Knowledge Management in the Esports Industry: Sustainability, Continuity, and Achievement of Competitive Results

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Abstract: The increasing popularity and exponential growth of esports as a worldwide phenomenon has created a whole new industry with important implications for the different key players in the value chain. The digitalization process, which accelerated after the global spread of COVID-19, has introduced a collection of exciting changes to content production and delivery, with the Internet as its fundamental pillar. Knowledge management in successful esports organizations can be associated with their sustainability, continuity, and achievement of long-lasting competitive results in this industry. From a descriptive standpoint, this paper aims to analyze the determinants that have advanced the esports industry, especially in Spain. To achieve this goal, a SWOT analysis is carried out to highlight the keys that have developed this industry. This research contributes to studying the economic impact and the strategies organizations should follow to guarantee their future. Recommendations for both the industry and public administrations are further discussed.

Keywords: esports; knowledge management; gaming; value chain players; strategies; Spain; SWOT analysis; Latin America

1. Introduction

Also known as competitive gaming, organized play, e-gaming, or pro-gaming [1], electronic sports (esports) is defined as “competitive gaming at a professional level and in an organized format (a tournament or league) with a specific goal (i.e., winning a champion title or prize money), where players and teams are competing against each other” [2] (p. 4). Some authors [3,4] have expanded this definition to include professional and amateur gaming, video games, the use of consoles, tablets, and mobiles, and contemporary forms of gaming, such as game experience (competitive multiplayer computer games), digital augmentations (digitally enhanced sports) [5], virtual reality, and augmented reality (immersive reality sports).

Today’s global gaming market exceeds two billion participants or 30% of the world’s total population [6,7]. Video games have ceased to be a fad to become a nascent industry with a growing economic and business impact. Arcade games (old coin-operated arcade machines) are the forerunners of current esports [8]. The development of the Internet and the use of high-speed data transmission networks changed the initial model of human-against-machine competition for another of human-against-human and developed the esport industry, defined as the organization and the implementation of an organized game, mediated by computers and of a competitive nature [4].

Digital technology has profoundly impacted how young people play and consume sport as part of their leisure activities. In this respect, the integration of esports into the traditional sports model by local sports clubs due to the introduction of esports in the
school system at K-12 and higher education is gaining momentum [9,10]. These initiatives can be observed among several nations around the world, and recently with an increasing impulse in Latin American countries, such as Mexico, Chile, and Argentina, with Spain as its main precursor [11].

The increasing digitalization process accelerated after the worldwide spread of COVID-19 (also known as SARS-CoV-2 and coronavirus) is transforming industries such as esports. As a result, knowledge management (KM) plays an important role in such transformation. The increasing developments in information and communication technologies (ICT) stream new and innovative approaches for using information, in the form of multiple open data sources and real-time metadata or big data [12]. Information is flowing continuously at great lengths and speed, representing both a challenge and an opportunity for the industry's key value chain players to adapt the means and resources to analyze such data and aid their decision-making processes [13–15], thus creating, storing, transferring, and applying knowledge within and between such players. Such new approaches to assess data information have provided innovative techniques to study different variables [16,17].

Consequently, the objective of this paper is not only to provide an up-to-date overview of the esports industry worldwide, including a description of the key value chain players, but to deepen into the study of esports from a contextualized perspective, such as Spain. For this purpose, a SWOT (strengths, weaknesses, opportunities, and threats) analysis method is proposed to study the economic impact and the strategies firms should follow to guarantee their sustainability, continuity, and achievement of competitive results. The authors considered the relevance of Spain for the following reasons:

(a) There is almost a nonexistence of studies carried out on this industry’s characteristics and development in this country.

(b) Spain has very high youth unemployment rates (from the Spanish Labor Force survey, 45% in 2020 and continuously growing due to COVID-19) [18], making it very difficult for them to emancipate from the family home at an early age by converting esports into something more than mere entertainment and fun.

(c) The economic, social, and historical relationship between Spain and Latin America is vital at all levels, depicting a particular type of leadership, and thus facilitating the expansion of multinationals with implications for the future growth of this region [19,20]. Previous studies have supplied evidence that Spain is ideally positioned as a proximal cultural nation for Latin American countries [21,22]. Besides the linguistic similarities with the Latin American region, authors have compared qualitative and quantitative indicators using GLOBE, Hofstede's cultural dimensions, and the Lewis model and found that Spanish cultural experience only not bridges but propels other countries to Latin American culture [21]. As a result, Spain has been used as a springboard to enter Latin America to reduce cultural, psychic, and performance risks [23,24]. In this regard, Spanish esports firms' participation and influence in Latin America is continuously growing. An example of this fact is so the Latin edition of the University esports, a tournament organized by the Spanish company GGTech in collaboration with 300 universities located in Latin American countries to promote educational learning through electronic sports in Mexico, Argentina, Colombia, Peru, Chile, and Uruguay [11,25].

(d) The growing participation of female esports teams. An example of this fact is the push made by Vodafone Spain after the creation on 6 March 2019 of the first all-women professional esports team in Spain. As a result, the new five-strong Vodafone Giants team comprises players from Spain, Germany, Russia, and Belgium. They compete in both mixed and female Counter-Strike: Global Offensive (CS: GO) tournaments.

(e) Spain is a strategic market for the big companies in the sector and is one of the European countries with the most activity in esports, so much so that, for the first time in history, in 2019, Madrid hosted two world championships: the quarterfinals of the 2019 Worlds’ League of Legends (LoL), hosted at Vistalegre Palace, and the Rocket League World Championship final.
Spain also participates in the FIBA esports Open. Formed by seven players, five on court and two bookings, FIBA has taken a historic step in its modernization and approach to fans. FIBA has just announced its first esports tournament (FIBA esports Open), based on the NBA 2K video game, where seventeen national teams, including Spain, compete (Argentina, Australia, Austria, Brazil, Cyprus, Indonesia, Italy, Latvia, Lebanon, Lithuania, New Zealand, Philippines, Russia, Saudi Arabia, Spain, Switzerland, and Ukraine) [26].

The remainder of this paper is organized as follows. Section two includes an overview of the esports industry and a description of the key value chain players from a KM perspective. Section three offers an up-to-date examination of the esports industry in Spain, emphasizing what has been published by the Spanish Association of Videogames (AED). Section four presents a SWOT analysis. The discussion in section five includes recommendations for both the industry and public administrations. The study ends with some conclusions and future perspectives.

2. The Industry of Esports

Esports have several common characteristics with traditional sports oriented towards physical (almost all sports) or mental (e.g., chess) effort. Traditional sports inserted into regional, national, and international competition to the teams' structural composition, mainly domestic ones, including the increase in performance with training and practice, up to the injuries and physical and psychological stress of the athlete-gamer [27].

Contrary to traditional sports, esports have introduced a collection of exciting changes to content production and delivery. This market has made the Internet its fundamental pillar, achieving the exploration and consolidation of new communication techniques through transmedia processes, such as streaming television and video on demand. In esports, live streaming and content are delivered virtually online, through social and video platforms (i.e., Twitch, YouTube, Facebook) [28]. In this regard, esports popularity has largely been determined by encouraging active participation of the mass of spectators. While spectators positively value schedule convenience, sports commentators, players, and event attractiveness in traditional sport contexts [29], authors show that chat room, streamer traits, stream quality, and virtual rewards appear to be unique in esports [30].

On a spectator’s personal computer, such streaming content recreates an interactive view of the game where the spectators can interact with certain virtual objects and content, including camera angles, rewind, and pause. Additionally, statistics, times, and other tiers of information are stored and translated into interactive content for the audience, such as graphs and markers, enhancing the overall esports experience. Additionally, social media platforms allow spectators to chat directly with professional league players. For instance, Twitch fans can watch professional gamers play live as they ask questions regarding game techniques, strategies, and practically everything else, strengthening the connection and attachment to the overall esports experience [31].

The COVID-19 lockdown measures led consumers and gamers worldwide to seek alternative ways to socialize and play games. One of the options was creating social hubs based on at-home entertainment with friends of all ages. Gaming has not replaced social media as an alternative to real-life events. It is a process accelerated during the COVID-19 pandemic that will rapidly grow during the 2020 decade.

2.1. A Fast-Growing Global Industry

Due to new technologies and the Internet, younger generations leave behind traditional media (mainly radio, TV, journals, and newspapers) in exchange for social media. Digital natives (formed by millennials or Y-Gen, centennials or Z-Gen, and the Alpha-Gen) combine Internet-based social networks, websites, bookmarking sites, social news, microblogging, and media sharing to create and share social network content. Content must be highly interactive and immersive, as in the esports industry. However, for digital natives, the move from social media to esports does not mean abandoning the former
The esports industry is in total growth globally, especially in developed countries, with robust growth in the Asia–Pacific region (Figure 2). The global games market will generate revenues of $159.3 billion in 2020, a +9.3% year-on-year (YoY) increase, accounting for the Asia–Pacific region almost half of all global game revenues ($78.4 billion in 2020), up +9.3% YoY), revenues reaching 93% of the world revenues, if North America ($40.0 billion in 2020, up +8.5% YoY) and Europe ($29.6 billion in 2020, up 7.8% YoY) are added [2]. As a result, the esports industry is more typical of developed countries than developing nations because all the participants in this industry at different levels need an amount of money to play in it.

Figure 1. Global Players Forecast Worldwide. Source: Adapted from [2].
As shown in Figure 3, developing countries are pushing up the esports industry worldwide, reaching 93% of the world revenues if those of North America ($40.0 billion in 2020, up +8.5% YoY) and Europe ($29.6 billion in 2020, +7.8% YoY) are added. As a result, the esports industry is more typical of developed countries, including Spain, than developing nations, given the investment needed to make this industry grow. Additionally, this industry’s participants require a non-vital amount of money to play, which is only possible in populations living in developed countries.

One explanation that enlightens the accomplishment of esports is the development of the betting system. When performed on a global scale, the stakes tend to be high, which attracts new bettors. A second factor in explaining this success of the esports betting system is how it works. Bettors are classified into three categories. First, the most used is esportsbook (45% of bets), where participants bet on the results of esports events. Second, in fantasy, esports participants create their virtual team with esports players to participate in a specific event or series of events, usually with a budget limit to pay salaries. Both esportsbook and Fantasy Esports participants bet with cash. Third are in-game items-based bets. One of the esports betting market’s peculiarities is that participants can bet...
on virtual items called skins. The skins allow modification of the appearance (but not the functionality), weapons, or equipment of a player’s in-game avatar, making this betting system known as in-game items-based bets [32].

Among the best-known esports, we can cite League of Legends (38%), Counter-Strike: Global Offensive (29%), Dota 2 (18%), and Starcraft 2 (7%) [33]. Additionally, EA SPORTS FIFA and Hearthstone are other popular esports in the industry, as shown in Table 1.

### Table 1. Top 10 Esports Games Watched at Twitch.tv in 2017 (in millions of hours).

<table>
<thead>
<tr>
<th>Esport Game</th>
<th>Hours</th>
<th>In %</th>
<th>Esport Game</th>
<th>Hours</th>
<th>In %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 League of Legends</td>
<td>988</td>
<td>100</td>
<td>Overwatch</td>
<td>230</td>
<td>23.28</td>
</tr>
<tr>
<td>2 Playerunknown’s Battlegrounds</td>
<td>519</td>
<td>52.53</td>
<td>World of Warcraft</td>
<td>130</td>
<td>13.16</td>
</tr>
<tr>
<td>3 Dota 2</td>
<td>435</td>
<td>44.02</td>
<td>Grand Theft Auto V</td>
<td>117</td>
<td>11.84</td>
</tr>
<tr>
<td>4 Hearthstone</td>
<td>416</td>
<td>42.10</td>
<td>EA SPORTS FIFA</td>
<td>89</td>
<td>9.01</td>
</tr>
<tr>
<td>5 Counter-Strike: Global Offensive</td>
<td>400</td>
<td>40.48</td>
<td>Destiny</td>
<td>88</td>
<td>8.90</td>
</tr>
</tbody>
</table>

Source: Adapted from www.gamoloco.com (accessed on 26 February 2021).

As shown in Table 1, only two games (League of Legends and Playerunknown’s Battlegrounds) exceed 500 h. The last two games are very scarce in the number of hours watched (EA SPORTS FIFA and Destiny), with just over 8.9% that of League of Legends. As games are guided by the novelty effect and by the fashion effect, this industry must innovate continuously to avoid that the game falls into the maturity phase within the life cycle of the multiproduct [34], which would lead to losing appeal to the player so that the player would replace it with another game.

In addition to betting, worldwide esports growth is also a result of developments in the esports value chain that we will see in the next section. As a result, KM is also affected.

#### 2.2. The Esports Industry Value Chain

Knowledge management (KM) can be defined as a set of actions, behaviors, and strategies used for the creation, storage, transfer, and application of knowledge within and between organizations [35–37]. KM practices are sought to improve the organizational processes, increase productivity and quality, and ultimately innovate the goods and services in the market [38,39], which, at the same time, denote competitive advantages [40].

Recent studies [41,42] have postulated and associated the benefits of knowledge accumulation on organizational effectiveness, such as the innovation of products and services, identification of market opportunities, rapid commercialization of new products and services, and quick response to market changes. Value chain players in the esports industry should make the most effective and efficient use of KM practices, particularly in technology-intensive industries where competitive advantage relies greatly on the capability of firms to continually innovate [43].

Network improvement speed from broader bandwidths, with the implementation of 5G technology, has facilitated the development of this industry and the arrival to adulthood of the millennials and centennials that form the social base of esport. The esport industry will develop due to the media and the Internet of Things (IoT). This industry is increasingly becoming more popular and accepted by society. The sector grows with technological improvements that favor interactivity and speed in the game. In this sense, the exponential growth of momentum in the transmission of data in real-time from the implementation and development of 5G will facilitate this industry’s growth on a large scale, especially in those developed countries with better infrastructure telecommunications. As a result, the gap between the most developed countries and those in which technology is lagging will increase.
The esports industry’s value chain is composed of six players (Figure 4): (1) hardware and IT providers; (2) publishers, for example, online multiplayer game developers, such as Twitch, the world’s leading live streaming platform for gamers; (3) competition organizers; (4) broadcasters; (5) sponsors; and (6) gamers (called “gamer persona” in esports), who can be individuals or be part of sport teams [32]. One of the secrets to being successful in this chain is having the latest technology and, above all, eliminating bottlenecks in data transmission to have continuous streaming without pixelation of images and sound. Therefore, within the chain, the most critical link is the first (hardware and IT providers), because the others rely on it.

Figure 4. Esports industry’s value chain.

2.2.1. Hardware and IT Providers

The esports industry is dominated by multinationals, such as Intel, NVIDIA, and specialized firms, such as Scuf Gaming and HyperX. Known for its industry-leading processors, Intel is a keystone in the esports industry, as this multinational caters to all levels of gamers. It has launched the most significant esports events within CS:GO and the Intel Extreme Masters (IEM) series partnered with ESL and their Intel grand slam, seeing millions of dollars being won by teams in front of millions of viewers around the world. As a result, Intel won the 2017 esports Awards Esports Hardware Provider of the Year.

Winner of the best hardware provider in 2018, NVIDIA GameWorks software allows developers to make games photorealistic and immersive. It has also sponsored events, such as Red Bull Battle Grounds, ESL One Championships, and DOTA 2 the International. Regarding Scuf Gaming, it was chosen in 2016 as the best hardware provider for games in this industry. This firm designs and builds handcrafted personalized controllers, professional controllers, and high-end gaming accessories for PC and console. Finally, HyperX is the high-performance product division of Kingston Technology, the world’s largest memory manufacturer; it sponsors esports teams worldwide and owns its HyperX esports arena in Las Vegas to host esports events. In Spain, hardware and IT providers are the same as in the USA.

2.2.2. Publishers

Although the value chain does not vary, there are two models of esports in the world. In the first model (Riot model, League of Legends), the publisher has absolute control over almost everything, except broadcasting, related to their titles at the esports level: organization of the competitions, the licensing policy’s definition, total control of the competition rules. The second model (Valve model, Counter-Strike) is defined because the publisher is less involved in the exploitation and entrusts an organizer to exploit the game competitively. This model’s advantage is creating more competition, so the volume of business is more remarkable.

As happens worldwide, Twitch (www.twitch.tv, accessed on 26 February 2021) is the world’s leading social video platform and community for creative arts, video game culture, and gamers, as each day, more than 10 million visitors interact, watch, and talk with more than 2 million streamers Table 2.
Table 2. Twitch Top 10 Games in 2018 by Hours Watched.

<table>
<thead>
<tr>
<th>Game</th>
<th>Hours Watched (in Millions)</th>
<th>2017–18 Change</th>
<th>Compared to 2017 Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fortnite</td>
<td>1350</td>
<td>+1558%</td>
<td>+9</td>
</tr>
<tr>
<td>League of Legends</td>
<td>983</td>
<td>+0.1%</td>
<td>−1</td>
</tr>
<tr>
<td>Dota 2</td>
<td>472</td>
<td>+8%</td>
<td>=</td>
</tr>
<tr>
<td>PUBG</td>
<td>453</td>
<td>−13%</td>
<td>−2</td>
</tr>
<tr>
<td>CSGO</td>
<td>401</td>
<td>+0.5%</td>
<td>−1</td>
</tr>
<tr>
<td>Hearthstone</td>
<td>356</td>
<td>−9%</td>
<td>−1</td>
</tr>
<tr>
<td>Overwatch</td>
<td>301</td>
<td>+31%</td>
<td>−1</td>
</tr>
<tr>
<td>World of Warcraft</td>
<td>260</td>
<td>+99%</td>
<td>=</td>
</tr>
<tr>
<td>GTA V</td>
<td>147</td>
<td>+25%</td>
<td>=</td>
</tr>
<tr>
<td>Call of Duty</td>
<td>139</td>
<td>New</td>
<td>New entry</td>
</tr>
</tbody>
</table>

Source: Adapted from www.gamoloco.com (accessed on 26 February 2021).

First, the annual League of Legends world championship tournament (League of Legends Worlds), watched by 100 million people worldwide and endowed with a USD one million prize pool and a 70 pound trophy, is the most critical esports tournament worldwide. Second, and set in Seattle (USA) and developed by Valve, Dota 2 Esports Championship Tournament attracts millions of gamers around the planet. Publishers such as Blizzard or Riot Games are essential to creating this industry. The leading publishers in Spain are Activision Blizzard, Electronic Arts, Ubisoft, and Riot Games [44].

2.2.3. Competition Organizers

Given the high number of tournaments, both free registration (indie) and paid, there are many organizers of esports competitions in the world. Cloud9, Evolved, and Team Liquid stand out among them. Cloud9 is represented across twelve games with standout teams in League of Legends, Overwatch, and CS:GO. Their crews are considered to be some of the best in the world. Evolved Talent Agency is the world’s largest esports player representation agency, working with hundreds of professional players worldwide. Team Liquid is a multi-regional professional esports organization. In Spain, competition organizers generally follow a process defined by public–private collaboration, with limited sponsorship participation.

2.2.4. Broadcasters

Broadcasters can set the scene and captivate the audience on esports and complement, in some cases, traditional broadcasting, where professionalism and social presence in esports commentators’ self-presentation are crucial (Li et al., 2020). Examples of outstanding broadcasters in this industry are ESPN Esports, The Score, Maven, and Dexerto, to name a few.

There are four models (Announcer, Arena master, Talent manager, and All-rounder) for participating in esports. In each model, broadcasters play a crucial role. In the announcer model, broadcasters provide platforms to show esports competitions, but when audiences are massive and minimal economies of scale have been achieved to guarantee the economic viability of the event, the broadcaster can go one step further and have a broadcaster-owned competition, as defined by the Arena master esports model. Additionally, broadcasters can own teams (talent manager esports model), and when there is a substantial number of fans and followers, a community platform can be developed where fans interact with their favorite gamers (all-rounder esports model).

2.2.5. Sponsors

Sponsoring is vital in the esports industry to cover and surmount the generally high costs incurred in preparing esports tournaments. Sponsors and commercial partners (i.e., Gillette, Intel, Monster Energy (the 2016 Esports Commercial Partner of the Year),
G Fuel Energy (the 2017 Esports Commercial Partner of the Year), Gatosalvaje, GGTech, and Loaded) have an active role in attracting partners and money, and supporting esports in developing esports tournaments, teams, and streamers to allow many to make a career out of their passion. The industry is attracting major brand sponsors, including Red Bull, McDonald’s, Anheuser-Busch, and Coca-Cola, and many traditional sports brands, including Formula One, NBA, NFL, AFL, and A-League, have established their esports franchises and leagues [3].

Loaded is an esports agency endowed with the biggest influencers on the Internet, connecting brands and publishers with the right gaming talent. It is important to note that, regarding sponsoring based on alcoholic drinks, authors [3] show that heavy gamers are more receptive to alcohol advertising in terms of awareness, preference, and consumption while gaming than casual gamers.

2.2.6. Gamers Personas

The so-called “gamers personas” are the engine and the object of desire of this industry. Formed by the millennial and centennial generations, human gamers are digital natives who are passionate about esports. The number of those who are professionally dedicated to the game is increasing. For this reason, in the world of esports, the concept of a “gamer persona” was born, which is defined as a new way of segmenting game enthusiasts across their playing, viewing, and owning of gaming-dedicated hardware.

Not all “gamer personas” are the same, as they can be classified according to their addiction to gambling, the technical means they have, and the time and money they spend on esports Table 3. As in the sports industry, a user’s classification is based on the time and money spent on going to the stadiums (or not going at all and being a mere viewer). For this reason, esports and traditional sports are very similar from a consumer motivation perspective [32]. However, in esports, its users’ complexity is more significant due to the variety of electronic media used in their practice, vision, or bet.

Table 3. Gamers Personas’ Classification.

<table>
<thead>
<tr>
<th></th>
<th>Play Games</th>
<th>Watch Gaming Video Content</th>
<th>Own Gaming Dedicated Hardware</th>
<th>High Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>BV</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>CP</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>HE</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>FFA</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>LG</td>
<td>No</td>
<td>Yes, a little</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>PG</td>
<td>Yes, a little</td>
<td>Yes, a lot</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>TS</td>
<td>Yes, HQ only</td>
<td>No</td>
<td>Yes, if needed</td>
<td>No</td>
</tr>
<tr>
<td>TF</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>UG</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Legend: ARE (All-Round Enthusiast), BV (Backseat Viewer), CP (Conventional Player), HE (Hardware Enthusiast), FFA (Frequent First-Adopter), HQ (High-Quality), LG (Lapsed Gamer), PG (Popcorn Gamer), TS (The Subscriber), TF (Time Filler), UG (Ultimate Gamer). Source: Adapted from [2].

Given the adoption of faster technological changes, it is crucial worldwide the impact of digitalization on young people. Digitalization of the environment, active use of gadgets, and the quality of available information content affect the formation of young people’s mental processes [45] have facilitated the adoption of esports. This process of digitization of young people is observed at all levels, both in leisure and work activities. As a result, there is a breach between the level of digital skills required in the labor market and the actual level of digital skills in both young people and social workers, despite efforts by both groups to improve their skills [46].

This greater digitization towards youth allows not only the development of new leisure industries, among which is the esports industry, such as the implementation of
Industry 4.0. As a result, positive (higher productivity and labor efficiency) and adverse effects (fragmentation of society and individualized forms of existence that are passive in nature) are being created. As a result, some emerging centrifugal trends emerge by qualitative changes in ideas about happiness, justice, body, mobility, and work [47].

These changes in young people affect countries where the impact of esports is most remarkable, including Spain. These characteristics and differences in Spanish young people will be analyzed in the next section.

3. The Esports Industry in Spain

According to the Spanish Association of Videogames (AEVI), Spain is among the top-10 countries globally in terms of business. It is estimated that, in this country, there are 5.5 million esports enthusiasts and viewers, which has made the three largest telephone operators in Spain (the Spanish Telefonica Movistar, the French Orange, and the British Vodafone) have opted for this activity. Additionally, Telefonica-Movistar has launched a dozen Movistar Riders Club national and international level titles, gathered 145,000 attendees to the events and tournaments organized in Spain by Movistar esports and ESL, and gained more than 6800 registrations in the different competitions organized and/or sponsored by Movistar [48]. Spain is the twelfth country globally in the esports audience ranking, with 2.6 million followers and 5.5 million viewers who watch esports broadcasts more than once a month and/or participate in amateur leagues. Simultaneously, 2.9 million are occasional viewers, 36% of which are women, the highest rate in Europe [49]. Vodafone Spain pushed female teams’ participation after the creation on March 6, 2019 of the first all-women professional esports team in Spain. As a result, the new five-strong Vodafone Giants team comprises players from Spain, Germany, Russia, and Belgium, and competes in both mixed and female Counter-Strike: Global Offensive (CS: GO) tournaments.

Esports are more than mere entertainment and fun. As a result, the number of gamers personas has exceeded 15 million, about half of the Spanish population between 6 and 64 years, with a significant presence of women, who increased to 42% of the total, and esports enthusiasts, which rose to 2.9 million. Furthermore, it is reflected that Spaniards dedicated an average of 6.7 h a week to this activity, still slightly below neighboring countries, such as the United Kingdom (11 h), France (8.6 h), or Germany (8.3 h).

The economic, social, and historical relationship between Spain and Latin America is vital at all levels, with Spanish esports firms’ participating in Latin America’s different activities. An example of this fact is in the Latin edition of the University esports, a tournament organized by the Spanish company GGTech in collaboration with 300 universities located in all Latin American countries to promote educational learning through electronic sports in Mexico, Argentina, Colombia, Peru, Chile, and Uruguay [11]. Spain is a strategic market for the big companies in the sector and one of the European countries with the most activity in esports. So much that, for the first time in history, in 2019, Madrid hosted two world championships: the quarterfinals of the 2019 World’s’ League of Legends (LoL) hosted at Vistalegre Palace and the Rocket League World Championship final.

The increasing professionalization of the national esports teams (some with global impacts, such as Giants Gaming or G2), with 100 professional “gamer personas” in Spain, and the remarkable growth of tournaments and leagues have led Spain to be considered a power in this industry within the European Union. Spain is the twelfth country in the world in the ranking of esports audience participating in tournaments, such as League of Legends, Call of Duty, EA SPORTS FIFA, Hearthstone, Playerunknown’s Battlegrounds, Counter-Strike, Dota 2, and Overwatch Table 4.
Table 4. Top 10 Best Selling Video Games in Spain (January 2021).

<table>
<thead>
<tr>
<th>Ranking</th>
<th>PEGI Code</th>
<th>Game</th>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>Mario Kart 8 Deluxe</td>
<td>Switch</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Animal Crossing: New Horizons</td>
<td>Switch</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>Ring Fit Adventure</td>
<td>Switch</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Just Dance 2021</td>
<td>Switch</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>Minecraft Nintendo Switch Edition</td>
<td>Switch</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>Super Mario Party</td>
<td>Switch</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>FIFA 21</td>
<td>PS4</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>New Super Mario Bros U. de Luxe</td>
<td>Switch</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>Super Mario 3D All-Stars</td>
<td>Switch</td>
</tr>
<tr>
<td>10</td>
<td>18</td>
<td>Grand Theft Auto V</td>
<td>PS4</td>
</tr>
</tbody>
</table>


As a result, the esports industry is equivalent to 0.11% of the Spanish GDP. Every EUR 1 invested in this industry generates EUR 3 in the economy, and for each job created in this industry, 2.6 are formed in other sectors. In Spain, the esports industry directly employs 9000 people, has a turnover of EUR 3577 million, and affects 22,828 jobs in different sectors. The esports industry represents 14.3% of the publishing sector, 9.6% of the audiovisual production sector (film, video, television, and music), 3.8% of the programming and data processing sector, and 3.2% of the telecommunications sector. In 2019, 8.4 million video games, 1.1 million video game consoles, and 4.2 million accessories were sold, placing desktop consoles as the device most used by Spanish gamers. The significant growth in application sales (24%) has highlighted the increasingly prominent weight of the digital market associated with mobiles and tablets.

Developed by the ISFE (Interactive Software Federation of Europe) and active from 9 April 2003, the PEGI (Pan European Game Information) code is a European system for classifying video games and other entertainment software. As shown in the second column of Table 4, the predominant code is PEGI 3, which shows that the content of the game is considered suitable for all age groups, as it does not contain sounds or images that may scare young children, it does not have a foul language, and, optionally, has a very mild form of violence of its own in a comic context or a child environment. To be suitable for all age groups implies higher sales. In total, there are five PEGI codes (PEGI 3, PEGI 7, PEGI 12, PEGI16, and PEGI 18). As shown in www.pegi.info (accessed on 26 February 2021), PEGI18 is applied with excessive violence, murder for no apparent reason, or violence towards defenseless characters.

In Spain, the esports industry has been thriving due to three main reasons. First, because esports consumption in Spain is higher than that of nearby European countries, this industry is the most powerful within Spain’s cultural and creative industries. As a result, most of the world’s leading video game publishers have established themselves in Spain, for example, Activision Blizzard, Bandai Namco, Electronic Arts, Sony Interactive Entertainment, Ubisoft, and Riot Games.

Second, there is an ecosystem of amateur and high-level competition with the presence in Spain of the LVP (the most extensive national league in Europe), PlayStation League, GAME Esports, ESL, and Dreamhack Table 5.

Third, unlike France, South Korea, or Andorra, there is no Spanish regulatory framework specifically focused on esports, which encourages esports tournaments’ growth, as the market is free to grow. The holding of these tournaments, especially when they are no-cost (Indie) (Table 6) and focused on attracting the youngest gamers, seeks to promote the esports industry’s development. This promotion is reliable when it takes advantage of the three market effects (novelty effect, imitation effect, and fashion effect) that are the basis for converting products traded within this industry into Giffen goods, types of goods that improve the companies’ competitive position within the sector and maximize their EBITDA (earnings before interests, taxes, depreciation, and amortization).
Table 5. Main Ecosystems in the Esports Industry.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Role</th>
<th>Video Game</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplayer Online Battle Arena (MOBA)</td>
<td>Multiplayer Arena Games</td>
<td>League of Legends</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dota 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Heroes of the Storm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smite</td>
</tr>
<tr>
<td>First Person Shooters (FPS)</td>
<td>First Person Shooter Games</td>
<td>Counter-Strike</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overwatch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Call of Duty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rainbow Six Siege</td>
</tr>
<tr>
<td>Battle Royale (BR)</td>
<td>Last Survivor Games</td>
<td>Playerunknown’s Battlegrounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fortnite</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H1Z1</td>
</tr>
<tr>
<td>Collective Card Games (CCG)</td>
<td>Trading Card Games</td>
<td>Hearthstone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clash Royale</td>
</tr>
<tr>
<td>Real-Time Strategy (RTS)</td>
<td>Real-Time Strategy Games</td>
<td>Starcraft 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>World of Tanks</td>
</tr>
<tr>
<td>Fighting Games</td>
<td>Fight Games</td>
<td>Tekken 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Street Fighter 7</td>
</tr>
<tr>
<td>Sport Games</td>
<td>Sports Simulators</td>
<td>FIFA 18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NBA 2K18</td>
</tr>
<tr>
<td>Racing</td>
<td>Driving Games</td>
<td>MotoGP 17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F1 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gran Turismo Sport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forza Motorsport</td>
</tr>
</tbody>
</table>


Table 6. Indie eSports Festivals Selected by AEVI.

<table>
<thead>
<tr>
<th>Festival</th>
<th>City</th>
<th>Country</th>
<th>Festival</th>
<th>City</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>A MAZE</td>
<td>Berlin</td>
<td>Germany</td>
<td>Indie Prize USA</td>
<td>Los Angeles</td>
<td>USA</td>
</tr>
<tr>
<td>BIG Festival</td>
<td></td>
<td>Brazil</td>
<td>Indie Prize Eastern Europe</td>
<td>Istanbul</td>
<td>Turkey</td>
</tr>
<tr>
<td>Busan Indie Connect Awards</td>
<td>Busan</td>
<td>South Korea</td>
<td>Ludicious</td>
<td>Zurich</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Big Indie Pitch Tallinn</td>
<td>Tallinn</td>
<td>Estonia</td>
<td>Nordic Game Discovery Contest</td>
<td>Several locations</td>
<td></td>
</tr>
<tr>
<td>Big Indie Pitch Skellefteå</td>
<td>Skellefteå</td>
<td>Sweden</td>
<td>Pixel Awards</td>
<td>Warsaw</td>
<td>Poland</td>
</tr>
</tbody>
</table>
Table 6. Cont.

<table>
<thead>
<tr>
<th>Festival</th>
<th>City</th>
<th>Country</th>
<th>Festival</th>
<th>City</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Brighton</td>
<td>Brighton</td>
<td>UK</td>
<td>Pixel Pop Festival</td>
<td>St Louis, Mi.</td>
<td>USA</td>
</tr>
<tr>
<td>ECGC Conf</td>
<td>North Caroline</td>
<td>USA</td>
<td>Play Festival</td>
<td>Hamburg</td>
<td>Germany</td>
</tr>
<tr>
<td>Fun&amp;Serious</td>
<td>Bilbao</td>
<td>Spain</td>
<td>Reboot</td>
<td>Dubrovnik</td>
<td>Croatia</td>
</tr>
<tr>
<td>Game Connection Europe</td>
<td>Paris</td>
<td>France</td>
<td>Develop Blue</td>
<td>Taipei</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Game Show Indie Award</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Valencia Indie Summit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gamelab</td>
<td>Barcelona</td>
<td>Spain</td>
<td>Tokyo Game Show Indie Game Area</td>
<td>Tokyo</td>
<td>Japan</td>
</tr>
<tr>
<td>Games for Change Awards Asia</td>
<td>New York</td>
<td>USA</td>
<td>Gamepolis</td>
<td>Malaga</td>
<td>Spain</td>
</tr>
<tr>
<td>Indie Prize</td>
<td>Shenzhen</td>
<td>China</td>
<td>Tokyo Game Show Indie Game Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indie Prize London</td>
<td>London</td>
<td>UK</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


4. SWOT Analysis

The esports industry’s development entails a series of advantages and disadvantages that can be grouped into a SWOT analysis, which refers to the identification and assessment of strengths, weaknesses, opportunities, and threats and is intended to yield strategic insights. Regarding the esports industry, the authors propose a resource-based SWOT analysis by focusing on systemic causal issues that afford more perceptive, reliable, and actionable insights [50].

4.1. Strengths

(a) Industry growth can be achieved by creating many games, making the player’s range of choice wide. As a result, a win–win effect is created, as both game designers and players benefit from this creation.

(b) The esports sector is a rapidly growing industry, which leads to the creation of new opportunities and attracting investment, both domestic and foreign. This investment creates a push effect within the industry, allowing its rapid development.

(c) The spirit of teamwork and competitiveness for continuous improvement (kaizen) and the desire to improve and a job well done is strengthened in firms due to young people’s pressure. In this sense, individual actions conditioned on estimated win probability changes correlate almost entirely to team performance [51]. Therefore, the development of esports in this industry and the profits generated have a learning effect that continues in time.

(d) When developed within a country, the esports industry contributes to generating highly specialized engineering and design jobs. Therefore, there is a multiplier effect that positively impacts HEIs (higher education institutions) in the world [9].

4.2. Weaknesses

(a) The esports industry has a bad image in society in general and in families, considering that this leisure time generates psychological dependence, which harms young people studying for high school and undergraduate studies. As a result, families tend to discourage their children from participating in tournaments organized by this industry.
(b) The high initial investment to design a high-quality game capable of competing with those created by the industry’s most prominent companies discourage SMEs from developing new games.

(c) The payback period for games is usually relatively short, given the high number of existing games and the increased competition.

(d) Many times, esports have become an escape route to solve personal problems. In these cases, addiction problems begin, added to aggressive behavior [52–54], especially when gamers are in massive tournaments where pressure and emotional tension are high. As with video games, esports is decidedly dominant in modern culture, particularly among young people, and a safe hobby for most users. However, excessive esports and video gaming may lead to manifest functional damage and psychological distress for a marginal number of players [55].

(e) When esports interfere in the player’s personal life, affecting their family, educational, and emotional stability. Regarding emotions and mental health, after having analyzed 15 top esports clubs in the Chinese cities of Shanghai, Guangzhou, Suzhou, and Chengdu, find that esports is perceived as non-secure, casual, and irregular by the Chinese public [56]. Additionally, esports professionals’ mental changes throughout their careers have been significantly influenced by cognitive cultural beliefs, economic stimulation, and authority attributions.

4.3. Opportunities

(a) The development of esports can foster greater public–private collaboration, especially in the organization and celebration of indie esports festivals to attract new players, especially the youngest.

(b) It is a growing industry, which can lead to future unicorn companies within the sector.

(c) The esports industry’s development requires constant technological improvement, which has induced in gamers a growing demand for increasing virtual reality, higher speed, and game complexity.

(d) The esports industry contributes to developing creativity, specialization, and the increase in new professions in digital strategy (CDO or Chief Digital Officer, and CTO or Chief Technology Officer), digital marketing (DMM or Digital Marketing Manager, Inbound Marketing, Trafficker Digital), big data and business analytics, techno creativity (digital designers and UI/UX designers), and tech and business innovators specialized in agile technologies.

(e) The development of esports can ease the building of triple helix entrepreneurial ecosystems [57], defined by collaboration between public administrations, private companies, and HEIs to develop this industry.

(f) In the case of increasing CSR (corporate social responsibility) policies in the esports industry, it could generate social change and fight against poverty in the most economically disadvantaged environments, particularly in times of upheaval amid the pandemic [58].

4.4. Threats

(a) In today’s economic world, rapid technological advances can change young people’s tastes as new technologies change consumer habits. With the constant introduction of technological improvements in the esports industry, the life cycle of games tends to be smaller and smaller, leading to shorter payback periods, except in disruptive gaming, and incorporates features that are difficult to imitate by competitors.

(b) The use and development of graphene can give a great turn to the esports industry due to its greater malleability, faster transmission capacity, reduced heating, and lower weight. Graphene has high thermal and electrical conductivity, high elasticity and flexibility, excellent hardness and resistance, is not affected by ionizing radiation, can generate electricity by exposure to sunlight, and is transparent. In practice, graphene will replace aluminum when manufacturing costs are reduced, leading to lower prices.
(c) The current economic and health crisis caused by COVID-19 may impact gamers’ consumption habits, which generates a slowdown in this industry’s development, as it is no longer fashionable. Therefore, they must continue holding tournaments, even online, so that the game’s habit continues over time.

(d) The equipment’s high prices can discourage starting in the industry, especially when there is an economic crisis, as is currently the case (except in China) in the world due to COVID-19.

(e) The high cost of acquiring games encourages gamers, with exceptions, to carry out illicit activities, such as piracy of games and data trading in parallel markets. The rise of video games such as Fortnite, Minecraft, or Roblox is such that a user account of one of these, with their respective credentials, can be sold in 2020 for up to 10,000 dollars in private Telegram groups or call channels on the deep web. As a result, it is estimated that the black market for gaming has already reached 1 billion dollars [59]. An account with a first season skin costs between USD 25 and USD 250, and an expert skin is for sale at USD 2500. The most expensive are independent accounts; that is, they are hacked to not link to a specific account of a PlayStation Network user, which can cost up to USD 10,000.

(f) Given the esports industry’s success, it can encourage new technologies or new leisure industries that compete with this industry.

(g) The onset and persistence of an ongoing economic crisis, except for China, for countries affected by the COVID-19 pandemic, including Spain, can negatively impact this industry’s growth.

(h) The high competition between teams and the tremendous desire to win and compete sometimes leads to attempts to cheat. A process that is defined by the so-called boosting is expressed when high-skilled players access lower-skilled players’ accounts to increase the rank of the account for monetary gain [60].

5. Discussion

5.1. Esports for the Industry

We are facing an industry in an initial state of economic development. A 32.5% growth is expected between now and 2021, and it is a sector that generates qualified jobs, which can help economic growth and whose activity encourages personal values and skills. For this reason, the industry should sign collaboration agreements with HEIs and with public administrations to build triple helix models and thus achieve a more significant impact on society. Therefore, greater cooperation with HEIs, which increases even to what already exists, would help generate competitive advantages of the first order (R&D and innovation) within the esports industry.

COVID-19 has had adverse effects on console gaming, as massive cross-company partnerships, physical distribution, and certification are an outstanding share of console game development [2]. Thus, the industry should have contingency plans and have the resources to face unforeseen events that endanger its survival. Given the current process of double health and economic crisis, the esports industry should be more risk-averse if it wishes to survive in this uncertain economic and health environment affecting investment processes and the entry into new markets or expansion of existing markets. In this process, the only exception is China. This country has hardly been affected by the pandemic from an economic point of view, which will foreseeably make it the world’s leading economic power towards the end of this decade.

As a result, the Chinese games market is the largest globally, both by revenues and by the number of players. It is also one of the world’s most competitive markets, particularly for mobile developers [2]. This fact will displace Europe from leading positions, including Spain, which will slow down video game development in this industry. In fact, and as happened with the influence of the United States in the world after World War II, it is foreseeable that, during this decade, the so-called soft power on the part of China will be strengthened, a fact that is already taking place from learning of the Chinese language,
carried out through the Confucius Institute and the signing of agreements with universities, mainly European, Latin American, and African, as well as the celebration of Chinese holidays in different countries outside China (primarily the Chinese New Year), to music and the use of Chinese social networks, such as TikTok, known initially as Douyin, which means “shake the music” in Chinese.

In Spain, the esports industry leads the cultural sector and its technological development by generating more than 9000 quality jobs, a vital role in the digital economy, and an increasing presence in other areas such as education, health, or the business. Therefore, given its characteristics, it is foreseeable that there will be a substantial increase in this industry in Spain, which will attract investment. It is desirable to attract venture capital to accelerate this investment process and set up strategic alliances between different actors. Therefore, whoever first achieves the industry’s leadership position has an easier time staying in it due to its gamers’ recognition. These companies are usually multinationals with a presence in many countries make it even more difficult for them to be overtaken by a competitor. Thus, for SMEs to guarantee their success within the sector, they should reach strategic alliances with large corporations to become stronger with relatively little effort and therefore ensure their permanence in the market.

5.2. Esports for the Public Administration

According to [44], in Spain, among the main regulatory challenges detected in Europe in general and in Spain in particular, the industry has pointed out the need to improve technological infrastructures in general and access broadband. In this sense, the arrival of 5G throughout Spain (since Nov. 2020, it already operates in the five largest cities: Madrid, Barcelona, Valencia, Seville, and Malaga) will solve this problem of lack of extra high data transmission speeds (currently performed by fiber optics) will lead to the practical elimination of many technical issues that slow down the performance of events and tournaments, many of which are broadcast around the world in real-time.

The esports industry’s strong growth is generating robust growth in employment, especially in the youngest. Therefore, it is always positive that Public Administrations explicitly support the sector through public aid policies. In this way, the industry’s sustainable growth is favored, positively impacting job creation and economic wealth and GDP (gross domestic product).

Given the youth and healthy growth of this industry, there is still no legal regulation, so the sector’s laws are not specific or adapted to it. Therefore, the public sector must approve rules adapted to the industry to provide greater legal certainty during the organization and celebration of competitions and tournaments to avoid legislative dispersion and self-regulation of the sector. As a result, there will be greater information transparency within the industry, which leads to less fiscal opacity and a better understanding between public administrations and the industry.

The quick approval of legal regulation will benefit the esports industry. It has to be carried out gradually based on the existing legal system, as has been done in France. In France, from a law that contained the fundamentals of the sector, other rules have emerged that regulate specific definitions and basic rules. Additionally, this can be an excellent strategy to follow, to combine the advantages of taking advantage of the existing general legislation and the specific legislation that details the tremendous existing casuistry. With a precise regulation, the rules of action are clear, and legal loopholes are avoided in the conflict of interest between the companies that interact within the industry. For this reason, once the national regulation has been achieved, the implementation of European legislation, specific to the European single market, should start to encourage the creation of European transnational companies, as is already being done, and thus reach broader markets. As a result, high growth rates can be achieved in this industry’s development, which is beneficial for companies that operate in it and for companies belonging to other sectors that interact with the esports industry.
6. Conclusions

Gaming is a social experience. Arcades and console couch co-op games are early prototypes for socialness. Still, gamers always join (physically and digitally) to play, discuss strategies, get recommendations, interact, have fun, and compete. At its core, gaming is a universal language connecting people through a shared passion, common goals, and experiences [61]. Derived from this passion, a thriving and increasingly digitalized esports industry has emerged and is globally developed.

There is no doubt that the phenomenon of esports has revolutionized the gaming industry, inciting not only social and cultural changes across different generations, but creating a whole new money-making market and opportunities across the world. Outcomes such as income generation, increased physical activity, and greater diversity participation represent potential value-added areas connected with esports and games [62].

To recognize how the experimental value of esports is emerging, it is important to note that all combined efforts of players and gaming companies, online communities, governing associations, and other stakeholders towards the professionalization and growth of esports. There is a real market of players, coaches, technical and commercial teams, among others, with movements, signings, and contracts. Consequently, esports hold a relevant market position with a high degree of commercialization, while continuing to develop a highly specialized and captivated global market [63].

One of the keys to achieving strong growth in the esports industry is the possibility of relegation, making all stakeholders (and not just the publisher) participate in decision-making. While the Riot model is more closed, since only Riot Games makes decisions practically in a monopoly regime, the Valve model tends to open to relegation, which benefits all the industry stakeholders’ interests and allows them to join efforts in a more supportive and democratic way among all. This democratization of the industry helps esports avoid future bottlenecks in its growth and guarantee its survival over time.

Consumers in the esports industry become creators due to the democratization of game creation. This situation is evident in countries where STEM (science, technology, engineering, and mathematics) professions emerge. This is China’s case, as it produces four times as many STEM graduates as the USA. In Spain, of the four areas of knowledge, only engineering stands out.

It is expected that the esports industry will continue to develop, as observed with the diversity and technological complexity of the new games sold in the market as, for example, hyper-casual games, formed by different mechanics types (tap/timing, stacking, turning, dexterity, swerve, merging, and idle mechanics) that are a gateway for new players.

Regarding the live-service games, such as those in tournaments and competitions, revenues are crucial, but gamers and public engagement are even more critical. Public engagement ensures the continuity, not only of income but also of investments within the industry, generating sustainable growth and attracting capital to make new investments in technology and the creation of gaming spaces. Therefore, casual and core monetization convergence is a must for this industry.

Additionally, to promote consumer welfare through market competition, antitrust law should restrict game publishers from using IP rights in their games to monopolize the downstream esports market for those games [64]. For an increasing proportion of gamers, there is currently a shift from consuming esports, typically on mobile, as a means of passing the time, as occurs with spectators of traditional games, to a passion that negatively interferes with other life activities. Women are generally an exception, as nearly a third of all female game enthusiasts consume esports as a time filler only. Therefore, it is essential to achieve public–private solid collaboration, especially in the European Union, Latin American and the Caribbean countries, and the Asian continent, to bring about government strategic plans and investment for esports development post-COVID-19 era [65].
Future Research

As in other industries and sectors, the lockdown caused by COVID-19 is a double-edged sword for engagement and revenues in the game business. Although still uncertain and variable depending on the countries and continents, there will be many countries where the health and economic crisis persists and even causes a lost decade’s economic effects. The economic impact of the virus depends, to a great extent, on the speed of vaccination of the population until reaching herd immunity. The problem is that the different vaccination rates will lead to a world at two speeds, which will increase the gap between developed and developing countries, which will ruin all the efforts that have been made to reduce it. Future research directions will deal with how Blockchain provides the potential to facilitate open marketplaces in esports to soften the impact of the double sanitary and economic crisis that the world is suffering today.

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