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Development of eSports in Ukraine

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Abstract

Esports in Ukraine started significantly later than in other progress countries, therefore in present times, Ukrainian gamers are face to face with specific problems of the esports accelerating development in the country. The research aims to study problems of developing esports in Ukraine. In professional esports teams, players receive a salary. Now monthly salary is a thousand dollars. That's what one gets consistently. In addition, there is prize money, of which he receives 80-85%, and the rest the player gives to the employer. It depends on the number of tournaments

and prize pools, but there were times when they received an additional one and a half thousand dollars. On average, it is about \$500. In total, in 2023, Ukraine turned out to be the main esports location in Eastern Europe and hosted 31 Dota 2 tournaments - almost half of all competitions held in the discipline. 20 of them were organized by the largest esports platform in Ukraine ESportsBattle, which offered \$120 thousand prize money and generated 1.2 million hours of broadcast views.

Keywords: esports, Game, Player, Shooter, Business

Introduction

Cybersport (also known as computer sports or esports) is a team or individual competition based on computer games. All esports disciplines are divided into several main classes, distinguished by the properties of spaces, models, game task and developed game skills of esports players: First-person shooters, real-time strategies, sports simulators, car simulators, flight simulators, fighting games, team role-playing games with elements of tactical and strategic games, etc. (Hamari & Sjoblom, 2017; Ghazali *et al.*, 2023) ^[14, 13].

The prize pools can reach fifty million US dollars. Tournament games are broadcast live on the Internet, gathering a multi-million audience. For example, the final of The International 2015 was watched by more than 4.6 million viewers, and in 2020, viewers spent more than 21 million hours broadcasting matches of the first division of the Russian EPIC League tournament. Since 2024, esports has been recognized as an Olympic discipline, the first Olympic esports games will be held in 2025 in Saudi Arabia.

Like classic sports, esports comes with significant health risks. The enormous strain on the eyes and hands, a sedentary lifestyle, and high levels of stress can lead to a variety of pathologies, while esports medicine is not developed enough to diagnose and treat injuries in a timely manner. Many athletes are forced to end their esports careers before reaching the age of 30 for health reasons due to problems with the eyes, hands, wrists, neck, or back (Salehudin, & Alpert, 2021; Orme, 2022) ^[26, 23].

So, Esports in Ukraine started significantly later than in other progress countries, therefore in present times, Ukrainian gamers are face to face with specific problems of the esports accelerating development in the country. The research aims to study problems of developing esports in Ukraine.

Material and Methods

Participants

The population of this study was esports clubs located in a million West Ukrainian city Lviv: 163 esports players (for the most part of them are males and 18 are females) took part in the research 23.8±2.4 years old (M ± SD).

Organization

Internet search on esports games Dota 2, Counter-Strike, Fortnite, PUBG (Chang, 2013; Abbasi *et al.*, 2021)^[8, 1]. All the necessary data were obtained from statistical websites such as Statista, escharts, esportsearnings. The tables were processed compared and graphically represented using Excel program.

The study was done in accordance with the basic bioethical norms of the Helsinki Declaration of the World Medical Association on Ethical Principles for Conducting Scientific and Medical Research. Written informed consent was obtained from each studied participant.

The research has been approved in a good time by Science Research Ethics Committee of Lviv State University of Physical Culture named after Ivan Boberskiy.

Statistical elaboration

Normality of distribution of imparical data were shown using Shapiro – Wilkey method ($p > 0.05$); parametric statistical methods were used.

Results and Discussion

A way to an esports player in Ukraine

What is a typical way of a young person to become a

professional Esports player in Ukraine? As rule, they often started playing Counter-Strike in earnest in oldest grades. They want not only just to play, but to play better than their classmates. When actual Ukrainian Esports players started playing, the era of computer clubs had already passed, everyone was already playing from home. For about a year, they actively played on their own and online, and then many of them found out that Counter-Strike competitions were held in Kyiv. They are finally fascinated when they got to the first tournament: It turns out that there are people who are seriously involved in this. Of course, the lost a few first two matches. But they began to devote more and more time to the game, to gather the first amateur teams. Then they can say that at that moment they wanted to become a professional Esports player (Hsu, & Lu, 2004; Jang, 2021)^[15, 19].

More professional young players gather several teams, constantly trained and eliminated weaker players. Over time, when they reach a stable warehouse and results, they are usually noticed by an organization that decides to invest money in the team (Tables 1, 2). They saw that it made sense to invest in promising players who could grow, and provided conditions for training and a salary (Ma, 2021)^[20].

Table 1: Esports teams statistics (2016 – 2024)*

Teams	Prize Money Earned, USD	Team Tour-naments	Peak Viewers	Mat-ches	Win Streak
T1 T1 LoL,T1	9418521	42	6402760	466	3
Weibo Gaming WBG LoL,Weibo Gaming	602143	14	6402760	134	2
DRX DRX LoL,DRX	1268330	27	147701	323	1
Falcons AP.Bren FLCN.Bren ML:BB,Bren Esports	1168817	26	5067107	214	2
Fnatic ONIC FNC.ONIC ML:BB,ONIC Esports	781495	34	5067107	284	4
JD Gaming JDG LoL,JD Gaming	2341588	33	4308901	312	-
RRQ Hoshi RRQ Hoshi ML:BB,Rex Regum Qeon	400963	28	4270270	232	2
Blacklist International BLCK ML:BB,Blacklist International	682130	21	4270270	211	1
Dplus DK LoL,Dplus KIA	2059220	34	4018728	367	-
EDward Gaming EDG LoL,Edward Gaming	4049177	41	4018728	350	2

*<https://escharts.com/teams?order=peak>

When do they get the feeling that this was something they could do for a living? In 2010, there were literally several professional Counter-Strike teams in the world – in Sweden, Denmark, etc. In Ukraine and the surrounding countries, no one has ever led a team at a professional level: It was hardly possible to make money on it stably. That's why at first they didn't think about making money, but about playing and winning. When it started making money, it was kind of a nice add-on: "Oh, they also give money for that!"

A first salary is a force that stimulates a young person. When you study at the university and have no money at all, it was very nice. \$250 in 2014 was not bad money. Before that, however, they received prize money – 100-200 dollars for winning the tournament.

After graduating from university, a player is at a crossroads: He had to decide what to do with his life. He had moments

when he didn't play for a long period. For a while, he thought about doing something else. Perhaps, if there had been no money in the industry at that time, he would have left esports (Evans, 2016; Cranmer *et al.*, 2021)^[12, 11].

But over the past few years, the industry has undergone tremendous changes. In 2012, a new version of the game, Counter-Strike: Global Offensive, was released. After that, the community received a single platform for competitions in the Counter-Strike discipline. So people who come to esports today know that they can make a living from it. You understand that the time invested in the game may not be wasted (Weiss & Schiele, 2013; Yu & Huang, 2022)^[29, 30].

Peculiarities of the profession

There are many stereotypes about esports players. But there are some that they agree with. Most esports players are really sociopaths, it is difficult for them to adapt to society.

Of course, these are not all Counter-Strike players, but the average player has trouble interacting with other people. In the end, this is understandable: You have to be alone in front of the computer a lot of time.

On average, one spends at least eight hours a day training in

Counter-Strike, six days a week. This is usually six to seven hours of team training and one to two hours of theoretical training. It works out about nine hours a day, but there are players who train for twelve hours.

Table 2: Statistics based on data collected by Esports Charts since autumn 2016*

Teams	Prize Money Earned, USD	Team Tour-naments	Peak Viewers	Matches	Win Streak
RSG PH RSG ML:BB,RSG	254110	16	2800606	146	-
Natus Vincere NAVI CS2,Natus Vincere	9483067	129	2748434	615	3
G2 Esports G2 CS2,G2 Esports	5089854	147	2748434	661	-
LGD Gaming LGD Dota 2,LGD Gaming	18528246	89	2741 514	573	-
Team Spirit TS Dota 2,Team Spirit	28152394	99	2741 514	568	-
Gen.G Gen.G LoL,Gen.G Esports	1943449	29	2656938	324	3
TODAK TDK ML:BB,TODAK	186900	28	2639547	196	3
Splyce SPY LoL,Splyce Inactive	311433	11	2518106	130	-
Fnatic FNC LoL,Fnatic	3480526	37	2422 647	428	-
Team Liquid Aura TLID ML:BB,Team Liquid	12901	3	2403352	20	-

* <https://escharts.com/teams?order=peak&page=2>

Players call team training "prakes" – they play online with other teams, thus imitating performances. In theory, the five of them go to the server and talk about tactics: What they want to see in the game, what needs to be fixed, what to add. Players consult with the coach, if there is one in the team. Here players just practice technique or play "mixes" with other players. This is an individual story: Someone can allocate 5-6 hours of time for this, and someone can do it to a minimum (Trotter *et al.*, 2021) ^[27].

There is at least one day off per week, sometimes it can be two – as luck would have it. In addition, there are competitions, the schedule of which is constantly updated. For example, the world's top teams constantly host live competitions; they can fly to a tournament with prize money of several hundred thousand dollars almost every two weeks. For the rest of the teams, most of the tournaments take place online: There may be games every day, or there may be nothing for several weeks. That is, the schedule is irregular; you usually do not know what will happen to employment (Wang *et al.* 2022) ^[28].

Players turned a hobby into a profession. Of course, because of this, it is difficult to enjoy the game, as it was at school. Then they could do whatever they wanted. Now they need to think about the fact that the standard of living depends on game. In addition, when it turns into a profession, contracts appear. Firstly, a player has to work out the term of the agreement in a team – usually from six months to three years. Secondly, he has to play in a team with those you may not want to play with (Purnami, & Agus, 2021) ^[24].

Revenue

In professional esports teams, players receive a salary. Now monthly salary is a thousand dollars. That's what on gets consistently. In addition, there is prize money, of which he receives 80-85%, and the rest the player gives to the employer. It depends on the number of tournaments and

prize pools, but there were times when they received an additional one and a half thousand dollars. On average, it is about \$500.

As rule, in the Counter-Strike: GO discipline, professional players receive from \$500 to \$2,000 per month in teams. But top esports players have individual contracts, under which they can have a bid of several tens of thousands of dollars. In Ukraine and neighboring countries, there are people who receive \$20,000 or more. It is clear that in the United States all this is multiplied many times over.

In Dota 2, everything is about the same: There are tops that get a lot, and there are mid-level teams where players get from \$500 per month. In Ukraine and Russia, there are six to eight teams in which people have \$1,500-2,000 a month. But this discipline has its own peculiarities: Fewer tournaments for mid-level teams, and therefore fewer opportunities to prove themselves. Accordingly, fewer organizations support young teams and give them the opportunity to progress.

Things are getting worse in FIFA, it's a less popular discipline. It is not easy to say what the salaries of the top "fifers" are, but there is definitely much less money there. In Ukraine, CS and DOTA are the most popular, it is difficult to prove yourself in other games. But new disciplines are actively developing abroad – first of all, Fortnite with millions in prize money. In recent years, the industry has grown so much that real rock stars from the world of esports have appeared. These are people who have serious contracts, moreover, they earn money on prize money and advertising. Majority of esports players have enough money to live on as they consider it. In addition, they simply do not have time to take on any additional work. If you want to achieve something, you have to devote all your time to it. They used to find time for other games, played Dota 2. But usually they want to try to spend their free time away from the computer

(Qian *et al.*, 2020) [25].

Expenses

As rule, professional esports players have one stable item of expenditure – food. Usually, no more than \$300 is spent on these expenses per month. Most often they eat at home; they go to the supermarket for ready-made food. Sometimes they go out to a cafe. Sometimes young persons' parents pass on something if they live nearby. (Traditionally Ukrainian family is a strong social institute.)

Often a sportsman has an apartment, so he doesn't need to pay for rent. He almost doesn't spend on transport because usually he works from home. If he needs to go somewhere, he takes a minibus. By taxi – only if he is in a hurry. On weekends, he can go out for a walk with friends in the downtown. He puts another part of the money for pocket money: 200-300 dollars a month just disappears somewhere. Either is for rest, or for clothes.

He saves 15-20% of his salary every month – for example, for rest. He can go to the sea with friends once every six months. It is difficult to travel, because it is not possible to plan free time due to an unstable schedule of tournaments (Huettermann *et al.*, 2020) [17].

Ukrainian esports teams

In eSports, the team captain is the official leader among its players. This is usually the oldest or most experienced member of the team or a player who can greatly influence the outcome of the match. Esports Team Coach A coach is a specialist in a certain type of esports discipline who supervises the training of a team of eSports players. The coach carries out educational and training work aimed at educating, training and improving skills, developing the functional capabilities of his wards. He also often performs analytics and analysis of the patch and tries to understand the meta in the new update, in some cases the coach is an ex-player. Esports players (pro-gamers) Pro-gamers are professional players who play for money. The main income of a pro gamer is prize money and salaries for playing in eSports competitions. While a pro gamer is financially dependent on games, spending time playing them is not considered "free" and can be less enjoyable: A Brief History of Esports. The first video game competitions began in the 1990s. It was played with the help of popular arcade slot machines of the time. The tournaments were not world championships and had a small prize pool. Everything changed with a technological breakthrough in the second half of the decade, which made it possible to create spectacular competitive games. For example, Street Fighter. It was thanks to this game that the first large-scale competitions took place in the world under the auspices of the Battle by the Bay organization created specifically for this purpose (Balakrishnan & Griffiths, 2018; Jang & Byon, 2020; Allcorrect Games, 2022) [4, 18, 2].

A little later, full-fledged three-dimensional graphics appeared. And with it, 3D shooters. At this time, computer sports took on a modern form. Large-scale games began to be held with Quake, Doom II. Video game competitions are very popular these days. Broadcasts of tournaments gather a huge audience, esports news is watched by millions of people around the world. In most countries, eSports has officially become a sports discipline. Esports in Ukraine also received this status and was on a par with traditional sports. Today, large-scale championships are held in the following genres of computer games: Tactical shooter (CS: GO, Valorant, Rainbow 6 Siege); moba action (Overwatch,

Paladins); battle royale (Apex (FIFA).

It is easy to see that the most spectacular and dynamic disciplines are chosen for eSports tournaments. Championships are held under the auspices of esports organizations. The prize fund is formed thanks to their own funds, as well as the investments of sponsors. The same formations contain commands. The latter can number from 1 to 15 people. The latest esports news, match schedules, information about top players, and much more can be found on this page. All data is constantly updated, so there is only up-to-date information (Bonny, & Castaneda, 2022) [6].

Most of the competitions are broadcast on Twitch. But in most cases, the broadcasts are duplicated with the help of other popular video platforms, for example, YouTube. There are no hard and fast rules on how often championships take place. It all depends on the esports organization. There may be situations when two championships in one discipline can take place during a year. The biggest prizes can be obtained thanks to eSport. In other games, the reward for the winning team usually does not exceed \$4-5 million, and in Dota 2 it can be more than \$40 million.

Esports has evolved from amateur online competitions in computer games into an industry in which millions of dollars circulate. The NAVI team, which won PGL Major Copenhagen and became the first world champion in Counter-Strike 2, once again proved that Ukraine is one of the leaders in it (Brown *et al.*, 2018) [7].

On March 31, 2024 Ukrainian the esports team won one of its biggest victories. Natus Vincere won the prestigious PGL Major Copenhagen tournament in Denmark in Counter-Strike 2. NAVI became the first world champion in the CS2 discipline, a new part of the Counter-Strike game franchise, which was released on September 27, 2023.

In the final, NAVI defeated the American team FaZe Clan on two maps out of three with a score of 2:1 (Ancient – 13:9, Mirage – 2:13, Inferno – 13:3).

For winning the tournament, NAVI received \$500 thousand. In total, the prize fund of PGL Major Copenhagen amounted to \$1 million 250 thousand. The competition in the stands of the Royal Arena in Copenhagen was watched by 17 thousand people. Viewers. And at the peak of the broadcast, the audience of the tournament reached 1.85 million (Chou, & Ting, 2003; Chen *et al.*, 2016) [10, 9].

Esports are video game competitions - individual and team. By the end of the 2000s, they were predominantly amateur, and they reached the professional level with the advent of online platforms such as YouTube and Twitch, which allowed them to attract players and viewers from all over the world. Already in the early 2010s, esports had become an important part of the computer video game industry, and many of their developers began to fund tournaments. Esports first gained popularity in China and South Korea, where the first professional players received licenses in the early 2000s. Gradually, it conquered both Europe and North America.

Currently, the most popular esports games in the world are League of Legends, Dota, Counter-Strike, eFootball, Valorant, Overwatch, Street Fighter, Super Smash Bros., StarCraft. Mobile Legends mobile games: Bang Bang and PUBG Mobile are also gaining popularity, the main advantage of which is much greater accessibility and reach. The leading genres of eSports games are MOBA (Massively Multiplayer Online Arena) strategies, in which several teams fight against each other (Dota, League of Legends).

Shooters in which two teams compete against each other (CS-2). And simulators like eFootball (Benlarbi *et al.*, 2024) [5].

In total, in 2023, Ukraine turned out to be the main esports location in Eastern Europe and hosted 31 Dota 2 tournaments - almost half of all competitions held in the discipline. 20 of them were organized by the largest esports platform in Ukraine ESportsBattle, which offered \$120 thousand prize money and generated 1.2 million hours of broadcast views.

In September 2020, esports was recognized as an official sport in Ukraine. In July 2021, the Ukrainian Esports Federation, which was founded in 2018, received national status. Under its auspices, athletes take part in amateur competitions under the auspices of the IESF - International Esports Federation. However, in this sport, most of the most prestigious professional tournaments are organized by commercial platforms - such as PGL, ESL and others (Huda & Salehudin, 2024) [16].

The most famous Ukrainian esports team is NAVI, which was created back in 2009. After winning the PGL Major, Copenhagen were the first to win Majors in all three key versions of Counter-Strike - CS 1.6, CS:GO, and CS2. The new title allowed NAVI to rise to second place in the ranking of the best teams in the world in the CS-2 discipline according to HLTV.org. The Ukrainians are second only to FaZe Clan, whom they defeated in the final in Denmark (Macey *et al.* 2020) [21].

Many Russian players have been involved in NAVI's previous victories. After the full-scale invasion, the team got rid of the last of them, motivating this decision by "reputational risks". In May 2022, Kirill "Boombi4" Mikhailov left Natus Vincere. Later - Denis "Electronic" Sharipov and Ilya "Perfecto" Zalutsky. In November 2022, NAVI started working with the UNITED24 platform, and the then team leader Oleksandr "s1mple" Kostylev made the first donation of \$100 thousand.

NAVI's main competitor in Ukraine is now Monte. In 2023, they defeated Natus Vincere at the BLAST.tv Paris Major. The broadcast of that match was watched by a record 59 thousand for the Ukrainian segment of esports at that time. Viewers. In November 2023, Monte won the ESL Challenger Jonkoping and got their first victory in tournaments of this rank. They received \$50,000 for it.

The most popular and titled Ukrainian player is Oleksandr "s1mple" Kostylev, who played for NAVI from 2016 to 2023. At 26 years old, he is a true legend of esports. Together with the team, he became the champion of PGL Major Stockholm 2021. Kostylev was recognized as the best player of the year according to HLTV.org three times - in 2018, 2021, 2022. During his performances in Natus Vincere, he received 21 titles of the most useful player of the tournaments - MVP.

In November 2022, s1mple was named the best player of the decade in the CS:GO video game by the Electronic Sports League. At the end of 2023, it was announced that Kostylev had decided to take a break from his career and was leaving NAVI. Later it became known that he would play for the French team Falcons on loan. Oleksandr Kostylev is the leader among Ukrainians in terms of earned funds among Counter-Strike players. During his career, he won \$1.7 million in prize money. Another Ukrainian player who crossed the million mark in this discipline was Valery b1t Vakhovsky - \$1.2 million.

However, the record holders for prize money among Ukrainians in esports are players in the Dota 2 discipline - Ilya "yatoro" Muliarchuk from Bucha and Myroslav "Mira Kolpakov", who was born in Lutsk. Both play for the Russian team Team Spirit, which is currently based in Serbia. As part of it, they became the winners of The International 2021 tournament and received \$3.6 million for this victory. In total, they earned \$5.4 million during their careers and are in the top 10 of the world ranking in terms of prize money. Topping the list is 30-year-old Dane Johan N0tail Sundstein with \$7.2 million. He is now a free agent, and is known for his performances for OG, which positions itself as a team not from a specific country, but as a representative of Europe.

Kokhanovsky then announced his desire to turn Dnipro into the world's first hotel for esports events with training areas, an esports stage and special rooms for professional players. However, the Covid-19 pandemic and Russia's full-scale invasion of Ukraine made adjustments to the plans. It is also worth noting that back in 2018, Kokhanovsky sold NAVI to another Ukrainian businessman, Maxim Krippa.

Maincast

What is Maincast and what kind of audience do esports broadcasts gather. A high level of prize money in esports is provided by a multi-million audience of fans, which attracts powerful sponsors. First of all, from the field of computer equipment and games. Ukrainians are also among the leaders in terms of popularity. For example, in CS, the championship belongs to NAVI, which at the peak of the broadcast views gathered a record audience for this game of 2.75 million viewers (Meng-Lewis *et al.*, 2022) [22].

Esports broadcasts are also in demand in Ukraine. The PGL Major Copenhagen 2024 screening in Ukrainian became the second most popular after English-language in the world and collected 137 thousand views at its peak. viewers on Twitch and YouTube. In Ukraine, esports events are shown by Maincast, which is the largest broadcaster of these competitions in Eastern Europe. The platform appeared in 2018, and its co-founder was the well-known esports commentator Vitaliy V1lat Volochay. Maincast bought the rights to broadcast computer game competitions in Russian until 2027, but after the full-scale invasion of the Russian Federation, it gave up some of the rights and now works only in Ukrainian.

According to him, in 2023, Maincast collected 46.5 million views of Dota 2 and Counter-Strike tournaments. And in the first months of 2024, it continues to grow - compared to last year, the number of views increased by 20%. Due to the popularity, accessibility and huge audience of computer games, esports in Ukraine and the world continues to develop rapidly. In terms of the number of spectators, it has already surpassed most classic sports. And the best Ukrainian pro-gamers are second only to football stars, top boxers of the level of Wladimir Klitschko and Oleksandr Usyk and tennis players of the caliber of Elina Svitolina in terms of prize money. Computer games have definitely become not only entertainment, but also have grown in a separate segment into a professional sport. A species whose future looks extremely attractive.

Conclusion

Computer games have definitely become not only entertainment, but also have grown in a separate segment into a professional sport. A species whose future looks

extremely attractive. Last decades, Esports in Ukraine accelerating developed. In total, in 2023, Ukraine turned out to be the main esports location in Eastern Europe and hosted 31 Dota 2 tournaments - almost half of all competitions held in the discipline. 20 of them were organized by the largest esports platform in Ukraine eSportsBattle, which offered \$120 thousand prize money and generated 1.2 million hours of broadcast views. Recently this modern sport in Ukraine extremely developed and shows good prognosis in future.

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