

# INTERIMIREPORT



# **Time to deliver**

India leads the world when it comes to real-time payments. The volumes are already huge and it will only accelerate further. Key drivers for the future are offline payments and central bank involvement via regulatory guidelines and innovation support. Crunchfish has the offline payment solution required and we are ready to deliver. Within Gesture Interaction our XR Skeleton Stereo is getting a lot of attention and is being delivered to leading computer vision players.

A leading bank in India has started the integration of Digital Cash and we are on track with a major e-wallet provider as their senior management expresses keen interest in the solution.

Crunchfish has a unique offline payment solution that we have presented to the Reserve Bank of India (RBI) in Q2 by participating in their Hackathon and also applying for guidance and support as part of RBI regulatory sandbox to demonstrate offline retail payments together with two banks in India. We were finalists in the Hackathon, which gave us a chance to present directly to RBI. This has been beneficial in the application to the RBI regulatory sandbox. Integration has started as we are waiting for final approval and announcement from RBI that the project is admitted into the regulatory sandbox. This is very important for our ambition making Digital Cash an eco-system innovation. Crunchfish is very committed to the Indian market which is demonstrated by the subsidiary we opened in India during the quarter.

### Gesture

Crunchfish XR Skeleton Stereo is the company's latest and most advanced software to date and provides support for two-hand interaction and the use of two camera sensors simultaneously. Having two sensors in AR smart glasses is important to achieve superior user interaction from a wider field of view. Crunchfish is probably the only independent provider that delivers a gesture interaction solution for two camera sensors, and it has certainly been noticed by leading computer vision player. Most notable was the agreement with Lenovo which gives them the right to use Crunchfish's technology – XR Skeleton Stereo – in AR glasses and smart glasses worldwide. Recently, we also announced a contract with Ximmerse for the same product and we expect to deliver more given the prospect list.

### Webinars

We continued delivering webinars in the Survival of the fittest series during the quarter and delivered 22 in total from the beginning of the year. This provides a great insight to our products and we have therefore provided the whole list of webinars in this quarterly report. We will take a break now from the weekly webinars and intend to come back with an updated format later.



### Financing

The warrant incentive program 2018/2022 for employees was closed in June with 511 000 new shares issued providing Crunchfish with 4,6 MSEK in cash. The next financing round is the publicly traded warrant program TO9, it will close in

December 2022 and involves 1,7m warrants which may be converted to shares at a 30% discount on the average share price during the two last weeks of November 2022, with a maximum conversion price set at 37,50 SEK.



### Crunchfish group

#### 15/7 2022

New number of shares and votes in Crunchfish AB (publ). The number of shares and votes in Crunchfish AB (publ) ("Crunchfish" or the "Company") has increased by 511,000 shares as a result of the exercise of warrants within the framework of the Company's incentive program 2018/2022. This information was only available in Swedish.

### 18/5 2022

**Crunchfish publishes interim report for Q1 2022.** The materials are available in English.



### 25/4 2022

**Crunchfish published annual report for 2021.** The materials are only available in Swedish.

### **Digital Cash**

### 24/8 2022

**Crunchfish Digital Cash integrated with Sirius' Payment Ecosystem Solution**. Crunchfish and Sirius join forces to offer banks and payment service providers an off-the-shelf integration of Crunchfish Digital Cash into Sirius' Payment Ecosystem Solution running on their Multiverse platform, enabling fast and easy deployment of both online and offline payments.

### 21/6 2022

Crunchfish Digital Cash in G20 TechSprint 2022. Crunchfish Digital Cash is shortlisted in the G20 TechSprint 2022 to advance to the prototype development stage. The focus is on solving technology challenges related to wholesale and retail Central Bank Digital Currencies (CBDCs).

### 30/5 2022

**Crunchfish finalist in Reserve Bank of India's Global Hackathon for Digital Cash on non-mobile devices.** Crunchfish was a finalist for its innovation Digital Cash on non-mobile devices, in the global hackathon "HARBINGER 2021 – Innovation for Transformation", organized by RBI, the Reserve Bank of India. The overall objective of the hackathon was to identify and enable innovations with the potential to transform the digital payments landscape.

### 27/5 2022

Crunchfish opens a subsidiary in India. No. 1 real-time payments market in the world. Crunchfish Digital Cash AB expands its operation with the recently opened subsidiary Crunchfish India Private Limited Company. Digital payments are growing very fast in India and are likely to surpass 100 billion transactions already in 2022 and projected to go beyond 500 billion in 2025. The Crunchfish India subsidiary will be strengthen Crunchfish's market presence in India and demonstrate its commitment to the market.

### 23/5 2022

Crunchfish and T-Hub launches Augmenting Payment Accelerator program. Crunchfish in partnership with T-Hub today officially launched an Augmenting Payment Accelerator program at an event at the Swedish embassy in Delhi.

#### 1/4 2022

Crunchfish made Digital Cash quantum safe. Crunchfish has applied for a patent that makes Digital Cash resistant to attacks by classical and quantum computers, keeping payment information secure even after large-scale quantum computers has been built.

### **Gesture Interaction**

### 17/8 2022

Crunchfish signs agreement with Ximmerse for XR Skeleton Stereo. Crunchfish signed a commercial license agreement with Guangdong Virtual Reality Technology CO LTD ("Ximmerse"), to provide Ximmerse's next generation ARglasses with Crunchfish's latest hand tracking technologies – XR Skeleton and XR Skeleton Stereo. Ximmerse will integrate Crunchfish's software in all new models of AR-glasses to enable touchless interaction. It is a 3-years agreement, with a business model that includes an initial fee of \$25,000US as well as a running royalty per produced unit that includes Crunchfish's software.

### 27/6 2022

**Crunchfish receives US patent for visual gesture cues in AR/VR.** Crunchfish has received a Notice of Allowance for a US patent for providing visual cues that helps the user understand what gesture can be used to activate a virtual object in AR/VR or mixed reality, strengthening the patent

### 21/6 2022

portfolio in the key US-market.

### Crunchfish Gesture Interaction shines at VivaTech

2022. Crunchfish presented its high-performance Gesture Interaction Platform at VivaTech 2022 on June 17th in Paris. During the presentation, lead by the leading global smart device brand OPPO, Crunchfish unlocked the potential for different applications, going from AR/VR devices to all the upcoming features in automotive.



### 14/6 2022

### Crunchfish presents at VivaTech 2022 together with OPPO.

Crunchfish Gesture Interaction AB ("Crunchfish") has been invited by OPPO – a leading global smart device brand – to present at VivaTech 2022 on June 17th in Paris. During the event, OPPO will share details of its ongoing OPPO Research Institute Innovation Accelerator program and introduce Crunchfish as one of the innovative technology companies that work with solutions suitable for areas of accessible technology and digital health.

### 31/5 2022

**Crunchfish signs agreement with Lenovo for XR Skeleton Stereo.** Crunchfish signed a commercial license agreement with Lenovo, to provide Lenovo's new AR-glasses with Crunchfish's latest hand tracking technology – XR Skeleton Stereo. Lenovo has integrated the software in their AR glasses to enable touchless interaction. It is a 2-years agreement, with a business model that includes an upfront fee as well as a running royalty per produced unit that includes Crunchfish's software.

#### 7/4 2022

**Crunchfish Gesture Interaction showcase image domain transfer tool** for deep learning that enables the use of synthetic image data to generate annotations on real images – image domain transfer. Examples of image domains are different camera sensors such as color, greyscale and Infrared cameras. The new tool is part of a comprehensive image data management system that includes all steps from creating synthetic image data to transfer of real-life images for deep learning.

### Webinars

#### April 2022

Crunchfish announced April weekly Survival Of The Fittest webinars.

### 22#13

**Crunchfish Digital Cash is highly resistant to the risks associated with double spending**, a major problem in offline payments. Digital Cash provides multiple protection mechanisms for the bearer instruments and the Digital Cash message carrying offline payments as well as in the backend.

### 22#14

Training data is a prerequisite for machine learning. Crunchfish's highly automated process for generating training data enables Crunchfish to come up with gesture interaction solutions extremely quickly in multiple computer vision scenarios.

### 22#15

Central Bank Digital Currency (CBDC) is being evaluated around the world where cash-like features such as ease of use, offline-, inclusive- and private- payments are key requirements. Indian ecosystem innovation pioneer T-Hub, in collaboration with Crunchfish, will arrange a unique accelerator program enabling fintech companies to create innovative CBDC products and services by exploiting Crunchfish Digital Cash.

### 22#16

Crunchfish DNA – Adaptive, Disruptive, Augmentative webinar explained how, as a deep tech company, Crunchfish has a track record of being remarkably responsive to fastmoving industries by offering game-changing platforms.

### May 2022

Crunchfish presented May's schedule of the webinar series Survival Of The Fittest, with moderator Johan Wester.

### 22#17

Crunchfish patents and innovation were the topics of the 17th Survival of the fittest webinar. The webinar covered Crunchfish's extensive patents within Digital Cash and its ability to innovate and be creative.

### 22#18

Crunchfish Neural Networks and Deep Learning were the topics of the 18th Survival of the fittest webinar. The webinar covered **Crunchfish's Skeleton platform that emulates the behavior of the human brain** to be used for Gesture Interaction by exploiting training data for Deep Learning using Neural Networks.

#### 22#19

Digital Cash India was the topic of the 19th Survival of the fittest webinar. The webinar covered India's fast-growing digital payments market and how Crunchfish could solve many of the key challenges faced in India's payment ecosystem through offline payments with infinite load possibilities.



#### 22#20

Crunchfish's chairman presented Granitors' strategic platform for business development followed by a panel discussion with board members at Crunchfish.

#### June 2022

Crunchfish announced the final month of the webinar series Survival Of The Fittest, with moderator Johan Wester.

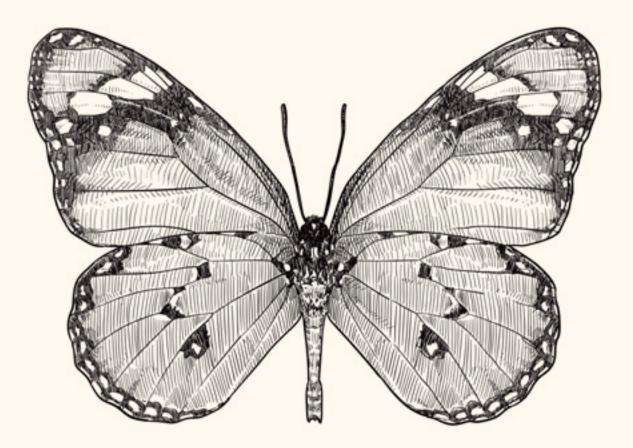
#### 22#21

**Crunchfish's contribution to the global hackathon RBI Harbinger** was presented at the 21st Survival of the fittest webinar. Crunchfish's solution enables cards and wearables to have contactless interaction with mobiles. This is important for financial inclusion as non-mobile devices interact with stored values on mobiles, even in an offline mode.

### 22#22

Crunchfish has a strong trend of unique innovations driven by creativity and curiosity. The 22nd Survival of the fittest webinar featured Crunchfish's patent development in the area of Gesture Interaction.

# Digital Cash



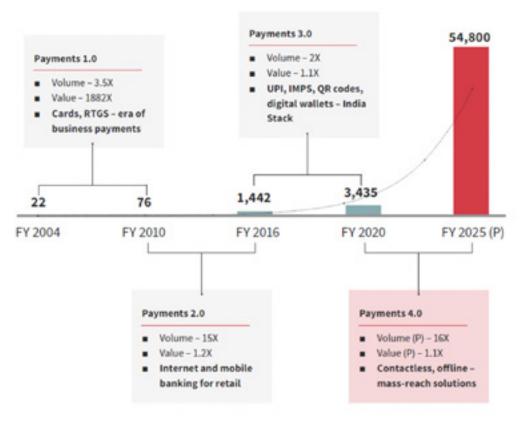


# Market Update

Crunchfish moves positions forward in both India and Southeast Asia with the Digital Cash platform.

### India

India ranks No. 1 in the world for real-time digital payments and the growth will accelerate further. The numbers of transactions are projected to reach a staggering 500 billion in 2025. Focus is on mass-reach solutions on interoperable platforms where offline payments will be a key component. Policy and regulatory support from government and the Reserve Bank of India will drive the next leap of growth. In India, Crunchfish is working on two key projects. A leading e-wallet has a keen interest in Digital Cash. Senior management is in favor of the solution and has asked the management team to broaden the scope of the Digital Cash to additional use cases and present back in August. Overall, the project proceeds according to plan with the change that the customer has requested Crunchfish's Bluetooth



Numbers in crore = 10 million transactions.

Source NASSCOM: India Digital Payments 4.0 – Sprinting towards a world-leading digital payments ecosystem in 2025.

interaction Proxilink for proximity interaction instead of ultrasound. This has been delivered and tested.

The other project is much larger as we are designing a solution providing Crunchfish Digital Cash for offline payments to multiple banks and payment providers in India. It is led by a leading bank in India and they have involved the Reserve Bank of India (RBI) and their regulatory sandbox as a prospect of making Digital Cash a payment eco-system innovation. The integration work has started.

Crunchfish was a finalist for its innovation Digital Cash on non-mobile devices, in the global hackathon "HARBINGER 2021 – Innovation for Transformation", organized by RBI. The overall objective of the hackathon was to identify and enable innovations with the potential to transform the digital payments landscape. Crunchfish participated for the problem statement – Non Mobile Digital Payment Solutions. Crunchfish was invited as one of 25 finalists from 363 entries to present and demonstrate their submitted solutions for an RBI jury in Bengaluru on May 26th-27th.

Crunchfish in partnership with T-Hub, an innovation hub and ecosystem enabler, based out of Hyderabad India, officially launched the Augmenting Payment Accelerator program at an event at the Swedish embassy in Delhi May 23rd.

To expand operations in India Crunchfish opened the subsidiary Crunchfish India Private Limited Company. The Crunchfish India subsidiary will strengthen Crunchfish's market presence and demonstrate its commitment to the Indian market.

### Southeast Asia

Southeast Asia has a large and young population with a big appetite for new technology. Mobile payments are booming in the region. The number of e-Wallets is expected to grow by over 300% between 2020 and 2025, reaching up to 440 million across Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. It's the fastest growing region for e-Wallets in the world<sup>1</sup>.

A partnership was established with Sirius, a financial infrastructure provider based in Southeast Asia. Sirius have integrated Digital Cash into its payment ecosystem solution to enable banks and payment services to perform offline payments. The solution will make it much faster and easier for banks and payments services to deploy Digital Cash. These benefits are similar to the benefits of the issuance-, acquiring- and payment processing- platform that are being developed in the RBI project, as described in the next two pages. The joint solution will be presented and demonstrated to existing customers and new prospects, with focus in Asia and South America where Sirius currently is operating.

The close collaboration with V-Key around sales and marketing in Southeast Asia continues. Interest is high in the region, especially in the Philippines, Vietnam and Indonesia. The project in Vietnam with one of the leading e-wallets continues, but with slower progress than expected. New Digital Cash features were delivered during Q2, which are being tested and evaluated by the customer.

The G20 TechSprint 2022, launched by the BIS Innovation Hub and Bank Indonesia, focus on CBDCs, and particularly on challenges and opportunities around three problem statement categories deemed to be of high priority areas by the global central banking and regulatory community related to wholesale and retail CBDCs. Crunchfish Digital Cash was shortlisted by the organizers to advance to the prototype development stage. In total twenty-one teams have been shortlisted, out of almost 100 submitting teams.

1 The Business Times, referring to Juniper Research

# A leading Indian bank with RBI

A key project is providing Crunchfish Digital Cash for offline payments to multiple banks and payment providers in India. It is led by a leading bank in India and they have involved the Reserve Bank of India (RBI) and their regulatory sandbox as a prospect of making Digital Cash an payment eco-system innovation. The integration project has started.



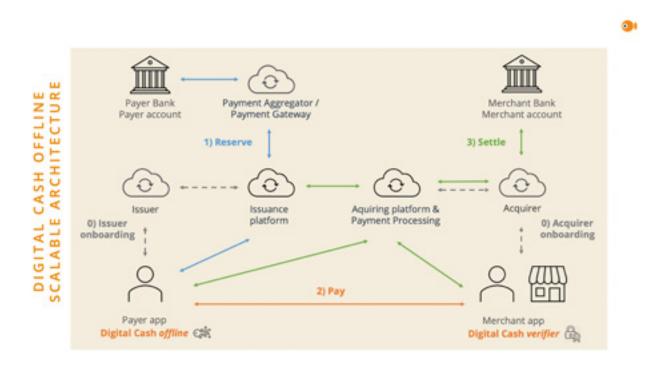
A leading bank in India expressed keen interest in Crunchfish Digital Cash platform already in Q1. They were engaged in offloading their core banking system from small transactions by a new feature called UPI Lite - a solution that allows UPI transactions to be executed without involving the core banking system. They realized though that Digital Cash online solves this in a superior way as it allows multiple payments apps to share the same balance instead of having one balance per UPI app. As Digital Cash online also links to Digital Cash offline they expressed an interest for a proof-ofconcept and pilot.

In Q2 the Reserve Bank of India (RBI) requested innovations for offline retail payments from banks and the bank decided then to respond with Crunchfish Digitial Cash offline solution as their proposal for offline retail payments. Although this complicated the project, we saw it as positive as it increases the chance of making Digital Cash an ecosystem innovation with RBI's involvement. Crunchfish mentioned this project in the Digital Cash market update in the Q1 report.

During Q2 the project followed RBI's three step process for entry to the regulatory sandbox. It has passed RBI's technical review, as well as the financial product review and the final review by RBI's department heads. In the last review it was suggested that another bank should be involved in the project as well to showcase offline payment in between banks. This is yet another expansion of the project, and again a positive one as we involve another bank and their customers piloting payments between banks. The integration has started whilst awaiting final approval and announcement by RBI.

### Scalable architecture

Crunchfish Digital Cash Offline solution is delivered as software development kits (SDKs) that are integrated with mobile apps and uses application programming interfaces (APIs) to communicate with backend functionality. Instead of requiring new customers to develop the backend themselves, the bank has engaged an experienced fintech provider to deliver the backend functionality as a platform. This issuance-, acquiring- and payment processing- platform makes onboarding of banks and payments services much easier and provides a more scalable architecture. This is a key issue to make Digital Cash an ecosystem innovation in India. There are several advantages with this scalable architecture:



**1)** Onboarding for issuers and acquirers is much easier. There are only app integrations of Digital Cash SDKs in the payer / merchant app and backend integration between the issuer and issuance platform / the acquirer and the acquiring platform. These integrations are fast and enables Digital Cash as a value added service.

**2)** Crunchfish Digital Cash SDKs are only communicating with the issuance-, acquiring- and payment processing- backend, which means only a single backend integration for Crunchfish.

**3)** The Issuance platform provides the issuer with operational support regarding issuing Digital Cash as a means of payment. Reserving money as Digital Cash may be done from any payment rail by an interface to Payment Aggregator / Payment Gateway.

**4)** The Aquiring platform provides the acquirer with operational support regarding receiving Digital Cash as a means of payment. Settlement is done by debiting the issuance platform and sending a settlement file to the acquirer.

**5)** The Payment processor enables an open-loop Digital Cash payment infrastructure where issuers and acquirers may onboard independently of each other.

**6)** The Digital Cash payment eco-system grows incrementally with every onboarded issuer / acquirer.

This scalable architecture with an issuance-, acquiring- and payment processor-backend will be very important for onboarding additional banks and payment services in India in order to make Digital Cash an ecosystem innovation for India.

# Gesture Interaction



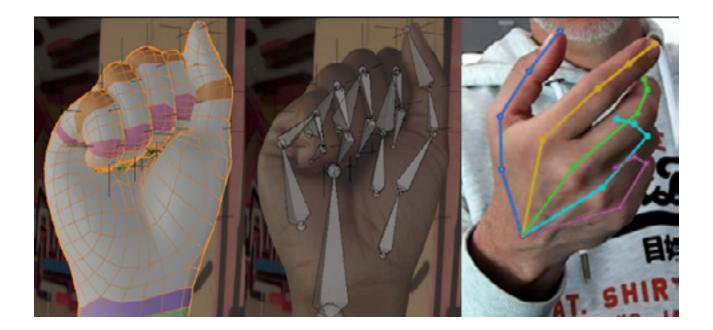


# Al-technology for gesture control

Crunchfish develops AI technology that detects and tracks hands and body. The technology can be used in several areas and is optimized for AR/VR (augmented & virtual reality), the automotive industry and next generation of digital interfaces. During Q2 2022 several exciting commercial license agreements for XR Skeleton as well as XR Skeleton Stereo were signed. In parallel the work has continued to further extend the product portfolio and the company also received a new patent connected to AR/VR.

### **Crunchfish Skeleton platform**

Gesture interaction is about controlling electronic devices without having to touch a screen or press physical buttons. Using a camera sensor and hardware with a processor, Crunchfish's gesture control technology makes it possible to interact from a distance by detecting and tracking the movements of the hands and body and then connecting them to various functions of a device. Crunchfish Skeleton platform forms the basis for the continued development of existing and new products and have during the quarter been supplemented with additional functions and adaptations to specific contexts and areas of use. The platform itself consists of several different components such as inhouse developed tools, camera rigs, inhouse designed neural networks and processes for generating synthetic data.



XR Skeleton is the flagship hand tracking product of the platform. The detection of the whole body was made possible by initially applying 21 points and then 34 points from head to toe, which created a full body tracking solution - FB Skeleton (under development). By combining hand tracking and body tracking, Crunchfish PS Skeleton was developed. PS Skeleton can be used for interaction in vehicles, for interaction with smart TVs etc. since it makes it possible to keep track of the number of people in front of a screen, detect hands superfast and also provide information about body positions and hand movements.

### **Crunchfish XR Skeleton**

Crunchfish Skeleton platform and a sharp development team not only pave the way for many new solution areas but also show the Crunchfish Skeleton platform's great technical flexibility for advanced hand tracking. During the second quarter, the development of XR Skeleton Stereo continued and a first commercial agreement was signed in May 2022. The XR Stereo solution uses two camera sensors in parallel, with a distance between the cameras like the distance between human eyes, providing true threedimensional image information of the distance between camera and every point tracked on the hands. The camera sensors also have a wide-angle perspective, which gives a large interaction space. The hands must be in the camera view (image) to be detected and tracked.

### **Product Roadmap**

The hardware in future generations of AR/VR products will certainly be faster, smaller and more energy efficient. They will also support more advanced camera configurations, creating even more gesture interaction opportunities. For Crunchfish, therefore, support for multiple camera sensors (stereo camera configuration) that increases precision in all three dimensions, as well as tracking of two hands simultaneously will be important. For optimal performance, Crunchfish's products also need to be able to execute on custom processors such as Graphics Processing Unit (GPU) and Neural Processing Unit (NPU).

The roadmap for H2 2022 includes work with the next generation's neural network and further balance the solution with large amounts of data, simulated backgrounds, different light, shadow conditions, etc., to secure that XR Skeleton will be able to meet even the toughest requirements from customers and end users. An early product release of XR Skeleton Stereo was delivered during Q2 to customers and commercial products including the software being developed during H2 2022.

The development of combined solutions with XR Skeleton, PS Skeleton and the full body solution - FB Skeleton - will also continue to create conditions for reaching new business areas such as the automotive industry, smartTVs etc. Support for other types of camera sensors will be important as well to enable new future use cases.

### **New US Patent**

Crunchfish received a Notice of Allowance for a US patent for providing visual cues that helps the user understand what gesture that can be used to activate a virtual object in AR/VR or mixed reality, strengthening the patent portfolio in the key US-market. An application has previously been granted in Sweden and is pending in China.

The graphical marking of the virtual object is provided as an animated morphing into the indication of the associated gesture, thereby replacing the virtual object's graphical marking with the associated gesture's indication.

This is a smart way of providing the user with a visual cue to understand what gesture that may be used to activate a virtual object for AR/VR and mixed reality applications.

# Market update

Crunchfish has during the period signed several new agreements and also strengthened the partnership with OPPO – one of the largest mobile device manufacturers in China – through a joint marketing event in France. Crunchfish's main market segments are AR/VR and automotive, since there is a clear demand for hand tracking in both segments due to lack of touch displays, physical buttons or requirements on hand tracking for safety reasons.



### **Customer projects**

A new commercial agreement was signed with Lenovo Shanghai in May 2022 and provides Lenovo the right to use Crunchfish's technology - XR Skeleton Stereo - in AR glasses and Smart glasses worldwide. Crunchfish XR Skeleton Stereo is the company's latest and most advanced software to date and provides support for two-hand interaction and the use of two camera sensors simultaneously.

Lenovo is since last year using Crunchfish's previous product generation, based on single point tracking of a hand, that has been shipped in Lenovo's DaystAR products. Lenovo's new generation AR glasses target higher production volumes and has a more powerful hardware with two camera sensors (stereo) that enables high precision hand tracking. With Crunchfish's skeleton hand tracking technology – XR Skeleton Stereo - dual-hand interaction is made possible with high precision and accuracy. Lenovo is focused on a vision to deliver smarter technology for all. By designing, engineering, and building the world's most complete portfolio of smart devices and infrastructure, Lenovo is also leading an Intelligent transformation – to create better experiences and opportunities for millions of customers around the world.

"We are very pleased that Lenovo has chosen to integrate our XR Skeleton Stereo solution into its new AR glasses. With XR Skeleton Stereo, we have taken the Skeleton platform and our hand tracking technology even closer to perfection and enable, as one of the first companies in the world, twohand tracking with millimeter precision and support for dual cameras", says Joakim Nydemark, CEO at Crunchfish Gesture Interaction.



"We strongly believe in the future of AR glasses and intuitive gesture interaction will be crucial to ensure a great user experience. We are very happy with Crunchfish's technology and look forward to a long and rewarding collaboration", says Karl Lu, Senior Manager at Lenovo Research.

Ximmerse (Guangdong Virtual Reality Technology CO LTD) in China signed a commercial license agreement to provide Ximmerse's next generation AR-glasses with Crunchfish's latest hand tracking technologies - XR Skeleton and XR Skeleton Stereo. Ximmerse will integrate Crunchfish's software in all new models of AR-glasses to enable touchless interaction. It is a 3-years agreement, with a business model that includes an initial fee of \$25,000US as well as a running royalty per produced unit that includes Crunchfish's software.

The agreement gives Ximmerse the right to use Crunchfish's technologies - XR Skeleton and XR Skeleton Stereo - in AR-glasses and other mixed reality products worldwide. Crunchfish XR Skeleton Stereo is the company's latest and most advanced software to date and provides support for two-hand interaction and the use of two camera sensors simultaneously.

Ximmerse was founded in 2014 and is a trusted provider of mixed reality products since many years.

The company's product – RhinoX – has been a great success and next generation models with even more advanced functionality and features are under development and will create opportunities for customers around the world.

"XR Skeleton Stereo is our latest and most advanced technology and we are very proud to get the opportunity to integrate it in the state-of-the-art AR products from Ximmerse. To be able to interact in augmented reality in an intuitive way is crucial for the success of a product and we are very excited to contribute to a great user experience for Ximmerse's customers", says Joakim Nydemark, CEO at Crunchfish Gesture Interaction.



"To enable even more compelling use cases with our next generation augmented reality products, intuitive hand gesture interaction will be crucial for us to create extraordinary experiences. We are delighted to embrace Crunchfish's XR Skeleton technology and look forward to a fruitful collaboration", says Mike Bailey, Co-Founder of Ximmerse.



### **Crunchfish at VivaTech 2022**

Crunchfish presented its high-performance Gesture Interaction Platform at VivaTech 2022 in Paris in June. During the presentation, lead by the leading global smart device brand OPPO, Crunchfish unlocked the potential for different applications, going from AR/VR devices to all the upcoming features in automotive.

OPPO invited three technology companies including Crunchfish to demonstrate their innovations at VivaTech 2022, highlighting how OPPO's global technology ecosystem is helping to deliver Virtuous Innovation. Crunchfish introduced how its gesture interaction technology can be used in AR applications, including future potential AR solutions developed using OPPO technology. Viva Technology is Europe's biggest startup and tech event, with more than 100 000 visitors and acts as a powerful global catalyst for digital transformation and startup growth. Every year VivaTech brings together, in Paris and online, business leaders, startups, investors, researchers and innovators to ignite positive change in business and for society. The show was a great success with fruitful customer meetings and high-level speakers including the President of France – Emmanuel Macron.

"We were delighted to be invited as a speaker together with OPPO and being able to attend VivaTech 2022. With many new contacts and business opportunities gained we look forward to moving the business forward", says Joakim Nydemark, CEO at Crunchfish Gesture Interaction.



### **Usecases in AR and Automotive**

Smart glasses continue to evolve from devices with a small screen in front of one eye and a single camera sensor to more advanced devices that project the screen in front of both eyes and have multiple camera sensors. For the consumer market, AR glasses with a stereo camera configuration will probably become standard as it adds a lot to the AR experience. From a gesture control perspective, this provides conditions for both greater precision as well as interaction with both hands simultaneously. The recently pre-released software - Crunchfish XR Skeleton Stereo - will therefore be an important component in the company's portfolio.

In enterprise and industry, there is also great potential for AR/VR with warehouses / logistics, training and machine maintenance with remote expert support as some examples. What model of AR/VR devices that is used in different environments varies depending on the area of use, but common is that they all needs gesture control for effective interaction and Crunchfish has several different software products that may be suitable depending on the type of hardware.



The automotive industry is a growing market segment where hand & body tracking is starting to gain momentum. The increase is partly driven by the increase in the number of screens in vehicles, but above all by the forthcoming legal requirements regarding safety.

To help prevent accidents, car manufacturers are developing safety systems that keep track of the driver's condition and send alerts when a person shows signs of deviant behavior. These advanced systems include camera-based driver monitoring systems (DMSs) to detect inattention or fatigue of the driver and send an alert if the system detects that the driver appears distracted. There are also systems for monitoring passengers and other things in the vehicle that come in the next step. These are called OMS (Occupant Monitoring Systems) and will be able to provide additional information about the safety of a vehicle.

To meet these usecases, Crunchfish's PS Skeleton has during Q2 continued to mature with support for more functionality to offer a competitive product to the automotive industry. With both hand tracking and soon body tracking, functions such as detection of drivers and passengers are made possible.

With the solution PS Skeleton optimized for RGB and IR camera sensors, Crunchfish has an excellent opportunity to take a position in the rapidly changing automotive industry by meeting the legal requirements that will be set for DMS. To use gestures to interact with entertainment systems in the front seat is another promising usecase in vehicles. As screens are becoming more common also in the back seat, the demand for gesture control will increase in this area to solve problems such as children in car seats not reaching the screen.

# Webinars

# Survival of the fittest webinar series

Crunchfish has run a series of webinars on the theme of Survival of the fittest during Q1 and Q2 2022. The series had 22 webinars in total on every Friday at 08:00 a.m. CET, with a premiere on January 7th, 2022. The webinars begin with a short presentation of a predetermined topic, followed by a moderator-led question time and an open forum with an expert panel. Every second webinar focuses on Digital Cash, and in between the theme is either Gesture Interaction or a broader Crunchfish topic. The webinars have been moderated by Johan Wester.

**Digital Cash** 



Digital Cash platform



Digital Cash benefits



Digital Cash for CBDC

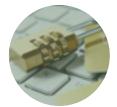


# **Digital Cash**





Digital Cash with ToneTag



Digital Cash security



Digital Cash with T-Hub



Digital Cash patents



Digital Cash India



Digital Cash Non-mobile devices

### **Gesture Interaction**



Gesture Interaction introduction



Gesture Interaction Skeleton platform



Gesture Interaction use cases



Gesture Interaction training data



Gesture Interaction neural nets



Gesture Interaction patents

## **Crunchfish Group**



Crunchfish equity analysis



Crunchfish investor relations



Crunchfish shares and warrants



Crunchfish DNA



Crunchfish governance

# Financials



### **Financial report**

### Sales and earnings for the quarter

Net sales amounted to SEK 134 (917) thousand for the second quarter and operating expenses amounted to SEK 10 906 (14 111) thousand. EBITDA for the period amounted to SEK -5 149 (-6 289) thousand. Loss before tax for the second quarter amounted to SEK -6 749 (-8 630) thousand and has been charged with amortization of intangible assets of SEK 1 558 (1 865) thousand and tangible fixed assets of SEK 76 (88) thousand.

### Sales and earnings for the half year

Net sales amounted to SEK 351 (2 018) thousand for the period and operating expenses amounted to SEK 21 920 (26 674) thousand. EBITDA for the period amounted to SEK –10 471 (-11 867) thousand. Loss before tax for the period amounted to SEK -13 481 (-16 396) thousand and has been charged with amortization of intangible assets of SEK 3 002 (3 764) thousand and tangible fixed assets of SEK 111 (182) thousand.

### Investments

During the second quarter, the Group invested SEK 3 429 (4 448) thousand in intangible fixed assets and 0 (0) in tangible fixed assets. Investments in associated companies amounted to SEK 0 (0) thousand.

During the first half year, the Group invested SEK 6 863 (7 794) thousand in intangible fixed assets and SEK 60 (0) thousand in tangible fixed assets. Investments in associated companies amounted to SEK 0 (1 000) thousand.

### Liquidity and financing

At the end of the second quarter the Group's cash and cash equivalents amounted to SEK 19 055 (1 385) thousand. Cash flow from operating activities during the second quarter amounted to SEK -5 348 (-5 626) thousand.

In June, the warrant incentive program 2018/2022 for employees was closed. As a result 511 000 new shares have been issued, providing Crunchfish with SEK 4 599 thousand in cash.

### **Associated companies**

Blippit AB is an associated company and the holding is reported in the consolidated accounts using the equity method. The equity method means that the value of the shares in the associated company reported in the Group corresponds to the Group's share in the equity of the associated company. Crunchfish's share of the associated company's earnings is reported as a separate item in the consolidated income statement.

### Staff

As of June 30, 2022, the number of employees was 20 (22).

### **Risks and uncertainties**

A number of different risk factors could impact Crunchfish's operations and industry negatively. It is therefore very important to consider relevant risks in addition to the Company's growth opportunities. Relevant risks are presented in the prospectus issued by Crunchfish AB in October 2021 and the annual report for FY 2021, which can be found at crunchfish.com.

### **Related party transactions**

Company management and administrative staff are employed in the parent company Crunchfish AB. Reported sales in the parent company consists of income from services rendered for management and administration of the company's two subsidiaries. Crunchfish Digital Cash AB performs development and administrative services for the jointly owned company Blippit AB. Of the group's net sales for the second quarter, SEK 39 thousand (748) relates to fees invoiced to Blippit.

Of the group net sales for the first half year, SEK 102 thousand (1 812) relates to fees invoiced to Blippit.

# Sales and earnings for the quarter, parent company

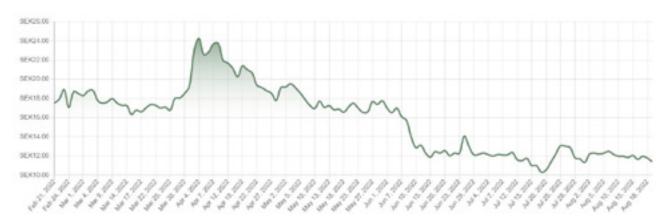
The parent company's net sales amounted to SEK 4 632 (6 435) thousand for the second quarter and operating expenses to amounted to SEK -4 995 (-6 671) thousand. EBITDA for the period amounted to SEK 168 (270) thousand. During the second quarter, the parent company invested SEK 0 (0) thousand in intangible fixed assets and SEK 0 (0) thousand in tangible fixed assets.

# Sales and earnings for the half year, parent company

The parent company's net sales amounted to SEK 9 308 (12 117) thousand for the period and operating expenses to amounted to SEK -10 192 (-12 635) thousand. EBITDA for the period amounted to SEK 221 (525) thousand. During the period, the parent company invested SEK 0 (0) thousand in intangible fixed assets and SEK 60 (0) thousand in tangible fixed assets.

### Major shareholders for Crunchfish AB (publ) per June 30th 2022

Shareholder	# of shares	% Share
Femari Invest AB (CEO Joachim Samuelsson & Petra Samuelsson)	7 500 000	23,86
Corespring Invest AB (Chairmain Göran Linder)	5 668 837	18,03
Paul Cronholm (Founder & CTO)	1 093 800	3,48
Carlquist Holding AB	1 000 000	3,18
Mikael Kretz incl, company holdings	710 000	2,26
Håkan Paulsson incl, family and company holdings	625 000	1,99
Claes Capital Consulting AB	342 088	1,09
Granitor Invest AB	298 250	0,95
Mats Kullenberg	252 473	0,80
Anders Williamsson	250 000	0,80
Total, ten largest shareholders	17 740 448	56,43
Other shareholders (approx, 6,000)	13 695 850	43,57
Total	31 436 298	100,00



### Share price development during 6 months

### **Financial calendar**

Crunchfish AB publishes financial reports after each quarter. Upcoming reports are planned to be published according to the schedule below:

### Interim report January – September 2022

November 16, 2022, 8:30 am CET

### Year-end report 2022

February 16, 2023, 8:30 am CET

### **Accounting principles**

This report has been drafted according to the Annual accounts act (Årsredovisningslagen) and BFNAR 2012:1 (K3).

### Auditor's review

This report has not been subject to review by the company's auditor.

### **Company information**

Crunchfish AB (publ), corporate registration number 556804– 6493, is a limited company seated in Malmö, Sweden.

### **Certified Adviser**

Västra Hamnen Corporate Finance AB is the company's Certified Adviser. E-mail: ca@vhcorp.se Phone: +46 40 200 250

### **Further information**

For further information, please contact: Joachim Samuelsson, CEO ir@crunchfish.com Crunchfish AB (publ) Stora Varvsgatan 6A 211 19 Malmö

# Statement by the Board of Directors and the CEO

The Board of Directors and the CEO hereby assures that this interim report gives a fair overview of the company's operations, financial status, and result. Malmö, August 25, 2022

The Board of Directors Göran Linder (chairman) Robert Ekström Susanne Hannestad Joachim Samuelsson Malte Zaunders

This information is information that Crunchfish AB is obliged to publish in accordance to the EU Market Abuse Regulation. The information was provided by the contact person above for publication on August 25, 2022.



# Group income statement (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Operating income					
Net sales	134 437	916 575	350 786	2 017 787	3 956 665
Own work capitalized	3 428 777	4 447 580	6 863 345	7 794 018	14 341 929
Other operating income	530 400	504 340	1 120 950	1 049 104	2 045 203
Total operating income	4 093 614	5 868 495	8 335 081	10 860 909	20 343 797
Operating expenses					
Goods for resale	0	0	0	-150 098	-210 688
Other external expenses	-3 917 211	-5 210 622	-8 127 119	-9 350 858	-16 010 862
Personnel expenses	-5 310 537	-6 492 566	-10 632 686	-12 291 991	-23 387 593
Depreciation of tangible and intangible fixed asset	-1 663 930	-1 953 219	-3 113 229	-3 945 856	-7 661 499
Other operating expenses	0	-73 625	0	-73 625	-755 275
Loss from participations in associated companies	-14 510	-380 476	-46 599	-861 527	-9 186 410
Total operating expenses	-10 906 188	-14 110 508	-21 919 633	-26 673 955	-57 212 327
Operating profit	-6 812 574	-8 242 013	-13 584 552	-15 813 046	-36 868 530
operating prone	-0012574	0242013	-15 504 552	15 0 15 0 40	50 000 550
Financial items					
Other interest income and similar profit items	76 303	1 529	119 917	71 573	111 464
Interest expense and similar loss items	-12 268	-389 240	-16 741	-654 196	-1 711 092
Profit or loss from financial items	64 035	-387 711	103 176	-582 623	-1 599 628
Profit or loss after financial items	-6 748 539	-8 629 724	-13 481 376	-16 395 669	-38 468 158
Profit or loss before tax	-6 748 539	-8 629 724	-13 481 376	-16 395 669	-38 468 158
Taxes					
Tax on income for the period	0	0	0	0	0
Profit or loss for the period/year	-6 748 539	-8 629 724	-13 481 376	-16 395 669	-38 468 158
Front of loss for the period year	-0740555	-0 029 724	-13 401 370	-10 393 009	-50 +00 150
Key figures					
EBITDA	-5 148 644	-6 288 794	-10 471 323	-11 867 190	-29 207 031
Earnings per share	-0.22	-0.30	-0.44	-0.58	-1.34
Number of shares average	30 925 298	28 348 190	30 925 298	28 348 190	28 777 708
Number of shares at balance sheet date	30 925 298	28 348 190	30 925 298	28 348 190	30 925 298
Earnings per share after full dilution	-0.21	-0.29	-0.42	-0.55	-1.27
Number of shares after full dilution average	32 338 098	29 760 990	32 338 098	29 733 740	30 176 883
Number of shares after full dilution balance sheet date	32 338 098	29 760 990	32 338 098	29 760 990	32 338 098



# Group balance sheet (SEK)

Assets	Jun 30 2022	Jun 30 2021	Dec 31 2021
Fixed assets			
Intangible assets			
Capitalized expenses for development work	31 183 184	24 785 415	27 322 509
Total intangible fixed assets	31 183 184	24 785 415	27 322 509
Tangible fixed assets			
Equipment	645 720	1 082 553	696 077
Total tangible fixed assets	645 720	1 082 553	696 077
Financial assets			
Participation in associated companies	89 925	7 961 407	136 524
Other long-term receivables	0	4 900	0
Total financial assets	89 925	7 966 307	136 524
Total fixed assets	31 918 829	33 834 275	28 155 110
Current assets			
Current receivables			
Account receivables	542 636	783 919	771 340
Receivables from associated companies	7 500	292 088	33 281
Other receivables	1 841 705	719 105	1 092 731
Prepayments and accrued income	1 203 376	1 296 755	1 384 171
Total current receivables	3 595 217	3 091 867	3 281 523
Cash and bank balances			
Cash and bank balances	19 054 706	1 384 899	32 755 502
Total cash and bank balances	19 054 706	1 384 899	32 755 502
Total current assets	22 649 923	4 476 766	36 037 025
Total assets	54 568 752	38 311 041	64 192 135



## Group balance sheet (SEK)

Equity and liabilites	Jun 30 2022	Jun 30 2021	Dec 31 2021
Equity			
Equity attributable to parent company shareholders			
Share capital	1 422 564	1 304 017	1 422 564
Unregistered share capital	23 506	0	0
Other contributed capital	253 715 581	189 895 143	249 140 087
Other capital including profit or loss for the period	-208 200 528	-172 646 664	-194 719 152
Total equity	46 961 123	18 552 496	55 843 499
Current liabilities			
Lease liabilities	443 793	675 663	560 584
Other current interest-bearing liabilities	0	10 000 000	0
Accounts payable	1 892 640	1 487 104	1 104 350
Current tax liability	0	34 261	4 273
Other liabilities	488 758	2 409 241	2 491 917
Accrued expenses and accrued income	4 782 438	5 152 276	4 187 512
Total current liabilities	7 607 629	19 758 545	8 348 636
Total equity and liabilities	54 568 752	38 311 041	64 192 135
Key Figures			
Equity-assets-ratio	86.1%	48.4%	87.0%
Debt-to-equity ratio	0.9%	57.5%	1.0%
Interest-bearing net debt	n/a	9 290 764	n/a

### Changes in the group equity (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Equity at beginning of period/year	49 110 662	27 182 220	55 843 499	34 838 074	34 838 074
Share issues	4 599 000	0	4 599 000	0	64 427 700
lssue costs	0	0	0	0	-5 064 208
Warrant premiums	0	0	0	110 091	110 091
Profit or loss for the period/year	-6 748 539	-8 629 724	-13 481 376	-16 395 669	-38 468 158
Equity at end of period /year	46 961 123	18 552 496	46 961 123	18 552 496	55 843 499



# Group cash flow statement (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Operating activities					
Operating profit or loss	-6 812 574	-8 242 013	-13 584 552	-15 813 046	-36 868 530
Adjustments for non-cash intems	1 674 168	2 407 320	3 155 556	4 881 008	17 584 557
Interest received etc.	5 932	1 530	19 471	1 530	12 484
Interest paid	-12 268	-350 925	-16 741	-615 881	-1 680 856
Income tax paid	0	0	0	0	0
Cash flow from operating activities before					
changes in working capital	-5 144 742	-6 184 088	-10 426 266	-11 546 389	-20 952 345
changes in working capital	-5 144 /42	-0 104 000	-10 420 200	-11 540 505	-20 332 343
Cash flow from changes in working capital					
Decrease(+)/increase(-) in receivables	-263 750	-94 904	48 583	2 614 687	2 425 031
Decrease(-)/increase(+) in current liabilities	60 908	653 175	-619 943	406 424	-858 418
Cash flow from operating activities	-5 347 584	-5 625 817	-10 997 626	-8 525 278	-19 385 732
Investing activities					
Investments in associated companies	0	0	0	-1 000 000	-1 500 000
Investmetn in technology development	-3 428 777	-4 447 580	-6 863 345	-7 794 018	-14 341 929
Investments in equipment	0	0	-60 202	0	0
Change in cash deposits	0	0	0	0	4 900
Cash flow from investing activities	-3 428 777	-4 447 580	-6 923 547	-8 794 018	-15 837 029
	-5420777	-4 447 500	-0 525 547	-0754010	15 057 025
Financing activities					
Share issue	4 236 723	0	4 236 723	0	59 363 492
Loans from shareholders	0	0	0	10 000 000	0
Amortization of financial leasing agreements	-58 612	-45 389	-116 791	-113 395	-228 474
Warrant premiums paid	0	0	0	110 091	110 091
Cash flow from financing activities	4 178 111	-45 389	4 119 932	9 996 696	59 245 109
	4 500 050	40 440 705	12 024 044	7 222 625	24.022.242
Change in cash and cash equivalents	-4 598 250	-10 118 786	-13 801 241	-7 322 600	24 022 348
Cash and cash equivalents at beginning of period/year	23 582 586	11 533 921	32 755 502	8 667 692	8 667 692
Exchange rate difference in cash and cash equivalents	70 370	-30 236	100 445	39 807	65 462
Cash and cash equivalents at end of period/year	19 054 706	1 384 899	19 054 706	1 384 899	32 755 502



# Parent company income statment (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Operating income					
Net sales	4 632 432	6 435 074	9 308 303	12 117 297	20 932 097
Other operating income	526 596	498 367	1 093 991	1 027 257	2 023 356
Total operating income	5 159 028	6 933 441	10 402 294	13 144 554	22 955 453
Operating expenses					
Other external expenses	-2 498 322	-3 294 364	-5 130 291	-5 963 474	-10 125 722
Personnel expenses	-2 492 437	-3 369 161	-5 051 372	-6 656 049	-11 971 263
Depreciation of tangible and intangible fixed asset	-4 229	-7 503	-10 701	-15 664	-32 097
Total operating expenses	-4 994 988	-6 671 028	-10 192 364	-12 635 187	-22 129 082
Operating profit	164 040	262 413	209 930	509 367	826 371
Financial items					
Profit/loss from participation in group companies	0	0	0	0	-610 000
Other interest income and similar profit items	120 353	254 435	176 564	373 998	1 346 307
Interest expense and similar loss items	-706	-384 443	-2 514	-647 457	-1 701 717
Profit or loss from financial items	119 647	-130 008	174 050	-273 459	-965 410
Profit or loss after financial items	292 697	422.405	202.000	225 000	120.020
Profit or loss after infancial items	283 687	132 405	383 980	235 908	-139 039
Profit or loss before tax	283 687	132 405	383 980	235 908	-139 039
					100 000
Taxes					
Tax on income for the period	0	0	0	0	0
Profit or loss for the period/year	283 687	132 405	383 980	235 908	-139 039
Key figures					
EBITDA	168 269	269 916	220 631	525 031	858 468
Earnings per share	0.01	0.00	0.01	0.01	0.00
Number of shares, average	30 925 298	28 348 190	30 925 298	28 348 190	28 777 708
Number of shares at balance sheet date	30 925 298	28 348 190	30 925 298	28 348 190	30 295 298
Earnings per share after full dilution	0.01	0.00	0.01	0.01	0.00
Number of shares after full dilution, average	32 338 098	29 760 990	32 338 098	29 733 740	30 176 883
Number of shares after full dilution, balance sheet date	32 338 098	29 760 990	32 338 098	29 760 990	32 338 098



# Parent company balance sheet (SEK)

Assets	Jun 30, 2022	Jun 30, 2021	Dec 31, 2021
Intangible assets			
Capitalized expenses for development work	0	8 043	756
Total intangible fixed assets	0	8 043	756
Tangible fixed assets			
Equipment	61 084	19 973	10 827
Total tangible fixed assets	61 084	19 973	10 827
Financial assets			
Participations in group companies	91 973 208	57 923 811	92 343 208
Receivables from group companies	18 916 613	18 962 800	0
Other long-term receivables	0	4 900	0
Total financial assets	110 889 821	76 891 511	92 343 208
Total fixed assets	110 950 905	76 919 527	92 354 791
Current assets			
Current receivables			
Account receivables	542 636	741 356	771 340
Receivables from group companies	101 664	0	0
Other receivables	712 789	34 924	372 859
Prepayments and accrued income	1 103 378	1 061 563	1 193 027
Total current receivables	2 460 467	1 837 843	2 337 226
Cash and bank balances			
Cash and bank balances	18 286 913	623 222	32 560 241
Total cash and bank balances	18 286 913	623 222	32 560 241
Total current assets	20 747 380	2 461 065	34 897 467
Total assets	131 698 285	79 380 592	127 252 258



# Parent company balance sheet (SEK)

Equity and liabilites	Jun 30, 2022	Jun 30, 2021	Dec 31, 2021
Equity			
Restricted equity			
Share capital	1 422 564	1 304 017	1 422 564
Unregistered share capital	23 506	0	0
Fund development expenses	0	8 043	756
Total restricted equity	1 446 070	1 312 060	1 423 320
Unrestricted equity			
Profit brought forward	126 154 938	62 465 495	121 717 727
Profit or loss for the period/year	383 980	235 908	-139 039
Total unrestriced equity	126 538 918	62 701 403	121 578 688
Total equity	127 984 988	64 013 463	123 002 008
Current liabilities			
Accounts payable	1 122 612	439 666	631 360
Liabilities to group companies	0	624 871	283 336
Other current interest-bearing liabilities	0	10 000 000	0
Other liabilities	129 204	1 219 510	1 116 875
Accrued expenses and accrued income	2 461 481	3 083 082	2 218 679
Total current liabilities	3 713 297	15 367 129	4 250 250
Total equity and liabilities	131 698 285	79 380 592	127 252 258
Key Figures			
Equity-assets-ratio	97.2%	80.6%	96.7%
Debt-to-equity ratio	0.0%	15.6%	0.0
Interest-bearing net debt	n/a	9 376 778	n/a
-			

# Changes in parent company equity (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Equity at beginning of period/year	123 102 301	63 881 058	123 002 008	63 667 464	63 667 464
Share issues	4 599 000	0	4 599 000	0	64 427 700
lssue costs	0	0	0	0	-5 064 208
Warrant premiums	0	0	0	110 091	110 091
Profit or loss for the period/year	283 687	132 405	383 980	235 908	-139 039
Equity at and of namind /year	127 984 988	64 013 463	127 984 988	64 013 463	123 002 008
Equity at end of period /year	12/ 984 988	64 013 463	12/ 984 988	64 013 463	123 002 008



# Parent company cash flow statement (SEK)

	Q2 2022	Q2 2021	Q1-Q2 2022	Q1-Q2 2021	2021
Operating activities					
Operating profit or loss	164 040	262 413	209 930	509 367	826 371
Adjustments for non-cash intems	4 229	7 503	10 701	15 664	32 097
Interest received etc.	96 133	254 435	126 780	308 695	1 272 652
Interest paid	-706	-354 207	-2 514	-617 221	-1 668 399
Income tax paid	0	0	0	0	0
Cash flow from operating activities before					
changes in working capital	263 696	170 144	344 897	216 505	462 721
Cash flow from changes in working capital					
Decrease(+)/increase(-) in receivables	120 144	-117 516	340 700	2 284 690	1 785 307
Decrease(-)/increase(+) in current liabilities	394 539	364 586	-253 617	-366 544	-1 141 888
	394 339	304 380	-255 017	-300 344	-1 141 000
Cash flow from operating activities	778 379	417 214	431 980	2 134 651	1 106 140
Investing activities					
Investmetn in equipment	0	0	-60 202	0	0
Acquisition of shares in subsidiaries	0	0	0	-25 000	-25 000
Repayment shereholder contributions	0	0	370 000	0	0
Loans provided to group companies	-9 660 846	-9 826 560	-19 301 613	-19 337 929	-35 745 861
Change in cash deposits	0	0	0	0	4 900
Cash flow from investing activities	-9 660 846	-9 826 560	-18 991 815	-19 362 929	-35 765 961
	-9 000 040	5 020 500	-10 551 015	-15 502 525	-55765561
Financing activities					
Share issue	4 236 723	0	4 236 723	0	59 363 492
Loans from shareholders	0	0	0	10 000 000	0
Cash flow from financing activities	4 236 723	0	4 236 723	10 000 000	59 363 492
		•			
Change in cash and cash equivalents	-4 645 744	-9 409 346	-14 323 112	-7 228 278	24 703 671
Cash and cash equivalents at beginning of period/year	22 908 437	10 062 804	32 560 241	7 816 432	7 816 432
Exchange rate difference in cash and cash equivalents	24 220	-30 236	49 784	35 068	40 138
Cash and cash equivalents at end of period/year	18 286 913	623 222	18 286 913	623 222	32 560 241

