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Future of Esports and the Development of Related Professions

Reasons for Choosing and Prospects for Professional Careers

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Thesis abstract

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This thesis explores the future of esports and the development of related professions in a rapidly evolving global industry. As competitive gaming continues to grow in popularity, economic value, cultural significance, and new career opportunities are emerging across multiple sectors – from professional players and coaches to event organizers, marketing specialists, and data analysts. This research aimed to analyse how the professionalization of esports compares to traditional sports, to identify the key challenges the industry faces, and to propose recommendations for sustainable development and education.

The research combines a scoping review of current academic and industry sources, qualitative insights from an expert interview, and comparative analysis with traditional sports structures. The study finds that while esports share many similarities with conventional sports in terms of training, management, and audience engagement, it also faces unique structural, social, and professional challenges – including short career spans, lack of unified governance, and diversity gaps.

The results support the hypothesis that the future growth and legitimacy of esports will rely not only on player performance but also on the expansion and recognition of the wider ecosystem of supporting professions. The findings highlight the need for formal education programs, improved health and career support systems, and institutional collaboration to ensure a sustainable and inclusive esports industry.

[1]Keywords: E-sports, esports development, esports players, player training, esports careers

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Opinnäytetyön tiivistelmä

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Tämä opinnäytetyö tutkii e-urheilun tulevaisuutta ja siihen liittyvien ammattien kehittymistä nopeasti kehittyvällä globaalilla toimialalla. Kun kilpailevan pelaamisen suosio, taloudellinen arvo ja kulttuurinen merkitys kasvavat, uusia uramahdollisuuksia ilmaantuu useilla aloilla – ammattilaispelaajista ja valmentajista tapahtumajärjestäjiin, markkinointiasiantuntijoihin ja data-analyytikkoihin. Tämän tutkimuksen tavoitteena oli analysoida e-urheilun ammatillistumista verrattuna perinteiseen urheiluun, tunnistaa alan keskeisiä haasteita ja esittää suosituksia kestävän kehityksen ja koulutuksen edistämiseksi.

Tutkimus yhdistää kartoittavan kirjallisuuskatsauksen ajankohtaisista tieteellisistä ja ammatillisista lähteistä, laadullisia oivalluksia asiantuntijahaastattelusta sekä vertailevan analyysin suhteessa perinteisiin urheilurakenteisiin. Tutkimuksessa todetaan, että vaikka e-urheilulla on monia yhtäläisyyksiä perinteisen urheilun kanssa koulutuksen, johtamisen ja yleisön sitoutumisen suhteen, sillä on myös ainutlaatuisia rakenteellisia, sosiaalisia ja ammatillisia haasteita – mukaan lukien lyhyet urat, yhtenäisen hallinnon puute ja monimuotoisuuskuilut.

Tulokset tukevat olettamusta, että e-urheilun tuleva kasvu ja legitiimiys riippuvat paitsi pelaajien suorituskyvystä, myös tukiammattien laajemman ekosysteemin laajentumisesta ja tunnustamisesta. Tulokset korostavat tarvetta muodollisiin koulutusohjelmiin, parempiin terveydenhuolto- ja uratukijärjestelmiin sekä institutionaaliseen yhteistyöhön kestävän ja osallistavan e-urheiluteollisuuden varmistamiseksi.

[2] Asiasanat: E-urheilu, e-urheilun kehitys, esports-pelaajat, pelaajakoulutus, esports-urat

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● Terms and Abbreviations

Esports Competitive video gaming at a professional level, often organized into leagues or tournaments with spectators, prizes, and sponsors.

MOBA Multiplayer Online Battle Arena; is a game genre characterized by team-based real-time strategy, e.g. League of Legends, Dota 2.

FPS First-Person Shooter; a game genre where players engage in gun-based combat from a first-person perspective, e.g. CS:GO, Valorant.

The International (TI) Annual World Championship tournament for Dota 2, organized by Valve Corporation, is known for its massive prize pool.

LPL League of Legends Pro League; the highest-level professional League of Legends league in China.

Streamer A person who broadcasts gameplay or commentary in real time on platforms like Twitch or YouTube Gaming.

GG Short for “Good Game,” a common term used by players to show sportsmanship at the end of a match.

Meta The most effective strategy or playstyle currently dominant in a game, often shifts due to updates or player innovations.

Bootcamp An intensive training session or period where esports teams practice together in one location to prepare for competitions.

Tilt A psychological state where a player becomes frustrated and plays worse as a result, often used in competitive gaming psychology.

Franchise league A closed league system where teams pay for permanent slots, common in some professional esports ecosystems.

Scrim is Short for “scrimmage,” meaning a practice match between teams, often used for training and preparation.

● 1 INTRODUCTION

○ 1.1 The Relevance of the Topic

Esports (competitive video gaming) has grown into a major global industry in the 2020s. It now rivals some traditional sports in terms of fan base and revenue. For example, a recent market analysis estimated the global esports market at about $1.3 billion in 2023, projected to reach $9.2 billion by 2033 (Allied Market Research, 2024). Relatedly, gaming as a whole is a massive entertainment sector: analysts project over 3.2 billion gamers worldwide in 2022 and industry revenues of around $196 billion (Newzoo, 2022b). This explosive growth within the realm of esports has made it a mainstream phenomenon, particularly among younger `generations. Huge esports events now draw tens of millions of viewers worldwide. For instance, the highly anticipated 2024 League of Legends World Championship recorded a peak audience of approximately 6.9 million concurrent viewers – a new record for esports tournaments *(Esports Charts, 2024b)*. These events also feature multi-million-dollar prize pools, highlighting the significant monetary stakes involved. In short, the topic is extremely timely and relevant: esports is redefining the frontiers of media, entertainment, and sports culture in increasingly profound ways.

Governments and organizations are beginning to officially recognize the importance of esports in modern society. For example, in 2019 China's Ministry of Human Resources and Social Security took a notable step by officially defining and classifying new professions related to esports, including job titles such as "esports professional (player)" and "esports operator" *(Zhang, 2020)*. Educational institutions – and even parents – are also paying close attention to this trend, as more and more young people express the desire to build careers in the burgeoning esports industry. It becomes important to understand which specific jobs are emerging in this evolving sector, what skills those jobs will require, and how one can properly prepare to meet those requirements. This thesis will examine the social and economic impact of esports and explore the associated career opportunities, providing insight for students, parents, and aspiring professionals.

- **1.2 Problems**

Despite its rapid growth, the esports industry faces several challenges. Many parents and educators still view gaming purely as a hobby rather than a valid career path, leading to misunderstandings about esports' professional potential. This skepticism can result in a lack of support or even opposition to youths pursuing esports careers. Players themselves often have unstable professional lives: contracts are short-term, and the peak performance age is young, many esports athletes retire in their early twenties *(Johnson & Woodcock, 2021; Ward & Harmon, 2019)*. Teams and organizations struggle to support players' well-being and post-competition careers, as the transition out of professional play can be difficult. Businesses in esports also navigate a rapidly changing environment – job roles and required expertise can evolve faster than in traditional fields. As one industry leader observed, "roles change faster than in traditional sectors," meaning professionals must constantly adapt to new games, technologies, and market trends *(Virtus.pro CEO Interview, 2025)*. There is also a persistent stigma in some circles that gaming lacks "real" value, which affects investments and personal decisions.

Another major issue is the ongoing process of professionalization and education in esports. Traditional sports benefit from well-established training systems, governing federations, and educational degrees (for example, degrees in sports management or coaching), but dedicated esports education is only beginning to emerge *(Reitman et al., 2020, p.32)*. Standard curricula for esports management, coaching, broadcasting, or marketing are still largely missing. This creates a gap between what is taught in schools and the practical needs of the esports industry. Novel roles – for example, streaming analysts or esports lawyers – often require interdisciplinary skills not covered in conventional academic programs. In sum, the inner workings of esports (from media management to legal issues) are still not fully understood by many outside the scene. This thesis aims to identify these gaps and propose ways to address them.

- **1.3 Hypothesis**

The central hypothesis of this study is that as esports continues its rapid growth and maturation, the development of new specialized professions (and corresponding education programs) will be necessary to sustain and professionalize the industry. In other words, the expectation is that identifying key supporting roles (coaches, data analysts, team managers, health professionals, etc.) and aligning academic training with industry needs will foster healthier career paths and greater industry maturity. Anticipated that the future success and legitimacy of esports will depend not only on star players, but also on the expansion and recognition of the wider ecosystem of professionals who support the competitive scene. This hypothesis will be examined by analyzing industry trends, interviewing experts, and drawing comparisons with how traditional sports have developed professional career pathways and educational pipelines through the scoping review.

- **1.4 Research Methods**

The methodological foundation of this thesis is the scoping review. This study employs a mixed-methods approach combining qualitative analysis and literature review. First, existing research on esports (including academic papers, industry reports, and news articles) was collected and analyzed to establish a foundation of current knowledge. Key sources include market analyses and academic studies on esports business models and education. Secondly, performing a comparative analysis with traditional sports – examining how sports coaching, management, and athlete development programs function – to draw parallels or contrasts with the emerging structures in esports. Simple statistical charts and figures (based on collected data) are included to illustrate relevant trends were helpful. Finally, a primary data source was an expert interview with a Virtus.pro esports executive. This interview, therefore, does not represent a separate method but serves as a tool to deepen and contextualize the results of the primary scoping review, offering practical, real-world perspectives.

■ 1.4.1 Methodology of Literature Review

A scoping review was chosen as the review methodology because the topic of the future of esports and related professions is broad, exploratory, and involves diverse types of evidence. As established in the introduction, the esports industry is characterized by rapid growth, a lack of unified governance, and a significant gap between professional requirements and existing educational programs. In such a context, a scoping review is the ideal methodology. Scoping studies are particularly suited for mapping an emerging field and summarizing a wide range of literature. In line with Arksey and O'Malley's (2005) seminal framework, the primary goals of this review are to "examine the extent, range, and nature of research activity" and to "identify gaps in the literature" concerning esports professions and education. This approach allows for comprehensive coverage of the multidisciplinary aspects of esports (economic, cultural, educational, etc.) without the constraints of a more narrowly focused systematic review, which is fitting for this research.

○ Search Strategy

The execution of this scoping review rigorously followed the five-stage methodological framework developed by Arksey and O'Malley (2005) to ensure a systematic and transparent process. The stages were as follows:

Academic databases: Google Scholar, Scopus, Web of Science, and EBSCOhost (including SPORTDiscus, Business Source, and relevant subject-specific indexes).

- **Industry reports and grey literature:** Market and industry reports from organizations such as Newzoo and Deloitte, which frequently publish on esports and gaming trends.

Search terms were selected to encompass key concepts in esports and career development. Examples of keywords (used singly or in combination) included: *"esports," "competitive video games," "career development in esports," "HR in esports,"* and *"professionalization in esports."* Search strings combined these terms with Boolean operators (AND/OR) to ensure broad coverage of the topic. Where possible, search strategies were tailored to each database (e.g. using subject headings in EBSCOhost). The search was conducted iteratively, refining terms based on preliminary results and including citations from relevant references (snowballing) to ensure comprehensiveness.

○ Inclusion Criteria

Studies and reports were selected according to predefined criteria to focus the review. Included sources met the following conditions:

- **Date range:** Published between 2010 and 2025 (to capture the modern growth of esports).
- **Language:** English-language publications (for accessibility and consistency).
- **Topical focus:** Primary emphasis on professionalization, career development, or educational aspects within esports. This includes research on esports career pathways, human resource practices in esports organizations, esports-related training or curricula, and similar themes.
- **Source type:** Peer-reviewed journal articles, conference proceedings, theses/dissertations, and reputable industry reports or white papers.

Sources were excluded if they fell outside the date range, were not in English, or did not address esports careers/education (for example, studies focusing solely on casual gaming or unrelated technology). Duplicate records were removed, and titles/abstracts of the remaining articles were screened against these criteria. The full text of potentially relevant items was then assessed to confirm eligibility.

○ Data Charting and Analysis

For each included source, data were extracted into a standardized charting form. Key information recorded included publication details (author, year, venue), study type (empirical, conceptual, report), objectives, methods, and main findings relevant to careers or education in esports. The extracted data were then analyzed thematically. Specifically, the literature was categorized into thematic domains such as:

- **Economic aspects:** Market size, industry growth, revenue models, and economic impact of esports.
- **Cultural aspects:** Community identity, media and spectator culture, and the societal perceptions of esports.
- **Career development and professionalization:** Esports career pathways, athlete, trainer, and coach roles, talent development programs, and human resources practices within esports teams.

- **Educational initiatives:** University/academy programs, vocational training, and curriculum development related to esports and gaming industries.

These categories emerged from the literature and were refined through iterative discussion among the reviewers. To enhance validity, a triangulation approach was employed: themes identified in the academic and industry literature were compared with qualitative insights from interviews with esports industry experts. By cross-referencing published findings with practitioner perspectives, aimed to corroborate trends and identify any discrepancies or knowledge gaps.

○ Scoping Review Process

The execution of this scoping review rigorously followed the five-stage methodological framework developed by Arksey and O'Malley (2005) to ensure a systematic and transparent process. The stages were as follows:

1. **Formulating the research question(s):** Defining broad questions on how esports careers and related professions are evolving. These questions guided the subsequent steps.
2. **Identifying relevant sources:** A comprehensive search of selected databases and industry sources was undertaken using the key terms described above.
3. **Study selection:** Retrieved records were screened and selected based on the inclusion criteria (date, language, and topic). Selection was performed independently by at least two reviewers, with disagreements resolved by consensus.
4. **Charting the data:** Relevant information from each selected source was extracted into the data-charting form. This included thematic coding of content according to the categories listed above.
5. **Collating and summarizing results:** The charted data were synthesized into narrative summaries, tables, and diagrams. Patterns and themes across the body of literature were identified, and gaps were highlighted. The triangulated findings (literature vs. expert interviews) were integrated into the synthesis to provide a comprehensive overview.

By following these stages, this scoping review maps the current state of knowledge on esports and career development, providing a foundation for understanding future directions

and identifying areas requiring further research. The Arksey and O'Malley framework ensures a systematic and transparent methodology for this exploratory review.

● 2 Esports as a Phenomenon: History and Modernity

○ 2.1 The Emergence and Evolution of Esports

Esports emerged in the late 20th century from the realm of casual video gaming into organized competitions. Early milestones include local arcade high-score contests, 1980s console and PC gaming tournaments, and the first nationally televised gaming competitions in the 1990s *(Bousquet & Ertz, 2021)*. One landmark often cited as a precursor to modern esports was the 1997 Red Annihilation tournament for the game Quake in California – its champion famously won a Ferrari sports car, signaling the arrival of high-stakes competitive gaming *(Hoppe, D., 2020a).* The rise of the internet in the late 1990s enabled global online multiplayer matches; from then on, competitive gaming communities grew rapidly beyond local scenes. By the early 2000s, formal esports organizations and leagues were forming. Notably, the Cyberathlete Professional League (CPL), founded in 1997, and later the World Cyber Games (WCG, founded in 2000) hosted international tournaments with professional players and prize pools, paving the way for today's global esports circuits *(Larch, F.,2024)*. Each new popular game genre has spawned its own professional scene: for example, first-person shooters like Counter-Strike, real-time strategy games like StarCraft, and MOBAs like DotA and League of Legends all developed dedicated pro leagues, teams, and sponsors by the 2010s *(Nyström et al., 2022)*.

The COVID-19 pandemic (2020–2022) unexpectedly accelerated esports' mainstream visibility. With many traditional sports on hiatus due to lockdowns, major esports events moved fully online and even gained airtime on television networks (for instance, ESPN broadcasted several esports events during 2020) *(Deloitte, 2024)*. This period saw a surge in esports viewership and brought new audiences into contact with competitive gaming. According to Deloitte (2024), after the pandemic surge, the initial "buzz" around esports has tempered slightly, but the concept is now firmly established in popular culture and continues to attract new fans. Today, esports can be defined as "video games played at a professional, competitive level, primarily as a spectator product that attracts audiences via Internet streaming, TV broadcasts, and live events." Unlike casual gaming, esports involve players and teams who train intensively and pursue professional careers in their game of choice, often under contract and supported by sponsors or organizations.

○ 2.2 The Economic Importance of Esports in a Global Context

Economically, esports is a multi-billion-dollar industry with high growth potential. In 2024 the global esports market was estimated at around $2–2.5 billion in annual revenues, with expected double-digit percentage growth each year. For instance, Allied Market Research reported the industry at about $1.3 billion in 2023 and forecasted it to reach $9.2 billion by 2033 (a ~21% compound annual growth rate) as shows in Figure 1 *(Allied Market* Research*, 2024)*. Market Analysis Report similarly cited approximately $2.9 billion in 2024 with ~8.7% CAGR to 2030 *(Grand View Research, 2024)*. Revenue in esports comes from multiple streams: media rights, advertising, sponsorships, merchandise and tickets, publisher fees, and digital subscriptions or in-game purchases *(Allied Market* Research*, 2024; Bousquet & Ertz, 2021)*. Unlike traditional sports leagues that rely heavily on TV broadcasting deals, many esports events are streamed free-to-view on online platforms like Twitch and YouTube *(Ward & Harmon, 2019)*. Thus, sponsorship and digital advertising play an outsized role in generating esports revenue. For example, the League of Legends World Championship finals are typically free to watch via Riot Games' official streams (no pay-per-view), yet corporate sponsors and media partners contribute funding for the multi-million-dollar prize pool and production costs *(Karhulahti, 2017)*.

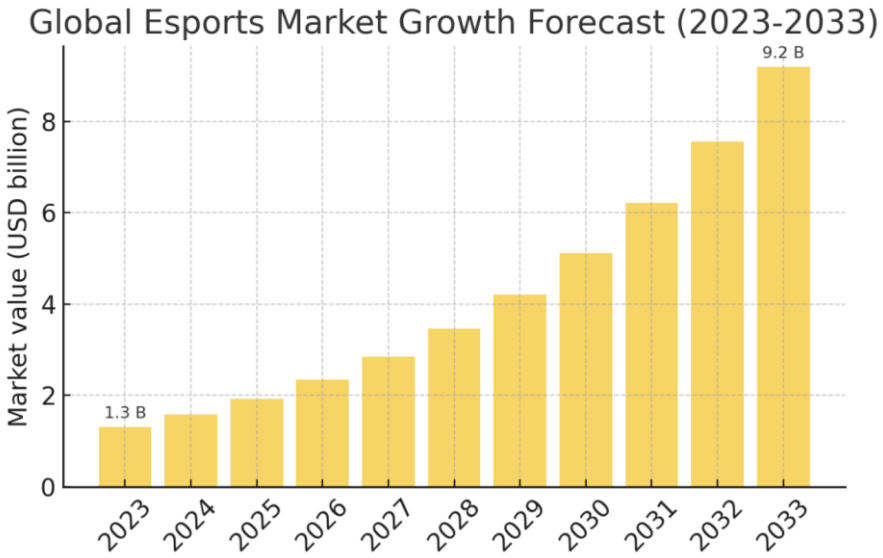

Figure 1. Global growth forecast for the esports industry (Allied Market Research, 2024). The global esports market was valued at ~$1.3 B in 2023 and is projected to reach ~$9.2 B by 2033, indicating robust growth.

Revenue distribution in the esports industry is currently dominated by sponsorships (often combined with advertising). Sponsors – ranging from gaming hardware brands to telecommunications and energy drink companies – collectively provide well over half of all esports industry income *(Filchenko, 2018)*. The next major segment is media rights (fees paid by streaming platforms or networks to broadcast events), followed by smaller contributions from merchandise sales, event ticket sales, and game publisher franchise fees *(Bousquet & Ertz, 2021)*. In 2022, for example, industry estimates suggested that sponsorships and advertising accounted for roughly 60% of global esports revenue, and media rights about 20%, with the remaining 20% split among merchandise & tickets, publisher fees, and other sources *(Newzoo, 2022a)*. Unlike traditional sports such as football or basketball, in-person ticket sales are a relatively small piece of the esports revenue pie (since many viewers watch online for free, and events have limited seating) *(Bousquet & Ertz, 2021)*. Instead, the model relies more on digital engagement and brand partnerships.

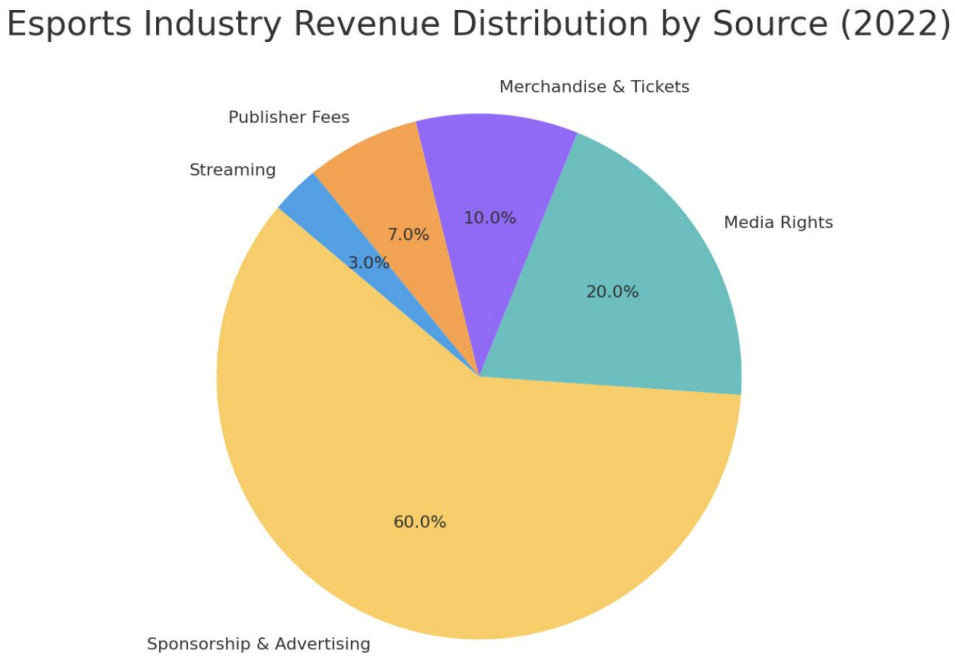

Figure 2. Revenue distribution in the esports industry by category (Newzoo, 2022a). Sponsorship and advertising form the largest share of esports revenues (~60%), followed by

media rights (~20%). Smaller portions come from merchandise & tickets (~10%), publisher fees (~7%), and other sources (~3%).

Prize pools and investment figures also highlight the scale of the esports economy. The largest esports tournaments now offer prize payouts comparable to top traditional sporting events *(Ward & Harmon, 2019)*. For instance, The International 2021 (the premier Dota 2 championship) featured a prize pool of over $40 million distributed among participating teams – a record-setting figure in esports *(Ocal, A., 2020)*. Franchise fees and team valuations have also soared: some North American esports league teams (in games like Overwatch or Call of Duty) have been sold for tens of millions of dollars *(Wolf, J., 2019)*. Major media corporations and traditional sports team owners are investing in esports franchises; for example, the NBA's Golden State Warriors own an esports team, and Red Bull sponsors multiple teams and tournaments *(Bousquet & Ertz, 2021,Scholz et al., 2020)*. Capital investment flows into esports companies that organize events, develop talent, and build streaming technology *(Allied Market* Research*, 2024)*. This economic momentum demonstrates that esports commands significant corporate and investor interest worldwide.

- **2.3 Social and Cultural Impact on Youth**

Esports has a profound social and cultural impact, especially on young people *(Nyström et al., 2022; Tjønndal & Skauge, 2021)*. It provides new forms of socialization and inclusivity. Unlike many physical sports, video games can be more accessible to a wider range of participants regardless of location or certain physical limitations (for example, games can have settings for colorblind players, and the entry barrier is more about owning a PC or console rather than specific athletic traits) *(Nyström et al., 2022)*. Surveys indicate that gaming is predominantly a social activity: over 80% of gamers report playing with others, whether online or in person *(Gottfried, J., & Sidoti, O., 2024)*. Being part of a gaming team or online community allows players to develop communication, leadership, and teamwork skills in a digital environment *(Ye et al., 2021)*. According to Petrosian, N. each team member has a specific role to play for their team's success – which fosters communication, strategic

problem-solving, and cooperation skills among youth *(Virtus.Pro CEO Interview, 2025)*. Young players often form deep peer networks and even cross-cultural friendships through esports, as online play connects people across regions *(Tjønndal & Skauge, 2021)*. Attending live esports events or viewing parties can also create a sense of community and shared fandom similar to that of traditional sports *(Filchenko, 2018; Reitman et al., 2020)*.

Picture 1. Esports event with a live audience (2019 League of Legends World Championship finals in Paris). Major esports finals fill large arenas with enthusiastic crowds, demonstrating esports' ability to draw spectators and create a vibrant event atmosphere.

At the same time, esports offer new identity and career pathways for the younger generation *(Johnson & Woodcock, 2021; Reitman et al., 2020)*. Many adolescents now see gaming not just as entertainment but as a potential professional pursuit. Today's teens have grown up watching YouTube and Twitch personalities and seeing professional players become celebrities who can earn lucrative incomes *(Johnson & Woodcock, 2021*). As a commentator noted, there are "thousands of career opportunities" in esports beyond just playing or streaming – including roles in design, marketing, coaching, event production, and more *(Virtus.Pro CEO Interview, 2025)*. Growing up with prominent esports figures as role models (some of whom earn millions in prize money and sponsorships) and witnessing large-scale tournaments in sold-out arenas, young fans increasingly aspire to be part of the industry *(Ward, M., & Harmon, A., 2019)*. This cultural shift, however, sometimes causes friction at home or school: some parents still dismiss esports as frivolous or "just a game," failing to recognize the dedication and skill involved *(Tjønndal & Skauge, 2021)*. For example, one student researcher observed that many parents in his community viewed gaming as childish, even though more than half of his peers were deeply engaged in esports and gaming culture. Bridging this generation gap requires education and communication – showing skeptics the professionalism, teamwork, and career potential present in esports (Ye et al., 2021). In

summary, esports has become a significant cultural force among youth, shaping how they socialize, learn teamwork, and envision future careers in the digital age.

● 3 Key Professions in the Esports Industry

○ 3.1 Players and Coaches: Their Role and Unique Skills

At the core of the esports ecosystem are the professional players. Top esports players undergo rigorous daily training regimens, much like traditional athletes. They practice gameplay strategies, refine their mechanics, study opponents, and scrimmage with teammates for many hours each day. Success in esports depends on exceptional cognitive and motor skills: players must have extremely high hand-eye coordination and reaction speed (often measured in actions per minute, APM), strong strategic thinking and game sense, and the ability to maintain concentration under intense pressure *(Johnson & Woodcock, 2021; Reitman et al., 2020)*. Indeed, research has found that elite esports players often exhibit enhanced visual attention, information processing, and working memory abilities compared to non-players – skills uniquely honed by gaming *(Bavelier et al., 2012)*. For example, a leading StarCraft world champion reported training up to 12 hours a day during peak competition seasons *(Filchenko, 2018)*. In team-based esports (such as League of Legends or Counter-Strike), each player typically specializes in a particular role (e.g. a “tank” or “support” role in a 5v5 game) and must cultivate leadership and communication skills to coordinate effectively with teammates *(Reitman et al., 2020)*. The competitive environment is high-pressure and fast-paced, requiring players to make split-second decisions and constantly adapt strategies *(Johnson & Woodcock, 2021)*.

Despite the glamour at the top, a professional player’s career comes with significant challenges. Esports athletes face intense competition and stress athletes *(Johnson & Woodcock, 2021)*, and their playing careers tend to be shorter on average than those of physical sports athletes *(Ward & Harmon, 2019)*. Reflexes and peak gaming performance often decline by the mid-20s, meaning many players retire very young. There is also less job security – player contracts may be season-to-season, and team rosters change frequently based on performance *(Johnson & Woodcock, 2021)*. Leading organizations now recognize the need for career transition planning and broader support. For instance, the Virtus.Pro esports club has implemented programs where retired players can receive training to become streamers, coaches, or analysts, with financial support extending through the end of their contracts *(Virtus.Pro CEO Interview, 2025)*. Additionally, player development in top teams

increasingly mirrors traditional sports including physical fitness (some esports teams mandate regular gym workouts for players) and mental conditioning to improve focus and resilience *(Filchenko, 2018; Tjønndal & Skauge, 2021)*.

Picture 2. Example of a professional esports training facility (T-Wolves Gaming Training Center, Minnesota). Such dedicated training facilities include scrimmage rooms, streaming stations, and performance coaching areas, reflecting the professional environment provided to esports players.

Supporting the players directly are the coaches. Esports coaches guide their teams' strategy, analyze opponents, train players on new game updates or "metas," and manage team dynamics and practice schedules *(Johnson & Woodcock, 2021)*. They combine deep game-specific knowledge with teaching and leadership abilities. Many successful esports coaches are former high-level players themselves or individuals who have studied the game extensively. Beyond in-game tactics, modern esports organizations have begun to employ specialized coaching staff such as performance psychologists or "mental coaches" to help players handle stress, build teamwork, and maintain a winning mindset *(Nyström et al., 2022)*. As a Virtus.pro team manager noted in our interview, some of the key emerging roles in esports include mental performance coaches, as well as data analysts, and even legal

advisors *(Virtus.Pro CEO Interview, 2025)*. In summary, players and coaches form the most visible layer of esports professions: players push the limits of human reflexes and strategic thinking in a digital arena, while coaches (strategic, mechanical, and mental coaches) enable teams to achieve peak performance through training and analysis.

○ 3.2 Management and Operation of Esports Teams

Behind the scenes, professional esports teams require management structures similar to those of traditional sports clubs. Key management professions include team managers, operations managers, and organization executives *(Nyström et al., 2022)*. These professionals handle logistics (travel arrangements, scheduling practice sessions, securing housing for players), recruit players and staff, negotiate player contracts, and oversee the team's finances and branding *(Johnson & Woodcock, 2021)*. For example, a team's general manager might coordinate with game publishers to secure slots in official leagues or tournaments, while a business manager negotiates sponsorship deals and partnerships *(Allied Market* Research*, 2024; Peng et al., 2020)*. Many current esports managers come from marketing, business, or media backgrounds. One interviewee described being hired into an esports organization with a public relations background and having to rapidly learn the gaming industry context to be an effective leader – illustrating that general management skills can transfer into esports if one is willing to adapt to gamer culture and fast-changing trends *(Virtus.Pro CEO Interview, 2025)*.

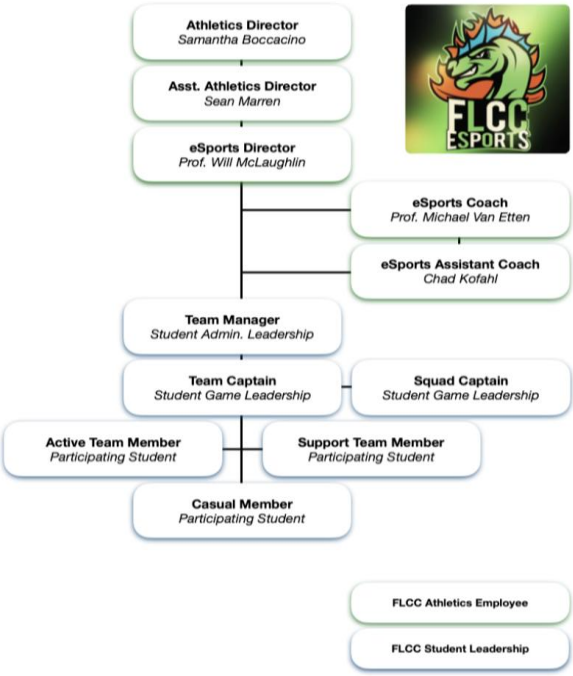

Figure 3. The internal structure of a professional esports organization (FLCC Esports Program hierarchy)

A major aspect of team operations is managing relationships with external stakeholders such as game publishers and event organizers *(Peng et al., 2020)*. Unlike some traditional sports which have independent federations or closed leagues, esports competitions are often organized or sanctioned by the game's publisher (for instance, Riot Games runs the official leagues for League of Legends, Valve Corporation oversees Dota 2's major tournaments, etc.) *(Karhulahti, 2017)*. Team managers must collaborate closely with these entities to ensure their team's participation rights, comply with rules, and stay informed of schedule changes or patch updates. They also often coordinate event logistics like travel, on-stage production, and media obligations for their team during big tournaments *(Johnson & Woodcock, 2021; Peng et al., 2020)*. Larger esports organizations have entire departments for marketing and content creation – employing content producers, video editors, social media managers, and graphic designers to build the team's brand and engage fans via streaming and social platforms *(Allied Market* Research*, 2024; Johnson & Woodcock, 2021)*.

Professional management in esports also extends to nurturing a pipeline of talent and a sustainable team ecosystem *(Nyström et al., 2022)*. For instance, leading Chinese esports clubs have developed structured league systems and training academies reminiscent of

traditional soccer clubs' youth academies. These clubs invest in junior squads and coaching for promising young players *(Zhang, 2020)*. In North America's franchised leagues (like the Overwatch League or Call of Duty League), franchises are encouraged (or even required) to develop local talent through "academy" teams in minor leagues *(Reitman et al., 2020; Scholz et al., 2020)*. Good management ensures that an esports team has the necessary resources, strategic direction, and stability to compete at a high level year after year. As the esports industry grows, management roles expected to become more formalized and specialized, requiring both solid business acumen and an understanding of gaming and esports dynamics *(Reitman et al., 2020)*.

○ 3.3 Marketing, HR, and Analytics in Esports

Modern esports organizations rely heavily on marketing and analytics to grow their fan base and improve competitive performance *(Allied Market* Research*, 2024; Reitman et al., 2020)*. Marketing professionals in esports design brand strategies, run social media channels, create content, organize fan meet-ups or online events, and secure sponsors. Given that esports audiences are global and primarily online *(Deloitte, 2024)*, marketers must be tech-savvy and culturally fluent in internet and gaming trends; they often blend gamer slang and memes with traditional branding messages. Content marketing is especially important – many teams employ video editors and streamers to produce behind-the-scenes vlogs, player interviews and highlights to keep fans engaged *(Johnson & Woodcock, 2021)*. There is a strong emphasis on community interaction: "Respecting the audience – their emotions drive the industry," advises Nikolay Petrosian, underscoring that understanding and engaging the fan community is critical for success *(Deloitte, 2024)*.

Human Resources (HR) and team operations in esports involve scouting talent, negotiating contracts *(Johnson & Woodcock, 2021)*, and supporting player welfare *(Nyström et al., 2022)*. Talent scouts or recruiters might watch countless hours of online matches or use scouting platforms to discover skilled amateur players to draft into a pro team. Once players are onboard, teams often adopt a "team house" model – providing a shared living and training facility – to foster team cohesion (this has parallels to training camps or dorms in traditional

sports) *(Filchenko, 2018)*. HR roles also increasingly include positions like player welfare managers, mental health counselors, or career advisors *(Nyström et al., 2022)*, reflecting a growing awareness of issues such as player burnout and the need to plan for life after a playing career (as noted earlier, Virtus.pro offers transitional support for departing players). Ensuring players have a healthy work-life balance and emotional support is becoming part of the organizational responsibility *(Nyström et al., 2022)*.

Data analytics is an emerging and exciting field in esports. Analysts collect and crunch in-game and out-of-game data to derive insights that can provide a competitive edge. For example, performance analysts might track a player's in-game statistics – accuracy, reaction times, decision-making patterns – to identify areas for improvement. Teams increasingly employ full-time data analysts or strategists who study both their own players' habits and their opponents' tendencies, then provide the coaching staff with actionable metrics (this is analogous to the "Moneyball" style analytics revolution in baseball) *(Reitman et al., 2020; Virtus.Pro CEO Interview, 2025)*. An analytics team might discover, for instance, that a certain team composition or strategy yields a higher win rate, or that a player performs best on certain map types or after specific practice routines *(Reitman et al., 2020)*. On the business side, analysts also track metrics like viewership numbers, social media engagement, and sponsorship return on investment to guide marketing and partnership decisions *(Allied Market* Research*, 2024; Deloitte, 2024)*. As highlighted in the expert interview, data analysts are considered among the key future roles in esports organizations – blending IT skills with competitive knowledge to inform strategy *(Virtus.Pro CEO Interview, 2025)*. Together, marketing, HR, and analytics roles form a "business intelligence" layer that underpins both competitive success on stage and financial growth off-stage in the esports industry.

○ 3.4 The Impact of Educational and Professional Experience on Work Efficiency

The effectiveness of esports professionals – whether they are players, coaches, managers, or support staff – often hinges on a blend of formal training and hands-on experience *(Johnson & Woodcock, 2021; Nyström et al., 2022)*. Currently, specialized academic

programs in esports (for example, bachelor's degrees in esports management or esports coaching) are still rare but are gradually growing in number *(Nyström et al., 2022; Reitman et al., 2020)*. Many early-career entrants into esports have come from related fields or are self-taught. For instance, one Virtus.pro manager with a strong PR and media background quickly adapted to the esports context and became highly effective in team management *((Johnson & Woodcock, 2021; Virtus.pro CEO Interview, 2025)*. This suggests that core professional skills (communication, marketing, data analysis, etc.) can transfer to the esports domain, provided the individual takes the initiative to learn the gaming-specific context and culture.

Conversely, some new graduates from the few existing esports-focused programs find the fast-paced industry challenging *(Virtus.Pro CEO Interview, 2025)*. The field requires not just theoretical knowledge but also immersion in the gaming scene. Therefore, practitioners commonly believe in combining academic study with real-world exposure *(Nyström et al., 2022)*. Internships with esports teams or tournament organizers, mentorship by industry veterans, and active participation in gaming communities or amateur tournaments are all seen as valuable experiences. These help newcomers gain a practical understanding that complements classroom learning.

In more formal terms, aspects of traditional sports education can also benefit esports professionals *(Filchenko, 2018)*. For example, learning sports science and physical conditioning can help players manage their health (nutrition, ergonomics, exercise) and help coaches understand the principles of teamwork and leadership *(Tjønndal & Skauge, 2021)*. In traditional sports, coaches often have to obtain certifications; in esports, coaching education is only just emerging (some private certifications and workshops exist, but no widely recognized standard yet) *(Nyström et al., 2022)*. Real-world experience remains crucial: as the Virtus.pro example shows *(Virtus.Pro CEO Interview, 2025)*, an experienced manager without prior esports involvement became successful through intensive self-education and adaptation on the job. In summary, a mix of professional experience (e.g. internships, and related jobs) and targeted education or training (courses in marketing, analytics, game design, broadcasting, and sports psychology) tends to boost work efficiency and effectiveness in esports roles. Organizations are beginning to recognize this need: in China, for instance, government-led programs have sought to bring more formally trained professionals into esports roles *(Peng et al., 2020; Zhang, 2020)*, and universities in Europe and North America have started esports clubs, scholarships, and even electives or minors related to esports *(Nyström et al., 2022; Scholz et al., 2020)*. The trend suggests that as

educational offerings improve and more professionals from diverse backgrounds enter the field, future esports managers and support staff will be better prepared, thereby professionalizing the industry further.

● 4 Comparison of Esports with Traditional Sports

○ 4.1 The Role of Specialized Training Programs in Sports and Esports

Traditional sports benefit from long-established training infrastructures: local youth leagues, school and college sports programs, professional club academies, and national sporting bodies all contribute to identifying and developing athletic talent from a young age. Many countries have formal sports academies and university degrees in fields like sports science, kinesiology, sports management, and coaching, which collectively cover athlete development, coaching techniques, team management, physiology, and more *(Filchenko, 2018; Tjønndal & Skauge, 2021)*. Esports, being a newer competitive field, has only recently begun to develop analogous structures. For example, some high schools and colleges now have esports teams, and a few offer courses on game design, esports management, or digital media production related to gaming *(Nyström et al., 2022)*. Professional esports organizations often create “academy” squads or training camps for junior players – directly mirroring the concept of youth academy teams in soccer or farm teams in baseball *(Johnson & Woodcock, 2021)*. The idea of a team gaming house, where players live and train together under one roof, is an esports innovation that resembles the centralized training centers used by Olympic programs or sports academies *(Filchenko, 2018)*.

Picture 3. Esports bootcamp setting for team training (Goexanimo bootcamp facility in Latvia). Professional teams often travel to bootcamp facilities or team houses to practice

intensively before major tournaments, building skills and team cohesion in a focused environment.

However, fully specialized academic programs for esports are still few and far between. A handful of universities have launched bachelor's programs in esports management, and some vocational schools offer diplomas in game production or broadcasting with an esports angle, but many industry professionals still learn on the job or through short courses and certifications *(Nyström et al., 2022)*. As a European Deloitte report notes, even reaching a uniform definition and understanding of "what is esports" is an ongoing task *(Deloitte, 2024 p. 3, p. 6)*. As the esports industry matures and standardizes, we can expect more formalized training programs to appear – perhaps even sports science or management degrees with a focus on esports – along with certification pathways for roles like coach, referee, or event organizer. There is precedent in the way sports coaching has professional certifications; esports could evolve similarly once consensus builds around best practices *(Nyström et al., 2022)*.

- **4.2 Comparing the Skills and Competencies Needed for Success**

Success in any competitive field requires talent, discipline, and practice, but the specific skill sets can differ between traditional sports and esports *(Filchenko, 2018)*. Physical fitness is paramount in many conventional sports, whereas esports demands what might be called cognitive and fine-motor fitness – quick reflexes, high sustained attention, excellent hand-eye coordination, and mental acuity *(Filchenko, 2018; Johnson & Woodcock, 2021)*. Both domains require strong teamwork (in team-based games or sports), strategic thinking *(Ye et al., 2021)*, and mental resilience to cope with high-pressure situations *(Nyström et al., 2022)*. For instance, an in-game shot-caller in Dota 2 or CS:GO must constantly read the opponent's moves and adapt strategy on the fly, much like a football quarterback or a basketball coach making real-time decisions. Communication and leadership skills are thus crucial on both sides: an esports team needs coordination and trust among players just as much as a traditional sports team does *(Ye et al., 2021)*.

Esports may require additional tech-savviness and knowledge of complex game mechanics. Players must frequently update their knowledge and skills as games receive patches or balance changes that can shift strategies overnight *(Johnson & Woodcock, 2021; Karhulahti, 2017)*. Traditional athletes typically focus on physical conditioning and sport-specific techniques, while esports athletes might spend comparable time analyzing game updates, studying digital analytics (like heatmaps of in-game actions), and practicing in virtual environments. Meanwhile, a broader range of multidisciplinary knowledge can be valuable in esports professions: for example, a team manager might need to understand streaming platforms and digital content rights, a marketing lead might need to leverage social media trends and online communities, and even a team trainer or physiotherapist might need to learn about preventing esports-related injuries (such as repetitive strain injuries from mouse/keyboard use or poor posture) *(Reitman et al., 2020; Nyström et al., 2022)*. According to Petrosian *(Virtus.Pro CEO Interview 2025)*, In essence, esports professionals often wear multiple hats and must be adaptable to new technologies.

Key differences and similarities in required competencies for esports versus traditional sports

Skill/Competency	**Esports (Competitive Gaming)**	**Traditional Sports (Physical Sports)**
Physical Endurance	Moderate – focus on posture, hand stamina	High – cardio, muscular strength required
Hand-Eye Coordination	Critical – essential for precise gameplay	Important – especially in ball sports
Strategic Thinking	Very High – constant in-game analysis	High – strategy varies by sport
Teamwork & Communication	Very High – vital in team-based games	Very High – vital in team sports
Mental Resilience	Essential – under constant cognitive pressure	Essential – coping with pressure & fatigue
Use of Technology	Very High – hardware, software, analytics	Low/Moderate – mainly training equipment

Reaction Time	Extremely High – milliseconds matter	High – varies by sport (e.g. goalkeeper)
Training Environment	Digital – online practice, gaming house	Physical – fields, courts, gyms, etc.

Table 1. Key differences and similarities in required competencies for esports versus traditional sports.

According to many industry insiders, the rapid evolution of roles and games in esports means that an esports professional must be particularly flexible and committed to continuous learning: adaptability is key, since “roles change faster than in traditional fields.” *(Virtus.Pro CEO Interview 2025)*. Still, a number of core competencies overlap between sports and esports. Discipline, teamwork, communication, and passion are foundational in both domains. In fact, schools that introduce extracurricular esports programs often cite traditional virtues like goal setting, leadership, and sportsmanship as benefits of student participation – similar to why they promote physical sports *(Tjønndal & Skauge, 2021)*. The main differences lie in the medium of competition (virtual vs. physical) and the tools used (gaming rigs and software vs. balls and physical equipment), but the competitive spirit and need for team dynamics are common to both.

○ 4.3 Prospects for Growth and Professional Recognition

Esports is on a trajectory of increasing legitimization that in some ways mirrors how certain traditional sports gained acceptance over time. Professional recognition of esports has been growing year by year. For example, major universities now offer athletic-style scholarships to top esports players, treating them similarly to traditional college athletes *(Filchenko, 2018; Scholz et al., 2020)*. Some countries have established national esports associations or federations, and several traditional sports organizations have invested in esports teams (such as football clubs fielding teams in FIFA or NBA teams in the NBA 2K esports league) *(Scholz et al., 2020)*. There have even been discussions about including esports as events in multi-

sport competitions – for instance, the 2022 Asian Games featured esports as an official medal event, and while esports in the Olympic Games remains a topic of debate, the mere conversation indicates how far esports has come in being considered alongside conventional sports *(Bousquet & Ertz, 2021)*.

Job growth in the esports sector looks strong as the industry *expands (Allied Market* Research*, 2024; Johnson & Woodcock, 2021)*. A leading market report projects that by 2033 the global esports industry will reach its highest revenues ever, implying many new job roles will emerge in its ecosystem *(Allied Market* Research*, 2024)*. Importantly, however, experts caution about structural risks: the esports industry's dependence on a few popular game titles (controlled by publishers) *(Karhulahti, 2017; Peng et al., 2020)*, and on certain regional markets could pose stability issues. As one interviewee warned (*Virtus.Pro CEO Interview, 2025*), esports clubs must diversify across multiple game titles and geographical markets to mitigate the risk of any single game's decline or discontinuation – echoing how traditional sports clubs diversify through merchandising, multiple league participation, etc.

Overall, the growth prospects for esports are robust. Metrics like annual total prize money *(Ward & Harmon, 2019)*, global viewership hours, and sponsorship investment continue to rise each year *(Allied Market* Research*, 2024; Newzoo, 2022a)*. In 2023, global esports prize pools reportedly exceeded $500 million across all events, and engagement among the coveted youth demographic is higher than ever *(Esports Charts, 2024a)*. While some critics still argue that esports is "not a real sport" due to the lack of physical exercise *(Filchenko, 2018; Tjønndal & Skauge, 2021)*, many others point out that esports demands a comparable level of dedicated training, teamwork, and entertainment value as traditional sports *(Reitman et al., 2020)*. The trends suggest that as traditional sports organizations and tech companies increasingly collaborate with or invest in *esports (Allied Market* Research*, 2024; Scholz et al., 2020)*, its status will continue to rise, bringing more formal recognition to esports careers and potentially integrating esports more deeply into the broader sports industry.

● 5 The Future of Esports Professions

○ 5.1 New Professions and Challenges

The esports industry is already spawning new specialized roles that did not exist a decade ago *(Johnson & Woodcock, 2021)*. Beyond the core roles of players and coaches discussed earlier, some important emerging professions in esports include data analysts, mental performance coaches, broadcast/streaming content producers, community managers, and legal experts specialized in gaming and media (*Virtus.Pro CEO Interview, 2025*). Table 2 provides examples of key career areas in esports and some roles within them, illustrating the breadth of professions beyond just playing:

Examples of key esports career paths beyond playing

Career Area	**Roles**
Competitive Play	Pro Player, Streamer (content creator)
Coaching & Analysis	Coach, Strategy Analyst, Scout
Media & Content	Broadcast Commentator, Video Producer, Community Manager
Business & Marketing	Marketing Manager, Team Manager, Public Relations (PR)
Technology & Data	Data Analyst, IT Support Specialist, Software Developer
Legal & Governance	Esports Lawyer, IP (Intellectual Property) Specialist, League Administrator
Health & Performance	Esports Psychologist, Nutritionist, Physiotherapist

Table 2. Examples of key esports career paths beyond playing.

For example, the Virtus.pro manager that been interviewed predicts that “data analysts, mental coaches, and lawyers knowledgeable in intellectual property” will be among the key roles in the coming years of esports (*Virtus.Pro CEO Interview, 2025*). The need for intellectual property (IP) lawyers is rising because esports content involves complex rights issues – games are the intellectual property of publishers *(Karhulahti, 2017)*, and everything from tournament streams to player contracts can raise legal questions about IP, licensing, and broadcast rights *(Reitman et al., 2020)*. Similarly, as events move increasingly online and virtual assets (like in-game items or NFTs) gain value *(Newzoo, 2022)*, roles like cybersecurity specialists and platform engineers become crucial to protect competitive integrity and digital economies *(Bousquet & Ertz, 2021)*.

Other potential new roles on the horizon include talent scouts dedicated to finding the next generation of esports pros (using online platforms and AI-driven scouting tools to identify top players globally) *(Ward & Harmon, 2019)*, and esports ethics or compliance officers who develop codes of conduct and handle issues like cheating, match-fixing, or doping in esports *(Bousquet & Ertz, 2021)*. An ongoing challenge is establishing robust talent pipelines: ensuring that youth interested in esports have clear paths to develop their skills and transition into professional roles *(Nyström et al., 2022)*. Currently, many in the industry are self-taught or come from adjacent fields; we may see more formal apprenticeship or internship models develop, as well as certification or licensing for certain roles (for example, referees or coaches could eventually be certified by an esports governing body). Another challenge is maintaining player health and wellness in the face of grueling practice hours and travel schedules – hence, we anticipate fields like sports science, physiotherapy, and psychology to expand their presence in esports contexts, focusing on issues like repetitive strain injury prevention, mental health support, and career longevity *(Nyström et al., 2022)*.

A strategic risk unique to esports is publisher dependence. Unlike sports such as soccer or basketball, which are essentially public domain activities (no single entity “owns” the concept of football or basketball), each esports title is owned by a game publisher who can alter the game, impose rules, or even discontinue the game entirely. If a popular game is shut down or loses support, teams and professionals built around that game can find their careers in jeopardy *(Karhulahti, 2017)*. Our interview highlighted this risk: esports clubs must diversify across multiple games and revenue sources to reduce the impact of any one game’s decline

or a publisher's change of strategy (*Virtus.Pro CEO Interview, 2025*). Therefore, future esports professionals must be adept at navigating complex business ecosystems involving not just teams and leagues, but also large technology companies (the publishers), streaming platforms, and global audiences – all under rapidly changing conditions.

○ 5.2 The Impact of Technology: Artificial Intelligence, VR, and Other Innovations

Advances in technology will continue to shape esports careers and the types of expertise required. Artificial Intelligence (AI) is poised to be a significant factor *(Grand View Research, 2024)*. Teams are already exploring AI-driven analytics tools: for example, the North American team Cloud9 partnered with NVIDIA to develop custom AI models to analyze gameplay data and enhance player training *(Cloud9, 2024)*. AI tools can quickly identify patterns in opponents' strategies or help simulate optimal scenarios for practice. Shortly, AI "assistants" might be used by players to improve their reaction time or decision-making by providing real-time feedback or analysis *(Grand View Research, 2024)*. For coaches and analysts, mastering these AI tools and integrating them into training regimens could become a standard part of the job.

Virtual Reality (VR) and Augmented Reality (AR) may also spawn entirely new forms of competitive gaming. VR esports (where players compete inside virtual environments using VR headsets and motion controllers) are already emerging in games like Beat Saber and Echo Arena. As VR technology improves and becomes more widespread, professionals will be needed to design and balance these games to run VR tournaments and to coach players in three-dimensional virtual spaces (which involve physical movement and spatial awareness quite different from PC or console games*) (Allied Market* Research*, 2024; Filchenko, 2018; Grand View Research, 2024)*. On the spectator side, AR overlays might provide viewers with real-time stats, virtual replays, or interactive experiences during live esports events, which would require AR developers and broadcast technicians to implement *(see Grand View Research, 2024, for general AR trends in gaming)*. In short, tech innovations will continually blur the line between the digital and physical aspects of esports.

Other technological trends affecting esports include improvements in networking (like 5G mobile networks and low-latency streaming), cloud gaming, and blockchain *(Grand View Research, 2024)*. Cloud gaming allows high-end games to be played on any device via streaming from servers, which could lower hardware barriers and expand esports access to regions with less gaming PC penetration – potentially creating new player bases and viewership markets (for example, mobile esports are already huge in parts of Asia) *(Allied Market* Research*, 2024; Grand View Research, 2024; Newzoo, 2022a)*. Professionals in IT infrastructure and cloud services thus have roles to play in ensuring smooth online tournament experiences. Blockchain and NFTs have started to appear in gaming as ways to create tradable in-game assets or reward mechanisms; if these trends stick, esports might see roles for blockchain specialists or digital asset managers (particularly if games incorporate collectible or tradable items of real value) *(Grand View Research, 2024; Newzoo, 2022a)*. Overall, as technology evolves, esports professions will become even more tech-centric, requiring a fusion of gaming knowledge with cutting-edge digital innovation skills.

○ 5.3 Models for the Development of Esports Academies

To sustain the growth of the industry, many experts suggest establishing structured esports academies and training programs. These could mirror the model of sports academies that exist for soccer, basketball, etc., where promising young talent is identified and developed under professional coaching in a dedicated environment (*Nyström et al., 2022)*. Some esports franchises have already started junior teams often called “academy teams” that compete in lower-tier leagues as training grounds (for example, many Overwatch League teams fielded academy squads in regional competitions) *(Scholz et al., 2020)*. Educational institutions are also getting involved: universities have begun offering certificates or minors in esports operations *(Nyström et al., 2022)*, and in places like China there are government-industry partnerships launching esports vocational schools *(Zhang, 2020)*.

A promising model is the dual-track education approach, where students combine their regular studies with esports training. For example, a university might partner with a professional team to offer a semester-long course on esports event management or to

provide college credit for students competing in collegiate leagues. Some high schools now allow students to count after-school esports practice towards certain curricular goals, or they integrate topics like video production and business (through organizing campus esports tournaments) into the learning experience *(Tjønndal & Skauge, 2021)*. There are also online academy platforms that offer coaching sessions, strategy guides, and even certifications for specific esports (targeting games like League of Legends or Fortnite). These platforms often connect experienced players with newcomers for mentoring, helping to standardize skills and knowledge *(Newzoo, 2022a)*.

Industry reports emphasize that successful esports academy models will integrate both gaming skills and soft skills. For example, players in an academy might not only practice the game but also receive training in communication, teamwork, media relations, and personal branding – preparing them for the public-facing role of being a professional gamer. Similarly, an “esports business academy” program should teach real-world management and marketing concepts alongside game-specific knowledge. Lessons can be drawn from traditional sports: top soccer academies, for instance, include education on nutrition, psychology, and financial management for young athletes *(Nyström et al., 2022; Ye et al., 2021)*. Likewise, esports academies could incorporate courses on mental health, stress management, and career planning (knowing that not every trainee will become a star player, some may transition into coaching or other roles) *(Johnson & Woodcock, 2021)*. If well-designed, these academies and educational programs can feed a steady pipeline of qualified players, coaches, analysts, and administrators into the esports industry, which will be crucial for its long-term sustainability.

○ 5.4 Recommendations for Educational Programs

Based on the analysis in this thesis, educational programs aiming to prepare future esports professionals should include the following elements:

- **Industry-Relevant Curriculum:** Courses should cover esports-specific content (game mechanics, tournament formats, streaming technology, esports marketing) alongside general skills (business management, communications, data analysis). As one

executive put it (*Virtus.Pro CEO Interview, 2025*), managers in esports need a blend of solid academic knowledge and an understanding of gamer culture. Therefore, curricula should integrate case studies from real esports organizations and up-to-date industry trends.

- **Practical Experience:** Hands-on experience is invaluable. Programs should include internships or practicum projects in collaboration with esports teams, event organizers, or gaming companies. For example, a school could partner with a local esports organization to have students help organize a campus tournament or manage a live stream, thereby gaining real experience.
- **Interdisciplinary Skills:** Esports programs should combine IT and media skills (for broadcasting, video editing, analytics) with soft skills (teamwork, leadership, communication). Training in soft skills – such as leadership and emotional intelligence – reflects industry advice that respecting and engaging the audience (community management) *(Deloitte, 2024; Virtus.Pro CEO Interview, 2025*) and effective teamwork are critical *(Ye et al., 2021)*.
- **Flexibility and Lifelong Learning:** Given the fast pace of change in esports (new games, new platforms, shifting trends), curricula must be regularly updated. Modules on emerging technologies (AI, VR, blockchain in gaming), new popular game titles, or evolving legal/regulatory issues should be introduced frequently. Students should be encouraged to be self-directed learners able to adapt post-graduation.
- **Health and Well-being Education:** Similar to sports programs, esports students should learn about maintaining healthy gaming habits – including ergonomics (proper seating and posture), vision care, exercise and nutrition, and managing stress and screen time. This can improve their performance and longevity in the field.
- **Career Guidance and Diversity of Paths:** Programs should counsel students on the variety of esports careers available (so they don't focus only on the narrow goal of "pro player"). Guest lectures by esports professionals in various roles – pro players, team managers, event producers, game developers, etc. – can expose students to multiple pathways and help them network.
- **Global and Legal Awareness:** Since esports is a global phenomenon, education should address international contexts – understanding different regional esports markets, basics of international IP law (as highlighted by the need for legal experts in esports), visa regulations for players, and cross-cultural communication for global teams.

Implementing these recommendations will help produce well-rounded, job-ready graduates who can meet the evolving needs of the esports industry. The goal is to create a talent pool that not only loves gaming but also has the professional skills to push the industry forward responsibly.

● 6 Esports Ecosystems and Stakeholder Collaboration

Esports is sustained by a broad ecosystem of interdependent stakeholders: game developers and publishers, professional teams and players, sponsors, and advertisers, tournament organizers and league operators, media and streaming platforms, educational institutions, and government/regulatory bodies *(Bousquet & Ertz, 2021; Peng et al., 2020; Reitman et al., 2020)*. Each group plays a role in the structure and sustainability of the industry. For example, game publishers create and update the games and often run the official competitions *(Karhulahti, 2017; Peng et al., 2020)*; players and teams provide the entertainment and competitive content that draws audiences *(Johnson & Woodcock, 2021)*; sponsors provide the financial backing *(Allied Market* Research*, 2024)*; media platforms deliver the content to fans worldwide *(Bousquet & Ertz, 2021)*; educational programs train new professionals *(Nyström et al., 2022)*; and governments can provide legitimacy and infrastructure (or impose regulations) *(Peng et al., 2020; Zhang, 2020)*. In practice, all these stakeholders must cooperate effectively for the esports system to thrive. As the International Esports Federation notes, “the esports ecosystem relies on all its stakeholders to function properly” – meaning no single entity can ensure success in isolation *(International Esports Federation, 2023)*. In the following sections, this paper examines each major stakeholder’s role, highlight examples of successful partnerships, and identify areas where better collaboration could strengthen the esports ecosystem.

○ 6.1 The Esports Ecosystem and Its Stakeholders

At the core of the esports ecosystem are the game developers and publishers (e.g. companies like Riot Games, Valve, Activision Blizzard, Tencent). They own the intellectual property (IP) of the games and thus control fundamental aspects of the competitive scene: the game rules, balance updates, and often the structure of professional competition. Some publishers directly run their own pro circuits – for instance, Riot Games operates regional and global leagues for League of Legends, and Valve Corporation hosts The International for Dota 2 – while other publishers license independent tournament organizers to run events (for

example, Capcom allows multiple organizers to host Street Fighter tournaments) *(Bousquet & Ertz, 2021; Karhulahti, 2017; Peng et al., 2020)*. The extent of publisher involvement shapes how the ecosystem functions: a tightly controlled publisher-run league can offer stability (as with Riot's franchise leagues), whereas a more open ecosystem allows grassroots events but can be less coordinated.

Professional teams and players are the active competitors and content creators. Well-known esports teams like T1, Fnatic, G2 Esports, or Team Liquid often field rosters across multiple games *(Johnson & Woodcock, 2021; Scholz et al., 2020)*. These teams train players *(Johnson & Woodcock, 2021)*, create content for fans, negotiate sponsorships, and build their brand – similarly to sports clubs *(Filchenko, 2018)*. They inject personality and narrative into esports, which is key for fan engagement. Corporate investments have flowed into teams: traditional sports team owners (from the NBA, NFL, European football, etc.) have purchased or started esports teams *(Scholz et al., 2020)*, and legacy brands like Red Bull sponsor or even co-own esports organizations *(Allied Market* Research*, 2024; Bousquet & Ertz, 2021)*. This corporate involvement brings more stable funding and professional management practices to teams, further professionalizing the industry.

Sponsors and media platforms inject capital and visibility. Major consumer brands (Coca-Cola, Intel, Mercedes-Benz, Nike, and many tech companies) see esports as a channel to reach young, digitally native audiences *(Bousquet & Ertz, 2021; Deloitte, 2024)*. Sponsorship dollars finance a large portion of esports: they contribute to prize pools, team salaries, and event production costs. Industry analyses indicate that sponsors are the single biggest source of revenue for esports teams and event organizers. In parallel, media and streaming platforms like Twitch (owned by Amazon), YouTube Gaming (Google), and Facebook Gaming broadcast competitions to the world *(Allied Market* Research*, 2024; Newzoo, 2022a)*. Unlike traditional sports, esports viewership is largely free and online rather than behind subscription TV services – meaning advertising and sponsorship integration are crucial for monetization. For example, the League of Legends World Championship streams are free to watch, but the event is funded by sponsors and regional media deals (in some regions, TV networks pay for broadcasting rights, but globally the model is different from, say, FIFA World Cup deals). New innovative advertising formats are used, like in-game branding (virtual billboards or banners showing sponsor logos inside the game for viewers) *(Bousquet & Ertz, 2021; Karhulahti, 2017; Newzoo, 2022a)*. The symbiosis is clear: stream platforms

provide the audience, sponsors provide the money, and together they shape the economic structure of esports content delivery.

Tournament organizers and leagues create the competitive structure and live events that make up the esports calendar. Some are part of the game publishers (as mentioned, Riot and Blizzard directly run their leagues), while others are independent companies like ESL, DreamHack, or FACEIT that specialize in esports event management *(Bousquet & Ertz, 2021; Newzoo, 2022a; Peng et al., 2020)*. Collaboration is needed between these organizers and other stakeholders: for instance, third-party organizers must often align with publishers for permission and game data access, and they must work with teams on scheduling and participation agreements *(Nyström et al., 2022; Peng et al., 2020)*. In franchise league models, organizers (the publisher in that case) share some revenues with teams and may support player welfare initiatives like a players' union or minimum salary *Scholz et al., 2020)*. In open tournament models, organizers focus on staging compelling events and open qualifiers *(Bousquet & Ertz, 2021)*. Both models have pros and cons; many regions use a mix (closed franchise leagues for stability, plus open tournaments for broad inclusion). A recent trend is the formation of neutral federations or associations (like the Global Esports Federation, GEF) which aim to bring together multiple stakeholders – governments, publishers, and teams – to coordinate on calendars and standards *(Nyström et al., 2022; Peng et al., 2020)*. Though still in the early stages, such bodies reflect the understanding that greater cooperation (for example, avoiding schedule conflicts between big events, or standardizing rules on cheating or player transfers) would benefit the industry as a whole.

Educational institutions and training programs are emerging stakeholders as well. As discussed, universities and colleges worldwide have started varsity esports teams *(Scholz et al., 2020; Tjønndal & Skauge, 2021)*, and even dedicated esports facilities (arenas or labs on campus) *(Nyström et al., 2022)*. Publishers are beginning to partner with these academic programs: for example, in 2023 Riot Games announced a multi-year deal with a collegiate esports organizer (GGTech) to manage official college League of Legends and Valorant leagues in North America *(Daniels, T., 2023)*. Similarly, Amazon's Twitch has supported a pan-European university esports league *(Geracie, N.,2020)*. These programs give student players a competitive experience and also expose students to professional standards in coaching, analysis, and event management. However, as noted in Chapter 4, education-industry collaboration still has gaps – standard curricula are only just being developed *(Nyström et al., 2022)*, and companies often report that graduates lack some practical skills

needed for emerging roles. Overall, colleges and publishers are starting to link up to create talent pipelines, but more alignment is needed to ensure academic programs truly prepare students for esports jobs.

Finally, government and regulatory bodies influence esports through recognition, legislation, and sometimes funding *(Peng et al., 2020)*. Some governments have been quite proactive. China, as mentioned, officially recognized esports players and operators as professions in 2019 *(Zhang, 2020)* and has invested heavily in esports infrastructure (for example, the city of Hangzhou built an “esports town” with arenas and facilities ahead of the 2022 Asian Games) *(Peng et al., 2020)*. Chinese officials often frame esports as part of national technological and cultural development. South Korea’s government in the 2000s supported esports stadiums and training programs, which helped make Korea a dominant force in esports *(Bousquet & Ertz, 2021; Karhulahti, 2017; Peng et al., 2020)*. On the other hand, governments also impose regulations that shape esports: for instance, China’s strict rules on youth gaming time and content censorship affect how games are played and broadcast *(Newzoo, 2022a)*. In Europe and North America, governments have been relatively hands-off, though some national sports agencies now include esports and debates continue about visa classifications for pro players or whether esports qualifies for certain funding *(Reitman et al., 2020)*. The lack of a global governing body means issues like match-fixing or doping in esports are handled by individual leagues or third-party watchdogs (like the Esports Integrity Commission) *(Bousquet & Ertz, 2021; Nyström et al., 2022; Peng et al., 2020)*. Government involvement can lend legitimacy and resources, but too much or misaligned regulation could also hinder flexibility, so finding the right balance is an ongoing process.

○ 6.2 Game Developers and Publisher-led Ecosystems

Game developers/publishers often sit at the center of the esports ecosystem, given their control over the games themselves. Riot Games provides a prominent example of a publisher-led ecosystem: not only does Riot create League of Legends, but it also runs its entire global competitive structure (the League Championship Series in North America, the LEC in Europe, LCK in Korea, etc., plus the World Championship). In 2018, Riot introduced a

franchising model for the North American LCS, wherein teams paid a buy-in fee (reported around $10 million for existing teams, $13 million for new entrants) to secure permanent slots; in return, Riot shares media and sponsorship revenue with those teams and helped establish a players' association for pro players *(Khan, I., 2017)*. This was intended to provide stability for teams (no relegation worries) and encourage long-term investment *(Scholz et al., 2020)*. Riot's approach extends beyond competition – it also produces a lot of the content around its esports (like documentaries, all-star events, and opening ceremonies with high production value), creating an entire entertainment ecosystem around the game *(Bousquet & Ertz, 2021)*.

Other publishers have taken different routes. Activision Blizzard launched city-based franchises for its Overwatch League (OWL) and Call of Duty League, explicitly recruiting traditional sports team owners as franchise investors (e.g., the owners of the New England Patriots, Los Angeles Rams, etc., bought in). They mirrored the structure of traditional sports with home cities and home/away scheduling (though the pandemic disrupted live city events) *(Scholz et al., 2020)*. Activision Blizzard also entered media deals – notably selling broadcast rights of OWL to Disney/ESPN and streaming rights to Twitch and even saw an equity stake by traditional media (e.g., a division of Comcast bought into the OWL) *(Cohen, A., 2018)*. Meanwhile, Valve(developer of Dota 2 and CS:GO) took a more open approach: aside from its annual International which it directly funds (partly via in-game item sales to fans), Valve largely allows third-party tournament organizers to operate and doesn't impose franchising in Dota 2 (making it more akin to an "open circuit" like tennis or golf) *(Bousquet & Ertz, 2021)*. This fosters a mix of events by different organizers, sometimes resulting in a less predictable structure but a more grassroots feel.

Tencent, the Chinese tech giant, is an interesting case as it is the publisher or part-owner of many major esports titles (it owns Riot Games, has a large stake in Epic Games, partial stakes in Activision Blizzard and Ubisoft, etc.) *(Grand View Research, 2024; Newzoo, 2022b)*. Tencent has enormous influence, especially in Asia. For example, Tencent leveraged its resources to form international partnerships: in 2025, Tencent's esports division announced a strategic alliance with a Saudi-backed Esports World Cup initiative, aiming to integrate Chinese esports more with global events *(Tencent, 2025)*. Domestically, Tencent has worked with local Chinese governments (like Wuhu City) to build esports parks and even an esports university *(Peng et al., 2020; Zhang, 2020)*. These show how a major publisher can marshal both corporate and government support to expand an ecosystem. More broadly,

when publishers ally with state or media partners, they can set terms for the industry: for instance, Tencent's heavy investment is credited with helping China's esports industry rebound and grow 4.6% in revenue to about $3.8 billion in 2024, even as global growth slowed a bit *(Cao, A., 2024)*.

In summary, publishers define the competitive landscape: a strict franchise model (like Riot's or Blizzard's) can drive professionalism and stable investment, whereas an open model (like Valve's or many fighting game communities) can encourage grassroots participation and diversity of events. Each approach has trade-offs. The industry is still experimenting with finding the right balance of publisher control versus independent ecosystem growth.

○ 6.3 Teams, Leagues, and Event Organizers

Professional teams and leagues are the engines of day-to-day competition. Successful teams not only train players but also often collaborate closely with other stakeholders *(Bousquet & Ertz, 2021; Johnson & Woodcock, 2021; Peng et al., 2020)*. Many top teams provide feedback to game developers on competitive balance *(Johnson & Woodcock, 2021)* or help shape tournament rules by being part of player/team unions or advisory boards. In some regions, teams have even helped form governing associations; for example, South Korea's KeSPA (Korean e-Sports Association) historically coordinated among publishers, teams, and broadcasters to run national leagues and promote Korean esports globally *(Peng et al., 2020)*. In franchise leagues, teams become long-term partners with the publisher – they share revenue, have guaranteed slots, and can invest in infrastructure (like training facilities or academies) knowing they won't be relegated *(Reitman et al., 2020; Scholz et al., 2020)*. This fosters more stable careers for players and encourages teams to invest in support staff (analysts, sports psychologists) to gain competitive edges. The downside is reduced mobility – new organizations can't just rise easily *(Scholz et al., 2020)*. By contrast, in open esports ecosystems *(Bousquet & Ertz, 2021)*, any new team can try to qualify for major events, which keeps the door open for fresh talent but can make it harder for teams to invest confidently long-term (since a few bad results can knock them out of top competitions).

Tournament organizers, whether league operators or one-off event hosts, must coordinate across stakeholders to pull off successful *events (Nyström et al., 2022; Peng et al., 2020)*. A large international tournament like ESL's Intel Extreme Masters, for instance, involves partnerships with hardware sponsors (Intel being the title sponsor) *(Bousquet & Ertz, 2021)*, deals with streaming platforms for broadcasts, contracts with venues (e.g. stadiums or convention centers) and often local governments for support, plus ensuring the participation of top teams which may require schedule coordination with other events. When publishers and third-party organizers co-exist, aligning schedules is crucial to avoid burnout or conflicts. League of Legends now has a structured global season with regional leagues, a mid-season invitational, and Worlds – independent events in LoL have become rare, as Riot keeps a tight calendar *(Karhulahti, 2017)*. In games like CS:GO, multiple organizers exist *(Bousquet & Ertz, 2021)* and a problem emerged of overlapping events – the response has been partial coordination through a circuit ranking system and occasional summits among organizers to space out events. The formation of umbrella organizations like the GEF (Global Esports Federation) or the IE.S.F (International Esports Federation) is an attempt to provide a forum for communication between different stakeholders globally, although these are still gaining traction *(Nyström et al., 2022; Peng et al., 2020)*.

A notable successful collaborative structure is the Olympic Council of Asia's inclusion of esports in the Asian Games (as a medal sport in 2022) *(Wong, J., 2018)*. That required coordination between game publishers, national bodies, and traditional sports authorities to set standards for team selection, anti-cheating measures, etc., effectively integrating esports into a multi-sport context *(Nyström et al., 2022; Peng et al., 2020)*. This kind of cross-ecosystem collaboration could serve as a model for the future, ensuring that esports events don't operate in silos but rather in a somewhat harmonized sports calendar.

○ 6.4 Sponsors and Media Platforms

Sponsors and advertisers are essential collaborators that give esports financial legitimacy and sustainability. Brands from outside the gaming world have increasingly entered esports, seeing its large young audience as valuable *(Allied Market Research, 2024; Deloitte, 2024;*

Newzoo, 2022a). Companies like Coca-Cola, Mercedes-Benz, and Intel have all sponsored esports teams or events in recent years. These partnerships often go beyond simple logo placement – for example, Mercedes-Benz partners with multiple League of Legends leagues and produces co-branded content; Red Bull runs its own esports tournaments and training workshops with teams, leveraging its brand's association with extreme sports and high-performance *(Bousquet & Ertz, 2021; Filchenko, 2018)*. Such partnerships bring marketing expertise and broaden esports' appeal. Traditional sports clubs partnering with esports is another trend: European football clubs (like Paris Saint-Germain, FC Schalke 04) have fielded teams in esports (notably in League of Legends and FIFA), sometimes entering official leagues, which cross-pollinates fan bases and best practices in sports operations (*Scholz et al., 2020; Tjønndal & Skauge, 2021)*.

Media and streaming platforms similarly partner deeply with the industry *(Allied Market* Research*, 2024; Newzoo, 2022a)*. Twitch and YouTube have struck exclusive deals for certain leagues – for instance, Twitch reportedly paid for exclusive rights to stream Overwatch League matches in its early seasons *(Ring, O., 2020)*, and YouTube later signed a deal to stream the Call of Duty League and some Blizzard esports exclusively *(Šimić, I., 2023)*. These deals infuse money into the ecosystem (broadcasters paying for rights is a revenue source, though smaller than in traditional sports so far). Traditional media companies have also experimented: ESPN and Disney aired some esports on TV, and in Asia, TV networks regularly broadcast big esports matches *(Bousquet & Ertz, 2021; Newzoo, 2022a)*. A notable case was the 2018 Asian Games, where esports was a demonstration event, and local broadcasters, along with the Olympic Council, worked with publishers to present it in a multi-sport context – a collaboration bridging the gap between mainstream sports media and esports *(Esports Charts,2018)*.

The model of content distribution in esports is highly interlinked: content is often free to the viewer, meaning monetization happens via sponsors and platform partnerships. This has led to creative approaches, such as in-game advertising (e.g., virtual billboards in stadium maps), sponsored segments in broadcasts, or co-streaming (where popular streamers restream an event with commentary, expanding reach, often under an agreement with the event organizer) *(Newzoo, 2022a)*. It's a delicate balance to maximize revenue without charging viewers, and it relies on the cooperation of sponsors (to fund events), teams (to be open to heavy branding and content obligations), and platforms (to promote events and share advertising data). Overall, sponsors and media platforms shape not only the finances of

esports but also its public image – professional broadcasts and big-name sponsors lend credibility and attract wider audiences, which in turn draws more sponsors, creating a growth cycle *(Allied Market* Research*, 2024; Deloitte, 2024)*.

○ 6.5 Education and Academic Partnerships

Education-industry collaboration is a rapidly growing area in esports *(Nyström et al., 2022; Reitman et al., 2020)*. Collegiate leagues and university programs now offer structured entry points for young talent and future professionals *(Scholz et al., 2020; Tjønndal & Skauge, 2021)*. As mentioned, many universities across North America, Europe, and Asia have varsity esports teams, sometimes with scholarships similar to traditional sports *(Filchenko, 2018; Nyström et al., 2022)*. These collegiate programs often operate under partnerships: for example, Riot's North American collegiate program is managed by a partner organization (GGTech) to ensure standardized competition nationwide *(Daniels, T., 2023)*. In Europe, Amazon's involvement via Twitch in a university league demonstrates how a tech giant can support grassroots competitive infrastructure *(Poole, J., 2023)*.

Academic institutions are also collaborating on curriculum and research related to esports. Some universities have launched dedicated esports degree programs (e.g., degrees in esports management, esports performance, etc.) often in partnership with industry advisors to ensure relevance *(Nyström et al., 2022)*. For instance, a hypothetical scenario could be a university working with a game studio to develop a course on esports event production, or inviting pro players as guest lecturers in sports management classes to share real-world perspectives. There was even a high-profile (though ultimately false) rumor in 2018 that Tencent would fund esports courses at the University of Oxford – showing the level of interest in blending academia with industry *(Fitch, A., 2018)*. More concretely, some schools partner with tech companies: Samsung has sponsored esports labs at certain universities, providing equipment (*Samsung Business, n. d.*), and Microsoft has been providing access to Microsoft Azure (AI data analytics tool) to esports organizations (*Microsoft, 2020)*.

Despite these developments, there are shortcomings. As noted, standard curricula for esports roles are still nascent *(Nyström et al., 2022)*, and a gap exists between what

universities teach and the rapidly evolving needs of the industry. Many companies find that while graduates might know general concepts, they lack hands-on experience with things like running a live stream, moderating an online community, or navigating the legal complexities of esports contracts *(Nyström et al., 2022; Virtus.Pro CEO Interview, 2025)*. To bridge this, experts suggest deeper collaboration: for example, co-designed programs where game publishers or esports firms help set the curriculum, joint internship pipelines (where students spend a semester working with a team or organizer as part of their degree), or even apprenticeship models akin to trade schools, where learning is primarily on the job but structured with academic oversight. An idea floated is accreditation standards for esports programs developed together by academic bodies and industry representatives, so that a student completing a program has demonstrable competencies that teams and companies value *(Nyström et al., 2022)*. In summary, while esports education is expanding quickly and is key to developing future talent, it will need an even closer partnership with the industry to ensure students are truly job-ready when they graduate.

○ 6.6 Government and Policy Support

Public-sector actors shape esports through official recognition, regulation, and sometimes direct investment. Several governments now view esports as a strategic asset – both culturally and economically. We've discussed China's strong official support: the government not only classified esports-related professions (legitimizing them for labor purposes) but also funds large infrastructure projects (like esports parks and stadiums) and includes esports in national events. Chinese officials often link esports to national pride and youth engagement on the global stage *(Peng et al., 2020; Zhang, 2020)*. South Korea is another pioneer: government support in the 2000s, including building esports stadiums (like the famous Busan stadium for StarCraft) and funding esports associations, helped cement Korea's dominance in early esports *(Bousquet & Ertz, 2021; Karhulahti, 2017)*. Countries like Japan and Singapore have also begun hosting international tournaments with government backing or incorporating esports into tourism and economic plans *(Hoppe, D., 2020b; Esports Insider, 2025)*. Even some Middle Eastern countries (e.g., Saudi Arabia, Qatar) have started

investing state funds into esports events and organizations as part of diversifying their entertainment sector *(Newzoo, 2022a; Tencent, 2025)*.

Policies, of course, vary. Some regulators provide incentives: for example, countries offering tax breaks for esports events or simplifying visa processes for international players (much like countries do for traditional sports events or athletes) *(Revera, 2024)*. Other government interventions come as restrictions: China's rules limiting under-18 gamers to certain hours per week and banning certain game content (violence, etc.) directly impact how esports leagues in China operate (forcing them to adjust schedules or rosters for youth players, and game companies to release separate compliant versions) *(Newzoo, 2022a)*. In Western countries, regulation has been lighter, but ongoing discussions include whether esports players should be classified similarly to athletes for visa and legal purposes *(Reitman et al., 2020)*, how to handle sports betting and gambling around esports (some places consider match-fixing under gambling laws), and whether existing sports laws (like those on performance-enhancing drugs) should apply or if new frameworks are needed *(Bousquet & Ertz, 2021; Peng et al., 2020)*.

One challenge of lacking a unified global body is inconsistency: rules about issues like match-fixing, doping, underage player protections, or contract standards can differ widely between regions and games. An independent watchdog, the Esports Integrity Commission (ESIC), has emerged to investigate and coordinate issues like cheating and betting fraud, but not all organizers are members *(Nyström et al., 2022; Peng et al., 2020)*. Governments could play a role here by supporting such bodies or adopting their standards nationally. Some national sports ministries have begun including esports under their umbrella (e.g., in France, esports is recognized by sporting authorities, which can help with funding and oversight) *(Peng et al., 2020)*. However, the debate continues in other places about whether esports should be recognized as a sport or kept separate (for instance, some argue it belongs under digital entertainment law rather than sports law) *(Filchenko, 2018; Reitman et al., 2020; Tjønndal & Skauge, 2021)*.

In summary, government support can provide a huge boost – funding events, building infrastructure, legitimizing careers (which can encourage parents to be supportive and sponsors to invest), and integrating esports into education and culture. On the flip side, governments can also impose constraints (like content regulations or limiting playtime) that the industry must adapt to. The ideal scenario for the esports ecosystem is a partnership

model: public-private initiatives where governments see esports as part of innovation and youth engagement and thus work with companies to provide resources while also ensuring fair play and youth protection *(Nyström et al., 2022; Peng et al., 2020)*.

○ 6.7 Collaboration Gaps and Strategies for Cohesion

Despite many successes in esports' development, there are still gaps where collaboration among stakeholders is lacking. One major issue is fragmented governance: there is no single international federation governing esports as a whole (unlike FIFA for soccer, for instance). As a result, rules and player protections can vary widely between games and regions *(Nyström et al., 2022; Peng et al., 2020)*. This fragmentation can hinder things like international player movement (visa issues, contract recognition across borders) *(Reitman et al., 2020)*, and can create confusion for sponsors or media trying to get involved globally (since they must navigate a patchwork of different league structures and rights deals) *(Peng et al., 2020)*.

Another gap, as discussed, is the misalignment between education and industry – curricula not keeping up with industry needs, and the lack of clear career pathways for aspiring professionals *(Nyström et al., 2022; Reitman et al., 2020)*. Additionally, many stakeholders still operate in silos. For example, a game's development team might not communicate much with the independent tournament organizers or community tournament hosts, leading to scheduling clashes or inconsistent rule *enforcement*. Or a team's competitive staff might be disconnected from its marketing team, leading to missed opportunities in storytelling or fan engagement. In short, better communication and shared frameworks could solve many minor frictions that collectively hold the ecosystem back from being more efficient and unified *(Nyström et al., 2022; Peng et al., 2020)*.

To address these issues, several strategies can be pursued:

- **Establish Multi-Stakeholder Councils and Standards:** Form industry associations or federations that include representatives from all key groups – publishers, teams, players, sponsors, broadcasters, etc. We already see moves like the Global Esports Federation (which includes some companies and sports bodies) and national esports federations in certain countries. These bodies can work on unified codes of conduct, standardized rules for player transfers, safety protocols, and more (*Nyström et al., 2022; Peng et al., 2020)*. For example, developing a common player contract template or a shared anti-cheating database could benefit all. Tencent's partnership with the Esports World Cup Foundation *(Tencent, 2025)* is an example of pooling networks internationally for a bigger goal. Shared guidelines for tournament formats or player health management *(Nyström et al., 2022)* could reduce friction when players and teams move between different competitions.

- **Expand Education-Industry Pipelines:** Encourage more cooperation between educational institutions and esports organizations *(Nyström et al., 2022; Reitman et al., 2020)*. This could involve companies helping design college courses, or colleges requiring internships with esports companies. Publishers could sponsor university research labs for esports tech, or teams could provide mentorship programs for students. Institutional scholarships and academy systems (akin to sports) can also be expanded – for instance, publishers might endow a professor position in "esports management" at a university, or teams might sponsor local school leagues to foster talent. The partnership between Riot and GGTech for collegiate esports in NA *(Daniels, T., 2023)* is a good start; expanding similar models globally can produce a more skilled workforce ready to enter esports jobs.

- **Promote Government-Industry Collaboration:** Governments should continue to officially recognize esports athletes and events (for visa and funding purposes), integrate esports into cultural and youth programs, and support infrastructure (like high-speed internet, venues, and incubator programs for gaming startups) *(Peng et al., 2020; Tjønndal & Skauge, 2021; Zhang, 2020)*. Public-private partnerships, such as Tencent's project with Wuhu City to build an esports complex *(Paek & Shin, 2017)*, illustrate how aligning government development plans with corporate investment can create "world-class" esports hubs. Policymakers can also facilitate international

collaboration by including esports in bilateral cultural exchanges or multi-sport events, and by harmonizing regulations (for example, agreeing on travel visa categories for esports athletes or coaches) *(Peng et al., 2020)*.

- **Leverage Cross-Industry Partnerships:** Traditional sports, entertainment, and education sectors can cross-pollinate with esports more *(Allied Market* Research*, 2024; Deloitte, 2024)*. Joint ventures like football clubs owning esports teams (PSG in Dota 2, etc.) bring sports marketing savvy into esports *(Scholz et al., 2020)*. Media companies partnering with tech firms (like ESPN working with Twitch) can produce hybrid events that reach broader audiences – for example, a televised tournament that also has interactive online elements *(Bousquet & Ertz, 2021)*. Additionally, integrating esports with STEM education *(Ye et al., 2021)*, or health initiatives *(Nyström et al., 2022)* can draw support from sectors that might not normally engage with gaming. For example, a program that uses an esports club to teach coding or media production can attract educational grants.

- **Focus on Inclusivity and Sustainable Careers:** Stakeholders should collaborate to ensure esports is inclusive and that participants have sustainable career options *(Johnson & Woodcock, 2021; Nyström et al., 2022)*. That means working together on player welfare programs – perhaps an industry-wide health insurance or retirement fund for pro players, funded by teams and organizers collectively. It could also mean inter-team agreements on limiting practice hours to prevent burnout *(Johnson & Woodcock, 2021)*, or jointly funding resources like counseling services *(Nyström et al., 2022)*. The formation of player associations (with support from publishers, as Riot did) *(Reitman et al., 2020)*, is a positive step. Diversity initiatives are also key: creating competitive opportunities for women and other underrepresented groups in esports will require sponsors willing to invest in those tournaments, teams ready to recruit and nurture diverse talent, and organizers including divisions or mixed tournaments *(Nyström et al., 2022; Reitman et al., 2020)*. Everyone benefits from a larger talent pool and audience.

In conclusion, the maturation of esports careers and the industry at large depends heavily on collaboration across the ecosystem. The most successful models we've seen – from Riot's franchise leagues (publisher-team collaboration) *(Bousquet & Ertz, 2021; Karhulahti, 2017)*, to Tencent's government-backed projects (public-private collaboration) *(Peng et al., 2020; Zhang, 2020)*, to emerging collegiate systems (education-publisher collaboration) *(Scholz et al., 2020; Tjønndal & Skauge, 2021)* – demonstrate the power of integrated efforts. However, there is room to deepen this coordination. Stakeholders should work towards building joint platforms for governance (like councils or federations as mentioned), aligning educational initiatives with professional needs *(Nyström et al., 2022)*, and maintaining open communication channels across borders and sectors. By embracing such collaboration, the esports ecosystem can become more professional, sustainable, and cohesive *(Nyström et al., 2022; Peng et al., 2020)*, ultimately benefiting players, fans, and businesses alike.

● 7 CONCLUSION

This scoping review has systematically mapped the complex and dynamic landscape of esports, an industry that has transitioned from a niche pastime to a global competitive enterprise in just two decades. Its future promises continued growth fuelled by technology advances, increasing media investment, and deepening engagement among youth. By fulfilling the objectives of the review, this thesis explored how esports history, its economic and social context, and its emerging professional ecosystem set the stage for a range of new careers. The research indentifies that key professions – from players and coaches to data analysts, marketers, and even lawyers – are already taking shape to support the competitive gaming scene. Organizations are increasingly recognizing the need for formal training and support structures: for example, as noted, some top teams now offer transition programs for retiring players and actively hire managers from diverse backgrounds to bring new expertise.

Comparing esports with traditional sports reveals both similarities and differences. Both domains value teamwork, coaching infrastructure, and fan engagement strategies. However, esports operates on digital platforms and evolving business models that differ from legacy sports in important ways (such as revenue streams and the role of game publishers). As one professional advised during our research (Virtus.Pro CEO Interview, 2025), success in esports careers will require respecting the audience, being flexible in one's role, and combining knowledge with passion for gaming. Those qualities – along with structured education and closer cooperation between industry and academia – will determine how well the esports ecosystem matures.

In summary, central hypothesis is supported. The rapid expansion of esports is indeed creating an urgent need for specialized roles and career pathways. As this scoping review has demonstrated, aligning educational programs with these needs will be crucial for the industry's sustainability. If academic institutions adapt to teach esports-specific management, analytics, law, health, and culture, and if industry leaders invest in developing talent beyond just players, then the esports sector can more effectively harness its human capital and sustain its growth. Parents and students should note that beyond the most visible role of "professional player," many vital professions are emerging in esports – including mental health professionals, event producers, software developers, and business managers. By acknowledging esports' professional depth and providing the right education and support

systems, society can ensure that this digital sport fulfills its potential as a legitimate career field, benefiting both the individuals involved and the broader entertainment economy.

● BIBLIOGRAPHY

Allied Market Research. (2024). *Esports market expected to reach $9.2 billion by 2033*. https://www.alliedmarketresearch.com/press-release/esports-market.html

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Bavelier, D., Green, C. S., Pouget, A., & Schrater, P. (2012). Brain plasticity through the life span: learning to learn and action video games. *Annual Review of Neuroscience*, *35*, 391–416. https://doi.org/10.1146/annurev-neuro-062111-150506

Bousquet, J., & Ertz, M. (2021). eSports: Historical Review, Current State, and Future Challenges. In S. Andrews & C. Crawford (Eds.), *Handbook of Research on Pathways and Opportunities Into the Business of Esports* (pp. 1–24). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-7998-7300-6.ch001

Cao, A. (2024, December 11). China's esports industry returns to growth in 2024 as Tencent, NetEase expand overseas. *South China Morning Post*. https://www.scmp.com/tech/big-tech/article/3290350/chinas-esports-industry-returns-growth-2024-tencent-netease-expand-overseas

Cloud9. (2024). *Frames win games: Cloud9 is powered by NVIDIA GeForce RTX 40 Series*. https://cloud9.gg/frames-win-games-cloud9-is-powered-by-nvidia-geforce-rtx-40-series/

Cohen, A. (2018, July 17). ABC, Disney, ESPN sign deal to broadcast the Overwatch League. *Sports Business Journal*. https://www.sportsbusinessjournal.com/Daily/Issues/2018/07/17/Technology/activision-blizzard-overwatch-league-abc-disney-espn.aspx

Daniels, T. (2023, July 19). Riot Games and GGTech announce major collegiate esports partnership. *Esports Insider*. https://esportsinsider.com/2023/07/riot-games-ggtech-collegiate-esports

Deloitte. (2024). *Let's play! The European esports market* (8th ed.). Deloitte Insights Report.

Esports Charts. (2018). *Asian Games 2018 esports competitions*. https://escharts.com/news/asian-games-2018

Esports Charts. (2024a). *Esports prize money dynamics 2018 - 2023*. https://escharts.com/news/esports-prize-money-dynamics-2018-2023

Esports Charts. (2024b). *League of Legends World Championship 2024 viewership statistics*. Escharts.com.

Esports Insider. (2025, May 13). Esports around the world: Singapore.

https://esportsinsider.com/2023/08/esports-around-the-world-singapore

Filchenko, M. (2018). *A Comparison Between Esports and Traditional Sports* [Class paper, San Jose State University]. SJSU ScholarWorks. https://scholarworks.sjsu.edu/do/search/?q=Filchenko&start=0&context=1551039&facet=

Fitch, A. (2018, May 15). Tencent to bring esports courses to University of Oxford. *Esports Insider*. https://esportsinsider.com/2018/05/tencent-university-of-oxford

Geracie, N. (2020, February 3). Amazon, GGTech Entertainment, and The NUEL launch pan-European university esports partnership. *InvenGlobal*. https://www.invenglobal.com/articles/10283/amazon-ggtech-entertainment-and-the-nuel-launch-pan-european-university-esports-partnership

Gottfried, J., & Sidoti, O. (2024, May 9). *Teens and video games today*. Pew Research Center. https://www.pewresearch.org/internet/2024/05/09/teens-and-video-games-today/

Grand View Research. (2024). *Gaming market size, share & trends analysis report*. Retrieved from https://www.grandviewresearch.com/industry-analysis/gaming-industry

Hoppe, D. (2020a). A short history of esports. *Gamma Law*. https://gammalaw.com/a-short-history-of-esports/

Hoppe, D. (2020b). Japan puts even more government support behind esports. *Gamma Law*. https://gammalaw.com/japan-puts-even-more-government-support-esports/

International Esports Federation. (2023). *Everything you need to know about Esports ecosystem*. https://iesf.org/everything-you-need-ti-know-about-esports-ecosystem/

Johnson, M. R., & Woodcock, J. (2021). Work, play, and precariousness: An overview of the labour ecosystem of esports. *Media, Culture & Society*, *43*(8), 1449–1465. https://doi.org/10.1177/01634437211011555

Karhulahti, V.-M. (2017). Reconsidering esport: Economics and executive ownership. *Physical Culture and Sport. Studies and Research*, *74*, 43–53. DOI:10.1515/pcssr-2017-0010

Khan, I. (2017, June 1). Riot releases details on NA LCS franchising with $10M flat-fee buy-in. *ESPN*. https://www.espn.com/esports/story/_/id/19511222/riot-releases-details-na-lcs-franchising-10m-flat-fee-buy-in

Larch, F. (2024, April 16). *eSports History: How it all began.* ISPO.com. https://www.ispo.com/en/sports-business/esports-history-how-it-all-began

Microsoft. (2020). *Cloud9 conquers esports using Azure data analytics*. Microsoft Customer Stories. https://www.microsoft.com/en/customers/story/794816-cloud9-conquers-esports-using-azure-data-analytics

Newzoo. (2022a). *Global esports & live streaming market report 2022*. https://newzoo.com/resources/trend-reports/2022-global-esports-live-streaming-market-report

Newzoo. (2022b). *The Games market will grow by 2.1% to reach $196.8 bn in 2022*. https://newzoo.com/resources/blog/the-games-market-will-show-strong-resilence-in-2022

Nyström, A.-G., McCauley, B., Macey, J., Scholz, T. M., Besombes, N., Cestino, J., Hiltscher, J., Orme, S., Rumble, R., & Törhönen, M. (2022). Current issues of sustainability in esports. *International Journal of Esports*. https://www.ijesports.org/article/94/html

Ocal, A. (2020, October 9). Dota 2's The International surpasses $40 million in prize money. *ESPN*. https://www.espn.com/esports/story/_/id/30079945/dota-2-international-surpasses-40-million-prize-money

Paek, J., & Shin, Y. (2017, May 18). Tencent is building an esports theme park in Wuhu, China. *InvenGlobal*. https://www.invenglobal.com/articles/1889/tencent-is-building-an-esports-theme-park-in-wuhu-china

Peng, Q., Dickson, G., Scelles, N., Grix, J., & Brannagan, P. M. (2020). Esports governance: Exploring stakeholder dynamics. *Sustainability*, *12*(19), 8270. https://doi.org/10.3390/su12198270

Poole, J. (2023, February 22). Amazon University Esports expands further into Europe. *Esports Insider*. https://esportsinsider.com/2021/03/amazon-university-esports-expands-further-into-europe

Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S., & Steinkuehler, C. (2020). Esports research: A literature review. *Games and Culture*, *15*(1), 32–50. https://doi.org/10.1177/1555412019840892

Revera. (2024, August 30). *Tax benefits available to gaming companies in leading countries*. App2Top. https://app2top.com/pravo/tax-benefits-available-to-gaming-companies-in-leading-countries-column-by-revera-270848.html

Ring, O. (2020, March 30). Blizzard and Twitch sign two year streaming rights deal for esports events. *Esports Insider*. https://esportsinsider.com/2017/06/blizzard-twitch-sign-two-year-streaming-rights-deal-esports-events

Samsung Business. (n.d.). *The University of Akron's esports program powers up, fueled by SSDs*. Samsung Electronics America.

https://www.samsung.com/us/business/support/resource-center/case-studies/getting-the-most-out-of-gaming-with-ssds/

Scholz, T., Völkel, L., & Uebach, C. (2020). Sportification of esports – A systematization of sport teams entering the esports ecosystem. *Frontiers in Sports and Active Living*, *2*, Article 585229. https://doi.org/10.3389/fspor.2020.585229

Šimić, I. (2023, December 11). Call of Duty League to broadcast exclusively on YouTube despite growing numbers on Twitch. *Esports Insider*. https://esportsinsider.com/2023/12/call-of-duty-league-youtube-exclusive

Tencent. (2025). *Esports World Cup Foundation Forms Strategic Partnership with Tencent*. https://www.tencent.com/en-us/articles/2202032.html

Tjønndal, A., & Skauge, M. (2021). Youth sport 2.0? The development of esports in Norway 2016–2019. *Qualitative Research in Sport, Exercise and Health*, *13*(1), 166–183. https://doi.org/10.1080/2159676X.2020.1836509

Virtus.pro Esports Executive. (2025). *Interview responses (translated)*. Unpublished manuscript.

Ward, M. R., & Harmon, A. D. (2019). ESport superstars. *Journal of Sports Economics*, *21*(8), 987–1016. https://doi.org/10.1177/1527002519865461

Wolf, J. (2019, March 13). Call of Duty franchise spots to sell at $25 million per team - ESPN. *ESPN.com*. https://www.espn.com/esports/story/_/id/26249076/call-duty-franchise-spots-sell-25-million-per-team

Wong, J. (2018, August 22). Esports as a medal sport in 2022 Asian Games faces setback. *Esports Insider*. https://esportsinsider.com/2018/08/esports-as-a-medal-sport-in-2022-asian-games-faces-setback

Ye, J.-N., Ye, J.-H., Wang, C.-M., & Hong, J.-C. (2021). Development of 5Cs educational value scale for eSport games. *International Journal of Technology in Education and Science*, *5*(3), 362–374. https://doi.org/10.46328/ijtes.215

Zhang, C. (2020, March 31). The Chinese government recognises esports as a profession. *Esports Insider*. https://esportsinsider.com/2019/02/the-chinese-government-recognises-esports-as-a-profession