOF and r/Overwatch are the same people or different. In fact, in one comment a member of the r/Overwatch community suggests that he is also apart of the OOF community, "Man, you're talented! :) Keep up the work! Post this to the Blizz forums so Papa Jeff can see it!". The definition of virtual communities has often been interested in where the discourse takes place and not the content itself (Dholakia, Bagozzi, & Pearo 2004). This is a narrow in scope definition and assumes that users from multiple sites are not apart of a large virtual community under the Overwatch umbrella.

Cohen's definition of a community is defined around a set of ideas and less interested in space. While the term Virtual Community is explicitly defined by its space there should be a larger interest in why these users are in the space they're in. The content analysis showed that the discourse that takes place on r/Overwatch and OOF are definitively different, albeit about the same thing, and there is a severe lack of understanding why. Redefining the term Virtual Community to allow more than one place of discourse to be allowed and would reshape VC research, and would allow better exploration of the spaces users virtually inhabit. This would begin to answer why users prefer one forum over the other inside of a larger VC.

6. CONCLUSION

For people interested in Overwatch Virtual Communities, the r/Overwatch Virtual communities are increasingly becoming a major part of people's social lives. However, there needs to be more research to gain a better understanding of why users would choose one virtual community over the other. This research showed that virtual communities discussing the same thing can be vastly different, however no one knows why. Additionally, researchers should reassess the definition of a virtual community to be less defined by the space of the VC and more interested in the content and the people apart of it.

ANNOTATED REFERENCES

Activision & Blizzard (2017) *Second quarter 2017 results* [PowerPoint Slides] Retrieved from:
<http://investor.activision.com/results.cfm>

Slide presentation for an earnings call. Is important for giving sale and player numbers to emphasise the Overwatch playbase.

Carter, M., Gibbs, M., & Harrop, M. (2012, May). Metagames, paragames and orthogames: A new vocabulary. In *Proceedings of the international conference on the foundations of digital games*(pp. 11-17). ACM.

Article discusses the different layers of a game inside of a game. Cited for its clear definition of “metagame”

Cohen, A. P. (1985). *Symbolic construction of community*. Retrieved from books.google.com.

Cohen’s paper is famous in the study of communities and communication. This book is often used to cite the definition of what a community is.

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and psychological measurement*, 20(1), 37-46. DOI: [10.1177/001316446002000104](https://doi.org/10.1177/001316446002000104)

This paper explains how to use Cohen’s Kappa and it used in this paper to cite where to find information on Cohen’s Kappa.

Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International journal of research in marketing*, 21(3), 241-263.

Slide presentation for an earnings call. Is important for giving sale and player numbers to emphasise the Overwatch playbase.

Ho, S. H., & Huang, C. H. (2009). Exploring success factors of video game communities in hierarchical linear modeling: The perspectives of members and leaders. *Computers in Human Behavior*, 25(3), 761-769. DOI: 10.1016/j.chb.2009.02.004

A paper that looks at video game communities and is has a good definition of virtual communities and how they pertain to video games specifically.

Lai, H. M., & Chen, T. T. (2014). Knowledge sharing in interest online communities: A comparison of posters and lurkers. *Computers in Human Behavior*, 35, 295-306.

This paper discusses the difference between Lurkers and posters on online forums. This is important for our paper when discussing the limitations of our findings. DOI: 10.1016/j.chb.2014.02.004

PlayOverwatch (2017, 28 April) *More than 30 million players have charged into Overwatch! Thanks for grouping up with us, heroes. We couldn't ask for a better team.* [Twitter poster]
<https://twitter.com/PlayOverwatch/status/858002935820582912>

This tweet was the first time Overwatch announced its sales number of thirty million players.

[PlayOverwatch] (2017, 23 Aug) *Overwatch Animated Short | "Rise and Shine"*. [Video File] Retrieved from
https://www.youtube.com/watch?v=8tjcm_kI0n0

An animated short that is a backstory of an Overwatch character. This video is used in the paper to give clarification on the importance of Overwatch outside of the game itself.

Ridings, C. M., & Gefen, D. (2004). Virtual community attraction: Why people hang out online. *Journal of Computer-Mediated Communication*, 10(1). DOI 10.1111/j.1083-6101.2004.tb00229.x

Ridings and Gefen conduct qualitative research on virtual community forums and found that oftentimes, users of virtual communities have the same benefits as people in physical communities such as church.

Singer, P., Flöck, F., Meinhart, C., Zeitfogel, E., & Strohmaier, M. (2014, April). Evolution of reddit: from the front page of the internet to a self-referential community?. In *Proceedings of the 23rd International Conference on World Wide Web* (pp. 517-522). ACM.

This paper discusses what Reddit is and how the community is difficult to understand from the outside looking in due to its self-referential nature. We discuss this exact problem in our own paper and use this paper to point to where this issue arose from.

Shur, E. (2017). *Remixing Overwatch: A Case Study in Fan Interactions with Video Game Sound*. Retrived from
http://scholarship.claremont.edu/scripps_theses/1076/

An undergrad thesis that discusses Overwatch from the side of fan fiction. This paper was important due to its ability to define the importance of fan fiction in the Overwatch community.

Sköld, O. (2015). Documenting virtual world cultures: Memory-making and documentary practices in the City of Heroes community. *Journal of Documentation*, 71(2), 294-316.DOI: [10.1108/JD-11-2013-0146](https://doi.org/10.1108/JD-11-2013-0146)

Skold makes a clear concise definition of what Reddit is. Reddit can often be confusing to understand and Skold defines it well in an academic setting.

Steinkuehler, C. A., & Williams, D. (2006). Where everybody knows your (screen) name: Online games as “third places”. *Journal of Computer-Mediated Communication*, 11(4), 885-909. DOI: 10.1111/j.1083-6101.2006.00300.x

Steinkuehler & Williams’ paper discusses video game communities as an informal social space. This paper is of importance because it establishes the fact that video game VCs are important for users’ social life.

Super Data (2017) Global Games - *Everything you need to know about 2017 So far* [PDF] Retrieved from: <https://superdata-research.myshopify.com/products/year-in-review>

This presentation highlights the importance of games on a global scale. This fact backs up our claims that video games, and the communities that follow them are important and worth researching.

APPENDIX APPENDICES

APPENDIX A

Table 1 Coding for Official Overwatch Forums							
		Rater 2					
		Knowledge sharing	Usefulness	Enjoyability	Satisfaction	Loyalty	Off-site interaction
Rater 1	Knowledge Sharing	21	0	0	0	0	0
	Usefulness	0	0	0	0	0	0
	Enjoyability	1	0	4	0	0	0
	Satisfaction	0	0	0	0	0	0
	Loyalty	1	0	0	0	5	0

	Off-site Interaction	0	0	0	0	0	0
Notes: $K = 0.869$ ($n = 32$)							

APPENDIX B

Table 2 Coding for r/Overwatch							
		Rater 2					
		Knowledge sharing	Usefulness	Enjoyability	Satisfaction	Loyalty	Off-site interaction
Rater 1	Knowledge Sharing	8	0	0	0	0	0
	Usefulness	1	2	0	0	0	0
	Enjoyability	8	0	22	0	0	0
	Satisfaction	0	0	0	6	0	0
	Loyalty	0	0	0	0	0	0
	Off-site Interaction	0	0	0	0	0	0

Notes: $K = 0.713$ ($n = 47$)

Review

Research Design

I think the topic of your study is intriguing since there are few researchers focus on this topic. Our study is about analyzing game reviews, I think it is similar to your topic. We both do on content analysis. I think your group should collect more data to reinforce your results. The seven key factors for a thriving virtual community should also mention in the background section since it is an important guide for your coding.

Analysis and Results

The analysis of the data is sound, and you provide the reliability percentage clearly. The results are well presented in the appendix. But I think there are not enough raw data to come up with categories and themes. Also, I think it is better to present a form of the comparison between the two forums when coding data so that your readers can see the difference more clearly.

Reporting

I don't know if your group has finished your writing yet. There are no obvious mistakes with grammar and spelling. The structure of the article is clear and the annotated references are complete. But there are no keywords right now, and the abstract should provide more details about your results.

Score: 9/10

-Shimeng Guo

The basic structure of the paper is complete. Questions, methods, results, and analysis are coherent and reasonable.

Introduction:

The problem of the paper is not the question. So we should state the problem and its convenience first. Then there're some papers trying to solve the problem, but they also have limitations. Next, we give our own perspective on the problem: the difference of VCs.

Methods

Whole procedure conducting conclusions should be stated more clearly. A little suggestion: find a paper, write down each step on by one, and try to find the potential bias.

Discussions and Conclusions

There should be more discussions. In the first paragraph, you mentioned that " Users in the subreddit were much more interested in talking about how they enjoyed Overwatch." You can raise some examples and talk a little about them to support your ideas (Or the results distribution of data in appendix). And you need to write your conclusions in the conclusion section to answer your question in the introduction.

Finally, perhaps you can mention the structure of forum posts. How do threads are displayed? You mentioned the potential bias in the discussion, so. why don't you mention it in your paper?

Good luck.

Zhihui Chang (Steven)