



The Swedish Market

Gaming



**Open Trade
Gate Sweden**
National Board of Trade



The purpose of the market study

The purpose of this market study is to offer a comprehensive guide for companies that are interested in entering the Swedish gaming market. It aims to offer valuable insights and support actionable strategies for service providers and product/solution providers seeking to establish a foothold in Sweden. The study outlines important trends in the market; provides an overview of the Swedish gaming market; details technical, regulatory, and cultural requirements; and offers guidance on how to identify and secure business partners.

This market study is intended for companies in developing countries interested in entering the Swedish gaming market. It targets two main groups: service providers and product/solution providers.

Table of contents

Important trends influencing the Swedish gaming market.....	4
Artificial Intelligence (AI) and technological advancements	4
Acquisitions and investments	5
Sustainability	5
Gender diversity	6
Geopolitical tensions and economic uncertainty	7
The Swedish gaming market.....	8
Overview of market size and growth.....	8
Number of companies and diversity.....	10
Employment trends.....	11
Game development companies in Sweden	12
Segments and trends in the Swedish gaming market.....	13
What game development services are in demand in Sweden?	15
Ecosystems and entrepreneurship in the Swedish gaming market	17
Outsourcing and consulting.....	17
What requirements should suppliers meet?	19
Technical requirements and competencies	19
Legal requirements	22
Governance and ethical business practices.....	23
Sustainability	24
Swedish business culture	25
Where and how to find business partners	26
Trade fairs and conferences.....	26
Business support organisations.....	27
Company databases	28
Summary: What you need to do to get business.....	29

Important trends influencing the Swedish gaming market

The Swedish gaming market is at the cutting edge of technological innovation and industry growth. This section explores key trends that are shaping the industry, including advancements in artificial intelligence (AI), virtual reality (VR), and augmented reality (AR). We will also examine how economic conditions, sustainability efforts, geopolitical tensions, acquisitions and investments, and efforts to improve gender diversity influence the market. Understanding these trends is crucial for companies looking to thrive in Sweden's dynamic and evolving gaming market.

Artificial Intelligence (AI) and technological advancements

Sweden's gaming industry is known for its technological innovation, especially in the fields of artificial intelligence (AI), virtual reality (VR), and augmented reality (AR). These technologies are not just improving existing development processes, they are essential for creating and enhancing player experiences.

Leading innovations in AI

In Sweden, significant advancements in artificial intelligence (AI) are transforming gaming experiences. Projects like EA SEED's work in the Battlefield series and EA DICE's research in Stockholm have improved the sophistication of non-player characters (NPCs) and the overall realism and interactivity within games, enhancing player experiences. AI is also being used to streamline game development processes by automating routine tasks such as coding, allowing creative teams to focus on more innovative aspects of game creation.

One key innovation is procedural content generation—a technique where AI algorithms automatically create game content (such as levels, maps, or environments) rather than having to manually design this content. This allows for greater diversity and replayability in games. AI also enhances NPC intelligence and uses voice recognition to enable more natural interactions with players. Additionally, machine learning models adapt games to individual player preferences in real-time, ensuring a more personalised experience.

Breakthroughs in VR and MR

Sweden has also seen major developments in virtual reality (VR) and mixed reality (MR) technologies. VR fully immerses players in digital environments, while MR blends digital elements with the real world, allowing for interactive experiences that combine both physical and virtual elements. Companies like Resolution Games have released successful titles such as the VR game *Utimechs* and the MR game *Spatial Ops*. These innovations expand immersive gaming and offer players more interactive and engaging experiences.

Educational applications of AR

Swedish companies are also exploring the use of augmented reality (AR) as a tool to transform traditional learning methodologies in the educational sector. AR applications are increasingly being developed to facilitate interactive learning in subjects like history and science. These applications use engaging 3D visualisations to captivate students' interest and improve educational outcomes.

Enhancing game development processes

Technological innovations have significantly improved game development and player interactions. The shift from custom game engines to standardized engines like Unreal Engine and Unity has democratised game development, allowing more developers to create top-notch games. The use of asset libraries has streamlined the development process, enabling the reuse of graphics and other assets, which reduces production time and costs. Motion capture technology has also played an important role by enhancing the realism of character animations and providing more realistic and engaging player experiences.

Acquisitions and investments

The Swedish gaming industry has seen substantial investment activities, mainly in the form of acquisitions. According to the Game Developer Index 2023, there were 31 reported acquisitions in 2022. These acquisitions often involve both Swedish companies acquiring foreign entities and vice versa, which reflects the industry's global interconnectedness. For example, Swedish companies were buyers in 26 of the acquisitions and sellers in nine, showing the active role of Swedish companies in the global market.

This high level of investment activity underscores the industry's potential for growth and attractiveness to investors. It also highlights the strategic moves by Swedish companies to expand their global footprint and enhance their capabilities through mergers and acquisitions.

Sustainability

The Swedish gaming industry's commitment to environmental sustainability has resulted in major advancements, which are reported in the Game Developer Index 2023. Key developments include the integration of sustainable practices in operations and reduced carbon footprints, especially thorough the use of digital distribution, which lowers emissions compared to traditional methods.

Recent legislative developments, such as the European Green Deal and Sweden's climate policies, emphasise the need for good and effective digital systems to manage compliance, sustainability, and transparency. Swedish businesses are using digital platforms more and more to enhance efficiency and profitability while aligning with the UN's Sustainable Development Goals (SDGs) by tracking and reporting their environmental, social, and governance (ESG) metrics.

Recent initiatives focus on addressing substantial challenges in server operations and hardware production, which are notorious for their environmental impact due to Scope 3 emissions. The GameOn project, a collaboration between KTH Royal Institute of Technology and Uppsala University, explores more sustainable development methods for video games. Innovations like cloud gaming, which centralises computing on servers in renewable energy-rich locations, reduces the need to frequently update hardware. Advanced technologies such as AI and blockchain provide data analysis in real time and transparent reporting mechanisms for sustainability efforts.

Corporate environmental responsibility in the gaming industry is also evolving. Many companies are taking steps to minimise their environmental impact. For example, the Embracer Group has committed to significantly reducing its emissions in alignment with the Science Based Targets initiative (SBTi). Similarly, the Stillfront Group is promoting sustainable practices across its studios, as highlighted in its sustainability handbook.

In addition to reducing their own environmental impact, some Swedish gaming companies are using their platforms to raise public awareness about environmental issues. For example, Lutra Interactive and Eat Create Sleep develop games centred on themes such as ecosystem preservation and water restoration, helping to educate players about environmental challenges. Gro Play targets younger audiences with sustainability-themed games, encouraging environmental consciousness at an early age.

Additionally, emerging startups like BioSquare are at the forefront of a new trend in impact gaming. BioSquare focuses on addressing critical global issues, particularly climate change, by engaging the vast mobile gaming audience of over 2.5 billion players. Through partnerships with organizations like WWF Sweden and the Great Green Wall project, BioSquare channels player interactions into real-world environmental actions. This model demonstrates how gaming can move beyond entertainment to inspire tangible impact in the fight against climate change.

Gender diversity

The Swedish gaming industry has made some notable strides in promoting gender diversity. In 2022, women represented 23.4 per cent of employees in the industry, as reported by the Game Developer Index 2023. This is an increase of over one percentage point compared to the previous year, progress that can be attributed in part to targeted initiatives aimed at fostering inclusion and diversity within the industry.

Several key initiatives have played a role in promoting gender diversity, such as DONNA, Women in Games, and various industry events. DONNA, an interest group based at the University of Skövde, promotes gender equality in game development and education by creating networks and opportunities for women, non-binary, and trans individuals. The group hosts DONNA DAY, a mini-conference that offers students the opportunity to connect with and be inspired by professional role models from the industry. Women in Games is an international non-profit organisation dedicated to combating discrimination in the gaming industry and fostering inclusivity.

Other initiatives, such as Game Dev Force, GEM (Game Empowerment Movement), and the All In Project, also underscore the industry's commitment to inclusion. These programmes provide mentorship, support, and opportunities for underrepresented genders, encouraging their participation and leadership in the gaming sector. The All In Project focuses on increasing diversity within the gaming community and industry, in particular by supporting marginalised genders in their professional growth and representation.

Geopolitical tensions and economic uncertainty

Geopolitical tensions, particularly with Russia, have significantly influenced the Swedish gaming industry's operational strategies. To reduce risks and enhance production capacity, many companies have adopted strategies such as increasing outsourcing and establishing international offices. These strategies allow companies to navigate the complexities of geopolitical uncertainties and ensure continuous production and development. For instance, the Game Developer Index 2023 notes that many Swedish companies have subsidiaries and a substantial number of employees abroad, which helps in maintaining operational stability despite geopolitical challenges.

At the same time, the Swedish IT sector, including the gaming market, is grappling with significant economic challenges. The aftermath of COVID-19 has not only disrupted supply chains and accelerated digital transformation, it has also strained financial resources. The war in Ukraine has exacerbated instability, impacting energy supplies and increasing operational costs. Additionally, Sweden has been facing high inflation and rising interest rates, which is particularly troublesome for tech companies dependent on investment and consumer spending.

These economic pressures require companies to make strategic adaptations to navigate financial uncertainty and maintain competitiveness in a volatile market. The latest trends point to decreasing interest rates, but there is still uncertainty going forward depending on inflation trends.

The Swedish gaming market

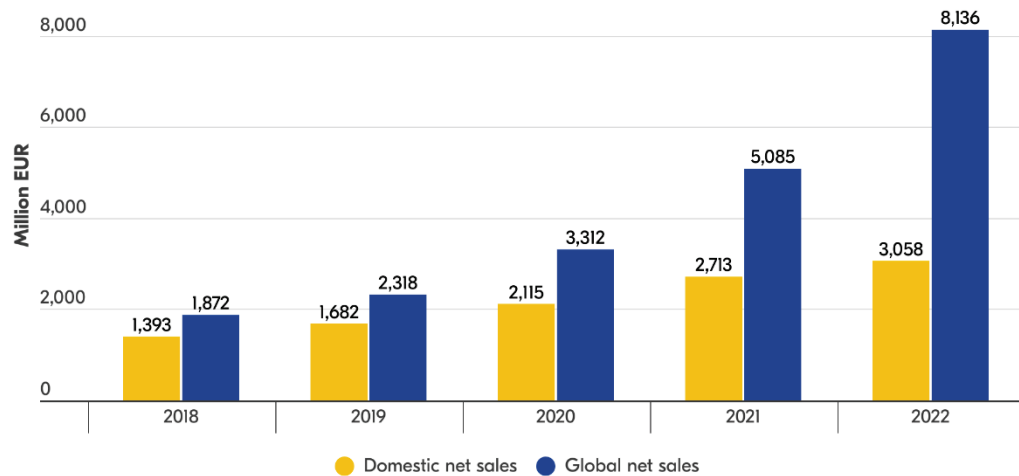
Overview of market size and growth

Sweden's gaming industry is highly influential, standing out in Europe despite Sweden's modest population of about 10 million people. Ranked ninth in annual digital video gaming revenue among leading European gaming markets, Sweden hosts the third-largest number of gaming companies in Europe. This disproportionately large presence underscores the country's significant influence on both the European and global gaming markets.

According to the Game Developer Index 2023, the Swedish gaming industry has shown substantial growth, particularly through strategic international expansions and a notable increase in revenue from both domestic and foreign subsidiaries. One example is the Embracer Group, which has pursued aggressive expansion by acquiring companies in North America, Europe, and Asia, further solidifying its global footprint. Similarly, the Stillfront Group has expanded through acquisitions, focusing on mobile gaming companies across Europe and North America. Many Swedish companies prioritise expansion into North American and European markets due to their established gaming ecosystems and consumer base. Smaller studios such as Valiant Game Studio are also making strides, targeting East Asian markets like Japan, South Korea, and China for future growth while acknowledging challenges in localisation and market entry. The focus on international audiences reflects a trend in the industry to try to reach a broader consumer base.

In 2022, the total global revenue of Swedish gaming companies exceeded EUR 8.1 billion, with a significant portion generated from subsidiaries outside Sweden. This global performance highlights the industry's ability to compete internationally, attract global talent, and create gaming experiences that reach hundreds of millions of players worldwide. The revenue of Swedish-owned foreign companies surpassed that of Swedish-registered companies for the second consecutive year, largely due to aggressive acquisitions abroad.

The Swedish gaming market has not only expanded globally, it has also significantly deepened its financial foundations (see Figure 1). From a modest EUR 800 million a decade ago, revenue for Swedish-registered companies alone ballooned to over EUR 3.1 billion in 2022. The global sales of Swedish game publishers increased dramatically as well and were almost three times higher than the domestic ones. Eight Swedish gaming companies reported revenues exceeding EUR 100 million in 2022, underscoring the substantial economic impact of the gaming sector. The top ten companies accounted for a significant portion of the total revenue, demonstrating exceptional profitability and contributing to substantial tax revenue.

Figure 1. Development of sales of Swedish game publishers, 2018–2022

Source: Dataspelebranschen/Swedish Games Industry

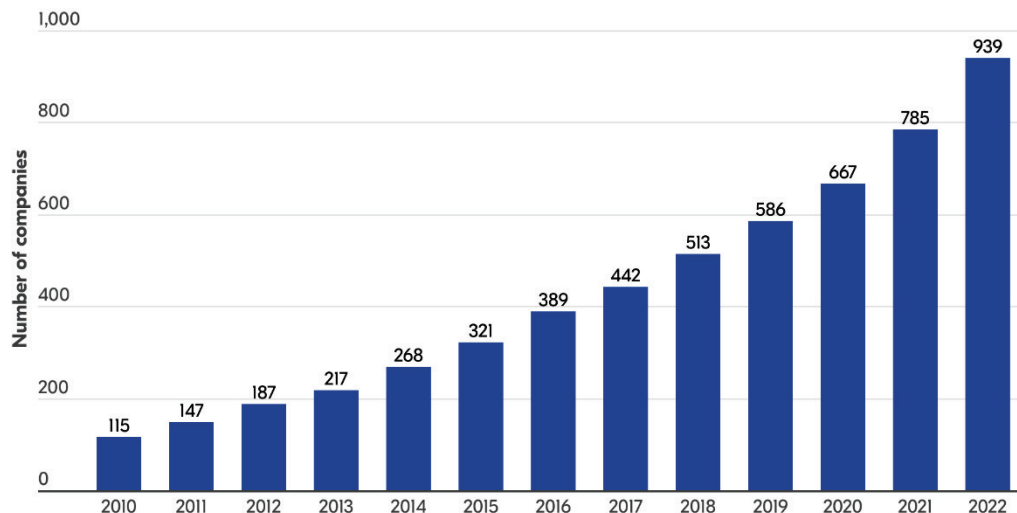
The industry is ever-growing, with a great need for expertise, particularly in handling large amounts of data, which is becoming increasingly important for game development and player analytics. Some of the most in-demand competencies in the Swedish gaming industry include system developers, data scientists, AI specialists, UX/UI designers, and blockchain coders. *Triolith Games* noted in a recent interview that blockchain coders for web3 games and infrastructure are among the hardest to recruit. Additionally, the company emphasised that it is also difficult to find qualified marketing and project managers, reflecting shifting demands in both technical and leadership roles within the industry. Despite Sweden's advancements, significant challenges remain, including a persistent shortage of IT skills. According to the Swedish IT and Telecom Industries Association, the shortage of skilled workers in these areas is a major bottleneck for the continued growth of the gaming sector. Additionally, expertise in cloud computing, cybersecurity, and blockchain technology is in high demand, as these technologies are becoming increasingly central to gaming infrastructure and development.

Although recent market challenges due to COVID-19 and geopolitical tensions have impacted economic conditions, many competencies remain in high demand, particularly in emerging technologies such as AI, which will create many new opportunities. This makes Sweden an important hub for international digital talent.

Number of companies and diversity

The Swedish game development industry has seen an increase in the number of companies and sustained operations, as shown in Figure 2. According to the Game Developer Index 2023, the total number of active gaming companies reached 939 by the end of 2022, representing a 19 per cent increase from the previous year, which underscores the sector's dynamic expansion.

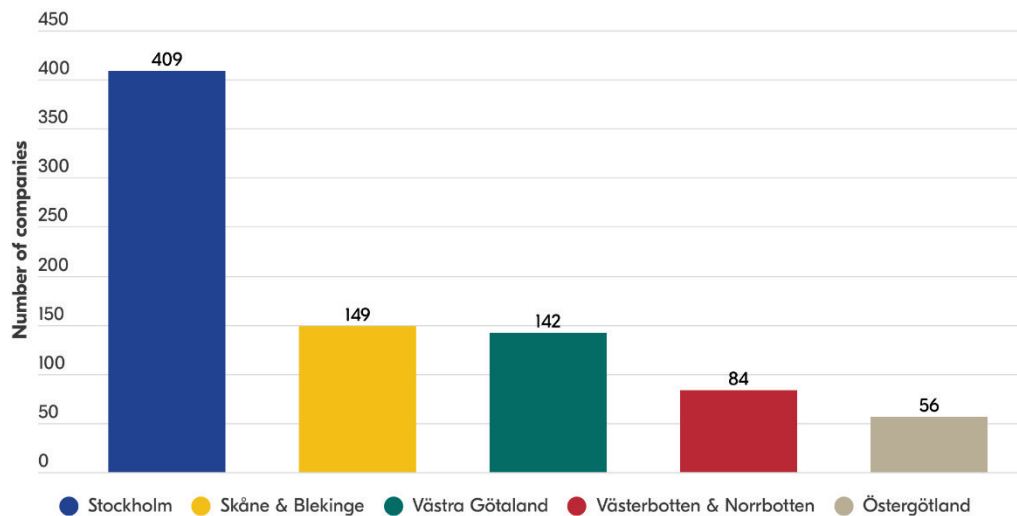
Figure 2. Number of gaming companies in Sweden, 2010–2022



Source: Dataspelebranschen/Swedish Games Industry

Notably, a large portion of these companies have maintained operations for over a decade, indicating a mature and stable industry environment. In recent years, the number of gaming companies in Sweden has nearly doubled. By 2022, the number of game developers had clearly increased, with the industry growing not only in size but also in diversity. The sector includes various types of businesses, from single-owner companies to economic associations, highlighting the entrepreneurial spirit prevalent in the Swedish gaming landscape.

In 2022, Stockholm was home to the majority of video game companies in Sweden, with a total of 409 enterprises (Figure 3). The regions of Skåne and Blekinge were the second most significant hubs, accounting for 149 video game companies. The substantial concentration in Stockholm can be attributed to its strong infrastructure, advanced technological facilities, and a rich ecosystem that includes both startups and established companies, which provides a foundation for innovation and growth in the gaming sector.

Figure 3. Number of gaming companies in Sweden in 2022, by region

Source: Dataspelebranschen/Swedish Games Industry

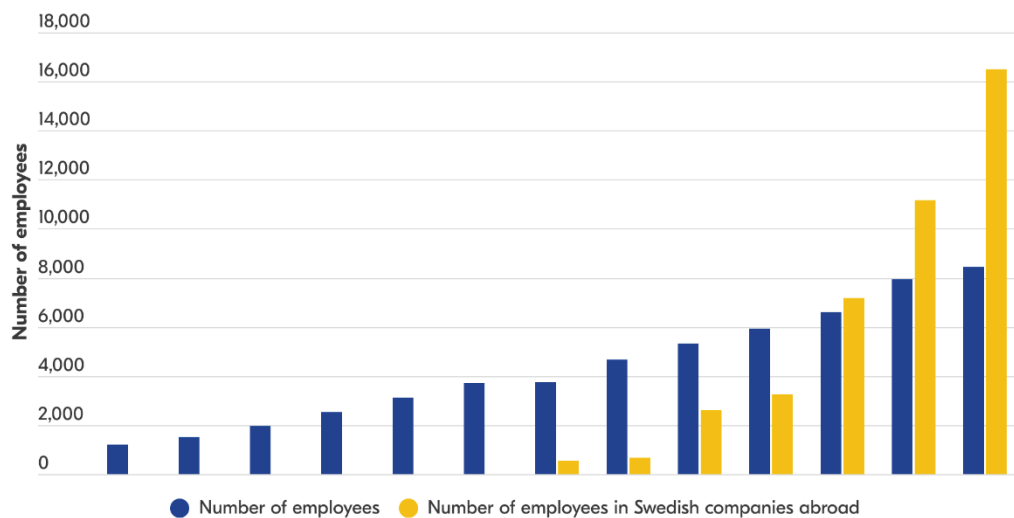
While Stockholm is the primary centre, the rest of Sweden shows a well-proportioned distribution of game development activities aligned with regional populations. Most companies outside of Stockholm are situated in cities that host business incubators or clusters that support and promote business development.

Financially, many companies have reached significant revenue milestones, with several surpassing approximately EUR 50,000 and a few even surpassing the EUR 100,000 mark. This financial activity indicates a healthy and profitable industry.

The composition of the Swedish gaming industry by company size shows that many companies are independently operated, typically run by independent developers or very small teams. However, there is also a notable, albeit smaller, segment of larger enterprises. These larger entities are crucial in the industry, supporting substantial employment and contributing to economic stability.

Employment trends

The Swedish video game industry has been expanding its workforce, adding about 500 new full-time positions (6 per cent) in 2022 according to the Game Developer Index 2023. Ubisoft Entertainment remains the largest employer in the sector with about 850 staff members, while many other companies also employ large numbers of staff. Swedish-owned gaming companies have also expanded their international workforce significantly, mainly through acquisitions (see Figure 4).

Figure 4. Employee growth in the Swedish gaming market, 2010–2022

Source: Dataspelsbranschen/Swedish Games Industry

Sweden's gaming industry is a major contributor to both revenue and job creation within the technology and creative sectors. A significant workforce is employed both domestically and internationally, contributing to the global gaming markets. Despite growth, the industry has faced challenges, including economic downturns leading to layoffs and studio closures.

The workforce in the Swedish gaming industry is diverse, covering various specialisations in game design and programming. However, there are ongoing challenges in achieving gender parity, with women significantly underrepresented in technical roles.

Game development companies in Sweden

Sweden is home to several prominent game development companies, which have significantly contributed to the industry's growth in terms of both revenue and employment. Below are a few examples of companies that are recognised globally for their innovative games and substantial market presence.

- **King:** Known for the massively popular mobile game Candy Crush Saga, King remains a leading company in the Swedish gaming industry. In 2022, King reported a net revenue of EUR 598 million, making it one of the highest-grossing companies in the sector. King employs 621 people in Sweden, contributing significantly to the local economy and job market.
- **Mojang:** The creators of Minecraft continue to be a major player in the industry. With a net revenue of EUR 516 million in 2022 and 474 employees, Mojang's influence extends globally, with Minecraft remaining one of the best-selling video games of all time.

- **Paradox Interactive:** Known for their strategy games, Paradox Interactive reported revenue of EUR 187 million in 2022. The company employs 474 people in Sweden and is widely known for titles such as Europa Universalis and Crusader Kings, which have a dedicated global fanbase.
- **EA DICE:** A subsidiary of Electronic Arts, EA DICE is famous for its Battlefield series. The company had a revenue of EUR 155 million in 2022 and employs around 696 people in Sweden. EA DICE's advancements in AI and machine learning, particularly in the Battlefield series, are noteworthy and contribute to the company's leading position in the industry.
- **Coffee Stain Publishing:** Known for games like Goat Simulator and Deep Rock Galactic, Coffee Stain Publishing reported revenues of EUR 155 million in 2022. The company employs 196 people, contributing to the industry's growth with innovative and entertaining titles.
- **G5 Entertainment:** Specialising in mobile and casual games, G5 Entertainment had a revenue of EUR 132 million in 2022. The company employs 121 people in Sweden, highlighting its important role in the mobile gaming segment.
- **Toca Boca:** A leading developer of children's mobile games, Toca Boca reported a revenue of EUR 131 million in 2022. The company employs 112 people, focusing on creating fun, educational, and safe digital toys for kids.
- **Ubisoft Entertainment:** The Swedish branch of Ubisoft, one of the largest gaming companies globally, employs around 850 people, making it the largest employer in the Swedish gaming industry. The company continues to work on high-profile projects like Star Wars Outlaws and Tom Clancy's The Division 3.
- **Avalanche Studios Group:** Known for its open-world games like Just Cause and Rage 2, Avalanche Studios Group reported a revenue of EUR 85 million in 2022 and employs 441 people. The company continues to innovate in the genre of large-scale, open-world action games.
- **Sharkmob:** A relatively new entrant, Sharkmob has quickly made a name for itself with innovative projects. The company reported a revenue of EUR 84 million in 2022 and employs 329 people in Sweden, focusing on multiplayer and AAA game development.

Segments and trends in the Swedish gaming market

The Swedish gaming market is diverse and dynamic, encompassing various segments that cater to different gaming preferences and trends.

Console and PC gaming

Console and PC gaming play a significant role in the Swedish gaming market. Many leading Swedish game development companies focus on creating high-quality games for these platforms. Titles from companies like Paradox Interactive and EA DICE have achieved global success on consoles and PC, which demonstrates the importance of these platforms within the industry. Microsoft's acquisition of Mojang in 2014

brought Minecraft under the tech giant's banner, further developing and expanding the game across multiple platforms. The development of AAA titles and innovative PC games continues to be a significant trend, contributing to the overall growth and reputation of the Swedish gaming market.

Online gaming

Online gaming continues to be a significant segment within the Swedish gaming market. This segment is driven by popular titles like Minecraft by Mojang, Battlefield by EA DICE, and Crusader Kings by Paradox Interactive, which are games that attract a strong and dedicated player base. Tencent, a Chinese gaming company, has invested in Paradox Interactive, providing financial backing and access to wider distribution networks, thus helping the company expand its global reach. The success of online multiplayer games and the increasing availability of high-speed internet have contributed to the growth of this segment. Swedish companies are at the forefront of developing and maintaining engaging online gaming experiences that cater to a global audience.

Mobile gaming

Mobile gaming remains a strong and fast-growing segment in Sweden. Companies like King are leading the market with blockbuster games such as Candy Crush Saga, which has attracted millions of players worldwide. King was acquired by Activision Blizzard in 2016, a move that strengthened Activision's position in the global mobile gaming market. The convenience and accessibility of mobile games make them a popular choice among players of all ages. Swedish mobile game developers continue to come up with new ideas and create more innovative games, which helps promote the continued growth of the mobile gaming industry.

Esports

Esports is a fast-growing segment within the Swedish gaming market, which is supported by increasing investments and the growing popularity of competitive gaming. The rise of esports has led to the establishment of professional teams, tournaments, and dedicated esports arenas. DreamHack, a Swedish company, is one of the world's largest organisers of esports events. The company is widely known for its massive LAN parties and tournaments, highlighting Sweden's leadership in this segment.

Swedish companies like Stunlock Studios (developers of Battlerite) and Embracer Group (owner of Piranha Games and their title MechWarrior Online) are involved in developing esports-focused games. These companies contribute to Sweden's esports ecosystem, which is further supported by a growing number of tournaments and investments. Swedish organisations are actively involved in promoting and developing esports, which contributes to its status as a mainstream form of entertainment. The success of esports titles and events highlights the potential for further growth and investment in this segment.

Indie gaming culture

Indie gaming is thriving in Sweden, with numerous small and medium-sized enterprises (SMEs) contributing innovative and creative titles to the market. The indie game development scene is characterised by a spirit of innovation and experimentation, often resulting in unique and critically acclaimed games. Notable Swedish indie developers include Thunderful Games and Coffee Stain Studios, companies that are known for titles like SteamWorld Dig and Goat Simulator, respectively. Supportive ecosystems, including incubators, accelerators, and funding initiatives, help indie developers bring their ideas to life. This vibrant indie culture adds diversity to the Swedish gaming market and fosters a community of passionate developers.

Web3 gaming: An emerging trend

Web3 gaming is a growing trend that uses blockchain and NFTs to create decentralised game economies, giving players ownership of in-game assets. In Sweden, the segment is still small but emerging with companies like Triolith Games developing infrastructure for web3-based games.

“Almost no competition exists in this space so far, as many companies still have no clear understanding of how to implement web3 gaming properly.”

Triolith Games

An example is though BioSquare, a company exploring blockchain's potential, particularly for impact gaming. By leveraging Web 2.5 architecture, BioSquare allows players to make real-time donations to NGOs within the game, showcasing how blockchain can be used not only for decentralized ownership but also for social impact.

While promising, web3 gaming remains a niche segment compared to established sectors like mobile and PC gaming, though it has potential for future growth as technology matures.

What game development services are in demand in Sweden?

There is a growing demand for various game development services in Sweden, reflecting broader industry trends and the specific needs of Swedish game development companies. Key areas with strong demand are highlighted below.

Game design and development

The core service of game design and development remains in high demand. With the increase in the number of game development companies in Sweden, the industry employed 8,445 people in 2022 (according to figures from the Game Developer Index). There is a continual need for skilled designers and developers, both domestically and internationally, who can bring creative game concepts to life. This includes everything from initial game concepts to final product development, ensuring

that games are engaging, functional, and market-ready. Swedish companies are open to outsourcing parts of the development process to specialised firms abroad, which allows them to access a broader talent pool and maintain their competitive edge.

AI and machine learning integration

AI and machine learning are becoming critical in modern game development, especially in creating advanced non-player characters (NPCs) and immersive environments. Swedish companies like EA DICE are working on integrating AI more deeply into gameplay, and the international outsourcing of AI expertise is becoming more common.

VR/AR development

The demand for VR and AR developers is rising as Swedish companies (e.g. Resolution Games) continue to innovate in these areas. The global market for AR and VR is projected to generate USD 40.4 billion in 2024, according to Statista. VR and AR skills, particularly in hardware integration and interactive design, are highly valued, with Swedish developers often collaborating with international experts to meet the growing demand for immersive and interactive gaming experiences.

Quality assurance and testing

Quality assurance (QA) and testing are essential services, and the demand for rigorous testing is increasing as games become more complex. Swedish studios frequently outsource QA to countries with a strong tech workforce to maintain efficiency and cost-effectiveness. For example, companies specialising in multi-platform testing are in demand, as developers aim to ensure that their games work seamlessly across a variety of devices and consoles.

Creative content creation

Creative content, including art, animation, and storytelling, is vital for game development. The need for talented artists, animators, and writers who can create compelling game worlds and narratives is significant. This includes everything from character design and environmental art to in-game cinematics and narrative development. The outsourcing of art creation is a strategic approach used to access diverse artistic talents and manage production timelines effectively.

Localisation and internationalisation services

With the global reach of Swedish gaming companies, localisation and internationalisation services are crucial. Games need to be adapted for various languages and cultural contexts to ensure they are accessible and appealing to international audiences. This requires expertise in translation, cultural adaptation, and regional compliance.

These services reflect the dynamic and multifaceted nature of the Swedish gaming industry, where advanced technologies and global market strategies are essential for continued growth and success.

Ecosystems and entrepreneurship in the Swedish gaming market

Sweden's successful ecosystems are driven by strong regional hubs, incubators, and accelerators that foster innovation, collaboration, and growth in the gaming industry. Key hubs like Game Habitat in Skåne and Sweden Game Arena in Västra Götaland nurture talent and support new ventures with resources such as mentorship, funding, and networking. Education programmes and community initiatives, including Science Park Skövde and DONNA, play crucial roles in nurturing talent and promoting inclusivity. Despite challenges like access to capital, the supportive ecosystems and growing market offer numerous opportunities for start-ups.

Startups like BioSquare are using these ecosystems to drive innovation in impact gaming, showcasing how partnerships can contribute to both business success and real-world environmental efforts. These hubs attract talent and investment, driving local economic development and industry growth. Overall, Sweden's robust ecosystems and entrepreneurial landscape ensure continuous innovation, solidifying its position as a leader in the global gaming industry.

Outsourcing and consulting

Outsourcing and consulting services have become increasingly vital components of the Swedish gaming industry's operational strategies. With the rising complexity and scope of game development projects, many companies are leveraging international talent and expertise to enhance their production capacity and efficiency. This approach allows Swedish game developers to tap into a global pool of specialised skills, ensuring they can maintain high standards of quality while managing costs effectively.

The Game Developer Index 2023 highlights that outsourcing and co-development are common strategies used by Swedish companies to mitigate challenges associated with a lack of local resources and to manage production bottlenecks. By collaborating with external partners, these companies can scale their operations more flexibly and respond to market demands more swiftly. This trend is particularly evident in areas such as game design, art creation, quality assurance, and programming, where specialised external teams can contribute significantly to the development process.

According to Triolith Games, there is a strong demand for coding and technical expertise in Sweden, but the country faces challenges in meeting this demand due to a shortage of skilled coders. As a result, many Swedish companies find it increasingly difficult to source these services locally, making outsourcing an essential part of their strategy to access the expertise they need.

Valiant Game Studio also notes that it is particularly challenging to source localisation and QA services within Sweden due to high costs associated with local employees. This makes outsourcing these services a viable option. When considering partners for these services, they emphasise the importance of price, speed, quality of work, and responsive communication.

Countries like Poland, Ukraine, and India have become the most popular outsourcing destinations for Swedish companies. According to Elitex, these countries are favoured

for their cost-effectiveness, high-quality tech talent, and strong educational infrastructures that produce skilled developers. Poland stands out for its close proximity to Sweden and high English proficiency, while Ukraine offers competitive rates and strong technical skills, despite the country's ongoing political challenges.

Consulting services also play a crucial role in the Swedish gaming market, providing companies with access to expert advice and strategic insights. Consulting firms offer a range of services, including market analysis, project management, and technical consulting, which help game developers navigate the complexities of the industry and optimise their production workflows.

What requirements should suppliers meet?

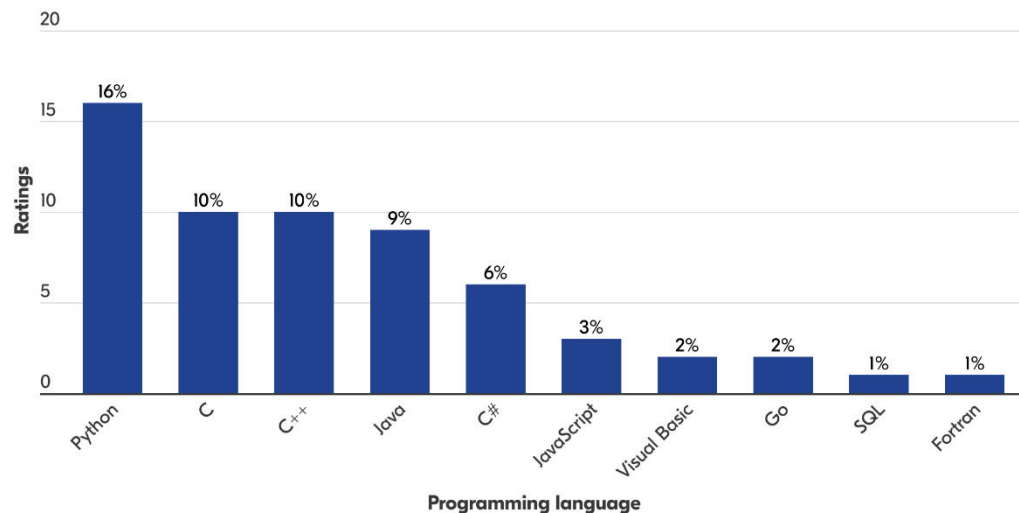
To successfully operate within the Swedish gaming market, suppliers must meet several technical, legal, and ethical requirements.

Technical requirements and competencies

Programming languages

Proficiency in a variety of programming languages is essential for game development in Sweden. There are about 600 programming languages, and the demand and popularity of these languages vary from year to year. New trends, such as AI and machine learning, mean that certain programming languages have increased in popularity – especially Python.

Figure 5. Programming languages worldwide



Source: TIOBE programming index

According to the TIOBE programming community index (Figure 5), based on the most sought after programming languages online, the most widely used programming languages are Python, C, C++, Java, and JavaScript. This is true for Sweden as well. Below are some key programming languages that are trending in game development:

- **C++** is essential in game development for its efficiency and high performance. It is widely used in AAA titles and popular game engines like Unreal Engine and Unity due to its low-level memory access, making it ideal for resource-intensive tasks such as graphics rendering and physics simulations.
- **HTML5**, combined with CSS and JavaScript, revolutionises web-based game development. It enables the creation of browser-based games with enhanced interactivity and responsiveness. Libraries like Phaser and Three.js utilise HTML5 and JavaScript to deliver engaging web gaming experiences.

- **Java** is favored for cross-platform game development, particularly on Android, due to its 'write once, run anywhere' capability. Tools like Android Studio and LibGDX allow developers to create games that run seamlessly across various devices.
- **Python** is popular among indie developers for its simplicity and readability. It is used for prototyping, scripting, and casual games. Pygame and the Godot Engine's GDScript offer accessible environments for 2D game development.
- **JavaScript** is crucial for web-based game development, leveraging HTML5 and the Canvas API to create interactive games. Game engines like Phaser utilise JavaScript for 2D games, and frameworks like Node.js extend its use to server-side development.
- **Swift**, which was developed by Apple, is the primary language for iOS and macOS game development. It is supported by Apple's SpriteKit framework, facilitating the creation of high-performance, visually stunning games for Apple devices.
- **Rust** is gaining attention in game development for its balance of performance and memory safety. Its unique memory management system reduces common programming errors, making it a promising choice for system-level game components.

For developers and service providers that support the Swedish gaming industry, expertise in one or more of these languages is not just a bonus but increasingly a must, especially when working with companies that prioritise specific technical requirements in their projects.

Software development methodologies

The choice of software development methodology depends on the specific needs of the project and the company's preferences. In Sweden, agile methodologies are widely adopted across the gaming industry, reflecting a global trend toward flexibility and iterative development. According to research by The Standish Group, the rise in agile practices has contributed to fewer project failures, as these methods allow teams to adapt to changing requirements and feedback.

Among Swedish companies, Scrum and Kanban are particularly popular as they offer structured but flexible approaches to managing development. Agile practices like continuous integration and frequent testing are especially important in Sweden's dynamic game development environment, where creativity and responsiveness to player feedback are crucial.

For example, Triolith Games uses agile and Scrum methodologies, but allows flexibility in how they are applied, adjusting them based on the needs of the project. Similarly, Valiant Game Studio, another small company, uses a loose, customised approach to agile methods, adapting processes to fit the size of the company and the demands of specific projects.

While Sweden follows international standards in using agile methodologies, the ability to customise and adapt these practices, as seen in both Triolith Games and Valiant Game Studio, is a common feature in the Swedish gaming industry, particularly among smaller studios.

Quality assurance

Quality assurance (QA) in Sweden's gaming industry involves developing, documenting, and following processes and using various tools to ensure the quality of games and related services. Organisations can achieve this by obtaining certification from recognised bodies according to international standards or by establishing internal quality assurance policies, processes, and procedures.

Swedish gaming companies often expect their suppliers to adhere to high QA standards, especially in larger companies, which may require certifications such as ISO 9001 (Quality Management Systems) or ISO/IEC 27001 (Information Security Management). These certifications demonstrate a commitment to quality and regulatory compliance, and foreign suppliers who hold these certifications have a competitive edge. For suppliers looking to enter the Swedish market, obtaining such certifications is advisable.

Smaller companies may take a different approach

Triolith Games, for instance, does not prioritise certifications, stating that they focus more on the actual quality and security of the work, particularly due to the security needs of their projects. They rely on multiple external partners to verify and scrutinise their code for quality assurance. Similarly, Valiant Game Studio prefers to assess partners based on testimonials, references, and their ability to meet the specific needs of a project rather than formal certifications. This shows that smaller studios may value practical experience and proven reliability over certification.

In these cases, certifications may not always be a strict requirement, but quality expectations remain high. Smaller gaming companies often implement robust internal QA processes. At Valiant Game Studio, for example, quality assurance is integrated into their development from the planning stage, while unit testing, tracking issues, and external QA professionals are involved closer to launch.

Cloud computing and infrastructure management

As games become more complex and player bases grow, efficient cloud computing and infrastructure management have become essential. Suppliers should be proficient in using cloud platforms such as AWS, Azure, or Google Cloud to manage game servers, handle large volumes of data, and ensure scalable and reliable game performance. Knowledge of cloud-based tools and services can significantly enhance the operational capabilities of game development projects.

These technical requirements and competencies ensure that suppliers can meet the high standards expected in the Swedish gaming market, contributing to the production of innovative, high-quality games that meet global competitive standards.

Legal requirements

Laws and regulations

As a game developer or service provider for a Swedish gaming company, it is important to be aware of the legislation that applies in Sweden and is relevant to the gaming sector. Although this legislation directly impacts your Swedish partner, it will likely translate into requirements you must fulfill to start and maintain a collaboration. Sweden is part of the EU, and many rules and regulations for the IT sector are regulated at the EU level and apply to all EU countries. Other regulations are specific to Sweden. Below is a summary of the most noteworthy EU regulations and directives, as well as national laws and regulations in Sweden.

EU regulations and directives

- **General Data Protection Regulation (GDPR)** (Regulation (EU) 679/2016): All outsourcing of business must adhere to the provisions of the GDPR. Businesses are prohibited from transferring personal data outside the EU if the recipient does not have an adequate level of protection. Game developers must develop high-standard, compliant IT systems to ensure data security during transfers.
- **Cybersecurity Act** (Regulation (EU) 2019/881): This regulation aims to achieve a high common level of cybersecurity across Europe. Game developers targeting the Swedish market should familiarise themselves with this regulation and align their operations accordingly.
- **NIS2 Directive**: The updated Directive on Security of Network and Information Systems (NIS2) strengthens cybersecurity requirements across the EU. It includes stricter measures for incident response, supply chain security, and risk management. Game developers must ensure compliance with NIS2 to avoid penalties and enhance their cybersecurity posture.

National regulations that apply in Sweden

In Sweden, national law does not specifically regulate IT outsourcing transactions, but several sectoral regulations apply. For the gaming industry, the most relevant regulations include:

- **Consumer protection**: Ensuring that games meet consumer rights and protection standards.
- **Data security**: Compliance with the Patient Data Act (2008:355) for games involving personal health data and other general data security requirements.
- **Financial services**: If the game involves financial transactions, it must comply with relevant financial regulations.

Sector-specific regulations

Depending on the activities of the game developer, licenses, permits, or approvals may also be required from various bodies such as local authorities or government departments. Specific regulations may include:

- **Gambling regulations:** If the game involves gambling elements, it must adhere to Swedish national gambling regulations.
- **Telecommunications and broadcasting:** Compliance with the Electronic Communications Act for games that involve communication services.

By focusing on these specific legal aspects, game developers can better align their operations with the requirements of the Swedish gaming industry, ensuring compliance and maintaining high standards of quality and security.

Legal setup for a business relationship in the gaming industry

In Sweden, the most common outsourcing structure for gaming companies is direct outsourcing, which involves a straightforward contract between the customer and the supplier. However, indirect structures are also frequently used. These can include appointing a primary supplier who then subcontracts to another supplier, or using a multi-sourcing approach where the customer enters into separate contracts with various suppliers for different parts of their requirements.

Another option, though less common due to its complexity and cost, is establishing a joint venture. This can take the form of a joint venture company, partnership, or contractual joint venture. Joint venture outsourcing is particularly utilised in large transactions within sectors such as banking and insurance, but it can also be relevant for significant gaming projects requiring extensive collaboration and resource sharing.

This flexibility in structuring business relationships allows Swedish gaming companies to choose the most suitable arrangement based on their specific needs and the scale of their projects.

Governance and ethical business practices

Swedish gaming companies maintain high standards of business ethics and prefer to engage with ethical partners. Service providers aiming to work with Swedish firms must demonstrate good governance and ethical business practices.

With the rise of global and local anti-corruption regulations, Swedish gaming companies are increasingly vigilant about minimising corruption risks within their supply chains. Therefore, they seek to collaborate with trusted service providers who meet the following criteria:

- **Legal compliance:** Service providers must be duly registered and adhere to all relevant laws and regulations.
- **Transparent business structures:** Companies should have clear business structures with identifiable Ultimate Beneficial Owners (UBOs).

- **Ethical financial practices:** Providers must maintain ethical financial and accounting practices.
- **Tax compliance:** Adherence to tax laws and regulations is essential.
- **Respect for human rights:** Providers must respect human rights in their operations.
- **Commitment to transparency and anti-corruption:** Companies should demonstrate transparency in their operations and a commitment to anti-corruption measures.

By aligning with these principles, service providers can establish trust and foster strong business relationships with Swedish gaming companies.

Sustainability

The focus on sustainability in Sweden has intensified, driven by the United Nations Sustainable Development Goals (SDGs) and an evolving regulatory landscape. Recent legislative developments, such as the European Green Deal and Sweden's own climate policies, emphasise the need for robust digital systems to manage compliance, sustainability, and transparency effectively.

Gaming companies in Sweden are increasingly relying on digital platforms to enhance efficiency and profitability while aligning with the SDGs. These platforms help organisations track and report their environmental, social, and governance (ESG) metrics, ensuring compliance with both international and national standards. The integration of advanced technologies like AI and blockchain into these platforms has revolutionised the way companies manage their sustainability efforts, providing real-time data analysis and transparent reporting mechanisms.

The 'No Games on a Dead Planet' initiative and commitments from companies like the Embracer Group and Stillfront to set science-based targets for reducing emissions exemplify the industry's dedication to environmental sustainability. Additionally, the development of games that address sustainability challenges, such as those by Lutra Interactive and Gro Play, highlights the sector's role in promoting environmental awareness and education.

The pressure from investors and consumers for greater ESG efforts has grown substantially. Investors are prioritising companies that demonstrate strong ethical standards and sustainable practices, leading to a surge in ESG-focused investments. Similarly, consumers are choosing brands that are transparent about their sustainability initiatives and are committed to making a positive impact on society and the environment.

This shift towards sustainability presents significant opportunities for gaming companies. The industry is looking for partners who can offer technologies and services that support sustainable growth. This includes developing software for efficient resource management, creating digital platforms for ESG reporting, and implementing AI-driven solutions for sustainability analytics. By helping businesses

integrate sustainability into their core operations, gaming companies can play a crucial role in driving the transition towards a more sustainable future.

Swedish business culture

The Swedish business culture in the gaming industry is characterised by a strong emphasis on collaboration, innovation, and inclusivity. The presence of regional hubs, incubators, and accelerators fosters a supportive environment for startups and established companies alike. Initiatives like Science Park Skövde and Game Habitat contribute to a community-oriented culture that values education, diversity, and sustainable growth.

For foreign suppliers, the collaborative spirit of the Swedish gaming industry offers both opportunities and challenges. The close-knit nature of the Swedish gaming industry means that building relationships and trust is essential. Foreign companies entering the market may benefit from partnering with local firms or establishing a local presence, which can help the process of integrating into this collaborative culture. Understanding and aligning with Swedish values like transparency, inclusivity, and sustainability are important factors for success in the market.

“ *It is important for new entrants to understand the local work culture. The Swedish market is not particularly different from other markets in the gaming industry, as companies tend to follow the latest trends. Many consumers prefer original language versions, avoiding games that are localised in Swedish.*

Valiant Game Studio

This perspective highlights that while high productivity is essential, adapting to cultural norms, such as the preference for non-translated products and work-life balance, is crucial for success in the Swedish gaming industry.

Where and how to find business partners

After Silicon Valley, Stockholm is the second largest IT hub in the world with a vibrant and active ecosystem. Companies are connected through different networking platforms, and there are different activities that offer opportunities for businesses to meet, share ideas, develop partnerships, and promote their products and services. Identifying the right platforms for networking and business development is crucial for companies looking to enter or expand within the Swedish gaming market. Below we describe where and how you can come in contact with potential business partners.

Trade fairs and conferences

Sweden hosts a variety of trade shows and conferences in the IT and technology fields. These events offer excellent opportunities to network and identify potential customers within the Swedish gaming industry. Here are some of the prominent events:

- **Nordic Game Conference:** One of Europe's leading gaming conferences, bringing together developers, publishers, investors, and industry professionals for lectures, panel discussions, and networking opportunities. Held in Malmö, Sweden.
- **DreamHack:** Known as one of the world's largest digital festivals, DreamHack focuses on gaming, esports, and game development, featuring tournaments, expos, and developer sessions. Held in Jönköping, Sweden.
- **iGaming Forum:** This conference targets the gaming industry, covering trends, regulations, and innovations in online gaming.
- **Comic Con Stockholm:** With a primary focus on pop culture, this event includes a significant gaming section where developers showcase their latest projects and fans can try out new games. It also offers networking opportunities within the gaming community. Held in Stockholm, Sweden.
- **Sweden Game Conference:** Focused on game development, this conference offers talks, workshops, and networking opportunities for industry professionals and students. Held in Skövde, Sweden.
- **Game Developers Conference (GDC) Europe:** Although not based in Sweden, many Swedish developers attend this event to network and learn about the latest industry trends and technologies. Held in various locations in Europe, with a significant Scandinavian presence.
- **Mobile Games Forum (MGF):** Focused on mobile game development, MGF is a key event for developers, publishers, and marketers in the mobile gaming industry. It attracts a significant number of Swedish participants and is held in various locations, including Nordic countries.
- **Women in Games Conference:** This conference focuses on diversity and inclusion in the gaming industry, providing a platform for discussing challenges and promoting the role of women in game development. It is often held in various locations, including events in Sweden.

Business support organisations

There are a number of platforms, organisations, and associations that offer both relevant information about the Swedish market and opportunities for networking with Swedish companies. Some notable ones for the gaming sector are listed below.

Swedish Games Industry (Dataspelsbranschen)

This is Sweden's trade association for video game companies. It provides industry reports, statistics, and insights into the Swedish gaming market. Representing the industry as a whole, it acts as the voice of the sector to the outside world. They offer detailed industry reports, such as the annual Game Developer Index, which maps and analyses Swedish game companies and international trends. The organisation includes the industry associations Spelplan-ASGD and ANGI, making it a crucial source of industry data, advocacy, and networking opportunities.

Game Habitat

Game Habitat is a community-driven organisation that supports game developers in Sweden. They offer resources, networking opportunities, and events to foster collaboration among game developers and related professionals. Their focus is on creating a vibrant ecosystem for game development, making them a valuable resource for those looking to engage with the Swedish gaming scene.

Spelplan-ASGD

As part of the Swedish Games Industry, Spelplan-ASGD represents the interests of smaller game studios in Sweden. They provide support, resources, and advocacy for independent game developers, making their insights important for understanding the landscape of the indie game sector in Sweden.

TechSverige (techsverige.se)

Tech Sweden is an industry and employer organisation for all companies in the tech sector, including gaming, with the task of creating the best possible conditions for a competitive Swedish IT and telecom industry. It has over 1,400 member companies – which in total have almost 100,000 employees in Sweden. Techsverige publishes reports and insights that may be relevant for IT services providers looking to sell their services to the Swedish market.

Company databases

There are a number of company databases you can use to find company's that may be relevant to your business.

- **LinkedIn:** Many Swedish companies have a presence on LinkedIn, and it is possible to search for companies by industry, location, and other criteria to find relevant businesses in the gaming sector.
- **Bolagsverket** (Swedish Companies Registration Office): The Swedish Companies Registration Office is the Swedish companies registration office.
- **Hitta.se** is a website with information on Swedish businesses (only available in Swedish).
- **Allabolag.se:** A website that provides detailed information about companies registered in Sweden. It offers a wide range of data, including company financials, board members, corporate structure, and business activities. Users can access annual reports, financial statements, and other key documents (only available in Swedish).
- **International company databases, for example:** opencorporates.com, vainu.io/search; crunchbase.com.

Summary: What you need to do to get business

To successfully enter the Swedish gaming market, companies need to adopt a strategic approach tailored to their specific offerings. It is essential to focus on a niche market and customise offerings based on the unique needs of the Swedish companies you are approaching. Below is an overview of key considerations for service providers and product/solution providers:

- **Market research:** Conduct thorough market research to develop an understanding of the Swedish gaming landscape, including demand, competition, and consumer behaviour. Utilise resources like Business Sweden, Swedenabroad.se, and Allabolag.se for insights and data. Industry-specific reports from the Swedish Games Industry (Dataspelsbranschen) can provide valuable information about market trends and company profiles.
- **Regulatory compliance:** Familiarise yourself with Swedish and EU regulations, including data protection (GDPR), cybersecurity laws, and industry-specific standards. Ensuring compliance is crucial to avoid legal issues and build trust with local partners and consumers. Obtaining certifications that demonstrate compliance can be advantageous.
- **Quality assurance:** Ensure high standards in service delivery and customer support. Provide robust after-sales support and maintenance services. Having a local support team or a reliable partner in Sweden can enhance customer satisfaction. Swedish businesses prioritise quality and reliability, so demonstrating these attributes can give you a competitive edge.
- **Localisation:** Adapt your products to the local language, culture, and user preferences. This includes translating product manuals and ensuring that products are suitable for the Swedish market.
- **Sustainability:** Demonstrate a commitment to sustainable practices in product development and lifecycle management. Swedish consumers and businesses value sustainability highly.
- **Networking and partnerships:** Establish connections with local businesses, industry associations, and potential partners, for example, through trade shows, conferences, and networking events like the Nordic Game Conference, DreamHack, and Sweden Game Conference.
- **Cultural competence:** Develop an understanding of Swedish business culture, which emphasises consensus decision-making, punctuality, and work-life balance. Adapting to these cultural nuances can enhance business relationships.
- **Good online presence:** Website, LinkedIn, Social Media platforms
- **Local presence:** Consider establishing a local office or partnering with a Swedish firm to build trust and credibility. This can also help you navigate local business practices more effectively.

- **Business registration** (when applicable): Register your business with relevant Swedish authorities. This may involve obtaining necessary permits and licenses, which can be facilitated through platforms like Verksam.se.
- **Market entry strategy**: Develop a clear market entry strategy, which may include direct sales, partnerships, or establishing a local subsidiary. Tailor your approach based on market research and competitive analysis. Put together an export plan for the Swedish market, with clear goals and actions that will keep you focused on your target.

By working actively with these areas, companies from developing countries can effectively navigate the Swedish market, ensuring compliance, establishing strong partnerships, and driving sustainable growth.