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Esport and simracing markets – The effects of COVID-19, difficulties and opportunities

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ABSTRACT

The esport industry is emerging and constantly changing. The pandemic has had a significant impact on esport and its markets and has affected the whole ecosystem. The focus of this paper, besides esport, is simracing: due to the limitations on physical events, motorsports have had to convert their races to the digital world. The aims of the article are: (1) to identify the changes in the esport and simracing world and markets caused by the pandemic, (2) to examine the difficulties and challenges that the industry is facing, and (3) to explore the opportunities for the further development of the business. Our research methodology involved in-depth interviews with industry professionals from different backgrounds. The results show that esport and simracing need to become more economically sustainable, and changes are required in all related markets. This article identifies such opportunities. Despite the difficulties, esport will continue to be a major player in the digital world and in the world of sports.

KEYWORDS

esport, simracing, esport business, esport markets, pandemic effects

JEL CODES

L83, Z21, Z29

1. INTRODUCTION

The COVID-19 pandemic led to the cancellation of sporting events around the world and people looked for alternative entertainment, so the popularity of esports increased. Esports

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allowed people to stay connected, even during the pandemic. Of the 2,000 people PwC (2021a) surveyed during the pandemic, half of them played or watched game content on a weekly basis. This proportion was even larger for those aged under 35: two-thirds of this age group played or watched games at least weekly. In European countries, 38%–67% of esport consumers said that they had watched esport for the first time during COVID-19 (Deloitte 2021). The rise in the popularity of esport is a trend that has been occurring for several years. It was a global niche market associated with 194 million USD revenue in 2014, but this had increased to 980 million in 2019 and is forecast to reach 1.8 billion by 2023. However, this forecast was made before COVID-19, so the figure is likely to be even higher (PWC 2021a).

There is debate about the relationship between esport and traditional categories of sport, but scholars generally agree "that esport requires skill, is competitive in nature, has a level of stability (…), and has some level of institutionalization of rules, records, and other standards, though the latter point is somewhat debated, too" and that "esport has a place in the sport management discourse" (Cunningham et al. 2017). Simracing itself stands for Simulator Racing, which involves professional gamers racing each other within a virtual racing game or other software.

The aims of the present article are: (1) to identify the changes in the esport and simracing world and markets caused by the pandemic, (2) to examine the challenges that the industry is facing, and (3) to explore the opportunities for the further development of the business. In the following theoretical section we present the environment, markets, and business models of esport and simracing, and in the empirical section we detail the results of in-depth interviews which were conducted with different experts from the industry. In many cases, the characteristics of esport are also characteristics of simracing. Where there are differences, these are described separately.

2. THE ESPORT INDUSTRY

The very first esport competition was held at Stanford University in 1972. Little time passed before the first official competition was organized, named Space Invader Championship, created by Atari. At that time there were no big organisations or professional players; there were only "amateurs". In the 1990s, more competitions and leagues emerged, including the Nintendo Championships, QuakeCon, Professional Gamers League, and the Cyberathlete Professional League (Lorenzo 2017). Some of the more popular games that exist today date back to this time, including Counterstrike and Warcraft. In 1990, the World Wide Web not only revolutionised the entire world but opened up a whole new universe for gamers and game developers, leading to huge developments in the esport industry. Gaming consoles emerged and a large number of video games were released to market (Peša et al. 2017).

Despite the enormous growth of the esport industry, its revenues are still tiny compared to those of the most popular traditional sports. In 2019, the revenue from esport was 980 million USD, while for the NBA it was 7,920 for and the NFL 15,260 million USD. The NBA was formed in 1949, 23 years earlier than the first esport competition. Today, however, esport is one of the fastest growing industries in the world, although in 2020, during the pandemic, the revenue of the industry decreased by a few percent (Newzoo 2021a). Even at the start of the pandemic, Newzoo's (2020) industry forecast was for growth of 1.7%, but this forecast did not materialize in 2020. Offline events were a very big part of the market, and due to the COVID-19 restrictions

all big events had to be postponed or completely cancelled (Newzoo 2021a), leaving the option for competition organizers to convert the tournaments to the online space. Esports competitions were already being broadcast online, but most of the big championships were "offline" events due to the need to create a controlled environment for the competitions in which every participant could compete according to the same circumstances. The overall audience for esports has reached 435.9 million people by 2020 (Newzoo 2021a), of whom esport enthusiasts account for 215.4 million. In 2024, it is estimated that the viewer base will reach 577 million, of whom esport enthusiasts will number 285.7 million (see Fig. 1). These viewership numbers only account for online viewers. The biggest "offline" event so far was the 2017 Intel Extreme Masters Katowice, attended by 173,000 people over the course of two weeks (ESL Gaming 2017). In comparison, the 2017 Super Bowl filled the NRG Stadium with 70,807 people (NFL 2017).

András (2004) described five markets in professional football: the (1) consumer market, (2) media rights/broadcasting market, (3) sponsor market, (4) merchandising market, and (5) player market. In addition to these five markets, developers/game publishers, organisers and teams are also part of the esports ecosystem. *Game publishers* are responsible for the virtual environment itself. We call them the *developers*. They manage everything that is connected to the games. The most crucial difference between traditional sports and esport is that esport is developer-driven (Scholz 2019), and the latter can change the rules from one day to another. One example of this, which was provided by Scholz (2019), is that Valve is capable of shutting down its operation of the Counter-Strike game, leaving every player in a vulnerable position. In contrast, FIFA could stop operating but this would not prevent football players from playing the sport (Scholz 2019). COVID-19 has increased global gaming sales by 20% (PWC 2021b).

Sponsors are the most important part of the whole ecosystem; most revenue is associated with this area, reaching 724 million USD in 2023. Figure 2 clearly presents that from the total 1084.1 million USD income in 2021, 641 million was derived from sponsorship (Newzoo 2021a). In 2018, McDonald's stopped its fifteen-year sponsorship deal with the Bundesliga and

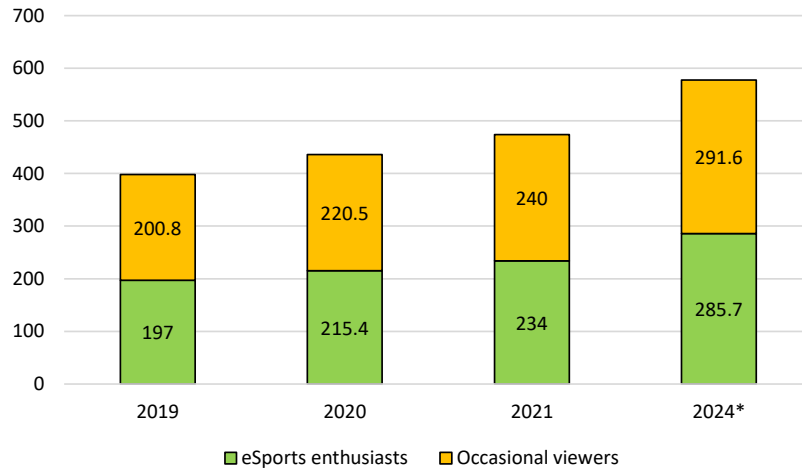

Fig. 1. Worldwide esports viewership
Source: Newzoo (2021a).

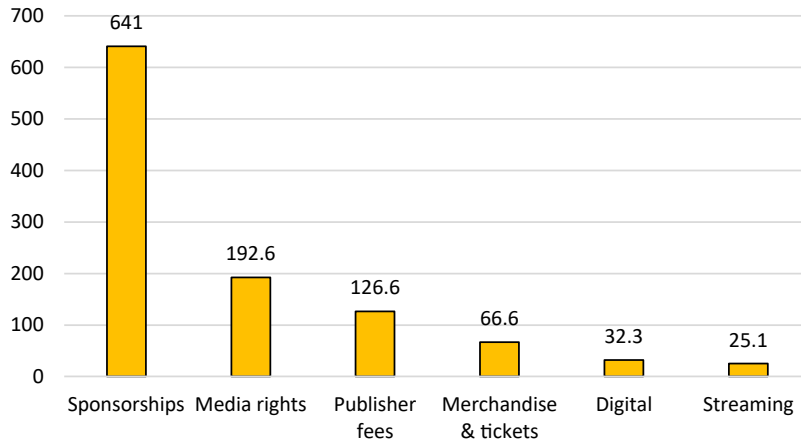

Fig. 2. Global revenue from esports' markets in 2021 by segment (million USD)
Source: Newzoo (2021a).

decided to start partnering with ESL – thus instead of supporting traditional football they started to sponsor esport – and other companies have also started to engage with esport (Rivers et al. 2021). We can differentiate between two types of sponsorship. One is field sponsorship, which is based on logos on sports equipment and around an arena or the hosting location itself (Lardinoit-Derbaix 2001; Mason 2005). The other is television or broadcasting sponsorship (Lardinoit-Quester 2001; Mason 2005). It is important to note that viewers or followers are much more likely to remember field sponsors than broadcasting sponsors. This is because field sponsors are much more involved with the event itself (Mason 2005). In 2019, 601 deals were made, but this number had decreased significantly to 387 deals in 2020 (Newzoo 2021b) due to the COVID-19 pandemic, as numerous events had to be cancelled or postponed (Shawn 2020). However, before 2019, there was an increase in the number of deals and the amount of money pumped into the industry. Broadcasting sponsorship deals remained and may even have increased in number. However, comparing the first quarter data in 2019 with that for 2020 and 2021, we can see that sponsorship deals have returned to an all-time high, with 205 deals in 2021 compared to 193 and 140 in the two preceding ones (Newzoo 2021b).

Viewers are also important part of the business. *Consumers* buy tickets to attend live events and buy *merchandise* of their favourite teams. The more people that follow competitions, events, or broadcasts, the more money flows in from sponsorship, tickets, merchandise, donations, and subscriptions. Some esports already have high viewership numbers: the LCS and LEC, the global Call of Duty League, and most Counter-Strike tournaments are watched by millions of viewers. Tournament models have more viewers than esport leagues that maintain a traditional sports model (season play and playoffs) (Strenczewilk 2021). Due to the pandemic, 38% of fans replaced following traditional sports with esport events, and 63% started following new types of esports online (PWC 2021b). The "viewing hours" of game streams hosted on Twitch, YouTube, Facebook and Mixer increased from 4.8 billion to 7.6 billion in the first quarter of 2020 (Strenczewilk 2021). The motivation for this consumption includes escape, social factors, achievement, drama, gambling, and knowledge (Pu et al. 2021).

The biggest market with a direct connection to esport is the gaming industry. The number of gamers has been increasing over the years. The Asia-Pacific region is home to the majority of *players* with 1.5 billion players, 54% of the total (Newzoo 2021b), and this is growing by 6.5% yearly. It is followed by Europe, and the Middle East and Africa with 391 and 388 million players, respectively. The number of players in Europe is growing by 3.6% per year, while the Middle East and Africa region has the biggest growth rate with 9.9%. North and Latin America account for the fewest with 211 and 274 million players, and growth rates are 2.6% and 7.7%, respectively. There were 2.8 billion gamers in the world in 2020. Growth worldwide is estimated at 6.4% (Newzoo 2021b).

The earnings of professional esport players has started to increase. Patrick Hansen was signed by Cloud9 for 2.1 million USD for three years (Rawat 2021), but this is exceptional. Researching the motivations of esport players, Yee (2006) found three main drivers: performance, a social, and an immersion component. Performance is based on competitive, sports-oriented consumerism. The second driver involves the desire for human socialization. The last is enjoyment – the player's "immersion" in the content of the game.

Broadcasting platforms have changed a lot in the last 5–10 years. Online live streaming services like Twitch, YouTube Live and Huya Live in China have become popular. Through these applications people can share their gaming experiences live with their viewers, creating smaller communities inside the gamer community. In the first quarter of 2021, streamers streamed 265 million hours on Twitch, 19.5 million hours on Facebook, and 9.7 million hours on YouTube (Streamlabs Q1 2021). Twitch TV accounts for most viewers who do not necessarily play the games but watch how streamers play. They also communicate with each other through chat functions (Peša et al. 2017).

The *organiser* group creates and hosts the competition events. Depending on the game, the publisher itself sometimes assumes this role, thereby keeping control. For example, Riot Games controls all of its leagues in the different regions (Riot Games 2020). With other games, like Valve's Counter-Strike, several organisers manage tournaments. The most valuable esport team in 2020 was Team Solo Mid (TSM) with a value of 410 million USD, followed by Cloud9 (350 million) and Team Liquid (310 million) (Newzoo 2021a).

We compared global esport revenues with those of English Premier League clubs. In the Premier League, broadcasting revenues are the most important source of money, while in esport sponsorship is (Table 1). The amount of money the Premier League collects is much greater than that generated by the whole of the global esport industry. Figure 3 illustrates the current business model of esport (Newzoo 2021a).

Compared to KPMG's estimate of total revenue from esport of 855.5 million USD, Newzoo's figures showed total revenue of 947.5 million USD in 2020 (and more than 950 million USD in 2019; but PWC's data showed 980 million USD for that year). Revenue from global esports increased to 1,084 million USD in 2021, a growth of 14.5% on 2020 (Newzoo 2021a). Although the related data is not always consistent, the growth trend is clear, (with a slight stagnation, or rather decline in 2020).

Since COVID-19, the lack of live events has decreased ticket and merchandising sales and sponsorship revenue (Rivers et al. 2021). According to Deloitte (2021), the top 10 trends and drivers that impact the development of the esport industry are: (1) growing popularity and audience, (2) the engagement of non-endemic sponsoring partners, (3) the engagement of non-endemic investors, (4) esport in the entertainment industry, (5) increasing media-rights

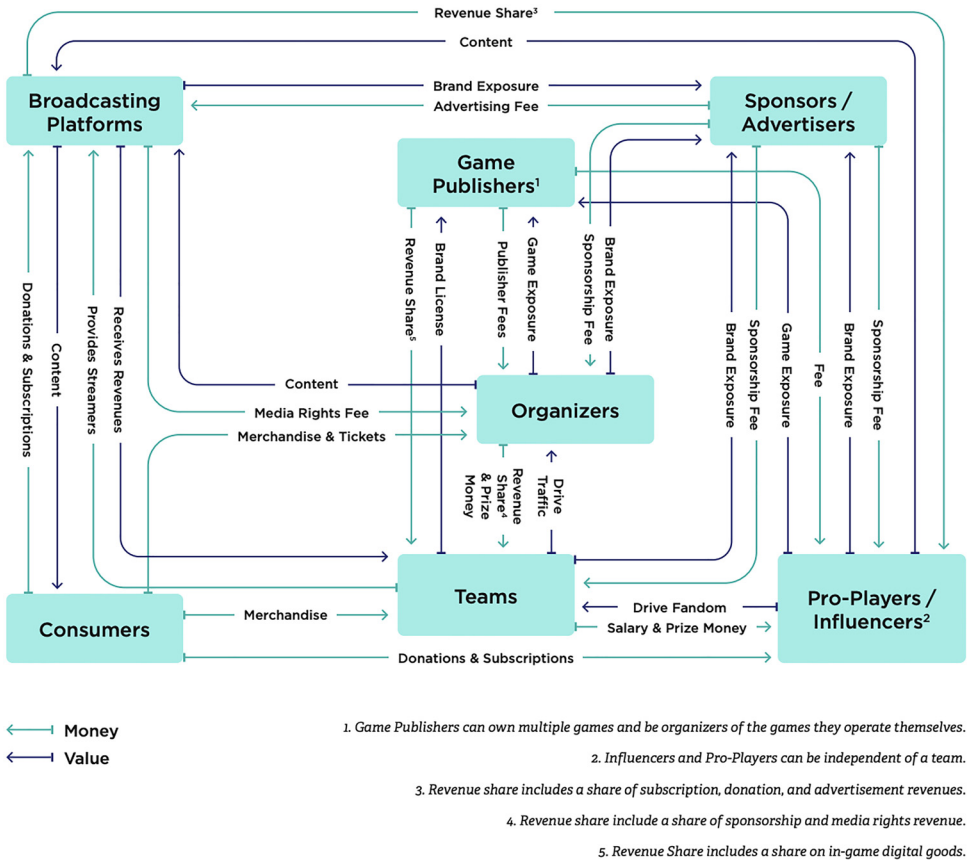

Fig. 3. Business model of esports
Source: Newzoo (2021a).

Table 1. The esport industry's global revenue compared to that of the English Premier League

	Total English Premier League revenue (2018/19 season) million euro and as % of all revenue	Esport industry global revenues (2020) million euro and % of all revenue
Match day/live events	768 (13%)	67.5 (8%)
Sponsorship/commercial	1,620 (28%)	518 (61%)
Broadcasting	3,462 (59%)	136 (16%)
Publisher fees	-	97 (11%)
Digital and streaming	-	37 (4%)

Source: KPMG (2021).

revenues, (6) external investor funding, (7) mobile esport, (8) esport in traditional sports organizations, (9) franchise league concepts, and (10) 5G technology.

Esport in Hungary is still in its infancy. HUNESZ started operating in 2017 with the goal of developing the Hungarian esport system (hunesz.hu). The same year, the National Gaming and Esport Association (NGES) was established *(Nemzeti Gaming és Esport Sportági Szövetség*, nges.hu). Competitions were created to bring the whole ecosystem to life. Today, there are a great number of nationwide events for every esport title. The biggest one is the MNEB, which stands for the Hungarian National Esport Championship, which are presented by NGES. The MNEB championship started back in 2018. People can register and compete in the League of Legends, Rainbow 6 Siege, CS:GO, Valorant, FIFA, Gran Turismo, and iRacing. This means that simracing is also part of the main events in Hungary. There are other smaller championships organized by smaller actors which may be a good start for smaller teams and their players.

Simracing is the part of esport where participants race each other in a virtual, real-time simulated world. The very first racing game to be released was Atari's Space Race game in 1973, in which competitors had to cross the screen with their spaceships. One of the most impactful racing games, Pole Position, came out in 1982, developed by NAMCO, where players raced on the iconic Japanese Fuji Speedway. In the early 1990s, Nintendo released Super Mario Kart, where you could race with Mario-styled weapons. However, in terms of simracing, one of the most important games, Gran Turismo, was released in 1997. This was the most realistic racing game at the time. Over the years, as technology evolved, simulator software became ever better at simulating real-life situations on the track. A breakthrough occurred when rFactor was introduced in 2005, changing simulators forever (Tobias 2020). The most popular titles today are the F1 series, iRacing, Dirt series, Assetto Corsa, and Gran Turismo, the latter will be part of the first ever Olympic Virtual Series (FIA 2021). Simracing has evolved a lot through the years. According to Stream Hatchet, simracing viewership increased from 2.2 million in August 2020 to 4.4 million in January 2021. Viewership doubled due to the COVID-19 pandemic. F1 games had 900 thousand active gamers in February 2021. Second was iRacing, with 100 thousand players (Newzoo 2021b). However, iRacing stated in May 2020 that due to rapid growth, they have introduced a number of new servers. They state that the iRacing user base is now more than 170,000 (iRacing 2020). Racers whose races had been cancelled or postponed purchased simulator equipment and registered with iRacing.

The biggest difference between real-life motorsports and simracing is the location of the racing. This is an important difference, because building a physical racetrack is extremely expensive. There is no definitive data about the cost of an online F1 esport event, but it does not require a complete infrastructure costing hundreds of millions of dollars. The 2020 Formula 1 season reached an average of 87.4 million people per race. In the virtual world, the esport series had a total of 11.4 million viewers throughout the 12 races (F1 2021), equivalent to 950 thousand viewers on average per race. F1 generated 810 million interactions throughout the season on all platforms combined, while for the esport series the number was only 1.7 million. Since Liberty Media acquired the F1 circus back in 2017 (Sylt 2017), they have started to make use of social media platforms. In 2020, F1 achieved a total of 4.9 billion video views across all platforms, while the same indicator was only 23.8 million for the esport series (F1 2021: 1). It is difficult to make comparisons using viewer numbers for other esports competitions. League of Legends and Counter-Strike events are much more popular, and simracing only came into the spotlight during the lockdown. In F1, to make up for postponed races, the Virtual Grand Prix Series was

introduced, where real drivers competed with celebrities (F1 2020a). Thirty million views were achieved across all digital platforms with eight virtual races (F1 2020b). The other big winner of the pandemic was the eNascar iRacing Pro Invitational Series. The first race was watched by 900,000 viewers concurrently, which increased to 1.3 million for the second one (Arnold 2020).

We should also mention UCI (Union Cycliste Internationale), which started their esport cycling championship during the COVID-19 outbreak. They are working together with the indoor fitness platform ZWIFT, which is a market leader in virtual cycling. Cycling esport was born from community racing and is no different to any other form of esports competition – skill, tactics, and experience all are important. Virtual cycling has been on the rise, and the pandemic has turbocharged this growth. During the COVID-19 outbreak, this market saw a 400% increase (The Guardian 2020; Financial Times 2020).

3. EMPIRICAL RESEARCH

3.1. Methods

Esport lacks a history and enough knowledge in comparison to traditional sports. For this reason, we undertook exploratory research in the form of semi structured in-depth interviews with professionals from the field. We conducted six 1.5-h-long interviews in the summer and autumn of 2021. Our research questions were the following: (1) What are the characteristics and challenges for esport and simracing markets? (2) What has COVID-19 changed in each market? (3) What are the factors which could help make the business of esport and simracing better, and could contribute to the more sustainable development of esports' business operations?

The interviewees were (1) Árpád Rab, a cultural anthropologist, ethnographer, and sociologist; (2) Sebestyén Balázs, a sport and esport advisor at KPMG; (3) Gergő Baldi, a professional racer and simracer; (4) Balázs Lengyel, the chief digital officer at Berlin International Gaming; (5) Alex Kreis, the chief business development officer at Cowana; and (6) Dániel Kutyej, CEO of Békéscsaba E-Sport Association. We also participated in the Interdisciplinary Conference of Consumption organized by the University of Pécs, at which the main topic was sports and games. Participation at this event was a good opportunity to hear the opinions of other experts who we could not interview, including (7) Pál Novák, an associate professor at the University of Pécs; (8) Olivér Szabella, manager of the Hungarian Spirit Esports team; (9) Balázs Bíró, president of HUNESZ, founder of Esport1, Esportmilla, and V4FSF and a member of the advisory committee at *Esports* Europe. The empirical section of this paper is grounded on an analysis of the opinions of these nine experts.

3.2. Esport and its markets

All the interviewees in this industry are working on getting esport accepted as a sport. They argue that esport is a sport, despite the legal debate. *"It doesn't matter whether it is a sport or not legally, it is a competition with the best players from the various games"(6).* The biggest advantage of esport compared to physical sport is its ability to connect people without any limitations. The experts' view of esport is that different types of games represent different sub-markets. Analogous to the system of physical sport, every game is its own sport because they have different sets of rules. But each market works in a very similar way in each esport. In the following we only discuss simracing separately if we detect something different or special about this market.

3.2.1. The developer/game publisher market. Due to the pandemic, the market attracted new consumers, and this has led to greater revenue for game publishers. The vulnerability of the industry can largely be attributed to the fact that game developers have absolute control over it. This is possible because the developers own all the rights to their games. "*They decide who can organize events, they control who can play their game(s)"(7).* "*From one day to another, they can completely ban players and from that point, they can't play the game, they can't join another federation to play. Nobody can tell the developers what they can or cannot do with their game" (1).* The role of federations in the future is still a big question. Developers do not rely on federations, unlike in physical sports. The lack of cooperation among parties is significant. As governments are starting to notice how rapidly esport is emerging, they might introduce some sets of rules about how developers should cooperate with federations. "*If the developers are not willing to cooperate with other actors, the sustainability of profits might suffer in the future, (…) federations should play a big role" (4).* It is thus important to introduce new legal regulations.

Developers' power in the simracing scene is lower than with esports generally. The reason is the nature of the real-life simulations; simracing is a copy of real racing, which means that developers' hands are somewhat tied in terms of shaping the game.

3.2.2. The sponsor market. During the lockdown, sponsors who suffered losses due to the pandemic cancelled their deals, and there were no events which could be sponsored during the lockdown. *"Anything that happens financially to the sponsors is going to have an effect on the industry"(2).* This business model must be changed in the long run. The whole industry is heavily driven by sponsorship. According to the experts, companies are more and more interested in sponsoring these events. "*They (companies) want to reach the young generation, and this is one of the best ways to achieve that" (5).* As the industry grows, there will be more sponsors, including non-endemic ones. The more money they bring to the industry, the more professional the actors can and must be. To make the sponsor market more sustainable, long-term contracts are needed. However agile the industry is, it is difficult to calculate the future risk or the profitability of sponsorship.

Sponsorship revenues are important in simracing too, but this sub-market is perhaps less developed than in the case of other esports.

3.2.3. The consumer market. During the lockdown, it was very convenient and useful for customers to spend time playing games and consuming online content. This increased the awareness of esport and viewership in the short term. "*In the long run, it's important to take advantage of the COVID situation and keep this new audience"(8).* Experts mention some disadvantages; one of these is the younger, less well-known target audience. To give a relatively good estimate about the future of this industry, we must know who the followers are. "*They are an extremely immature audience of between 15 and 25*" (*4).* Fans of traditional sports are on average 30 years older than the Millennials and members of Generation Z who are typical fans of esports. Disposable income is lacking. The biggest problem with the industry is that income is strongly driven by sponsorship. A healthier industry would be created by the target audience spending more money. "*The younger generation must receive money from their parents to be able to support their favourite esport players or teams. The amount of this support varies across countries depending on the parents' acceptance of the virtual world"(1).* Due to technological development, the gap between the younger generation and their parents has increased. The gap

also varies depending on how much players' parents become involved in this new culture and in this new world. Esport is heavily affected by social acceptance. Esport can grow at a much faster pace in countries with a more open-minded society. In Europe, the penetration rate of esport is highest in Poland, Spain, and Italy, at around 50%. As far as further development is concerned, esport needs new content which keeps viewers entertained and attached to the industry. This content includes videos, posts, blogs, the games themselves, or programmes available at events. This high-quality content leads to a perfect consumer experience and unique selling proposition. The personalisation of this content for the different demographic segments of the target audience is needed, not forgetting women. Mobile developments are also a promising area. All in all, this consumer area has a lot of potential for growth.

Due to COVID, lots of new simracing consumers have appeared. If the simracing market can provide great entertainment for these viewers, they will stay for the long-term. This is a very important shift, because simracing has lacked respect from the real racing world. Holding real postponed races in the virtual world showed that the market has reached a level at which it is acceptable and useful for various actors from the real racing world. The role of federations could be very different in terms of simracing. In the non-virtual world, the FIA has a huge impact on motorsport as a whole. They create prestige and a certain level of professionalism, which is very hard to assess or to replicate. The target audiences of the virtual and physical world now look very similar. "*It might even happen that motorsport and simracing exist in symbiosis in the future"(3).*

3.2.4. The merchandising market. This market needs a lot of development but also more consumers. Young customers depend on adults, meaning that they cannot support their favourite teams as much as they want to. During the lockdown, this market did not grow – only online web shops and e-commerce worked. Advertisements through influencer marketing and celebrities may boost the merchandising market. Generation Z and younger fans want a personalized experience and personalized products too. "Lifestyle brands" can be created for them.

As for simracing, the merchandising market is underdeveloped even compared to other esports.

3.2.5. The player and team market. All the experts agreed that COVID-19 increased the number of players. Due to the lockdown, people spent a lot of time at home, so gaming and esport were a good means of entertainment, relaxation, and stress-reduction. *"Esport was one way to decrease the stress that came with the pandemic" (1).* This increase meant more sales for the gaming industry, but does not necessarily mean that more individuals will be converted to professional esport players. "*More players meant a drop in quality and more mediocrity" (1).* "Offline players" from other sports also recognised that esport offers a good opportunity to build their brands during the pandemic. According to most experts, esport is nothing but the marketing aspect of gaming, but it is important to differentiate esport from gaming itself. "*Esport is a tool for the gaming industry" (2).* Competition means there are players fighting to win, and there are teams who take care of these players. According to experts, in every kind of competition (poker, physical sport, or esport), one must invest time and make sacrifices to become the best. "*It is crucial whether it's worth it for the player to invest their time and resources to succeed as a professional esport player" (1).* Being an esport player must satisfy basic needs for physical

security and safety (e.g. such as the ability to earn an adequate income). It may give players a feeling of belonging to a group, and help with self-actualization. Professional esport players play matches at competitions. These events are basically the source of the tools and the environment that satisfy players' needs. Since players are busy getting better at their craft, they need management to take care of everything else. There is still a lot to do in terms of professionalism compared to physical sports.

The advantages of esport are that there is a low entry barrier, people can obtain a lot of experience right from the start and develop and succeed quickly, but many people underestimate the physical and mental strength this requires. Cloud gaming allows consumers to play streamed games on different devices, often without expensive hardware. The interviewees also talked about the importance of personalities on the scene. "*To be entertaining, we need the best players but also great personalities – the 'superstars' – so that companies, teams, and sponsors can create content with the players"(4).* Personalities ultimately increase reach and engagement. Professionalism is needed through improving official communication or contracting players and teams. Fraud must also be tackled. In everyday life, esport players are looked down on because they sit in front of a computer and play. "*Members of society don't know how much physical and mental effort is required to compete in this field" (5).* It is a very big problem that even the best teams were not profitable, but interviewees hope that things will improve in this area too. "*How can teams be fully professional if they cannot be profitable?" (2).*

COVID-19 had a very positive effect on simracing both in the short- and long-term because the number of simracing players increased massively, and those already part of it became even more active. In the long-term, it has increased the prestige of the scene due to the approval of organisers of non-virtual events and racing drivers. In simracing, there are fewer players because it is more challenging – it requires more attention and concentration, but it is also more cult-like. There are more followers than players. "*You need the same reflexes and inputs to drive a car both in the physical and the virtual world. The biggest advantage of simracing is that you're able to train your racing skills and knowledge of track layouts very cost efficiently compared to real-life tests"(3).* In a game like League of Legends, it is not that hard to reach an average level. "*In simracing, since it's very similar to reality, you must work on your skill a lot. It requires a lot of perseverance until it becomes truly enjoyable" (1).* Simracing is growing very fast. Due to the development of simulator software, real racing drivers have started to use these sims to train more frequently. It gives a very special feeling to share the track with Fernando Alonso or Rubens Barichello, even if only virtually. Simracing represents a great means of gathering talent for real racing in the future or testing new drivers before giving them a chance in a real race car. Real racing needs simracing to connect the young generation with motorsport. In the future, real motorsport must become aware that simracing is a key part of it. Simracing needs more standards. Everyone races with very different equipment and, since there is little regulation, cheating is abundant. COVID-19 has brought simracing respect.

3.2.6. The broadcasting market. One of the biggest sources of income of the NFL and NBA is broadcasting rights. While more and more fans are watching matches digitally in traditional sports, the majority of esport audiences consume almost exclusively online. Esport championships and races are broadcast for free. This allows viewer numbers to grow freely but does not generate income. This problem desperately needs solving so that views can be converted into income. This is where the greatest potential for business revenue is. "*But who will be the first to*

dare say that broadcasting is not free of charge?" (2). It is certain that in the long term the current model is not sustainable. An intermediate solution could be to allow viewers to access certain content for free, while other online content could be paid for. If the TV channels would like to stay relevant in the long run, they will have to start broadcasting live esport events as well, which will generate more broadcasting money.

3.2.7. The organizers' market. The lack of live events due to COVID-19 has set back markets in the short term. Most of the merchandising sales happen at these events. Ticket sales were a very big part of the organizing companies' business, but this disappeared during the lockdowns. Since reopening, event attendance is still nowhere near that of pre-COVID levels. COVID-19 led to the closure of most of the organizing companies, and those that survived were badly damaged. The biggest ones were able to stay alive and convert their events to the online space to minimize losses. In the future, a hybrid system may be a sustainable option that involves using the online space to complete offline events. "*We might not even necessarily need real-life events, considering the fact that the whole industry can work online, which COVID-19 clearly showed, but still…" (5).* "*It is necessary to have offline events due to their community-forming power" (1). "Events are a very important part of the ecosystem" (2).* It is essential that people feel that they are part of a group with the same interests. Offline events should be restarted, which are entertaining; a high-quality match-day experience is needed.

Due to COVID-19, real-life racing events have been substituted with simracing events and championships. Racing drivers have been forced to move to virtual racing tracks. This is how organizers and championships in different categories have tried to maintain the interest. This has succeeded and elevated simracing to another level.

3.3. The Hungarian situation

Esport is starting to make ground in Hungary. "*We couldn't talk about esport markets in Hungary a few years ago" (2).* Not long ago there were few actors and little money in this market, but the market expanded with new actors, and government subsidies helped the industry develop. "*We talked about social acceptance before. Our ancestors worked very hard every day in agricultural jobs. Because of this, (…) seeing[people] play a video game and sit all day long in a room is considered slacking" (1).* The solution to this is communication. Talking about esport with actors from other parts of society can slowly change the perspective about the industry. In the future, this can be the key to increasing the consumer market and social acceptance. *"There should be a change of attitude – the games, the experience should be more involved in public discourse – esport is not evil, it should not be underestimated" (1).* Esport must become more professional in every area of functioning, in every market. This is true of event organizers, teams, and players. It is not common for players to have a contract with an organization, so it is positive that two federations currently exist that create a competitive market which usually increases the overall prize money connected to events. Professional players in Hungary usually do not have a monthly salary, but they receive a certain proportion of the prize money. This means that the majority of teams also struggle for money. Contracts between players and teams are not yet as professional as in traditional sports. Hungarian esport players must look abroad for more sustainable careers. Hungarian players are in great need of better English-language skills, coaches, and psychologists. There is also a need to participate in the championships in other countries in the region, as competing at a domestic level is not very valuable. However, there are

some questions connected with players which require further research. For example, what motivates Hungarian professional esport players? Is it worth being a professional esport player in Hungary? In football, for example, these questions would not even arise.

It is very hard to compare the international and the Hungarian market. In terms of quality, Hungarian events are at a high level compared to those in other countries. Content is good quality and the events are well organized, although they are state subsidised. In terms of income, the biggest constraint is the population of the country, which cannot be compared to countries like Poland with nearly 38 million, Germany with 83 million, or France with 67 million citizens. *"There are a total of 3.5 million gamers in Hungary, of which around 640,000 are e-sports enthusiasts, mostly men, aged 18-30, and only around 10% are women" (9).* Cooperating with other countries would be an effective way to increase the size of the market.

4. CONCLUSION AND RECOMMENDATION

The esport industry's business model must be changed. There is no well-functioning system, and game publishers own the rights to games; thus revenue only returns to the esport scene if the publisher wants this to happen. Sponsorship is the main revenue stream for the industry, but significant revenues should come from other markets as well. Consumers are young, which means they lack purchasing power. Broadcasts are free. If the TV channels would like to stay relevant in the long run, they will have to start broadcasting live esport events as well, which will generate more broadcasting money for the industry. Even the biggest teams with big sponsors cannot always break even. If the biggest teams cannot make a profit, it is sure that smaller teams cannot. Collective regulations for the industry about sharing control of the scene are required. The most important thing is for the industry to be professionalized. Esport is not associated with an "old operating system" unlike football, which has a huge and well-developed operating structure – it has national leagues and cups for the local market, and various international championship leagues that target different regional markets. It also has the world championships. It would be possible to achieve a state where there are lots of professional esport players, teams, and their managements with associated business operations that make esport an organised, popular, entertaining branch of professional sport. Because there are so many kinds of esport, there are many opportunities. A key factor is increasing the social acceptance of esport. However, we can say that an increase in popularity (both for consumers, players and sponsors), awareness and viewership also bring an increase in revenues; esport is clearly a growth industry, which can of course be further developed. The biggest problems in each market, the most important effects of COVID-19, and the factors most needed for the business development of esport are summarised in Table 2.

The Hungarian esport market is not big enough. It is state-subsidised, and big events are not market-based. There are talented players, and Hungarian events are good in regional comparison, but Hungarian players should aim to participate in international competitions and work in an international environment.

Simracing's future is certainly positive. It is still a very fresh part of the new and dynamic esport industry. During COVID, the whole market took off, demonstrating that consumers engaged with the physical racing world are interested in the virtual one.

The COVID-19 lockdown has increased the acceptance and importance of esport. The opportunities identified by experts must be seized and esport must be developed. Regulation,

Table 2. Summary of esport markets – Challenges and opportunities associated with COVID-19, and areas most in need of business development

	Greatest challenges	Most significant effects of COVID-19	Areas requiring business development
Developer/game publisher market	• too powerful	• higher revenue due to new customers	• more cooperation and strong federations are needed
Sponsor market	• the largest source of revenue, accounting for a disproportionate share	• fewer sponsorship contracts, pre-existing contracts cancelled due to lack of live events	• long-term sponsorship contracts are needed • more non-endemic companies aspartners, sponsors
Consumer market	• social acceptance is not high enough • young, unknown, heterogeneous target market • lack of disposable income	• awareness, viewership, consumption increased	• retain new consumers that joined due to COVID-19 in the long term, • understanding consumer preferences • personalised content is needed (videos, posts, blogs, programmes), high-quality content leads to a better consumer experience and unique selling proposition • attract more women • more mobile content
Merchandising market	• very small market	• this already tiny market has become even smaller	• influencers, celebrities, "lifestyle brands" and personalised products are needed
Player and Team market	• lack of social acceptance • mediocrity • (financially) rarely worth being an esport player • even bigger teams are not always profitable	• more players, but more mediocrity • offline players can build their brand online	• a much higher level of professionalism is needed at all levels – management, communication, contracts • "superstars" are needed • fighting fraud is important

(continued)

Table 2. Continued

	Greatest challenges	Most significant effects of COVID-19	Areas requiring business development
Broadcasting market	• free broadcasts	• more viewers	• make consumers pay for some content • TV channels have to start broadcasting live esport events as well
Organiser market	• strong dependence on sponsors	• no live events, so zero revenue	• hybrid world • convince people to come back to live events after COVID-19; community is very important • entertaining events, high-quality match-day experience, special competitions

Source: authors.

establishing a functioning system of competitions, more professionalism, converting customers into paying customers, the development of new technologies, interaction with other sectors (i.e. traditional sports) and diversifying how revenue is distributed are the most critical challenges. Furthermore, event calendars should maintain a balance between offline and online events – like everywhere else, a hybrid world is the future, or even the present. Jonasson and Thiborg (cited by Pu et al. 2021) determined three scenarios for esports in 2010: (1) esport as a counterculture or alternative to modern sports; (2) esport as part of the hegemony of sports; and (3) esport as the future hegemonic sport. It appears that with the "help" of COVID-19 we have now moved from the first to the second scenario, with esport becoming part of the hegemony of sports.

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