THE SPORT OF THE DIGITAL WORLD: E-SPORTS
" Dijital Dünyanın Sporu: E-Spor "

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ÖZET

Amaç: Bu çalışmada dijitalleşen dünyada hızla büyüyen e-sporun geçmişten günümüze değişim süreci incelenmiştir.

Materyal ve Metod: Çalışmada e-spor üzerine yapılan araştırmalar, yayınlanan resmi raporlar ve resmi kurumların web sayfalarında paylaşılan bilgiler dikkate alınarak e-sporun gelişim süreci ortaya koyulmuştur. Ayrıca, bu kapsamda yapılan araştırmalar, yayınlanan resmi raporlar ve International E-Sport Fedearation (IESF) tarafından paylaşılan veriler irdelenmiştir.

Bulgular: İlk olarak 1972 yılında ortaya çıkan e-spor kavramı günümüze kadar önemli gelişmeler yaşayarak gelmiştir. Özellikle geleneksel sporların bile ötesine geçen finansman gelirleri ve izleyici sayısı ile artık bir spor branşı olarak dünya çapında bir popüler bir yapıya kavuşmuştur.

Sonuç: Bilgisayar etkileşimi yoluyla ortaya konan e-spor müsabakaları, yine bilgisayar veya akıllı telefonlarla çevrimiçi video platformları üzerinden takip edilmektedir. Önümüzdeki yıllarda hem ekonomik olarak, hem de izleyici sayısı olarak geleneksel sporların önüne geçeceği öngörülmektedir.

Anahtar Kelimeler: E-Spor, Elektronik Oyunlar, Video Oyunları

ABSTRACT

Aim: In this study, the change of e-sports, which is growing rapidly in the digitalized world, from the past to the present has been examined.

Material and Method: In the study, the development of e-sports was tried to be revealed by taking into account the researches on e-sports, published official reports and the information shared on the web pages of official institutions and by making a literature review. In this context, researches, published official reports and data shared by the International E-Sport Fedearation (IESF) were examined.

Results: The concept of e-sports, which first emerged in 1972, has come up with significant developments until today. It has gained a worldwide reputation as a sports branch, especially with its financial income and audience numbers that go beyond even traditional sports.

Conclussion: E-sports competitions, which are created through human-computer interaction, are also followed via online video platforms with computers or smart phones. It is predicted that in the coming years, it will surpass traditional sports both economically and in terms of the number of spectators.

Keywords: E-Sports, Electronic Games, Video Games,

INTRODUCTION

In today's world, with the development of technology, measures and developments have begun to improve existing sports competitions. The rapid development of technology has accelerated the emergence of new sports branches and revealed the concept of "E-Sports". The concept of e-sports was first introduced in 1972 when a group of students at Stanford University played the video game "Spacewar" in the form of a tournament. The student who won the tournament bought a subscription to the magazine called "Rolling Stone". Under the leadership of this organization, the way for inter-university tournaments was opened and their organizations began to be organized. Although the first e-sports competition was held in 1972, many people do not know what e-sports is yet. E-Sports has its own unique games and the big players competing in this game, a fan base that follows these players from all over the world. E-Sports organizations are implemented in online environments so that they can reach audiences from all over the world. A video game developed by international game producing companies such as Atari, Nintendo, and Capcom had traditionally been a way for individuals to compete against each other. With the development of innovative internet technologies, the video game has become a technology that allows individuals to compete online against each other (Hiltscher, 2015). Since the 1990s, as computer graphics and hardware have advanced and the Internet has become increasingly ubiquitous, individual games have changed their shells, and they now provide content, dynamics, and visual presentations that provide a more realistic experience each day (Williams, 2017). Through this process, online multiplayer has started to take over the game industry, and games with single-player story modes (single-player, campaign, story mode, etc.) have been replaced by e-sports games where individuals compete against each other via computers, mobile phones and consoles (Campbell et al., 2018).

E-Sports has many different definitions. Asian Electronic Sports Federation defined e-sports as "a combination of electronics and sports, which means the use of electronic devices as a platform for competitive activities". It is known as electronic sports or "eSports" which is a form of professional sport competition between two or more individuals using video games as a platform (Scholz and Barlow, 2019). The definition of modern eSports has been stated as "a form of sports in which the main aspects of the activity are facilitated by electronic systems; human-computer interfaces are used to interact with the eSports system and facilitate the input and output of the players/teams" (Hamari and Sjöblom, 2017). There are two developments that can be defined as the turning point of e-Sports. In the 1980s and 1990s, the spread of arcades known as "Arcade" and the great interest of game consoles in the home environment constitute the first period. The second period can be considered as the widespread use of the internet since the 2000s. Today, the Asian Olympic Council announced in its statement on April 17, 2017 that e-sports will take part in the competitions as an official game at the Asian Games, which will be held in Hangzhou, China in 2022. As a result of the increased popularity of digital communication, there have been growth opportunities in investment and sponsorship for eSports (Lee and Schoenstedt, 2011). Commercialization of the sector developed rapidly as endemic and non-endemic sponsors joined forces and many sports were diversified into eSports. The competitive nature of video gaming within the gaming community has led to officially sponsored tournaments, although individuals originally engaged in recreational video gaming (Jin, 2010).

Today, in the e-sports branch, as in the modern sports organizations of many international tournaments, the media, brands and the audience attract the attention and this interest is increasing day by day. Based on the information obtained, we are faced with the fact that e-sports will be among the developing and most popular sports branches of the future. It is estimated that in the coming years, it will surpass traditional sports both economically and in terms of the number of spectators. This situation shows that sports teams, media and brands should keep up with the developing sports. For this purpose,

it is aimed to examine the changes that e-sports has experienced from the past to the present, which is on the way to become the biggest competitor to traditional sports by growing rapidly in the digitalized world.

MATERIAL AND METHOD

In this study, the literature review method was used. The document analysis method can be used as a stand-alone technique as well as being used as a complement to other research methods used in scientific research. This analysis is a systematic procedure for scanning, reviewing and evaluating printed or electronic resources (Bowen, 2009). In this context, the development of e-sports has been tried to be revealed by taking into account the researches on e-sports, the official reports published and the information shared on the websites of official institutions. In this context, researches, published official reports and data shared by the International E-Sport Fedearation (IESF) were examined.

RESULTS

Scholz (2020) revealed the e-sports ecosystem (Figure 1). This ecosystem includes the main stakeholders of e-sports. The primary stakeholders here are esports players, teams, game producers and organizers.

Figure 1. *E-Sports Ecosystem (Scholz, 2020)*

It has been stated that the number of participation in e-sports with competitors and teams in video game tournaments through human computer interaction has exceeded 100 million in recent years. For this reason, it is seen that the researches are mostly done on the parameters that affect participation in e-sports (Braun et al., 2016; Seo, 2016; Seo and Jung, 2016). E-sports includes categories such as multiplayer online battle arena, online multiplayer role-playing, real-time strategy and first-person shooter. The common theme here is that a player fights as a team to eliminate the opposing team's avatar and achieve a goal. Here, the success of the players depends on combining their perceptual and cognitive abilities and computer use skills (Pluss et al., 2019).
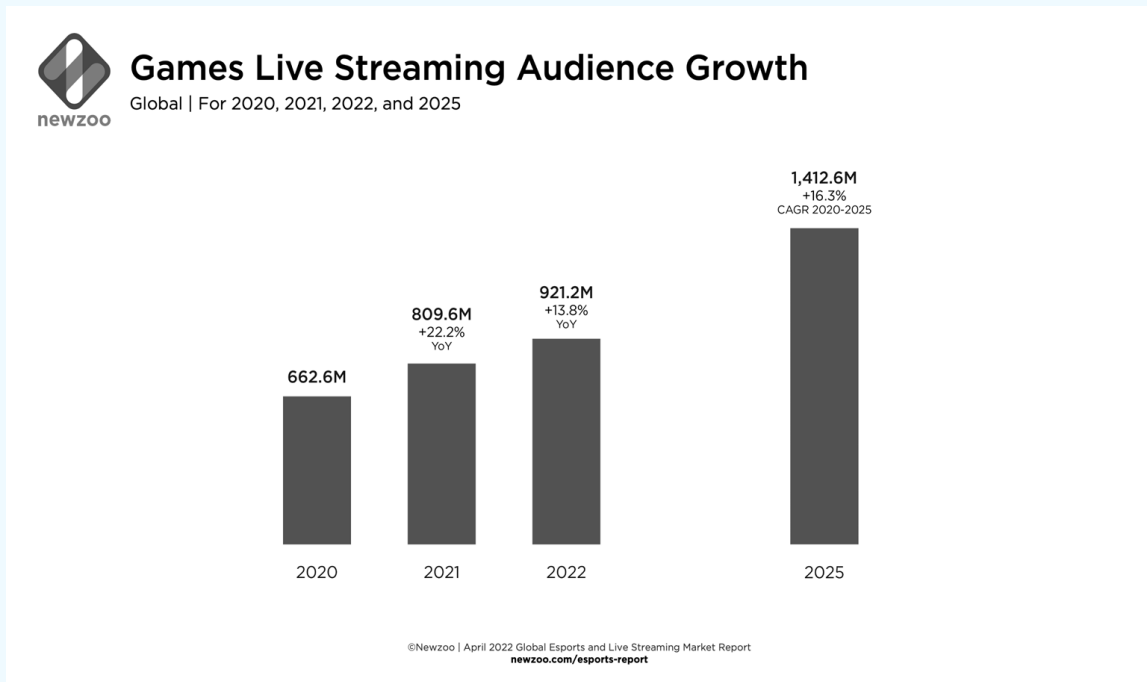
Figure 2. *Games Live Streaming Audience Growth (Source: newzoo.com)*

During the pandemic period, e-sports was negatively affected like other traditional sports. However, the number of viewers has increased greatly during the quarantine period. In particular, they reach live broadcast viewers from platforms such as Youtube, Twitch and Huya. Live stream viewers of esports videogames reach 809 million by the end of 2021 (Figure 2). It is thought that the increased audience rates during the pandemic period will increase at the same rate after the pandemic (Newzoo, 2021). As seen in Figure 2, it is expected that the number of live broadcast viewers will reach 1412.6 million people by the end of 2025.
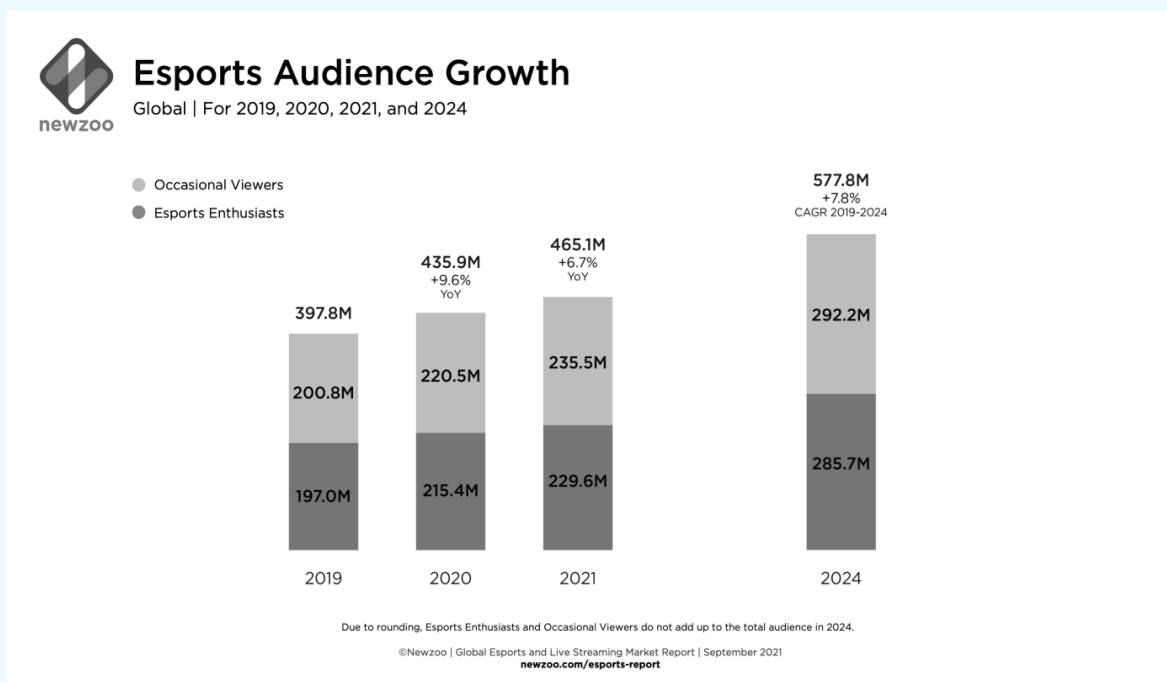
Figure 3. *Esports Audience Growth (Source: newzoo.com)*

From 2019 to 2024, Newzoo predicts that eSports enthusiasts will experience a compound annual growth rate of 7.7% (Figure 3). By 2024, Newzoo predicts that 291.6 million people will watch eSports occasionally. A total of 577.2 million people will watch eSports events, and 285.7 million of them will be eSports enthusiasts. The popularity of eSports is growing around the world. It is particularly popular in mature markets such as North America and Western Europe. The audience numbers of growth markets in the Middle East, Africa, Asia-Pacific, and Latin America accounted for most of the audience growth over the last year. Furthermore, demand in markets such as India and Brazil has increased as mobile users stream content.

The important developments experienced by e-sports in recent years can be summarized as follows;

- ✓ It is reported that the number of e-sports spectators worldwide reached 495 million by the end of 2020 (NewZoo, 2020). It is estimated that this number will increase by an average of 10-12% every year and will reach 646 million esports spectators by the end of 2023 (NewZoo, 2020). It has been stated that this number is more than the number of many popular traditional sports spectators (Shabir, 2017).
- ✓ The number of spectators in e-sports tournaments held around the world exceeds the number of viewers in traditional sports events. For example; While 60 million people watched the e-sports League of Legends World Championship held in 2017, 20.4 million spectators followed the National Basketball Association (NBA) matches (Steinkuehler, 2019).
- ✓ The worldwide e-sports industry generated $1.2 billion in revenue in 2019, attracting all the attention in this sense (Gawrysiak et al., 2020).
- ✓ It was stated that e-sports reached a global market of over 490 million Euros in 2016 (Chiva-Bartoll vd., 2019),
- ✓ It is stated that it earned $1.1 billion in revenue in 2019 and its audience reached 453.8 million people (Pannekeet, 2019).
- ✓ According to Newzoo, it is stated that the e-sports industry generated $1.1 billion in revenue with an annual growth of 16% in 2020, and the total e-sports audience increased by 11.7% to reach 495 million people (British Esports Association, 2021).
- ✓ In 2021, esports is expected to generate more than $1.6 billion in total revenue with $1.3 billion from brand investments (Animation Career Review, 2021).
- ✓ It is estimated that video games will generate $152 billion in revenue in 2019, making it one of the largest entertainment industries in the world (Anderton, 2019).

Table 1 presents the e-sports World Championship statistics. It is observed that the number of participants has increased rapidly over the years. In addition, South Korea draws attention among the countries that won the tournament. It is observed that the number of participants in e-sports world championships has increased over the years (Table 1).

Table 1. E-Sports World Championships (IESF, 2022)

Year	Host City	Participants	Winner
2009	Taebaek	180	South Korea
2010	Daegu	250	South Korea
2011	Andong	300	Sweden
2012	Cheonan	300	South Korea
2013	Bucharest	350	South Korea
2014	Baku	400	South Korea
2015	Seoul	400	Serbia
2016	Jakarta	400	South Korea

2017	Busan	400	South Korea
2018	Kaohsiung	400	South Korea
2019	Seoul	500	Japan

DISCUSSION AND CONCLUSION

E-sports, which has become a worldwide phenomenon, has been growing rapidly in recent years (Himmelstein et al., 2017). In addition to its rapid growth, it causes a significant increase in the number of professional human resources due to the increasing interest of people. Especially young people's desire to make a career in this field is increasing (Smith et al., 2019). The fact that e-sports has become so interesting has allowed academic research to focus on this subject. In academic researches, the industrialization of e-sports, the relationship between traditional sports and the evaluation of e-sports within the framework of the administrative principles of sports are mentioned. (Cunningham et al., 2018; Hallmann and Giel, 2018; Heere, 2018). The growth of e-sports is attributed to the development of e-sports culture in Western and Asian countries (Cheung and Huang, 2011). The introduction of personal computers led to the development of many games and the diversification of games, which served as a catalyst for the increased use of computers. A common connection was created between personal computers at this time, allowing two people to play a game at the same time (Wagner, 2007). In recent years, the growth and development of the e-sports community has been reported rapidly. Internet cafes, which were popular in South Korea in early 1998, created a competitive environment and stimulated audience behavior. Later, the friendly games played among gamers transformed into enormous e-sports organizations, leagues, teams and superstars who compete professionally in exchange for a prize. E-sports has thus created a new web community of spectators, fans and people interested in e-sports (Magerko et al., 2004).

E-sports, which draws attention also by the authorities that have a say in traditional sports, has gained momentum in reaching the masses by making significant developments on a global scale. E-sports, which develops with such a rapid acceleration, can take place as an official sports branch in the global championships to be held in the near future. The competition of the rapidly growing e-sports with traditional sports draws attention. In recent years, it has left traditional sports behind with its growing economy and increase in the number of viewers. For this reason, it has turned into an arena that affects many sectors and where investors are increasingly differentiated. The increase in the number of spectators has led to an increase in online video platforms, a platform sponsored by large companies. Finally, the relationship of e-sports with fields from different disciplines shows that its importance will continue at the same pace in the future.

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