GAMEDEV
IN WROCLAW AGGLOMERATION

2022

ARAW
Wroclaw Agglomeration
Development Agency

Startup
Wroclaw

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ARAW Wroclaw Agglomeration Development Agency

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— INTRODUCTION

THE VIDEO GAME DEVELOPMENT INDUSTRY (ABBREVIATED AS "GAMEDEV") IS ONE OF THE FASTEST GROWING SPACES CONNECTING THE HIGH-TECH WORLD WITH THE BROADER CREATIVE INDUSTRY.

In 2021, the global value of this market reached $180 billion and the total number of gamers exceeded 3.2 billion[1]. This trend in growth received a boost from the COVID-19 pandemic, which significantly changed consumer behaviour, especially in terms of leisure activities. This, combined with the explosion in popularity of mobile games designed for smartphones, means that the gamedev industry is no longer just a runner-up compared to other forms of entertainment.

Gaming has long since ceased to be a pastime meant only for children. Today's generation of 30 and 40-year-olds has grown up in a world where computer games are widely available. Nowadays, adults have no problem admitting that they enjoy gaming and do it regularly in their free time. Younger generations, on the other hand, have been immersed in the world of digital entertainment from an early age. Games have become a part of pop culture and successfully compete for time and attention with other formats such as movies or TV. In fact, the budgets for some of the biggest games are not inferior to, and often exceed, those of Hollywood blockbusters. For example, the budget for the game "Star Citizen" has already exceeded 420 million USD so far, and this amount is still increasing because it is still in production (for comparison, the most expensive feature film in history, "Pirates of the Caribbean: On Stranger Tides" cost a total of 410 million USD)[2]. All of this makes the production of computer games an extremely lucrative branch of the economy, which is worth supporting and developing.

ABOUT THIS STUDY

This publication was written in order to better understand the local gamedev scene and its potential for further development. The aim was to understand how Wroclaw compares to other major urban centres in Poland, in terms of conditions for the development of the gamedev industry, and whether the developers themselves consider it a good place to develop games.

The results of our research present the landscape of the game production industry in Wroclaw, the direction of its development, and the challenges that it faces. Obtaining a clear view of where the gamedev industry currently stands is a good starting point for creating initiatives that will support the development of the industry and make Wroclaw an even more attractive place for further investments.

EXPERT SUPPORT

The content of this report is supported by industry experts connected to the local and national gamedev scene: **Adam Flamma**, CEO & Co-Founder at Astrolabe Stories; **Adam Lason**, Operations Director at PixelAnt; **Adam Malek**, COO at The Knights of Unity; **Adam Pawlewski,** UE4 Developer at Awaken Realms; **Andrzej Blumenfeld**, CEO at Far From Home; **Dominika Siemienska,** Vice-chairwoman of the Computer Games Research Club at The Eugeniusz Geppert Academy of Art and Design; **Dr. Jacek Lewandowski,** Campus Director at Coventry University Wroclaw; **Jakub Wolff,** CEO at The Dust Inc.; **Michal Debek**, Board Member at Try Evidence; **Michal Rypel**, Marketing Specialist at Giant Lazer; **Michal Skrzywanek**, Partner at Dotlaw; **Piotr Matecki**, Business Developer for Norway & Poland at Changemaker; **Piotr Mistygacz**, Lead Technical Level Designer at Techland; **Radoslaw Klasa**, President at TK Games Wroclaw and **Aleksandra Konicka & Iga Konicka,** Founders at Polski Gamedev.

RESEARCH METHODOLOGY

This report is based on a survey, in-depth interviews, and desk research (publicly available data sources). The survey was conducted among 25 companies that are active in the game development sector with headquarters or significant representation in the Wroclaw agglomeration, and it provides good insight into the structure of the Wroclaw gamedev scene. The results of this research present both strengths of the Wroclaw agglomeration and needs that should be addressed in the future.

[1] Newzoo, Statista
[2] TweakTown, Statista

— THE GAMEDEV MARKET IN POLAND

DUE TO A GROWING GLOBAL DEMAND FOR NEW GAMES, THERE IS AN INCREASING NUMBER OF ENTITIES PRODUCING NEW TITLES IN POLAND. IN 2021, THERE WERE 470 STUDIOS ON THE MARKET WITH OVER 12,000 EMPLOYEES.

This means an increase of 9% and 20%, respectively, in relation to the previous year[3]. In terms of employment, this growth in the number of employees is even more impressive when we look at historical data. In 2016, there were just 4,000 people working in the industry, which means that in a very short period of time, employment has increased 3-fold. Retail value sales in the video games market reached 4.3 billion PLN in 2021, an increase of 19% compared to the previous year. Experts are forecasting steady, stable growth over the next years (CAGR in 2021-2027 is expected to be 11% in current terms)[4].

Over the years, Poland has earned a reputation around the world as a great place to produce high-quality titles. The global success of games such as The Witcher series (created by CD Projekt RED) or Dying Light (from Techland) has only strengthened this position. Polish studios have proven that they can create productions at the highest level and have achieved recognition all over the world for this. Smaller indie studios are also developing dynamically. Mobile games designed to meet the needs of the casual player, who only play from time to time, have become very popular. Quantitatively, this type of game dominates the portfolio of Polish development studios, although their budgets are obviously many times smaller than those of flagship AAA games.

The strength of the Polish market is also evidenced by the fact that as of October 2020, the Polish stock exchange has been the world leader in terms of the number of listed companies in the gamedev sector. In 2021, there were a total of 64 companies while, a year earlier, there were 44 and in 2016, there were only 13 entities. As of April 2022, there are already 78 listed companies, and this number is constantly growing. The Polish stock exchange noticed the high activity of this sector and decided to group it into a separate

Value of the video games market in Poland

Retail Values RSP, current, in PLN billion
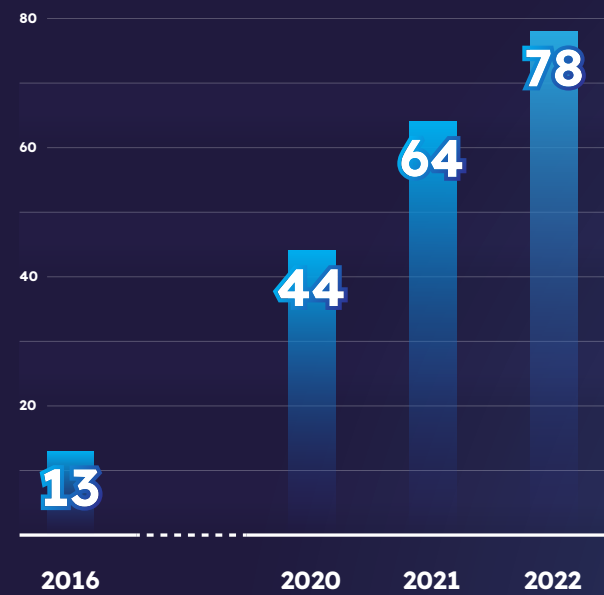
Year	Value
2021	4,29
2022	4,97
2023	5,49
2024	6,01
2025	6,55
2026	7,10
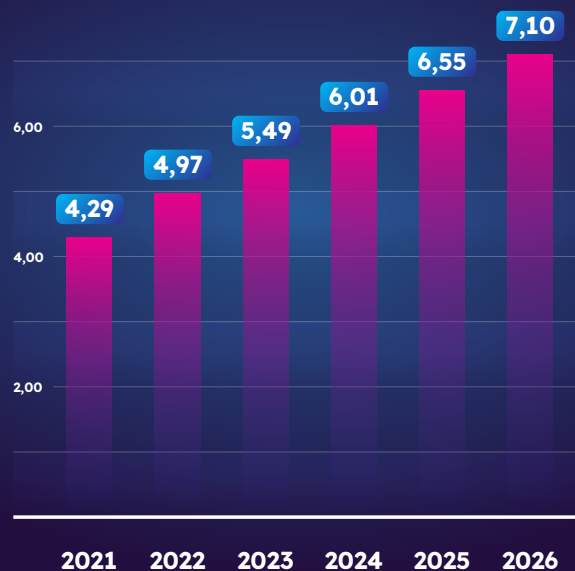
Source: Euromonitor, 2022

[3] The Game Industry of Poland, 2021

[4] Euromonitor International, 2022

Gamedev companies listed on the WSE

Source: WSE, StockWatch

Best developers ranking by country

Ranked by average score all HackeRank Challenges

RANK	COUNTRY		SCORE INDEX
#1		China	100,0
#2		Russia	99,9
#3		Poland	98,0
#4		Switzerland	97,9
#5		Hungary	93,9
#6		Japan	92,1
#7		Taiwan	91,2
#8		France	91,2
#9		Czechia	90,7
#10		Italy	90,2

Source: HackerRank

index, called WIG-Games. This includes nineteen companies from the sector listed on the main floor of the Warsaw Stock Exchange (WSE).

There are many factors contributing to the successful development of the game production industry in Poland. Undoubtedly, a key element is the high skill level of Polish programmers. This is due to both the quality of the mathematics education in school
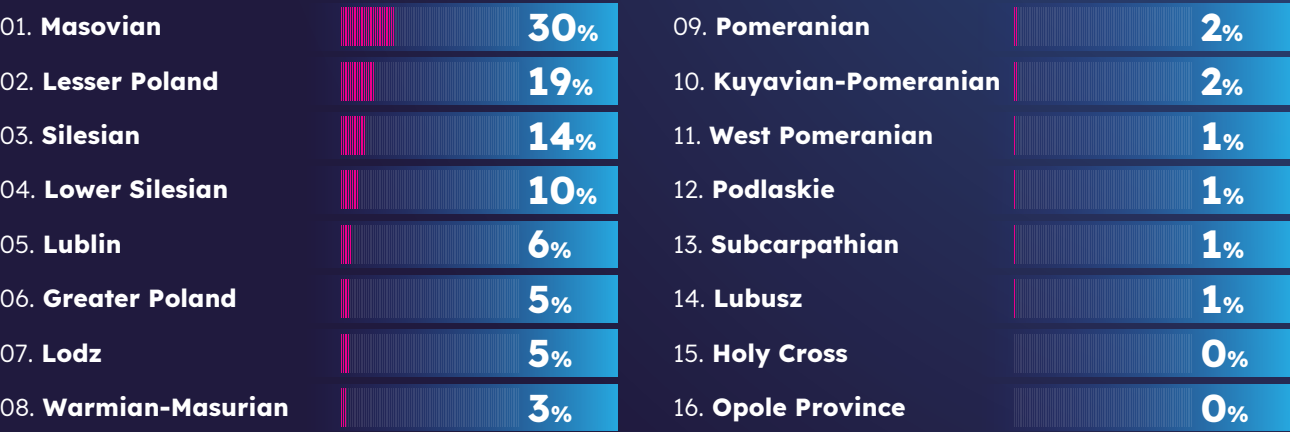
(Poland has placed high in the international PISA ranking for years) and the wide educational offerings at universities. In 2021, universities in Poland offered 71 faculties related to the production of computer games and 30 faculties related strictly to programming games[5]. In addition, there is a wide range of courses and training available on the market run by private entities, focused exclusively on the practical education of novice programmers.

Gamedev studios HQ location

per province in percentage

01. **Masovian**	30%	
02. **Lesser Poland**	19%	
03. **Silesian**	14%	
04. **Lower Silesian**	10%	
05. **Lublin**	6%	
06. **Greater Poland**	5%	
07. **Lodz**	5%	
08. **Warmian-Masurian**	3%	
09. **Pomeranian**	2%	
10. **Kuyavian-Pomeranian**	2%	
11. **West Pomeranian**	1%	
12. **Podlaskie**	1%	
13. **Subcarpathian**	1%	
14. **Lubusz**	1%	
15. **Holy Cross**	0%	
16. **Opole Province**	0%	

Source: https://polskigamedev.weebly.com/

[5] The Game Industry of Poland, 2021

The quality of Polish programmers is evident, as they can be seen placing in the highest spots in international competitions and rankings such as HackerRank[6].

In 2016, two organizations representing domestic developers were established - Stowarzyszenie Polskie Gry, which brings together the largest producers, and Fundacja Indie Games Polska, a foundation which helps smaller studios. These associations, among others, cooperate with government bodies and help with the promotion of both the entire Polish industry and individual developers at fairs in Poland and abroad. 2016 also saw the start of government programs aimed at injecting money into the industry (including the GameINN program, which allocated PLN 116 million to creators in its first year)[7].

WROCLAW IN COMPARISON TO OTHER CITIES IN POLAND

It is difficult to keep track of the geography of Polish gamedev landscape. The number of studios is growing, and remote work is increasing in popularity. Geographic factor is becoming less and less important nowadays. The majority of the market is dominated by smaller studios or even single game developers.

Most gamedev companies have a registration address in Warsaw; it is estimated that up to one-third of all studios in Poland may be located there. Wroclaw, Krakow and Silesia (mainly Katowice and Gliwice) are the three next biggest hubs, while Wroclaw is where the most exciting growth and development is happening. There is an increasing number of new teams, often set up by experienced professionals who have interesting business ideas.
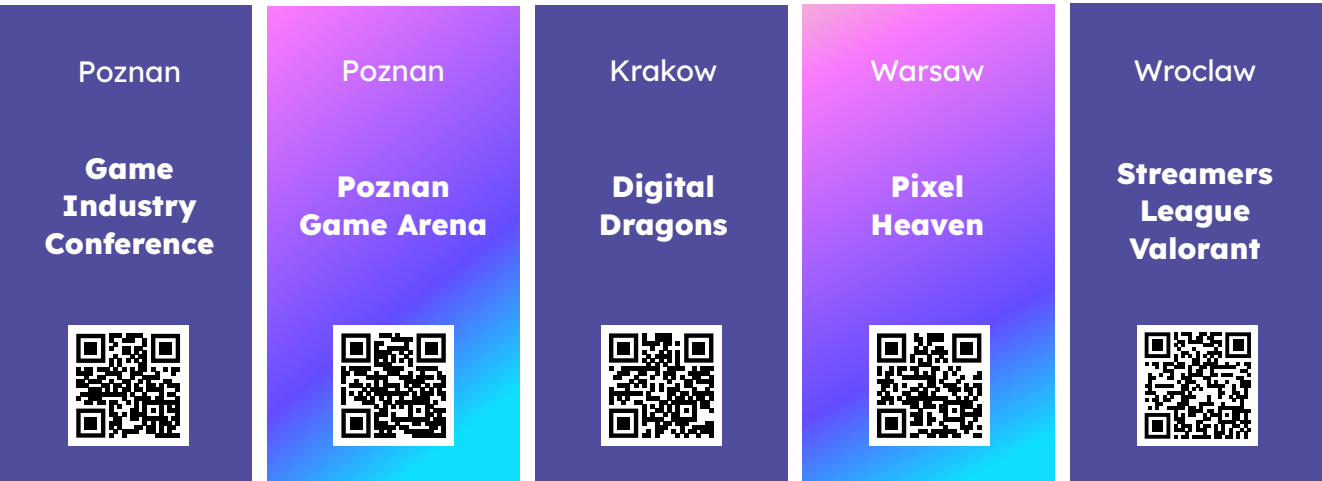
COMPARISON BY CITY

CITY	NO. OF STUDIOS[1]	NO. OF UNIVERSITIES[2]	JOB OFFERS[3]
Katowice	22	5	6
Krakow	83	6	15
Lodz	21	7	4
Poznan	35	4	5
Warsaw	157	7	39
Wroclaw	55	6	10

[1] https://polskigamedev.weebly.com [access: 21.07.2022]
[2] https://polskigamedev.pl/ksztalcenie-dla-branzy-gier [access: 21.07.2022]
[3] Sum of the offers posted on popular job boards: JustJoinIT, Nofluffjobs and Pracuj.pl [access: 21.07.2022]

TOP EVENTS PER CITY

Poznan	Poznan	Krakow	Warsaw	Wroclaw
Game Industry Conference	**Poznan Game Arena**	**Digital Dragons**	**Pixel Heaven**	**Streamers League Valorant**

[6] HackerRank, 2016 https://www.hackerrank.com/blog/which-country-would-win-in-the-programming-olympics/

[7] Jak technologia zmienia biznes, 2019 https://krzysztofrdzen.com/wp-content/uploads/2020/03/wydanie-specjalne- technologia-biznes.pdf

— GAMEDEV MARKET IN WROCLAW

THE DEVELOPMENT OF THIS INDUSTRY DATES BACK TO THE 1960S, WHEN THE FIRST GAMES WERE CREATED. THE HISTORY OF WROCLAW GAMEDEV OVERLAPS WITH THE HISTORY OF GENERAL POLISH INDUSTRY DEVELOPMENT.

An important role was played by Odra computers (high quality for those times), which were produced at the Elwro Electronics Factory in Wroclaw. The first Wroclaw-based game, called Marienbad, for Odra 1003 computers was created in 1962 by Witold Podgorski[8]. In the 1970s, the same company produced TVG-10, a gaming console[9]. Unfortunately, these Polish technological projects were quickly shut down and, thus, Poland saw a 20-year gap in game production capabilities. It was not until the mid-1980s that Western computers such as ZX Spectrum and Atari began to arrive in Poland.

Despite severe restrictions related to the political and economic situation, in 1986, the first serious domestic video game was created: "Pandora's Box", which was officially recognized as the first Polish game. Subsequent productions followed, including "Mózgprocesor" and "Robbo" in 1989. These were the first productions made by Polish companies, such as LK Avalon and Mirage. However, despite the popularity of Polish games in the 90s, many producers failed to maintain their position on the market due to, among other things, the mass copying of games.

An even bigger breakthrough came at the beginning of this century, when Chrome from Techland's 2003 studio in Wroclaw, was noticed in the West by top media in the gaming industry. However, the studio experienced even more success three years later, with the release of Call of Juarez (Techland). 2015 is considered to be a major breakthrough year for the Polish gamedev market, with the release of Dying Light (Techland). However, above all, this was associated with the release of the third part of The Witcher: Wild Hunt, which dominated the global rankings of the best games of the year. This good run led to an increase in revenue and value for CD Projekt on the stock market - from 2.1 billion (by the end of 2015) to 5 billion (at end of 2016)[10]. As the industry grew, grassroots initiatives began to emerge in Wroclaw, bringing together both smaller and larger studios.

— MARKET DESCRIPTION

There are over 50 studios[11] operating in Wroclaw, ranging from small teams consisting of a few people to large companies operating on a global scale. Most projects are small to medium scale. These are productions with relatively small budgets but of high quality. There are companies that cater to virtually every market segment and various platforms (mobile, consoles, PC). Companies in Wroclaw attract employees from all over the country and they are also eager to hire workers from other countries, which is why the working language is English.

Techland, one of the largest studios in Poland, has its headquarters in Wroclaw and they create advanced AAA games. Another big player is Ten Square Games, a producer and publisher of mobile games that are distributed in the free-to-play model. Another well-known and fast-growing company from Wroclaw is The Knights of Unity, which offers project outsourcing in the Unity engine. And the most internationally recognized Polish gamedev company, CD Projekt Red, also has a branch in Wroclaw (the only city in Poland apart from Warsaw). The Wroclaw team was largely responsible for the development of Cyberpunk 2077, the studio's most recent world-class game.

[8] Wikipedia https://pl.wikipedia.org/wiki/Marienbad_(game_computer)
[9] Wikipedia https://pl.wikipedia.org/wiki/Ameprod_TVG-10
[10] Jak technologia zmienia biznes, 2019 https://krzysztofrdzen.com/wp-content/uploads/2020/03/wydanie-specjalne-technologia-biznes.pdf
[11] Polish GameDev Database, https://polskigamedev.weebly.com/lista-a-z.html

History of game production
in Wroclaw

1959
Odra computers

1962
Wroclaw-based game » Marienbad

1979
Ameprod TVG-10 console

1986
Elwro 800 Junior personal computer

2003
Chrome (Techland)

2006
Call of Juarez (Techland)

2015
Dying Light (Techland)

Although the largest entity, i.e., Techland, is still in the hands of private owners, many gamedev companies from Wroclaw also have their representatives on the Warsaw Stock Exchange, such as:

- T-Bull (debuted in 2016, WSE main market)
- Ten Squared Games (debuted in 2018, WSE main market)
- The Dust (debuted in 2018, New Connect market)
- MegaPixel Studio (debuted in 2021, New Connect market)

Ten Squared Games is one of the highest valued gaming companies on the Warsaw Stock Exchange. It's safe to say that Wroclaw has become an important centre on the Polish gamedev map, but it has not been an easy path. After big game premieres, especially if they have achieved market success, there's often an exodus of employees who strike out to set up their own studios. However, it is too soon to tell if they will also share the same success with their own projects. A weak point for Polish gamedev, in turn, is the fact that many studios do not have a strong post-production plan for the phase after the game is ready. There are many enthusiasts who want to make games according to their own vision, without looking at the needs of the market. On the other hand, producing games is a combination of both technical aspects and art. As Michal Debek of Try Evidence admits, passion is very important, but understanding the needs of the audience and having good business sense also count.

The game development industry shows similarities to the art market. For success, you need both artistic value as well as the right marketing, and to adapt to the needs of the recipients. On the other hand, games are created out of creative need and passion, and not to order - without this, they lose their authenticity and become copies of existing titles. The studios have to provide a quality product, but they can't neglect the phase after the game has been finished, which is selling it. The competition is fierce because titles produced in Wroclaw are destined for the global market.
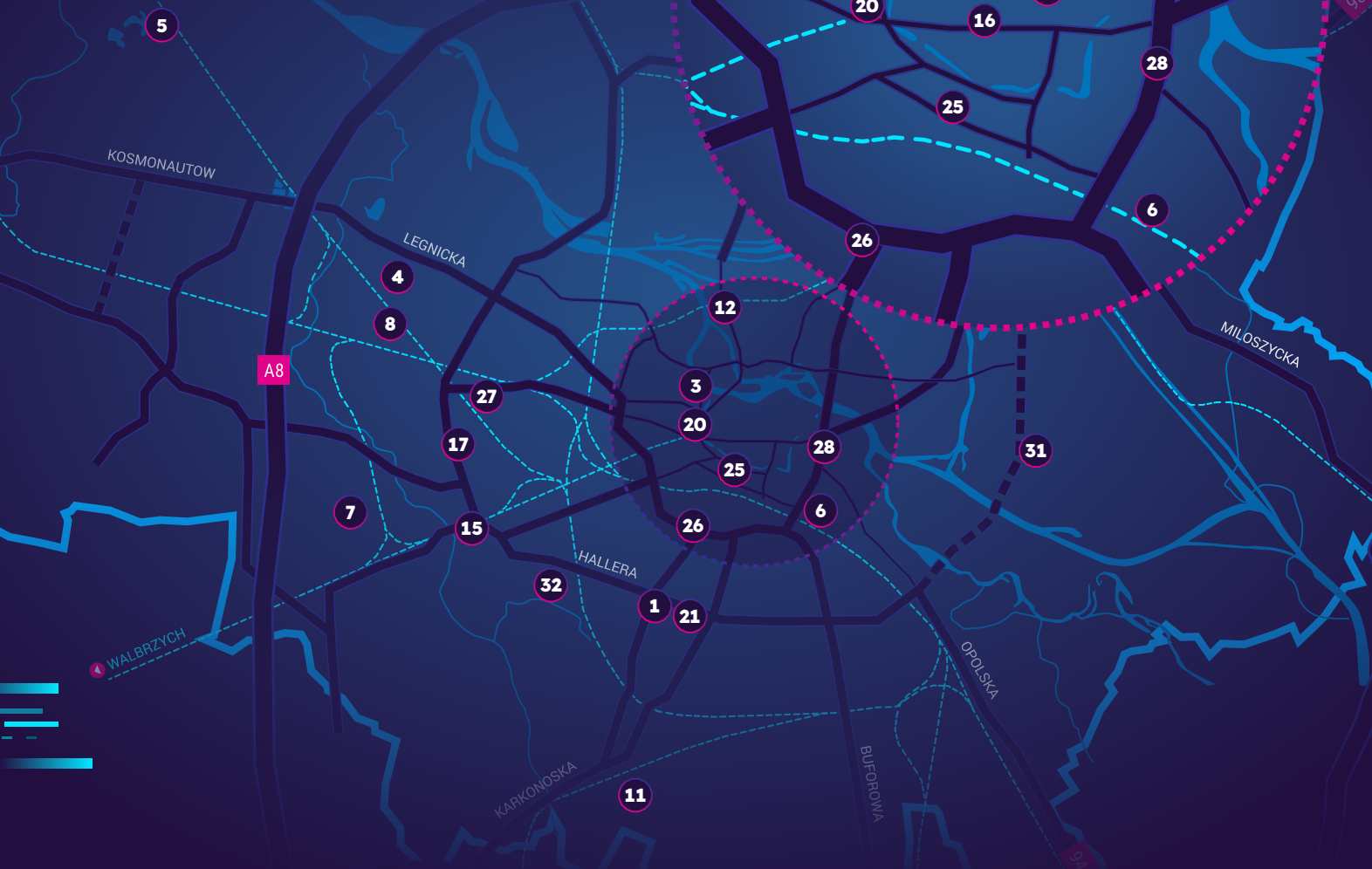
Michal Debek
Board Member, Try Evidence

I see high potential in two specific areas:

1. **AR and Mixed Reality** - creating advanced content using the environment. AR allows the user to stay in the environment they see without cutting themselves off from the world. Some people find this easier to deal with, instead of cutting themselves off completely, as is the case with VR technology.

2. **Avatars and 3D virtual worlds** - spaces where people can hang out with each other and meet virtually, like in VRChat. The community aspect will grow as we continue to play with images in virtual space, and technology allows us to do this with increasing accuracy by replicating the user's natural movements in the app. This is the next step in the development of games for building community and establishing relationships.

Michal Rypel
Marketing Specialist, Giant Lazer

The XR (extended reality) sector is very well-developed in Wroclaw. There are several well-known companies that offer VR & AR solutions. These include Giant Lazer, The Knights of Unity, Madnetic Games and Gameboom VR. VR technology, despite growing interest, is not mainstream because using it requires advanced and relatively expensive equipment. This technology is most often used in simulators and training games, which is due to the fact that VR allows students to learn more effectively by interacting with the world around them. However, over the past few years, the market has been changing. Thanks to Meta's solution - Oculus QUEST 2, the equipment has become cheaper and more accessible to individual users. This has caused a rise in interest among single users, and in VR technology, the equivalent of classic games such as Shooters or multiplayer games such as Among Us, are already in development.

GAMEDEV STUDIOS
BASED IN WROCLAW

KOSMONAUTOW

LEGNICKA

MILOSZYCKA

A8

WALBRZYCH

HALLERA

KARKONOSKA

BUFOROWA

OPOLSKA

1	**BAAD Games** al. Kasztanowa 3a, 53-125 Wroclaw	**12**	**Goobsta Games** pl. Strzelecki 25, 50-224 Wroclaw	
2	**Chaos Forge** ul. Sw. Mikolaja 8-11, 50-125 Wroclaw	**13**	**Kids With Sticks** ul. Wita Stwosza 3, 50-106 Wroclaw	
3	**Critical Hit Games** ul. Sikorskiego 2-8/201, 53-659 Wroclaw	**14**	**Liberty Games Interactive** ul. Wita Stwosza 16, 50-148 Wroclaw	
4	**Cublo Games** ul. Skrzydlata 11c, 54-129 Wroclaw	**15**	**MegaPixel Studio** ul. Ostrowskiego 13a, 53-238 Wroclaw	
5	**Dali Games** ul. Lomnicka 24, 54-061 Wroclaw	**16**	**Mousetrap Games** ul. Leszczynskiego 4/29, 50-078 Wroclaw	
6	**Dash Dot Creations** ul. Pulaskiego 52, 50-443 Wroclaw	**17**	**Madnetic Games S.A.** ul. Klecinska 123, 54-413 Wroclaw	
7	**Donkey Crew** ul. Stanislawowska 47, 54-611 Wroclaw	**18**	**Picadilla Games** Rynek 60, 50-116 Wroclaw	
8	**Eremite Games** ul. Hermanowska 6A, 54-314 Wroclaw	**19**	**Pixel Storm** ul. Sw. Mikolaja 59/60/lok.14, 50-127 Wroclaw	
9	**Game Island** Wyspa Slodowa 7, 50-266 Wroclaw	**20**	**PixelAnt Games** pl. Orlat Lwowskich 1, 53-605 Wroclaw	
10	**Gameboom VR** ul. Odrzanska 6/4, 50-113 Wroclaw	**21**	**Polished Games** al. Wisniowa 47, 53-126 Wroclaw	
11	**Giant LaZer** ul. Oltaszynska 92c/6, 53-034 Wroclaw	**22**	**Raba Games** ul. Odrzanska 6/4, 50-113 Wroclaw	

23	**Raving Bots** ul. Sikorskiego 2-8, 53-659 Wroclaw
24	**Superbright** ul. Sw. Mikolaja 8-11/36, 50-125 Wroclaw
25	**SuperNova Interactive** pl. Kosciuszki 9/15, 50-028 Wroclaw
26	**T-Bull** ul. Szczesliwa 33/2.B.09, 53-445 Wroclaw
27	**Techland** ul. Jana Szczyrki 11, 54-426 Wroclaw
28	**Ten Square Games** ul. Traugutta 45, 50-416 Wroclaw
29	**The Dust** Wyspa Slodowa 7, 50-266 Wroclaw
30	**The Knights of Unity** pl. Strzelecki 25, 50-224 Wroclaw
31	**Wayward Preacher** ul. Kazimierska 3, 51-657 Wroclaw
32	**Whitemoon Games** ul. Szolc-Rogozinskiego 22, 53-209 Wroclaw
33	**Xi4G** ul. Sw. Mikolaja 51/52 (5 p.), 50-127 Wroclaw

─── EDUCATION IN GAMEDEV

UNIVERSITIES IN WROCLAW ONLY PARTIALLY ADDRESS THE MARKET DEMAND, WHICH IS THE DEVELOPMENT OF COMPETENCIES FOR FUTURE GAME DEVELOPERS. THERE ARE A TOTAL OF 11 DIFFERENT FIELDS OF STUDY.

Computer game programming is as popular a field of study as game design. However, it's mostly private universities that are responding to modern trends (Copernicus University of Computer Science and Management, Coventry University, the University of Lower Silesia, Wroclaw University of Applied Computer Science, and Wroclaw School of Banking). There is a lack of competitive course offerings among public universities; nevertheless, this is not only a challenge for Wroclaw, but also one for Poland in general. The only public university in Wroclaw which offers branch-based development, is the Eugeniusz Geppert Academy of Art and Design.

At private universities, course topics are in line with the requirements of the industry, with some classes taught by practitioners. Most students who want to develop in the gamedev industry take the initiative and gain experience on their own. Studying is a good complement to acquiring knowledge, but it is more important to have passion and the willingness to develop. Developing games after hours is the norm in the industry, even for people with extensive professional experience. This opinion is shared by Dominika Siemienska, vice-chairwoman of the Computer Games Association. According to her, completing a course related to creating computer games is not enough to find a job in this industry.

> **A student can, and indeed should, ask questions of lecturers and independently deepen the knowledge gained at university on their own. The problem with academic course offerings is that students are mainly taught the basics and parts of various aspects of game development, rather than the overall process. Universities lack experts from the gamedev industry who could bring more practical knowledge of the process of creating recognizable titles.**
>
> *Dominika Siemienska*
> *Vice-chairwoman of the Computer Games Research Club at The Eugeniusz Geppert Academy of Art and Design*

In response to this challenge, the Wroclaw School of Banking, together with a local company have teamed up to create a project: Giant Lazer's XR Lab, where extended reality specialists are trained. Using all of the equipment available to them, students can create their own projects, as well as use nine specially prepared training applications[12].

COURSES

6   7
DESIGN   **PROGRAMMING**

X

UNIVERSITIES

1   5
PUBLIC   **PRIVATE**

[12] WroclawskieFakty.pl https://Wroclawskiefakty.pl/otwarcie-giant-lazers-xr-lab-na-wsb-we-Wroclawiu/

"

This is an innovative educational project in Poland. VR labs dedicated to students mainly operate in Western Europe. Poland is still at the beginning of this road. The Wroclaw School of Banking has a "starter kit" for anyone who wants to find themselves in the XR world. It's worth noting that it's not just VR; the world is moving in different directions, and AR (augmented reality) and mixed reality are developing in parallel.

Michal Rypel
Marketing Specialist, Giant Lazer

In September, a new gamedev school will be opening in Poland: Futuregames. Initially, classes will be held in Warsaw, but there are plans to open hubs in other parts of Poland, including Wroclaw and Sopot. Registration is open for the following courses: Game Artist, Game Designer, and Game Programmer. The education model is based on hands-on experience and real-world practice in studios.

Representatives from large studios are on our curriculum board which allows them to make a real impact on the program. We teach what is required in the industry and the course outline is continually consulted and adjusted to meet the gamedev studio's HR department's needs. Most of our students are hired immediately after graduation. With backup from AcadeMedia, we will now be able to expand and export this successful model to new world markets.

"

Piotr Matecki
Changemaker Business Developer for Norway & Poland

COVENTRY UNIVERSITY IN WROCLAW

As the games industry in Poland is filled with young and fast-changing businesses, our educational offerings need to be flexible and reflect market needs, as well as engage professionals in the delivery process. After speaking to local gaming companies, we believe we can bring value to the segment by delivering gaming education in Poland with the same competencies that we have offered so far on the UK market.

According to Statista, in 2021, Coventry University was the 3rd biggest university in the UK with almost 40,000 British and International students, and 15 research centres. We are a forward-looking, modern university with a proud tradition as a provider of high-quality education with a focus on applied research. We aim to offer a career-focused experience to our students, one that is traditionally academic but also designed to help our students progress in their future careers. With an award-winning track record, we drive innovation and mutually beneficial business partnerships through the fusion of academic research and industry.

Coventry University opened a branch campus in Wroclaw because we believe that the UK education model, with its flexible, modular, and practical courses is a good fit for the local landscape of talented and ambitious people. The campus was established in 2020 with a cohort of business and technology undergraduate studies, which were in line with current and potential market needs. Now, we would like to offer one of our Games Development degree courses in Poland. It is designed to be a highly focused programming course aimed at educating specialised software developers in the gamedev industry. It concentrates on the technical elements of game engineering, together with supplementary subject areas such as game design, usability, and asset generation.

The course will cover the essentials of game technology: state-of-the-art techniques in computer graphics for the real-time rendering of game environments, physics programming for realistic game interaction, artificial intelligence for creating compelling game opponents, networking essentials for game operability, user-centred design techniques, playability, and games concept development, as well as the latest developments in games and the creative industries. It will create work-ready graduates who have been taught by experts to develop their project management skills, design thinking and gamification techniques by building computer games in class.

Dr Jacek Lewandowski,
Campus Director,
Coventry University Wroclaw

INTERESTED IN FINDING OUT MORE? LET'S MEET IN WROCLAW!

🌐 www.coventry.ac.uk/wroclaw

f www.linkedin.com/company/coventry-university-wroclaw/

in www.facebook.com/coventryuniversitywroclaw

Coventry University | Wrocław

ul. Powstancow Slaskich 17,
Centrum Poludnie Budynek D,
53-332 Wroclaw

LIST OF UNIVERSITY COURSES IN WROCLAW

UNIVERSITY	DEPARTMENT	COURSE NAME	FOCUS	TYPE
Coventry University Wroclaw	n/a	Games Development BSc	Programming	Private
The Eugeniusz Geppert Academy of Art and Design	Laboratory of Computer Games and Virtual Forms Design	Design of Computer Games and Virtual Forms	Design	Public
Wroclaw University of Applied Computer Science	Faculty of Information Technology	Programming computer games	Programming	Private
Wroclaw School of Banking	Research and Design Centre for Games and Animation "Digital Masters"	Programming VR/ AR applications in Unity 3D	Programming	Private
Wroclaw School of Banking	Research and Design Centre for Games and Animation "Digital Masters"	Computer graphics and multimedia technologies	Design	Private
Wroclaw School of Banking	Research and Design Centre for Games and Animation "Digital Masters"	Programming computer games	Programming	Private
Wroclaw School of Banking	Research and Design Centre for Games and Animation "Digital Masters"	Game Design	Design	Private
Wroclaw School of Banking	Research and Design Centre for Games and Animation "Digital Masters"	Game and animation design	Design	Private
Copernicus University of Information Technology and Management	Faculty of Information Technology	Creating computer games	Programming	Private
The University of Lower Silesia	Informatics	Computer Science, specialization: Programming of computer games	Programming	Private
The University of Lower Silesia	Creative media: game design, animation, special effects	Animation and special effects for film and games, Animation & Visual Effects - English studies, Game design	Design	Private
The University of Lower Silesia	Creative media: game and animation design	3D animation and special effects for film and games Game design	Design	Private

— LABOUR MARKET

THERE IS A HUGE SHORTAGE OF HUMAN RESOURCES IN THE INDUSTRY. WROCLAW IS HOME TO THREE LARGE COMPANIES, SEVERAL MEDIUM-SIZED ONES AND A LOT OF SMALL ONES TOO — AND EACH OF THEM OFFERS A LOT OF WORK OPPORTUNITIES. IN THE COMING YEARS, STUDIOS WILL CONTINUE TO STRUGGLE WITH STAFF SHORTAGES.

Companies themselves are addressing the problem with internal training and workshops, etc. Each new game requires more people to create it because they are becoming more complex and more difficult, technically. However, the proper education of junior developers requires cooperation with the industry. Senior developers are in demand and can choose from many proposals.

What attracts employees are attractive projects and passion, as many people in gamedev also create games after work. Passion and the willingness to develop after hours allow you to find yourself in this world. Currently, most of the competencies needed to develop games cannot be learned at university. Students have to practice and learn on their own. However, this might change if universities respond better to the industry's needs.

"

Adam Malek
COO, The Knights of Unity

Game developers are competing for employees with the IT industry, which often offers higher salaries than the gamedev industry. Small studios in particular may find it difficult to offer competitive salaries. At the same time, game developers need to have advanced skills in order to create a fascinating project. The range of required skills often exceeds the offered rates, which is especially important to older and more experienced employees. For young people who want to work in game development, Adam Malek recommends, above all, participating in student research clubs and industry training. In his opinion, self-development is the most important aspect. Dedicated gamedev

schools are a good solution that can help beginners, though meetings with industry practitioners are also extremely important. Some companies willingly agree to cooperate with universities, student organizations, and will even go to the market themselves to attract potential employees.

In my opinion, the coming years will be very interesting for Polish gamedev. I am frequently hearing about new studios or companies undertaking work on new titles or launching interesting projects. A lot of foreign capital is also appearing, which often helps to achieve goals and accelerates the growth process. Our studio is a great example of this - growing to almost 80 people in 2 years, and in such a difficult and niche industry. This situation is very good news for employees. The time when only a few large companies determined the market dynamics is slowly coming to a close. Right now, just like 10-15 years ago in IT, gamedev companies are starting to understand the importance of a solid EVP (Employee Value Proposition) and are introducing newer methods to interest and attract people. Wroclaw is a great example of this trend. Here, we have both large and experienced players and also quite a few young, innovative companies.

Adam Lason
Operations Director, PixelAnt

Game development requires a wide range of competencies. They can be divided into several basic groups:

- Game development - this is mainly the developer's area, most often using Unity or Unreal Engine; AI specialists are included here as well
- Game design - designers are responsible for the game idea, the mechanics of the game, along with its optimization
- Artists - responsible for character visuals, environments, illustrations, UX, and special effects
- Quality assurance - game testers, responsible for detecting bugs
- Musicians, sound engineers - they create the melody line of the game

The people responsible for the plot of the story, the translation of the games, and the dubbing are also very important. They allow players from different countries to be equally satisfied with the level of the game, the story, and the character dialogues. Project managers also play an important role in game development, and finding a good PM is quite a challenge. Creating games has a completely different specificity than classic IT projects. It is impossible to learn project management "after hours" as in the case of game development; real experience is necessary. These positions are usually occupied by experienced Project Managers from other industries who are looking for new challenges. The second way to become a PM is via internal promotion: people who learn the specifics of game development while working in other positions may become project managers out of necessity, learning everything on their own.

Understanding the characteristics of the industry is required of all professionals who work with gamedev studios. This also applies to less obvious professions, such as lawyers. This is why some law firms specialize in serving the high-tech industry and understand its needs. Legal counsel Michal Skrzywanek, who has been operating in this market for years and is familiar with its pain points, can attest to this.

> **We see that there are not enough competent lawyers who understand the specifics of the gaming industry and who have, at least, basic technical knowledge. This is a significant barrier to the development of this market.**
>
> *Legal Counsel Michal Skrzywanek*
> *Partner, Dotlaw*

With the dynamic development and professionalization of the industry, the demand for a variety of competencies is growing. Many people who don't seem to be related to gamedev are likely to find their way in it. On the other hand, recruiting experienced experts who understand this market is becoming increasingly challenging.

NGOS AND STUDENT ORGANIZATIONS

In Wroclaw, student research clubs are very active, as they bring together people who are interested in developing a career in the gamedev industry. TK Games at the University of Science and Technology in Wroclaw is a good example of this, as they have created a strong community of future developers and designers. Attendees can gain knowledge from zero to the junior level by taking courses in select branches of gamedev (programming in Unity, Unreal; 2D and 3D graphics; or Game Design). TK Games also organizes its own Game Jam. It's the perfect place to meet people from the industry, make first contacts, and sometimes even get a job.

> **A problem I've noticed is a lack of awareness among employers about student research clubs and their role and importance. These clubs are the student's first point of contact with the world of gamedev, where future employees are trained. There is a lack of close cooperation between employers and clubs. We don't get as many offers from employers as I would expect. A club like TK Games should be the first point of contact for recruiters.**
>
> *Radoslaw Klasa*
> *President at TK Games Wroclaw*

Another active student organization is the Computer Games Research Club in the Media Art Department of the Eugeniusz Geppert Academy of Art and Design. This is a group of enthusiasts who devote their time and energy to exploring 3D modelling techniques, animation, and creating concept art for computer games and animations. They also organize meetings where guests from the game development industry and other experts are invited to share their knowledge in this field.

There are also a few non-governmental organizations in Wroclaw that focus on popularizing games as a medium. They cover topics such as the history of computer game development, their role in pop culture, and future perspectives, etc. They also run museum facilities, displaying collector's models of old computers, gaming consoles, slot machines, and other memorabilia related to this subject.
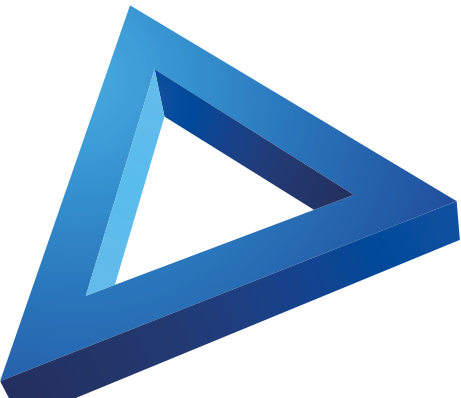
STUDENT ORGANIZATIONS

NAME	DESCRIPTION	WEBSITE
Computer Games Research Club at The Eugeniusz Geppert Academy of Art and Design	This organization focuses on exploring knowledge in topics such as 3D modeling techniques, animation, and creating concept art for computer games and animation.	
TK Games	TK Games is a Scientific Association of Game Developers at Wroclaw University of Science and Technology.	

NGO'S

NAME	DESCRIPTION	WEBSITE
GameUP	Association for the Research and Development of Games. "GameUP" is a non-governmental organization, which aims to popularize games as an excellent medium for learning, development, advertising and communication.	
Foundation for the Promotion of Retroinformatics "Old Computers and Games"	This is an organization that, since 2010, has been helping to trigger nostalgic memories related to computers and games from a dozen-or-so years ago.	
Games and Computers of a bygone era Foundation	The Foundation runs the Games and Computers Museum in Wroclaw, where people can easily travel back in time - to the 70s, 80s and 90s, when the video game industry and IT itself was thriving.	

— EVENTS AND MEDIA

The gamedev community in Wroclaw is a very tight-knit group and its members know each other well. This results in numerous thematic meetings and events for the local community. For example, for over 5 years now, there have been monthly meetings in the GameDev Wroclaw series, organized by Piotr Mistygacz, who works as Lead Technical Level Designer at Techland. There have already been over 50 editions of these events and there would have been more if not for the outbreak of the COVID-19 pandemic. More interesting events include initiatives such as Gamedevowe Pogaduchy and Pog(R)adajmy Wroclaw. A common feature of these events is that they are organized by gamedev enthusiasts from the ground up, without external funding or media patronage. In 2016, a unique nationwide project called Polski Gamedev was developed in Wroclaw. This is a knowledge portal and national database collecting information about development studios from all over Poland. The project was started by game enthusiast Iga Konicka, who wanted to show that the gamedev market is not only made up of the biggest and most recognized studios but also by smaller teams or even single developers. Today, it's continued and developed by her sister - Ola Konicka, who adds emerging companies as well as other interesting facts and news on a regular basis. There are also podcasts focused on gamedev based in Wroclaw like Rock and Borys or Strefa Gier.

EVENTS

NAME	CYCLICAL	DATE	DESCRIPTION	WEBSITE
GameDev Wroclaw	yes	monthly	Open meetings have been held on a monthly basis since August 2016. The meetings feature talks combined with the integration of people from the industry. Participants can meet employees of big companies (such as Techland, Ten Square Games, and CD Projekt), independent developers, as well as students.	
Gamedevowe Pogaduchy	yes	n/a	Gamedevowe Pogaduchy holds periodic meetings in the form of roundtables. During the event, various topics about game design and video game development are discussed.	
Pog(R)adajmy	yes	monthly	Pog(R)adajmy holds regular meetings for gamers and gamedev employees.	
Cyberiada	yes	Final: July 2022	Cyberiada is a project implemented by the Foundation for Youth Creativity, Education, and Animation "Teatrikon" within the framework of the government's IT Talent Development Program for 2019-2029.	
Turniej Trojgamiczny (Computer Game Design Championship)	yes	Final: June 2022	Turniej Trojgamiczny is a competition where the main task is for a team of high school-aged male and female students to collaboratively design a unique video game.	
Streamers League Valorant	no	18-19 June 2022	Streamers League Valorant is a project in which popular Twitch streamers from Poland, the Czech Republic, Hungary, Romania, and Greece compete with each other for a prize. The competition is split into regional qualifiers and LAN finals in Poland (Wroclaw).	
TK x Sensei Game Jam 2022	yes	23-25 September 2022	TK Game Jam is a 48-hour competition for creating games, not necessarily computer games. Participants create games from scratch in a limited time on a given topic.	

MEDIA

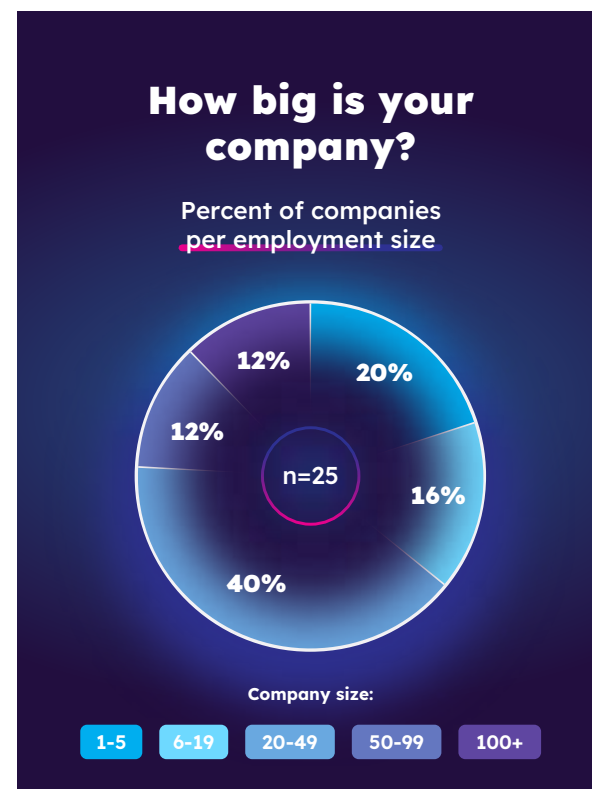| NAME	DESCRIPTION	WEBSITE
Borys Niespielak and Rock	Rock and Borys (RCKBRS) is a regular program featuring Remigiusz Maciaszek, better known as Rock - one of the most popular Polish YouTubers and streamers, and Borys Niespielak - director, documentary filmmaker, photographer, and cinema connoisseur	
Strefa Gier podcast	Current events and news from the world of virtual entertainment. E-sports, gamers, computer games, competitions - all in one place. Podcast created by Krzysztof Majewski from Radio RAM.	
Baza PolskiGamdev	Baza Polski GameDev is a project from CHV'OK Studio in Wroclaw. The site was created in 2015 and gathers a list of active Polish game developers.	

— MARKET SURVEY. RESULTS

THIS SURVEY WAS DESIGNED TO BETTER UNDERSTAND THE ACTIVITIES, NEEDS, AND PERSPECTIVES OF THE WROCLAW GAMEDEV INDUSTRY. 25 STUDIOS PROVIDED RESPONSES, INCLUDING THE LARGEST AND MOST RECOGNIZED ONES. THIS PROVIDES GOOD INSIGHT INTO THE STRUCTURE OF THE WROCLAW GAMEDEV SCENE.

The average Wroclaw gamedev studio has between 20-49 employees. As the study did not cover most micro studios (1-2 people), it presents the employment structure among entities with a stable market situation quite realistically.

the market for over 10 years and have grown to a considerable size.

How big is your company?

Percent of companies per employment size

12%
20%
12%
n=25
16%
40%

Company size:

| 1-5 | 6-19 | 20-49 | 50-99 | 100+ |

Since when has the company been on the market?

Number of firms established in the given period, n=25

4 — Before 2010
8 — 2010-2015
11 — 2016-2020
2 — 2021 and later

The results show a picture of the dynamic growth of new entities in 2018-2020, when a total of 10 new companies were established. Half of the surveyed companies have been operating on the market for less than 5 years and are growing dynamically. They are often set up by former senior employees of large organizations such as Techland and Ten Square Games. These, in turn, have been present on
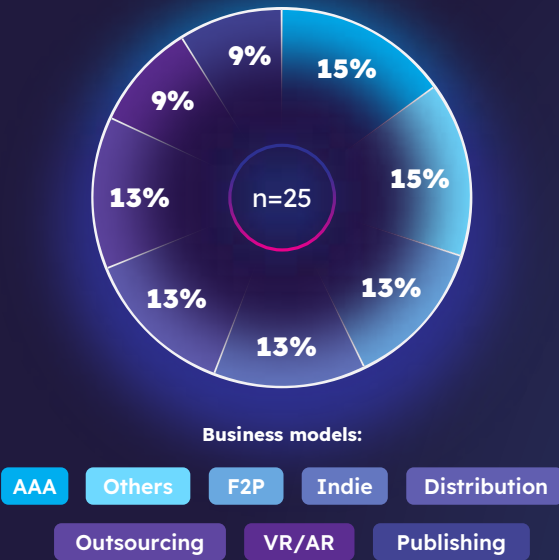
When it comes to the business model and the type of games produced, Wroclaw has a great variety of companies. There are both AAA titles, i.e., the most expensive and largest productions with a global reach, as well as much more modest productions focused on monetization through the F2P (Free-to-play) model. AR / VR games are developing dynamically too. Important business segments are also publishing and outsourcing services for larger entities, which often allows smaller studios to work on their own productions. RPGs (Role Playing Games), simulations, and strategies are the most popular. Nevertheless, they do not dominate the market; other genres, such as casual, arcade, or sports, make up a significant share.
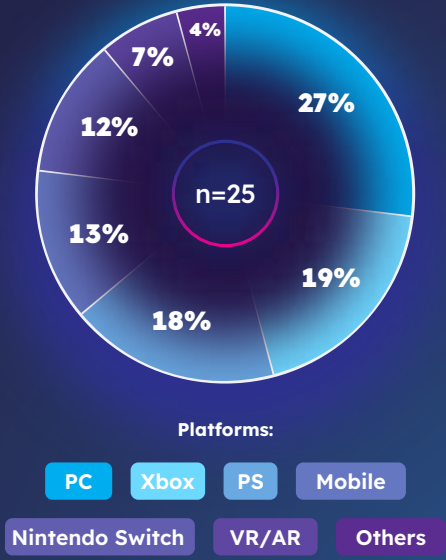
What is your company business model?

Multiple answers were possible

n=25

15% | 15% | 13% | 13% | 13% | 13% | 13% | 9% | 9%

Business models:

AAA | Others | F2P | Indie | Distribution
Outsourcing | VR/AR | Publishing

To which platform are your games dedicated?

Multiple answers were possible

n=25

27% | 19% | 18% | 13% | 12% | 7% | 4%

Platforms:

PC | Xbox | PS | Mobile
Nintendo Switch | VR/AR | Others

Dominating programming languages are C# and C++. Both are used by 26% of developers. They are the most universal languages and, therefore, used by almost half of the surveyed companies. Other popular languages (or pre-engineered engines) are JavaScript, HTML5, PHP, Unreal Engine, Lua, and Unity.

What genres of games do you develop?

Multiple answers were possible, n=25

Genre	%
RPG	15%
Simulators	13%
Strategy	12%
Casual	10%
Arcade	10%
Sports	8%
Education	7%
Logical	7%
Others	18%

There are various platforms for which games are created. The most popular platforms are PCs (27%) and consoles like Xbox (19%) and PS (18%). Mobile games, as well as Nintendo Switch, are also important and titles dedicated to VR / AR platforms are making their way more boldly.

What programming language do you use?

Multiple answers were possible, n=25

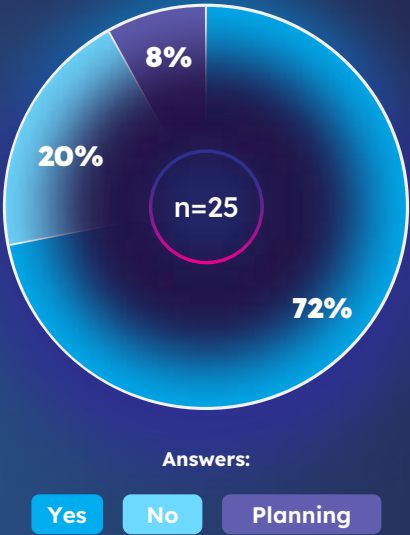| Language	%
C#	26%
C++	26%
Java Script	7%
HTML 5	7%
Unreal Engine	7%
Unity	5%
Lua	5%
PHP	5%
Others	14%

Companies in Wroclaw definitely target their products for global markets. Four out of five respondents confirmed that they cooperate with foreign companies (or plan to do so in the near future). When it comes to the origin of the contractors, they are often partners from developed markets (EU countries, USA), and in some cases also from China and other Asian countries. 12% of respondents declared that their activities are global and not limited to specific markets.

Do you work with clients from abroad?

n=25

72% | 20% | 8%

Answers:

Yes | No | Planning

What are your company's main export markets?

Multiple answers were possible, max. 3

n=25

40% | 32% | 12% | 8% | 8%

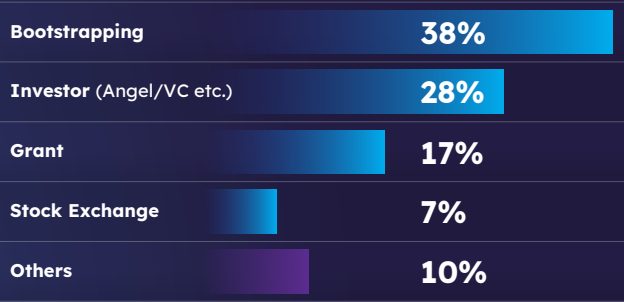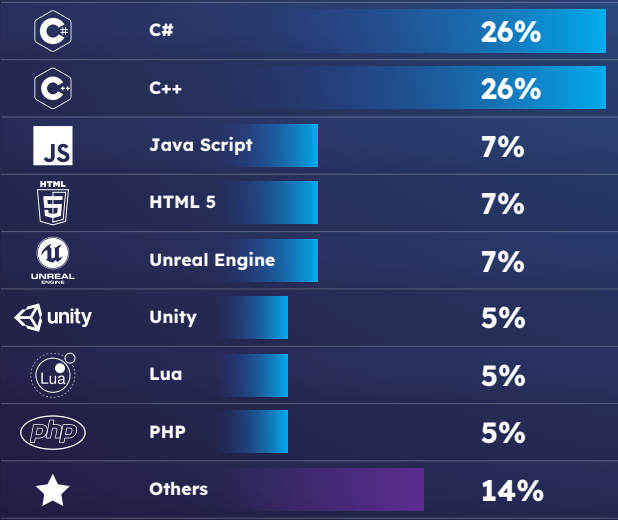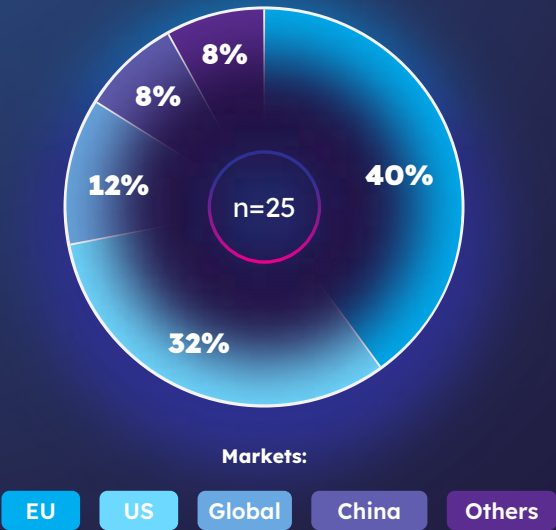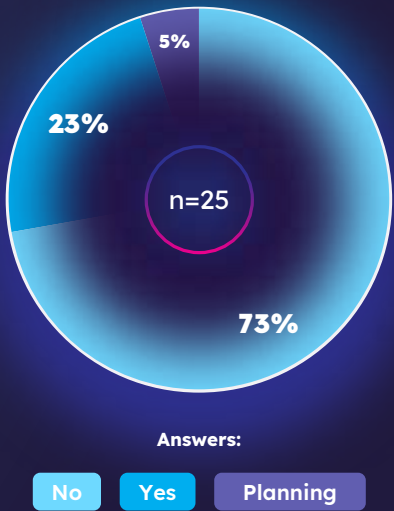**Markets:**

EU | US | Global | China | Others

Self-financing (bootstrapping) is the most popular form of financing, and it applies to 38% of companies. 25% of respondents gained funds from an external investor (VC fund, angel investor, or industry investor), and 17% received support in the form of grants or subsidies (e.g., EU programs). It is also relatively popular to gain additional funds by going public, although three-quarters of companies are not listed and are not planning to debut soon.

How does the company finance its operations?

Multiple answers were possible, n=25

	%
Bootstrapping	38%
Investor (Angel/VC etc.)	28%
Grant	17%
Stock Exchange	7%
Others	10%

Is your company listed on the stock exchange?

n=25

73% | 23% | 5%

Answers:

No | Yes | Planning

In the last part of the survey, we asked companies to express their subjective opinion on the attractiveness of Wroclaw in the context of the development of the gamedev market. More than half of them agreed with the statement that the city offers attractive conditions for the operation of this industry, while only one in ten was of the opposite opinion.

Does Wroclaw offer attractive conditions for the development of the gamedev industry?

n=24

38%

54%

8%
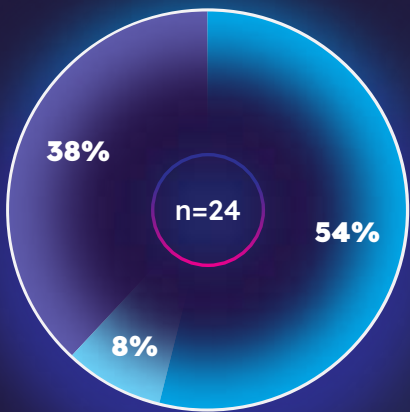
Answers:

Yes   No   No opinion

The questioned companies pointed to relatively good access to a qualified workforce as an advantage of operating in Wroclaw. Well-developed infrastructure (access to good office space and high quality Internet, etc.), as well as the opportunity to establish industry contacts (networking) and a wide range of events for the industry, were also frequently mentioned.

On the other hand, the most frequently cited disadvantages were regulatory shortcomings (tax procedures and bureaucracy, etc.), the insufficient number of qualified personnel, the lack of a major industry event on a national/international scope, and insufficient support from public institutions such as local government units or offices.

What do you think is missing the most in Wroclaw in order to grow your business faster?

Multiple answers were possible, n=22

Friendly regulatory environment	41%
Access to skilled workforce	36%
Industry events offer	36%
Institution support (local government, industry-dedicated organisations, etc.)	36%
Educational offer	27%
Networking	14%
Others	9%

Which of the following factors help you develop your business in Wroclaw?

Multiple answers were possible, n=23

Access to skilled workforce	61%
Developed infrastructure (office space, fast interent connection, etc.)	48%
Networking	35%
Industry events offer	30%
Educational offer	22%
Institution support (local government, industry-dedicated organisations, etc.)	13%
Others	17%

— SUMMARY AND NEXT STEPS

OVER THE PAST FEW YEARS, WROCLAW HAS BECOME AN IMPORTANT CENTRE ON THE MAP OF POLISH GAMEDEV. GAME DEVELOPERS HAVE HAD STRONG CONNECTIONS TO THIS CITY SINCE THE VERY BEGINNING OF THE INDUSTRY'S FORMATION IN POLAND, AS IT HAS A LOT TO OFFER.

Wroclaw has undeniable advantages, such as:

- Good transportation (planes, railways, and highways)
- Expansive hotel base
- A large number of students, active and ready to participate
- Climate and atmosphere conducive to attracting investors and new residents
- An active local business scene, with businesses of all sizes that are constantly looking for employees

In order to better understand the condition of the local industry, we asked the creators themselves, as well as people connected to the gamedev environment in Wroclaw about this. Their statements indicated that many areas are already well or very well-developed. At the same time, they also pointed out many opportunities to support and accelerate the development of this market. We have gathered the most frequent comments and grouped them in such a way as to get a true picture of the state of the industry in Wroclaw.

WHAT WORKS

- Great human potential, developed human resources
- Developed culture of networking, mutual support of businesses, exchanging experiences, and open approaches to cooperation with other companies
- Lots of grassroots initiatives, and meetings with people from the industry
- Educational offerings from local universities in programming, graphic design, etc. draws skilled professionals
- Culture of an innovative city Wroclaw is already a magnet that attracts skilled professionals from other cities

The attractiveness of Wroclaw is linked to our philosophy. We want to build a space for developers who want to make a big impact on quality products. In turn, Wroclaw has the right climate for this. Not only do we have many developers with different levels of experience in the city, but also the right universities, there is no lack of gamedev meetups and passionate people. In addition, Wroclaw simply has a great reputation as a city: people want to live here. Of course, some other big cities also have at least some of the same advantages mentioned but, in Wroclaw, the whole thing comes together perfectly and makes it an ideal place for AA+ game development.

Andrzej Blumenfeld
CEO at Far From Home

"

Wroclaw is a very gamedev-friendly city, and we are extremely happy that this is where The Dust Group and subordinate companies have put down roots. Thanks to the extensive local market of our industry, we have been able to attract talented programmers, graphic designers, and game designers, and over the past few years, The Dust Group has grown to include 3 independent studios that work on games in various genres. Our productions are already receiving a lot of attention from investors, publishers, and gamers around the world. We owe our success in large part to our location, which fosters creativity, but also to the presence of other acclaimed development studios in the Wroclaw agglomeration. Their successes give us additional motivation to create the best quality games possible. In the future, we want our studios to be associated only with titles that provide audiences with an exceptional experience and will strengthen our position on the map of global gamedev and, consequently, Wroclaw as a whole. We cannot imagine better working conditions than those offered by the capital of Lower Silesia.

Jakub Wolff
CEO at The Dust Inc.

CHALLENGES:

- There is a lack of opportunities to expose the local gamedev industry in terms of events such as industry trade shows or conferences
- Difficult for smaller studios to attract qualified and experienced staff
- The educational offerings should be better tailored to the needs of the industry and educate students in a more practical way. Universities lack practitioners and industry experts from the market
- Insufficient institutional support for the industry in the form of grants and competitions, etc.

NEXT STEPS

The gamedev industry has the potential to become Wroclaw's showcase on a national or even international scale. It may be a place that is widely associated with game developers and that attracts foreign investors associated with the industry. However, other urban centres in the country and abroad have similar ambitions. In order to compete effectively for talent or investments, specific initiatives should be undertaken. The three most repeated ideas are:

A) CREATE A MAJOR INDUSTRY EVENT

The Wroclaw gamedev community is an integrated one, standing out in this respect even on a national scale. However, most of the existing initiatives are local events, organized by enthusiasts on a grassroots scale. The voice of the industry is unanimous - Wroclaw lacks a large conference or any other kind of industry event in the field of gamedev, or even with a broader focus, especially on an international scale. This opinion is shared by Adam Pawlewski of Awaken Realms, among others.

"

The gamedev scene in Wroclaw is very active. The most active people are mainly enthusiasts, but they don't have institutional support, so they engage in grassroots, small-scale initiatives. There is definitely room for a big national or even international event.

Adam Pawlewski
UE4 Developer, Awaken Realms

Wroclaw has the potential to host this type of event. For example, Krakow made an effort to organize the Digital Dragons conference - the biggest gamedev event in Poland, with an international reach. The main partner of this event was Malopolska Voivodeship. If it was successful there, there's no reason why a similar event couldn't be held in Wroclaw as well. However, this requires the involvement of many parties and cooperation between the private and public sectors.

B) GAME JAMS AS A SHOWCASE OF WROCLAW

"Game jam" is an industry term for a competition of video game developers whose task it is to design and develop a playable production in the shortest

possible time. Game jams usually last between one and three days, and the work created by participating programmers and artists usually have to be related to a theme announced shortly before the event.

Before the outbreak of the COVID-19 pandemic, a total of several dozen game jams were held throughout Poland, most of which were small events for a few dozen people. In Wroclaw alone, there were four events of varying scales. According to experts in our city, Wroclaw has the potential to successfully organize a few bigger events like this every year (with over 200 participants). In turn, smaller jams for a few dozen people (with a cheap entrance fee) could even be held every month, especially if they were thematic and combined with lectures, seminars or game fairs. Everything depends on the sponsors and availability of venues. Demand is certainly there, because there is a hunger for live meetings after a two-year break.

"

Wroclaw has a rich tradition of organizing game jams that are recognized on a national scale. Before the outbreak of the pandemic, they were very popular and attracted participants from all over Poland and even abroad. It would be worthwhile to support the organization of these events, as they are a great showcase for Wroclaw. We can draw on the experience of countries such as Sweden and Finland, where cyclical events of this type are held on a much larger scale. It's also a good idea to attract stars from the industry, who can draw even more interest. Properly supported and promoted game jams can become a showcase of Wroclaw and attract more game developers to the city.

Piotr Mistygacz
Lead Technical Level Designer at Techland

C) TALENT SUPPORT

The gamedev industry is relatively rich and does not expect to support companies that have already reached a certain level of development. Nevertheless, experts in interviews emphasize that it would be worthwhile to help young companies that are just taking their first steps in the industry. These are usually small companies run by enthusiasts for whom creating games is mainly a hobby. For them, support in the form of, e.g., subsidized trips (not necessarily 100% of

costs) to gaming fairs when the studio has completed a particular fragment of the game would also be highly recommended.

It would be a good idea to announce periodic competitions for young game developers with prizes such as software licences, online courses, or funding for travel to trade fairs or industry conferences. These smaller studios often don't have the budgets for this, so their marketing and consequently, sales suffer. Smaller players often look for suitable publishers, who can help in the proper promotion and distribution of the game at fairs or events. Young creators participating in an event on an international scale have the opportunity to learn a lot and better understand how the industry functions in practice.
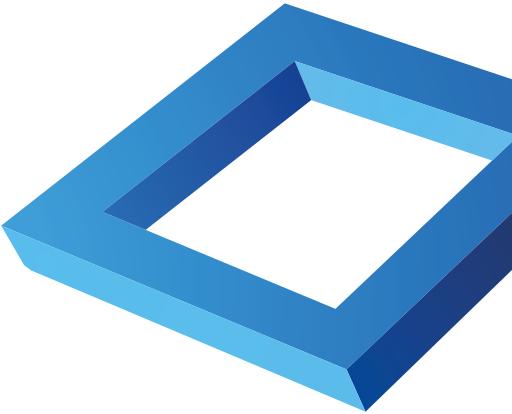
LEGAL DEBT IN THE GAMEDEV INDUSTRY
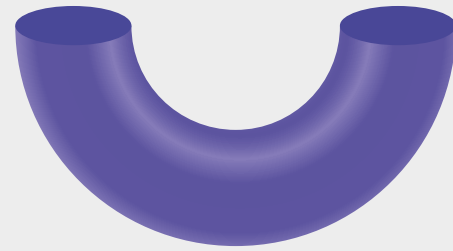
GAMEDEV COMPANIES ARE VERY DIVERSE. THERE ARE HUGE PLAYERS WITH HUNDREDS OF EMPLOYEES, EXPERTISE IN THE ENTIRE GAME PUBLISHING PROCESS, AND HUGE BUDGETS FOR LEGAL SERVICES. HOWEVER, THE VAST MAJORITY ARE SMALLER COMPANIES, FOUNDED BY ENTHUSIASTS.

These usually have no knowledge of what legal pitfalls may await them later when presenting their ideas to the world. Omission or use of suboptimal solutions is the so-called legal debt, which means measurable costs, and in extreme cases can even lead to the failure of the project or bankruptcy of the company.

In order to reduce this risk, it is worth taking the proper precautions to protect our project in advance. The following will address the most important legal areas while maintaining flexibility in the creative process.

1. IDEA PROTECTION

As long as a project is just an idea, a concept, or a description of operating principles, including, for example, just the mechanics, it is not automatically covered by copyright protection. Only when it takes a concrete form, e.g., in the form of a written storyline, conceptual graphics, or a computer program - will it be protected by copyright.

That's why it's a good idea to sign non-disclosure agreements at the initial stage of an idea (when forming a team, presenting the idea to external entities, or getting funding, etc.). Such an agreement should oblige both parties to keep secret for themselves what they have learned in the course of discussions or presentations and that the other party will not use the knowledge provided to them, for example, to copy the project or exploit the idea.

2. ACQUISITION OR LICENSING OF IP

Another key aspect is to clearly define who has the right to the finished work, i.e., the created game and its various elements. The first basic question that an investor or lawyer always starts the conversation with is, "Did you acquire the rights or do you have the relevant licences to your/our game?" The problem can be addressed in two ways:

1. acquiring from collaborators the economic copyright to the results of their work;
2. entering into a licensing agreement with collaborators. The latter solution is used extremely rarely in practice due to significant limitations (e.g., that the agreement can be terminated).

Significantly, the acquisition of economic copyrights in Poland requires the conclusion of a written agreement - so any platform for signing documents and concluding agreements over the Internet will, unfortunately, usually be insufficient. Making sure you protect your rights and avoid infringing on the rights of others is the most important issue in gaming projects.

3. CONTROL OVER THE PERSONAL DATA COLLECTED

Once a game is on the market, one of the key aspects of promoting and improving it is to understand how and by whom it is used. This includes where its users come from, why they chose a particular title, what frustrates them the most, or what convinces them to keep playing.

Gathering information about players thus gives studios tangible benefits. At the same time, in doing so, they must not neglect the privacy of players. Therefore, both throughout the European Union and in other countries around the world (in the USA, Canada, or Australia, etc.), appropriate legal solutions have been adopted, which imply that certain types of information about players cannot be collected. At the same time, it is necessary to transparently inform what data we collect and indicate where it will be stored.

If a company wants to use tools in a project that collects data about players, it should carefully analyse their Terms of Service. An analysis of the ToS will indicate whether their operation may be risky, for example, by transferring data to countries that do not meet data protection standards - after all, no one would want their data to end up in North Korea. It is also imperative that the company informs players what solutions it uses.

Applying the above should allow young gamedev companies to avoid legal debt. This is important because neglecting to do so could mean losing time and money to fixing mistakes that could have been avoided relatively easily. On the other hand, if a company does not want to deal with these topics on its own, it is a good idea to ask for help from a partner in the form of a law firm that has the right experience and competence in the field of intellectual property protection and that understands the specifics of the creative process, which is game production.

Dotlaw is a modern law firm specializing in serving companies and technology projects. The Dotlaw team combines the experience of joint work for the largest law firms in Poland and in-house counsel, close to the business. As a result, it understands the needs of technology companies and is able to address them efficiently. Among the many services it provides are those related to intellectual property and GDPR, i.e., the preparation and auditing of IP agreements, assistance with the safe use of open source, due diligence, assistance with trademark registration and the implementation of GDPR (personal data protection and information security) rules.

APPENDIX II:
DIRECTORY OF SELECT WROCLAW GAMEDEV STUDIOS

THIS CATALOGUE CONTAINS DESCRIPTIONS OF THE COMPANIES THAT VOLUNTEERED TO COMPLETE THE SURVEY. THIS DATA WAS PROVIDED BY THE COMPANIES THEMSELVES AND HAS NOT BEEN VERIFIED BY THE AUTHORS OF THIS PUBLICATION. COMPANIES ARE PRESENTED IN ALPHABETICAL ORDER.

Astrolabe Stories
www.astrolabestories.com

Foundation: 2021

Headcount: 13

Model:
Indie

Games type:
Visual Novel

Techstack:
C#

Platform:
PS

Description:	We make independent games focused on history and narration. Our main focus is the genre of Visual Novel.
Main titles:	"Last Threshold"
Plans for 2022:	We are preparing two games in the genre of Visual Novel.

Awaken Realms
www.awakenrealms.com

Foundation: 2018

Headcount: 51

Model:
AAA, Publishing

Games type:
Arcade, RPG

Techstack:
C#, C++

Platform:
Xbox, PC

Description:	We are one of the largest publishers of board games in the world! Our successes include: Nemesis: Lockdown and Tainted Grail: The Fall of Avalon. Based on our experience, we are also entering the digital market. We have had two successful computer games - Tainted Grail: Conquest and No Place Like Home.
Main titles:	"Tainted Grail Conquest", "No Place Like Home", "Nemesis Lockdown"
Plans for 2022:	Publish a new game: "Death Roads: Tournament" and deliver the board game "Death Roads: All Stars" to our Kickstarter supporters.

Cat-astrophe Games
www.cat-astrophe-games.com

Foundation: 2016

Headcount: 20

Model:
AAA, F2P, VR/AR, Outsourcing

Games type:
Strategies, RPG, Arcade, Casual, Simulators, Sports, Logical

Techstack:
C#, JavaScript, HTML 5

Platform:
PC, Mobile, Switch, VR/AR

Description:	Cat-astrophe Games is an independent game studio from Wroclaw focused on innovative cross-platform game solutions. We have expertise in game development and design for a wide variety of systems - PCs, mobile, consoles, and VR devices. Our goal is to create unique game experiences - using engaging stories, comic-inspired graphics and satisfying mechanics.
Main titles:	"The Unholy Society", "Theatre of Sorrows", "Mechanic Battle"
Plans for 2022:	Exploring the AR/VR space with our City Stories platforms.

ChaosForge

www.chaosforge.org

Foundation: 2015	**Headcount: 3**
Model:	**Games type:**
Indie	**RPG, Simulators**
Techstack:	**Platform:**
C++, Lua	**Xbox, PS, PC, Switch**

Description:
ChaosForge was established as a commercial continuation of free games created by Kornel Kisielewicz in 2000-2015 (DoomRL and AliensRL, etc.). We produce games using our own technology (cross-platform custom 3D engine in C++ / Lua) and mainly focus on indie games for PCs, such as "classic roguelikes" (turn-based random dungeon-crawlers).

Main titles:
"Jupiter Hell"

Plans for 2022:
Ports of our engine and "Jupiter Hell" for consoles (PS, Xbox, Switch).

Dash Dot Creation

www.dashdot.pl

Foundation: 2008	**Headcount: 23**
Model:	**Games type:**
AAA	**n/a**
Techstack:	**Platform:**
n/a	**Xbox, PS, PC, Mobile, Switch**

Description:
We are an animation and post-production studio from Wroclaw providing services in the field of creating advertisements, cinematics, trailers and teasers as well as special effects for films. Our team has many years of experience acquired from dozens of national and international productions. We care about providing the highest quality in our work, which has resulted in opportunities to cooperate with major game producers.

Main titles:
Trailers for games: "The Witcher II", "Medium", "Observer Redux"

Plans for 2022:
Extending our cooperation with game producers from the USA.

Donkey Crew

www.donkey.team

Foundation: 2018	**Headcount: 35**
Model:	**Games type:**
Publishing, Other	**Survival, MMO**
Techstack:	**Platform:**
C++	**Xbox, PC**

Description:
We create computer games and run publishing activity in the field of computer games and software.

Main titles:
"Last Oasis"

Plans for 2022:
"Last Oasis Season 5" release

Gameboom VR

www.gameboomvr.com

Foundation: 2009	**Headcount: 30**
Model:	**Games type:**
VR/AR, Publishing	**Arcade, Simulators**
Techstack:	**Platform:**
C#	**VR/AR**

Description:
We produce and publish computer games for virtual reality goggles (Steam VR, Meta Quest, and PlayStation VR).

Main titles:
"Cooking Simulator VR", "Thief Simulator VR"

Plans for 2022:
Publish "Cooking Simulator VR" for Quest and PS VR. Complete the demo for our new VR game: "Into the Darkness".

Gamefound

www.gamefound.com

Foundation: 2015

Headcount: 30+

Model:
n/a

Games type:
RPG, Strategic, Logical, Sports, Education and more

Techstack:
n/a

Platform:
Others

Description: We already have over 700,000 active backers on our platform. Gamefound is a platform for funding board games and things related to them. We offer both Crowdfunding and Pledge Manager. In February 2022, Ravensburger joined us as a strategic investor.

Main titles: "ISS Vanguard", "Sleeping Gods", "Castles of Burgundy"

Plans for 2022: EA lot of plans in the context of improving the platform's operation, expanding our group of backers, and the further development of our platform in general.

Game Island

www.gameisland.pl

Foundation: 2020

Headcount: 22

Model:
Indie, AA Games

Games type:
Survival

Techstack:
Unreal Engine

Platform:
Xbox, PC, PS

Description: Game Island is part of The Dust group, and it is dedicated to the production of survival games. Their flagship project is "Serum", which is currently under development, and it is a game in which the player has to survive in a dangerous, unknown world. Game Island creates its productions via the latest Unreal Engine 5.

Main titles: "Serum"

Plans for 2022: —

Giant Lazer

www.giantlazer.com

Foundation: 2015

Headcount: 27

Model:
VR/AR, B2B

Games type:
Arcade, Simulators, Education, Casual

Techstack:
C#, C++, JavaScript, HTML5, Python, PHP

Platform:
PC, Mobile, VR/AR

Description: Creating VR and AR applications and games - from conceptualization, through 3D, UX and UX design, and programming (including Unity), to providing support in the implementation, distribution, and purchase of dedicated virtual and augmented reality devices. We work with companies, educational institutions and public institutions from Poland and abroad.

Main titles: "Trash Rage VR", "Flying Things", "Planet Stories AR"

Plans for 2022: In 2022, we have already launched our mobile game "Planet Stories AR" (Google Play, App Store), but we are also developing a new VR game dedicated to climate change and a training application related to cybersecurity. We combine B2C and B2B activities here.

Kids With Sticks

www.kidswithsticks.com

Foundation: 2019

Headcount: 5

Model:
AA

Games type:
Arcade

Techstack:
C++

Platform:
Xbox, PS, PC

Description: Independent production of premium games for consoles / PC.

Main titles: "Rogue Spirit" (not released yet)

Plans for 2022: "Finish working" on "Rogue Spirit".

Madnetic Games

www.madnetic-games.com

Foundation: 2020

Headcount: 11

Model:
Distribution, Publishing, VR/AR

Games type:
RPG, Simulators, Strategy, Logical

Techstack:
C#, C++. SQ:, Unreal Script

Platform:
Xbox, PS, PC, VR/AR

Description: We create games that stand out in terms of quality. Currently, Simulators are the most developed games in our studio. Meanwhile, however, we are slowly working on more elaborate titles and the development of the studio.

Main titles: "WW2 Rebuilder", "Photography Simulator", "Mythos: Medieval Survival City Builder"

Plans for 2022: Release the game, "WW2 Rebuilder". Present demos of other games and show new productions.

No Rush Games

www.norushgames.com

Foundation: 2018

Headcount: 2

Model:
Indie

Games type:
Turn-based Tactical Games

Techstack:
C++

Platform:
Xbox, PS, PC, Switch

Description: We are a small independent game studio based in Wroclaw, founded by two developers who previously worked on several games for PC and mobile devices. In August 2018, we started working on our debut cyberpunk tactical game called Terminal Protocol.

Main titles: "Terminal Protocol" (not released yet)

Plans for 2022: Release of the demo version of "Terminal Protocol" on Steam.

Oxygen

www.oxygen.com.pl

Foundation: 2020

Headcount: 38

Model:
F2P, Distribution, Publishing, Outsourcing

Games type:
mid-core, hyper-casual

Techstack:
Unity

Platform:
PC, Mobile, Switch

Description: Oxygen SA is a company listed on the NewConnect stock exchange. Together with Mousetrap Games and HyperCat, it comprises the Oxygen Capital Group, which focuses on production and publishing activities on the mobile games market, with particular emphasis on mid-core, casual, and hyper-casual productions. We also work with respected players from the gamedev industry, such as "Voodoo", "Daedalic" or "Ketchapp" (Ubisoft).

Main titles: 96%: "Family Quiz", "Rocat Jumpurr", "Cards Up!"

Plans for 2022: Release 20 games, expand publishing activities, and launch operations on the NFT market.

Picadilla

www.picadilla.com

Foundation: 2010

Headcount: 20

Model:
F2P

Games type:
Logical, Casual

Techstack:
C#

Platform:
Mobile

Description: Production of own mobile games.

Main titles: "Traffic Puzzle", "New Rock City"

Plans for 2022: Continuing the strategy of creating "innovative but familiar" games.

PixelAnt Games

www.giantlazer.com

Foundation: 2020

Headcount: 65

Model:
AAA, AA+, Co-development

Games type:
Sports, Action RPG & more

Techstack:
C#, C++, Lua, Python

Platform:
Xbox, PS, PC

Description: PixelAnt Games is a studio belonging to the British Sumo Digital group. Based in Wroclaw, they are a leader in the field of the co-development of AAA and AA+ games for current and next generation platforms, and they are also working on their own IP. In June 2022, PixelAnt Games opened a new studio in the Czech Republic.

Main titles: [co-created as part of co-development] "Forza Horizon 4", "Forza Horizon 5", "Sackboy: A Big Adventure"

Plans for 2022: Continuing the strategy of creating "innovative but familiar" games.

Silver Lemur Games

www.silverlemurgames.com

Foundation: 2005

Headcount: 1 + freelancers

Model:
AAA

Games type:
RPG, Strategy

Techstack:
C++

Platform:
PC, Switch

Description: We create classic RPGs in the style of 90s dungeon crawlers and complex turn-based strategies (4X, grand strategy) for PC and consoles.

Main titles: "Stellar Monarch", "Stellar Monarch 2" (in progress), "Legends of Amberland"

Plans for 2022: "Release Stellar Monarch 2" (currently in Early Access) and the sequel to "Legends of Amberland".

SuperNova Interactive

www.supernovainteractive.pl

Foundation: 2008

Headcount: 5

Model:
F2P, MMO

Games type:
RPG, Sports

Techstack:
JavaScript, HTML 5, SQL, PHP

Platform:
PC, Mobile, Browser

Description: SuperNova Interactive is an independent studio creating MMO games. The company's portfolio currently includes two browser games - the latest MMORPG "Ski Jump Simulator" and the sports manager "Ski Jumps". Previously developed titles include "Delirium", "LifeON" and "Tetrykowo". The company has also prepared and is currently developing a website with online games - Portal MMO.

Main titles: "Delirium", "Ski Jumps", "Ski Jump Simulator"

Plans for 2022: Promote and develop their new title, "Ski Jump Simulator", in foreign locations (English, German).

Techland

www.techland.net

Foundation:
1991

Headcount: 410

Model:
AAA, Publishing

Games type:
RPG

Techstack:
C++

Platform:
Xbox, PS, PC, Switch

Description: Techland is one of the largest and most famous Polish game developers with studios based in Wroclaw and Warsaw. For over 30 years, we have cultivated a tradition of providing players with an unforgettable experience. We are an international team of over 400 highly qualified professionals driven by a shared passion for gaming, always striving for the best quality.

Main titles: "Dead Island", "Call of Juarez", "Dying Light", "Dying Light 2"

Plans for 2022: In addition to continuously expanding "the Dying Light" world with a solid post-launch support plan for "Dying Light 2 Stay Human", we're also working on an unannounced AAA Open World RPG set in a brand-new fantasy universe; our biggest project so far.

ten square games

Ten Square Games
www.tensquaregames.com

Foundation: 2020	**Headcount: 520**
Model:	**Games type:**
F2P	Simulators, Sport
Techstack:	**Platform:**
C#, Java	Mobile

Description:	We create free-to-play mobile games
Main titles:	"Fishing Clash", "Hunting Clash", "Let's Fish"
Plans for 2022:	Develop and diversify the portfolio of our games.

THE KNIGHTS OF UNITY

The Knights of Unity
www.theknightsofunity.com

Foundation: 2015	**Headcount: 120**
Model:	**Games type:**
AA	Arcade, RPG, Simulators, Strategy, Education, Casual
Techstack:	**Platform:**
C++	Xbox, PS, PC, Mobile, Switch, VR/AR

Description:	We outsource projects in the Unity engine for external entities and use the obtained funds to produce our own games.
Main titles:	Internal projects: "Scythe: Digital Edition", "Tools Up!" External projects: "Disco Elysium", "PC Building Simulator"
Plans for 2022:	Publish our new game "Death Roads: Tournament" and deliver the board game "Death Roads: All Stars" to our Kickstarter supporters.

THE DUST

The Dust
www.thedust.pl

Foundation: 2014	**Headcount: 30**
Model:	**Games type:**
Indie, AA	Action-Adventure, Fantasy
Techstack:	**Platform:**
Unreal Engine	Xbox, PS, PC

Description:	The Dust is a studio from Wroclaw that produces action-adventure games. The team is currently developing the project I, the Inquisitor - a game based on Jacek Piekara's best-selling books. As part of The Dust group, he created three subsidiary studios: "Two Horizons", "Game Island" and "4 Knights".
Main titles:	I, the Inquisitor
Plans for 2022:	We are focusing on the development of our flagship title: "I, the Inquisitor".

try_evidence

Try Evidence
www.tryevidence.com

Foundation: 2019	**Headcount: 6**
Model:	**Games type:**
Outsourcing	n/a
Techstack:	**Platform:**
n/a	Xbox, PS, PC, Mobile

Description:	We study the reactions of the media and players to games. Try Evidence is an analytical and consulting agency dedicated exclusively to the video game industry. Our insights help game producers, publishers and investors make key decisions in game development. We make it easier for them to minimize business risks through comprehensive qualitative (UX, focus tests, game lab), quantitative (international player research) and market analyses based on various hard data sources
Main titles:	n/a
Plans for 2022:	Strong expansion into the markets of the "old" EU.

Horizons

Two Horizons
www.twohorizons.pl

Foundation: 2020

Headcount: 19

Model:
Indie

Games type:
Simulators, Others

Techstack:
Unreal Engine

Platform:
Xbox, PS, PC

Description: The Wroclaw-based studio Two Horizons is a company in The Dust group specializing in creating next-gen simulators with photorealistic graphics, satisfying mechanics and a large dose of humour. Currently, they are developing the Hotel Renovator project in conjunction with global publisher Focus Entertainment.

Main titles: Hotel Renovator, Airport Renovator, Camping Builder

Plans for 2022: —

T-Bull
www.t-bull.com

Foundation: 2010

Headcount: 60+

Model:
F2P, Distribution, Publishing

Games type:
Simulators, Strategy, Casual

Techstack:
C#, C++

Platform:
Mobile, PC, Switch

Description: A developer of mainly mobile games. Recently, they've been expanding their portfolio with console and computer productions. They have nearly 600,000,000 game downloads worldwide. They have been present on the WSE for several years.

Main titles: Moto Rider GO, Top Speed

Plans for 2022: Expand their game portfolio with new titles, garner support for their current projects, and prepare for their Early Access release of Birding Simulator on Steam.

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