

Taking a critical sociological perspective, discuss the changes that social media is bringing to business

Danyang Li

*University of York, York, United Kingdom
e-mail: 904096919@qq.com*

Abstract: *Social media is increasingly used in society and has become an integral part of the population's lives. In particular, as a novel form of communication on the Internet, social media has dramatically changed the way people access information and communicate and transformed business models. It is also the emergence of social media that has driven a significant shift in e-sports and e-commerce. Therefore, this essay will take the live gaming platform Twitch as an example, analyse and study its characteristics and advantages, and analyse the changes brought about by social media to business from a sociological perspective.*

Keywords: *Social Media; Business Change; Twitch; E-commerce*

1. Introduction

"How much time do you spend on social media each day?" "How many social media platforms do you have on your phone?" Social media has infiltrated the lives of many people. Over 3.6 billion people worldwide reportedly use social media in 2020, and by 2025, the number of social media users is expected to rise to almost 4.41 billion (Clement, 2020). Social media platforms such as Facebook, Wechat, Tik Tok, Twitter, LinkedIn, and Twitch have become an integral part of users' lives for work and entertainment purposes. Moreover, given social media's ability to disseminate significant amounts of data, businesses worldwide use social media to cater to the growth and expand their marketing strategies. As a result, social media heavily impacts businesses across the globe. Furthermore, defined as a new form of communication on the Internet, social media has significantly altered the methods by which people access information and communicate. The main characteristic of social media is reflected in the relationship between users; it emphasises user-centred, content communication, relying on the connections established between users. The social media platform aggregates user communication, thus further promoting interpersonal networks with social value connectivity (Dijck, 2013).

Social media's unique communication characteristics (aggregation, connectivity). The creation of social media has driven a critical shift in eSports and E-commerce. The acquisition of Twitch by Amazon in 2014, making it the largest live gaming video platform, attracting a growing audience and becoming a business model for e-commerce combined with social media platforms. In 2015, Blizzard Entertainment (a leading game production and distribution company) developed Warcraft, allowing players to log in using social media, post screenshots directly to the platform. The following year later partnered with Facebook to bring Facebook Streaming to its games industries (Bankov, 2019). Evidently, social media drives the commercialisation of games in different forms and methods, while expanding multiple business channels through e-commerce platforms. Nevertheless, social media's influence on the gaming industry and e-commerce is a controversial topic. Benson, Saridakis, and Tennakoon (2015) argue that the integration of social media and e-commerce has caused the public to be under surveillance, creating risks such as information leakage, putting the privacy and security of users at risk. As Kalhour and Ng (2016) state, the emergence of social media platforms has led to users' various irrational behaviours due to the overly entertaining nature of the gaming industry, which has had many adverse effects. Benson, Saridakis, and Tennakoon (2015) argue that social media and e-commerce have led to a state of surveillance, creating risks such as information leakage, putting users' privacy and security at risk. As Kalhour and Ng (2016) state, the emergence of social media platforms has led to users' various irrational behaviours due to the overly entertaining nature of the gaming industry, which has had plenty of adverse effects.

This essay will critically analyse social media's impact on commercialisation by drawing upon specific sociological theories, and is organised as follows. The social media platform, Twitch, is used

as a case study to analyse social media platforms' changes and adverse effects on the gaming industry's commercialisation. Accordingly, the essay proposes corresponding improvement strategies that need to strengthen the internal supervision of the platform. Secondly, changes to e-commerce resulting from social media platforms are examined, and existing issues are identified; the public is under constant surveillance by social media, leading to personal privacy threats.

2. Twitch, changes to the commercialisation of the gaming industry

Twitch, the real-time streaming video platform owned by Twitch Interactive, with the best feature being that viewers and gamers can interact with each other (Matsui, Sapienza and Ferrara, 2020). This characteristic can be linked to a participatory culture. Jenkins (2005) developed the concept of 'participatory culture', which describes the relationship between fans and producers; instead of being passive receivers of information in traditional media, fan groups have become active disseminators and participants, thus changing the status of fans (Jenkins and Ito, 2005). Therefore, the participatory cultural nature of Twitch has facilitated a dramatic change in the relationship between gamers and viewers; the viewer has become central to the business culture of gaming. The business model of gaming has changed. In the context of a participatory culture that focuses on personal creation and sharing, establishing a clear connection between social media and the gaming industry seems a logical step. An excellent example of this is Twitch. As a platform focused on live gaming, Twitch complements the shortcomings of video games and traditional broadcasting, engaging viewers through a real-time online interactive format. With around two million content creators and a vast online audience of 150 million, Twitch's vast user base can create content and watch live games (Abarbanel and Johnson, 2020). As a form of participatory culture, each user on the platform has an independent voice right, can express their opinions at any time, and breaks down regional restrictions, allowing gaming enthusiasts worldwide to connect. It also represents Twitch has a highly interactive model; fans engagement and stickiness have increased, starting the trend of interactive gaming. Therefore, social media are vital for games because they support to attract more users to the gaming industry.

For the average gamer, Twitch has transformed the profit model of the gaming industry into a 'fan' driven one. This is a monetisation model that gets streamers audience to subscribe and actively contribute payment. As Napoli (2020) notes, the emergence of social media has changed the business marketing pattern and the role of consumers; the consumer has come to dominate the business. As illustrated in Figure 1, the business model for game players on Twitch is relatively simple. Game players will broadcast live game footage in real time on the platform through Twitch's website. Audiences watch their favourite live game videos on the platform, while Twitch sorts its channels according to different game categories and online viewership. Twitch's profitability model is based on viewers following and rewarding their favourite streamers through virtual gift trading and membership subscriptions, thus commercialising the game industry. Streamers earn corresponding profit sharing; streamers gain increased earnings when they obtain a larger following. Thus, for streamers on Twitch, the fans and audience base has been redefined and plays an irreplaceable role in the video streaming platform. Both the social media platform and streamers base their profits on the accumulation of a fan base; thus, platform and streamers should strengthen their interaction with fans. As a result, Twitch's participatory culture gradually removes the boundaries between gamers and audiences, creating a gaming community for both parties to interact on an equal footing, which, in turn, enhances the gaming industry's interactivity.

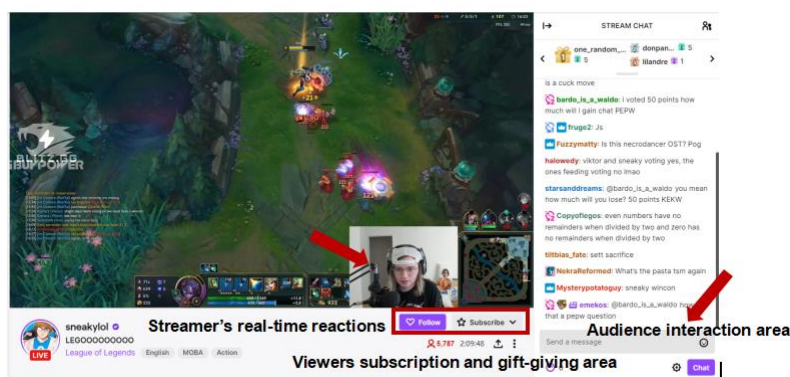


Figure 1: Gamer live streaming (Source: Sneakylol, 2021)

The streamers have access to income through live streaming. By offering employment opportunities to live streaming platform; Twitch makes playing games a profession to a certain extent. As a commercial platform for gaming, Twitch is a highly inclusive platform for a segment of gamers compared to other working industries. Streamers can choose to work full-time or part-time on live online gaming assignments, and there are no additional requirements for streamers in terms of status, position, or education. Johnson and Woodcock (2017) conducted an interview survey with streamers, in which one of them said that before he came to Twitch, he had dropped out of school twice and not worked for almost five years; after joining Twitch, he started gaming and now enjoys a live streaming career on Twitch. This because Twitch has improved his life and fulfilling his life's values (Johnson and Woodcock, 2017). Similarly, Twitch gives people with chronic illnesses the opportunity to work and earn a significant amount of income. The platform does not discriminate against people with medical conditions, and instead supports them to live broadcast on the platform (Johnson, 2018). In the face of the COVID-19 pandemic, many people have lost their jobs, and several businesses have faced closure due to strict lockdown restrictions. As a result, plenty of people are required to stay at home, which has consequently increasing the number of people who seek digital entertainment during pastimes, such as watching eSports matches and live video games. Accordingly, the growth of users of video platforms increased instead (Perez, 2020). It means that streamers' employment has not been negatively affected by the epidemic. Additionally, given that live video gaming is a way of earning an income; Twitch has provided employment opportunities for people during difficult times in society.

Additionally, from a corporate perspective, Twitch has expanded the way commercials are marketed. With the popularity of video streaming, an increasing number of users are watching live video platforms, so this live streaming boom has also driven commercial advertising marketing. Previously, advertising was mainly shown on TV, interspersed between TV shows, but electronic products have become widespread, the young population has gradually moved away from TV's traditional media. As a result, with social media's evolution, to increase its influence for the company products, the corporate has shifted its attention to video streaming platforms. For example, companies cooperate with social media platform or streamers to embed their products on the homepage of video streaming sites, online live-streaming rooms of internet celebrities, or have internet celebrities conduct verbal promotions. Thus, achieving a promotional effect. Once gamers have a large fan base on the Twitch platform, they can negotiate with advertising companies and sponsors. For example, streamers broadcast product advertisements in their live streams. Advertisers also use the platform to seek streamers that will willingly promote their products. In return, the platform and streamers benefit from various advertisements (Johnson and Woodcock, 2019). In addition, based on a large number of live viewers and the richness of the group type (covering a wide range of age groups), the use of video streaming as a way to disseminate corporate advertising serves to promote products and services.

In addition to the commercial revenue and business change generated by regular gamers, and impact and changes of social media on commercial advertising. Twitch has also expanded the gaming business chain by partnering with the physical game industry. For example, Twitch cooperates with several game makers and game competition agents, opening up a new business combination model; exchange of benefits between the parties. From a game maker's perspective, they require more online users to follow the games competition. On video streaming platforms, utilising the interactive feature of the audience can boost the discussion of the game; also, through the live game broadcast, it is possible to bring more attention to the game application and attract people to play. And Twitch is an option for game makers. Twitch has a massive audience, so game makers depend on the streaming platform to promote their games; and expand public awareness of the professional leagues in the gaming industry.

Additionally, eSports are getting a considerable amount of attention in recent years in terms of video streaming platforms. Therefore, professional eSports leagues competition's broadcasting rights can be seen as a signature for live streaming platforms. Twitch certainly wishes to obtain the commercial broadcast broadcasting rights of mainstream game events. Thus, it becomes even more distinguished to attract a wider audience, generating increased revenue. For example, League of Legends (a multiplayer competitive game), developed by Riot Games, is one of eSports' most popular options. Currently more popular than some sporting events, part of League of Legends' success can be attributed to the use of live streaming, as Twitch enables global audiences to watch matches online in real-time. Riot Games has licensed the League of Legends broadcast rights to Twitch, so almost all League of Legends-related events can be seen on Twitch. Thus this will attract loyal League of Legends followers to use the social media platform (Rosell Llorens, 2017). As illustrated in Figure 2, Twitch broadcasts the League of Legends professional league. League of Legends is a professional tournament in different countries every year. The LPL (League of Legends Pro League) is a professional tournament of the highest standard in China. It is the only channel to the League of Legends Global

Finals; a competition highly regarded by Chinese players. Due to the popularity of the eSports tournament, many commercial companies have invested in specific teams; accordingly, the gaming industry chain continues to expand, thus bringing substantial commercial benefits to the eSports industry. Therefore, Twitch's positive partnership with the physical gaming industry (game producers and game competition agents) is evident, opening up the gaming industry chain and achieving win-win cooperation.

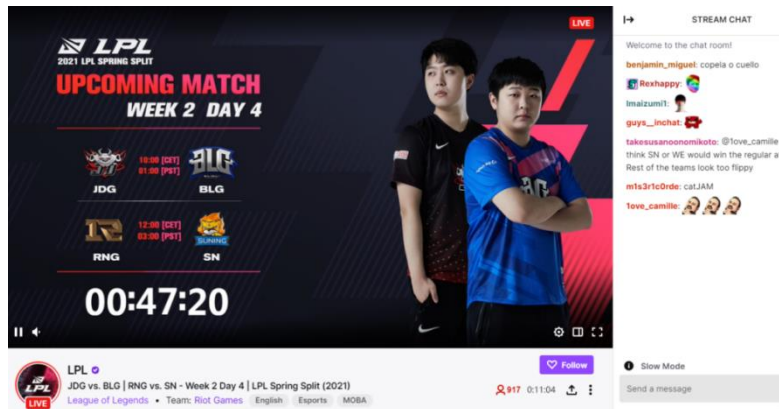


Figure 2: League of Legends Pro League (Source: LPL, 2021)

As aforementioned, the profit model of ordinary game players on Twitch is usually dominated by fan groups; however, this business model creates a degree of "false demand" and a "consumer society". Marcuse (1964) emphasises false needs, refers to profit groups for specific social or personal interests, through external circumstances imposed on consumer demand, induce consumers to expand unreasonable consumption desire, and the public obtains false satisfaction, thereby generating the impulse to consume. This concept illustrates that business people promote consumers' false demands and demand for excess value through mass media, which, in turn, negatively impacts society (Marcuse, 1964). Based on the theory of false needs, Baudrillard (2016) introduces the consumer society concept; refers to the change in the perception of consumption in modern society. There has been a shift from the objects' consumption to the symbols consumption, politics, economics, culture, and other things that can be consumed as symbols. Symbolic consumption represents the personality, characteristics and status of the consumer. As such, consumers no longer buy goods based on their use and practical value, but rather the meaning behind them (Baudrillard, 2016). However, in the general environment of false needs and consumer society, consumers' needs are often combined with desires when consumers do not know whether to consume based on real needs or false needs. Most notably, there is an expanding demand for extras behind the products, especially on social media platforms. As a result, an increasing number of consumers turn their attention to satisfaction and engagement in the consumption process, thus creating a strong desire to consume stimulated by the external environment (streamers' guidance for consumers).

Users' desire to consume is intensified on the live video streaming platform. For example, streamers on Twitch stimulate their fan base to present gifts by interacting with their spectators. Through giving gifts to their favourite streamers, fans gain extra attention from the streamers; streamers usually show gratitude and interact with viewers who send them gifts. Notably, the Twitch chat box has a gift leaderboard; the more gifts that a fan sends, the higher their name will be on the rankings. Therefore, in order to satisfy their inner vanity, some fans increase their satisfaction through continuous consumption. Driven by this consumer mentality, to some extent, consumption without restraint can also lead to lousy consumer attitudes. There have been negative gift-giving cases to streamers on Chinese live streaming platforms, such as students stealing their parents' money to reward their favourite streamers with gifts. There was even a case of an adult embezzling public funds to provide gifts to a streamer. The pursuit of hedonistic public funds for spending, conspicuous and extravagant spending will gradually create an undesirable trend. The lack of self-restraint in spending just to satisfy vanity, society's impact is unfavourable.

Social media facilitates sharing and exchanging information with internet users, promoting relationships between gamers and users. However, there are also some weaknesses to public participation on social media. Unfortunately, some female gamers may face unequal treatment in the gaming industry due to social media platforms' open nature. A large number of gamers stream live videos every day on Twitch, and millions of viewers participate in live online chats; thus, the lack of

appropriate content regulation of user-generated interactive content often leads to gender cultural constructs (Ruberg, 2020). As Holmes and Meyerhoff (2003) suggest, gender is seen as an essential aspect of social interaction. Perceptions of 'masculinity' and 'femininity' are often stereotyped by the nature of the work, and therefore people are labelled differently through gender categorisation (Holmes and Meyerhoff, 2003).

Especially, In the gaming industry, female gamers, as a minority group in the live gaming industry, are labelled as special/alternative, and are therefore treated differently by some viewers and even professional gamers. For example, female gamers have reported instances of being harassed by users, with some viewers commenting on the physical appearance of female gamers, making inappropriate comments on the social media platform's discussion boards, thus causing great distress to the female gaming community (Ruberg, Cullen, and Brewster, 2019). In addition, there is a strong prejudice against female gamers among viewers and professional gamers, who generally believe that girls are not talented at gaming. As a result, female gamers' gaming behaviour is questioned. For example, Geguri, a female gamer, was accused of using cheating software by professional gamers and game enthusiasts because of her skill and awareness in the game; many audiences made unfriendly comments about her gender and looks, thus subjecting her to gender discrimination and unfair treatment (Choi, Slaker and Ahmad, 2019). Therefore, issues of gender bias and limited female career progression are intensified; unjust perceptions can lead to female players being at a disadvantage in the esports industry; moreover, the cultural construction of gender in society will deepen the differences and unequal conditions between men and women, deepening the divide between men and women in the gaming industry.

This means that in a certain sense, in the gaming industry, although social media provides a platform for the public to speak freely. However, in turn, can trigger prejudiced and hateful comments. Therefore, Twitch should continue to strengthen the regulatory issues within the platform to ensure that it can keep up with the changing trends of social media. An automated content review system is necessary to monitor the whole platform. Sensitive word tags to monitor users language are particularly useful in automatically blocking potentially hurtful or inappropriate words or phrases. Moreover, a peer reporting system enables users to report inappropriate or problematic content to the platform; comments identified as problematic are subsequently reviewed, and if they are deemed inappropriate, the content is directly removed. Rules must be made clear and accessible to inform all users and streamers of prohibited behaviours. In this light, social media platforms can work towards effectively managing communication between users and streamers. Although these strategies do not eliminate internal weaknesses, they provide a foundation for improving inclusivity on social media platforms and help establish a positive environment for all users (Gerrard, 2020).

3. Social platform “Twitch” , changes to the e-commerce

Twitch, the representative of live game streaming platforms, because of its real-time interactivity. Therefore, Twitch has brought about a significant commercial change not only in the gaming industry, but also in e-commerce. It offers a fresh approach to business marketing for e-commerce. In recent years, there are many online shopping sites and platforms; as a result, e-commerce faces market saturation. In order to improve market competitiveness and expand the number of sales, e-commerce is gradually shifting its attention to video streaming platforms, where they try to take advantage of the unique benefits of social media platforms to expand their business value. A prime example of this is the commercial convergence of Twitch and Amazon. Panneton (2019) outlines how the retail confluence of Amazon and Twitch, which Amazon acquired for \$970 million in 2014, has since set a precedent for the combination of emerging streaming culture and commerce. Firstly, Amazon sells its related gaming products directly to viewers by using a video game streaming marketplace. Viewers can purchase products through the live streaming platform's exclusive purchase portal, thus making Twitch the main commercial sales channel for Amazon. Secondly, Amazon has embedded its corporate services into Twitch's operational services. By obtaining information about the streaming platform's user base, Amazon will develop strategies to attract viewers on Twitch to browse Amazon products, thereby increasing traffic to Amazon's e-commerce platform. Finally, as an acquirer of Twitch, Amazon simultaneously prevents multiple competitors of Google and Yahoo from using the platform for marketing purposes, achieving an industry monopoly. Thus Amazon's uniqueness and exclusivity on the Twitch live gaming video platform (Panneton, 2019). As a result, e-commerce platform Amazon has combined with video streaming platform Twitch promotes its products, and enhances its corporate brand in emerging markets while creating a new environment for video consumption. This new type of business combination can effectively mobilise and stimulate consumers' desire to shop. For instance,

Twitch's real-time display of gaming goods in live streaming allows consumers to feel the quality of goods. Consequently, consumption increases Amazon's business value, stimulates users' desire to consume, and achieves a successful business model which involves enabling users to buy products while watching videos or live streams. Accordingly, social media platforms are essential to the growth of e-commerce as they promote economic and social development.

Amazon and Twitch's commercial convergence produces real-time streaming shopping; consumers buy products during social interactions, forming social media commercialisation. However, there are many critics of the commercialisation of social media. Social media and e-commerce platforms exploit consumers by continually collecting information and processing it for use and distribution. The consumer is consequently in a state of exploitation. Smyth (1997) describes this concept as audience commodity, which explains the relationship between media, audiences, and advertisers, and conveys audiences' changing role in the media communication process. The media produces entertaining content (comedy, music, games) to attract audiences, thereby collecting data from users when they engage in media content. Subsequently, social media platforms sell users data to advertisers, which advertisers then analyse to re-market to users. As a result, the audience becomes a social media commodity (Smyth, 1997). Similarly, Murdock (2014) highlights the concept of digital labour to explain social media's commercialisation. Digital labour originally referred to paid or unpaid labour performed by people in the network. Today the concept only relates to users becoming free labour on social media platforms and doing unpaid work for the platform (Murdock, 2014, cited in Fuchs, 2015). In other words, when users actively post information on social media, the production of this information amounts to free labour for the user; the more time users spend on social media platforms, the more valuable social media reaps become. Social media platforms can collect data from users' content and thus make a profit from it (Srnicek, 2017).

The above concepts of "audience commodity" and "digital labour" can be applied to Amazon and Twitch's commercial integration. When people register for a Twitch account, users must compulsorily tick and confirm the privacy policy to successfully use Twitch account. These privacy policies indicate that Twitch will provide information about its users to service companies and advertisers; the platform collects information about the audience, monitors their interaction behaviour, and gives it to Amazon. Amazon subsequently integrates users' data to understand their demands and to market their services and products precisely. In a series of operations that enable a cycle of social media business operations. The process can be summarised as follows: users engage in spontaneous social behaviour - Twitch collects data through user behaviour - Amazon collects and uses the data - Amazon purposefully markets to attract users to buy products. This means that the use of social media is transforming corporate communication and public relations. Through user data collection, social media facilitates organisations to understand client needs and respond effectively to these demands. As a result, although the audience appears to benefit from the process, users' data tends to be exploited for marketing purposes.

This also means that when markets and social media converge, it opens up economic and social opportunities and challenges. At the company level, they are constantly collecting information about their users and using data to drive precision marketing. For example, through data analysis, algorithms create personalised recommendations for each consumer, thereby increasing the efficacy of their marketing strategies (Yu et al., 2020). Thus, data collection is one of the ways in which companies enhance their economic development. However, the comprehensive and complex nature of collecting vast amounts of information about each user causes some social issues, such as surveillance and privacy. In an age of data surveillance, databases record data that informs them of which websites users are visiting. As such, people are under the 'surveillance' of social media, which exercises invisible control over consumers. However, this surveillance is in a certain way, similar to panopticon. Foucault (1977) argues that the circular prison reflects social reality from a sideways perspective. Foucault drew on the concept of Jeremy Bentham's prison design. It refers to the imaginary prison where the prisoners are locked in a central tower that they cannot see; they are entirely closed. Therefore, the prisoners cannot know the monitor's location; they require always regulate their behaviour. (Foucault, 1977). Social media platforms digitally record information about consumers through the mining of data about their daily lives, thus keeping track of all information about consumers, so that they are in a state of total surveillance. As a result, to some extent, the public's movement and freedom is restricted and basic human rights are threatened.

4. Conclusion

This essay critically analyses how social media changes business through the lens of relevant sociological concepts. Using the social media platform Twitch as the main example, video streaming platforms' influence on the gaming industry and e-commerce is analysed in light of social media's impact on the gaming industry. From Twitch's perspective on the changing business of gaming, social media platforms now offer employment opportunities to the general public; social media strengthens the interactions between game players and audiences, establishes a model of fan-led profit, streamers obtain benefit shares through virtual gifts rewarded by fans and subscriptions to member programs, when the amount of fans reaches a certain scale, streamers can cooperate with advertisers to earn funds. In contrast, the platform cooperates with game manufacturers; through the exchange of profits, the platform helps the game manufacturers to promote the game. Game makers give platform games the broadcasting rights, achieve commercial operation and expand the game industry chain. However, although social media has brought high profits to the gaming industry, some users have invested too much energy and money into the game, leading to irrational false needs behaviour. Additionally, through the interactive community of social media platforms, there is a risk that some audience members may post inappropriate comments on the platforms, deepening the cultural construction of gender in society, thus leading to social inequality factors. Nonetheless, this paper has suggested several strategies that Twitch can implement to its platform to regulate communication between users and increase inclusivity effectively.

Then from the perspective of Twitch's impact on e-commerce, using Twitch and Amazon as an example. Amazon embeds service features into Twitch, expanded commercial marketing channels for a unique commercial transaction process. Social media directly impacts e-commerce by allowing viewers to shop while watching live streams, introducing new user traffic to e-commerce platforms, and collating data to be analysed to achieve specific marketing purposes. Finally, social media's collection of user information is explained through a panopticon, thus imposing invisible control over consumers and harming their overall privacy. From the discussion results, it is evident that the emergence of social media has, to some extent, changed the way in which businesses operate and grow profits. Nevertheless, although the public enjoys the convenience of the changes in business brought about by social media, we must not lose sight of the negative repercussions of social media's impact on businesses.

References

- [1] Abarbanel, B. and Johnson, M. (2020). *Gambling engagement mechanisms in Twitch live streaming*. *International Gambling Studies*, 20(3), pp.393-413.
- [2] Bankov, B.(2019). *The Impact of Social Media on Video Game Communities and the Gaming Industry*. *House Science and Economics* ,1, pp.198-208.
- [3] Baudrillard, J.(2016). *The Consumer Society: Myths And Structures (Revised Edition)*. London: Sage.
- [4] Benson, V., Saridakis, G. and Tennakoon, H.(2015). *Information disclosure of social media users*. *Information Technology & People*, 28(3), pp.426-441.
- [5] Choi, Y., Slaker, J. and Ahmad, N.(2019). *Deep strike: playing gender in the world of Overwatch and the case of Geguri*. *Feminist Media Studies*, 20(8), pp.1128-1143.
- [6] Clement, J. (2020). *Number of global social network users 2017-2025*. [Online]. Statista. 24 November 2020. Available at <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/> [Accessed 2 January 2021].
- [7] Dijck, J. (2013). *The Culture of Connectivity: A Critical History of Social Media*. Oxford: Oxford University Press.
- [8] Foucault, M. (1997). *Discipline and Punish: The Birth of the Prison*. New York: Pantheon Books.
- [9] Fuchs, C. (2015). *Dallas Smythe and digital labor*. New York: Routledge.
- [10] Gerrard, Y.(2020). *Social media content moderation: six opportunities for feminist intervention*. *Feminist Media Studies*, 20(5), pp.748-751.
- [11] Holmes, J. and Meyerhoff, M.(2003). *The Handbook Of Language And Gender: Language And Desire*. Malden, MA: Blackwell Publishing Ltd.
- [12] Jenkins, H., Ito, M. and Boyd, D.(2018). *Participatory Culture In A Networked Era: A Conversation on Youth, Learning, Commerce, and Politics*. Cambridge: Polity Press.
- [13] Johnson, M. (2018). *Inclusion and exclusion in the digital economy: disability and mental health as a live streamer on Twitch.tv*. *Information, Communication & Society*, 22(4), pp.506-520.

- [14] Johnson, M. and Woodcock, J.(2017). 'It's like the gold rush': the lives and careers of professional video game streamers on Twitch.tv. *Information, Communication & Society*, 22(3), pp.336-351.
- [15] Johnson, M. and Woodcock, J.(2019). "And Today's Top Donator is": How Live Streamers on Twitch.tv Monetize and Gamify Their Broadcasts. *Social Media + Society*, 5(4), pp.813-823
- [16] Kalthour, M. and Ng, J.(2016). The dark side of social media game: the addiction of social gamers. *Economia e Politica Industriale*, 43(2), pp.219-230.
- [17] LPL (2021). *League of Legends Pro League*. [Online]. Twitch . Available at <https://www.twitch/lpl> [Accessed 14 January 2021].
- [18] Marcuse, H. (1964). *One Dimensional Man*, Boston: Beacon Press.
- [19] Matsui, A., Sapienza, A. and Ferrara, E. (2020) 'Does Streaming Esports Affect Players' Behavior and Performance?', *Games and Culture*, 15(1), pp. 9–31.
- [20] Napoli, P. (2010). Revisiting 'mass communication' and the 'work' of the audience in the new media environment. *Media, Culture & Society*, 32(3), pp.505-516
- [21] Panneton, C. (2019). *Appropriating Play: Examining Twitch. tv as a Commercial Platform*. Western Libraries, pp.1-86.
- [22] Perez, M. (2020). Video games are being played at record levels as the coronavirus keeps people indoors. [Online]. *Forbes*. 16 March 2020. Available at <https://www.forbes.com/sites/mattperez/2020/03/16/video-games-are-being-played-at-record-levels-as-the-coronavirus-keeps-people-indoors/?sh=46e86d4757ba> [Accessed 3 January 2021].
- [23] Rosell Llorens, M.(2017). eSport Gaming: The Rise of a New Sports Practice. *Sport, Ethics and Philosophy*, 11(4), pp.464-476.
- [24] Ruberg, B.(2020). "Obscene, pornographic, or otherwise objectionable": Biased definitions of sexual content in video game live streaming. *New Media & Society*, pp.1-19
- [25] Ruberg, B., Cullen, A. and Brewster, K.(2019). Nothing but a "titty streamer": legitimacy, labor, and the debate over women's breasts in video game live streaming. *Critical Studies in Media Communication*, 36(5), pp.466-481.
- [26] Smythe, D.W.(1977). *Communications: blindspot of western Marxism*. *CTheory*, 1(3), pp.1-27.
- [27] Sneakylol (2021). *gamer live streaming*. [Online]. Twitch . Available at <https://www.twitch/sneakylol> [Accessed 14 January 2021].
- [28] Srnicek, N. (2017). *Platform Capitalism*. Cambridge: Polity Press.
- [29] Wulf, T., Schneider, F. and Beckert, S.(2018). Watching Players: An Exploration of Media Enjoyment on Twitch. *Games and Culture*, 15(3), pp.328-346.
- [30] Yu, C., Zhang, Z., Lin, C. and Wu, Y.(2020). Can data-driven precision marketing promote user ad clicks? Evidence from advertising in WeChat moments. *Industrial Marketing Management*, 90, pp.481-492.