



AGENDA

10:00	Redeye Intro
10:15	Remedy – Tero Virtala, CEO
10:30	Thunderful – Brjann Sigurgeirsson, CEO
10:45	G5 Entertainment – Stefan Wikstrand, CFO
11:00	Starbreeze – Tobias Sjögren, CEO
11:15	Paus
11:25	Media & Games Invest – Remco Westermann, CEO
11:40	Zordix - Matti Larsson, CEO
11:55	CI Games – Marek Tyminski, CEO
12:10	An introduction to SPACE – Åsa Caap, Head of Space
12:20	Lunch
13:05	Fragbite – Stefan Tengvall, CEO
13:20	MTG - Maria Redin, CEO
13:35	M.O.B.A. Networks – Björn Mannerqvist, CEO
13:50	Nitro Games – Jussi Tähtinen, CEO
14:05	Paus
14:15	Rovio – Rene Lindel, CFO
14:30	Beyond Frames – Ricky Helgesson, CEO
14:45	Flexion - Niklas Koresaar, CFO
15:00	Adverty – Torbjörn Warin, CSO
15:15	Redeye Summary

REDEYE

Redeye is the next generation equity research and investment banking company, specialized in life science and technology. We are the leading providers of corporate broking and corporate finance in these sectors. Our clients are innovative growth companies in the nordics and we use a unique rating model built on a value based investment philosophy.

Redeye was founded 1999 in Stockholm and is regulated by the swedish financial authority (finansinspektionen).

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Leading Nordic Investment Bank

Leading Advisor for Growth Companies

Founded 1999 Corporate Broking 160+

Under supervision of the Swedish FSA

160+ public corporates as clients

Ownership Partner owned Corporate Finance 150+

150+ transactions executed over the last five years

Employees 65+ Key Specialties Tech & Life Science

Analysts: 25 Corporate Advisory: 20

Redeye.se 140,000+ Focused themes 10+

Attracting 140,000+ unique visitors monthly

Includes 5G, AI, AR, Autotech, Cybersecurity, Disease of the Brain, Envirotech, Fight Cancer, Digital Entertainment and SaaS

Redeye Corporate Advisory

Leading Advisor for Growth Companies

Corporate Broking

- In-depth research coverage sector expertise
- Investor events & activities
- Create brand awareness, credibility and manage expectations
- Stratetgic advise regarding how to create the optimal shareholder structure and build a strong and well-positioned financial brand

Certified Adviser

- Requirement for companies listed on Nasdaq First North incl. Premier
- Ensures compliance with Nasdaq Rule Book
- CA-breakfast seminars and newsletters to ensure client companies are up-to-date with the latest information and hot topics

Corporate Finance

- The go-to adviser for growth companies
- One of the most active advisors within the segment
- Leading adviser within private and public transactions
- Highly skilled team with vast experience from private and public transactions
- Over 150+ executed transactions including IPO:s, preferential rights issues, directed issues

ECM

- The most relevant investor network for growth companies
- · Matching companies with the right investors
- Broad network of investors including institutional investors, family offices and retail investors



Johan Ekström Head of Digital Entertainment

Johan has a MSc in finance from Stockholm School of Economic and has studied e-commerce and marketing at MBA Haas School of Business, University of California, Berkeley. Johan has worked as analyst and portfolio manager at Swedbank Robur, equity PM at Alfa Bank and Gazprombank in Moscow and as hedge fund PM at EME Partners. At Redeye, Johan works in the Corporate Advisory team with special focus on Digital Entertainment and Tech.



Tomas Otterbeck Head of Research

Tomas Otterbeck gained a Master's degree in Business and Economics at Stockholm University. Tomas was previously responsible for Redeye's website for six years, during which time he developed its blog and community and was editor of its digital stock exchange journal, Trends. Tomas also worked as a Business Intelligence consultant for over two years. Since 2016 he has covered several gaming stocks in the Nordic gaming industry. Today Tomas is Head of Equity Research at Redeye.



Hjalmar Ahlberg Analyst

Hjalmar is an equity analyst within the technology team focusing on gaming and online gambling sectors. He holds a Master's degree in finance and has previously worked within the banking industry with focus on equity research covering various sectors.



Danesh Zare Analyst

Danesh has a Master's degree in mechanical engineering from the Royal Institute of Technology. He has previously worked as a Calculation Engineer for more than 6 years, holding positions at both Scania and Volvo Trucks. He also produced a finance podcast for nearly two years. Danesh joined Redeye in 2020 and works as an equity research analyst, covering companies in the tech-sector, with a focus on gaming companies.



Viktor Lindström Analyst

Viktor is an equity analyst in the technology team, focusing on gaming and cleantech sectors. He holds a Master's degree in Finance from University of Gothenburg. Previously, he held positions at Carnegie Investment Bank and Consensus Asset Management.

AdvertyCSO Torbjörn Warin

Thorbjorn Warin has more than 15 years experience from all aspects of the mobile and free-toplay games industry. He has been both on the game company side as well as on the mobile ad tech side. He has extensive experience from building and mentoring start-ups in digital highgrowth industries. Originally from Sweden he has been living abroad since 2006 and is currently calling Helsinki home.

Adverty, the leading seamless in-game ad tech company, is developing a version of its Unity SDK to be enabled on the Unity Asset Store, a marketplace where all creators can find, source, and sell everything they need to be successful, including third party assets, tools, and services. Adverty's advertising solution uses Unity to display seamless in-game ads through an SDK launched to the public a year ago [1], accessible from the Adverty website www.adverty.com. In this new installment, the Unity SDK from Adverty will be easily accessible to developers on the Unity Asset Store.

Beyond FramesCEO Ricky Helgesson

Ricky Helgesson is a co-founder of Beyond Frames and a board member since March 2018. Ricky is a former CEO and co-founder of the technology company Univrses, which Beyond Frames emanates from. Ricky has previously been a Producer and Lead Developer at the gaming company Dice, which is today owned by the gaming giant Electronic Arts. He has also been a Senior Software Engineer at the gaming engine company Frostbite. Ricky has founded and built five companies.

Headquartered in Stockholm, Sweden, Beyond Frames is an XR focused publisher with its development studios Cortopia, Moon Mode and partner studio Odd Raven. Through creative and technical consulting, funding and publishing services, Beyond Frames partners with studios to make amazing XR products. Our main business areas are Publishing, Game Creation through innovation in XR and Transformation of traditional flat-screen games to XR-platforms.

CI Games CEO Marek Tymiński

Marek Lech Tymiński graduated from the Management Programme in Canadian International Management Institute, Management Development Programme at the University of Virginia and Leadership Development Programme and Advancing Global Leadership Programme in the Center for Creative Leadership. In 1997 he launched his first business enterprise. In the following years, he was Board Member and associate in numerous companies from the electronic entertainment industry. Since 2002, he has been CEO/Chief Executive Officer, founder and chief shareholder of CI Games S.A.

CI Games is a globally renowned independent games developer and publisher, mostly known for its action-driven titles such as the Sniper Ghost Warrior and Lords of the Fallen franchises. As of August 2021, the Sniper Ghost Warrior franchise had sold more than 12.5 million copies and the Lords of the Fallen series more than 3 million copies. The company runs two internal development studios, focusing on its key franchises and operating as an independent publisher for all key gaming platforms (PlayStation, Xbox, PC). On the 15th of October 2021, CI Games announced that they had entered into an agreement with the Czech studio BatFields s.r.o., which will be operating as an external studio, developing games within the survival genre, creating a third internal IP of CI Games. Moreover, in 2018, CI Games founded a new publishing arm called United Label, currently co-operating with four independent studios.

Niklas Koresaar has 20 years within banking, fund management and start-ups in London and Dubai. Started within the shipping & offshore space generating, structuring, documenting and closing real asset investments on both project and corporate level at banks and the world leading fund Tufton Oceanic. Niklas left the space in 2010 to work with start ups. He joined Flexion in 2014 to build up the finance team.

Flexion solves technological and commercial fragmentation. Unique technology makes games compatible with any distribution channel. Integrations and commercial relationships with channels create an aggregated user base to which games can be profitably distributed. Flexion's service management sees Flexion actively working with a portfolio of games meaning developers can reach new channels without additional work. For channels (i.e. stores) Flexion is a content provider.

FlexionCFO Niklas Koresaar

Stefan Tengvall has studied Master Program in Accounting, Valuation & Financial Management at the Stockholm School of Economics. Stefan has extensive experience as an entrepreneur and investor in the field of information and communication technology. Stefan was one of the founders of Ownit Broadband and helped build the company to sales of SEK 134 million and SEK 29 million in EBIT before the company was sold to Telenor in 2012. Stefan was previously also a leading investor and chairman of Scrive Norrdic, a leading company in e -signing. Stefan holds a number of different management and board assignments as well as advisory roles within technology companies.

Fragbite Group is a digital gaming entertainment group with subsidiaries active in the mobile games and e-sports industry. The group consists of companies with people who all share the same passion for gaming. The Group is headquartered in Stockholm, Sweden and has physical representation in Alexandria, Egypt and in Montpellier and Nancy, France. The group has two internal game development studios and employs approx. 50 employees. The subsidiaries Funrock Development AB and P Studios AB develop, publish, distribute and market mobile games for the global gaming market. Fragbite AB is one of the Nordic region's leading E-sports media companies that organizes and broadcasts e-sports tournaments live. Playdigious SAS is a publisher that adapts games for mobile devices and develops indie games.

FragbiteCEO Stefan Tengvall

G5 Entertainment

CFO Stefan Wikstrand

After studies at Jönköping International Business School, **Stefan Wikstrand** worked five years within audit at MGI Revideco AB and KPMG. Since 2010, Stefan Wikstrand has worked at TradeDoubler AB as Group Financial & Business Controller. During his time at TradeDoubler, Stefan has worked with all aspects of running the finance function at an international listed company.

G5 Entertainment Group develops and publishes high quality free-to-play games for both smart-phones and tablets that are family-friendly, easy to learn, and targeted at the widest audience of both experienced and novice players. The group distributes their games through the Apple, Google, Amazon, and Windows application stores. The company's portfolio includes popular games like Hidden City®, Mahjong Journey®, The Secret Society®, Homicide Squad®, and Pirates & Pearls®. Through its head entity G5 Entertainment AB (Publ), G5 Entertainment Group is publicly listed on Nasdaq Stockholm's main market mid cap segment under trade symbol G5EN.ST.

M.O.B.A. Network CEO Björn Mannergvist

Björn Mannerqvist has worked with digital marketing and SEO all over the world for 20 years. He has a broad experience of digital solutions and rapidly growing companies. He is the former CEO of Future Gaming Group International AB and the former Director of Operations at Ayima Nordic AB. Currently he is a board member of several Swedish listed companies including Tourn International AB and Orgo Tech AB.

MOBA Network owns and operates several of the world's largest e-sport communities. The company offers communities to core e-sport fans to craft gaming strategies and share ideas with other passionate players. Moreover, the recent acquisition of Magic Find creates a new multi-channel network business unit..

Media & Games Invest

CEO Remco Westermann

Remco Westermann has been the chief executive officer of gamigo since November 2012 and the chairman of the Company's Board of Directors since May 2018. Remco holds a master's degree in business economics and has over 25 years of professional experience, over 15 years of which he has worked in the mobile and online entertainment industry. In the course of his career, he founded the listed company Bob Mobile AG (later Cliqdigital AG). He also helped build the mobile media company Sonera Zed and managed its German subsidiary for several years as chief executive officer. Previously, Remco was a manager at leading companies such as Balance Point and a consultant at Rost & Co. In the dynamic, highly competitive and fast growing games market, Remco has built up a leading and fast-growing online games company through a successful M&A strategy following the acquisition and repositioning of gamigo. In 2018, Remco acquired a majority stake in the Company and aligned its business model to "buy, integrate, build and improve" in the gaming and media sectors.

Media and Games Invest SE is a digitally integrated games and media company with main operational presence in Europe and North America. The company combines organic growth with value-generating synergetic acquisitions, demonstrating continuous strong, profitable growth with a revenue CAGR of 78% (2018 – LTM Q2'21). Next to strong organic growth, the MGI Group has successfully acquired more than 30 companies and assets in the past 6 years. The acquired assets and companies are integrated and amongst others cloud technology is actively used to achieve efficiency gains and competitive advantages.

Maria Redin was appointed as Chief Executive Officer in September 2020. She previously served as Chief Financial Officer from December 2015 (and acting Chief Financial Officer from June to November 2015). She has also held a number of senior positions at MTG, including Head of Group Finance and Group Controller. Her roles in the Group have included the positions of CFO, and later CEO, of MTG's former gaming entertainment company Bet24, as well as a number of financial positions, and she started her career at MTG as a management trainee in 2004. Maria was previously a Member of the Board of Directors at NetEnt. She holds a Master's degree in International Business from the University of Gothenburg.

MTG (Modern Times Group) is a strategic operational and investment holding company in esports and gaming entertainment. MTG was formed out of the media holdings of investment company Kinnevik, which in 1997 was distributed to the company stockholders. Born is Sweden, the shares are listed on Nasdaq Stockholm. Today, MTG is managing a unique portfolio including esports businesses ESL and DreamHack, gaming companies InnoGames and Kongregate as well as digital network company Zoomin.TV.

MTG CEO Maria Redin

Jussi Tähtinen is Managing Director of Nitro Games since September 2008. He started as a designer in Nitro FX in 2004, and before becoming the Managing Director for the spin-off Nitro Games, he worked in various roles within design and production. During his time at Nitro Games, Jussi has built up a close-knit team of gaming professionals and been involved in over 25 different game launches.

Nitro Games is a free-to-play mobile game developer and publisher with a decade of experience in developing games for the mid-core user segment, mostly focusing on the genre of strategy games. The Company focuses on producing games with high production value and high revenue potential for smartphones and tablets. With Nitro Games' powerful NG Platform and NG MVP-process, the Company is able to do market validation with new game prototypes after only a week of development. Historically, Nitro Games has developed games such as East India Company, Commander: Conquest of the Americas, Pirates of Black Cove and Raids of Glory.

Nitro GamesCEO Jussi Täthinen

Tero Virtala holds a master's degree in engineering and has acted as the Chief Executive Officer since August 2016. He has extensive and comprehensive experience in the gaming industry and management of gaming companies. Prior to this, Tero was CEO of RedLynx which was acquired by the international gaming giant Ubisoft in 2011. During 2011–2015, Tero participated in Ubisoft's international development projects as Managing Director of RedLynx.

Remedy Entertainment is a globally successful game company known for story-driven and visually stunning action games such as Control, Alan Wake, Max Payne and Quantum Break. Remedy works with renowned partners such as Microsoft, Rockstar Games, Smilegate and 505 Games. Remedy also develops its own Northlight game engine and game development tools. Founded and based in 1995, Finland, the company employs over 250 game industry professionals from 27 different countries. Remedy is listed on Nasdaq First North Growth Market Finland.

Remedy Entertainment CEO Tero Virtala

Rovio Entertainment CFO René Lindell

René Lindell has acted as Chief Financial Officer since 2017, a member of Rovio's Leadership Team since 2016 and as Chief Strategy Officer and Strategy and Business development officer, between 2014–2017. Prior to this, he has acted as Strategy Director at Nokia Oyj, 2011–2014 and a Management Consultant at Boston Consulting Group, 2006–2011. René holds a M.Sc. in Economics and a Ph.D. in Tech, Engineering Physics.

Rovio Entertainment Corporation is a global games-first entertainment company that creates, develops, and publishes mobile games, as well as licenses the Angry Birds brand for consumer products, movies, animations and other entertainment. Rovio is best known for the global Angry Birds brand, which started as a popular mobile game in 2009 and has since evolved from games to various entertainment and consumer products through brand licensing. Rovio's operations are divided into two business models: Games and Brand licensing. Rovio is headquartered in Espoo, Finland and Rovio is listed on the main list of NASDAQ Helsinki under the trading code ROVIO.

Starbreeze CEO Tobias Sjögren

Since 1996, **Tobias Sjögren** has been active in the computer game industry in production, business development, sales and management. Most recently, Tobias was CEO of the company White Wolf Entertainment and has previously worked at Paradox Interactive, Stardoll and the international agent company DDM Agents. Tobias was the head of DICE Stockholm's studio while the first Battlefield game was launched.

Starbreeze is an independent developer, creator, publisher and distributor of PC and console games targeting the global market, with studios in Stockholm, Barcelona and Paris. Housing the smash hit IP PAYDAY, Starbreeze develops games based on proprietary and third-party rights, both in-house and in partnership with external game developers.

Brjann Sigurgeirsson created his first game in the early eighties, worked with gamification in Japan in the nineties and founded the acclaimed game studio Image & Form in 1997. Now runs and owns Thunderful Group AB together with business partners Klaus Lyngeled and Bergsala Holding.

Thunderful Group AB is a Swedish video game holding company based in Gothenburg. It was founded in December 2017 by Brjánn Sigurgeirsson and Klaus Lyngeled, in conjunction with Bergsala Holding, as the parent company for their Gothenburg-based game development studios, Image & Form and Zoink. Thunderful was expanded into the Thunderful Group in December 2019, taking over Bergsala Holding's distribution companies. Image & Form and Zoink make for Thunderful Group's Thunderful Development branch, Thunderful Publishing AB (founded in 2017) and Rising Star Games (acquired from Bergsala Holding in 2018) form the Thunderful Publishing branch, and the Thunderful Distribution covers Bergsala, Amo Toys Nordic, and Nordic Game Supply.

Thunderful Group CEO Brjann Sigurdsson

Matti Larsson is the founder of Zordix and has over 20 years of experience in leading positions in the gaming industry with a focus on leading the process from the concept stage to publication. With over 20 recognized game titles behind him and a strong international network, Matti has been the driving force behind Zordix's success. Matti has a master's degree in Computer Science from Umeå University.

Zordix AB (publ) is the parent company of an expansive multinational group focusing on game development and publishing for consoles and PC. Group headquarter is located in Umeå with a strong connection to the Swedish gaming industry. The Zordix Group has altogether developed and published more than 65 games. Zordix AB (publ) is listed on Nasdaq First North Growth Market in Stockholm.

Zordix CEO Matti Larsson

Gaming Coverage Overview



MSEK Company	Listed Country	EV	Business type	Main platform	Main revenue model	Game portfolio	Revenue div.*
LISTED REDEYE CLIENTS							
Embracer Group	Sweden	81,790	Dist/Pub/Dev	PC/Console	Premium	<300	High
Remedy Entertainment	Finland	4,739	Dev	PC/Console	Premium	<5	Low
CI Games	Poland	624	Pub/Dev	PC/Console	Premium	<10	Low
Thunderful Group	Sweden	3,749	Dist/Pub/Dev	PC/Console	Premium	<50	Medium
Zordix	Sweden	1,002	Dist/Pub/Dev	PC/Console	Premium	<30	Medium
G5 Entertainment	Sweden	3,939	Pub/Dev	Mobile	Free to Play	<30	Low
Starbreeze	Sweden	1,045	Pub/Dev	PC/Console	GaaS	<5	Low
Flexion Mobile	Sweden	688	Dist/Pub	Mobile	Free to Play	<30	Medium
Media and Games Invest	Sweden	10,050	Pub/Dev/Media	PC	GaaS	<20	Medium
M.O.B.A Network *	Sweden	703	Community	Internet	Advertsing	<30	Medium
Adverty	Sweden	112	Tech Platform	Mobile	Advertsing	<10	Low
Nitro Games *	Sweden	176	Pub/Dev	Mobile	Free to Play	<5	Low
OTHER LISTED COMPANIES							
Paradox Interactive	Sweden	14,029	Pub/Dev	PC	Premium	<30	Medium
Stillfront Group	Sweden	21,714	Pub/Dev	Mobile	Free to Play	<60	High
MTG	Sweden	12,517	Investment comp	Mobile	Free to Play	<30	Medium
Rovio Entertainment	Finland	4,023	Pub/Dev	Mobile	Free to Play	<30	Low
Fragbite	Sweden	432	Pub/Dev	Mobile	Free to Play	<10	Low
Beyond Frames	Sweden	571	Pub/Dev	PC/Console	Premium	<5	Low

^{*} Estimates under review Source: Redeye, Bloomberg



						Re	edeye fair value	e
	Sales 22E	EBIT 22E	EV/Sales	EV/EBIT	Stock price**	Base	Bear	Bull
LISTED REDEYE CLIENTS								
Embracer Group	20,860	7,293	3,9	11,2	91	155	97	175
Remedy Entertainment	580	190	8,2	24,9	38	50	22	70
CI Games	158	55	3,9	11,3		3,7	2,7	5,5
Thunderful Group	3,342	409	1,1	9,2	58	95	55	140
Zordix	580	65	1,7	15,4	40	38	20	64
G5 Entertainment	1,520	274	2,6	14,4	444	630	320	850
Starbreeze	127	-32	8,2	neg	1,1	2,2	0,8	5
Flexion Mobile	540	12	1,2	53,5	16	28	11	42
Media and Games Invest	3,110	755	3,2	13,3	52	85	45	110
M.O.B.A Network *	56	28	12,5	25,1	33	30	15	42
Adverty	22	-9	5,1	neg	5	12	0	28
Nitro Games *	31	-15	5,7	neg	33	16	6	37
OTHER LISTED COMPANIES								
Paradox Interactive	2,115	948	6,6	14,8	146	-	-	-
Stillfront Group	6,279	2,230	3,5	9,7	51	-	-	-
MTG	7,240	1,140	1,7	11,0	96	-	-	-
Rovio Entertainment	2,957	483	1,4	8,3	7	-	-	-
Fragbite	n.a.	n.a.	n.a.	n.a.	5	-	-	-
Beyond Frames	n.a.	n.a.	n.a.	n.a.	37	-	-	-







The questions we asked the CEOs of our Client Companies were:

- 1) Has the gaming industry reached a matured and saturated phase with lower growth (supply exceeding demand)? If not, what factors will keep up the growth?
- 2) Where do you see the best growth opportunities, for your company, in the coming years?
- 3) The Platform-Giants such as Microsoft, Apple, and Google have lowered their distribution fees recently. How will this affect your company and the industry as a whole if this trend continues?

And two additional question depending on the business focus.

Mobile Games:

- 4) Apple's private security measures (IDFA) have scared investors lately, with quite dramatic negative revenue impacts amongst social media giants. How will your company tackle the new challenges with targeted marketing (User Acquisition)?
- 5) Apple plans to allow publishers to offer consumers payments outside the App Store. This move from Apple could lower distribution costs amongst publishers. Will your company do any strategic changes due to this change?

PC/Console Games:

- 4) The VR market is the fastest-growing niche segment in gaming. Will your company bet on this trend in the next few years? If so, how?
- 5) The price of purchasing a game has historically been immune to inflation. The next generation of consoles (especially Sony) shows some interesting pricing power and has increased the price by 20-30%. Do you think consumers will continue to buy the same quantities of games in the next few years despite more expensive games?

INTERVIEWS



Tobias Knutsson CEO Adverty

1) Has the gaming industry reached a matured and saturated phase with lower growth (supply exceeding demand)? If not, what factors will keep up the growth?

With more or less the same reach as social media, the reach is definitely there. And is still growing at a fast pace, in many different ways. We have barely seen the start of growth within VR and AR yet. As for the demand side, this is where we see a great deal of curiosity and interest. But it is also a question of maturity. Even though we see a larger number of bookings, it still takes some training with brands and agencies to get them to see the possibilities within the new format and most important of all, make them release old patterns.

2) Where do you see the best opportunities for growth, for your company, in the coming years?

With a significantly larger supply, as for now we need to find carefully selected sales partners for global coverage for media agencies and brands at the local level. There is an incredible potential there. And as I wrote under the question above, we have barely seen the start for all possibilities within VR/AR/XR/MR yet, and this is the are where Adverty all started.

3) The Platform-Giants such as Microsoft, Apple, and Google have lowered their distribution fees recently. How will this affect your company and the industry as a whole if this trend continues?

We do not have our own games or apps distributed through these channels and advertising revenue is not affected at the same way by their fees. But it affects us indirectly in a positive way as it becomes more financially advantageous for our partners.



Marek Lech Tyminski CEO CI Games

1) Has the gaming industry reached a matured and saturated phase?

The global games industry showed year-on-year growth of over 20% in 2020, fueled by demand for games during lock-down and boosted by the start of a new console transition. We expect the market growth to slow in 2021 and resume growth in 2022. The drivers will be global growth and increasing demographic penetration.

2) Where do you see the best growth opportunities, for your company, in the coming years?

CI Games will work on further development of our existing franchises, the next Sniper Ghost Warrior instalment and Lords of the Fallen 2. Moreover, we see many opportunities for United Label, which will continue signing new projects, with the aim to consistently release three to four titles every year going forward. Finally, CI Games will launch a 3rd owned IP in the attractive survival genre.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

We see this as a positive development within the industry, having an impact on many developers. We hope to improve our margins as the number of unit sales increases.

4) The VR market is the fastest-growing niche segment in gaming. Will your company bet on this trend in the next few years?

We believe that VR will become more important over the years and we expect it to be part of our product mix. However, at this moment, we do not consider VR as part of the business.

5) The console makers have shown some serious pricing power recently.

Do you think consumers will continue to buy the same quantities of games in the next few years despite more expensive games?

We expect that consumers will continue to appreciate high-quality releases even if these releases are offered at higher prices.

INTERVIEWS



Jens Lauritzson CEO Flexion Mobile

1) Has the gaming industry reached a matured and saturated phase?

We don't see consumer demand slowing down anytime soon. New growth regions will primarily drive adoption of mobile games and new IP which in turn will go cross platform. The new and popular type of open world/battleground games that require big volumes of global players will find successes on mobile first and find its way to other platforms. In parallel, we are also seeing the emerging blockchain and NFT trends driving demand as well streaming, and AR/VR based gaming. Supply of games already exceeds demand but that's more down to quality of games and lack of distribution/marketing. Consumer demand for top quality games will continue to increase.

2) Where do you see the best growth opportunities, for your company, in the coming years?

We see several areas of growth opportunities.

- 1. Our core distribution business will continue to grow with new channels emerging such as Windows 11 launching Android game support, Netflix entering the market and others. New mobile game streaming services such Now.gg will also help remove boundaries.
- 2. Existing channels will continue to grow both because of less dominance by Google Play but also as a result of new games coming to these stores and Paid User Acquisition switching to destinations with higher payout. This will favour alternative channels and Flexion.
- We see more openness driving increased competition between app stores. That means more aggressive marketing in terms of user acquisition which will favour developers and Flexion.
- 4. We have been able to build a leading role in the alternative distribution market based on organic traffic. We will now invest and acquire expertise in performance marketing and related services. This in turn will allow us to scale faster.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

Most of our stores already offer better terms than Google and Apple who have not yet reduced their share for most services including games. So far it is only a few service including subscriptions that have been reduced. However, just to be clear, the main market problem is discovery of games whereas payouts is one out of several catalysts for change. We see a continued trend with increasing competition and general pressure on payout across the market also more a more competitive and fragmented distribution landscape. We believe payment services will be a commodity and new wallets will emerge which will cater for gamers. These will be more available as Google and Apple's grip of the market loosens up. More services, platforms and competition is a sign of a healthy market and it will drive Flexion's growth.

4) How will your company tackle the new IDFA-challenges with targeted marketing (User Acquisition)?

IDFA used to be the way advertisers identified customers on iOS. Flexion is not operating on iOS so it has no direct impact on us. We have seen the big spending game publishers shifting budgets to android and this is good for Flexion. It increases competition and drives up value of our distribution.

We are also investing in User Acquisition related services to cement our leading position in the alternative market as it becomes more and more attractive to advertisers.

5) Apple plans to allow publishers to offer consumers payments outside the App Store. Will your company do any strategic changes due to this change?

Apple has been forced to allow app developers certain ways to offer other payment methods to their users. This war between EPIC and Apple is by no means over and it does not impact Flexion since we are not operating on iOS. However, I find it inevitable that the payments and distribution markets will become more open for competition on both iOS and Android. We have been supporting this for many years and it finally looks like it is happening albeit slowly as the incumbents have no interest in letting go quickly. We can today offer developers on Android distribution and payments independently from app stores and we continue to developers' services to allow developers to take advantage of high payouts and new distribution. This is part of our core business.



Vladislav Suglobov CEO G5 Entertaintment

1) Has the gaming industry reached a matured and saturated phase?

No, of course not. The gaming industry has been growing for 40 years now, mobile games industry for 20 years, all the years that G5 exists as a company. I have no doubt it will continue to grow. For emerging markets, it's going to grow through device adoption and growing incomes. For developed markets, its going to continue growing both through more casual experiences that are going to attract even wider masses, and through deeper experiences that are going to continue to increase average checks. Most of our revenue comes from developed markets, and we can clearly see how monetization KPIs continue to go up year after year, pandemic or not. And yet, games continue to be one of the cheapest ways to entertain yourself.

2) Where do you see the best growth opportunities, for your company, in the coming years?

We are committed to casual games and most of our players are women 35+. This is where we will continue to focus. There are many opportunities in this part of the market, where most played games are puzzle-adventure games, in the genres where we are already active and the genres where we have not delivered any games yet.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

So far, only Microsoft was bold enough to lower their fees to 12% across all apps, including games, for developers of all sizes. Apple and Google made some changes which mostly applied to subscriptions and bedroom developers. Essentially, they are only posturing but not in fact lowering the fees on in-app purchases in games, which remain at 30%. That said, the momentum is clearly building for lower fees for in-app purchases in games, which can happen with pressure from regulators or lawsuits, or, I hope, through the market forces, good will and common sense of the platforms. One thing is clear - the only way the fees are going from here is down. When and where exactly - we will see. This is a positive development for the industry, and, interestingly, for the platforms as well. More money in the pockets of developers means more money invested in developing the apps and games that sell the devices, and more money is invested in content discovery which again means more engagement and more reason for the users to own a device in the first place. As Steve Balmer famously said, "Developers, developers, developers... yes!" (sic.)

4) How will your company tackle the new IDFA-challenges with targeted marketing (User Acquisition)?

As you have said, IDFA changes mostly affected advertising business of social media giants, and this was perhaps by design. There was some collateral damage among developers who did not care to prepare for the upcoming changes. We did prepare, and it was quite smooth transition for us. We are doing less business with social media giants on iOS now, also advertising budgets were shifted towards where there's more transparency in advertising returns. In the long run, I think that Apple remains interested in a healthy ecosystem of apps and advertising on its platform. The challenge is to adapt and respond to technical changes quickly - something we have done well over the years and many changes in the environment.

5) Apple plans to allow publishers to offer consumers payments outside the App Store. Will your company do any strategic changes due to this change?

G5 essentially offers a platform-agnostic experience. You can start playing on a mobile phone, then pick up on a computer, then continue on your tablet, and then maybe again on a computer but this time through the browser. And you take your progress with you and whenever you make a purchase, you get the goods, because your progress is in the cloud and G5 offers not games but essentially platform-independent cloud experience. G5 Store further supports this concept enabling direct payments from players where we pay only very low single percentage point fees for payment processing. We are very open about the fact that players may choose where to make payments: in the game or on our web-site through G5 Store, and that's why G5 Store revenues are growing quickly since its inception. We will certainly continue offering flexible payment options to our players in compliance with store rules and let the players choose where they want to pay. I agree that this, over time, means a reduction of effective store fees.

INTERVIEWS



Remco Westermann CEO Media and Games Invest

1) Has the gaming industry reached a matured and saturated phase?

If you look at the estimates of the industry analysts - and we share this view - you can't say that the games industry has reached its peak. Clearly, the growth in 2021 will be less strong due to the strong comparative figures from the previous year. But between 2021 and 2023, an average annual growth of 7.8% is expected, which is still very dynamic in our view and compared to most other markets. This is driven, for example, by the fact that in the same period the number of players will increase to well over 3bn and the play time is also expected to increase further. In addition, there are new technical developments and the trend towards Games as a Service, which means that players are significantly more involved in the development and operation of games and are therefore also more committed. The trend towards games being used more and more as social platforms, which enable much greater interaction between users than conventional social platforms, has also been strongly driven forward by Corona. Not only will the market continue to grow, the pandemic - as well as other economic crises before it - have shown that the games market is exceptionally crisis-proof.

2) Where do you see the best growth opportunities, for your company, in the coming years?

Due to the nature of our games portfolio, we see ourselves very well positioned to benefit from trends towards Games as a Service and Games as Social Platforms. In addition, we will grow through the organic and inorganic expansion of our portfolio and our growth pipeline and especially through the strong synergies in the area of customer acquisition with our Media segment.

However, we also see strong growth opportunities in the Media segment through innovation, synergies and a combination of organic and inorganic growth projects.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

This is an important step, but the impact on us is currently not so strong, as we generate about 90% of our revenues through our own platform.

4) How will your company tackle the new IDFA-challenges with targeted marketing (User Acquisition)?

From our Press Release from 25th October: Apple's IDFA and SkAdNetwork changes have been disrupting the digital media and games markets: Now it is required to ask users for their explicit opt-in permission to track them across apps and websites owned by other companies. This has recently negatively impacted especially large social networks, casual and hyper casual gaming companies as well as several AdTech players.

MGI and its media segment Verve, however, are among a group of media players that are not affected in a negative way, but rather profit from these changes. Primary factor is a technical reason: Verve's vertical omnichannel ad-tech-platform in most parts simply does not have to rely on IDFA-technology as it serves the full value chain from the advertiser through the demand side and supply side platform with thousands of direct integrations to publishers giving access to first-party mobile data. This enables Verve despite the recent IDFA-changes to deliver favorable costs per mille (CPMs) for publishers while also advertisers in an IDFA-less world can still efficiently target.

This has led to many new clients as well as increasing volumes from existing accounts for Verve. Moreover, the demand side of Verve is affected positively: a lot of companies in the (hyper) casual-games-market feel the impact as traditional measuring of advertising on Apple phones has become much less efficient making advertisers to shift their budgets, accordingly. Here, Verve profits from these shifts and sees new advertiser-intakes based on the disruption in the industry, due to its strong position in contextual audiences as well as technical solutions such as ATOM which work very well without IDFA. Therefore, Verve remains on its growth trajectory for the demand and supply side. While (hyper) casual mobile games have to cope with the disruption brought by IDFA, MGI's games portfolio, consisting primarily of strong PC and Console titles, that are practically not impacted by those changes and therefore shows continued strong growth.

5) Apple plans to allow publishers to offer consumers payments outside the App Store. Will your company do any strategic changes due to this change?

We also see that as an important step, although again the impact on us is not that strong at the moment because we generate about 90% of our revenue through our own platform.



Jussi Tähtinen CEO Nitro Games

1) Has the gaming industry reached a matured and saturated phase?

Definitely not. What the gaming industry as a whole is experiencing right now are the negative impacts of COVID-19. To simplify things a bit, the industry experienced a huge positive uplift in consumer spending in 2020 as a result of the lockdown. Now in 2021 the industry is experiencing the hangover from this lockdown, and also some delays with large scale console game releases as well as shortages on chips affecting the availability of gaming hardware. Moving forward, as the pandemic wears down, the games industry and the consumer spending are expected to grow normally. Mobile gaming continues to be the growth driver moving forward as well.

2) Where do you see the best growth opportunities, for your company, in the coming years?

We do mobile games, and focus on the category of action & shooter games. What we're seeing at the moment is continued growth in this specific category and an increasing amount of new business opportunities for Nitro. Currently, shooter games are the 6th largest category on iOS, contributing around 6% of the market revenues. So we see a lot of room for growth moving forward.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

The impact is positive of course, but currently still pretty minimal in the big picture. Moving forward, we are likely going to see a more and more diverse setup of distribution channels available for game publishers, which means that we are likely going to experience more of these types of things, as the platforms are competing for their market share.

4) How will your company tackle the new IDFAchallenges with targeted marketing (User Acquisition)?

We have had plenty of time to prepare for this, as these types of changes are foreseeable long before they happen. Our approach is to turn this change in the mobile marketing landscape into our strength by using recognized brands and IP (Nerf by Hasbro), as well as by expanding our business to less-saturated new platforms (such as Snap) where targeting doesn't play as big of a role. So basically our way of tackling this is building products and business cases which can succeed with less or no targeting, and which can better take advantage of for example influencer marketing over Youtube. With a known mass market brand you know what you're about to get and we can rely more on the power of the advertisement than the power of targeting.

5) Apple plans to allow publishers to offer consumers payments outside the App Store. Will your company do any strategic changes due to this change?

Potentially yes in the long run. However, this is still so early that we don't expect any impact on our existing portfolio of games out of this. The important thing for us here is that it's less about the cost of distribution, but more about the ease of payment and trust towards the payment provider from the consumer point of view. And that's something that Apple does really well, by using their platform owner status to their advantage in keeping the payment process as frictionless as possible.

INTERVIEWS



Tobias Sjögren CEO Starbreeze

1) Has the gaming industry reached a matured and saturated phase?

Considering the amazing leap in revenue and amount of players the industry done during Covid time it wouldn't be strange to see a small decline in 2021 as some analysts predict. But it has never been a question abut supply and demand of games as there are so much more content available than anyone would ever be able to play, it is rather about availability and accessibility. The easier it gets to play and the more easier distribution methods and lower entry point business models we can create the bigger the market becomes. Mobile phones made a massive expansion possible both into markets and audiences where the traditional PC and console games aren't viable platforms.

Further down in the future we see even more easy access business models with subscription solutions, streaming and new platforms like VR headsets. There is also a generation of gamers born in the 70's who still keeps playing and predicts to keep doing it long into their older years.

2) Where do you see the best growth opportunities, for your company, in the coming years?

For Starbreeze it is in three main areas. First and foremost delivering more games based on PAYDAY IP, we are working on PAYDAY 3 and our partner PopReach is working on a mobile version and for the future we can see other genres of games where the PAYDAY IP is viable. Secondly and related to the first point is an brand-expansion beyond our games utilising partners in areas like merch and other auxiliary products like novels, board games and not unreasonably live action TV-content. Lastly it is long term all about utilising our learnings of building up the PAYDAY IP and repeat it with other IP's that we can publish on our own. Naturally we will create additional IP's internally but we are no strangers to licensing or acquiring other IP's as well.

To sum it up, expand our already successful business and scaling up on our core and then use partners to create additional products and revenue streams on platforms that is outside of our core competence.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

It definitely is a welcome addition to our revenue. One might expect this gives the opportunity to larger profits and dividends but there is a risk (or opportunity, depends how you look at it) that this business keeps on re-investing the additional revenue into more and bigger higher quality products.

4) The VR market is the fastest-growing niche segment in gaming. Will your company bet on this trend in the next few years?

In terms of game content wise we have had a VR version of PAYDAY 2 for quite some time and it is certainly appreciated by the fans. That we keep creating content for VR-platform should be as natural as it would be to make sure we are available on other platforms.

I would say that this is certainly a field where there is a lack of content today, I don't use my own VR headset as often as I imagined when buying it because there is simply a lack of quality content out there. And obviously this demand will be met in the future and I'm personally very excited about the possibilities of new and innovative game experiences you can do in VR.

5) The console makers have shown some serious pricing power recently.

Do you think consumers will continue to buy the same quantities of games in the next few years despite more expensive games?

If you go back 15-20 years and in some aspects only 10 years the pricing on the market followed a very traditional model where the retailers set the tone for it. But as digital distribution came along 10-12 years ago it changed into a much more flexible pricing model. I have, in the past, been creating special versions of games priced well over 100 USD, there is a market for it for sure.

But the question here is can the general market accept a price increase of the base level games and as an answer to that I think it can swallow that and pay more for high quality games. But it is important to remember that compared to before the game market now ranges from games that are absolutely free to play and to block buster experiences with a premium price and everything between.



Jörgen Larsson CEO Stillfront Group

1) Has the gaming industry reached a matured and saturated phase?

We see continued strong growth in the industry the coming years, driven by a growing numbers of gamers worldwide, with number expected to surpass 3 billion people by next year. We expect that the market will continue to grow by some 7-8% annually the coming years, and we expect that mobile gaming will drive a significant part of that growth.

2) Where do you see the best growth opportunities, for your company, in the coming years?

We see several exciting growth opportunities going forward, on top of the strong underlying market trends that continue to drive growth in our industry. We have accelerated new game development across the group during the past year, including a number of cross-studio collaborations, which has resulted in our strongest pipeline ever in terms of new games. With our acquisitions this year, we have also increased our exposure to the MENA region and the Indian subcontinent, two of the fastest growing gaming markets in the world. We are very excited about the growth that the amazing teams at our studios can achieve during the years to come.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

The continued pressure on platform providers to lower their store fees is positive for Stillfront in the long-term. During the past twelve months, we have spent more than 1.2 billion SEK on platform fees, of which most constitute of payments to Apple and Google. If, or rather when, those fees start coming down, we will see a significant positive impact on our margins.

4) How will your company tackle the new IDFA-challenges with targeted marketing (User Acquisition)?

The IDFA changes had an impact on the mobile gaming industry when launched this summer, but we have seen significant improvements during the past months as the market has adapted to a post-IDFA world and it is our firm view that the IDFA changes will have limited impact on Stillfront in Q4 and onwards. We started working with building a best-in-class performance marketing hub in 2018 and that has served us well this year, as we have been able to uphold a high user acquisition spend, without compromising on returns. Our ability to swiftly adapt and reallocate our marketing spend across channels to optimize returns, paired with our broad channel knowledge, continues to be a key competitive advantage for Stillfront as we operate in a fast-moving and ever-changing industry.

5) Apple plans to allow publishers to offer consumers payments outside the App Store. Will your company do any strategic changes due to this change?

We already have a significant share of our revenues generated from payments made outside mobile app stores, of which a large portion stems from browser games where we have proprietary payment solutions with significant lower transaction costs than in the app stores. As our ability to drive traffic to these payment solutions increases with the new terms, we are in a good position to benefit from these changes going forward.

INTERVIEWS



Brjann Sigurgeirsson CEO Thunderful Group

1) Has the gaming industry reached a matured and saturated phase?

Supply is indeed high and the growth rate may slow down in the near future, but gaming hasn't matured yet. There are still many technological and market innovations to be introduced. A few examples:

- VR is clearly on the rise and certainly not yet fully realized. The technology is still young as the hardware will be significantly updated and improved. The number of viable platforms is still small. Title releases are relatively scarce and we still haven't experienced sustainable immersion. VR lineups will soon be accompanied by AR experiences that make sense, that are useful and/or are truly interesting. Physical and/or virtual extensions such as smartglasses will be more ubiquitous as we go forward.
- Games as a service (GaaS) both inside and outside the mobile space has huge potential. Although the business model isn't new, there is room for big growth in PC GaaS gaming as younger generations of PC players are coming of age and start building economies of their own. Many of these players have never been accustomed to the premium business model and are likely to spend on their pastime of choice, gaming.
- Going forward, subscription services will carry premium titles, as it in the short perspective is hard to see how they will incorporate IAPs broadly into the subscription model. Premium marketplaces will continue to exist on top of this, but I believe their significance will decrease. (See also the answer to question #5 below.)

2) Where do you see the best growth opportunities, for your company, in the coming years?

Thunderful is a 360 degree gaming company. We develop games, we publish games, we invest in games and we acquire game companies, and believe that all of them are vital to our growth. The fundamental opportunity lies therefore in continued best-in-class performance on quality, not only when it comes to release titles but also in business practices, that is, continued excellence across the board rather than specific business areas.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

It will further empower developers and publishers. Going from paying 30% to 15% in platform fees is a cost reduction of 50%. That is meaningful to devs and pubs of any size.

4) The VR market is the fastest-growing niche segment in gaming. Will your company bet on this trend in the next few years?

Yes, we will — although we will certainly continue to develop "flat" games for multiple platforms as well. We already both develop and publish VR titles, and we have just announced that we are setting up a fund for VR game development. We are convinced that VR is one of the expansion areas for the game industry, and that we are in a good position going forward.

5) The console makers have shown some serious pricing power recently.

Do you think consumers will continue to buy the same quantities of games in the next few years despite more expensive games?

No. I definitely believe people will want to buy fewer game titles per capita, but it will not (mainly) be due to a higher price point. As with music and film, I rather think that gamers in general will be less concerned with owning their games – digitally or physically – and that GaaS and subscription services will increase their shares of "playing time". Although there will be many exceptions, a majority of people will be increasingly content with simply having access to large game portfolios. It will be less important to own them.



Matti Larsson

1) Has the gaming industry reached a matured and saturated phase?

Prognosis show a growth in outsourced games development and gaming services like quality assurance, which is driven by large AAA game studios ramping up for the latest consoles like Playstation 5 and Xbox Series X.

2) Where do you see the best growth opportunities, for your company, in the coming years?

On that same note, next gen consoles and also in the PC gaming sector. We put our efforts in the independent and AA games categories. Obviously less risk versus the big studio productions that have much longer lead times.

Another key driver is the growth in digital; which we aim to get more stake in. Zordix is a gaming group with growth in the whole value chain, from development to market. Besides our own IP titles, we will continue to have growth in retail opportunities.

3) How will lowered distribution fees affect your company and the industry as a whole if this trend continues?

This will have a great impact in our digital sales, and in general make new investments in bigger, better titles possible.

4) The VR market is the fastest-growing niche segment in gaming. Will your company bet on this trend in the next few years?

While VR is fast growing, it is from a low install base. In Zordix, we see it as an interesting spin-off niche. In practice, we might take one or two brands to try it out. Preferable with an established partner in the VR space.

5) The console makers have shown some serious pricing power recently.

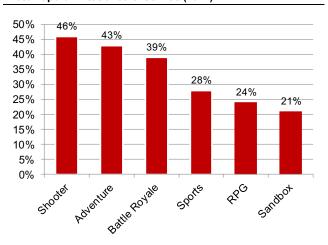
Do you think consumers will continue to buy the same quantities of games in the next few years despite more expensive games?

I certainly think so. There will be many pricing models in parallel, and there will always be niche audiences that wants quality and are willing to pay. Despite an expected larger diversity and flexibility in monetization models, the premium console pricing model should still work well in the near future.

Industry description

The gaming industry consists of several different Game Genres for all kinds of players. We describe the different categories and provide game examples. In this section, we also look closer at the Industry Value Chain that the ongoing digitalization is changing dramatically. Originally it has consisted of developers, publishers, distributors, retailers, and consumers. Another important aspect is how the revenues are generated, where different Revenue Models are applied. Full game is the traditional form but lately subscription-based has become the new trend.

Most Popular PC/Console Genres (2021)



Source: New zoo

Game Genres

Shooter/FPS

In the shooter genre we can find many popular subgenres which often test the players reflexes, speed and accuracy. First Person Shooters (FPS) is the most popular subgenre.

Examples: Call of Duty, Battlefield, Gears of War

Action/Adventure

Played in third person. The games are story driven with a focus on action and collecting inventories. Often problem solving and puzzle-elements.

Examples: Zelda, Tomb Raider, God of War

RPG (Role Playing Game)

Character evolves as the game progresses. Customizable characters. Most games today are Action RPGs.

Examples: The Witcher, Final Fantasy, Skyrim, Mass Effect

MMORPG (Massive Multi-player Online RPG)

Thousands of individuals play online simultaneously. Game environment is constantly active. Paid accounts and in-game purchasing.

Examples: World of Warcraft, EVE, The Elder Scrolls Online, New World

Strategy

Strategy games has logical and tactical gameplay mostly played on PC or mobile played in real-time or turn-based. MOBA (Multiplayer Online Battle Arena) is a subgenre and especially popular in Asia.

Examples: Clash of Clans, League of Legends, DOTA, Starcraft

Simulation:

Designed to closely simulate real world activities. Usually no strictly defined goals in the game.

Examples: Cities: Skylines, Sims, Farming Simulator

Puzzle:

Objective to solve or survive the puzzle. Players intelligence is primary and controller skills is secondary. Tetris invented the sub-genre Match 3 Puzzle and Candy Crush made it highly commercial on mobile.

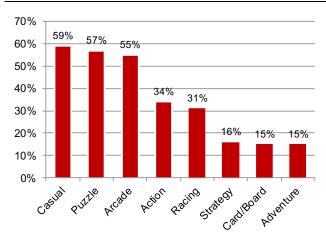
Examples: Tetris, Candy Crush Saga, Unravel

While Action/Adventure and shooter games dominate the western markets on PC and Console, MOBA, RPG and Fighting games are amongst the most popular and highest grossing genres in the Eastern markets.

Mobile Game Genres

On the mobile games market, the highest-grossing genres differ a lot compared to PC and Console. Some of the most popular games are two or more genres combined. A puzzle, arcade, or action game could also be classified as a casual game.

Most Popular Mobile Genres (2019)



Source: NDP Group

For example, "Candy Crash Saga" the highest-grossing mobile game of all time is a Casual Puzzle game so-called "Match-3". Despite that this genre attracts casual gamers the userbase is often highly loyal. This is one of the most important reasons why both Rovio and G5 Entertainment have entered the Match-3 market.

The top-grossing genres on mobile are casino (slots), Match-3, RPG, and strategy games. These four top-grossing genres have remained on the top for several years.

Golden Game Franchises

The most commercially famous collector of Game IPs (Intellectual Property) in the Nordics is perhaps Lars Wingefors. He truly values the importance of a strong IP portfolio. However, if we look at the top-grossing game franchises of all time, our list is dominated by primary Japan and then China. Only Activision-Blizzard manage to win two of the spots on the Top-10 list with Call of Duty and Swedish-created Candy Crush. And this year we estimate EA's FIFA game franchise has managed to take a position on our top 10.

We have decided to exclude estimated merchandise sales from our Top-10 list. Both the recently celebrated 40-year old Pac-Man (Bandai Namco) and Space Invaders (Square-Enix) are therefore excluded from our list.

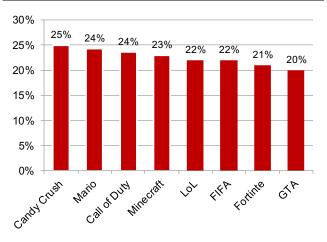
All Time Top Grossing IPs (USD)						
Franchise/ IP	Owner	Revenue*				
Mario	Nintendo	27 billion				
Pokémon	Nintendo	23 billion				
League of Legends	Tencent	22 billion				
Call of Duty	Activision-Blizzard	21 billion				
Dungeon Fighter	Nexon	15 billion				
Candy Crush	Activision-Blizzard	14 billion				
Crossfire	Smilegate	13 billion				
FIFA	EA	12 billion				
Street Fighter	Capcom	12 billion				
Final Fantasy	Square-Enix	11 billion				

Source: TitleMax, Forbes * Revenue from estimated game sales

The two most valuable IPs in the gaming industry are owned and partly owned by Nintendo. Pokémon is on top of the list with a wide margin (USD 92 billion) if merchandise sales are included. Nintendo owns 32% of the Pokémon Company. Pokémon is also the highest-grossing media franchise of all time

League of Legends, Dungeon Fighter, and Crossfire are currently the most profitable game franchises on PC with their stronghold in China. All these games have generated over USD 1 billion yearly for some time now. Our covered company Remedy will likely release a story mode for Crossfire this year in the western markets. In a survey published by Newzoo, gamers (Generation-Z, parents and females) was asked which game franchises they play and the answer was as follows. Interseting to see that the most popular game was Candy Crush and also the Swedish-created Minecraft was in the pole-position. We are however surprised that Roblox is not on this list.

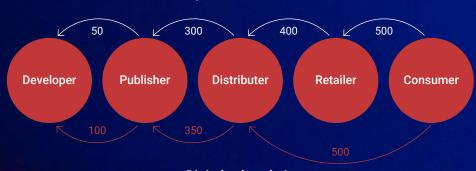
Most Popular Game Franchises (2021)



Source: New zoo

Industry value chain

Physical value chain



Digital value chain

Simplified, the value chain within the Gaming industry consists of the following players: **Developer, Publisher, Distributor, Retailer and Consumer**

Developers

Developers can be divided into three different categories.

A **first-party developer** is part of a platform owner, such as Sony and Microsoft, and develops games exclusively for this platform

Second-party developers are game developers that are connected to a platform owner in making exclusive content. Unlike a first party developer, they can be an independently owned studio.

Third-party developers are a platform-independent developers and often also a publisher as well. EA, Ubisoft, and also Remedy are examples of third-party developers.

A value chain that is changing

There has been a dramatic change from physical distribution to digital distribution.

- Loser: Retailer
- Winner: Distributor

This means higher revenues for publishers and in some cases developers. Distributors such as Apple and Google are minimizing risk and maximizing profits thanks to digital distribution

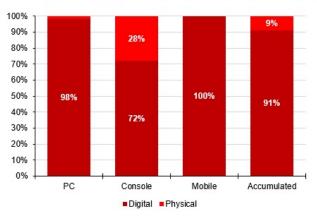
Distributors

Distributors are usually game vendors, supermarkets, and internet providers. Distribution via digital channels is becoming more common as gamers prefer digitally distributed games. All the console manufacturers have their own digital platforms.

Publishers

A game publisher publishes games that they have either developed internally or have developed through a video game developer. Usually, the publisher provides financing for the development of the game while also being responsible for the market research, pricing of the game, and all aspects of marketing and advertising.

Publishing format video games 2020



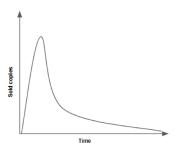
Source: Newzoo, Gamerant

In 2009 roughly 80% of console game sales in the USA were physical. Today only 28% is physical. PC and Mobile is almost 100% digital which means only 9% of the total market is physical game sales. The physical market will continue to exist on consoles for at least 10 more years but should be considered a niche market.

The following section describe the most common revenue models for the two respective segments; PC/console and mobile.

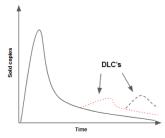
Full game/premium

Traditional model where the customer pays for the whole game up front. Most often about 70% of the life-time value



Extra content

Often called "Add-ons" and DLC (Downloadable Content). Downloadable Content (DLC) /Expansion pack: Usually extended storyline, new game areas, or objects which are distributed digitally by the game's official publisher



Freemium/F2P

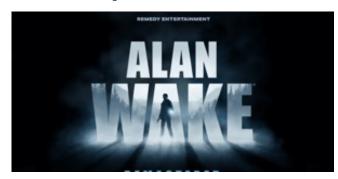
F2P (Free to Play) has been dominating the mobile industry. In late 2016 Nintendo tried charging players when launching Super Mario Run but without success which is a strong sign of how difficult the old revenue model is in mobile games nowadays. Freemium is starting to take a position in the PC/Console industry as well with strong titles like Fortnite, PUBG, and Warframe. Around 85% of the global market is free-to-play games, dominating on mobile and PC.

Subscription-based

Subscription-based is a relatively new trend. EA, Sony, and Microsoft have launched new subscription-based services. This could also be a more common revenue model for mobile games in the future. In 2018 Microsoft's two biggest exclusive titles were released on "Xbox Game Pass" the very first day, which was a potential "game-changer".

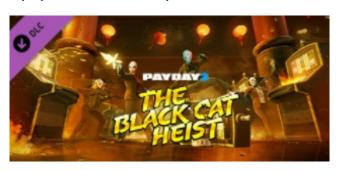
Examples from our Universe:

Biomutant, Little Nightmares 2, and Alan Wake.



Examples from our Universe:

Payday 2, Valheim, Satisfactory, and Borderlands 3.



Examples from our Universe:

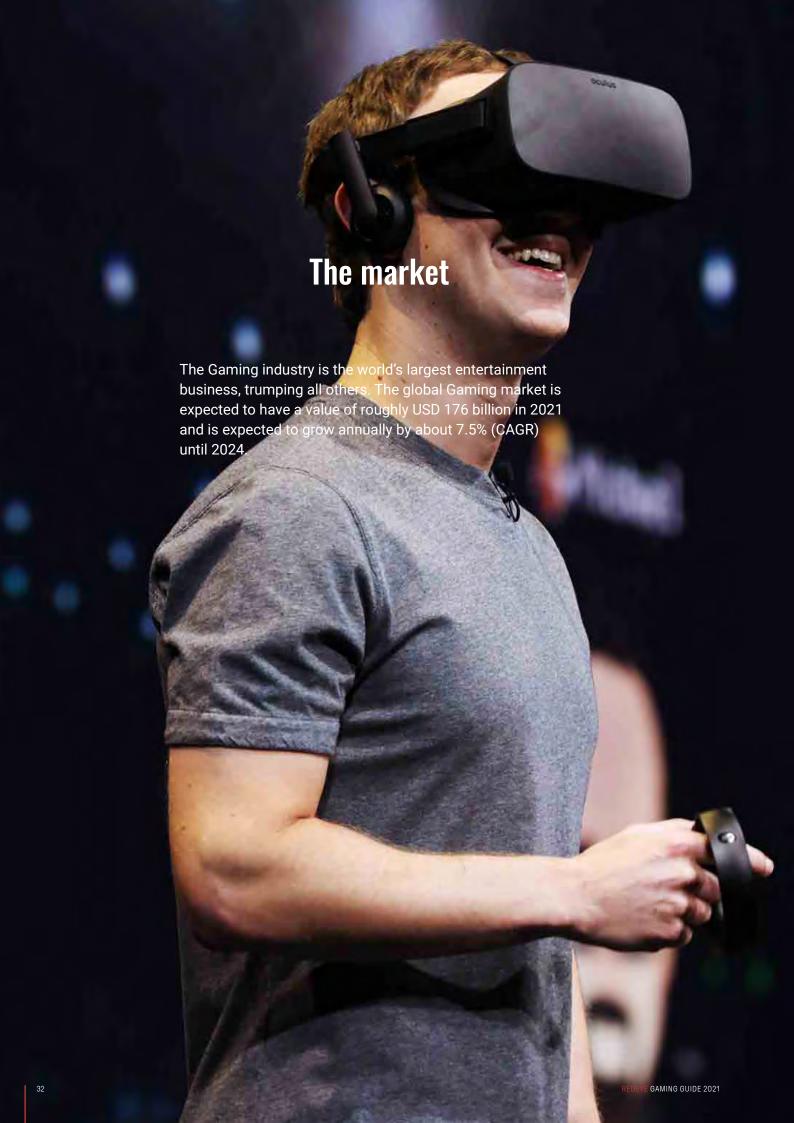
Hidden City, Big Farm, Heroes of Warland.



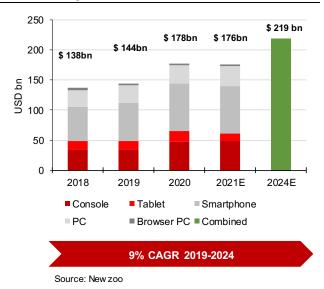








Global Gaming Market in USD bn

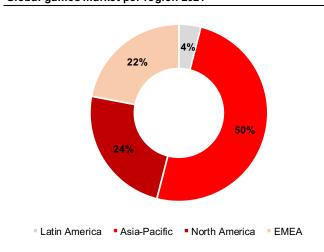


Globally there are about 2.9 billion gamers, i.e., who play at least one time a month. The average gamer is 35 years old and the gender split is relatively even, with a slight predominance of males.males.



In 2021 the Asia-Pacific territories will generate around USD 88 billion. China stands for the majority of revenues.

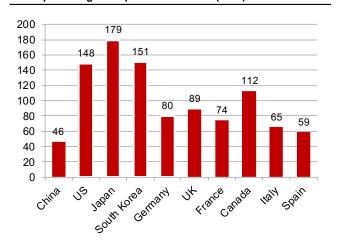
Global games market per region 2021



Source: New zoo

Asia-Pacific has a huge population but the spending per capita and per gamer are still much lower than in the West. In this diagram, we show the top spending countries per internet user.

USD spent on games per internet user (2020)

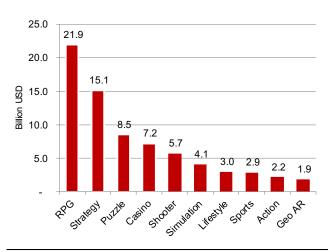


Source: New zoo, Redeye Reasearch

We expect that the revenue per capita will increase significantly in Asia in the coming decade. The Asian market is an immense opportunity but is also most often hard for Western Gaming companies to enter due to differences in culture and distribution. There is a clear trend where Western gaming companies partner up with Asian representatives, we expect this will continue

The boxed console and PC games stand for a minority of the game's sales in China and South Korea. The boxed industry is almost non-existing, and it was forbidden to sell consoles until mid-2015.

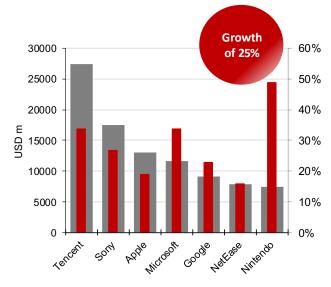
Top Grossing Mobile Game Genres Worldwide (2020)



Source: Statista

The Big Players

Revenues are very concentrated at the top. USD 107 billion (82 in 2019) comes from the top 10. The global games market amounted to USD 178 billion which means 60% (54% in 2019) of total revenues come from the top 10. Tencent alone earned USD 27.4 billion (20.5 in 2019) in revenues, accounting for more than 15% of the entire games market, and was the world's number one public company by game revenues for the eighth year running.



Platform owners as a group once again were the major winners in growth, showing a 25% year-on-year growth in 2020. The COVID-19-boosted sales boost and engagement was considerable across all platforms. Console-owners had an extremely strong year with Nintendo at the top position showing a yearly growth of 49% followed by Microsoft at 34% and Sony at 27%. Tencent once again showed an impressive growth of 34% despite its "super-size".

Since the beginning of 2019 Nintendo has outpaced its competitors in console sales. One of the explanations is that the console was released more than three years later than its competitors. But as everybody knows in this industry it is software that sells hardware. And Nintendo has built up an impressive exclusive game library in the last three years. The hybrid console has also become an essential platform for indie games.

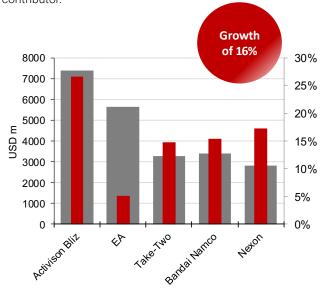
The growing third-party support has also been an important driver for success.

Console War Last Two Years							
Platform	Units Sold	Growth	Total				
Nintendo Switch	63 million	214%	93 million				
Playstation	38 million	41%	129 million				
Xbox	17 million	41%	58 million				

Source: VGChartz

The major game publishers as a group once again had a hard time competing with the platform owners in terms of growth with a combined growth of 16% (amongst the five biggest companies). The major contributor is Activision Blizzard.

The company has been able to monetize well on its strong IP portfolio, especially on "Call of Duty" its biggest revenue contributor in 2020. In 2019 Candy Crush was the biggest contributor.



Best-selling games 2020

Mobile games with their stronghold in China dominated the highest-grossing list like never before. Some games grew by 100% from high levels meaning an increase of around USD 1 billion.

Fortnite was the highest-grossing game for the third year in a row with revenues of USD 2.8 billion according to financial documents in Epic's court battle against Apple. According to these documents, Fornite generated almost USD 5.5 billion in 2018. However, Fortnite was the only game that did show negative growth in our top 10 list.

Some games on the top list had an explosive growth in 2020 which means we had four newcomers on the list, these are Roblox, Free Fire, AFK Arena, and Gardenscapes. A majority (7 out of 10) are mobile games.

Free to Play Games 2020 (USD m)								
Game	Publisher	Platform	Revenue	Growth				
Fortnite	Epic Games	Multi	2 771	-25%				
Honour of Kings	Tencent	Mobile	2 450	53%				
Peacekeeper Elite	Tencent	Mobile	2 300	92%				
Roblox	Roblox Corp	Multi	2 290	111%				
Free Fire	Garena	Mobile	2 130	113%				
Pokémon GO	Niantic	Mobile	1 920	37%				
League of Legends	Tencent	PC	1 750	17%				
Candy Crush Saga	King (Activision)	Mobile	1 660	11%				
AFK Arena	Lilith Games	Mobile	1 450	504%				
Gardenscapes	Playrix Games	Mobile	1 430	90%				

Source: SuperData, Epic Games

To set things in perspective these 10 free-to-play games above represented 11% of the total gaming market in 2020, with its USD 20 billion contributions.

It is of course interesting to compare the highest-grossing free-to-play games with premium games. However, most often these games rely on DLCs and microtransactions also, often called "Game as a Service" which is the case in Call of Duty, NBA2K, FIFA, and GTA.

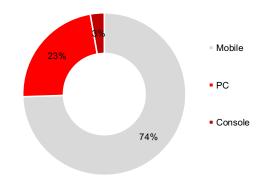
Digital Premium Games 2020 (USD m)							
Game	Publisher	Platform	Revenue	Growth			
Call of Duty (2 latest)	Activision	Multi	2 591	129%			
NBA 2K (2 latest)	Take Two	Multi	1 660	173%			
FIFA (2 latest)	EA	Multi	1 483	17%			
Animal Crossing	Nintendo	Switch	1 400	NEW			
GTA 5	Take Two	Multi	911	53%			
Cyberpunk 2077	CD Projekt Red	Multi	685	NEW			
Sims 4	EA	Multi	462	49%			

Source: SuperData, VG Chartz, Redeye estimates

As always these four game series were the major winners. The latest yearly installment of those game series always shows solid physical sales as well, which means we most likely can add another 20-30% of revenue to the digital revenue in our table for all except GTA.

For the relatively brief period King (Candy Crush) was a public traded company (on its own) there was an investor skepticism of how sustainable revenues were in its smash hit Candy Crush. At that time free to play games, in general, was in an early stage. Now eight years later after the release of the first game King has reported revenues of around USD 2 billion every year (mainly from the Candy Crush franchise). Activision Blizzard completed the acquisition of King at the beginning of 2016 for USD 5.9 billion. The game giant surely knows the value of a loyal fanbase.

Free-to-play games generated USD 98.4 billion in total (55% of the total gaming market) in 2020 according to Superdata. Digital Premium Games generated USD 24.5 billion in total as a comparison. In 2020 the digital premium market showed higher growth than the free-to-play market 28% versus 9%. The free-to-play market is 74% mobile games and 23% PC games primarily popular in Asia.



Source: Superdata

Valuation per segment

On an overall level, the multiple valuations most often range from; 3-6x EV/S and 10-30 EV/EBIT depending on growth outlook and profitability. Our company sample is based on 37 companies sorted into three categories; Premium, Mobile/Free to play, and Nordic listed companies.



Premium Games

The average valuation for Premium games companies is highest in the group at c. 5x EV/S and 17x EV/EBIT. However, the span is wide depending on size and where the companies' gaming portfolios stand in their development phase. The valuation has come down around 30% compared to last year, despite a continued positive growth outlook for both topline and profit. The aggregated group is expected to grow annually by 15% in the coming three years with an average EBIT margin of 24%. Many companies in this segment group are active in M&A, so this affects the growth rates to some degree.

Mobile and Free to play

The companies in our Mobile and Free-to-play list have an almost exclusive focus on mobile or free-to-play while the exposure to premium games is limited. On an aggregated level this group has a lower valuation than Premium gaming companies. The group is valued, based on 2022 estimates, at 3x EV/S and 17x EBIT. The aggregated group is expected to grow annually by 15% in 2021-23E with an average EBIT margin of 20%. While growth outlook remains strong, the average valuation is similar to last year, although excluding recently listed Roblox the valuation is around 25% lower for the group.

Nordic companies

We have also built a separate group of Nordic listed companies which consists of both mobile/free to play focused companies as well as premium games focused companies. The average valuation for the Nordic sector is 3x EV/S and 13x EV/EBIT which is lower than the average for the two other larger groups. Growth outlook and profitability are similar, however, suggesting attractive valuation for the Nordic listed companies.

Valuation premi	um games				
		EV/Sales	EV/EBIT	Sales CAGR	EBIT-margin
Company	EV (MSEK)	2022	2022	21-23E	21-23E
Activision	477,757	5.7	13.1	9%	42%
Nintendo	335,054	2.7	7.6	-5%	36%
EA	333,945	4.9	14.9	7%	33%
Take-Two	157,586	4.5	19.5	20%	23%
Bandai Namco	129,832	2.1	15.4	5%	12%
Embracer	71,067	3.6	10.4	15%	34%
Ubisoft	62,700	2.4	12.5	10%	20%
Konami	55,901	2.4	9.5	6%	21%
Capcom	45,406	5.1	12.4	5%	39%
Square Enix	43,802	1.7	10.4	3%	15%
Perfect World	38,328	2.2	10.7	19%	17%
CD Projekt	38,061	14.5	29.8	5%	48%
Paradox	14,017	6.2	17.1	20%	35%
Frontier	12,443	6.2	27.5	13%	22%
Team17	11,148	9.5	28.6	9%	33%
Playway	6,606	9.0	12.6	13%	72%
Remedy	5,116	10.4	34.9	21%	32%
Thunderful	4,253	1.3	12.0	3%	9%
11 bit	2,084	12.3	62.5	104%	30%
CI Games	665	4.6	14.9	57%	48%
Average	n.m.	5.6	18.8	17%	31%

Source: Redeye, Factset

Company	EV, SEKm	EV/Sales	EV/EBIT	Sales CAGR	EBIT-margin
(12.17.00)		2022	2022	21-23E	21-23E
Netease	498,864	3.9	20.7	15%	19%
Roblox	397,587	14.6	78.6	18%	22%
Playtika	112,888	4.6	15.1	8%	31%
Nexon	92,282	3.6	8.9	15%	38%
Zynga	75,476	2.8	13.0	9%	22%
Stillfront	18,481	3.0	9.8	11%	29%
MTG	12,412	1.7	12.6	23%	9%
Sumo	10,398	6.6	40.0	18%	16%
Nexters	10,082	1.8	8.0	24%	16%
Com2Us	7,080	1.4	6.9	19%	19%
Ten Square	4,827	2.8	8.2	16%	33%
Huuuge	4,824	1.3	7.8	12%	16%
Media and Games	4,184	1.3	6.2	22%	16%
G5 Entertainment	3,783	2.4	11.7	12%	17%
Rovio	3,437	1.2	8.5	5%	14%
EG7	1,989	1.2	9.4	9%	6%
Nitro Games	247	n.a.	n.a.	n.a.	n.a.
Average	n.m.	3.4	16.6	15%	20%

Source: Redeye, Factset

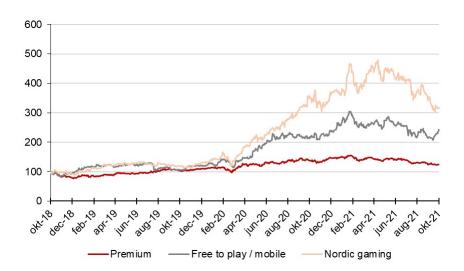
Valuation Nordic c	ompanies				
		EV/Sales	EV/EBIT	Sales CAGR	EBIT-margin
Company	EV (MSEK)	2022	2022	21-23E	21-23E
Embracer	71,067	3.6	10.4	15%	34%
Paradox	14,017	6.2	17.1	20%	35%
Remedy	5,116	10.4	34.9	21%	32%
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Nitro Games	247	n.a.	n.a.	n.a.	n.a.
Average	n.m.	3.2	13.3	14%	20%

Source: Redeye, Factset

Global and Nordic Gaming Index

We here present an index showing the market value-weighted price development for the companies in the groups above.

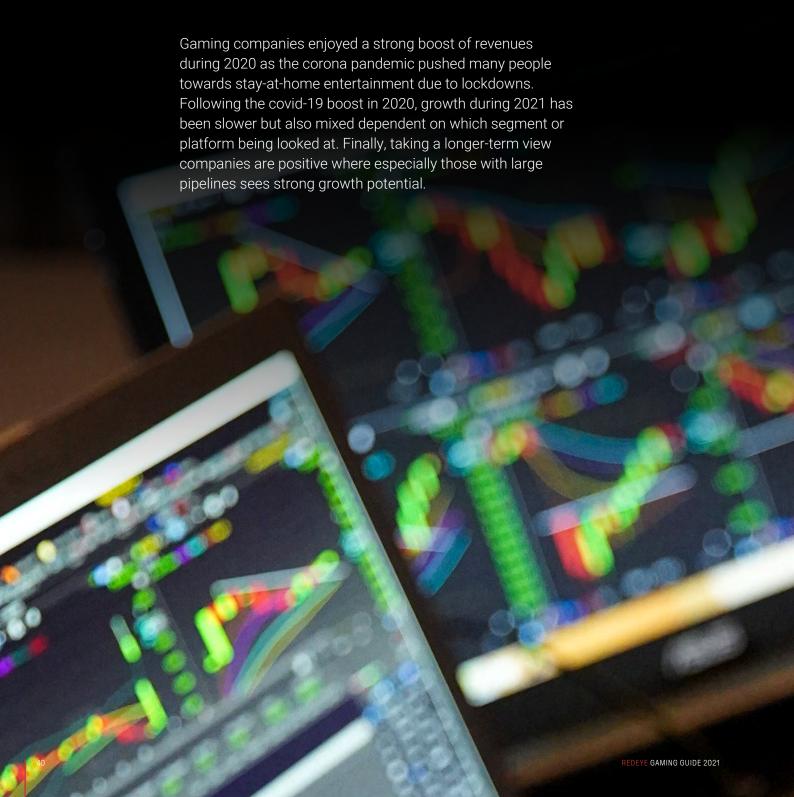
Gaming Index performance



The Nordic gaming companies enjoyed a strong run during 2020 when it outperformed the broader groups of Premium and Mobile/Free to play. One potential explanation is probably related to the Nordic gaming companies becoming discovered by investors as they have grown in size after being highly active in acquisitions. Secondly, the corona pandemic also led to an increased demand for digital companies and stay-at-home / lockdown winners where gaming companies were a clear example.

However, in 2021 the Nordic segment has seen a weak performance and underperformed the other groups. Some potential factors for this could be sector rotation out of the segment in favor of companies that benefit more from easing of pandemic-related lockdowns. Secondly, the M&A activity which was a key driver for some of the Nordic companies has also been slower lately. Finally, the fundamental performance during the last coupled of quarters has been mixed in the sector which likely has created increased uncertainty for the underlying growth in the sector.

Post-COVID Depression is Transitory



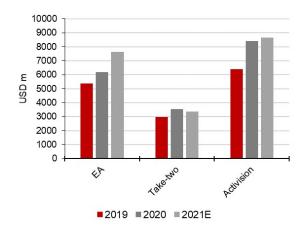
Looking at the results this far from the larger listed gaming companies and those under Redeye's coverage growth has been slower in 2021 than 2020. However, there is also a mixed picture depending on focus segment where mobile focused companies enjoyed a large boost in 2020 and had tougher to grow in 2021. Premium gaming companies are instead more dependent on its pipeline while the platform companies which generate revenue from all segments are more stable/resilient.

2021 Platform Companies

For the large platform companies (Microsoft, Nintendo, Sony, Apple, Google and Tencent) growth has been mixed with growth in hardware for Sony and Microsoft while Nintendo declined hardware sales. All three suffered from shortages of semiconductors and could have grown significantly more if that was not the case. Software sales has generally been slower with stable or declining levels due to tough comparison from the covid-boosted 2020. The broader and mobile focused platforms, Apple and Google, has seen strong growth in service revenue but this also includes revenue outside games.

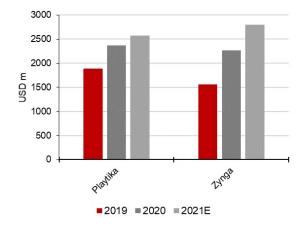
2021 Game Publishers

The largest game publishers have seen slower growth during 2021 and looking at their guidance growth has slowed down to low single digit. However, some are seeing strong growth, for example EA which expects current year bookings to be up 23%. An indicator of long-term growth is Take-two that highlights its studio headcount is up 17% in 2021 while it has 62 titles in pipeline over 2022-24.



Mobile and free to play

The mobile and free to play gaming companies saw the biggest boost in 2020 and have also seen slower growth and even negative organic growth in 2021. Mobile gaming companies have typically said that older games that saw a boost in 2020 has declined in 2021 while newer games show growth even in 2021, albeit lower. These companies has also faced headwinds from IDFA which has lowered effectiveness of UA investments which impact growth negatively. Longer term, growth rates should be more stable however and Zynga for example expects double digit growth for 2022.





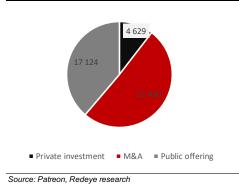
Transactions and M&A

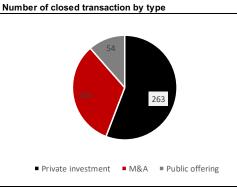
The transaction market for Gaming has been remarkably strong in the past year. H1 in 2021 saw an increase of almost 4x times compared to 2020 and the total deal value for the market was \$44.2B in H1 2021. M&A was the largest contributor. The total deal value reached \$22.4B, up from \$4.0B in 2020. Already exceeding the 2020s full-year result total deal value of \$12.6B.

The second-largest contributor in terms of deal value was from public offerings, which increased to \$17.1B from \$4.9B. Moreover, the private investments also saw a significant increase and rose to \$4.6B, up from \$1.4B. This was a new record, and the largest funding rounds included Epic Games and Roblox pre-IPO. 74 percent of the total deals were in the gaming segment, 17 percent within the platform & tech segment, and the remaining 9 percent was within E-sports and other segments.

Naturally, the private investments deals accounted for the majority as the deals tend to be smaller in size and are less time-consuming and costly.

Value of closed deals by transaction type

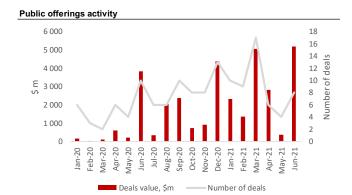




Source: Patreon, Redeye research

Public Offering Activity

Public deal activity remains strong in H1 2021, reaching a total deal value of \$17.1B, exceeding 2020's full-year results of \$15.7B. The primary deal value driver in the period was the Bilibili (PIPE), ironSOURCE (SPAC), AppLovin (IPO), and Playtika (IPO). The activity has declined in the second quarter this year, as declining share prices have resulted in higher market uncertainty.



Source:Patreon, Redeye research

M&A Activity

The M&A deal market in H1 2021 saw massive growth and reached a value of \$22.4B across 154 deals, already exceeding the level for the full year 2020. Notably, 75 percent of the total value came from large deals including, Zenimax, Moonton, Glu mobile, Gearbox, Playdemic, and Codemaster. In terms of total activity, the market shifted from mobile to PC and Console with 27 versus 46 closed transactions, respectively.



Source:Patreon, Redeye research

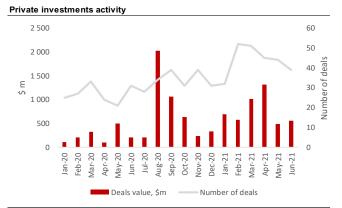
Overview of the largest M&A deals in H1 2021

Largest M&As	Target	Buyer	Size*, \$m	Platform
	ZeniMax	Microsoft	7 500	PC & console
	Moonton	ByteDance	4 000	Mobile
	Glu Mobile	EA	2 100	Mobile
	Playdemic	EA	1 400	Mobile
	Gearbox	Embracer	1 378	PC & console
	Codemasters	EA	1 200	PC & console

Source: Patreon, Redeye research

Private investments activity

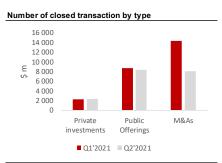
In H1 2021, investors pumped an amount of \$4.6B via venture capital and corporate deals, indicating a 226% growth y/y. In total, 263 deals were closed.



Source:Patreon, Redeye research

Comparing Q2 2021 vs Q1 2021

The private investments and public offerings saw modest sequential changes. However, Interesting to note is the drop in the M&A activity. This represents a 43 percent decline compared to the first quarter. One of the reasons could be the declining share prices, which put pressure on earnings multiples. This complicates the deal activity as the multiple arbitrage public traded companies have used in the past years are not as accretive as a few months ago. Moreover, the competition has increased, indicating higher earnings multiples for privately traded companies, limiting the multiple arbitrages further.



Source: Patreon, Redeye research

Top strategic investors

In the first half of 2021, the most active strategic investors closed 104 deals, surpassing \$21.4B in deal value. Microsoft acquisition of the development studio, Zenimax media (Bethesda) is the largest deal year to date. The deal expands Microsoft's internal game development studios and expands the game portfolio on its Xbox game pass platform.

Apart from Microsoft, Electronic Arts, Embracer Group and Bytedance have been the largest deal value consolidators. EA closed four acquisitions in the first half-year, Codemasters, Metalhead, Glu Mobile, and Playdemic. Substantially increasing its mobile presence as well as its sporting games pipeline, as its adding racing and baseball games. Embracer Group's most substantial acquisition consists of Gearbox, Easybrain, Aspyr, and Crazylabs. It has also acquired smaller bolt-on acquisitions, ensuring high-quality game developers. The acquisitions increased its focus on mobile games, the fastest-growing segment. Bytedance, the owner of TikTok expands its Gaming vertical by two acquisitions, both developing studios.

Investor	# of deals	Value, \$m	Deal type	Focus
Tencent	53	800		PC & Console, mobile, cloud
Embracer Group	7	2 608	M&As	PC & Console, mobile
Sony Corp	9	400	M&As, Corporate	PC & Console
Electronic Arts	4	4 700	M&As	PC & Console, mobile
ByteDance	4	4 025	M&As. Corporate	Mobile
Epic Games	5	600	M&As. Corporate	PC & Console, Tech
Stillfront Group	4	308	M&As	Mobile, PC
Take-Two Interactive	3	378	M&As, Corporate	PC & Console, mobile
Zynga	3	250	M&As	Mobile, PC & Console
Microsoft	1	7 500	M&As	PC & Console
AppLovin	1	1 000	M&As	Tech
NetEase	4	93	Corporate	Platform
Keyword Studios	3	120	M&As	Outsourcing
Enad Global 7	2	205	M&As	PC & Console, mobile
MY.Games	6	20+	M&As, Corporate	Mobile, cloud

Source: Patreon, Redeye research

Enter the Metaverse



What is Virtual Reality and Augmented Reality?

Virtual Reality (VR) is the use of computer technology to create a simulated environment. VR places the user inside an experience instead of viewing a screen in front of them, creating a high level of immersion and the ability to interact with the 3D world through the use of a head-mounted display (HMD) or headset.

Augmented Reality (AR) is an interactive 3D experience that overlays and combines computer-generated elements on top of a view of the real world and real objects in real-time through the help of AR glasses. Both VR and AR are a form of Extended Reality (XR).

Hardware will drive the market

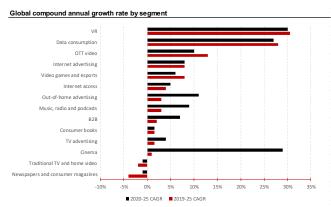
Facebook has its sights set on dominating the Virtual Reality (VR) and the Augmented Reality (AR) space. It acquired Oculus in 2014 and has now accelerated investments into the segment, as almost 20% of the 60,000 strong workforce of the gargantuan is reportedly working on VR, that's roughly 10,000 people dedicated to just VR and AR.

Apple, Google, and Microsoft are also making entries into the AR/VR space as they recognize it as the next big computational platform. The space is therefore expected to grow at an explosive rate as all the tech giants are entering the space within the next 1-2 years.

However, the popularity has already reached a mainstream adoption rate as the standalone headset, Oculus Quest 2, has sold over 5 million units to date, selling in line with PS5 and Xbox Series X in Q4'20-Q1'21. Pre-bookings for the Oculus Quest 2 were five times higher than the Quest 1.

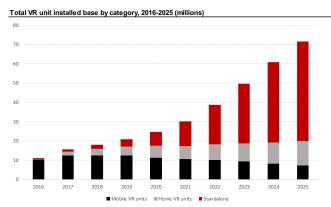
Standalone is the driver behind the growth

VR is expected to grow faster than any other media segment at a CAGR of 30% over the next few years, according to PwC. The VR market amounted to USD 1.8bn in 2020, an increase of 32% over 2019. PwC expects the global VR market to amount to USD 6.9bn by 2025. The uptake in the market is primarily explained by smaller, lighter VR headsets that are standalone (no requirement for a PC) at a consumer-friendly price point, as well as an increase in the content of high quality. Standalone headsets are therefore easier to use, cheaper, and is more giftable than previous generations of VR.



Source: PwC Global Entertainment & Media Outlook 2021-2025

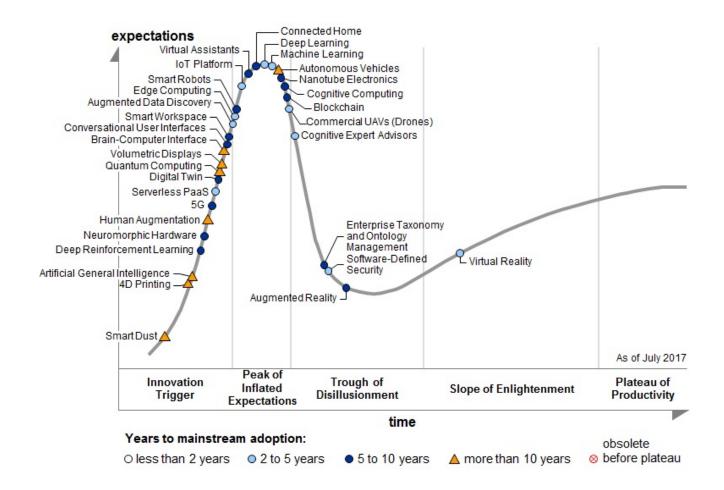
The biggest growth is expected to come from the standalone headset market, as PwC expects that it will triple by 2025. The installed base of VR headsets is expected to reach 40 million in 2022, of which ~20 million headsets are expected to be standalone and ~8 to be home VR.



Source: PwC Global Entertainment & Media Outlook 2021-2025

Entering the plateau of productivity

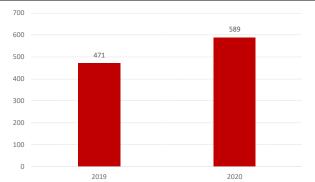
Gartner included VR and AR in its hype cycle 2017. VR was in the "slope of enlightenment" and AR was in the "trough of disillusionment". Gartner expected VR to enter into the mainstream somewhere in 2019-2022 and AR to enter into the mainstream around 2022-2027. It appears that Gartner was quite accurate in its predictions.



Content is king — platform owners like Oculus Store are desperate for content

Hardware will drive the XR market, but software must follow as a lack of content will hinder the growth of hardware sales. Both markets will have to grow in parallel, creating a positive spiral. Platform owners such as Facebook (Oculus Store) are offering VR developers very beneficial development deals, in where they typically fully finance the development of games, while the developer still retains IP rights and a revenue share. Facebook has also started development studios that are focused on VR software and has acquired several upcoming VR developers. VR games generated USD 589m in 2020, up 25% from 2019.

VR games revenue (USDm)



Source: Superdata

Only digital distribution — high margins

VR games and software are exclusively distributed digitally ensuring high margins for the software developers. The top VR digital stores include Oculus Store, Steam, and PlayStation VR and they typically charge a 30% revenue cut. Pure VR platforms like the Oculus Store only have about 200 VR games and apps, making it much easier for VR developers to stand out and take a large corner of the market, compared to traditional game platforms.



The price of games will increase over time

AAA IP:s like Half-Life, Assassins Creed, and Splinter Cell are entering the VR space, driving hardware sales but also increasing the average sales price (ASP) as consumers become more willing to pay up for VR games. A trend that will likely continue and also affect the indie and AA segments of VR. "The Walking Dead: Saints and Sinners," had grossed USD 29m in February 2021. Market research firm Super Data estimates that Half-Life: Alyx sold 1.9m digital copies in its first six months. These numbers were unheard of for VR games previously.

High return on investment

VR games tend to be more limited in scope due to some of the challenges in VR. It is for example more cumbersome to travel long distances in VR and spending a very long time in VR tends to be more exhausting physically and can cause nausea in some instances. VR games tend to focus more on core gameplay and mechanics rather than creating huge worlds and are therefore smaller in scope.

The development cost for a VR game is typically lower than for PC- and console games and as such the return on investment is typically higher. A great example of this is Beat Saber, which has sold over 4 million copies at a retail price of USD 30, and it has generated over USD 180m in revenues. The game was developed by Czech developer Beat Games (acquired by Facebook) and the team consisted of only two developers.

5G and VR

High reliability and bandwidth but more importantly low latency can pose a very interesting application for VR hardware as games could be streamed to a screen, without any need for expensive and bulky hardware. Driving down the cost and weight of VR headsets while simultaneously increasing performance as the games can be run on a high-performance PC or in a data center.

"Netflix for Games"

From an investor perspective, the business model namely recurring revenue through subscriptions is probably an interesting topic, often called "Software as a Service" SaaS. Microsoft has been the most aggressive player in this area with its Game Pass. While the game library according to us has gone from interesting to awesome during the last 12 months, the number of subscribers recently reached approximately 25 million. With no big investments needed in either games or hardware for customers, the industry can likely continue to grow in the years to come.



Subscription Services

More than two years ago we argued that Microsoft and Sony will be the major players and winners in this field in the years to come. The most obvious reason is of course their current dominance in the console gaming market alongside Nintendo. Dominating platform owners in the PC segment (Valve and Epic) and big tech companies such as Amazon, Google, Apple, and Tencent we also expect to be more serious competitors in the future.

Microsoft has succeeded in this "Software as a Service" business model before with for example Windows 365 and Azure. For SEK 99 a month, gamers can pick up all Microsoft Studios games at launch. Around 100 games from third-party studios are also available for subscribers.

This offering should be considered a major investment even for Microsoft. To this day third-party games are paid up-front by Microsoft. The paycheck to the publisher is based upon estimated "missed sales". If we look at some of our covered Nordic gaming companies' like Embracer and Remedy revenues from subscription services have become a way to "de-risk" lots of revenue. High-quality content and beloved IPs have always been essential for a blooming business and in our view, it is now more important than ever. For example, Embracer's growing library of games with nearly 120 games under development will be a golden asset in the years to come.

The King of SaaS

Microsoft is estimated to have approximately 25 million subscribers currently on its Game Pass service. During the first half of 2021, the service grew by 37% year-over-year, slower growth than Microsoft's goal of 48%. In the last two months this year, Microsoft releases games within three of the biggest game franchises on console, namely Forza Motorsport, Halo and a GTA remaster. With this lineup of games, we believe Microsoft will reach 30 million subscribers in a near future.



Although 30 million subscribers is an impressive number the number of users that are using Microsoft's online service for games (called Xbox Live) is currently over 100 million. With this comparison subscription services of this kind still are in an early stage.

Microsoft has openly communicated the old rivals Sony and Nintendo are not the main competitors in the future, it is instead Google, Amazon, and other big tech companies. Microsoft's new offering is "Play Everywhere" preferably on Xbox Game Pass. The hardware consumers play on is however of less importance.

Microsoft's big bet in the future is to grow its user base. And they plan to do that not by selling consoles primarily but to sell Game Pass. It's a fact that game consoles are historically sold at a loss (Nintendo not included). This trend is expected to continue for both Microsoft and Sony with the new generation. However, the console makers generate major profits from software, services, and subscriptions.

The future of gaming is about establishing a wide install base and creating an ecosystem where people can connect and play together.

Phil Spencer (Head of the Xbox Division) has boldly claimed that Microsoft is intent on reaching the 2-3 billion gamers in the world. That's an impossible goal if the requirement is for people to own a game console. This is only a possible goal with a software service such as Xbox Game Pass and so-called "Cloud Gaming" for example powered by Microsoft xCloud.

Cloud Gaming

Last year Microsoft launched its cloud gaming service called "xCloud" through its Azure Cloud Architecture. Cloud Gaming is entering its 1.0 version with Microsoft xCloud and other competing technologies. Just like the smartphone needed extensive 3G networks to have a breakthrough the key for true commercialization of Cloud Gaming is the speed of the networks.

Fiber is being widespread, but some key markets like the UK and some parts of the USA are still far behind the countries with the highest fiber penetrations. We believe the coming adoption of 5G could play a vital role in the mass adoption of Cloud Gaming. At peak speed, 5G is roughly 20 times faster than 4G. 5G is expected to reach a 50% penetration in the USA by 2025 at the same year roughly 1.5bn subscribers globally are expected to use 5G.

Content is King

More than two years ago we stated and illustrated in a positioning scheme the importance for a company to both have the tech, the cloud infrastructure but also as always, the content.



As we wrote Google did not have the content, which remains to be the case. We have tested Google Stadia and think the tech is great, so this is clearly not the explanation for the lack of interest in the service amongst customers.

If we look at launched services instead Nvidia with its Geforce Now is the big winner.

Nvidia both have the tech and the content due to the access of 1500 games from Steam and Epic Games Store at the big launch. In a few weeks (back in 2020), the subscription service reached 1 million subscribers. Some of the highly popular games in the catalog have since then been deleted, despite that, the user base has continued to grow. However, Nvidia Geforce Now is still outsourced game hardware and does not own any of its content. For consumers, it is a bargain for those mainstream gamers unwilling to pay at least SEK 8000 for a gaming computer. In April 2021, Nvidia reached a new milestone with its subscription service reaching over 10 million subscribers. Nvida has also doubled the subscription fee to USD 9.99 per month for players with higher demands on the tech specs.

The Cloud Gaming Market

Casual gamers and early adopters will likely be the only audience that embraces this new technology in the first years. Most early adopters will buy a console or a new PC as well we believe.

We believe there likely will be three phases in cloud gaming in the next years, driven in part by the development of the infrastructure with 5G and FTTH (Fiber-To-The-Home). In the first phase, single-player games and some less demanding multiplayer games will find an audience. In the second phase, more competitive and therefore more input lag critical multiplayer games will gain a larger audience. In phase three highly demanding and competitive multiplayer games will find mass-market appeal. Currently, we are in phase 2 according to us.

Cloud Gaming Market in USD m 7000 6000 5000 4000 Ε OSD 3000 2000 1000 0 2019 2020 2021E 2024E 77% CAGR 2019-2024 Source: New zoo

According to Newzoo, the Cloud Gaming market will generate revenues of USD 1.57 billion in 2021. The growth will continue to be explosive in the next-coming years reaching USD 6.53 billion in 2024. With an estimated market total gaming market of USD 219 billion the cloud gaming market still is a niche market according to this projection with only a 3% market share.



eSport or Electronic Sport is a term for competitive gameplay of computer and video games. Having tournaments in video games is nothing new, the first more "regulated" tournament was held in 1972, however technology advances in games and streaming platforms have led to a rise in entertainment value for fans and availability to follow matches. The eSport industry is one of the fastest-growing in the world and the business opportunities that will emerge in the coming decade are vast. In this chapter we try to introduce the reader to the industry, explain the ecosystem, show some interesting data, and elaborate on the possible public investment opportunities with eSport exposure.

Definition

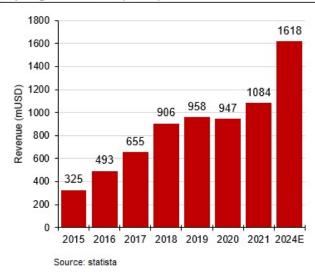
eSports is defined as a competitive and professional gameplay of computer and video games. Not every game is an eSport. Most eSports are multiplayer games and played in teams. The team dynamic makes the games more enjoyable to watch for the audience. Every game franchise that is classified as an eSport shares the characteristics of having a highly strategic-, meta- and technical gameplay and is spectator friendly. The most popular genres for eSport titles are RTS (Real-Time Strategy), ARTS (Action Real-Time Strategy), MOBA (Multiplayer Online Battle Arena), FPS (First Person Shooter), Sports and Fighting.

The pro-gamers that compete in the big leagues are employed by eSport organizations, have a salary, train most often over 10 hours a day, and earns a share of the prize money their team wins.

Growth rate and size

eSports is the fastest growing sports industry in the world. It is estimated that global revenue of the sector will grow to USD 1618m in 2024

eSport global revenue (mUSD)

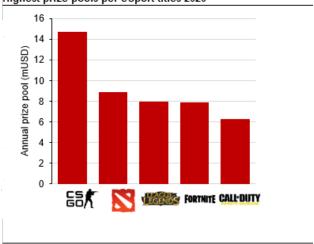


and is expected to grow more than 18% annually over the coming years.

Top games

The top eSport titles during 2020 both in terms of prize pools where Counter-Strike: Global Offensive (FPS), Dota 2 (ARTS), League of Legends (MOBA), Fortnite (Shooter), and Call of Duty: Modern Warfare (Shooter).

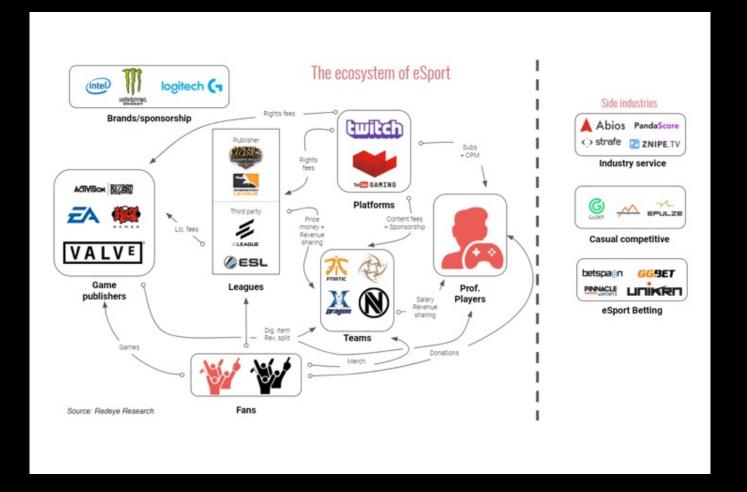
Highest prize pools per eSport titles 2020



Source: THE ESPORTS OBERSEVER

The Ecosystem of eSports

The ecosystem of the eSports industry is both vast and evolving. Here we try to explain how the money and value flow within the value chain and the key stakeholders that exist. We also briefly describe some emerging side industries which are dependent on the primary industry but are growing to a noteworthy size on their own.



Game publishers

The game publishers create and distribute the games. As the publishers own the IP rights, all stakeholders in the ecosystem are dependent on the approval to broadcast, play, or host competitions. These are one of the main differences compared to traditional sports as no one "owns" football or ice-hockey. The IP holders yield the most power and influence within the ecosystem. Some publishers also act as league operators.

Publisher's main income comes

- · Fans who buy games and content
- · License fees from third party league operators
- · Rights fees from different platforms

Leagues/Tournaments

Leagues are run by either the game publishers or third party event organizers. The event organizers gain permission and licenses to broadcast the competitions from the game publishers.

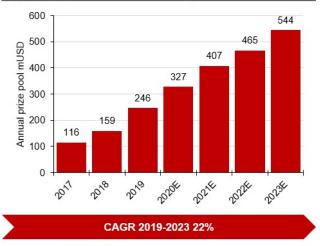
Leagues main income comes from:

- · Sponsors for the events
- · Rights fees from platforms
- Ticket sales

Teams and players

The teams and players are of course central to the eSport ecosystem. A broadcasting game session is a natural part of their career, so players get sponsored by brands. Some teams recruit influencers that only do streaming. eSport teams are run like an enterprise and most often have multiple teams in different sports. The prize money is an essential part of the income for players and the teams as well. The growth of the prize pool is vital for the eSport industry as it will lead to even further professionalism among players and teams.

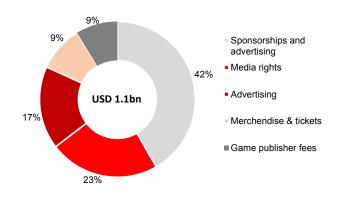
eSport prize pools 2017-2023 (mUSD)



Source: Statista

The global prize pool amounted to approximately USD 407 million during 2021. The annual combined prize pools are estimated to grow at an annual rate of 22% between 2019 to 2023. Cirkeldiagram ej uppdaterat

eSport markt revenue by segment (2019)



Source: statista

Even though the prize money is important the bulk of the income for teams comes from sponsorships. The team's sign brand deals with activation on jerseys, in-stream promotional content, and hardware exclusivity deals.

Teams and players main income comes:

- · Player salary
- · Sponsorship deals
- · Prize pools
- · Digital sales split
- Donations
- Merchandise
- Income from streaming platforms

Brands and advertisers

The most significant revenue contributors within the ecosystem are brands and advertisers with sponsorships.

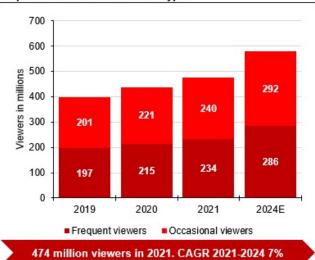
The brands sponsor teams, make hardware deals, buy screen space at streaming platforms, have influencers, buy name placements at tournaments, and more. The increased viewership of eSport is the primary driver of advertising growth.

Fans

The increasing fan base of eSport is the main driver of the revenue within the industry and is the reason why many brands have taken an interest in eSports. The estimated amount of eSport viewers in 2021 amounted to 474 million and is expected to continue to grow in the coming years.

eSport viewers in millions and type

Source: statista



The fans consume eSport both live and online. Many fans, but not all, play games, support teams (often multiple teams), consume ads on streaming platforms for both their favorite streamers and competitions, purchase merchandise, and are exposed to sponsor's products through brand's marketing efforts. Each game most often has a unique community. Many fans participate in direct dialogue with stakeholders through chat systems and forums.

Investment Summary Client companies



November 24 2021

Redeye Rating

Adverty ADVT



Snapshot





Marketplace	Nordic SME
CEO	Tobias Knutsson
Chairman	Joachim Roos
Share information	
Share price (SEK)	5.5
Number of shares (M)	22.6
Market cap (MSEK)	124
Net debt (MSEK)	0

Analyst



Danesh Zare danesh.zare@redeye.se

Conflict of interests

Danesh Zare owns shares in Adverty: No

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye Es	timates
	2019	2020	2021E	2022E
Revenue, MSEK	0	1	7	22
Growth	>100%	>100%	>100%	>100%
EBITDA	-11	-14	-12	-7
EBITDA margin	Neg	Neg	Neg	Neg
EBIT	-11	-14	-13	-9
EBIT margin	Neg	Neg	Neg	Neg
Pre-tax earnings	-11	-14	-13	-9
Net earnings	-11	-14	-11	-7
Net margin	Neg	Neg	Neg	Neg
Dividend/Share	0.00	0.00	0.00	0.00
EPS adj.	-0.91	-0.69	-0.52	-0.35
P/E adj.	0.0	-12.8	-17.0	-25.2
EV/S	56.0	253.7	33.2	10.4
EV/EBITDA	-0.9	-14.0	-18.1	-32.5

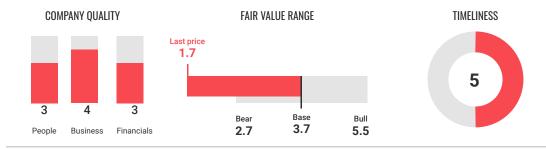
Last updated: 2020-12-11

22.4%	22.4%
12.8%	12.8%
10.2%	10.2%
6.8%	6.8%
3.8%	3.8%
3.2%	3.2%
1.4%	1.4%
1.3%	1.3%
1.0%	1.0%
1.0%	1.0%
	12.8% 10.2% 6.8% 3.8% 3.2% 1.4% 1.3%

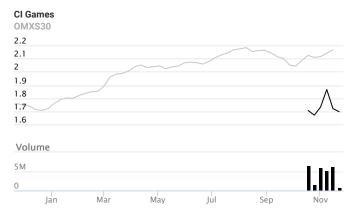
November 24 2021

Redeye Rating

CI Games CIG



Snapshot



Marketplace	Warsaw Stock Exchange		
Share information			
Share price (PLN)	1.7		
Number of shares (M)	182.9		
Market cap (MPLN)	310		
Net debt (MPLN k)	-28,174		

Financials

			Redeye Es	stimates	
	2019	2020	2021E	2022E	2023E
Revenue, MPLN k	47,478	46,010	103,962	71,229	225,250
Growth	>100%	-3.1%	>100%	-31.5%	>100%
EBITDA	20,514	27,829	61,609	47,826	110,428
EBITDA margin	43.2%	60.5%	59.3%	67.1%	49.0%
EBIT	1,047	8,729	38,099	25,057	70,020
EBIT margin	2.2%	19.0%	36.6%	35.2%	31.1%
Pre-tax earnings	219	8,532	40,499	24,757	69,720
Net earnings	-2,877	7,097	32,820	20,053	56,473
Net margin	Neg	15.4%	31.5%	28.2%	25.1%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-0.02	0.04	0.18	0.11	0.31
P/E adj.	-45.3	30.6	9.0	14.7	5.2
EV/S	3.1	4.1	2.5	3.3	0.9
EV/EBITDA	7.2	6.8	4.2	4.9	1.8

Last updated: 2021-11-24

Owner	Equity	Votes

Company description

City Interactive, förkortade CI Games, är verksamma inom teknikbranschen. Bolaget är idag specialiserade inom dataspelsutveckling. Utbudet består av spel inom olika genren och inkluderar exempelvis Sniper Ghost Warrior och Alien Rage, anpassade för Playstation och Xbox. Bolaget grundades under 2002 och har störst verksamhet inom Europa.

Publication date

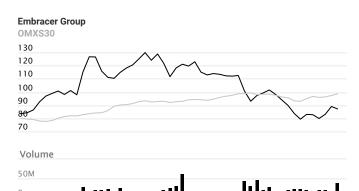
https://www.redeye.se/company/embracergroup November 24 2021

Redeye Rating



Snapshot

Jan



Marketplace	First North Stockholm
CEO	Lars Wingefors
Chairman	Kicki Wallje-Lund
Share information	
Share price (SEK)	90.6
Number of shares (M)	1,015.3
Market cap (MSEK)	91,984
Net debt (MSEK m)	0

Analyst



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Conflict of interests

Tomas Otterbeck owns shares in Embracer Group: Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye Es	timates
	2019	2020	2021E	2022E
Revenue, MSEK m	5,249	9,222	17,321	20,860
Growth	N/A	75.7%	87.8%	20.4%
EBITDA	1,821	3,985	7,554	9,822
EBITDA margin	34.7%	43.2%	43.6%	47.1%
EBIT	1,033	2,870	5,403	7,292
EBIT margin	19.7%	31.1%	31.2%	35.0%
Pre-tax earnings	1,013	2,870	5,103	6,710
Net earnings	790	2,239	3,980	5,234
Net margin	15.1%	24.3%	23.0%	25.1%
Dividend/Share	0.00	0.00	0.00	0.00
EPS adj.	2.99	5.63	3.95	5.19
P/E adj.	12.0	17.4	22.8	17.3
EV/S	1.8	4.2	5.2	4.3
EV/EBITDA	5.2	9.8	12.0	9.2

Last updated: 2021-11-24

Owner	Equity	Votes
Lars Wingefors	23.5%	38.0%
S3D Media Inc	9.9%	13.8%
Cbny-Citibank N.APrivate Bank	7.9%	4.6%
Swedbank Robur Fonder	6.3%	3.7%
Erik Stenberg	5.6%	8.5%
State Street Bank And Trust co	5.3%	3.1%
Handelsbanken Fonder	4.6%	2.7%
Canada Pension Plan Investment Board (CPP)	3.1%	1.8%
ML, Pierce, Fenner & Smith Inc	2.6%	1.5%
Didner & Gerge Fonder	2.6%	1.5%

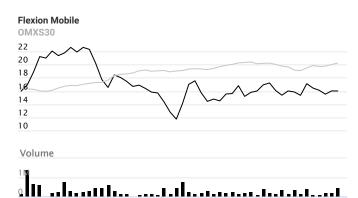
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November 24 2021

Redeye Rating



Snapshot



Marketplace	First North Stockholm
CEO	Jens Lauritzson
Chairman	Carl Palmstierna
Share information	
Share price (SEK)	16.2
Number of shares (M)	50.0
Market cap (MSEK)	808
Net debt (MGBP)	-12

Analyst



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Conflict of interests

 ${\it Tomas\ Otterbeck\ owns\ shares\ in\ Flexion\ Mobile:\ {\it Yes}}$

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye I	Estimates	
	2019	2020	2021E	2022E	2023E
Revenue, MGBP	9	21	31	45	63
Growth	47.5%	>100%	49.9%	45.7%	39.9%
EBITDA	-1	-1	0	2	4
EBITDA margin	Neg	Neg	Neg	6.0%	7.8%
EBIT	-2	-1	-1	1	3
EBIT margin	Neg	Neg	Neg	3.5%	5.1%
Pre-tax earnings	-2	-1	-1	1	3
Net earnings	-2	-1	-1	1	2
Net margin	Neg	Neg	Neg	3.2%	4.6%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-0.07	-0.03	-0.03	0.03	0.06
P/E adj.	-161.2	-418.5	-620.5	567.0	280.0
EV/S	47.6	24.2	25.6	17.5	12.4
EV/EBITDA	-275.0	-482.5	-898.2	293.5	160.4

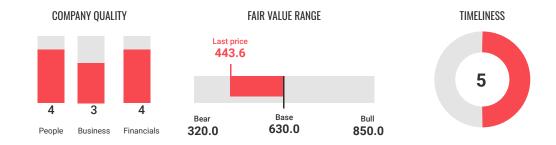
Last updated: 2021-11-24

Owner	Equity	Votes
Mobile Sensations Ltd	22.0%	22.0%
Carl Palmstierna	6.8%	6.8%
Fredrik Palmstierna	4.6%	4.6%
Odey Asset Management LLP	4.4%	4.4%
Joachim Odqvist	3.1%	3.1%
eQ Asset Management Oy	3.1%	3.1%
Sjätte AP-fonden	2.4%	2.4%
Avanza Pension	2.1%	2.1%
Aktia Asset Management	0.8%	0.8%
Claes Kalborg	0.3%	0.3%

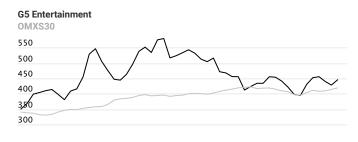
Publication date

https://www.redeye.se/company/ g5-entertainment November 24 2021

Redeye Rating



Snapshot





Marketplace	NASDAQ Stockholm
CEO	Vladislav Suglobov
Chairman	Petter Nylander
Share information	
Share price (SEK)	443.6
Number of shares (M)	9.1
Market cap (MSEK)	4,039
Net debt (MSEK)	-188

Analyst



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Conflict of interests

Tomas Otterbeck owns shares in G5 Entertainment: Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye B	Estimates	
	2019	2020	2021E	2022E	2023E
Revenue, MSEK	1,233	1,356	1,353	1,520	1,660
Growth	-15.0%	9.9%	-0.2%	12.3%	9.2%
EBITDA	171	310	361	459	501
EBITDA margin	13.9%	22.9%	26.7%	30.2%	30.2%
EBIT	59	189	222	274	346
EBIT margin	4.8%	14.0%	16.5%	18.1%	20.9%
Pre-tax earnings	59	189	223	277	350
Net earnings	48	165	210	221	280
Net margin	4.0%	12.2%	15.6%	14.6%	16.9%
Dividend/Share	2.50	2.50	6.25	7.00	8.00
EPS adj.	5.36	18.14	23.13	24.37	30.84
P/E adj.	18.9	22.3	22.7	21.6	17.0
EV/S	0.6	2.6	3.3	2.8	2.5
EV/EBITDA	4.5	11.3	12.5	9.4	8.1

Last updated: 2021-11-24

Owner	Equity	Votes
Wide Development Ltd	6.6%	6.8%
Purple Wolf Ltd	5.7%	5.9%
G5 Entertainment AB	4.7%	2.2%
Tommy Svensk	4.4%	4.6%
Avanza Pension	4.3%	4.4%
Proxima Ltd	4.1%	4.2%
Swedbank Robur Fonder	3.2%	3.2%
Aktia Asset Management	2.0%	2.0%

Media and Games Inves...

Company page

https://www.redeye.se/company/media-and-games-invest

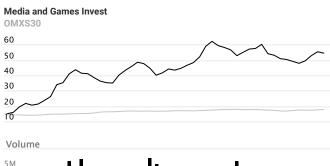
Publication date

November 24 2021

Redeye Rating



Snapshot





Marketplace	First North Stockholm
CEO	Remco Westermann
Chairman	Remco Westermann
Share information	
Share price (SEK)	51.8
Number of shares (M)	149.7
Market cap (MSEK)	7,746
Net debt (MEUR m)	0

Analyst



Danesh Zare danesh.zare@redeye.se

Conflict of interests

Danesh Zare owns shares in Media and Games Invest: Yes

Redeve performs/have performed services for the Company and receives

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye I	Estimates	
	2019	2020	2021E	2022E	2023E
Revenue, MEUR m	84	140	247	311	364
Growth	N/A	67.1%	76.0%	26.0%	17.2%
EBITDA	15	26	63	96	110
EBITDA margin	18.5%	18.9%	25.8%	31.0%	30.2%
EBIT	5	11	35	62	77
EBIT margin	6.0%	7.8%	14.5%	20.1%	21.3%
Pre-tax earnings	5	3	16	56	70
Net earnings	1	2	13	50	63
Net margin	1.5%	1.9%	5.3%	16.2%	17.3%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	0.06	0.06	0.13	0.36	0.45
P/E adj.	0.0	37.9	39.5	14.3	11.5
EV/S	0.0	1.4	3.6	2.9	2.5
EV/EBITDA	18.0	31.5	14.1	9.3	8.1

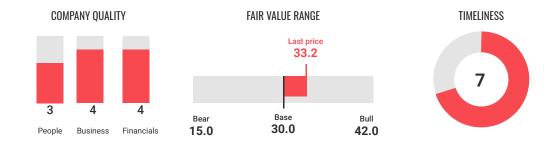
Last updated: 2021-11-24

Owner	Equity	Votes
Remco Westermann	33.5%	33.5%
Oaktree Capital Management LP	9.1%	9.1%
Clearstream Banking S.A. W8imy	2.5%	2.5%
Luxembourg Branch, UBS Europe Se	1.8%	1.8%
UBS Switzerland AG	1.5%	1.5%
Nordnet Pensionsförsäkring	1.5%	1.5%
Avanza Pension	1.2%	1.2%
Skandia Fonder	0.7%	0.7%
Atlant Fonder AB	0.6%	0.6%
Finlandia Rahastoyhtiö Oy	0.6%	0.6%

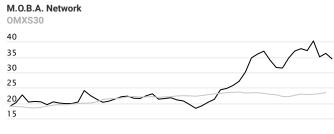
https://www.redeye.se/company/m-o-b-a-network

November 24 2021

Redeye Rating



Snapshot





Marketplace	First North Stockholm
CEO	Björn Mannerqvist
Chairman	Fredrik Burvall
Share information	
Share price (SEK)	33.2
Number of shares (M)	22.4
Market cap (MSEK)	743
Net debt (MSEK)	-21

Analyst



Danesh Zare danesh.zare@redeye.se

Conflict of interests

Danesh Zare owns shares in M.O.B.A. Network: No

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye E	stimates	
	19/20	20/21	21/22E	22/23E	23/24E
Revenue, MSEK	23	32	40	56	72
Growth	N/A	42.4%	25.4%	40.1%	28.3%
EBITDA	12	15	20	28	37
EBITDA margin	52.2%	45.4%	49.2%	50.3%	50.8%
EBIT	11	13	17	25	33
EBIT margin	47.6%	40.3%	42.6%	44.5%	46.1%
Pre-tax earnings	10	13	17	25	33
Net earnings	6	8	11	16	21
Net margin	28.8%	24.9%	27.1%	28.5%	29.6%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	4.90	4.68	6.42	9.29	12.40
P/E adj.	23.5	42.4	35.1	24.3	18.2
EV/S	7.7	9.9	8.9	6.1	4.5
EV/EBITDA	14.7	21.8	18.1	12.2	8.8

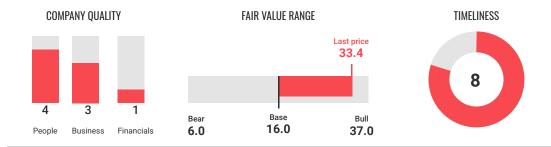
Last updated: 2021-02-27

28.5% 22.3%	28.5%
22.3%	
	22.070
12.9%	12.9%
9.3%	9.3%
9.2%	9.2%
3.3%	3.3%
2.9%	2.9%
2.5%	2.5%
1.9%	1.9%
	2.9% 2.5%

https://www.redeye.se/company/nitrogames

November 24 2021

Redeye Rating



Snapshot

Nitro Games OMXS30 30 20 10 Volume



Marketplace	First North Stockholm
CEO	Jussi Tähtinen
Chairman	Johan Biehl
Share information	
Share price (SEK)	33.4
Number of shares (M)	10.7
Market cap (MSEK)	356
Net debt (MEUR)	0

Analyst



Danesh Zare danesh.zare@redeye.se

Conflict of interests

Danesh Zare owns shares in Nitro Games: Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye Es	timates
	2019	2020	2021E	2022E
Revenue, MEUR	1	1	2	3
Growth	-62.6%	50.6%	52.0%	64.0%
EBITDA	-3	-3	-2	-1
EBITDA margin	Neg	Neg	Neg	Neg
EBIT	-3	-3	-2	-1
EBIT margin	Neg	Neg	Neg	Neg
Pre-tax earnings	-3	-3	-2	-1
Net earnings	-3	-3	-2	-1
Net margin	Neg	Neg	Neg	Neg
Dividend/Share	0.00	0.00	0.00	0.00
EPS adj.	-0.66	-0.35	-0.24	-0.14
P/E adj.	-1.2	-2.3	-3.3	-5.6
EV/S	4.9	4.4	3.9	3.4
EV/EBITDA	-1.2	-1.9	-3.9	-7.7

Last updated: 2021-01-08

Owner	Equity	Votes
Egmont Holding Oy	40.0%	40.0%
Avanza Pension	4.9%	4.9%
Johan Biehl	4.7%	4.7%
Ludvig Strigéus	2.8%	2.8%
Matti Nikkola	2.5%	2.5%
Antti Villanen	1.6%	1.6%
OP Fonder	1.3%	1.3%

Remedy Entertainment REMEDY

Company page

https://www.redeye.se/company/remedyentertainment

Publication date

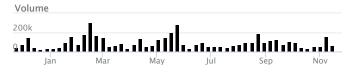
November 24 2021

Redeye Rating



Snapshot

Remedy Entertainment OMXS30 45 40 35 30 25



Marketplace	First North Finland
CEO	Tero Virtala
Chairman	Markus Mäki
Share information	
Share price (EUR)	37.9
Number of shares (M)	13.3
Market cap (MEUR)	503
Net debt (MEUR)	-24

Analyst



Tomas Otterbeck tomas.otterbeck@redeye.se

Conflict of interests

Tomas Otterbeck owns shares in Remedy Entertainment: Yes
Redeye performs/have performed services for the Company and receives/have
received compensation from the Company in connection with this.

Financials

			Redeye E	stimates	
	2019	2020	2021E	2022E	2023E
Revenue, MEUR	33	41	47	58	67
Growth	64.6%	23.9%	13.9%	23.9%	15.5%
EBITDA	8	14	15	20	26
EBITDA margin	26.7%	34.8%	34.0%	34.5%	40.0%
EBIT	8	13	15	19	26
EBIT margin	24.3%	32.2%	33.7%	34.1%	39.6%
Pre-tax earnings	8	12	15	19	26
Net earnings	6	10	12	15	21
Net margin	20.4%	25.2%	27.0%	27.3%	31.7%
Dividend/Share	0.10	0.11	0.15	0.16	0.22
EPS adj.	0.56	0.86	0.95	1.19	1.60
P/E adj.	20.5	45.5	40.4	32.2	24.0
EV/S	3.6	11.1	10.4	8.3	7.0
EV/EBITDA	13.4	31.9	30.6	24.0	17.5

Last updated: 2021-11-24

Owner	Equity	Votes
Markus Mäki	24.0%	24.0%
Accendo Capital	14.0%	14.0%
Sami Järvi	4.2%	4.2%
Tencent	3.8%	3.8%
Working Capital Management Pte Ltd	3.4%	3.4%
Tero Virtala	2.3%	2.3%
Saku Lehtinen	1.8%	1.8%
Evli Fonder	1.8%	1.8%

https://www.redeye.se/company/starbreeze

November 24 2021

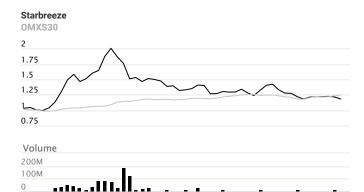
Redeye Rating



Nov

Snapshot

Jan



Jul

Marketplace	NASDAQ Stockholm
CEO	Tobias Sjögren
Chairman	Torgny Hellstöm
Share information	
Share price (SEK)	1.1
Number of shares (M)	724.6
Market cap (MSEK)	804
Net debt (MSEK)	135

Analyst



Tomas Otterbeck tomas.otterbeck@redeye.se

Conflict of interests

Tomas Otterbeck owns shares in Starbreeze: Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye	Estimates	
	2019	2020	2021E	2022E	2023E
Revenue, MSEK	280	118	126	127	974
Growth	-20.0%	-57.9%	7.0%	0.5%	>100%
EBITDA	-116	43	1	92	396
EBITDA margin	Neg	36.4%	1.4%	72.4%	40.7%
EBIT	-504	4	-50	38	339
EBIT margin	Neg	3.8%	Neg	30.2%	34.8%
Pre-tax earnings	-448	-130	-90	46	339
Net earnings	-397	-130	-93	46	339
Net margin	Neg	Neg	Neg	36.4%	34.8%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-1.20	-0.19	-0.13	0.06	0.47
P/E adj.	-1.0	-5.3	-10.6	21.6	2.9
EV/S	1.2	7.2	7.2	6.2	0.6
EV/EBITDA	-2.9	19.8	512.7	8.6	1.4

Last updated: 2021-11-24

Owner	Equity	Votes
Swedbank Robur Fonder	14.8%	13.1%
Digital Bros	12.0%	28.9%
Första AP-fonden	10.2%	9.6%
Avanza Pension	5.5%	3.1%
Fjärde AP-fonden	3.1%	9.6%
Nordnet Pensionsförsäkring	1.6%	1.0%
Handelsbanken Fonder	0.9%	0.3%
Deka Investments	0.8%	0.3%

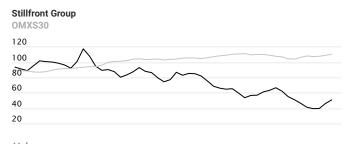
https://www.redeye.se/company/stillfront-group

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Redeye Rating



Snapshot





Marketplace	NASDAQ Stockholm
CEO	Jörgen Larsson
Chairman	Jan Samuelson
Share information	
Share price (SEK)	50.7
Number of shares (M)	387.1
Market cap (MSEK)	19,608
Net debt (MSEK)	1,814

Financials

			Redeye E	stimates	
	2019	2020	2021E	2022E	2023E
Revenue, MSEK	2,175	4,334	5,879	6,452	7,142
Growth	48.4%	99.3%	35.6%	9.8%	10.7%
EBITDA	742	1,552	1,995	2,342	2,622
EBITDA margin	34.1%	35.8%	33.9%	36.3%	36.7%
EBIT	518	992	1,073	1,378	1,630
EBIT margin	23.8%	22.9%	18.3%	21.4%	22.8%
Pre-tax earnings	454	799	848	1,156	1,409
Net earnings	341	580	614	867	1,056
Net margin	15.7%	13.4%	10.4%	13.4%	14.8%
Dividend/Share	1.35	1.67	1.71	2.42	2.95
EPS adj.	1.35	1.67	1.71	2.42	2.95
P/E adj.	N/A	59.7	48.0	34.0	27.9
EV/S	N/A	8.4	5.6	4.9	4.3
EV/EBITDA	N/A	23.5	16.5	13.6	11.7

Last updated: 2021-11-24

Owner	Equity	Votes
Laureus Capital GmbH	12.3%	12.3%
Swedbank Robur Fonder	10.3%	10.3%
SEB Fonder	7.8%	7.8%
AMF Pension & Fonder	5.1%	5.1%
Handelsbanken Fonder	5.1%	5.1%
Första AP-fonden	3.1%	3.1%
Fidelity Investments (FMR)	2.5%	2.5%
Man Hay Tam	1.6%	1.6%
TIN Fonder	1.3%	1.3%
Avanza Pension	1.3%	1.3%

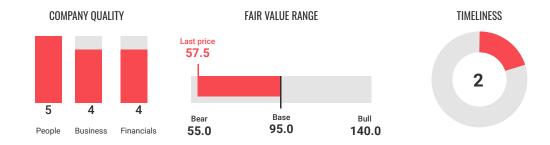
Company page

https://www.redeye.se/company/thunderful-

Publication date

November 24 2021

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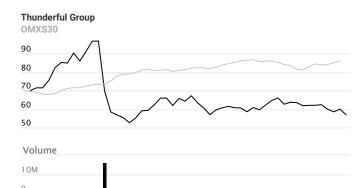


Sep

Nov

Snapshot

Jan



Marketplace	First North Stockholm
CEO	Brjann Sigurgeirsson
Chairman	Mats Lönnqvist
Share information	
Share price (SEK)	57.5
Number of shares (M)	69.6
Market cap (MSEK)	4,003
Net debt (MSEK)	-305

May

Jul

Analyst



Danesh Zare danesh.zare@redeye.se

Conflict of interests

Danesh Zare owns shares in Thunderful Group: Yes

Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.

Financials

			Redeye E	stimates	
	2019	2020	2021E	2022E	2023E
Revenue, MSEK	2,116	3,082	2,921	3,414	3,425
Growth	9.3%	45.6%	-5.2%	16.9%	0.3%
EBITDA	229	277	386	486	525
EBITDA margin	10.9%	9.0%	13.2%	14.2%	15.4%
EBIT	209	215	274	388	420
EBIT margin	9.9%	7.0%	9.4%	11.4%	12.3%
Pre-tax earnings	209	173	244	388	420
Net earnings	167	137	208	307	332
Net margin	7.9%	6.6%	7.6%	9.0%	9.7%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.		3.91	3.26	4.45	4.82
P/E adj.	N/A	20.7	17.8	13.0	12.0
EV/S	N/A	1.7	1.3	1.0	0.9
EV/EBITDA	N/A	18.9	10.0	7.3	6.1

Last updated: 2021-11-24

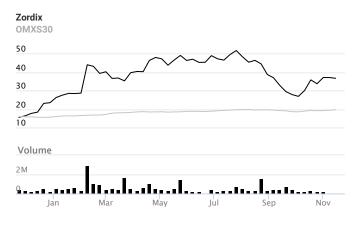
Owner	Equity	Votes
Bergsala Holding AB	24.9%	24.9%
Swedbank Robur Fonder	8.2%	8.2%
Brjann Sigurgeirsson	6.3%	6.3%
Klaus Lyngeled	6.2%	6.2%
Knutsson Holdings AB	2.9%	2.9%
Emid Invest AB	2.5%	2.5%
Forminx Invest AB	2.5%	2.5%
Hinapulkka & Allihuuppa Oy	2.4%	2.4%



Redeye Rating



Snapshot



Marketplace	First North Stockholm
CEO	Matti Larsson
Chairman	Malin Jonsson
Share information	
Share price (SEK)	40.3
Number of shares (M)	27.6
Market cap (MSEK)	1,113
Net debt (MSEK)	-29

Financials

			Redeye E	stimates	
	2019	2020	2021E	2022E	2023E
Revenue, MSEK	13	11	360	580	653
Growth	2.4%	-11.2%	>100%	61.1%	12.5%
EBITDA	2	6	41	89	120
EBITDA margin	17.1%	60.2%	11.6%	15.5%	18.4%
EBIT	1	4	28	65	92
EBIT margin	9.5%	43.1%	7.8%	11.2%	14.1%
Pre-tax earnings	1	4	6	35	62
Net earnings	1	3	1	28	49
Net margin	9.1%	31.3%	0.3%	4.8%	7.6%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	0.09	0.19	0.04	1.08	1.91
P/E adj.	86.1	125.3	800.3	30.7	17.2
EV/S	7.2	36.7	2.5	1.5	1.3
EV/EBITDA	42.3	61.0	21.5	9.9	7.2

Last updated: 2021-11-16

Equity	Votes
18.1%	51.6%
11.4%	6.7%
7.1%	4.2%
6.9%	4.1%
6.9%	4.1%
6.3%	3.7%
5.7%	3.2%
5.3%	3.0%
4.2%	2.5%
3.8%	2.3%
	18.1% 11.4% 7.1% 6.9% 6.9% 6.3% 5.7% 5.3% 4.2%

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