



SERBIAN GAMING INDUSTRY REPORT

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INTRO

In the 12 months since our last report, the world has changed. This was certainly one of the most challenging years for all of us. However, despite all of the obstacles, the SGA team has risen to the challenge.

The team adapted quickly and since organizing our regular events was temporarily on hold, focused the efforts on working with our members and partners to build strong foundations on which the future growth of the SGA and Serbian games industry will take place.

Access to Google Play and Apple merchant accounts from Serbia, first master programs dedicated to game design, unified game jobs platform, new hubs with game development programs, joining the EGDF, and a robust benefits package for our members are only some of the wins we have achieved.

Speaking of our members, SGA is now supported by 80 companies, across Serbia. That is 20 companies more compared to the same time last year. They employ close to 2.000 people and as you will see in this updated report, they are leaving a mark on the global scene. From smaller indie studios and their hypercasual hits

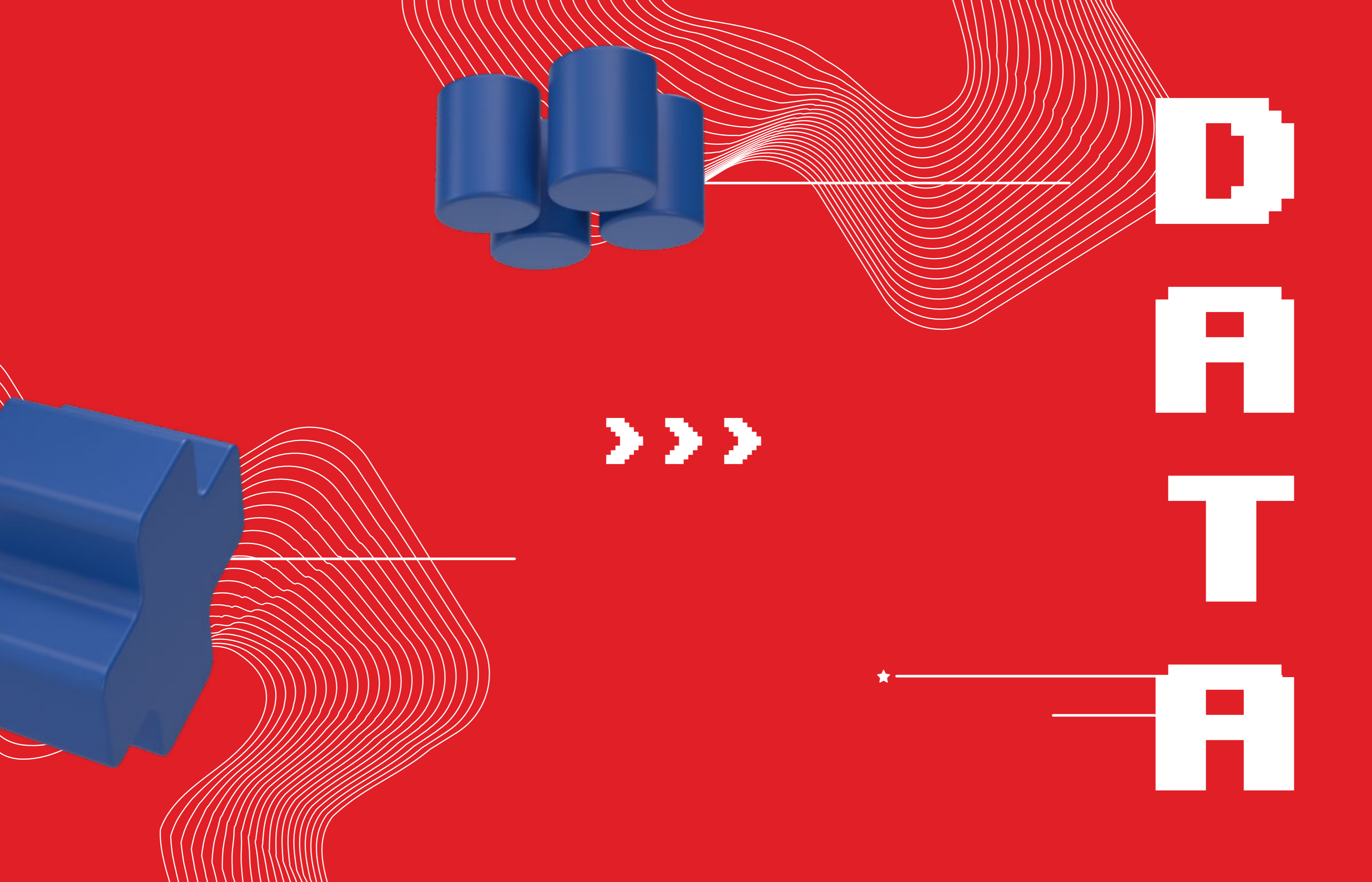
to big teams working on AAA titles, games and studios from Serbia have been making headlines, and we couldn't be more proud.

The global games industry has been on a healthy growth trajectory over the last decade, but due to this tumultuous year, it is safe to say that there has never been a time when games have been considered more relevant and economically significant than they are today. This presents a real opportunity for all of the studios in Serbia, to thrive together as a sector. We need to leverage the strengths we have, primarily the ability to do a lot with little, and also our abundance of engineering talent, and **be bold.**

There is much work to be done, and the SGA team, the board of directors and I will continue to work hard and evolve how we support our members and the wider community. A big thank you goes out to all of our friends, partners, members and founding companies for believing in us and supporting us in this journey. We couldn't have done it without you.

Nikola Čavić
President of SGA





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2019 AT A GLANCE



estimated
80-120
million
euros in revenue



estimated
100
teams and
companies

approximately
2000
employees in
the industry

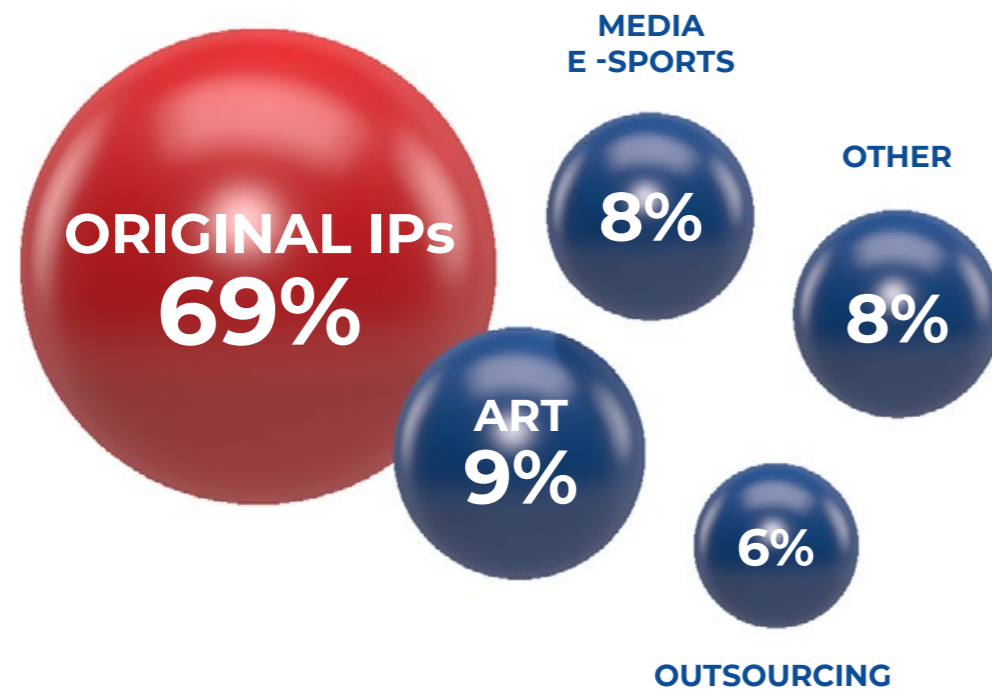
46
games
published

roughly
1/3
of all
employees
are women

Mobile
is the primary
platform

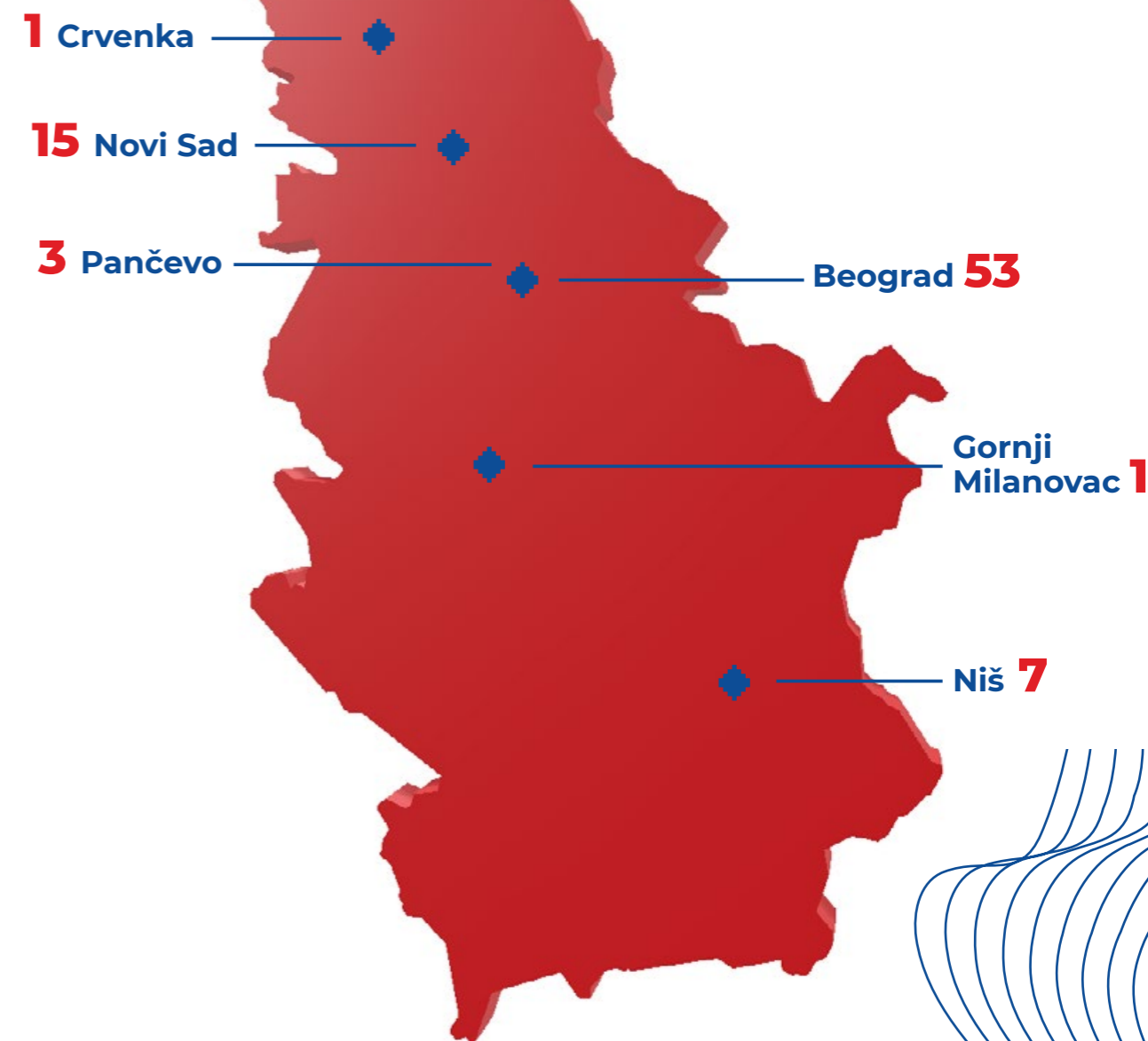
COMPANIES

Company activity



83% of companies don't have offices outside of Serbia

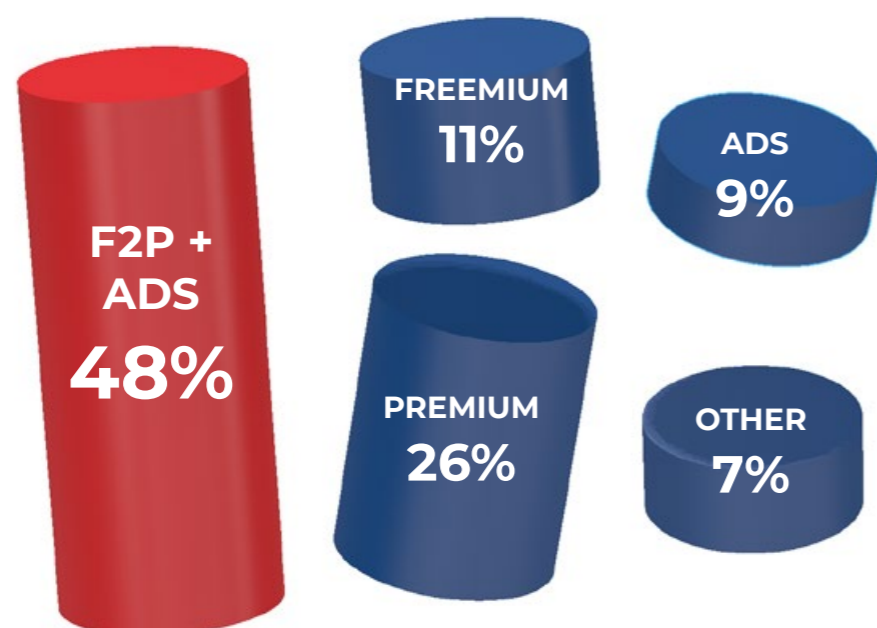
only **34%** of respondents have a registered LLC



GAMES



Monetization model



46 games published in 2019

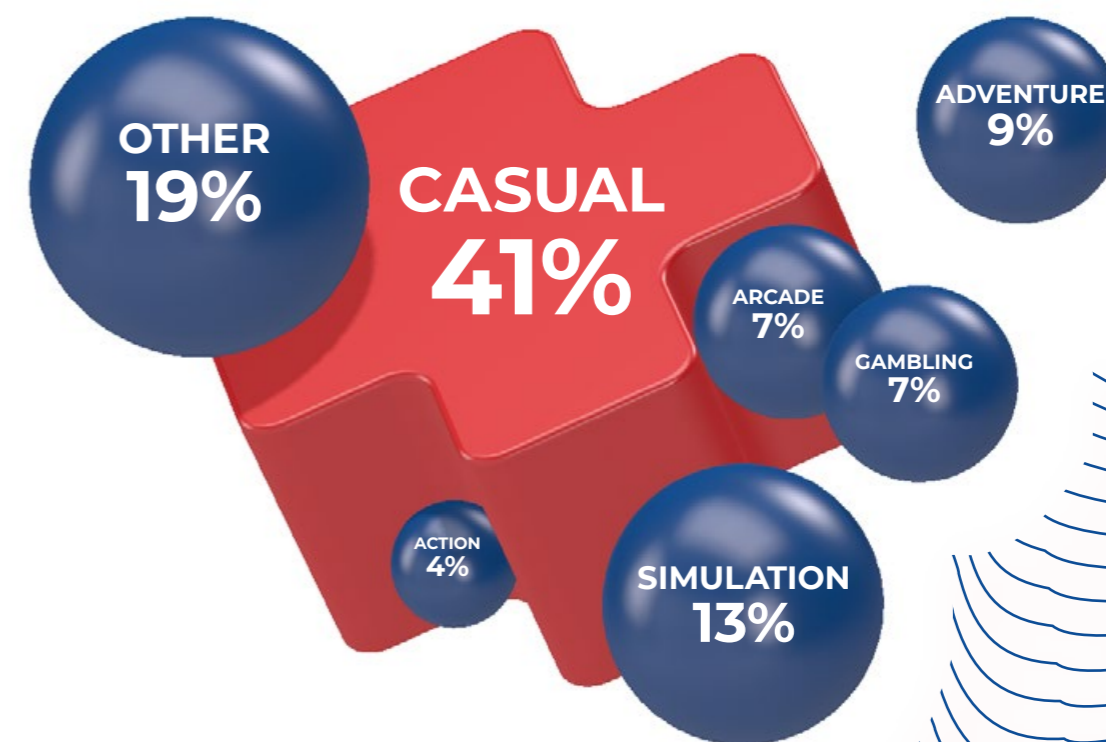
2/3 opted for self-publishing

A typical Serbian game made in 2019:

A casual mobile F2P title with ads monetization, developed in 6 months by a team of around 10 people, with a max budget of 100k eur, using Unity and C# or C++



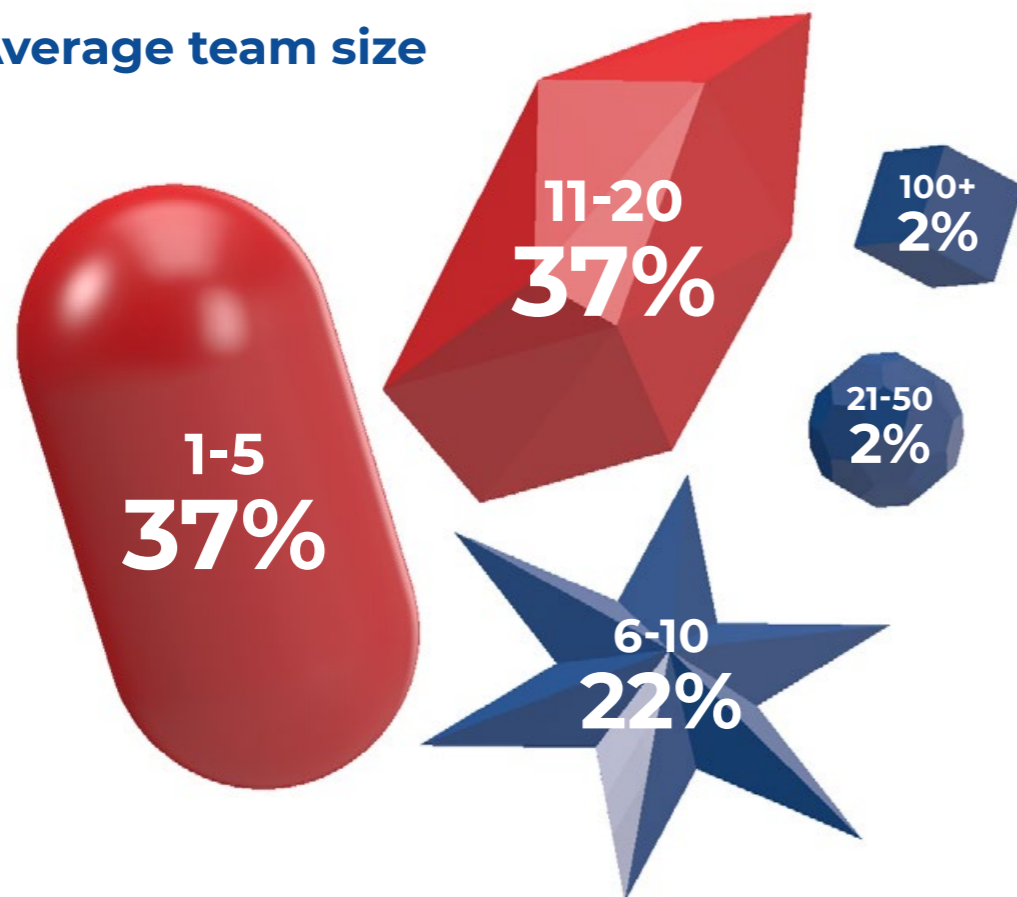
Genre



GAMES



Average team size

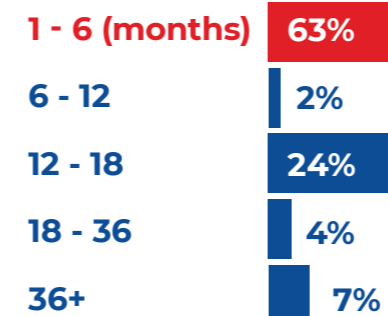


68% use
Unity engine

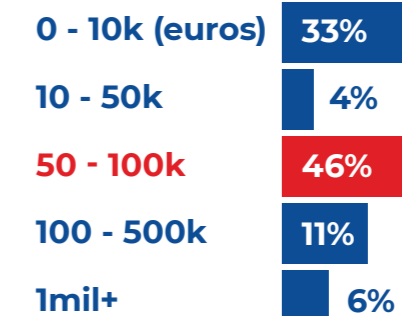
46% have a budget of
50-100k euros per project



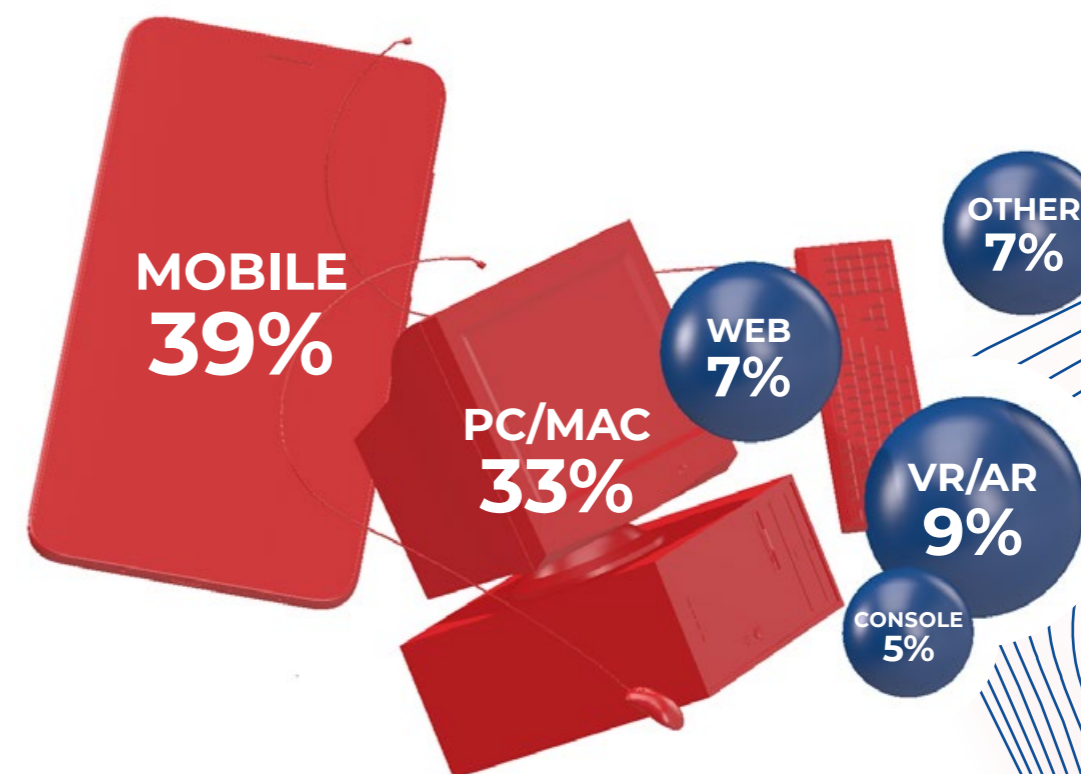
Average time



Average budget



Platforms

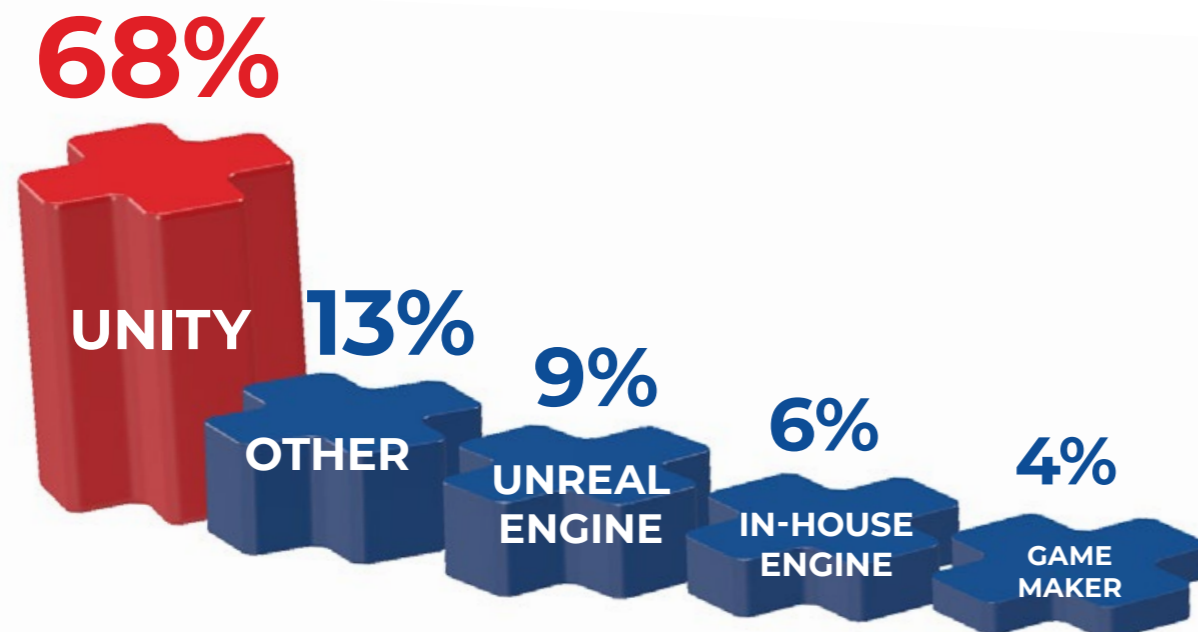


GAMES

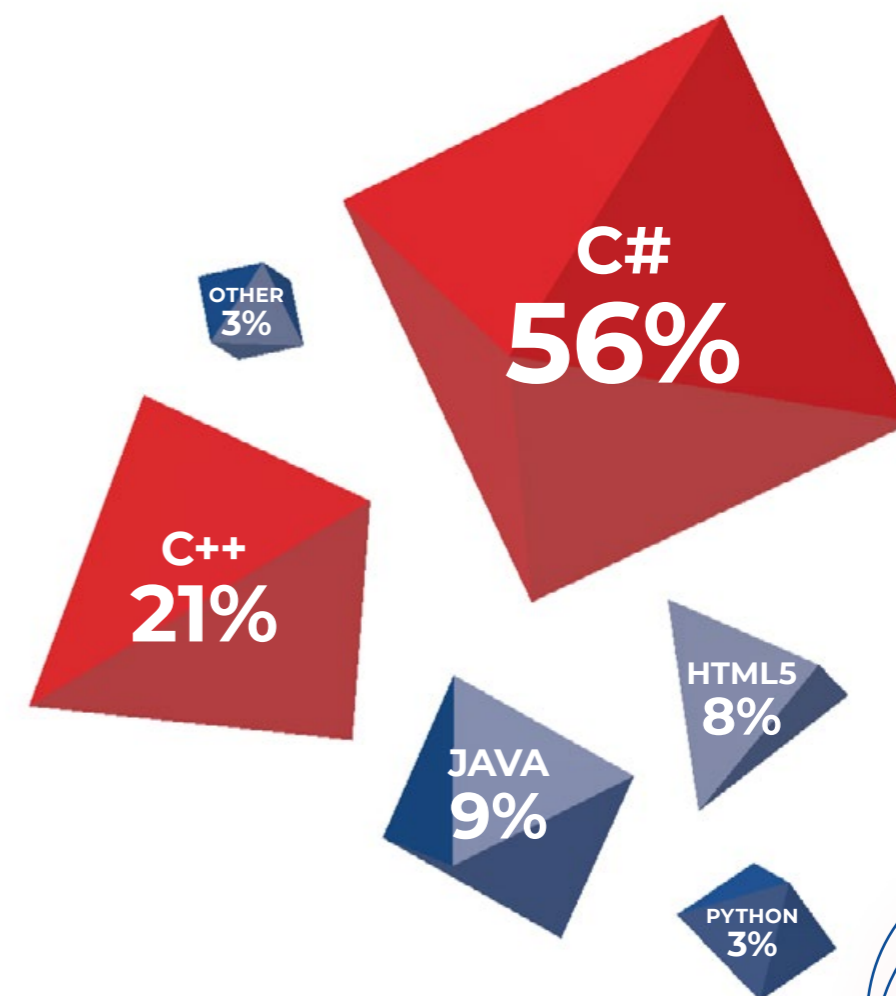


Engines

Our game devs
are proficient in
Unity, C# and C++



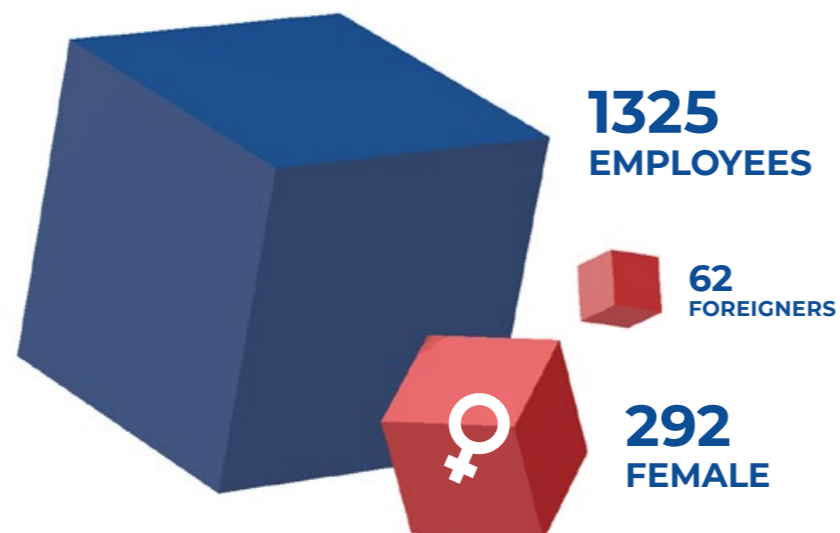
Programing languages



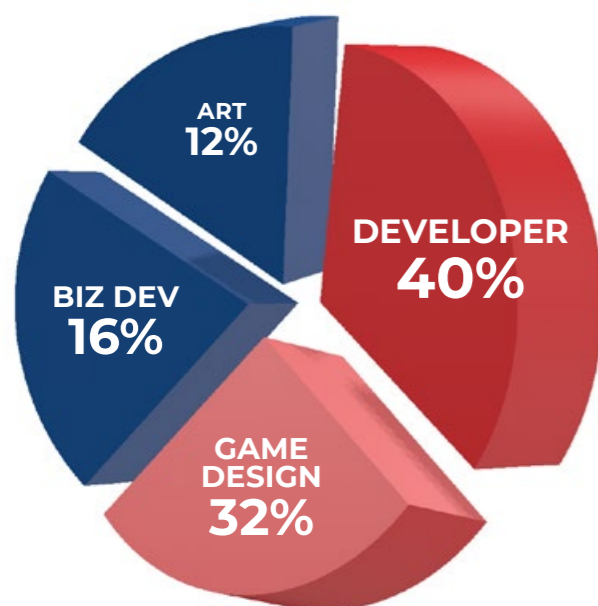
TALENT



Employees



Hardest to hire



62% of companies plan to employ more in 2020

Serbian gaming industry showed a **3.4 % YoY growth** in employees in 2019



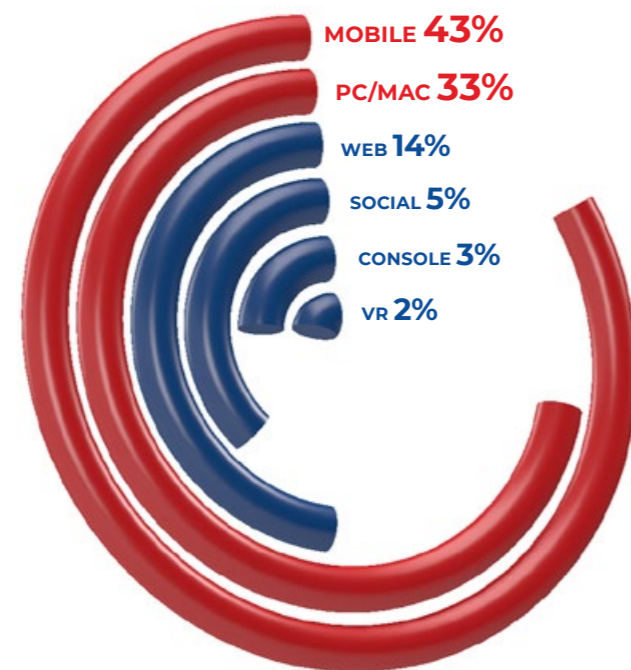
Avg. net salary



Around **40%** of our members **employed students** in 2019, and more than half were satisfied with the quality of their work.

REVENUE

Income per platform



estimated
80-120 million
euros of revenue

more than
2/3 of respondents
generate **50-100%**
of revenue outside
of Serbia

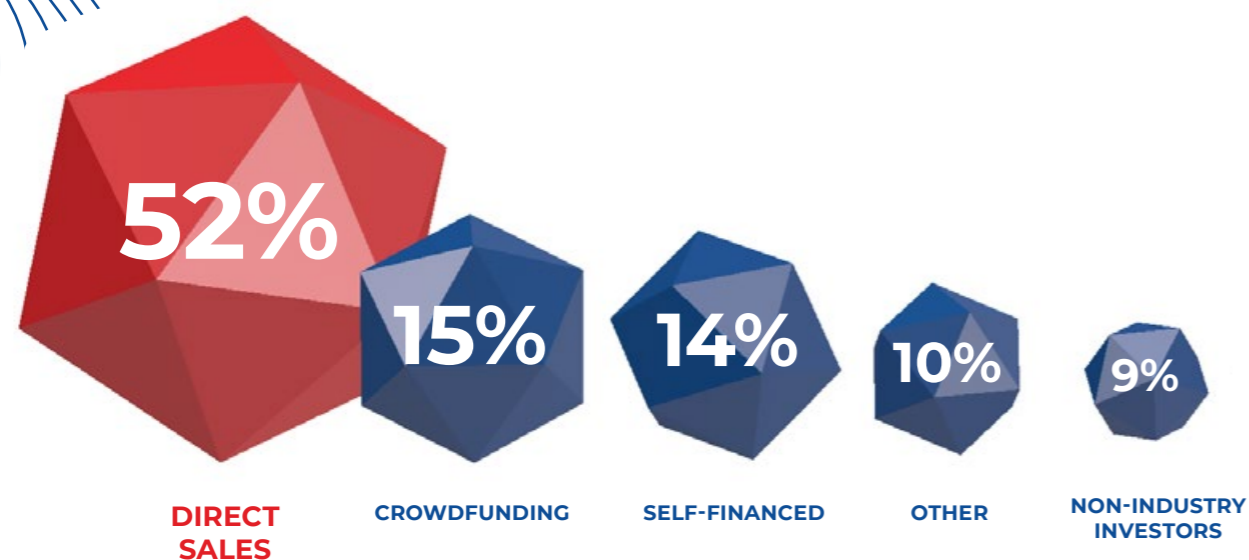
Companies by revenue category (EUR)

	2017	2018	2019
0 - 20k	24	25	18
20k - 50k	3	2	6
50k - 100k	4	1	8
100k - 1mil	2	3	18
1mil - 5mil	5	6	4
over 5mil	2	3	4

Mobile remains the most important platform for our studios when it comes to revenue

FINANCING

Main financing source



56% of funding came trough angel investments

83% respondents think it is easier to get an investment today than in the last year

Even though **50%** of our members stated they will actively pursue investments in the previous report, **only 10%** actually **received an investment** in 2019

32% of our members stated that they will look for investments in 2020, in the amounth of **100-500k €**


ECOSYSTEM

List of negative factors

-  **Finances**
-  **High taxes**
-  **Finding the right candidates for certain positions**
-  **Bureaucratic procedures**
-  **No dev support for consoles**
-  **Legal obstacles**

2/3 of our respondents have a positive outlook about the future of the Serbian gaming industry

When it comes to government aid our members would mostly appreciate carefully targeted tax incentives.

 **"Updating"** the educational system should be a number one priority in the long run

 **Double taxation** remains a number one regulation challenge alongside banking procedures



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3LATERAL

3lateral.com

team of: **120+**



3Lateral develops innovative technologies that enable digitization of human appearance and motion at an unprecedented level of realism. 3Lateral covers a full set of solutions for human digitalization - from 3D and 4D face and body data capture infrastructure, data processing and compression algorithms to recreate realistic facial and body deformations, PBR data extraction to define how skin interacts with the light, and articulation through user friendly bio-kinetic models of humans in a digital form. Their well-balanced multidisciplinary team with artistic and technological expertise is focused on bringing to life characters across all digital mediums.

In January 2019, 3Lateral became a part of the Unreal Engine team within Epic Games. Creation of realistic digital humans remains a key goal for filmmakers, content creators, and game developers, with additional applications across simulation, research, and more. Epic Games remains committed to mastering this process through real-time rendering, and democratization of the tools via Unreal Engine.

PROJECTS

Marvel`s Spiderman, Star Wars Battlefront II, Battlefield I, Activision's Call of Duty: Black Ops 4, Rockstar Games Grand Theft Auto IV and V, Red Dead Redemption I and II, Horizon Zero Dawn, Hellblade: Senua's Sacrifice, Devil May Cry 5 and many more.



DIGITAL ARROW

digital-arrow.com
team of: **29**



Digital Arrow was founded in 2015 by two passionate gamers, who wanted to focus on video game production and software development of the highest quality, with special attention turned to result-analysis and quality, and especially the VFM.

Digital Arrow studio has a team of 29 talented and ambitious people who give their best to transform their love of video games into something new and unique. The projects they are most proud of are InMomentum and Aquanox: Deep Descent.



FORTUNA ESPORTS

fortunaesports.com

team of: 12



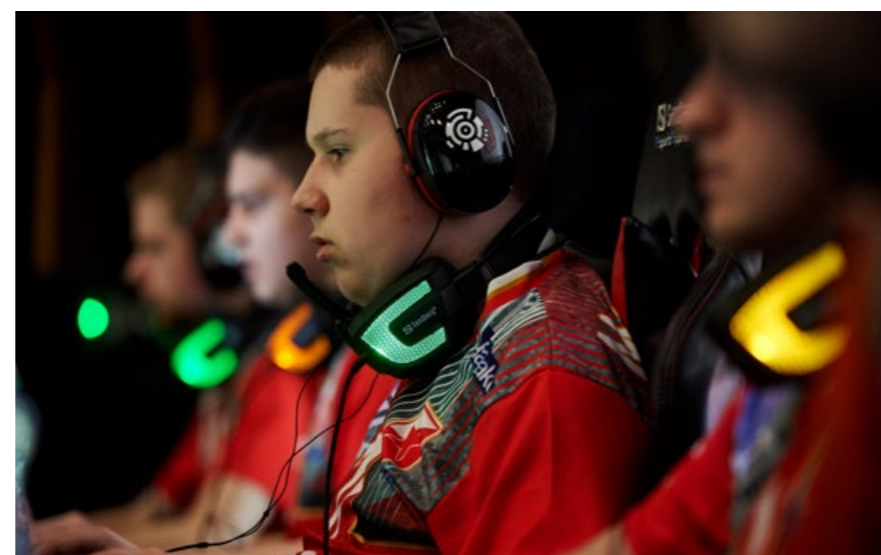
Fortuna Esports is the regional leader when it comes to esports. It handles event organization, studio and video production as well as TV and online streaming for international tournaments. Fortuna is the first regional broadcaster to acquire rights for premium esports content with the Riot Games' LoL Esports tournament circuit, Dota 2 The International and CS:GO Majors.

Along with premium esports programming, Fortuna's portfolio includes unique entertainment shows created for local audience as well as the biggest regional esports league – Esports Balkan League (EBL).

So far EBL has distributed over 180.000 EUR in prizes, featured three game titles (League of Legends, CS:GO and Dota 2) and through partnership with Riot Games provided our teams with an official path to international tournaments in Europe. Most importantly, EBL broadcasts gather an audience of around 300.000 esports fans every year.

Since June 2019, Fortuna is operating SK Esports - a brand new 24/7 Sport Klub TV channel created through partnership with United Media. Its programming includes live broadcasts from the world's and region's largest tournaments, news from the world of gaming, game reviews, popular streamer's gameplay and entertainment shows. We are extremely proud that our studio yearly produces more than 200 live broadcasts, with over 1.000 hours of content.

fortuna
ESPORTS



MAD HEAD GAMES

madheadgames.com

team of: **130**

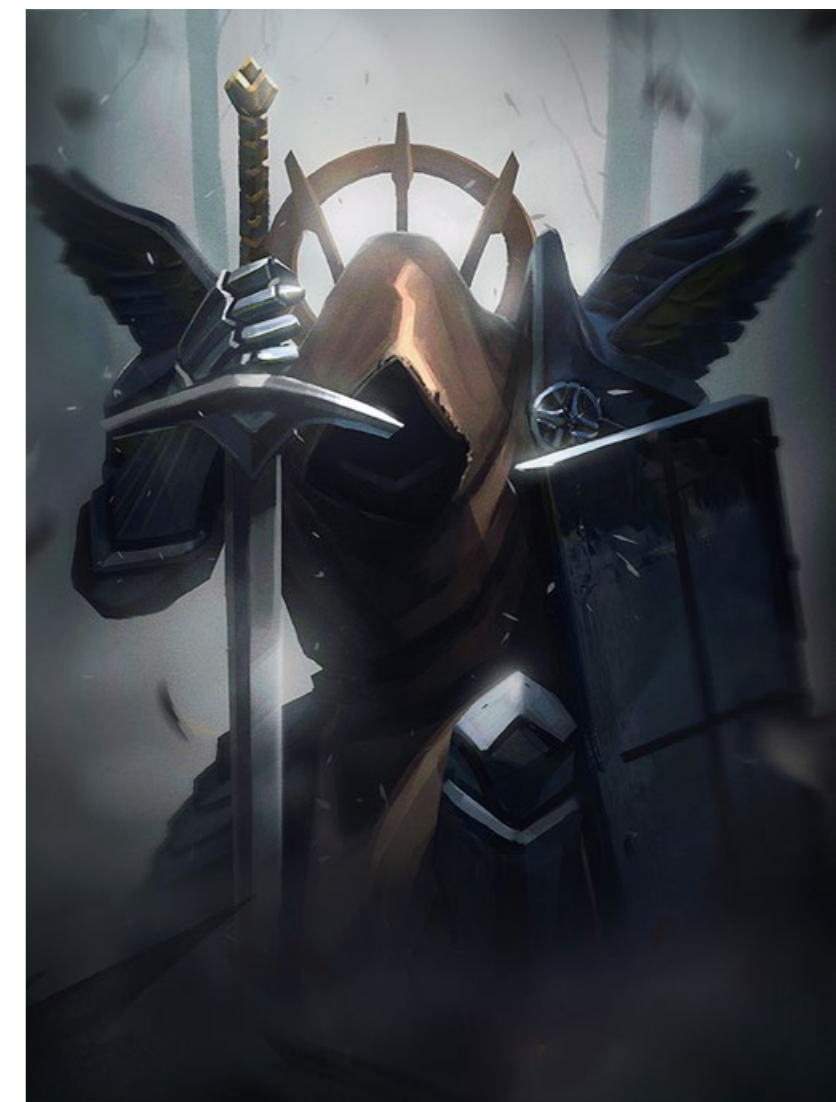
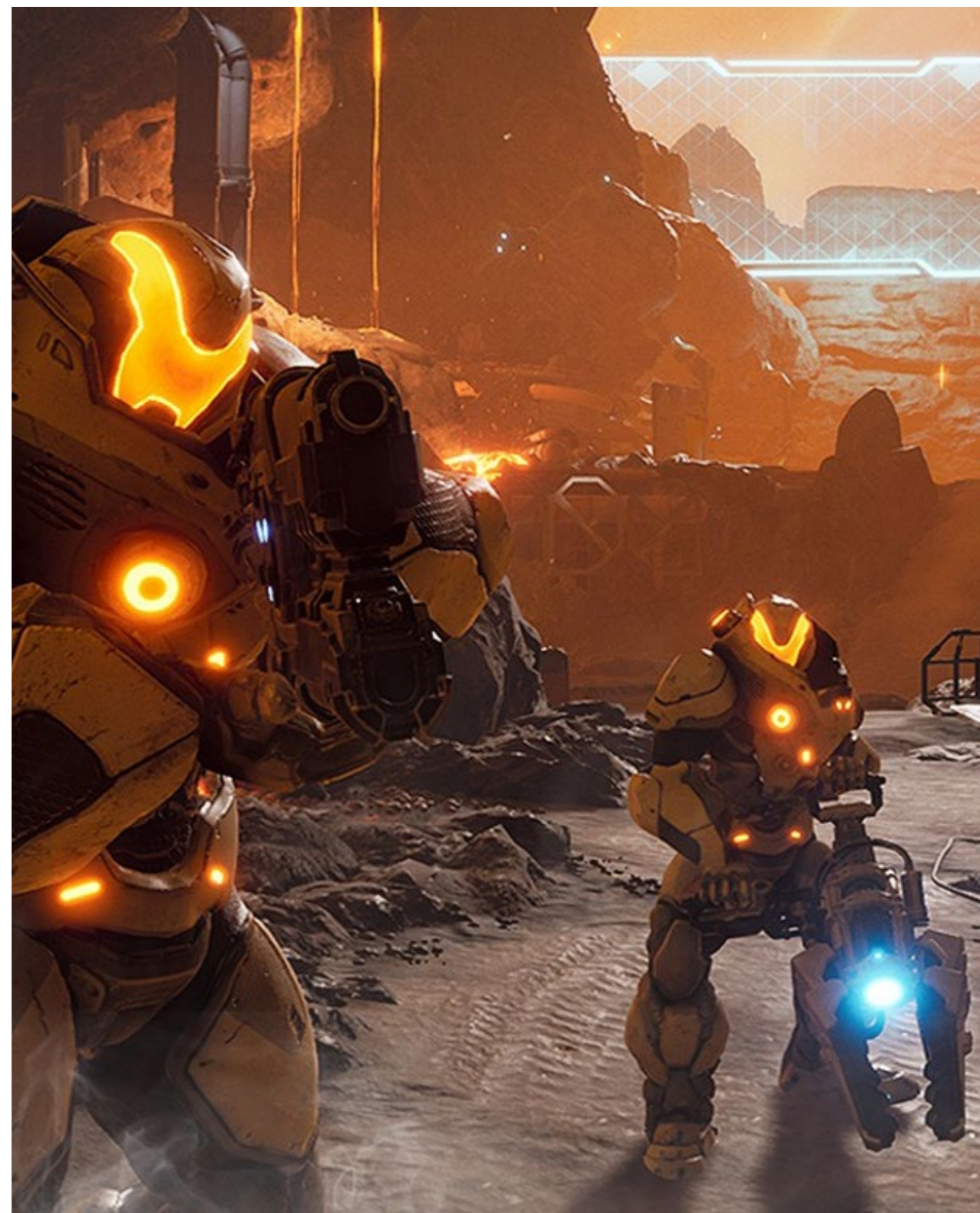


Mad Head Games is a local bootstrapped developer from Belgrade and Novi Sad made up of hard working, passionate, dedicated dreamers who strongly believe that games have the power to make anyone's day a little bit more fun and imaginative. Its story began when it was founded in 2011 by a group of experienced developers and friends, which makes the team one of the first ones on the national game dev scene.

They, just like the team that grew around them, continue to be committed and passionate about making games, united around a singular vision of creating immersive, atmospheric, and fun titles. Their first big successes came with HOPA titles published by Big Fish Games. Now, years later, the studio is working and focusing on several core projects in Unreal Engine.

In November 2020 Mad Head Games has become a part of a larger gaming family - Embracer group, where they will continue to develop their own projects as an independent studio. This Serbian game dev pioneer plans to use its hard earned knowledge and experience to, one day, lead Serbian core game development and put the country on the world map of AA+ games.

That is why, no matter what the future of the gaming industry brings, Mad Heads will be right there to give their best shot at creating amazing games!



NORDEUS

nordeus.com

team of: **180**



HIRING
NEW TALENT

OPEN FOR
MEDIA

Nordeus started in 2010, and is an independent gaming company based in Belgrade. Today, it employs 180 people from across 20 countries and is best known for Top Eleven - the world's most successful mobile sports game with over 220 million registered users.

Since then Nordeus has successfully launched Golden Boot, a free-kick flick game, and Heroic – Magic Duel, a fast-paced PvP. Nordeus is one of the founding members of the SGA and Digital Serbia Initiative, both of which help create a stimulating environment for creating video games and the development of other digital industries.

Since its launch in 2019, Nordeus Hub has supported 27 independent game teams through the flagship Booster program helping them create their games, delivered more than 70 online and offline events, and welcomed international industry professionals and co-operation from the likes of UKIE and the British Council.





Peakxel is a mobile games and apps development and publishing company, based in Nis, southern Serbia. Since its beginnings in 2012, the company has grown to over 60 employees and has published over 300 mobile apps and games with no external funding up to date.

Their portfolio of games includes various casual, virtual pet, and logic puzzle games. In addition, the company has published a variety of music, entertainment, and utility apps.



PLAYRIX RS

playrix.rs
team of: 160



Playrix RS is a casual F2P mobile games development studio from Novi Sad, Serbia. Playrix RS is a part of the global Playrix group - one of the world's largest casual mobile gaming companies and creators of Gardenscapes, Homescapes, as well as Township, Fishdom, Wildscapes, and Manor Matters. Playrix games have been in the Top 50 Grossing Apps on Google Play and App Store platforms since their appearance on the market.

The total number of monthly active users exceeds 100 million! Playrix RS team employs more than 160 professionals who, with the support and knowledge of the most excellent experts in the gaming industry, top-industry tools and technologies, work every day to develop new and unique projects - mobile games of the highest quality.

The value shared by all team members and an imperative in every segment of our work is quality. That is why Playrix RS nurtures team spirit, creativity, transparency, trust, professional and personal development, and responsibility.



TWO DESPERADOS

twodesperados.com

team of: 50+



Two Desperados is a Belgrade-based, mobile games development studio. Our games, Woka Woka and Viola's Quest, are #1 marble shooter games with over 30 million players! Two Desperados is deeply committed to developing and nurturing great teams, believing they drive creation of amazing games.

The team is inspired by a shared passion for knowledge, and team members are constantly challenging each other aiming at moving forward the boundaries of entertainment. As one team, we are focused on creating entertaining moments and memorable experiences for millions of our players worldwide. The philosophy behind it is quite simple - great teams make great games.



UBISOFT BELGRADE

[ubisoft.com](https://www.ubisoft.com)

team of: **150+**



HIRING
NEW TALENT

OPEN FOR
MEDIA

NEW
PROJECT

Ubisoft is one of the leaders in entertainment, with a rich portfolio of well-known brands worldwide. We are committed to enriching players' lives with original & memorable entertainment experiences.

Ubisoft Belgrade was established in 2016 and focuses on strengthening Ubisoft's presence on multiple platforms – PC, console, and Google Stadia. Our studio has contributed to multiple triple AAA titles, including Tom Clancy's Ghost Recon, Steep, The Crew 2, Tom Clancy's Rainbow Six, Skull&Bones and Riders Republic.

Here you will get a chance to work together with young, creative and talented individuals who are just as passionate about gaming as you are!



WEBELINX

webelinx.com

team of: 135

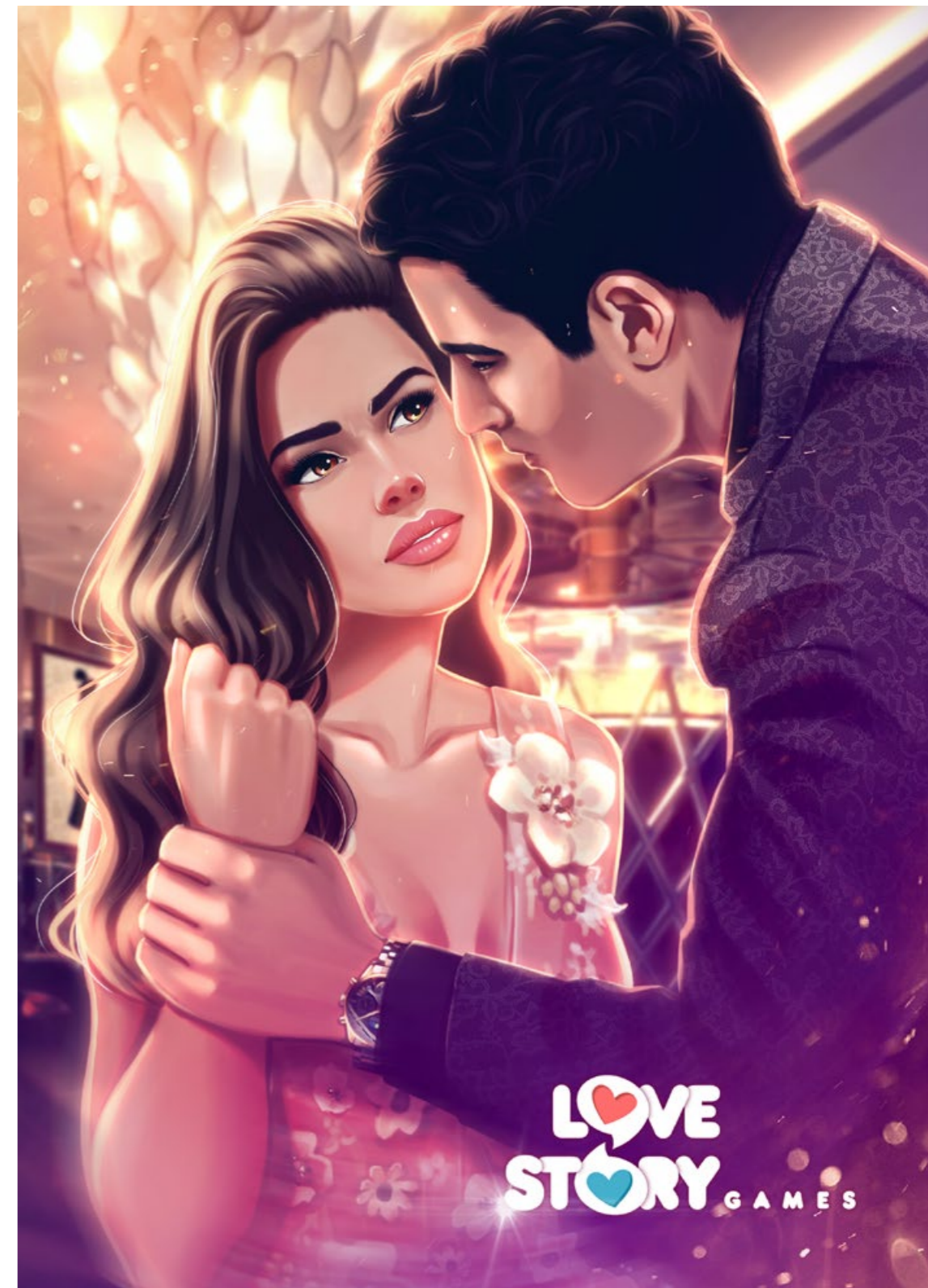
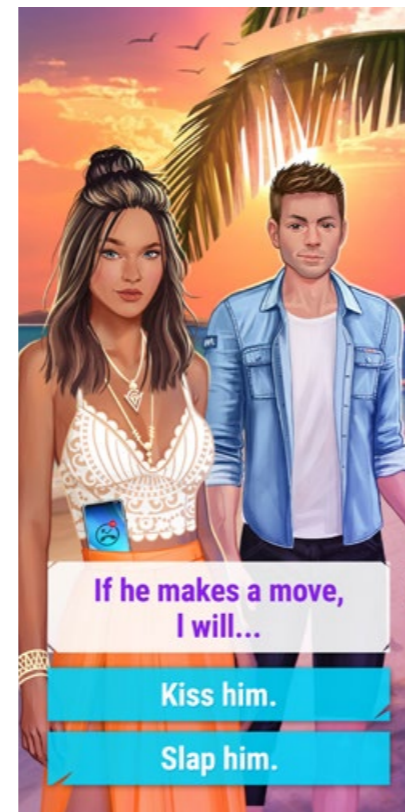


Webelinx is a development studio based in Niš, Serbia, founded in 2011 by a group of few enthusiasts willing to create something completely new on the mobile market.

Almost 10 years and over one billion downloads on the two largest mobile platforms later, we now pride ourselves with 135 employees, from multicultural backgrounds, divided into 2 departments for developing immersive, customer-oriented Apps and Games.

Throughout its history, Webelinx worked hard on building diversified portfolios in different categories and we are currently dedicated to expanding the scope of our work from mobile devices onto multi-platform love story-telling games as well.

In a stimulating environment built on professional work, trust, and respect, Webelinx gives young people the chance and freedom to explore and nurture their potential, which is the core of the company's culture and an asset that drives Webelinx to the top.



YBOGA

yboga.rs
team of: 5



Yboga studio was founded in mid-2016 in Belgrade with the focus on creating simulation and management games for mobile devices. At the very beginning of the studio's business the idea was to make a hospital management simulation game, and after nine months a soft launch was made, followed by the final version for Android. Dream Hospital, which is available for Android and iOS, has recorded over 5 million downloads up to date and was well received by the audience.

All of this is made possible with our in-house developed technology that we are constantly working on. Our plan is to keep the further improvement of our technology and studio as a whole specifically by making more games with it and continue learning in the process. Currently we are working on a new exciting product that should be a step forward compared to our previous game and let us proceed going forward in the direction we have initially set. Our goal is to establish ourselves as a respectable game studio that creates high quality simulation games for mobile.

yboga

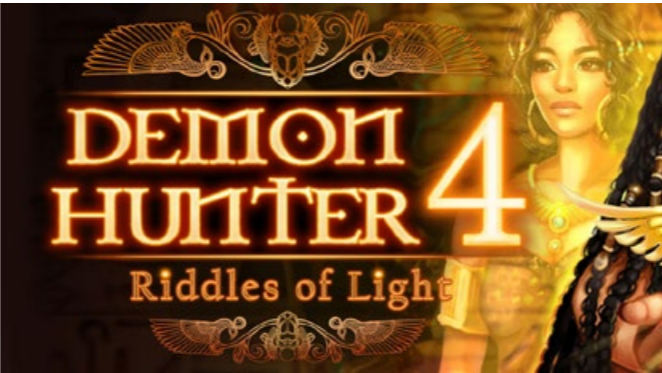


Brave Giant

bravegiant.com
team of: 30+

Brave Giant was founded in 2012 in Novi Sad. We started as a 5 team small studio and we have grown to 30 + people. Our focus is game development and we work on creating premium quality video games for PC, Mac, iOS, Android, Windows Store.

The studio developed and published numerous games world-wide in more than ten different languages, across all relevant gaming markets. Thanks to building strong partnerships over the years, with the world's most recognized video game companies, Brave Giant reached millions of satisfied players all over the globe, delivering unique and exciting games and breathtaking gameplay.



BUNKER VFX

bunkervfx.com
team of: 35



Bunker VFX studio was founded in 2014, in Belgrade, Serbia. From the very first year the studio has been focused on the production of high end game trailers and cinematics. Since very beginning the studio has started working intensively on the development of the working environment and pipeline suitable for this type of production. This particularly meant investing in experienced artists, creating unique internal pipeline tailored for game trailers and also investing in hardware and software required for this kind of production. The combination of great internal teamwork of 40 senior artists and trustful external collaboration resulted after a short period of time in making cinematic trailers for AAA games. List of our clients include Bethesda Softworks, Red Barrels, Electronic Arts, Zynga, THQ Nordic, Warner Bros Entertainment, Rovio Entertainment, Com2Us etc. Bunker continued with the development of the creative department, both responding to clients needs and offering various creative solutions in order to achieve exceptional quality in production.

Our mission is to design exceptional visual stories by cooperating closely with our clients. By carefully choosing the projects we work on, we thrive to deliver extraordinary visual content primarily in the field of game cinematics. Furthermore, we try to build strong, creative and long lasting relationships with our clients that will distinguish our work from the rest. Additionally, we are focused on the development of unique visual signature that would be recognizable in the field. Deeply, we believe in challenges.



CRATER TRAINING CENTER

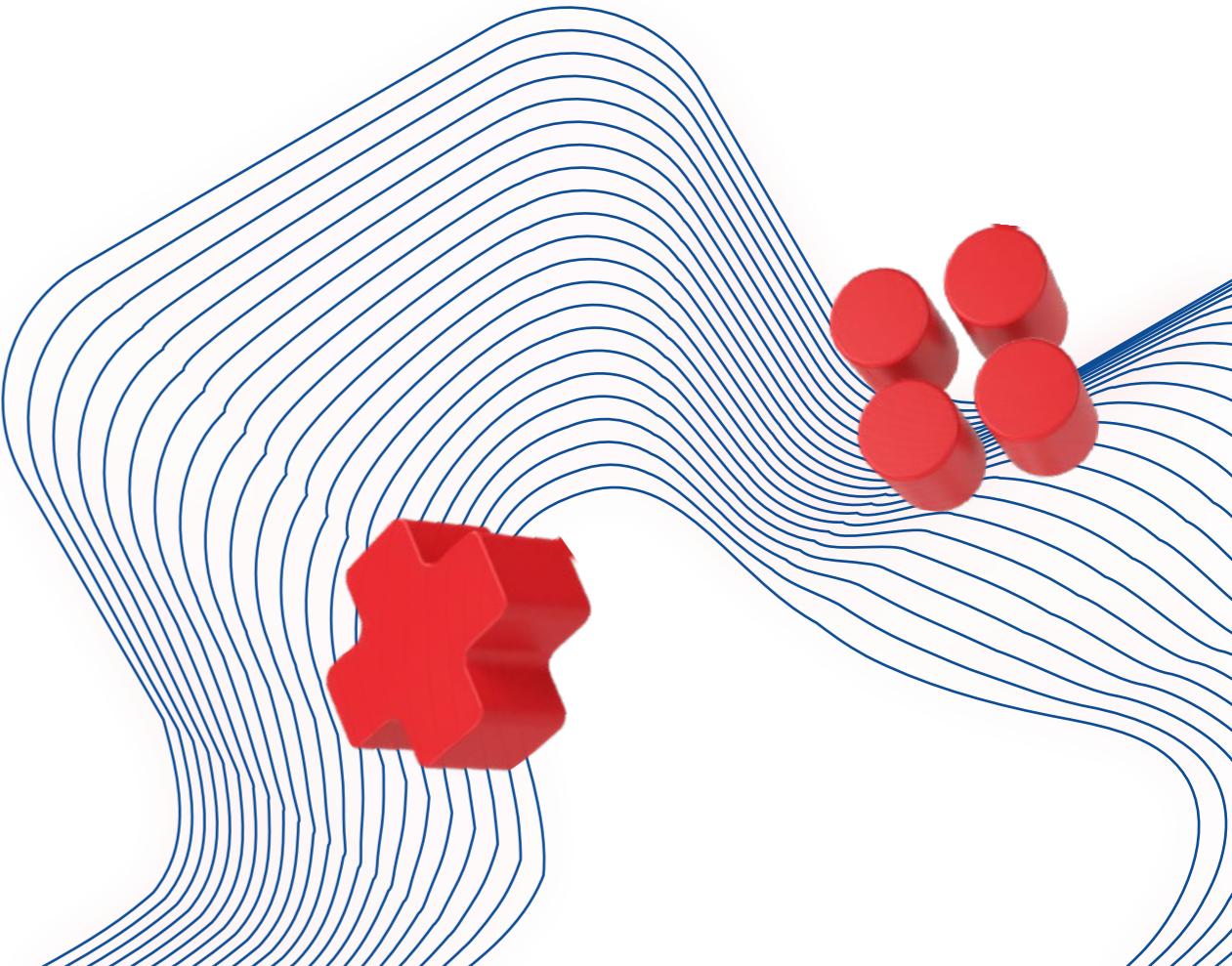
school.craterstudio.com
team of: **20**



Founded for professionals by professionals, our singular aim is to bridge the undeniable gap between academic study and on-the-job practice in the field of computer graphics. As of 2020, our course portfolio officially includes game art and development.

With courses designed and delivered by working senior artists, we provide actionable education that mirrors a studio environment and allows our students to hit the ground running as soon as they join their first project. Thanks to the modular and agile program structure, students or entire teams can shape their learning path according to need, approaching skill development from a strategic, market-oriented standpoint.

A meeting point between industry and academia, we are one of the founders of CGA Belgrade platform and collaborate daily with partners from both sectors on forging community ties and strengthening the overall capacities of Serbia's CG industry.



ALSET STUDIO

alsetstudio.com
team of: 10



We are a game development studio. Founded in 2018, Alset Studio consists of professionals that have been working in the video game industry for many years. We are concept artists, 3d modelers, illustrators, designers, and programmers.



DEMAGOG STUDIO

demagogstudio.com
team of: 7 demagog studio.

Demagog Studio creates digital content for a generation that will live to witness the end times. The studio is best known for the Apple-featured game Golf Club: Wasteland.



COFA GAMES

cofagames.com
team of: 10



COFAGames is an independent studio from Belgrade working on Awakening of Heroes, an objective-based mobile MOBA game. With more than 1 million organic downloads, their game is getting promising feedback from beta players, especially about the unique characters and the innovations bringing to the conservative MOBA genre. Awakening of Heroes has been awarded multiple times including The most promising game at GDC pitch in San Francisco and The best multiplayer game at Casual Connect.



ELBET STUDIO

elbet.rs
team of: 25



Elbet was founded in Belgrade in 2002 as a technology company specializing in the development of software solutions for the gaming industry. Their extensive portfolio of virtual games includes a number of titles, virtual sports, and virtual casino games. They co-operate with more than 80 operators on three continents, including four state lotteries.



FOXY VOXEL

foxyvoxel.io
team of: 7



Foxy Voxel is an independent game development studio that brings together a group of seasoned developers to work on games they'd like to play themselves. Since late 2018, the team has been working on its first project - GoingMedieval, colony builder set in alternate post-apocalyptic medieval Europe. Players get to guide a group of survivors while they migrate and re-settle remote areas reclaimed by nature. Defend them from various raiders in a classless, borderless, lawless post-calamity age.



HORA GAMES

horagames.com
team of: 6



Hora Games creates new experiences in mobile gaming with a focus on strong gameplay and innovation! Their first project Crypto Idle Miner has over 200.000 downloads on both Google Play and App Store.



GAMEBIZ CONSULTING

gamebizconsulting.com
team of: 5



Our mission is to create opportunities for our clients that will meaningfully grow their business. Since we started, we have been trusted by dozens of companies, from indie game developers to global publishing giants. Regardless of the size of the company or the complexity of the task, we will always bring our best to the table. Our team has decades of experience of creating, publishing and monetizing video games and comes with a vast network of contacts that is at the disposal of our clients. The video games industry is first and foremost about the people, and we are proud to call many of them our friends.



INGENIOUS STUDIOS

ingenious-studios.com
team of: 15



Ingenious Studios is a team of game designers, artists, and developers, working passionately on something we all love - making games. We are a full-cycle game development studio with core strength in Unity development, and a deep understanding of gameplay, game art, and design. Our services include developing games from scratch based on the client's vision, as well as filling in some game development roles depending on the project's needs.



PIXQUAKE

pixquake.com
team of: **3**



PixQuake is a game developing studio from Belgrade, Serbia, creating casual games of various genres.

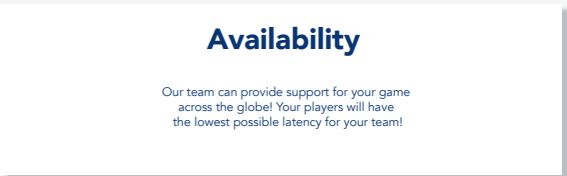
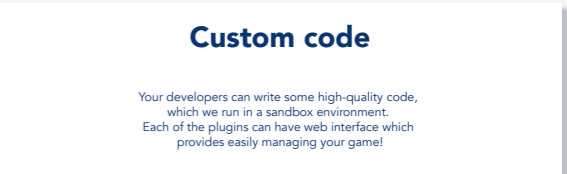
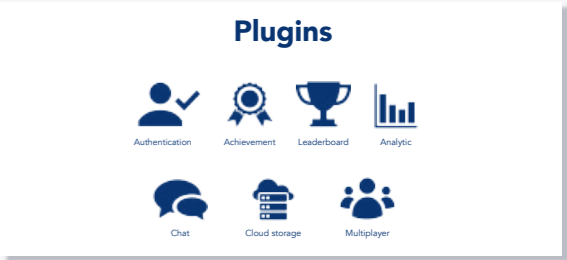


SERVERBYTES

serverbytes.net
team of: **4**



At ServerBytes, we believe there is a better way to create games. A more innovative platform that automates backend game development, encouraging you to focus on your game, and leave the operational concerns to us. ServerBytes is designed to increase productivity without sacrificing creativity. We're excited to simplify game development for everyone through our platform, plugins, and community!



SOZAP

sozap.com
team of: **18**



Sozap is a serbian/swedish mobile game development studio. We are a group of passionate gamers located in South Serbia in Nis. The whole team has one goal - to make great games. Our team consists of people who devoted their lives to playing and making good video games. Our game Armed Heist has more than 14 million installs on Android and iOS platforms, and we are very proud of it. Armed heist is a third-person multiplayer shooter game that gets your heart pumping! Besides this game, at the moment we are working on some new projects, and we really hope that they will get the similar results as Armed heist did.



SPRING ONION STUDIO

springonionstudio.com
team of: **14**



Spring Onion Studio is a 3D Animation, Visual Effects and Motion Graphics Studio based in Belgrade and founded in 2008. The studio has made its reputation with its high-end stylized and realistic animation quality but is best known for character development and world-class character animations. Our team can be involved at any stage of game development for a wide range of art services - 3D art, concept art, character development and animation. Our core services for the gaming sector includes Live-action games trailers, Full CG cinematic trailers, Character reveals and Client Login Splash Animations.

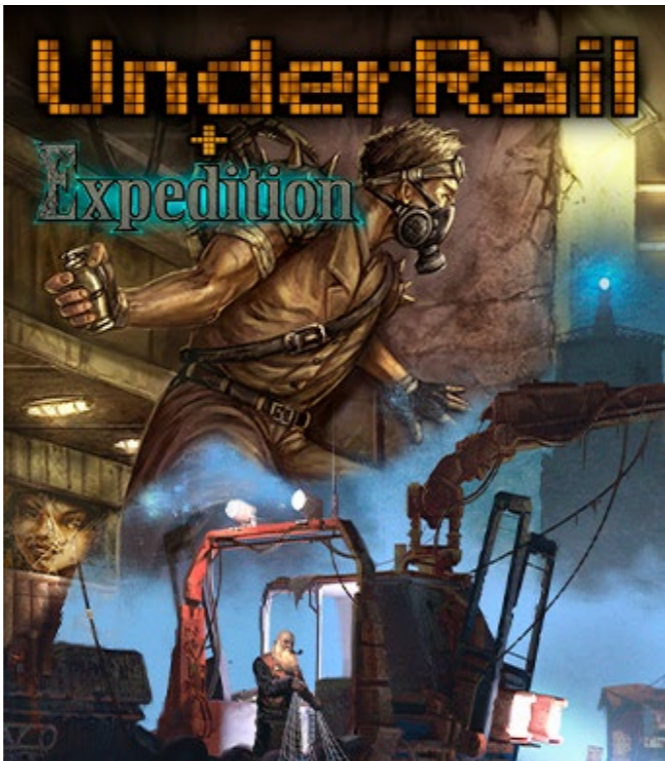


STYGIAN SOFTWARE

stygiansoftware.com
team of: 5



Stygian Software is a small indie company from Serbia that develops old-school isometric turn-based RPGs.



TRIA DOO

tria.rs
team of: 7



TRIA is a creative studio based in Belgrade and founded by a team of industry wizards with a love for games and interactive multimedia experiences. Today, Playable and Video Ads for mobile games and apps are the top service we provide, with clients like Twitter, King, Machine Zone, Traplight Games, etc. In the spare time the team is also working on an Infinite runner game, with a working title: Rift Runner.



SUPERVERSE INDUSTRIES

indus3.org
team of: 5



Superverse Industries is a game development company based in Belgrade, founded by Nemanja Bondžulić in 2002. With roots set deep in the 90's demo-scene, Superverse Industries is now working, with the very same passion, on creating impressive interactive audio-visual experiences and games for PC, VR/AR, and mobile platforms. The recently released arcade space shooter game SUPERVERSE in early access remains the primary focus of the company, with a new game title for mobile platforms in development.



TUMMY GAMES

tummygames.com
team of: 8



Tummy Games is a small gaming company from Serbia located in the city of Novi Sad. We focus on developing Hyper Casual games, and so far over 60.000.000 people played our games.



ADREAMATION GAMES

adreamation.com

team of: 20





OPEN FOR INVESTMENTS

OPEN FOR MEDIA


PROVIDES SERVICES

We strive to make games that stand out with characters,story,gameplay and tons of innovations, but that still maintain a bit of nostalgia.

AM-PM GAMES

our IG account

team of: 6






Why AM-PM? Because every time is great time for gaming. With several games published, AM-PM above all values good gameplay, followed by originality and experimenting with various mechanics.

BABYBOTTLE STUDIO

babybottlestudio.com

team of: 6





OPEN FOR INVESTMENTS

OPEN FOR MEDIA

NEW PROJECT

LOOKING FOR PUBLISHER

This studio was founded as a result of a huge appreciation for video games and many years of work on different projects, ranging from 3D game graphics to video game production. The studio offers outsourcing services for different platforms.

BRANISLAV GAGIC

branislavgagic.com

team of: 1





PROVIDES SERVICES

PROVIDES OUTSOURCING

Branislav Gagić is a composer for video games and other media. He is passionate about taking his listeners on a musical journey, by creating tracks that inspire the imagination.

CRYPTIC LEGENDS

crypticlegends.co

team of: 8





OPEN FOR INVESTMENTS

OPEN FOR MEDIA

LOOKING FOR PUBLISHER

NEW PROJECT

PROVIDES SERVICES

Cryptic Legends is a Belgrade based team of designers and developers, bent on bringing games to the players' true ownership via seamless and meaningful blockchain integration.

DEUTRIX

deutrix.com

team of: 2







Game and Web development studio based in Novi Sad, Serbia.

DEVOTION STUDIOS

vimeo.com/markozivanovic

team of: 12





PROVIDES OUTSOURCING

Devoted to make the best audio experience for your game, trailer, animated movie or song. The team consists of award winning Sound Designers, Composers, Music Producers and Voice Over Actors, currently working in the AAA industry and iGaming industry across the world.

ENYPH GAMES

enyph games

team of: 2







NEW PROJECT

PROVIDES OUTSOURCING

Their best projects are Puzzle Game for Kids: Cartoon characters and Scroller, and their latest project is FlyOut!, an android game. Although still very young, they hope to develop even more games in the future, and - for a living.

HERON GAMES

heron.games
team of: 20



Heron Games is a full-service mobile game development team with a focus on hyper-casual games.

MIRACLE DOJO

miracledoj.com
team of: 8



We are aiming to create memorable gaming experiences that may leave a real impact on people's lives.

LIFT KVIZ

liftkviz.rs
team of: 13



Lift Kviz is a company that develops live interactive game formats. Our first project is a mobile quiz game, with a live video QUIZ SHOW that allows users to play trivia games in real-time and win prize money.

ORAHARO ENTERTAINMENT

oraharo.com
team of: 1



Oraharo Entertainment is a small Belgrade-based studio, with only one published title so far. We choose fun over money and we make our games in our free time, until one of them buys us a yacht.

MOONBURNT STUDIO

moonburntstudio.com
team of: 2



Moonburnt Studio is an independent game development studio. In 2016 we raised over 40,000€ through a Kickstarter campaign for the development of "COLUMNAE: A Past Under Construction", a narrative-focused non-linear point & click adventure set in a post-apocalyptic steampunk-ish world.

PLAYSTUDIOS / TEAM SAVA

team-sava.com
team of: 45



Team Sava specializes in building outstanding teams of passionate, top-notch professionals and enabling them to take part in active development of amazing projects. Our partner, Playstudios, is a global consumer gaming company focused on social and mobile gaming.

MARBLE IT

marbleit.rs
team of: 15



Over the years of gaining experience, our work now covers a wide range of technologies and platforms. Starting from front end and back end web development, to video games and hybrid apps - you name it.

PRINCEPS GAMES

princepsgames.com
team of: 3



Welcome to Principes Games, a Tabletop Game Development Studio in Novi Sad, Serbia. We started in 2019 with great desire and determination to offer the World our best: games that will bring you only joy and entertainment.

SOBAKAISTI

sobakaisti.org
team of: 4



We are creating an educative alternate reality game that should help people find their meaning of life through the gamification of everyday challenges and choices.

STUDIO DON QUIXOTE

markokacanski.com
team of: 2



Studio Don Quixote, with their association Minotaur Production, produced over 25 short and long fiction, documentaries and 3d animation movies and games.

SUPERLATIVE

superlative.digital
team of: 6



We are engineers and designers building digital products with our clients from all around the world. Gaming is our huge passion, which is why we've made our first mobile game exclusively for iOS - Avoid Asteroid!

TENDER TROUPE

tendertroupe.com
team of: 12



We are a troupe of veteran game developers bringing high-quality polished games to a wider, more casual audience through time management sims and fantasy RPGs. Our games are designed with a mature player in mind.

THUNDER STRIKE

thunderstrikegames.com
team of: 4



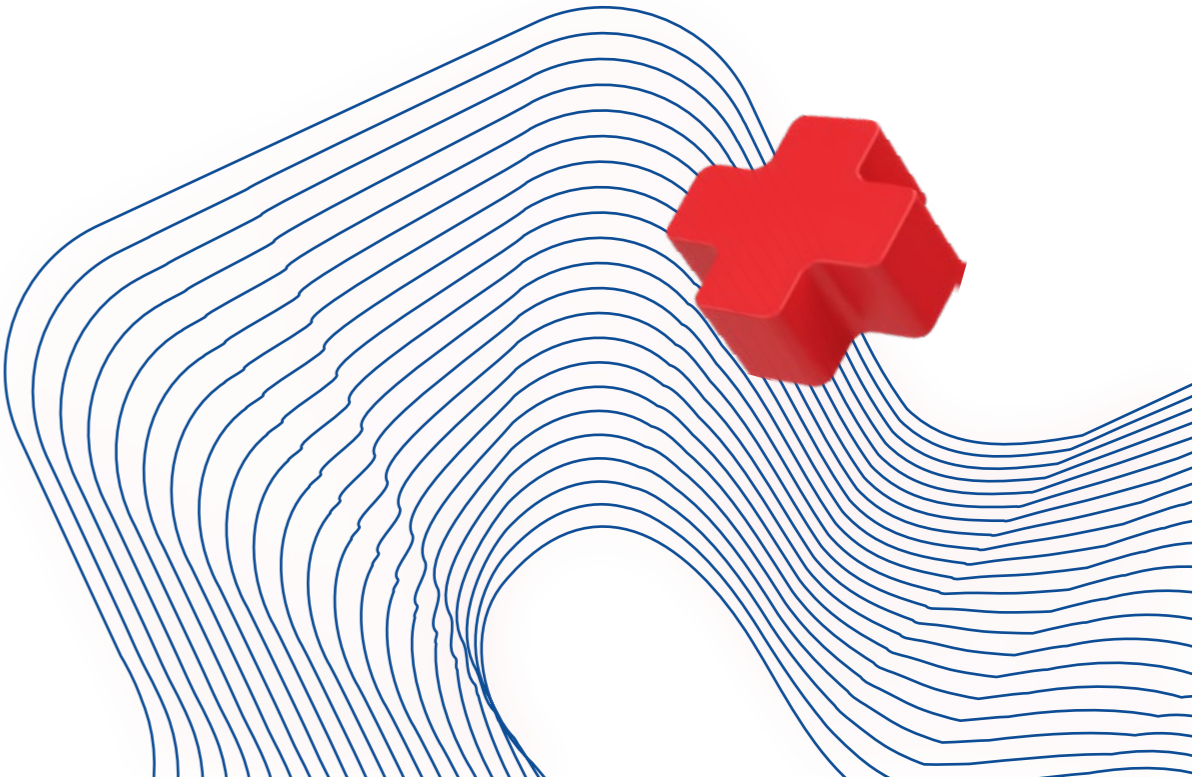
Thunder Strike is a game dev studio specialized in creating innovative and unique gameplay experiences pushing the boundaries of mixed reality in games and empowering everyone to have fun.

WAVEFORM STUDIO

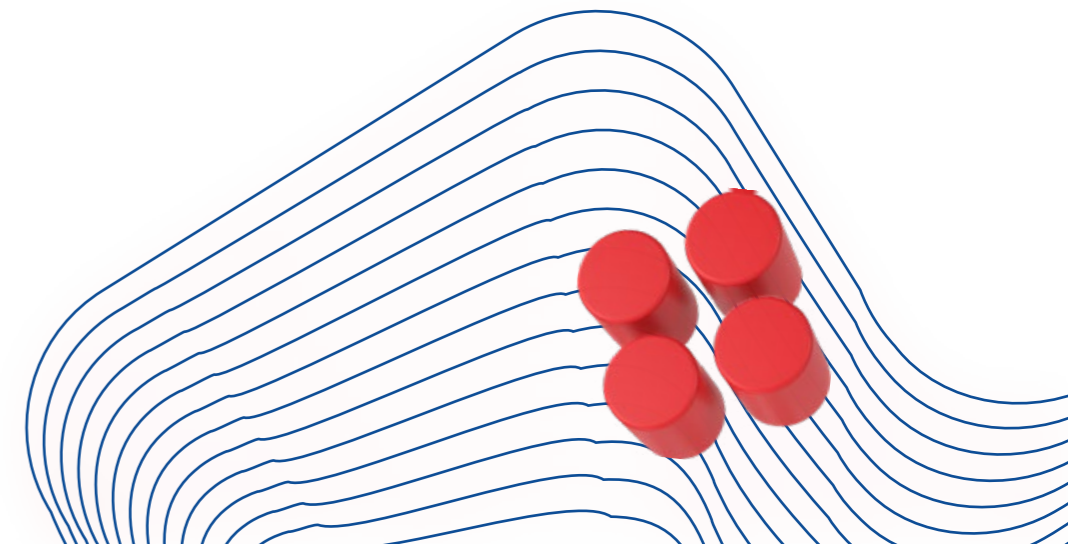
nikolanikitajeremic.com
team of: 1

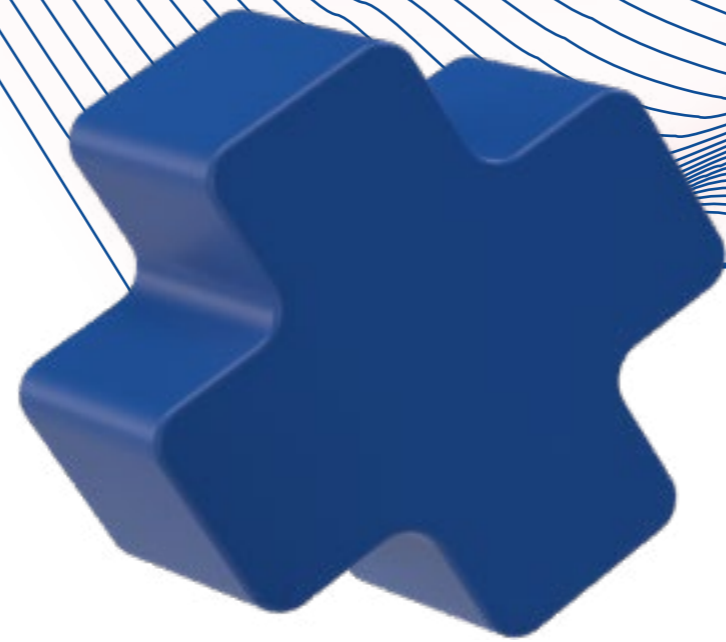


Nikola Nikita Jeremić is a professional video-game music com-poser and has been actively working in this field for the past six years. He is the CEO and mastermind behind the Waveform Studio. Eventually, he ended up in the world AAA league.



OUR OTHER MEMBERS:





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TI

CL

ES



3LATERAL IN THE ECOSYSTEM

WE WOULD LOVE TO SEE WHAT YOU'RE CREATING WITH UNREAL ENGINE!



The value of collaboration

Within the continuously evolving and multidisciplinary domain of game development, success is much easier when we share ideas, have joint initiatives, and work together. Approaching the industry in this way is what makes the SGA such a valuable platform.

Support and collaboration are essential, especially to Epic Games and 3Lateral. Our company brings technologies and services that help game developers create incredible interactive experiences, where **we succeed only when creators succeed!**

Epic MegaGrants

Globally, Epic Games has committed up to \$100 million via the Epic MegaGrants initiative to support game developers, students, educators, enterprise professionals, media and entertainment creators, and tool developers doing amazing work around the world with Unreal Engine or enhancing open-source capabilities for the 3D graphics community. **The presence of Epic Games in Serbia, via 3Lateral, introduces a local contact and resource for Epic MegaGrants applications.**

To date, the following publicly-announced projects from Serbia have been awarded with an EpicMegaGrant:

- Games: Mad Head Games - received support to develop two UE based video games;
- Non-games: Ydrive, a startup based in Serbia and US, creating cloud based AI for rapid 3D reconstruction of road environments. By integrating their service with the UE, they wish to empower AI and game developers to quickly and inexpensively create hyper realistic driving environments.

Supporting education

Together with like-minded companies and several universities, **we are working on initiatives to introduce relevant computer graphics knowledge and skills within the university curriculums.** Some examples of those initiatives:

- Faculty of Dramatic Arts (University of Arts in Belgrade) received a MegaGrant in support of the development of their new study program focused on animation, virtual production, game art and post-production.

- 3Lateral is now working with a regional computer graphics training center to deliver a course that would help university professors implement game development focused lectures (exploiting UE) in their teaching curriculums, while also equipping professors with course materials in the form of PowerPoint lectures, teaching documentation, sample UE scenes and assets, and also quiz like test questions.

We believe that the long-term success of the entire ecosystem can be unlocked through our joint support and collaboration with the educational sector.

How to start a conversation with 3Lateral?

We have shared some examples of local projects supported by Epic Games as options for those interested in potential collaboration.

You should also know that not all projects require MegaGrants funding, and 3Lateral has also independently-assisted with community connections, constructive feedback, and project

guidance. If you're interested in discussing initiatives with us, you only need to send a three-sentence description of your project vision and needs to solutions@3lateral.com.

Anyway, we can't wait to see what you're creating with Unreal Engine!

This is just our way of contributing to an already active and open games ecosystem in Serbia!

We already see plenty of selfless "givers" within the ecosystem, and we hope this mindset only gets stronger!

Make Amazing Things

STARTING A GAMING CAREER? EASIER THAN YOU THINK!



Matija Zorboski
Senior Unity
Developer
& Team Lead,
Webelinx

Since I was a kid, I liked playing games and wondered how it would be to actually make them on my own. At that time, I was thinking that the only way to become a game developer would be if I leave Serbia. Luckily, I was wrong. There were many roadblocks along the way, almost no programming education in elementary school, and not a single course about game development in college. That is why students had no realistic idea of what it means to create games, and the general opinion of students is that it isn't real programming. It is quite opposite, in fact. Game development is a very interesting and dynamic job with a lot of opportunities for professional development in many different subfields.

There should be even more engagement of companies and the government to educate young people about what game development really is and how to jumpstart their career.

While I was studying at college, I had no real knowledge of game dev companies in Niš, a southern Serbian city. At one local job fair, I had the opportunity to meet people from Webelinx. I saw that as an opportunity to get into the game development world, and, with an internship at Webelinx, I achieved just that. I learned what game development really is and a lot more about it... **Starting a career in Niš wasn't that hard after all.** In the beginning, I saw Webelinx as an opportunity that will launch my career off and allow me to get a job in some of the big companies worldwide, companies that we all heard of. After some time, I saw that the company goals were the same as mine, and here I am, 5 years later, still at Webelinx. I had it all right here, in my hometown.

I never could imagine that I would work on a big, ambitious project with a big team here in Niš. Currently, I am leading a team of 7 developers

I never could imagine that I would work on a big, ambitious project with a big team here in Niš. Currently, I am leading a team of 7 developers,

which is a very interesting task in game development. You can interact with all the processes that have to happen before a game can be shipped, and you can see how many different parts have to be interconnected before that happens. The ever-evolving market and technology (we are talking weeks here) require constant updating of the project, which makes game development very challenging, but also very satisfying.

One of the projects I worked on (also the one I am currently working on) is a storytelling mobile game. We all heard of Heavy Rain, Until Dawn, and Telltale's Walking Dead series, and trying to recreate that type of genre on a mobile phone was a really challenging task, but when you are working as a team, everything is possible. So, as a team, we succeeded and created a game called Love Story.

In game development everyone is there just for one thing, to create games, which creates a unique positive team atmosphere in the company. I was very lucky to have really talented people around me along the way.

Young generations that are interested in programming games (or people that would like to change their field of work) have plenty of places right here in Serbia where they can start their game development careers. That makes me happy because Serbia has a bright game dev future since there are many talented people out there.

For most of us, this isn't a career, it's a passion.

GAMING INDUSTRY EVOLUTION IN SERBIA



Milos Đurićanin
Impact Strategist,
Nordeus

Top Eleven is the most successful game produced in Serbia, but it is just one of many made by Serbian teams that are earning our industry (and country) over 100 million dollars a year

While we are still trying to see all the consequences of the global pandemic and the extent of the impact that this crisis will have on the overall development of the world economy, it is very clear today that gaming is one of the most stable global industries.

That is why we are not surprised that the revenue of the global gaming industry, and especially mobile games, increased further in 2020. Not only are the profits growing, but the most famous consoles have also got their long-awaited new versions, new versions, and the battle royale phenomenon has exploded once again into mainstream culture, as seen by the success of Fall Guys. The success of this game has completely overshadowed new releases in the rest of the entertainment world such as film and music.

Our gaming community in Serbia has already proven its success in this competitive global market. Our service companies are part of the development of some of the world's most famous titles, and a large number of studios from Serbia have built their position in our industry by working diligently for the past twenty years.

Top Eleven is the most successful game produced in Serbia, but it is just one of many made by Serbian teams that are earning our industry (and country) over 100 million dollars a year. There are over 75 companies and teams across Serbia today that deal with the production of games, in a country that currently does not have a single program in our formal education that teaches people the development of games.

The top professionals in our industry are taking responsibility for their own development, learning online, and through collaboration. Our formal education is still far from the world-class game development and design programs that we need to start reaching the heights of the top gaming hubs like San Francisco, Berlin, and Barcelona. While we can look at this fact with discouragement, I think

it should be approached in a completely different way. We have made all these amazing achievements together, in teams and communities, without any systemic support - how successful can we be if we build a system that supports us in our efforts to put Serbia on the global map of gaming?

And I mean build, as in - we build it, together as a gaming community, through collaboration and hard work. The most beautiful thing about working in the gaming industry is that we all work together. This is an industry in which collaboration is the foundation of growth and success. Cooperation on key issues goes without saying and the activity of our community is truly impressive.

In just two years, we have formed SGA, an organization that today brings together virtually all gaming companies in Serbia and is actively working to support their development. We also started Nordeus Hub, which offers support to anyone starting or is in process of game making or publishing. Even our universities are announcing new programs in game making, working in a collaboration with the gaming community, transforming education in a way we haven't seen so far in Serbia.

So imagine a few years from now, universities and our gaming community collaborating together, building on what we have already achieved, sharing the learning and experience to our students and gaming enthusiasts from other industries, creating together, playing together, building new successful games and studios.

Isn't that the future you would like to be a part of? Well, it is on us to build it as being part of SGA, Nordeus Hub, or any other gaming community gathered with this vision in mind. These communities will also work passionately for you, to support you on your creative journey to success. We will all grow together, achieving the vision of putting Serbia on a global map of gaming.

A DIFFERENT APPROACH TO HR ONE THAT FITS THE GAME DEV MINDSET



Stanka Vučetić & Marija Mitić Learning and Development Specialists, Mad Head Games



Developing a game means creating a world and an environment where players are happy, engaged, as well as willing to invest their time and energy to learn, master their skills and have fun along the way. Similarly, the role of HR in creating a working environment where people are happy, engaged, willing to put their time and energy to learn new skills and master old ones is crucial.

Working in a gaming industry means that you have to turn on your abilities to be flexible and agile to the maximum. The expression “change is the only constant” is very true for this industry. It is a fast-paced domain where art and technology meet to create astonishing new worlds.

In that setup, creativity is a must. To meet the developer's expectations and business needs, HR professionals have to be extremely creative, but also prepared to be challenged at any time.

Nowadays, the biggest challenge for any HR team in the gaming industry is building a new identity.

Even though the gaming industry in Serbia has changed drastically in the past years and attracted many colleagues from HR to do great things there, the role of HR is yet to be established. Although there is room for building HR professionals as strategic partners in this business, we need to work on our identity, so that we can transition from support positions to enablers. Being enablers suggests providing a wider context where both people and business can thrive together.

Having this in mind, HR, together with business stakeholders, needs to answer the following questions:

1. Is the vision clear?
2. Are the values and organizational culture being followed?
3. How does everyone in the team make an impact and contribute to the organizational vision and culture while promoting a project or business?
4. How can everyone thrive professionally in the future?

How do we do this

As a purpose-driven HR, we are actively interacting with business leaders and stakeholders to support them in shaping and creating purposeful, strategic activities. We apply a people-centric process. Design thinking is something we use as a creative and participative tool to assure the adoption of the HR processes. Our main focus is on executive coaching, learning, mentorship, and development - in other words, providing the meaning in what our people do, before short

breath benefits. The purpose, mastery, and ownership are key concepts to true motivation. And this is where our leaders play a crucial role.

Leadership in gaming?

Mad Head Games has always worked on interesting projects and it was easy for the studio to attract great artists and developers to join the team. We have a bold approach in choosing our next big game to develop. And on that journey, we count on our talents and our leaders.

This year we have launched our first Leadership Academy, with the main idea to support our greatest talents to speak with teams in a way that is inspiring, motivating and growth oriented.

By the end of the Academy EVERY leader in Mad Head Games will have skills, knowledge and a mindset which empower them to lead a team successfully and have an even bigger impact on the studio and people around them.

This is the vision we have for our people and studio.

Formats we like to use

Workshops, training, coaching sessions, one on one consultations, knowledge sharing and support along each step are the main avenues we are using.

Leadership is a popular topic in the HR and business world and our vision is to offer the best possible work experience by offering tools that are effective, professional and satisfying for all who wish to join in on this journey. Isn't that the future you would like to be a part of? Well, it is on us to build it as being part of SGA and any other gaming community gathered with this vision in mind. These communities will also work passionately for you, to support you on your creative journey to success. We will all grow together, achieving the vision of putting Serbia on a global map of gaming.



PEAKSEL DOES DATA

Snežana Đurić
Head of publishing,
Peakxel



**Whatever your situation
on the data team is,
it is very important to start
analyzing data and making
data-based decisions as early
as possible as it will greatly
influence business growth**

In the highly competitive and ever growing gaming industry, relying on data has become more important than ever. The more data we have, the deeper we are able to dive when it comes to granularity and personalization, thus allowing the decision-making process to be as objective as possible.

For me, looking at data is like listening to users telling me what they do and do not love about our game. You just have to listen for the right feedback. Otherwise, all decisions on product changes or marketing campaigns made without data input are just a wild (or perhaps an educated) guess, which often leads to product or marketing performance downgrade. That is why here at Peakxel, we rely heavily on all sorts of data when it comes to decision-making.

As the Head of Publishing, being familiar with all performance metrics is a must. A big chunk of my daily activities is looking at the data on revenue measurement and UA campaigns in order to be able to push forward any UA activity. In addition,

tracking product quality metrics allows for joint work with dev teams in order to improve product performance and ASO activities. Backing up our decisions with data has been a standard procedure for us for quite some time when it comes to both the development and publishing teams. With a large portfolio like ours, having a data analyst has made it so much easier to track everything. However, in addition to the data analyst and myself, our dev managers as well as QA specialists and UA managers look at data on a daily basis. We try to constantly improve the process by looking at data from a variety of angles and creating reports that will give us appropriate actionable steps in order to continuously improve our games and make the user experience the best possible.

Looking at Serbian mobile gaming community, several larger companies have already been heavily relying on data while smaller studios may not be there yet. It is important to know, however, that you do not need a data analyst to start making data-based decisions. In case there is no data analyst on the team, a product or UA manager should be the one to work with data until this becomes overwhelming, which is a good signal that the team requires a data analyst to only work with data. Whatever your situation on the data team is, it is very important to start analyzing data and making data-based decisions as early as possible as it will greatly influence business growth.

In conclusion, I believe that basing your decisions on data will leave very little room for mistake, which many big players both locally and globally have already proven true. Therefore, I expect to see big companies continuing to rely on data for business growth and product quality improvements. On the other hand, I expect smaller studios to start acknowledging the importance of data soon and I also expect them to start viewing data as something worth their time and money.

PASSION IS THE SPARK, KNOWLEDGE IS THE FUEL



Mladen Levnaic
Senior Lead
Narrative Designer,
Playrix RS

Relying on the self-development and nurturing of narrative and game designers within the company was the way most developers decided to use, and mentoring played a crucial part in building these first few generations of game and narrative design professionals

I saw my first video game back in 1990. Yes, it was a long time ago. Yes, I feel somewhat old telling this.

It was Prince of Persia, and for me, it was an experience like none before – I was captivated by that new medium and the group of pixels which was (and still is) the protagonist of the game. I remember the thrill of playing it for the first time, and I remember the moment when I sat down and drew a bearded, gnarly character and an arsenal of pointy weapons and started asking grown-up people a crucial question – „How do I make this into a game?“. And I remember my shock when nobody knew the exact answer. And, being a stubborn little whelp, I just kept asking.

It took me two decades, year give or take - to finally get the answer and the opportunity to do what I longed for - to create real games. I joined the industry as a narrative designer and never looked back. My passion has become my job.

Fun isn't a coincidence

Why do I believe this origin story to be important? Well, perhaps it's just the subjective experience that makes me believe this, but it's that same passion that I deem to be the most important asset of every game creator.

The sheer joy of creation is the biggest thrill of this craft, and if you are lucky enough to feel it - you are at the right place. Otherwise - creating games becomes just a job, and that's exactly what it shouldn't be. The first premise of making a fun game - is to have fun while you are doing it.

So, the first lesson I learned when I started making games was that element of fun isn't something that happens as a coincidence - every game is a designed experience, based upon the twofold foundation of narrative design - defining the world, the characters, and the storyline of your game, and game design - which determines

how that experience is going to play out, and the features the game is going to use to entertain and challenge you. It's the harmony of these two that forms the strong base for games of most genres.

The History/ The Change/ The Future

When I was starting out, save for the old-fashioned trial and error method, the best way to learn both of these disciplines was from one's peers - there were limited options for education, and soaking up every bit of knowledge was an important part of professional growth.

Relying on the self-development and nurturing of narrative and game designers within the company was the way most developers decided to use, and mentoring played a crucial part in building these first few generations of game and narrative design professionals. It took some time and a lot of patience - but we got there.

Nowadays, the arrival of big game development companies, such as Playrix, to Serbia, is the injection of tested and tried practices that raises the professional bar and gives us the opportunity to learn from some of the most successful projects in the world. Coupled with the access to shared databases of knowledge gathered right at the source - it is a giant leap forward for the profession and the local gaming industry.

But for that knowledge to have a long-lasting effect, we should focus on education. Not just mentoring, transferring knowledge from seniors to juniors, from Jedi to Padawan - but a structured, institutionalized approach to learning game and narrative design. And with an increasing number of programs, mostly originating within the gaming industry itself (Master 4.0 is the latest example) - aiming to teach various aspects of game development - we have a bright future to look forward to.

SOFT SKILLS IN THE GAMING INDUSTRY



**Norbert Varga, CEO
& Aleksandar Trudić,**
Executive assistant
and educator,
Digital Arrow

Soft skills and technical education are essential for every employee in the gaming industry. Now, if we take a closer look at most existing high education and business courses, there are no soft skill subjects or topics specifically geared toward the gaming industry that would enable potential employees to work more efficiently. Likewise, when looking at general marketing advertisements for the positions, almost everyone is on the lookout for a communicative QA, a producer with high organizational skills or an art director with reporting skills. What would happen if we found someone with amazing 3D art skills but less developed problem solving skills; or someone who shows great potential for UI programming, but who is still just in the field of general programming?

What Makes Us Different in the Industry?

At Digital Arrow we offer educational activities in both technical and soft skills for our employees. We've come to the conclusion that a holistic approach to education is one of our greatest strengths - soft skills together with technical skills are a quality combo for each employee. Internal results of these methods have shown us improved communication between employees, seeing them openly address with their team leaders the issues they are facing which in turn increases functionality and operability in the workplace. In addition, our technical experts can bring an inside perspective which can enable others on the team to do a better job.

The Technical Part of Education Isn't Enough

Working on a project doesn't only include writing a good story, making a good design document or making an environment concept. Technical skills are equally important as social skills. If you watch some gaming international conferences on YouTube, for example, the QA team leaders will say that communication is very important in solving game issues. And it's not just about oral communication, it also comes into play in the documentative phase--you can't expect to bring about a solution with:

"Go down, then go left and enter the cave and you'll find a hole which needs to be fixed."

The only thing we have is the rawest information, and it needs to be improved. A better version of the example would look something like this:

"Make your way down the stairs near the magical tree, and you'll see a cave on your left-hand side. In that cave you will notice a black graphic circle about 2cm in radius which needs to be fixed so the player doesn't miss the real cave entrance."

What About Meetings, Group Dynamics, Training Skills?

Why should these skills be reserved for every industry except the gaming industry? Well the answer is: they shouldn't be! The gaming industry in Serbia deserves competent employees, lecturers and trainers for all areas: production, 2D and 3D art, animation, programming etc, and I think readers will agree with us. But there is one catch...

Standards in Training, Learning and Development: The Future of the Gaming Industry in Serbia

We believe it's incredibly important to create national standards in lecturing/training in the gaming industry. At Digital Arrow, for example, we have our own internal standards. On an international level we have the European Training Strategy which is mostly directed to those who are working with young people in the context of non-formal education and that might be a good place to start. We also have international coaching associations that have their own standards which we could also use. But for that knowledge to have a long-lasting effect, we should focus on education. Not just mentoring, transferring knowledge from seniors to juniors, from Jedi to Padawan - but a structured, institutionalized approach to learning game and narrative design. And with an increasing number of programs, mostly originating within the gaming industry itself - aiming to teach various aspects of game development - we have a bright future to look forward to.

TECH ART — A FUNDAMENTAL PART OF YOUR PIPELINE



**Interview with
Jovan Damjanovic
Tech+Art Director,
Yboga**

Before we dive into the technicals, tell us a bit about your mobile project Dream Hospital?

Dream Hospital is a simulation management game for mobile. It has recorded over 5 million downloads and was very well received among the target audience. It helped us grow as a team in terms of figuring out all the aspects of mobile game development and publishing processes. We started development of the game with the goal to set foundations in terms of technology and good practices that we could use later for our future titles.

A lot of the playability in this genre lies in the art direction. How did you land on a style?

Coming up with the right art style and then creating a pipeline for it was a very difficult task. Having analyzed our target audience preferences and after we did research on titles they play and like the most, we set some rules we wanted to follow. It took us numerous iterations to finally come up with a style that was what we wanted.



Now that you established that, and considering you were a team of 5, how complex was it to develop a pipeline and did you go from scratch?

We did a lot of research initially about known practices and started with some tools that seemed to be good choices for our project that would save us a lot of time and energy. However after some time we realized that in the long run it is better to rely on custom tailored technology that is a perfect fit for our needs so we are able to have full control and make it usable in the future projects.

Tech art is notoriously mystical and not always in the first game dev team members one would name in a pipeline. This makes it even harder to find resources, advice and best practices. Did this slow you down?

Pipelines can change very quickly as technology advances so you have to be ready to frequently

upgrade your practices. You have to develop an open mindset in order to be ready for constant changes and not be afraid to try out something completely different. Tech art is very specific as it requires not only knowledge of technology and art, but also a problem solving mindset as there are constantly new challenges ahead. We decided to solve challenges we face in a way that is most efficient and beneficial for us in the long run.

What are the main lessons you will take into the next project? Something you wish you didn't have to learn from experience.

One of the most important lessons is to pay good attention and be very careful when deciding on using particular tools and plugins. Some factors like long term support provided by the developers, longevity and compatibility of the product are very important. Going for a plugin that looks like a perfect tool for a job at a glance, may seriously backfire at the later time. Most of the issues we had were linked to the plugins/tools we were using, so we ended by going with our custom solutions.

ONE OF THE GIANTS – ESPORTS IN SERBIA



Mihajlo Jovanović
– Džaril
CEO, Fortuna Esports



Esports has become one of the hottest trends in the world and one of the business world buzzwords. This means that it's still something new in Serbia and that its real growth is yet to come. We should all use this crystal ball that has been handed to us.

It is very fortunate that Serbia is not lagging too far behind other European countries when it comes to esports. Since 2016, through Fortuna Esports' collaboration with Riot Games, we have managed to connect firstly our region (Southeast Europe) and then link it to the wider European system when it comes to the most popular game in the world – League of Legends.

Currently our own Esports Balkan League (EBL) is proudly fighting against ecosystems such as France, Germany, Spain and Poland, while providing much better opportunities, higher-standard conditions and boasting bigger viewership than any of the other EU countries and regions. Our challenge right now is to improve our teams' as organizations and businesses and keep our own talented players at home.

Rough estimates say that in every country between 2% and 5% (depending on the age structure and wealth) of the overall population falls under the category of esports enthusiasts. This means that in Serbia there is between 150.000 to 350.000 people who like esports and engage with it. These are mostly young men, ages 13-30, who are often referred to as the "untargetable" or "unreachable". Simply put – the ad-block generation which lives without traditional media (TV, newspaper, radio).

There is nothing that could stop the games from being played, shows being run and viewers from being entertained. While we can debate the true nature of sports and whether esports falls under that broad category, it is now proven and undeniable that esports is entertainment for the new, digital age.



ART AND GAME DESIGN THAT INSPIRE ALL PLAYERS!



Manja Ćirić Lead Artist,
Nataša Isaković
Lead Game Designer,
Two Desperados

As a company, we have always believed that great teams make great games. This is the reason we place a lot of focus not only on providing vast opportunities for personal development but also on growing unified and stronger teams.

GAME ART

When starting my career in gaming, I had a vague picture in mind of what game art is about and what are the possibilities of an illustrator in this industry.

Over time Two Desperados had evolved and with it its visual style. The games had artistically matured and developed. I believe we have created a recognizable and unique style that is flexible enough to improve and perfect, and we are proud of that.



Specific solutions are created based on our needs, we don't like to fit into a mold. We have self initiated a specific art program that focuses on learning and skill building. By creating some time and opportunity for our artists, we can learn, create fictive games and characters, test software and techniques, and use those results to inspire the rest of the team and company.

Art is an excellent motivator and we want to use it to inspire every Desperados and player the same way art inspires us.

GAME DESIGN

Being at Two Desperados from the early beginnings gave me a chance to witness and be a part of the rapid and continuous evolution of the company. Seeing the progress we've made so far, not only in game design but other departments as well, has been incredibly motivating and inspiring.

Reaching out to and connecting with experts in various fields made a tremendous impact - men-

toring and diverse workshops covering a wide variety of topics helped us expand knowledge and develop our skills. When it comes to game design we have learned a great deal about different design and brainstorming techniques, our audience, prototyping, various tools we can use, ways to automate certain processes and repetitive tasks...and so much more. The game design we are doing now compared to the one at the beginning is much more complex and data-driven, but we always keep fun and creativity at the core. As passionate gamers, we regularly play and deconstruct numerous games of various genres - it is imperative for us to keep up with the industry trends and other design practices.

FUTURE

Our company has recently made great strides towards developing artificial intelligence. Its advancement will bring major changes in many different aspects, and the way we approach and do game design is going to change as well. I believe this will help elevate our products to a completely new level and open up so many new possibilities for providing the best experience for our players.

OUR PROJECT: A TRUE REPUBLIC

Milica Todorović
Associate Producer,
Ubisoft Belgrade



In Riders Republic and in our team, everyone is welcome. We put a lot of effort to make the game reflect the diversity of the real world and make it accessible to everyone.

When I first joined Ubisoft I already had 7 years of experience in game dev, and I thought it gave me a head start. In those years working for Indie studios I gained some invaluable experience, both as an artist and a manager and I learned how to make games, in a way. However, the difference between indie and AAA game development became apparent very quickly. The sheer size of the endeavor is incomparable. My adjustment took time, and my personal evolution coincides with that of my team.

During my time at Ubisoft our project grew from a solid core of about 20 people (mostly programmers), to 40+ people working on Riders Republic. Our headcount increased dramatically, but so did our expertise. We now have not just gameplay programmers but also Render and Engine programmers, and we have other job families like UI art, level art, level design, game design and dev test teams working on the PC, console and Google Stadia versions of the game.

The continuation of our fruitful collaboration with Ubisoft Annecy (lead site on Steep and Riders Republic) was absolutely vital. Our involvement from the earliest stages of the RR project made us feel more connected and involved with the vision of the game direction and engaged in actual collaboration during the lifecycle of this game's development.

Having a studio with 25+ years of experience in AAA game dev. by our side made us more confident. Their down-to-earth attitude makes them very open-minded and approachable. This attitude trickles down from top management to junior members of the team and everyone is equally respected. The lead site's management provide visibility and transparency, in the fashion of a true modern Republic. As a result, our whole team, from management and our technical directors, set the stage where you are able to contribute right way, no matter your seniority.

In Riders Republic and in our team, everyone is welcome. We put a lot of effort to make the game reflect the diversity of the real world and make it accessible to everyone. The Studio Manager of Ubisoft Annecy, Rebecka Coutaz is one of the founding members of Women in Games France, and a strong advocate for gender equality in games. Inspired by her, and as a WIGJ ambassador myself, I am happy to stand for the same ideas in Ubisoft Belgrade. I strongly believe that only diverse teams can move this industry forward.



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EDUCATION

We're very happy to present an updated list of all gaming-related university programs in Serbia. Since our last report, the list has expanded, thanks to tremendous and unified efforts of everyone in the ecosystem.

There are still roughly 30.000 university students in Mathematics, IT and Computing, and 10.000 more high-schoolers learning about Mechanics and Electronics across Serbia. In addition, there's a number of initiatives dedicated to improving educational opportunities for the IT sector and creative industries, such as the Digital Serbia Initiative and the Petlja Foundation.

In order to push this wave of changes even further, SGA and our partners will continue to work closely with government officials, relevant ministries and university decision-makers and together find the best and fastest ways to advance the process.

Besides developing informal learning opportunities, together with our members and partner network, in the following years we will also focus on helping acquire accreditations for new academic programs, creating up-to-date curriculums and finding the right educators and certified mentors to share industry knowledge and experience.

Computer science and programming skills are taught in Serbia as early as the 1st grade in primary schools, to six and seven-year-olds, with special IT divisions in high-schools, and more and more gaming-related programs at universities. Serbia is ensuring it will remain ranked highly on the global talent map.

 **MASTER 4.0**
tvoj sledeći nivo



The second Master 4.0 program - the first one officially devoted to gaming - will start in 2020 in Kragujevac, and 2021 in Belgrade. The goal is to equip students with technical, but mostly artistic backgrounds, with skills and knowledge necessary for a successful career in the expanding gaming industry.

- **“Master 4.0” program for IT and Business**
- joint initiative of universities of Belgrade, Kragujevac and Niš
- **“Master 4.0” program for Creative Industries/Gaming**
- joint initiative of universities of Belgrade and Kragujevac
- **College of Vocational Studies, Belgrade Polytechnic**
- BA in Concept Art and Character Design
- **Faculty of Contemporary Arts Belgrade, Graphic Design department**
- BA in Animation, Illustration and Game Art
- **Faculty of Dramatic Arts in Belgrade**
- BA in Dramaturgy; BA in Sound Recording and Design;
Master in Digital Transformation of Media and Culture
- **Faculty of Technical Sciences, Novi Sad**
- Department of Graphic Engineering and Design
- **Metropolitan University, Faculty of Information Technology**
- BA in Game Development; Faculty of Digital Arts
- BA in Design of Interactive Media
- **SAE Institute Belgrade**
- BA/BSC in Game Art Animation
- **Singidunum University, Faculty of Media and Communications**
- BA in Digital Arts
- **University of Belgrade, Faculties of Organizational Sciences and Electrical Engineering**
- MA in Advanced IT in Digital Transformation
- **University of Niš**
- MA in Intelligent data analysis
- **University of Novi Sad, Academy of Arts**
- BA in Video Game Design

THE EVOLUTION OF THE NORDEUS HUB

Miloš Paunović
Nordeus Hub Manager



A full year has passed since we launched Nordeus Hub, and when we take a step back and reflect on all the things that happened - IT WAS A BLAST! We incubated 27 teams in the Booster program and helped them create their games. At the same time, we organized 20+ events on game development and hosted more than 50 in collaboration with the community, with more than 2.000 people learning about game making with us. I'm proud that more than 50 of our team at Nordeus shared their time, energy, and knowledge with those people. Amazing right? But we've just started.

Don't forget, everything we do is free of charge, it's just up to you to apply and become a part of our community. Take a look at what we have to offer:

Intro 2 Gaming

Series of events for students and all gaming enthusiasts out there, created to introduce them to the gaming industry, community, and the game making processes. Each lecture is followed by a workshop on the same topic, where you can get additional practical knowledge from the most experienced professionals.

Bootcamps

We are planning to elevate gaming education in Serbia with these totally new one-month-long practical courses in game development, game design, game art, and narrative design.

Art Jam

At these events you will be working together with prominent game artists in live art sessions. Our mentors will introduce the tools, teach and preach about the techniques and share their experiences, and inspirations.

Deconstruction Club

Deconstruction club is there to teach the fundamentals of F2P game mechanics and business. Each participant gets a deconstruction template that they need to complete by playing the chosen game for a week. After which they will attend a 2-hour workshop where the group does a deep dive deconstruction with an expert, understanding the mechanics that ultimately define the success of a game.

Booster

Our flagship program, created to support the teams going through the process of making a prototype of their game, in 4 months. Teams get access to Nordeus Hub space, 4 workshops, boot camp, business, and technical mentoring, game testing, and a showcase event. Most importantly, teams will get access to our alumni group and peer network.

Booster Plus

For teams from Booster that successfully made significant progress with their prototypes, we have created a new program to help them continue their development, and in the end, pitch their idea to potential sponsors or publishers. Teams will also get an SGA Start membership package for at least 6 months to a year.

Game Lab

We love to see the whole community coming together, sharing experiences and knowledge, building relationships, and strengthening their networks. In our Game Lab, we bring professionals, students, creators, and experts, to analyze games, play, and learn together.

So, follow us on Facebook, Instagram, or through the SGA discord channel, and be a part of this new amazing game dev community we are building together.

MASTER 4.0 INDUSTRY AND UNIVERSITY GROWING TOGETHER



Nemanja Đorđević
Education
Program Director,
Digital Serbia Initiative

**These programs
united 75 companies
and 13 faculties
from three different
state universities.**

When companies and universities work together to push the frontiers of knowledge, they become a powerful engine for innovation and economic growth. To make this possible each side must overcome the cultural and communications divide. At the Digital Serbia Initiative we think this divide can be bridged with strong company support, faculty members who understand the business, and a clearly defined framework for both sides to follow.



In 2018 we already had evidence that 95% of IT companies in Serbia were having difficulties with finding the right employees. The root cause was that our universities are domain-oriented with traditional departmental structures that are disabling them from introducing new interdisciplinary programs. That is why we teamed up with the Ministry of Education to devise a public call aiming to create partnerships between industry and academia around a unique curriculum that should integrate different disciplines, allowing context-specific programs and better prepare students for actual jobs.

Although the initial plan was to support just one master's program, in the end of the process we had as many as four consortia under the Master 4.0 brand. These programs united 75 companies and 13 faculties from three different state universities. Their plan is to introduce more than 130 different courses and gather the best students especially interested in creating new products and businesses that can generate substantial economic benefits. In parallel, through Master 4.0 programs we engaged the best professors from both Serbian and international universities and

ensured that at least one-third of teachers come from the industry. Future managers and product owners will learn about artificial intelligence and cryptocurrencies, and at the same time, upcoming developers and engineers will discover key concepts in marketing, finance and other essentials needed to launch their own digital business.

Our plan is to take Master 4.0 to the next level and make programs that interconnect artists and engineers. This time round we will rely on the fact that gaming is one of the two dominating sub-sectors in the Serbian startup ecosystem.

 **MASTER 4.0**
tvoj sledeći nivo

 **Digital
Serbia
Initiative**

CROWDFUNDING — UNMISSABLE OPPORTUNITY TO FUND YOUR GAME

Luka Božović

Crowdfunding Expert,
Crowdfunding.rs



Crowdfunding brought a revolution to the gaming industry. In the time when small gaming studios hardly reached publishers that showed a lack interest for them, Kickstarter was a logical solution. Since then, gaming industry crowdfunding campaigns recorded an increasing success, and a solid 40% of them reached their goal.

In the last year's SGA report it is stated the share of crowdfunding as an investment source for gaming companies from Serbia is 30%. The most successful Kickstarter campaign from Serbia comes from the gaming industry and has collected almost 200 000 euros. Lately more and more gaming studios decided to fund new titles through crowdfunding. However, a number of them is not successful in it, not because the insufficient quality of the product they are offering, but rather an inadequate campaign. Some learn from failure and reach the goal in the second campaign, and some are disappointed and do not think about the second attempt.

Gaming studios and companies from Serbia do not lag behind the rest of the world, on the contrary, they are recognized as promising and talented. In order to launch successful campaigns they need support such as education and capacity building for the preparation and management of crowdfunding campaigns. A lot of those who failed didn't have a developed community in the moment of the launch, they are often unprepared for the process and they don't know what to expect. With proper support and education a number of successful crowdfunding campaigns from Serbia can grow and secure a place for Serbian gaming industry on the global map of gaming.



ALL OUR MEMBERS 78

3lateral

4 Save Soft

Adreamation

Alset Studio

AM PM Games

Aparteko

BabyBottle

Blacksmith Studios

Bom Solutions

Brave Giant

Bunker

Byte Kinematics

COFA Games

Crater VFX Training Center

Cryptic Legends

Demagog Studio

Deutrix

Devotion Studios

Digital Arrow

ElBet

Enyph Games

Esoteric Forge

Esoter Studio

Euclidean Studios

Flat Hill Games

Fortuna E-sports

Foxy Voxel

Game Biz Consulting

Harpoon Games

Heron Games

Hora Games

Illusio Pictures

Infinite Galaxy

Ingenious Studios

Kerber Games

KUKURU3

Lift Kviz

Mad Head Games

MarbleIT

Miracle Dojo

Mogul Digital

Moonburnt studio

Munzesky Studio

Nordeus

Oraharo

Peaksel

Pixquake

Playrix RS

Playstudios / Sava Team

Princeps

PWNRS

Raigon

Remote Human

ServerBytes

Sobakaisti

Software Wolf Studio

Sozap

Spring Onion

Stargazer Studio

Stick and Rope

Sticky Fingers

Studio Don Quixote

Stygian Software

Superlative

Superverse Industries

SupremeNexus

Tender Troupe

Three Swords Studio

Thunder Strike

Tria

Tummy Games

Two Desperados

Ubisoft

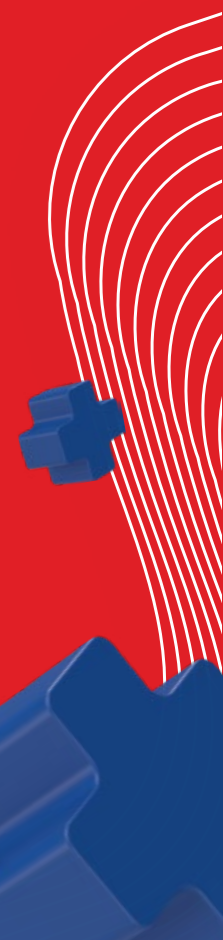
Ulti Coin

Waveform Studio

Webelinx

Whyttest

Yboga



PARTNERS

Our official partners actively support the work of the association and help our members make competitive products and deliver premium services.



FRIENDS

Initiatives, associations and institutions that collaborate with us on mutual projects and programs – this is how we enrich the ecosystem.



MEDIA PARTNERS

We rely on our media partners to promote new titles and events, to inform all interested parties on major events and other success stories.



