Introduction into the Global E-Sports Industry - Historic Perspectives

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Abstract: *In recent years, barely any other industry than eSport has evolved from niche to a mass phenomenon. While at the end of the 1990s only known by gamers, nowadays millions of viewers around the world watch the competitions via internet live streams or locally in sold-out sports arenas. In some countries, top E-Sports athletes enjoy a special status that is comparable with the popularity of football professionals or even pop stars. The prize money, which are earned at international E-Sports championships, accumulate to millions of dollars, depending on the event, audience size and type of game. But what exactly does E-Sports refer to? This paper defines the E-Sports term by definition and provides information about the historic development of E-Sports.*

Keywords: *eSports, digital sports, competitive video games, virtual   sports, electronic sports, E-Sports*

JEL Classification: *L6, L8, Z2*

1. E-SPORTS DEFINITION

Briefly, the term E-Sports (in literature, also referred as *ESport*, *e-Sport*, *E-Sports* or *e-Sports*) is the abbreviation for *electronic sports*. As with other traditional types of sport, E-Sports is about competition or measuring with others in a particular discipline. A professional gaming career today requires several years of hard and sustained training as in any other traditional sport – the professional E-Sports is demanding tremendous physical and mental performance from the players. The basis of E-Sports are computer and video games, which can be played competitively by individual players or teams depending on the game type. In this way, E-Sports does represent the core elements of computer and video games and enables experiencing the essential components of the games culture tangible: digital sport is about social interaction, about playing with each other as well as coordinating and working together as a team. Also, E-Sports is an international phenomenon. It can be played with people all over the world at any time. Nowadays, E-Sports teams no longer only consist of players from one nation or region. Instead, as in other sports, the most successful teams already consist of players from all over the world. Also, the most important leagues and tournaments are held internationally.

Major E-Sports titles include 'Counter Strike: Global Offensive' (CS:GO), 'Dota 2', FIFA, 'League of Legends' (LOL), or 'Star Craft 2' (SC2). Over the years, based on such tactical shooters, sports simulations and real-time strategy games, numerous leagues and tournaments have been established, in which E-Sports athletes compete against each other on a national and international level. Event series like 'ESL One' (CS:GO), 'ESL Intel Extreme Masters' (SC2), 'Worlds Finals' (LOL), or 'The International' (Dota 2) fill entire stadiums. Also, more and more traditional TV channels and news magazines broadcast the most important E-Sports events. But still, millions of viewers mostly watch the tournaments and leagues via online streaming platforms such as Twitch, Mixer or YouTube Gaming, which specialized in broadcasting gaming live streams and which are an integral part of the E-Sports ecosystem. By this development, nowadays an audience of millions of viewers worldwide is reached – which makes digital sports increasingly interesting for media companies, investors and sponsors even beyond the games and IT industry.

In the following the question will be discussed how the term E-Sportscan be classified from a scientific perspective. In comparison to other fields of research, not many scientific investigations have been carried out regarding E-Sports. However, in relevant scientific literature different definitions of E-Sports can already be found. In their original form, these definitions are to be found in publications from the early 2000s and still continue to serve as the basis for current scientific work in this regard.

A broadly defined, more abstract definition goes back to Michael Wagner, (2006) who deals with the topic of E-Sports from a social or cultural background in the sense of a general definition of sport[1]. Following his understanding, sport supports the development of socially relevant abilities, which are of physical nature, as well as in the mental area and in the handling of information and corresponding technologies. Hence, Wagner (2006) considers E-Sports as a generic term for sports disciplines in which the participants practice mental or physical skills in dealing with information and communication media and compare them in competition according to predetermined rules. His definition does focus more on the training and development of players' skills closely related to sport. However, in the current discussion and especially within the scene itself, the meaning of E-Sports is interpreted in a more narrow sense, probably because of a missing comprehensive scientific consideration. According to Müller-Lietzkow (2006), a simple definition of E-Sports is 'the competitive playing of computer or video games in single or multiplayer mode'. In more detail, Sauer (2004) describes E-Sports as a professional or amateur competition (including the corresponding training) that is hold digitally by usage of physical controls (e.g., joysticks, keyboards, mice). The core of this definition is the competitive nature and the athletic activity, since E-Sports does require both physical skills (e.g., hand-eye coordination and responsiveness) and tactical understanding (game vision and game understanding) (Müller-Lietzkow, 2006). Also, in this context E-Sports is understood as a further development of already existing types of sport and adopts central characteristics and values such as fair play. As E-Sports is approaching to established types of sport, also the style of E-Sports broadcasts can be considered, which are very similar to popular formats of broadcast from traditional sports. Beginning with preliminary reports and team presentations produced especially for certain events, live commentating of tournament games in several languages as well as pre- and post-match analyses by established experts, the media productions are becoming more and more professional and can keep up with traditional sports broadcasts in terms of effort and quality. In all definitions of E-Sports, however, the focus on the competitive aspect must always be distinguished from the casual use of digital games, solely to satisfy the human play instinct.

In the context of this elaboration, sponsoring within the professional E-Sports scene will be examined. Therefore, E-Sports is defined as a special form of dealing with computer games, which is interpreted exclusively for competitive purposes and whose players see themselves as professional athletes. In contrast, in this research, the occasional use of network-based videogames and the general usage of computer and video games are not being considered within the field of E-Sports. Instead, those are classified within the area of casual gaming and not relevant within this elaboration. To provide a better understanding of the gaming industry and its increasing dissemination and professionalization, a historical overview of the most important developments of this industry in recent years is given in the next section.

2. HISTORIC DEVELOPMENT

The roots of E-Sports go back to the middle of the 20th century. In 1958, the American William Higinbotham developed the game 'Tennis for Two' (later known as Pong) at the Brookhaven National Laboratory, which could only be played by two players (Ahl, 1983). Therefore, it is considered the first competitive multiplayer video game. The goal of the sport simulation was to hit a virtual ball over a tennis net. Two small metal boxes with one button for hitting the ball and one joystick for adjusting the angle were used as controllers (Ahl, 1983). With this invention, Higinbotham created the first computer-based competition which is assumed being the foundation for today's E-Sports(Ahl, 1983).

The first computer game, in which a human player could compete against a computer-simulated opponent, was the space simulation 'Spacewar!' by American computer scientist Steve Russell. Russell designed the game in 1962 at the Massachusetts Institute of Technology. The goal of the game

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[1]For example to be found at Beckers (2001)

was to successfully navigate a missile-equipped spaceship against a gravitational field to destroy an enemy spaceship. Whereas computers and video games mainly remained accessible to only university students by the early 1970s, this changed by the development of new and cheaper home computers and emerging offerings of the computer and video games industry in the following decades.

In addition to being able to buy video game consoles and games for home use, the emergence of arcade machines has contributed making computer and video games accessible to a growing population. Arcade games such as 'Computer Space' (1971), 'Pong' (1972), 'Space Invaders' (1978), 'Pac-Man' (1980) or 'Donkey Kong' (1981), which could be played in video arcades, influenced generations of gamers – both in the arcade halls and later through remakes of the classic games on game consoles. This paragraph is based on Kent (2001).

The 'Intergalactic Space war Olympics' was held in 1972 by Stanford University. It is known as the first organized computer game competition. On the university campus a tournament of 24 players in the game 'Space war!' was organized including an award ceremony (Farokhmanesh, 2012). A few years later, video game company Atari held the first big event. Over a period of three months, more than 10,000 contestants competed against each other at the 'Space Invaders Championship' in the game 'Space-Invaders' (Anon., 1982). Another big step in the history of E-Sports was also made in the 1970s: the introduction of high score lists (Anon., 2009). Later on, the in-game leader board system made it possible to compare achievements around the world, opening a global battle for the leader boards' leading ranks. During this time, also the first professional video game teams were founded. One of the first teams was the 'U.S. National Video Game Team', which consisted of the leaders of the leader boards, went on a tour through the US in 1983 and even played matches broadcasted on American television (Anon., 2009). In the following years, Nintendo and other video game developers also discovered their games as a platform for competitions, and hosted tournaments such as the 'Nintendo World Championships' (Cifaldi, 2015).

However, the actual evolution towards E-Sports, as it is known today, began in the 1990s with the increasing availability of home game consoles, home PCs and the introduction of broadband Internet. Due to a lack of sufficient internet bandwidth, enthusiastic video gamers were particularly interested in connecting computers locally – so-called LAN[2] parties (Wagner, 2006). Particularly, shooter games like 'Doom' and 'Quake' were played at such events and already contained much characteristics of what E-Sports consists of in these days: team games or one-on-one showdowns and comparisons based on stats and identical preconditions (Wagner, 2006). Initially, LAN parties were characterized by a small number of participants in a private environment.

But, from the mid 1990s these events gained increasing popularity and were professionally organized. In December 1999, the German 'Gamers' Gathering' attracted a total of 1,600 participants from all over Europe for competing in the biggest digital tournament in action, racing or strategy games until this point of time (pressrelations Presseportal, 1999). Five years later, 'DreamHack Winter 2004' in Jönköping, Sweden, set even a new world record in the 'Guinness Book of World Records' with a total of 5,272 participants (Dreamhack, 2010).

Around the same time of the Internet expansion and the first LAN parties, the first professional E-Sports teams formed, also known as clans, some of which still exist today and are leaders within the E-Sports scene (Jonasson & Thiborg, 2010). First and foremost is SK Gaming (formerly Schroet Kommando), founded in 1997 in Germany, which is still one of the most successful E-Sports organizations. The organization operates from Cologne and Berlin and employs several international teams and E-Sports athletes (SK Gaming, n.d.). Other well-known E-Sports organizations from Europe are e.g., MousE-Sportss and Fnatic, who are still in leading positions in some disciplines today.

While in Europe and North America the E-Sports scene grew more or less simultaneously and to a similar extent with the expansion of the Internet, the Asian scene lagged behind for a long time. High custom duties on game consoles often prevented participation in tournaments or even access to E-Sports. Only after the Asian crisis (1997/1998), potential players were able to get computers. However, after the crisis, broadband Internet as well as personal computers for private households were subsidized by the state in South Korea. This laid the foundation for an era of South Korean E-

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[2]Local Area Network (LAN)

Sports leadership, that partly continues to this day, especially in real-time strategy games such as 'StarCraft'. Hence, the South Korean E-Sports was able establishing a high level of professionalization and acceptance within the society, which has not yet been reached in Europe and North America until today. This paragraph is based on Jonasson & Thiborg (2010).

While only since a couple of years Europe's major final tournaments take place in football arenas and stadiums holding between 10,000 and 50,000 spectators, already in 2005, the finals of the South Korean 'StarCraft' leagues were visited by 120,000 fans (Becker, 2015). Whereas the Asian E-Sports market was mainly determined by real time strategy games, Western E-Sports markets especially focused on tactical shooter like 'Counter Strike' (and largely still do today). The world's top level in this area of computer games is still dominated by European and North American teams. Meanwhile, E-Sports cannot be seen as a hobby of technology-minded young people, but has become a mass movement of youth cultures worldwide. Even today, amateurs and professionals meet on LAN-events such as the already mentioned 'Dreamhack', which has been established as one of the most important events of this kind. As stated before, in 2004, the number of participants was over 5,000, and the 'Dreamhack' increased its visitor records year after year. In the winter of 2013, 'Dreamhack' reached a total of over 22,000 participants in Sweden (Dreamhack, 2013) and nowadays its events are organized in the cities of Leipzig, Bucharest, London, Valencia, Moscow, Austin, and Jönköping.

Besides to the number of spectators and attendees, also the prize money, which is being played at international events, has risen in recent years. While prize money of lower five-digit range were still very rare at the beginning of the 1990s (Warr, 2014), in some cases earnings even reach eight-digit amounts today. In 2017, 'The International', which stands for the 'Dota 2' World Championships, nearly paid USD 25 million to the participating teams. Three years earlier, the prize money for this event was even less than half (Statista, 2017b, p. 32). Solely the winning team received about half of the total amount.

By 2020, the accumulated sum increased to USD 34 million, of which USD 15 million are paid to the winner of the tournament (Valve 2020). The record award was mainly financed by other (casual) 'Dota 2' players and fans through the purchase of a digital booklet for the tournament and special additional content for the game (Regan, 2017). In addition, the accumulated prize money of the three most highly endowed E-Sports events illustrate the enormous growth in this area. In 2017 'The International 2017' (Dota 2), 'LoL 2017 World Championship' (LoL) and 'The Kiev Major 2017' (CS: GO) accumulated for a total of almost USD 33 million. Three years earlier, the comparable three top tournaments in these games distributed around USD 13 million and thus less than half of the amount (Statista, 2017b, p. 32).

3. CONCLUSION

Sponsors, investors, and clubs from other sports have also recognized this development and learned using it for themselves. Where in the past small clans had to convince small sponsors with constant performance and a lot of persuasion, today well-known sports clubs such as FC Schalke 04, Paris Saint Germain or companies as Red Bull sponsor or ownentire teams to enter the professional E-Sports sector (Anon., 2017a). E-Sports has now made it to a level of professionalization, which is nearly comparable to established sports. Players are completely dedicated to their computer game, developing tactics with coaches and their team, analysing opponents and, not least, earning a living (Mihalovici, 2016). In the case of some top teams, this even happens in spheres that exceed the salaries of the classically working population by far. Top E-Sports athletes receive advertising contracts, appear as testimonials for their sponsors, and are admired by their fans and imitated in ways of play, behaviour, and equipment (Deloitte, 2017). Look at the continuous development of the E-Sports industry, it can be stated that the industry developed from a nerdy niche market to one of the major drivers of the global leisure and amusement industry.

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