

FLANDERS INVESTMENT & TRADE MARKET SURVEY

Market study



# The Swedish gaming industry

# Get to know the market

April 2023

Flanders Investment & Trade Agency

c/o Embassy of Belgium Kungsbroplan 2, 2nd floor Kungsholmen - Stockholm Sweden



www.flandersinvestmentandtrade.com

# Content

1.	Introduction	
2.	Overview of the Swedish gaming industry	
3.	Analysis of the market	
	3.1	SWOT analysis
	3.2	Porter's Five Forces
4.	Trends	
	4.1	Mobile gaming7
	4.2	Cloud gaming7
	4.3	Indie game development
	4.4	Virtual Reality & Augmented Reality
	4.5	Gamification
5.	Players on the market	
	5.1	Publishers & Developers
	5.2	Service providers
6.	Associations & support for gaming companies	
	6.1	Associations
	6.2	Incubators, funding & investment
	6.3	Government regulations & support
7.	Education in Sweden	
	7.1	Education in High School19
	7.2	Game development in colleges and universities 19
	7.3	Higher Vocational Education
	7.4	Education for adults
8.	Industry events	
9.	Bibliography22	
10.	Disclaimer	

# 1. Introduction

The Swedish gaming industry is a very dynamic and rapidly growing industry. The generated revenue of the market, including only domestic sales, was an incredible 2,7 billion euros in 2021, which is an increase of 28% when compared to the previous year. In Sweden there is a number of 785 companies who are active in the video game market.

Swedish video games are played all over the world. The market in Sweden itself is also very successful. The best-selling video game ever, Minecraft, was created in Sweden. This gave the market a major boost and set the tone for other companies. The market in Sweden enjoys many players across a broad spectrum and several types of support for these players.

# 2. Overview of the Swedish gaming industry

The Swedish gaming industry is a successful industry. Despite being a small country and having to compete with countries like the USA, Japan, Finland and more, it is one of the bigger players on the current market. To put it in perspective, 1 of 4 people who play video games, play a game made by Swedes. The Swedish video games market is rapidly growing. In 2021 the generated revenue of the domestic industry was 2,7 billion euros, which was an increase by 28% compared to the previous year. When including the international sales of the Swedish market, the total global revenue totalled at 5,8 billion euros, this was an increase of an astonishing 75% in comparison to the previous year. In 2011 the total global revenue was "only" 256 million euros, making it an industry with amazing growth.

Unfortunately, there isn't more recent data available, but in 2017, Sweden was the country with the second highest concentration in the world of production of video games per capita. Currently, video games that are produced in Sweden, make up 4,1% of the total export in Sweden. It is one of the biggest, if not the biggest cultural exports of Sweden. It now rivals the country's traditional shipments of iron ore and paper.

Let's take a look at the numbers of the companies and employees in the video game market in Sweden. The number of companies in 2021 was 785, in 2020 the number was 667 companies. Of those 785 companies, 48,5% are solo companies and 39,6% are micro companies with less than 10 employees.

The other part of the companies is distributed as follows:

- 8,3% are small companies with 10-49 employees.
- 2,5% are mid-sized and have between 50 and 199 employees.
- 1% are large companies who have more than 200 employees.

In total, in the year of 2021 7.944 people worked in gaming companies in Sweden. There is definitely attention to diversity, because 22,1% of the employees in the industry are women.

There is a reason why the gaming industry is so successful in Sweden and why it was able to grow so rapidly. It comes from within Sweden and how gaming itself is looked at by the people in the country.

The culture surrounding gaming is very big in Sweden. 60% of Swedes play video games and 26% of those play on daily basis. It started when in 1998 the access to home computers gained a massive increase. This was because of certain government subsidies/tax incentives which made it possible to get a computer way below the actual value of the product. In turn, this improved the computer literacy and more people started gaming in Sweden. Also, in Sweden it is way more acceptable in society to be a gamer than in other countries because of the long and dark winters, it was normal to stay inside.

Next to these things, another factor why the industry has so much success, is because of the highspeed internet in Sweden. The country got an early start in comparison to other countries because of investment by the government Now it has one of the fastest internet networks on this planet. As a result of these major expenditures into infrastructure, Sweden and Stockholm are one of the hottest hubs for technology in Europe.

A major thing that boosted the Swedish market of games to another level, was the game known as Minecraft. People all around the world knows this game and set a great image for the Swedish gaming industry. It was created by the Swede Markus Persson in 2009 and made public in this year. By the official and full release of the game in 2011, it already sold 700.000 copies. This was never done before in the indie-game scene. It introduced millions of people to video games and to the Swedish market. Now, it is the best selling video game in the history of video games. Minecraft has sold 238 million copies and has around 140 million active players each month to this day.

In Sweden you can also find the Embracer Group, which is a holding company of game development and media companies. As of 2022, Embracer Group owns 131 game development studios around the world. In total, they employ 15,000 employees in over 40 countries. They have a revenue of around SEK 10,5 billion. Embracer Group is one of the biggest companies in the world, regarding game development and media, competing with multinationals from the USA, Japan and other major countries in the business.

The Swedish gaming industry is also very start-up friendly for the right companies. 93 new gaming companies were created in 2021. On the IMD World Digital Competitiveness Ranking, which rates the capacity to adopt and explore digital technologies, in 2022 Sweden ranked 3<sup>rd</sup> place. Sweden is a relatively small market, so it is a great market to test your products. You must start focusing on the international market sooner than in other countries. Also, because it is a small market, it is a great place to test your games and soft launch your product. Swedes are also very good at collaborating with each other and there is a lot of collaboration with the community.

# 3. Analysis of the market

# 3.1 SWOT analysis

The following analysis will showcase the SWOT of the Swedish market surrounding video games. The information was gathered through research and with the help of answers given by Swedish video game companies and associations. Keep in mind that you may observe different experiences then the ones depicted in the provided analysis.

#### Strengths

The first of the two internal aspects of the SWOT-model, is the strength of the industry in this case. There are several strengths that can be listed when talking about the Swedish gaming industry. Starting off, is the broad range of focus. There is a broad range of mobile games, games for PC, for console and for VR. As will be shown later in the study, you will notice there is also a broad range of publishers, developers and other companies in the gaming market.

Secondly, as mentioned before, the Swedish market is small. As a result, companies start to think globally from the start. It is also a young and rapidly growing industry, as 50% of the companies on the market has been created after 2010. The fast adoption of technology in Sweden is a major strength for this market, which can be seen for example in the highly developed internet structure. Of course, it helps the market a lot that the gaming culture is very big in Sweden.

In Sweden, you will find that there is a lot of collaboration inside a company, because they use a horizontal organisation structure where everyone can have their own opinions and ideas. Even between companies there is collaboration. Naturally, they will not discuss their whole business with each other, but it is more like they can ask each other what their experience with that certain supplier or company was that they worked with. Finally, unlike in many other countries, the association 'Datespelsbranschen' (Swedish Gaming Industry) is highly active on the scene and in promoting the video game industry and its companies in Sweden.

#### Weaknesses

For the second internal aspect, there was not that much information available, so the information regarding the weaknesses of the industry come mostly from the answers provided by the companies that operate in the Swedish gaming industry. The biggest and a major weakness is the limited access to capital and access to public funding. According to the companies, it is currently awfully hard for gaming companies to get financial resources, which makes it hard sometimes to compete with the bigger companies.

Intellectual property is a widely known term, which refers to something you can create with your minds. Things like an invention, a symbol, a design of a product, something you make, write or produce. In the gaming industry this is particularly important, since this is how those companies generate revenue. A lot of these IPs are owned by Swedish companies.

#### Opportunities

Opportunities is an external aspect of this analysis. In the case of the gaming market of Sweden, the first opportunity according to Per Stromback of the Swedish Gaming Industry, is to deliver on the growing global demand by increasing the production. This can be done for example via more talent, if they can overcome the threat, which will be mentioned later. Since the market is successful and growing quite fast, there is the opportunity to continue and ride on the success and growth of the industry.

There have been several stories of Swedish people and companies who were or are successful in the video game industry in Sweden. These people and companies would like to invest back into the market, what could make for a fantastic opportunity for the current companies in the business.

### Threats & Challenges

As mentioned before, there lies an opportunity to deliver on the global demand by increasing the production through more talent. While this is true, there is also the challenge in Sweden that there is a major problem in terms of access and the lack of talent. Fewer developers graduate than are employed. At the same time, there is a very big need for skills and competence. These two things together pose a big problem in Sweden. The competition by other countries like USA, UK and Japan pose a big threat to a small country like Sweden. Not only those big countries are a problem, but also Finland is a major competitor.

## 3.2 Porter's Five Forces

The next analysis will be using the model of Porter's Five Forces, so this will include the power of suppliers, the power of the buyers, the threat of new entrants, the threat of substitutes and finally the competitive rivalry of the industry.

#### Power of suppliers

There are many sellers of hardware, infrastructure and so on. Game development is more about coding, digital design and related things, so this means that companies don't have to purchase supplies that often. On the other hand, there are not a lot of suppliers of game engines. In conclusion, although there are not that many game engines available, the power of the suppliers on this market is rather low.

#### Power of buyers

In the case of the power of the buyers, it is a little bit more difficult to determine how low or high their power is because there are several aspects that need to be taken into consideration. On the one hand there is a large number of customers, this is an aspect that points towards low power. There are not that many substitutes for video games available now, at least not in the same range of entertainment. This would also mean they have low power. On the other hand, when looking at the market itself, when people don't like your game, they will just buy another game in another genre for example. There are many options to choose from. There is also a collective gaming community. In this day and age with social media, if they don't like a game they put in on social media and no one or at least way smaller number of people will play your game. As a result of these last two things, the bargaining power of buyers is medium to high.

#### Threat of new entrants

The threat of new entrants is mainly decided by how high or how low the barriers of entry are. For this market, the barriers are quite low since any "skilled" person can make a game. The appreciation for indie game developers is remarkably high in the community. Indie games are games made by small and independent game developers. These two things make the threat of new entrants quite high. The main barriers are the ability to consistently release games like AAA studios and also there is capital required, which is hard to come by in Sweden. This would mean that the threat is low. Altogether, the threat of new entrants is of medium level.

### Threat of substitutes

The substitutes for games are streaming services like Netflix, Disney +, Amazon, Paramount + and more. Board games and reading books are also considered substitutes of video games. In other words, there is not really any substitute that offers the same range of interactive entertainment, that video games do provide. While there aren't that many substitutes, the cost of switching to these other options is on the lower hand. They could even be cheaper. Still the threat of substitutes is considered low.

### Competition of the industry

Lastly, the fifth force of Porter's model is the competition of the industry. The competitive rivalry of the video game market is extremely high. There are several reasons for this. Firstly, brand loyalty is not a factor. The industry of video games relies on trends, for example if the trend is open-world games, companies will focus on that. Customers will pick the game they like, doesn't matter which brand made it. There is also a large number of companies which makes the competition fierce. The industry is constantly evolving, innovative technologies arise, and the customer behaviour changes. Every company want to jump on these things as fast as possible to get ahead of the competition. It must be said though that the competition is more in each genre itself, rather than on the whole market. In other words, the competition between sporting games and open-world games is lower than the competition between sporting games themselves.

# 4. Trends

The video game industry is a dynamic market with its own set of unique trends that shape the future of the industry in Sweden. There are several trends, and the following chapter discusses some of the key trends that are shaping the gaming industry in Sweden. Trends are constantly evolving, so these could change over time.

### 4.1 Mobile gaming

This is one of the major current trends of the gaming market in Sweden. 70% of the people that play games, enjoy games they play on their mobile phones or tablets. In 2020, it accounted for 40% of the total revenue, while console games and PC each made up 30%. The hardware is improving rapidly and there is also an increase of apps stores. As a result, more game development studios are creating mobile games and it also makes it easier to distribute them.

## 4.2 Cloud gaming

Cloud gaming means that players can play games on devices on the internet, through cloud-based servers. It offers gamers flexibility and a lot of convenience. Cloud gaming is a trend that has been growing a lot, and it is expected to grow even further in the following years. It is popular among games for multiple reasons, including the fact that it reduces the need for expensive hardware. Gamers can enjoy the games without downloading them and they can play on multiple devices.

### 4.3 Indie game development

Indie games, or games made by small studios, is still a rising trend in Sweden because they create innovative and engaging games for their audience. This trend gained popularity because of games like Minecraft and now with games like for example Goat Simulator. In the community in Sweden there is a lot of respect towards indie game developers, which is one of the reasons it is so popular and why the trend is still relevant.

## 4.4 Virtual Reality & Augmented Reality

VR and AR is a new trend in the industry and is steadily gaining more traction. In the future, people expect that virtual reality and augmented reality are going to be playing a very large role in the market of the future. A lot of companies are focusing on this trend and trying to take advantage of the innovative technologies to create innovative and immersive gaming experiences.

### 4.5 Gamification

A somewhat smaller trend, but still definitely large enough to pay attention to, is gamification. This term refers to using gaming elements in non-game context. For example, learning a dangerous job before doing the actual job in real life or a loyalty app where you can collect something get prizes and so on. It is a growing trend in Sweden and a lot of companies are using it to engage customers or promote learning.

# 5. Players on the market

## 5.1 Publishers & Developers

Publishers play a very important part in the industry surrounding video games. These publishers are the companies that, as the name suggests, publish and market the games. Publishers are the ones who invest in projects and game developers. Often, they manage the game development process and a big part of the financing. These companies also handle the distribution and the marketing of the product through several different channels. On the other hand, a game developer is the one who actually creates the games and often use publishers to publish their games.

You will notice that some companies both publish and develop games. In this case they publish their own games, but they also publish games of other video game developers. Here is a list of several publishers and game developers who operate on Swedish grounds:

#### Paradox Interactive - https://www.paradoxinteractive.com/

"Our vision is to make the world a nerdier place."

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- The company was founded in 2004

- Revenue was MSEK 1,972.9 in 2022  $\rightarrow$  36% increase compared to 2021
- 662 employees
- Paradox Interactive focuses on console games and PC, but also publish mobile games
- Their portfolio consists of more than 100 titles and the most important brands are: Stellaris, Cities: Skylines, Europa Universalis, Hearts of Iron, Crusader Kings, Prison Architect, Magicka, Age of Wonders, and the World of Darkness
- Social media:
  - Facebook: <u>https://www.facebook.com/ParadoxInteractive</u>
  - Twitter: <u>https://twitter.com/PdxInteractive</u>

#### Raw Fury - <a href="https://rawfury.com/">https://rawfury.com/</a>

"We don't care about genres or mechanics. We care about experiences and emotions."

- Publisher
- HQ is located in Stockholm, Sweden
- Founded in 2015
- Raw Fury focuses specialise in the publication of indie games
- Some of their most popular games include: Sable, Kingdom: New Lands, Star Renegades, Gonner, Townscaper, Per Aspera, Bad North, Atomicrops, Backbone and Dome Keeper
- Social media
  - Facebook: <a href="https://www.facebook.com/rawfury/">https://www.facebook.com/rawfury/</a>
  - Twitter: <a href="https://twitter.com/RawFury">https://twitter.com/RawFury</a>

#### Legendo Entertainment - https://legendo.com/

"Entertainment should enhance life, not replace it."

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 1998
- Legendo Entertainment creates video games, music, comics, art, and animation inspired by ancient myths, classic novels, and historical events. They specialise in exploring stories that they believe are overlooked by today's media and they bring them to life.
- The most important games consist of: Wolfwar Saga, Pure Pinball, Muskerados, Dracula Twins, Fortune Winds: Ancient Trader, Ghost Mania, Pearl Harbor Trilogy 1941: Red Sun Rising
- Social media
  - Facebook: <u>https://www.facebook.com/Legendously</u>
  - o Twitter: https://twitter.com/legendo

#### G5 Entertainment - <a href="https://corporate.g5e.com/">https://corporate.g5e.com/</a>

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 2001
- Revenue in 2022 MSEK 1,400.1, compared to 2021 the revenue increased by 6%

- 900+ international employees
- G5 Entertainment publishes high quality mobile games and for PC. Their games are family-friendly, are quite easy to learn and they target both beginners and experienced players.
- In their portfolio the most popular games are: Jewels of Rome, Sherlock: Hidden Match-3 Journey, The Secret Society and Wordplay: Search Word Puzzle
- Social media
  - Facebook: <u>https://www.facebook.com/G5games</u>
  - o Twitter: https://twitter.com/g5games

Coffee Stain Studios - https://www.coffeestainstudios.com/

"Our mission is simple: Enabling unique games to live up to their full potential."

- Publisher & Developer
- HQ is located in Skövde, Sweden
- Founded in 2017
- Revenue MSEK 657,2 in 2022
- They have 123 employees
- Coffee Stain publishes games for all types of hardware, they have games for mobile, console and PC
- Coffee Stain Publishing is the publishing entity of Coffee Stain Studios

   <u>https://www.coffeestainpublishing.com/</u>
- Some games in their portfolio include: Midnight Ghost Hunt, Songs of Conquest, Deep Rock Galactic, Valheim, Huntdown, Goat Simulator 3, A Story About My Uncle, Sanctum and Sanctum 2
- Social media
  - Facebook: <u>https://www.facebook.com/CoffeeStainStudios/</u>
  - o Twitter: <a href="https://twitter.com/Coffee\_Stain">https://twitter.com/Coffee\_Stain</a>

Avalanche Studios Group - https://avalanchestudios.com/

"Worlds beyond limits."

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 2003
- They have over 500 employees
- Avalanche Studios Group's main focus is giving people unforgettable open world games across multiple genres
- In their portfolio the most popular games are: Just Cause, Mad Max, Rage 2, Generation Zero and theHunter: Call of the Wild
- Social media
  - o Twitter: https://twitter.com/avalanchesweden?lang=en

#### Axolot Games - <a href="https://axolotgames.com/">https://axolotgames.com/</a>

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 2009
- The mission at Axolot games is to create and publish innovative and interactive entertainment. The publishing department offers other game developers their experience in marketing and development.
- Axolot has published Raft and their own game Scrap Mechanic
- Social media
  - o Twitter: https://twitter.com/axolotgames

Fast Travel Games - https://fasttravelgames.com/

"Shaping reality."

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 2016
- Fast Travel Games focuses solely on world-class VR experiences to find new ways to play. As a publisher they finance VR games and help with their experiences regarding marketing and more.
- Some games in their portfolio include: Game Vroom, Ghost Signal: A Stellaris Game, Guardians Frontline, EVERSLAUGHT Invasion, Broken Edge, We Are One and Virtuoso
- Social media
  - o Twitter: <u>https://twitter.com/fasttravelgames</u>

#### MAG Interactive - <a href="https://www.maginteractive.com/">https://www.maginteractive.com/</a>

- Publisher & Developer
- HQ is located in Stockholm, Sweden
- Founded in 2010
- In 2022, the revenue accounted for MSEK 328, which is an increase of 14% in comparison to 2021
- They have 107 employees
- MAG Interactive both develops and publishes casual mobile games, including word games, trivia games and puzzle games.
- They currently have 9 games in their portfolio: Ruzzle, Word Domination, Wordbrain, Wordbrain 2, Paint Hit, Quizduel, Wordalot, Ruzzle Adventure and Wordzee
- Social media
  - o Twitter: <u>https://twitter.com/maginteractive</u>

#### Thunderful Games - <a href="https://thunderfulgames.com/">https://thunderfulgames.com/</a>

- Publisher & Developer
- HQ is located in Gothenburg, Sweden
- Founded in 2019-2020

- Thunderful Games creates and publishes games in all kinds of genres and on all major hardware. There is a little bit for everyone to enjoy.
- Some games in their portfolio include: The Gunk, Swordship, Togges, Wavetale, Lego Bricktales, Industria, White Shadows, Source of Madness, Lost in Random, Bridge Constructor: The Walking Dead, Dead Age 2
- Social media
  - Facebook: <a href="https://www.facebook.com/thunderfulgames/">https://www.facebook.com/thunderfulgames/</a>
  - Twitter: <u>https://twitter.com/thunderfulgames</u>

#### Apprope - <a href="http://apprope.com/">http://apprope.com/</a>

- Developer
- HQ is located in Stockholm, Sweden
- Founded in 2012
- Apprope creates casual word games for mobile devices.
- The games in their portfolio include: Word Mansion, WordWhizzle Search, Wordbubbles and WordWhizzle Themes
- Social media
  - Facebook: <u>https://www.facebook.com/Apprope/</u>
  - Twitter: <u>https://twitter.com/apprope</u>

#### King - https://www.king.com/

"Making the world playful."

- Developer
- HQ located in Stockholm, Sweden
- Founded in 2003
- Revenue in 2022 was USD 2,79 billion
- They have 3000+ employees
- King creates mobile games that are free-to-play, where you can buy things in-game. Their games are also synchronised across the platforms, so you can switch between devices and pick up where you left off.
- They have developed over 200 games, including one of the most popular games in the world: Candy Crush. Other games include: Farm Heroes, Pet Rescue, Bubble Witch, Rebel Riders, Diamond Diaries, Pyramid Solitaire Saga and Blossom Blast Saga
- Owned by Activision Blizzard since 2016
- Social media
  - Facebook: <u>https://www.facebook.com/King</u>
  - Twitter: <u>https://twitter.com/King\_Games</u>

#### DICE - https://www.dice.se/

"We exist to push the boundaries of creative entertainment."

- Developer
- HQ is located in Stockholm, Sweden
- Founded in 1992
- They have over 700 employees
- DICE is a well-known developer that has been active for thirty years creating gaming experiences that are unforgettable.
- They are responsible for the famous the Battlefield-games and Star Wars Battlefront. Other games they developed: Mirror's Edge, Rallisport Challenge 2, True Pinball, Codename Eagle
- Owned by Electronic Arts since 2006
- Social media
  - o Twitter: https://twitter.com/ea\_dice

#### Toca Boca - https://tocaboca.com/

- Developer
- HQ is located in Stockholm, Sweden
- Founded in 2010
- Toca Boca creates mobile games directed at kids that focuses on inclusivity, open-mindedness, and playing with stuff. They make the games from a kid's perspective. It is never about winning but providing the kids with a playground.
- In their portfolio you can find games like: Toca Life World, Toca Hair Salon 4, Toca Mystery House, Toca Lab: Plants, Toca Builders, Toca Blocks, Toca Dance, Toca Nature and Toca Kitchen 2
- Social media
  - Facebook: <a href="https://www.facebook.com/TocaBoca/">https://www.facebook.com/TocaBoca/</a>
  - Twitter: <u>https://twitter.com/tocaboca</u>

#### Frictional Games - https://frictionalgames.com/

- Developer
- HQ is located in Helsingborg, Sweden
- Founded in 2006
- They have around 25 employees
- Frictional Games is a developer that is specialised in horror-games and narrative experiences, but they are also open for other genres.
- Their games include: the Amnesia series, SOMA and the Penumbra collection
- Social media
  - Facebook: <u>https://www.facebook.com/frictionalgames/</u>
  - Twitter: <u>https://twitter.com/frictionalgames</u>

Some more known game developing studios/companies in Sweden:

- Coldwood Interactive <u>https://www.coldwood.com/</u>
- Starbreeze Studios https://www.starbreeze.com/
- Ember Trail <u>https://embertrail.com/</u>
- Fatshark https://www.fatshark.se/
- Toadman Interactive https://toadmaninteractive.com/
- Rovio <u>https://www.rovio.com/</u>
   HQ in Finland, but also studio in Stockholm
- Activision Blizzard https://www.activisionblizzard.com/
  - o HQ in USA, but presence in Sweden
  - $\circ$  own King
- Electronic Arts <u>https://www.ea.com/</u>
   HQ in USA, but presence in Sweden
  - o own DICE
- Ubisoft https://www.ubisoft.com/sv-se/
  - HQ in France, but presence in Sweden
  - o own Massive Entertainment https://www.massive.se/
- Bandai Namco <u>https://en.bandainamcoent.eu/</u>
   O HQ in Japan, but presence in Sweden
- Xbox Game Studios <u>https://www.xbox.com/en-US/xbox-game-studios</u>
   HQ in USA, but presence in Sweden
- Warner Bros. Interactive Entertainment <u>https://warnerbrosgames.com/</u>
   HQ in USA, but presence in Sweden

#### 5.2 Service providers

The companies that will be listed in this chapter are companies that provide services that gaming companies use in their creative process of developing the perfect game for their customers. This ranges from audio design to translation and more.

Hereafter a list of important service providers on the Swedish market:

Really Interactive - https://www.really-interactive.se/

- HQ is located in Stockholm, Sweden
- Founded in 2016

- Next to creating their own projects they provide services that include: Unity development, technical art & 3D art, audio design, UI/UX design, virtual & augmented reality, interactive graphics & sound. For a more detailed explanation, check out their website
- They have collaborated with companies like: Rovio, Microsoft, Mojang Studios, Fast Travel Games, Toadman Interactive and more.

#### Elias Software - https://eliassoftware.com/

- HQ is located in Stockholm, Sweden
- Founded in 2015
- Their services are as follows: adaptive music composition, sound design, audio direction & consulting, audio programming, sound & music implementation. For a more detailed explanation of their services, check out their website or contact them directly.
- Some of their clients are: Avalanche Studios Group, Bethesda, Fatshark, Hazelight Studios, Rovio, and more.

#### LocalizeDirect - https://www.localizedirect.com/

- HQ is located in Helsingborg, Sweden
- Founded in 2009
- They provide translation, localisation and CMS services, focused on the video game development industry. Localisation in the game industry means adapting the software according to a certain country or region. Next to translating the game, this also means changing graphics, adapting packaging and also certain things that might be difficult in a certain culture.
- They have collaborated with several companies, some of which are: King, Bethesda, The Pokémon Company and Avalanche Studios

#### Coherence - https://coherence.io/

- HQ is located in Malmö, Sweden
- Founded in 2018
- Coherence is a network engine, platform and a set of tools to create multiplayer games, regardless of how technically skilled you are.

#### Pley - https://www.pley.com/

- HQ is located in Stockholm, Sweden
- Founded in 2016
- Pley is a platform to play new games on the browser, so no installs, downloads or anything like that. On this platform you can play with your friends simply by sending them a link.

These links direct you to websites that will help you find more companies operating in the Swedish gaming industry:

- <u>https://dataspelsbranschen.se/medlemmar</u>
- <a href="https://gamecompanies.com/industries/europe/swedish-game-industry/companies">https://gamecompanies.com/industries/europe/swedish-game-industry/companies</a>

# 6. Associations & support for gaming companies

The following section lists the associations that are active in Sweden, who work on behalf of the video game companies in the country. These associations are very important for the Swedish gaming companies as they spread recognition to all parties involved in the industry. Next to these associations, other types of support for gaming companies are also present in Sweden. These other types of support include incubators, funding and investment in projects, financially supporting programmes and regulations by the Swedish government. Understand that the organisations and companies provided below, are not all the entities that you can find in Sweden.

### 6.1 Associations

#### Dataspelsbranchen (Swedish Gaming Industry)

The Swedish Games Industry is an organisation that collects, compiles and communicates the common responsibilities and issues of the video game industry. Dataspelsbranschen represents the industry as a whole and speaks for it to the outside world.

https://dataspelsbranschen.se/ kansli@dataspelsbranschen.se

Spokesperson: Per Strömbäck E <u>per.stromback@dataspelsbranschen.se</u> T +46 (0)70 - 84 36 214

#### Game Workers Unite Sweden

This organisation is the local branch of the international organisation Game Workers Unite. They are a horizontal organisation of people who are dedicated to advocate for the rights of workers in the Swedish gaming industry. Keep in mind they are not a union, in some countries around the world they have been legally recognized and work together with unions in that country, but in Sweden this is not the case yet.

https://gwu-sweden.org/ info@gwu-sweden.org

#### **European Games Developer Federation**

The EGDF is stronger than ever in the 2020s. With the help of the EGDF, assistance programs for game creation have been established and upheld throughout the EU and several European member states. Games are largely acknowledged as a significant cultural medium with a great potential for creativity. Also, at the start of the decade, the EGDF was instrumental in bringing the European business together to confront the global pandemic and the crisis in Ukraine.

#### https://www.egdf.eu/

#### Managing Director: Jari-Pekka Kaleva E jari-pekka.kaleva@egdf.eu T +358 40 716 3640

#### Interactive Software Federation of Europe

The ISFE makes sure that gamers throughout the world continue to have a blast playing video games, that the voice of a responsible video game ecosystem is heard and understood, and that its creative and economic potential is promoted and recognized.

#### https://www.isfe.eu/

## 6.2 Incubators, funding & investment

#### East Sweden Game

East Sweden is considered a business incubator for video game developers, but they are also a community and a workplace for all game developers. They help you with your business, no matter in what stage your company finds itself in, they help you realize your dreams. ESG provides events & meetups, a coworking space, office rooms and their experience and advice. Find more information on their website.

#### https://eastswedengame.se/

#### **Amplifier Game Invest**

Amplifier Game Invest is, as the name suggests, a company that invests in game development studios to help them become a top studio in the video game industry. They finance your studio to reach the next level and they ensure that this will be a long-term commitment, as they know it doesn't happen overnight. Besides the financing of your project, they also provide their 50+ years' experience in the video game industry. The team is driven by a strong passion.

#### https://www.amplifiergameinvest.com/

#### Aldeon

Aldeon is a fairly new player on the investment scene. They focus on starting gaming studios, who find themselves in the early founding stage. The priority of Aldeon is companies in Scandinavia, but it is not exclusive to those countries. This means companies from other countries can also get a chance at Aldeon if they set up shop in the Nordic region.

#### https://www.aldeon.se/

#### Creative Europe

Creative Europe is a programme between 2021-2027 of the European Commission with a budget of € 2,44 billion, which is a big difference with the programme of 2014-2020 where the budget was € 1,47 billion. The programme Creative Europe invests in specific initiatives that would promote

cultural diversity and also responds to the demands and difficulties faced by the cultural and creative industries.

The programme has two major objectives, which are:

- 1) To preserve, advance, and promote the rich cultural and linguistic variety of Europe and
- 2) to boost the creative and cultural industries' capacity for growth, especially the audio-visual industry.

https://culture.ec.europa.eu/creative-europe

# 6.3 Government regulations & support

#### Tax incentives

The Swedish government offers tax incentives for research and development, in which game development is also included. Gaming companies can thus enjoy these tax incentives relating to R&D. 19,59% of the contributions of the employers and the general payroll taxes can be deducted following the tax incentive. There is a maximum of what can be deducted, and the maximum deduction limit comes down to SEK 919.239 per month, which is around €89.500. Keep in mind, these are numbers which were available at the time. The deduction that is made, should be made clear in the tax report of the company. There is another requirement to be entitled to the R&D tax deduction, which is that companies must have employees that work on activities relating R&D more than 75% of their time and more than 15 hours a week. The requirement of 75% of their time, has been adjusted by the government in 2021 to 50% of their time should be work related to R&D. Not only Swedish companies, but also foreign companies who pay employment taxes in Sweden can get this deduction.

#### Funding for R&D

The Swedish government also provides funding for research and development through several government agencies. For example, the Swedish Agency for Economic and Regional Growth, also known as Tillväxtverket. Another example is Vinnova, which is a Swedish agency focused on innovation. They provide funding for research and development projects, so including game development. The funding of Vinnova is aimed at the promotion of innovation and growth of Swedish businesses.

#### Protection of intellectual property

In Sweden, strong laws concerning the protection of intellectual property are in place. For game developers and publishers, this is very important, since these companies rely on this intellectual property to create revenue.

Check out the following website for more information about this topic: <u>https://www.prv.se/en/</u>

#### Education and training programmes

The Swedish government provides funding for education and training programmes relating the gaming industry. This includes universities and vocational schools that offer such courses in the department of gaming. These universities and programmes will be discussed in the following chapter.

# 7. Education in Sweden

In Sweden you can find a number of ways to follow some sort of education about a certain segment of the video game industry. Even in high school there are forms of education about gaming. In 2022, a number of 55 programmes about game development were offered by 36 high schools all over Sweden. There is also a large number of colleges and universities in the country that offer educational courses surrounding game development. Next to these colleges and universities, there is something called a Higher Vocational Education (HVE) in Sweden. An HVE is a post-secondary form of education, in which the theoretical and the practical are combined through close cooperation between the industry and the employers. These types of educational forms are offered in specific segments of the market where there is a clear demand for competence. HVE is very important for the gaming industry. Over half of the people who studied in Sweden and work at companies in the gaming industry, have done a higher vocational education. Last, but not least, there are institutions that offer education for adults in game development. Below, a list will be provided with institutions all around Sweden that offer some type of education regarding game development.

# 7.1 Education in High School

LBS Kreativa Gymnasiet - <u>https://www.lbs.se/</u>

Nacka Strands Gymnasium - https://nackastrandsgymnasium.se/

Snitz Gymnasium - <a href="https://snitz.se/gymnasium/">https://snitz.se/gymnasium/</a>

Uppsala Estetiska Gymnasium - https://estetiska.uppsala.se/

**Törnströmska gymnasiet** - <u>https://www.karlskrona.se/skola-och-forskola/gymnasieskola-och-gymnasiesarskola/tornstromska-gymnasiet/</u>

Klara Theoretical Gymnasium - https://klaragymnasium.se/

Katedralskolan - https://katedralskolan.uppsala.se/

Väsby Nya Gymnasium - https://www.vasbygymnasium.se/

Tibble Gymnasium - https://tibble.nu/

Cybergymnasiet - https://cybergymnasiet.se/stockholm/

Fryshuset Gymnasium - https://gymnasiet.fryshuset.se/

There are also courses offered in "Kulturskolan", which is a voluntary, government-subsidised education, usually conducted in cooperation with Swedish school education at the municipal level. In other words, it is an extracurricular activity.

## 7.2 Game development in colleges and universities

Blekinge Institute of Technology - <a href="https://www.bth.se/">https://www.bth.se/</a>

University of Skövde - https://www.his.se/en

Uppsala University - <a href="https://www.uu.se/">https://www.uu.se/</a>

Chalmers University of Technology - <a href="https://www.chalmers.se/en/">https://www.chalmers.se/en/</a> Stockholm University - <a href="https://www.su.se/">https://www.su.se/</a> Malmö University - <a href="https://www.su.se/">https://www.su.se/</a> Södertörn University - <a href="https://www.sh.se/">https://www.su.se/</a> Linköping University - <a href="https://www.sh.se/">https://www.sh.se/</a> Luleå University of Technology - <a href="https://www.ltu.se/">https://www.sh.se/</a> University of Göthenburg - <a href="https://www.gu.se/">https://www.gu.se/</a>

### 7.3 Higher Vocational Education

The Game Assembly - <a href="https://thegameassembly.com/se/">https://thegameassembly.com/se/</a>
Futuregames - <a href="https://futuregames.se/">https://futuregames.se/</a>
Yrgo - <a href="https://www.yrgo.se/">https://www.yrgo.se/</a>
PlaygroundSquad - <a href="https://www.playgroundsquad.com/">https://www.yrgo.se/</a>
PlaygroundSquad - <a href="https://www.playgroundsquad.com/">https://www.yrgo.se/</a>
PlaygroundSquad - <a href="https://www.playgroundsquad.com/">https://www.playgroundsquad.com/</a>
VUX - <a href="https://skelleftea.se/vux">https://www.playgroundsquad.com/</a>
VUX - <a href="https://skelleftea.se/vux">https://www.playgroundsquad.com/</a>
VUX - <a href="https://www.forsbergsskola.se/">https://www.forsbergsskola.se/</a>
Xenter Botkyrka - <a href="https://wenter.se/">https://wenter.se/</a>

# 7.4 Education for adults

Adult education is given in institutions called "Folkhögskolan" or The Folk High Schools. In these schools you can either study for a qualification that makes you able to go study in university or college, or you can study a specific subject to gain experience. There are several of these institutions across the country. There are 14 schools in total, who offer 27 programmes in the field of game development.

There are also other forms of adult education about game development provided by the following institutions:

Spelkollektivet - https://www.spelkollektivet.com/

FCV Sweden - <u>https://fcvsverige.se/</u>

Center for Lifelong Learning - <a href="https://www.c3l.se/">https://www.c3l.se/</a>

# 8. Industry events

You can attend several events who represent the gaming industry events, which are of immense importance for the companies. At these events, they get to promote their games and more.

Some of which are:

Nordic Game - <a href="https://conf.nordicgame.com/">https://conf.nordicgame.com/</a>

"As the leading games conference in Europe we have a lot to offer, with twice the Nordic Game experience online, at Slagthuset and Hotel Kämp, filled with the best speakers from the global industry and our own Nordic heroes, access to countless games industry professionals via our Expo, Developer Showcase and MeetToMatch, a host of networking and social events in Malmö, Helsinki and on the Nordic Game Discord server, as well as the highly anticipated Nordic Game Awards and much, much more."

#### LiU Game Conference - https://liugc.eventreg.se/

"LiU Game Conference is an annual conference about computer games and digital experiences. During an intense afternoon we explore trends in digital entertainment with games industry professionals and studios from all over the world."

# Invest in Games - <u>https://dataspelsbranschen.se/nyheter/2022/10/3/invest-in-games-den-25-oktober</u>

Invest in Games has a packed programme where we present the new Game Developer Index and offer the latest analyses from the games industry: artificial intelligence, inflation and the future of game developers.

#### Gamification World Meetups Scandinavia -

https://www.meetup.com/gamificationworldmeetupscandinavia/

"With Scandinavian countries becoming a hub for game design and technology, the purpose of this Meetup group is to share gamification theory, practise and knowledge through conversation and events both formal and informal. We are thinking big and want to see gamification meetups happen in each of the capitals: Stockholm, Helsinki, Oslo, Copenhagen and Reykjavik."

Stockholm VR Meetup - https://www.facebook.com/StockholmVRMeetup/

Indie Game Dungeon - https://www.facebook.com/IndieGameDungeon/

# 9. Bibliography

AFP. (2021, March 12). *From "Minecraft" to "Valheim": How Sweden is taking over the gaming world*. The Economic Times. <u>https://economictimes.indiatimes.com/magazines/panache/from-minecraft-to-valheim-how-sweden-is-taking-over-the-gaming-world/articleshow/81463642.cms</u>

Akpobome, M. (n.d.). *Porters 5 Forces Model Analysis: Video Game Industry*. prezi.com. <u>https://prezi.com/za4nzmglues3/porters-5-forces-model-analysis-video-game-industry/</u>

Armstrong, L. (n.d.). *Porter s Five Forces Analysis on a Video Game Company. Student Name. School Name - PDF Free Download*. <u>https://docplayer.net/219599145-Porter-s-five-forces-analysis-on-a-video-game-company-student-name-school-name.html</u>

Day, M. (2017, May 5). *Sweden's booming video game industry is more than just Microsoft's "Minecraft."* <u>https://phys.org/news/2017-05-sweden-booming-video-game-industry.html</u>

EduRank. (2022, May 20). *Game Design and Development in Sweden: Best universities Ranked*. EduRank.org - Discover University Rankings by Location. <u>https://edurank.org/cs/game-design/se/</u>

EGDF. (2021). 2019 EUROPEAN VIDEO GAMES INDUSTRY INSIGHTS REPORT. In *EGDF*. https://www.egdf.eu/wp-content/uploads/2021/08/EGDF\_report2021.pdf

GameCompanies. (n.d.). *Swedish Game Industry*. GameCompanies.com. <u>https://gamecompanies.com/industries/europe/swedish-game-industry/companies</u>

High Coast Invest. (2020, August 28). *Do not miss out on Sweden's R&D tax relief - High Coast Invest*. <u>https://www.highcoastinvest.com/news/learn-the-basics-on-sweden-s-r-d-tax-deduction</u>

IGN. (2022, September 27). *Top 10 Raw Fury Games*. https://www.ign.com/playlist/ignplusteam/lists/top-5-raw-fury-games

Invest Stockholm. (2019a). *The Games Industry in Stockholm*. www.investstockholm.com. <u>https://www.investstockholm.com/investment\_opportunities/tech-ict/gaming/</u>

Invest Stockholm. (2019b). *Engaging with Industry and Public Authorities: Part 9 - SWEDEN - STOCKHOLM*. <u>https://baltic-games.eu/media/bgi\_goa2-2\_output\_9\_sw-st.pdf</u>

Leyton. (n.d.). What are R&D Incentives? - Leyton Sweden. https://leyton.com/se/rd-incentives/

*List of top 21 universities in Sweden offering Bachelor of Game Design and development course.* (2021). Gyanberry. <u>https://gyanberry.com/list-of-top-universities-in-sweden-offering-bachelor-of-game-design-and-development-course/</u>

Mayors of Europe. (2022, January 19). *Sweden: Europe's gaming powerhouse*. https://mayorsofeurope.eu/top-stories/sweden-europes-gaming-powerhouse/ Montemayor, Z. (2022, September 20). *The Swedish Gaming Industry: How It Has Changed in the Digital Age*. Psychreg. <u>https://www.psychreg.org/swedish-gaming-industry-how-has-changed-digital-age/</u>

Moonpreneur. (2022, December 20). *Why is Minecraft So Popular?* <u>https://moonpreneur.com/blog/why-minecraft-so-</u> <u>popular/#:~:text=The%20game%20offers%20players%20a,by%20players%20of%20all%20ages</u>

*Price Elasticity in Video Game Economics*. (2017, March 12). The Economics of Gaming. <u>https://theeconomicsofgaming.wordpress.com/2017/03/12/price-elasticity-in-video-game-economics/</u>

PRV. (2022, October). *Publishers play an important role in the games industry. - PRV.* <u>https://www.prv.se/en/games-developers/the-role-of-the-publishers/#:~:text=of%20the%20publishers-</u> <u>publishers%20play%20an%20important%20role%20in%20the%20games%20industry.,the%20game</u> <u>%20via%20various%20channels</u>

r/starcraft - What makes Sweden such a good e-sport nation? (n.d.). Reddit. https://www.reddit.com/r/starcraft/comments/u7bf9/what\_makes\_sweden\_such\_a\_good\_esport\_ nation/

Statista. (2021, January 29). *Online gaming in Sweden 2017-2019*. https://www.statista.com/statistics/1115013/online-gaming-in-sweden/

studyportals. (n.d.). *Bachelor's degrees in Video Games & Animation in Sweden*. Studyportals Bachelor. https://www.bachelorsportal.com/search/bachelor/video-games-animation/sweden

Swedish Games Industry. (n.d.). *Våra Medlemmar — Dataspelsbranschen*. Dataspelsbranschen. <u>https://dataspelsbranschen.se/medlemmar</u>

Swedish Games Industry. (2022a). *Game Developer Index 2021*. Swedish Game Industry. https://static1.squarespace.com/static/5a61edb7a803bb7a65252b2d/t/6229e5dd50b8666aad71a0f 4/1646913002440/Spelutvecklarindex2021-ENG-WEBB.pdf

Swedish Games Industry. (2022b, October 25). *New report - Video Games Make Up 4.1% of Sweden's Service Exports — Dataspelsbranschen*. <u>https://dataspelsbranschen.se/news/2022/10/24/new-report#:~:text=In%202021%2C%20Swedish%20companies&apos;%20sales,of%20Sweden&apos;s%2 Ototal%20service%20exports</u>

Swedish Games Industry. (2022c). *Game Developer Index 2022*. Swedish Game Industry. https://static1.squarespace.com/static/5a61edb7a803bb7a65252b2d/t/636e923606b61f6829557ba c/1668190785189/GameDeveloperIndex2022WEBB.pdf

Swedish Institute. (2022, December 2). *10 facts about gaming in Sweden*. sweden.se. <u>https://sweden.se/work-business/business-in-sweden/10-facts-about-gaming-in-sweden</u> Tracxn. (2023, February 27). *Gaming Tech Startups in Sweden*. Explore | Tracxn. https://tracxn.com/explore/Gaming-Tech-Startups-in-Sweden

Wikipedia contributors. (2023a, March 21). *Video game publisher*. Wikipedia. <u>https://en.wikipedia.org/wiki/Video game publisher</u>

/1676809653101/Talent+Education+and+the+Art+of+Making+Games.pdf

Wikipedia contributors. (2023b, March 27). *List of video game publishers*. Wikipedia. <u>https://en.wikipedia.org/wiki/List of video game publishers</u>

Wollstad, V. (2022). TALENT, EDUCATION AND THE ART OF MAKING GAMES: Introduction to Skills and Jobs in the Games Industry. Swedish Games Industry. https://static1.squarespace.com/static/5a61edb7a803bb7a65252b2d/t/63f215a836234123989fc126

# 10. Disclaimer

The information in this publication is provided for background information that should enable you to get a picture of the subject treated in this document. It is collected with the greatest care on the bases of all data and documentation available at the moment of publication. Thus, this publication was never intended to be the perfect and correct answer to your specific situation. Consequently, it can never be considered a legal, financial or other specialized advice. Flanders Investment and Trade (FIT) accepts no liability for any errors, omissions or incompleteness's, and no warranty is given, or responsibility accepted as to the standing of any individual, firm, company or other organization mentioned.

Date of publication: April 2023