

Paul Diaz

ENGR 195B

Essay Writing 3

Technology Social Impact Research Paper

Over the last couple of decades, technology continues to grow and expand exponentially. The industries that provide technology and services through the use of the Internet are the ones that are developing rapidly and successfully — industries in retail, social media, business services, and most importantly online gaming. Online gaming has gained popularity all over the world, primarily in Europe, Asia, and North America. The most popular online gaming are sports, simulations, real-time strategy, combat, and MMORPGs, which stands for Massively Multiplayer Online Gaming. MMORPGs have revolutionized the online video game industry and earned billions of dollars year after year. However, its booming has had numerous social impacts on the culture and economy of many people. This paper identifies and discusses the social impact of MMORPGs on culture and economy of Japan. It also talks about some technological disruptions brought by this technology, ethical functions, and cross-cultural analysis of MMORPGs to Japanese people.

MMORPGs are played by a group of players that simultaneously work or play together via the Internet. According to MMORPG's column, the top five most played MMORPGs in 2017 are World of Warcraft, EverQuest, Ultima Online, Call of Duty, and Guild Wars 2 (Takahashi, 2013). MMORPGs continue to acquire their popularity in online video gaming industry. As a matter of fact, according to Spil Games, there are

more than 700 million people playing online video games, and 44% percent of them are playing MMORPGs (Takahashi, 2013). Similarly, MMORPGs have made a substantial amount of point-of-sale (POS) in the years 2010-2017. According to the statistics, MMORPG's website, in the year 2016, MMORPGs annual revenue was calculated to be at the level of \$11.2 billion US dollars, and is expected to reach up to \$31 billion US dollars in the year 2017 (Fuller, 2014).

The proliferation of MMORPGs has caused social impacts in Japan. Some Japanese experts believe that MMORPGs have created positive social impacts on their culture – such as the creation of virtual socialization, a whole new world for people who are actively playing MMORPGs. According to Zhong, participating in MMORPGs provides a sense of community and creates a new type of human interaction to many young Japanese adults. MMORPGs encourage collective and cooperative play that require social interactions, collaborate and help each other (players) to perform and achieve collective goals (Zhong, 2011). However, many Japanese researchers claim that modern society is deteriorating and negatively changing the essence of civic engagement, resulting in people having low social trust and “few spaces to meet with people in the real world” (Zhong, 2011).

There were some technological disruptions in Japan caused by activities of MMORPGs. One of these disruptions is massive network traffics in the country (Burgos-Amador et al, 2013). After the release of Xbox 360 and Xbox Live in 2005 and Play-Station Network (PSN) in 2006, it was reported that there were additional 77 million registered gamers total from 2005-2006 (Masoud et al, 2012). In Japan, which is

the home of gaming giants and the second largest gaming market in Asia, it was reported that, as of July 2017, there are at least 51 million registered MMORPG users, bringing in 87.17 billion yen net sales to the country in 2017 (Fuller, 2014). This large number of MMORPG users that simultaneously play together create a massive network traffic disruption, resulting the country's Internet infrastructure to be fragile, unreliable, slow, and susceptible to cyber attacks (Burgos-Amador et al, 2013). In fact, in 2008, it was recorded that MMORPG users in Japan use 30% of network traffic in the country. In 2013, it was reported that MMORPG users in the country have increased up to 35%. This resulted in a major overhaul of the country's Internet services, such as providing and installing more servers to accommodate the demands of MMORPGs (Burgos-Amador et al, 2013). Technologies (software and hardware) that make up the system of online gaming have benefitted this disruption. MMORPG users were required to purchased advanced and powerful personal computers with large memory availability, powerful processors, state of the art graphical user interfaces (GPUs), and fast network throughput. Network companies had to expand and manufacture these tools needed to participate in MMORPGs, and build hundreds of servers to cater MMORPG industry, which ultimately resulted in great profits for tech companies that mass-produce such technologies (Burgos-Amador et al, 2013).

MMORPGs performs ethical and unethical functions in Japanese culture. Due to the fact that almost 80% of MMORPG games have war or combat themes, experts at Iowa State University (ISU) agree that this type of online gaming promotes violence and influences children to commit crimes and violence (Iowa State University, 2008).

Similarly, a research study conducted by ISU assistant Professor of Psychology Douglas Gentile with the collaboration of Japanese researchers have found that the exposure of Japanese children (ages 9-12) to violent video games is one of the main factors of the elevated numbers of Japanese children aggression from year the 2007-2008 (Iowa State University, 2008). There are many other unethical functions that affected the behavior of children in Japan. For instance, many specialists claimed that online video games were to blame for many children's deteriorating eyesight (Iowa State University, 2008). Conversely, in terms of ethical functions, there are online games that are educational and strategic themes. These types of online games are beneficial to children in general, and a great supplement to their academic toolkit. As per MMORPGs, on some level, this type of online gaming provides ethical function because of the fact that they promote collaborative play and encourage collective and cooperative play with a strong virtual social interaction (Iowa State University, 2008).

In terms of cross-cultural analysis, MMORPGs provide several developments in an academic and social component. It also was reported that MMORPGs changed Japan's psycho-cultural norm. According to Kirby, MMORPGs are associated with skill and academic advancement. Online games such as MMORPGs provide an opportunity for children to have better "communication, problem-solving, team-work and shared goals" skills (Kirby et al, 2014). In addition, there have been some research studies that revealed some positive impacts of MMORPGs on Japan's young adult's social skills development. According to Kirby, through playing MMORPGs, it has helped them improved their social skills, relationship, and communication — and concluded that

“players derived social support from fellow online gamers” is one contributing factor to improve their well-being as a whole (Kirby et al, 2014). In connection with Japan’s psycho-cultural norm, one of the changes to Japanese culture is the young adults’ addiction to playing MMORPGs. For example, according to the Absentee Students Support Center (ASSC) located in Nagoya, Japan, it has reported that in the year 2012, ASSC received 327 requests for help for people that are suffering from online gaming addiction (Yomiuri, 2012). Similarly, in the years 2009 to 2012, the National Web Counseling Association also received a total of 150 requests for help/treatment concerning online game addiction. Excessive playing of MMORPGs has been one of the modern social problems and concerns in Japan for many years now. According to ASSC, since the online gaming industry continues to expand, the problem of online gaming addiction is expected to grow not only in Japan but also in China, United States, and in many countries in Europe that are actively and excessively playing online video games (Yomiuri, 2012).

References

Burgos-Amador, David, Jesus Martinez-Cruz, Sergio Recio-Perez (2013), "Reducing The Impact of Massive Multiplayer Online Games on the Internet Using SCTP", *Information Technology: New Generations, Third International Conference on*, vol. 00, no. ,pp. 8-13, 2013, doi:10.1109/ITNG.2013.9

Fuller, S. (2014, April 10). Statistics & Facts on MMO/MMORPG gaming. Retrieved November 12, 2017, from The Statistics Portal website:
<https://www.statista.com/topics/2290/mmo-gaming/>

Iowa State University. (2008, November 4). Violent Video Game Feed Aggression In Kids In Japan And U.S.. *ScienceDaily*. Retrieved November 12, 2017 from
www.sciencedaily.com/releases/2008/11/081103180252.html

Kirby, A., Jones, C., & Copello, A. (2014). The Impact of Massively Multiplayer Online Role Playing Games (MMORPGs) on Psychological Wellbeing and the Role of Play Motivations and Problematic Use. *International Journal of Mental Health and Addiction*, 12(1), 31-51.

Masoud, M. Z., Hei, X., & Cheng, W. (2012). A measurement study of a massive multi-player online first person shooter game in play-station networks. *Communications (APCC), 2012 18th Asia-Pacific Conference on*, 14(2), 8-13.
<https://doi.org/10.1109/APCC.2012.6388110>

Takahashi, D. (2013, November 25). More than 1.2 billion people are playing games. Retrieved November 12, 2017, from Venture Beat website:
<https://venturebeat.com/2013/11/25/more-than-1-2-billion-people-are-playing-games/>

Zhong, Z.-J. (2011). The effects of collective MMORPG (Massively Multiplayer Online Role-Playing Games) play on gamers' online and offline social capital. *Computers in Human Behavior*, vol 27(6), pp. 2352-2363.
<https://doi.org/10.1016/j.chb.2011.07.014>

Yomiuri, K. (2012, November 22). Online game addiction becoming serious problem in Japan. Retrieved November 12, 2017, from Japan Today website:
<https://japantoday.com/category/features/lifestyle/online-game-addiction-becoming-serious-problem-in-japan>