# crunchfish

# INTERIM REPORT Q1

# Turnaround: Third Time's the Charm

This quarter represents a defining turnaround for Crunchfish as we position ourselves to deliver on the immense promise of offline payments in India and beyond. Our journey to the solution that will finally resonate in the market has not been without its challenges. However, as the saying goes, "third time's the charm," and after two previous attempts, we now have a breakthrough strategy that we are very optimistic will succeed and scale effectively.



In our first attempt in 2023, Crunchfish partnered with HDFC Bank and IDFC First Bank to conduct pilot implementations of offline payments within the Regulatory Sandbox of the Reserve Bank of India (RBI). These pilots demonstrated the feasibility of offline payments as a way to enable resilience, usability, and financial inclusion in environments with limited or unreliable network connectivity. However, scaling this solution proved difficult. Offline payments need to be embedded across the entire payment ecosystem to ensure that users and merchants everywhere can seamlessly receive payments. The infrastructure-level adoption required for such an ecosystem-wide rollout was missing, hindering the project's scalability.

Our second attempt in 2024 focused on the National Payments Corporation of India (NPCI), which provides the backbone of India's payment infrastructure, including Unified Payments Interface (UPI) and the Digital Rupee. Crunchfish sought to convince NPCI to adapt Crunchfish Digital Cash offline wallets for the Indian payment ecosystem. While the concept generated significant interest, it became clear that NPCI was not willing to mandate an all-encompassing third-party offline wallet solution for the entire ecosystem, as this conflicted with their need to have absolute control over the solutions that are deployed domestically to banks and Third-Party Application Providers (TPAPs). This reinforced us to rethink our approach again and strategize to find a better way forward.

2025 marks the third attempt and the turning point for Crunchfish's strategy. This turnaround focuses on providing a solution that meets both NPCI's needs and the demands of the broader payment ecosystem. Crunchfish has proposed an Offline Terminal Infrastructure (OTI), which integrates directly into NPCI's existing payment rails, enabling the ability to receive offline payments as a fundamental feature of the ecosystem. Meanwhile, the ability to pay offline remains with banks and TPAPs, enabling them to assume the responsibility for the security of their mobile apps and an offline wallet, insourced from a third-party technology provider such as Crunchfish.



This new approach represents a holistic, scalable, and future-ready solution that balances NPCI's need to provide and control a seamless infrastructure with banks and TPAPs' ability to differentiate payment services. It is the cornerstone of our 2025 turnaround, setting the stage for widespread adoption and sustainable revenue growth.

#### Similarities with the Card Payment Infrastructure

This refined strategy draws inspiration from the infrastructure of card payments under the global EMVCo ecosystem, leveraging a tried-and-tested model for scalability, flexibility, and interoperability. In the card payment ecosystem, there is a clear separation of roles between:

- Interoperable Acquiring Card Terminal Infrastructure: The network of card terminals is part of the EMVCo's payment ecosystem's foundational specifications and infrastructure, allowing merchants to accept payments regardless of which card issuer the customer uses worldwide.
- Third-Party Issued Standalone Cards: Issued by banks or financial institutions, these cards have the ability to make payments, even in offline scenarios.

Similarly, Crunchfish's Offline Terminal Infrastructure (OTI) functions as the interoperable acquiring infrastructure within the payment ecosystem, enabling merchants and other payees to reliably receive offline payments. At the same time, third-party offline wallets developed by banks and TPAPs retain the capability to make offline payments. This separation ensures the payment ecosystem remains open, interoperable, and scalable, allowing issuing banks and TPAPs to compete and innovate freely while relying on a robust, standardized infrastructure for interoperability.

We have proposed to the NPCI that the OTI framework should serve as the backbone infrastructure in India's payment ecosystem, analogous to card terminal infrastructure, while enabling the banks and TPAPs to source in thirdparty solutions for customer-facing offline wallets. This architectural similarity ensures scalability and builds confidence across the ecosystem, as it leverages a model that has already proven successful for card payments globally.

#### Breakthrough and Future Potential

This 2025 turnaround approach represents several potential breakthroughs:

- NPCI gains resilient infrastructure: Offline payments become embedded within UPI and the Digital Rupee framework, improving the stability and inclusivity of India's payment ecosystem while ensuring interoperability across all participants. NPCI will still have full control of the schemes and specficiations.
- Banks and TPAPs gain freedom to innovate: By retaining the ability to integrate third-party offline wallets for their customers, banks and TPAPs can compete and differentiate their service offerings while engaging with NPCI's scalable infrastructure.
- Crunchfish unlocks multiple revenue opportunities: Crunchfish benefits from two significant revenue streams providing the OTI infrastructure for the payment ecosystem on a national or global basis and providing offline wallet solutions to the many financial institutions attached to these payment ecosystems.

India serves as the perfect launchpad for this scalable strategy, but the global potential is immense. For example, Crunchfish could be playing a pivotal role in Central Bank Digital Currency (CBDC) projects like the Digital Euro. As a pioneering partner to the ECB for conditional payments, Crunchfish is demonstrating offline payments with online settlement as an innovative use case for seamless, resilient, and conditional payments. Crunchfish way of doing offline payments with online settlement is particularly applicable as it shares an architectural foundation with conditional payments through the Reserve, Pay, and **Settle** approach:

- **Reserve:** Funds are pre-authorized and held in an offline or conditional state
- Pay: Payments are initiated offline or with predefined settlement conditions
- Settle: Transactions settle online automatically when the pre-defined conditions are fulfilled, ensuring higher security for offline payment, regulatory compliance and accountability.

European Central Bank (ECB) plans that the Digital Euro should support conditional payments. This enables Crunchfish to offer ECB a fully functional, secure and scalable offline payment solution which is roll-out ready and already approved by RBI. With our initial patent for offline payments granted in the US, Notice of Allowance announced in the EU and Taiwan, and patent pending in India and China, Crunchfish holds the pole position in the race to capture this burgeoning field.

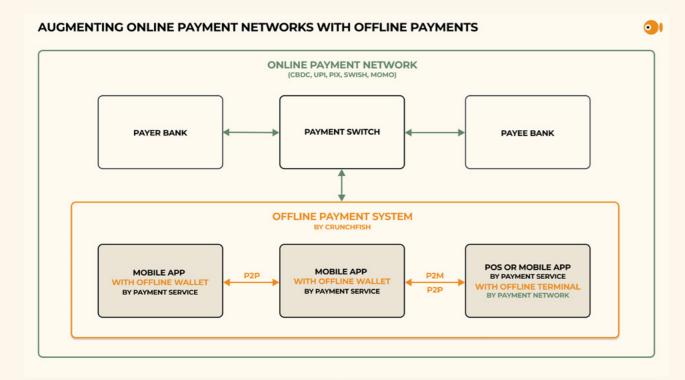


#### Conclusion

2025 is the year of transformation for Crunchfish. This third attempt may represent the breakthrough we have worked so hard for. If the Offline Terminal Infrastructure is integrated into NPCI's payment rails, Crunchfish ensures that offline payments can scale across India while enabling banks and TPAPs to innovate and select third-party offline wallets freely. This strategy, inspired by the tried-andtested card payment ecosystem, positions Crunchfish to adapt its model globally for CBDC initiatives and emerging offline use cases in commercial payment systems. Our perserverance, adaptability, and innovation will then ultimately pay off, and become a proof of "third time's the charm".

# **Offline Terminal Infrastructure**

The introduction of an Offline Terminal Infrastructure (OTI) represents a breakthrough in how payment ecosystems can scale offline payments. Offline payments are increasingly vital for ensuring seamless financial transactions in areas with limited or unreliable internet connectivity. They enable financial inclusion, build resilience in payment systems, and maintain digital transaction efficiency when connectivity is disrupted.



The OTI solution focuses on integrating an offline payment framework into existing payment rails, such as UPI or Digital Rupee systems in India. This strategic pivot shifts from selling fully integrated offline wallet solutions toward embedding offline payment reception capabilities within payment rail infrastructure, mirroring the design of globally established systems like EMVCo's card payment specification and architecture. Offline payment solutions often face limitations because they are set up as standalone systems, siloed from the broader payment ecosystem. This lack of interoperability reduces adoption by merchants and users. Crunchfish's OTI addresses this gap by embedding offline transaction capabilities into existing payment systems at the ecosystem level, such as those provided by NPCI. This ensures seamless offline payment reception as a standardized, interoperable feature, replicating the architecture used in modern card payment ecosystems. The OTI solution solves three key challenges:

Interoperability Across Ecosystems:	<ul> <li>OTI allows transact financial entities, si credit cards from a terminal. OTI empo capabilities univers</li> </ul>
Flexibility for Issuers:	<ul> <li>While OTI ensures leaves room for ba wallets. This allows user experiences a added features.</li> </ul>
Scalability of Adoption and Usability:	<ul> <li>Embedding offline widespread adoption standard part of re</li> </ul>

actions to happen seamlessly across different similar to how EMVCo's infrastructure enables any issuer to function with any acquiring powers NPCI to implement offline reception ersally across UPI and Digital Rupee systems.

s interoperability at the infrastructure level, it banks and TPAPs to innovate their own offline vs them to maintain the flexibility to offer unique and strengthen customer loyalty with value-

e payment capabilities at the rail level ensures ption, similar to how card terminals have become a retail infrastructure worldwide.

### **Sales Targets**

OTI's sales target primarily revolves around payment rail operators, central banks, and key institutional stakeholders in payment ecosystems. For instance:

In India:	<ul> <li>NPCI, India's most influential payment infrastructure provider, is the primary sales target. By providing OTI for integration into UPI and the digital Rupee ecosystem, Crunchfish positions itself as a pivotal enabler of offline transactions for billions of daily payments.</li> </ul>
CBDC globally:	<ul> <li>OTI targets Central Bank Digital Currency (CBDC) projects like the Digital Euro, where offline payment functionalities at the infrastructure level are critical for ensuring universal usability and resilience. Crunchfish's pioneering work with the European Central Bank (ECB) in demonstrating offline payments with online settlement aligns seamlessly with this opportunity.</li> </ul>
Beyond CBDCs:	<ul> <li>OTI is also appealing to regional payment networks and local switching providers that aim to increase inclusivity and improve offline payment capabilities.</li> </ul>



### **Market Potential**

The global offline payments market is poised for significant growth as both emerging and advanced economies rely increasingly on resilient financial infrastructure. According to industry estimates, the offline payments market is expected to grow rapidly, with the following driving forces leading the way:

Emerging Economies:	<ul> <li>Countries with lim of Africa, and Sout opportunity for en alone, UPI process could serve as an adoption.</li> </ul>
Expansion of CBDCs:	<ul> <li>Over 130 countries interoperability provide requirement for al equivalent usabilit</li> </ul>
Merchant Infrastructure Upgrades:	<ul> <li>Comparable to car OTI creates the dig for mobile and dig adoption.</li> </ul>

By prioritizing foundational payment infrastructure over stand-alone consumer features, OTI positions Crunchfish to capture a significant share of this expanding global market and generate

nited connectivity infrastructure (e.g., India, parts utheast Asia) represent a significant untapped embedding offline payment capabilities. In India sses billions of transactions per month, which excellent base for scaling offline payment

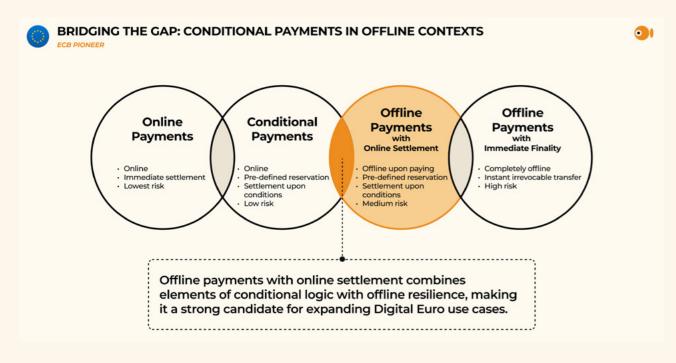
es are currently evaluating or piloting CBDCs. The rovided by OTI infrastructure is seen as a core allowing CBDCs to replace cash while maintaining ity, even in the absence of connectivity.

ard payment terminals in the EMVCo ecosystem, igital equivalent of offline acceptance terminals gital ecosystems, driving long-term infrastructure

both upfront revenue from payment network providers and downstream offline wallet sales to payment service providers, such as banks and TPAPs.

# **Conditional Payments in Offline Contexts**

Crunchfish way of offline payments that includes a subsequent online settlement may be become a cornerstone of modern payment innovation due to their ability to ensure resilient, flexible, and secure payment capabilities in low-connectivity environments while maintaining central system accountability. The method combines the benefits of offline payment capabilities (such as those enabled by Crunchfish's OTI) with the robustness of conditional payments with centralized online settlement.



The online architecture that support advanced payment models such as conditional payments (also known as smart contracts or programmable payments), where the payer's funds are reserved and only settled after predefined conditions are met, may also support offline payment with online settlement. This creates opportunities for a wide array of use cases, including offline payments. Both offline payments with online settlement and conditional payments rely on a similar approach based on **Reserve, Pay, and Settle.** 

The Reserve, Pay, and Settle approach ensures a secure and robust functionality across both offline and conditional payment models, while enabling new payment use cases to flourish.



It could be noted that conditional payments may be seen as a generalization of online payments as it provides the payer with the opportunity to define one or many conditions for payment settlement. A standard online payment is just a special case of conditional payments, where there are no settlement conditions. Likewise, Crunchfish's way of offline payments with online settlement can be seen as a generalization of conditional payments. A standard conditional payment require that the payer must be online to initiate the consitional payment, whereas Crunchfish's way of offline payments works even if the payer is offline. If the payer or the payee has online connection, then Crunchfish's way of offline payment settles immediately, or after one or many settlement conditions have been fulfilled.

The flexible **Reserve**, **Pay**, **and Settle** approach can be **contrasted with Fund**, **Pay**, **and Defund** which implements immediate finality with no settlement. Whereas Fund, Pay, and Defund is absolutely fine for online wallets, it is a risky proposition for offline payments, as it will be very challenging to detect

 Funds are pre-authorized and reserved at the payer level.
 For offline payments, these funds are locked until the offline transaction settles when connectivity is restored. For conditional payments, they are kept in escrow or held until criteria are met (e.g., service delivery, user confirmation).

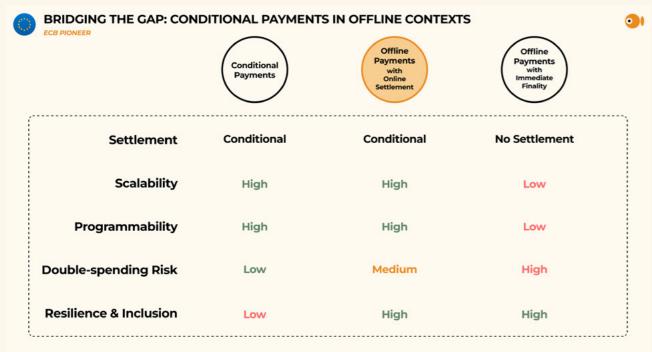
 Payment execution occurs locally or offline. In offline scenarios, buyer and seller devices communicate via proximity (e.g., NFC, QR, Bluetooth). In conditional payments, funds remain unavailable until both parties meet agreed-upon conditions.

• Once connected, offline transactions are synced to the network and settled online. Similarly, conditional payment systems settle amounts only when their conditions are validated by a trusted

> and take action against fraudulent offline wallets from the underlying online payment network's perspective.

> It should also be noted that an offline Fund, Pay, and Defund implementation is not a generalization of online payment at all, but rather a over-complicated implementation with higher double spending risks, despite using offline wallets in hardware-based secure elements, lacking the security gained from online settlement. Typically, an online reconciliation layer is built instead to compensate.

> Furthermore, offline wallets on hardwarebased secure elements are almost impossible to distribute to all mobile devices in a fragmented market with many mobile models, as there is no existing ecosystem that supports the deployment. Thus, such implementations does not bring much value over Crunchfish's way of offline payments which seamlessly ties with the payment network's online payment, conditional payment and online settlement structures.



### **Patented Leadership**

Crunchfish is the clear leader in this space, holding several key patents and multiple patent-pending applications related to offline payments with online settlement. This includes its core initial patent filed as early as January 2020 and is now in the process of being granted in multiple major jurisdictions. These proprietary solutions not only ensure Crunchfish's competitive edge but also provide a foundational platform for scalable and secure offline ecosystems, meeting the needs of modern banking and commerce.

Core Initial Patent	<ul> <li>Protecting Crunchfish's unique protocols for securely translating</li></ul>
Granted in the US:	offline transactions into centrally reconciled online payments.
Notice of	<ul> <li>Establishing intellectual property leadership within European</li></ul>
Allowance in the	payment developments, particularly for projects like the Digital
EU and Taiwan:	Euro.
Patent pending in	<ul> <li>We remain hopeful that this patent application will also be granted</li></ul>
India and China:	in India and China.

## **Future Opportunities**

Offline payments with online settlement and conditional payments are two sides of the same coin, sharing architectural foundations while carving out distinct use cases.

<b>CBDC Integrations:</b>	<ul> <li>Central banks incredigital currencies to Conditional payment payment execution ecosystems.</li> </ul>
Smart Contract and IoT Payments:	<ul> <li>Conditional payment such as pay-per-ust where funds execu Reserve-Pay-Settle</li> </ul>
Cross-Border Payment Systems:	<ul> <li>By combining offlin models, Crunchfish in global transactio environments.</li> </ul>

Crunchfish, with pioneering patents and proven deployment capabilities, is in a pole position in the global race for this emerging market. The shared architecture unlocks tremendous growth opportunities:

creasingly require offline capabilities for their to mimic the usability and flexibility of cash. nents layered on this architecture, such as delayed on or escrow, are perfectly suited for CBDC

nents are rising in importance for niche use cases, use utilities, rentals, and contractual agreements, cution requires automated approvals. Crunchfish's de architecture applies these use cases to offline.

line settlement with conditional payment sh can help solve long-standing challenges cions, particularly in fragmented connectivity

# **Digital Cash in India**



India is the leading country when it comes to real-time payments. The Reserve Bank of India (RBI) and the National Payment Corporation of India (NPCI) are the two cornerstones of the Indian payment ecosystem. The Digital Rupee is one of the most advanced CBDC implementations in the world. With 17.9 billion monthly transactions, the Unified Payments Interface (UPI) reached a 34% year-on-year increase in transaction volume and is by far the largest real-time payment system in the world. Crunchfish has been focusing on India for over five years and has developed the Digital Cash products based on the needs and requirements in India.

## **Central Bank Digital Currency in India**

The Digital Rupee is in an advanced pilot phase with leading Indian banks and third-party application providers (TPAPs). India's central bank RBI has ongoing efforts to integrate it into India's financial ecosystem more broadly. In February 2024, **RBI announced** that offline payments are a priority for the Digital Rupee, both in the form of offline payments in proximity and remotely. Crunchfish has together with IDFC FIRST Bank rolled out a solution for offline payments remotely.

Crunchfish is in ongoing discussions with the NPCI, RBI and several major Indian banks on how Crunchfish Digital Cash can add value to the Digital Rupee. As described earlier in the report, Crunchfish has presented proposals to NPCI to integrate Offline Terminal Infrastructure (OTI) for both the Digital Rupee, directly into the Digital Rupee payment rail, enabling the ability to receive offline payments as a fundamental feature of the Digital Rupee ecosystem. Meanwhile, the ability to pay offline remains with banks and TPAPs, enabling them to assume the responsibility for the security of their mobile apps and an offline wallet, in-sourced from a third-party technology provider such as Crunchfish.



- With this approach Crunchfish benefits from two significant revenue opportunities: — providing OTI to NPCI for the Digital Rupee payment ecosystem on a national basis, and
- providing offline wallet solutions to the piloting banks and TPAPs attached to this ecosystem.
- During 2024 Crunchfish together with IDFC FIRST Bank rolled out a solution for offline payment remotely for the Digital Rupee using Digital Cash telecom. This year all banks in India have been mandated by RBI to make a system-wide upgrade to a new generation of the Digital Rupee system, moving from fixed-denomination tokens to value-based tokens. IDFC FIRST Bank has completed this upgrade and re-launched their app with support for value-based tokens. As part of this upgrade, IDFC First Bank has also updated their Digital Rupee app with the latest version of the Digital Cash SDK, to ensure continued support for offline payments remotely.

### **Commercial Digital Wallets in India**

India's dominant payment system is the Unified Payments Interface (UPI), the world's most successful real-time payment system. UPI was launched in November 2016 and in April had a transaction volume of **17.9 billion transactions per month**. NPCI, which is the product owner of UPI, announced at the Global Fintech Fest (GFF) in Mumbai in September 2024 that it plans for an increase in the coming years to 100 billion transactions per month. To achieve this, offline payments are important for load balancing, resilience, and coverage in areas where internet connectivity is spotty or non-existent.

NPCI launched UPI Lite X during the GFF fintech trade show September 2023 to enable offline payments. One and a half year later, UPI Lite X has yet to be rolled out widely in the Indian market. Crunchfish believes that the main reason for the slow deployment is lack of proximity interaction methods and weaknesses in the security of UPI Lite X. Digital Cash complements UPI Lite X with a more secure and robust offline payment solution. It is also more versatile as it supports all possible proximity methods, like QR-codes, Bluetooth and Ultrasound, as well as NFC which is the only currently supported method by UPI Lite X. Providing offline support only for NFC enabled devices is limiting the addressable market significantly, as most devices in India are lacking NFC support and both devices in a transaction need to have the functionality.



The Offline Terminal Infrastructure presented for the Digital Rupee is also highly relevant for UPI and is being part of the current discussions with NPCI. If fully implemented, it would enable a more user friendly and secure solution than currently is available with UPI Lite X. At the same time, it provides the same kind of business opportunity to Crunchfish, providing OTI to NPCI and providing offline wallet solutions downstream to the many banks and TPAPs acting as UPI payment service providers.



# **Digital Cash in the Rest of the World**



Most of the world's central banks are evaluating or **preparing to launch CBDCs**. Support for offline payments is on the agenda for most of these projects. Outside of India and the CBDC market, it is primarily the emerging markets that have potential for offline payment in commercial wallets, but we also see movements in Europe, spearheaded by the European Central Bank (ECB) for the Digital Euro project.

### **CBDC** in the Rest of the World

ECB is investing heavily in an offline payments project for the Digital Euro. Over 2 billion SEK is the estimated budget for the project. The ECB has chosen a solution where the security of offline payments is based on the use of hardware in the mobile phone. Crunchfish sees significant scalability risks with this approach because there is no existing ecosystem to distribute and update an offline payment application on hardware. Without an ecosystem where the solution can be distributed and updated, the solution will not be scalable to the wide range of mobile phones on the market.

On a positive note, the ECB has announced that they want to offer conditional payments with the Digital Euro and are fostering innovation through the ECB innovation platform. The platform



simulates the envisaged Digital Euro ecosystem, in which the ECB provides technical support and infrastructure for European companies to develop innovative digital payment features and services at European level. Crunchfish is one of almost 70 market participants that have been selected by ECB to work with ECB to explore Digital Euro payment functionalities and use cases. Crunchfish was selected as a pioneer and will demonstrate three offline payment use cases with online settlement as innovative implementations of Digital Euro conditional payments, using Crunchfish's patented offline payment with online settlement. Findings from the pioneer projects will be published by the ECB in a report later this year.



Crunchfish, in co-operation with one CBDC platform partner, participated in a CBDC pilot with an Asian central bank during Q1. A local system integrator in the country was leading the project. Crunchfish has had a direct relation with the central bank for a long time to position offline payments. The offline feature was defined as a key feature for the pilot and is expected to also be part of the following commercial launch. The pilot started and concluded in Q1 and marked a significant step in assessing the potential of a CBDC within the country's financial system. The pilot result is now being evaluated and will form the basis for a potential commercial rollout, which is yet not planned for.

Crunchfish is also in advanced discussions with an Eastern European central bank for a CBDC pilot. Crunchfish has teamed up with one of the dominating system integrators within CBDC implementations globally, and with a local technology provided. With this setup the consortium has a strong technical offering, including Crunchfish's unique offline solution, combined with experience from CBDC pilot projects and a strong local representation. The board of the central bank will be presented with the viable solutions and providers during end of Q2. Based on recommendations from the board, one consortium will be selected, and contractual arrangements will be initiated. The pilot is planned to start during the second half of 2025, but based on experiences in the field it might also slide over to 2026.

### Commercial digital wallets in the Rest of the World

An important opportunity for Crunchfish is commercial payment systems that facilitate a payment ecosystem. Several countries have a centralized payment switch that operates in real time, like UPI in India, which makes payment apps in the country interoperable with each other. Integrating an interoperable acquiring Offline Terminal Infrastructure (OTI) for the payment ecosystem would have several advantages in terms of scalability, as much of the integration work would only need to be done once, compared to integrating with each of the payment service providers in the system.

Crunchfish is in advanced discussions with two such national switches. One is a leading country in Africa where an NDA has been signed and three technical workshops have been held. This country plans to add offline support in 2026. To get there, they will start design, implementation and testing during the summer of 2025. A workshop is planned in June to kick off this work. Crunchfish also has an early, similar discussion with a leading country in Asia. This country was hit by the serious Microsoft outtage last summer. This led to that the entire payment system in the country to collapse and a realization that offline payment capabilities is crucial to ensure resilience in the payment ecosystem. Crunchfish has started a dialogue with the banking association in this country, which has been tasked to investigate how to enable offline payment capability. The new go-to-market approach that first enables an OTI first with the payment network and then markets offline wallets to banks and TPAPs is very applicable here also.

Things are also starting to happen in Sweden, due to the deteriorating security

situation in the world. The Swedish Riksbank has announced in the media the need for offline payment to make payment systems more robust. Crunchfish has therefore initiated a dialogue with both the Riksbank and Swish about how the Crunchfish Digital Cash solution can increase resilience in the Swedish payment system by augmenting Swish with offline payment support. The OTI and and our core initial offline payment patent are important cornerstones to enable this.



The close partnership with SaaS Expand Agency continues, with the goal to develop opportunities with telecom operators, in mainly Africa. So far nothing has materialized into commercial agreements, but SaaS Expand handles several interesting prospects. The partnership also includes the right for SaaS Expand Agency to act as an agent in Latin America, where they work through sub-agents, giving Crunchfish a wider reach than would be possible without this partnership.

# Significant news during and after Q1

#### 2025-05-21

Crunchfish launches Offline Terminal Infrastructure for payment networks.

#### 2025-05-05

Crunchfish pioneers offline payments with online settlement in ECB innovation platform.

#### 2025-04-30

Crunchfish **withdrew proposal** for an incentive program proposal to the Annual General Meeting.

#### 2025-04-15

Crunchfish **published the 2024 annual report**, and held a webinar in Swedish about it, where Crunchfish CEO Joachim Samuelsson was interviewed by Johan Widmark, Equity Research Analyst från Emergers.



#### 2025-03-03

Crunchfish announced the result of the exercise of warrants series TO 10, with close to 8M warrants excercised for suscription.

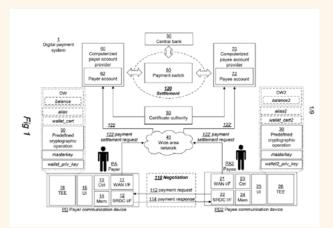


#### 2025-02-13

Crunchfish **published the 2024 Yearend report**, and **held a webinar about it**, where Crunchfish CEO Joachim Samuelsson was interviewed by chief analyst Martin Dominique from Västra Hamnen Corporate Finance.



#### 2025-01-21 Crunchfish received Swedish patent for quantum-safe offline payments.



# Financials



# Sales and earnings for the quarter

Net sales amounted to SEK 285 (1,665) thousand for the first quarter and operating expenses amounted to SEK 7 976 (12,812) thousand. EBITDA for the period amounted to SEK -4,552 (-3,920) thousand. Loss before tax for the first quarter amounted to SEK 5,109 (6,255) thousand and has been charged with amortization of intangible assets of SEK 415 (741) thousand and tangible fixed assets of SEK 64 (121) thousand and with impairment om of intangible assets of SEK 0 (1,507) thousand.

The reduction in costs is due to the decision to discontinue the operations of the gesture interaction business.

#### Investments

During the first quarter, the Group invested SEK 2,073 (4,264) thousand in intangible fixed assets and 0 (0) in tangible fixed assets.

#### Liquidity and financing

At the end of the first quarter the Group's cash and cash equivalents amounted to SEK 14,082 (21,985) thousand. Cash flow from operating activities during the first quarter amounted to SEK -5,331 (-4,469) thousand.

#### Staff

As of March 31, 2025, the number of employees was 15 (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 November 2024 and the annual report for FY 2024, which can be found at crunchfish.com.

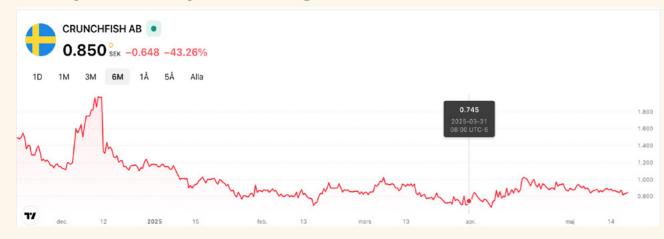
#### **Related party transactions**

Group 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.

# Sales and earnings for the quarter, parent company

The parent company's net sales amounted to SEK 3,386 (4,173) thousand for the first quarter and operating expenses to amounted to SEK 3,866 (4,523) thousand. EBITDA for the period amounted to SEK 109 (234) thousand. During the first quarter, the parent company invested SEK 0 (0) thousand in intangible fixed assets and SEK 0 (0) thousand in tangible fixed assets.

#### Share price development during 6 months



#### Major shareholders for Crunchfish AB (publ) as of March 31st 2025

Name	Number of shares*	Share %
Corespring Invest AB (Chairmain Göran Linder)	12 125 593	18.50
Femari Invest AB (CEO Joachim Samuelsson & Petra Samuelsson)	7 500 000	11.45
Nowo Global Fund	3 999 205	6.10
Nordic Underwriting ApS	2 118 680	3.23
Mats Kullenberg incl. company holdings	1 296 794	1.98
Granitor Invest AB	1 049 391	1.60
Carlquist Holding AB	900 000	1.37
Mikael Kretz incl. company holdings	760 000	1.16
Håkan Paulsson incl. family and company holdings	625 000	0.95
Ali Pahlawan incl. company holdings	536 277	0.82
Total, ten largest shareholders	30 910 940	47.17
Other shareholders (approx. 5,000)	34 619 814	52.83
Total	65 530 754	100.00

\*The number of shares is estimated based on information from Euroclear and shareholders.

#### **Financial calendar**

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

Interim report Q1 2025 May 21st, 2025, 8:30 am CET

Annual General meeting (Malmö) 2025 May 21st, 2025, 10:00 am CET

Half-year report 2025 August 22nd, 2025, 8:30 am CET

Interim report Q3 2025 November 13th, 2025, 8:30 am CET

Year-end report 2025 February 12th, 2026, 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

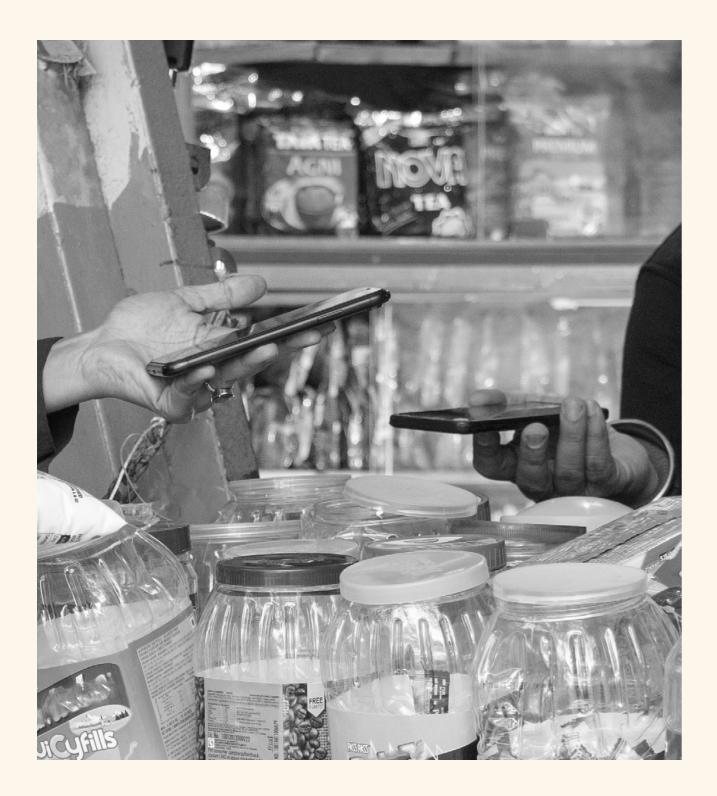
The Board of Directors and the CEO hereby assures that this interim report gives a fair overview of the company's operations, financial status, and result.

Malmö, May 21st, 2025

The Board of Directors: Göran Linder (Chairman) Susanne Hannestad Joakim Nydemark Birendra Sahu Joachim Samuelsson (CEO) Malte Zaunders

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# **Financial report**



### Group income statement (SEK)

#### **Operating income**

Net sales

Own work capitalized

Other operating income

Total operating income

#### **Operating expenses**

Other external expenses

Personnel expenses

Depreciation and impairment of tangible and intangible fixed asset

Other operating expenses

Profit/loss from participations in associated companies

Total operating expenses

#### **Operating profit**

#### **Financial items**

Other interest income and similar profit items

Interest expense and similar loss items

Profit or loss from financial items

Profit or loss after financial items

Profit or loss before tax

Taxes

Tax on income for the period

Profit or loss for the period/year

**Key figures** 

EBITDA

Earnings per share

Number of shares, average

Number of shares at balance sheet date

Earnings per share after full dilution

Number of shares after full dilution, average

Number of shares after full dilution, balance sheet date



Q1 2025	Q1 2024	2024
285 174	1 665 338	2 933 125
2 072 978	4 264 171	12 708 120
586 643	592 562	2 393 788
2 944 795	6 522 071	18 035 033
-2 721 977	-4 174 361	-15 717 962
-4 774 509	-6 284 924	-23 249 122
-479 316	-2 369 479	-5 386 783
0	0	-86 386
0	17 230	17 230
-7 975 802	-12 811 534	-44 423 023
-5 031 007	-6 289 463	-26 387 990
5 00 1 007	0100 100	2000/200
-1 608	50 933	155 217
-76 073	-16 453	-214 230
-77 681	34 480	-59 013
-5 108 688	-6 254 983	-26 447 003
-5 108 688	-6 254 983	-26 447 003
0	0	-78 774
-5 108 688	-6 254 983	-26 525 777
-4 551 691	-3 919 984	-21 001 207
-0,08	-0,16	-0,60
60 182 901	39 646 906	44 112 423
65 530 754	39 646 906	57 508 974
-0,08	-0,16	-0,60
75 738 312	41 059 706	49 923 224
75 738 312	/1 059 706	76 628 676

## Group balance sheet (SEK)

	Mar 31, 2025	Mar 31, 2024	Dec 31, 2024
Assets			
Fixed assets			
Intangible assets			
Capitalized expenses for development work	35 438 119	28 148 476	33 779 659
Total intangible fixed assets	35 438 119	28 148 476	33 779 659
Tangible fixed assets			
Equipment	841 234	1 329 053	906 372
Total tangible fixed assets	841 234	1 329 053	906 372
Total fixed assets	36 279 353	29 477 529	34 686 031
Current assets			
Current receivables			
Account receivables	1 208 232	1 755 516	329 212
Other receivables	1 530 783	1 468 591	1 615 856
Prepayments and accrued income	1 285 920	1 324 228	1 057 877
Total current receivables	4 024 935	4 548 335	3 002 945
Cash and bank balances			
Cash and bank balances	14 081 787	21 985 320	17 276 249
Total cash and bank balances	14 081 787	21 985 320	17 276 249
Total current assets	18 106 722	26 533 655	20 279 194
Total assets	54 386 075	56 011 184	54 965 225

## Group balance sheet cont. (SEK)

Equity and liabilites	
Equity	
Equity attributable to parent company shareholders	
Share capital	
Other contributed capital	
Other capital including profit or loss for the period	
Total equity	
Long-term liabilities	
Lease liabilities	
Total long-term liabilities	
Current liabilities	
Lease liabilities	
Accounts payable	
Other liabilities	
Accrued expenses and accrued income	
Total current liabilities	
Total equity and liabilities	
Key Figures	
Equity-assets-ratio	
Debt-to-equity ratio	
Interest-bearing net debt	

# Changes in the group equity (SEK)

Equity at beginning of period/year

Share issues

lssue costs

Warrant premiums

Translation difference

Profit or loss for the period/year

Equity at end of period /year

Mar 31, 2025	Mar 31, 2024	Dec 31, 2024
3 014 415	1 823 758	2 645 413
322 750 424	318 492 646	339 097 901
-279 417 185	-274 308 497	-294 580 064
46 347 654	46 007 907	47 163 250
701 993	907 778	754 498
701 993	907 778	754 498
205 786	453 129	202 994
1 346 073	1 462 110	642 794
817 084	860 439	810 044
4 967 485	6 319 821	5 391 645
7 336 428	9 095 499	7 047 477
54 386 075	56 011 184	54 965 225
85,2%	82,1%	85,8%
2,0%	3,0%	2,0%
n/a	n/a	n/a

Q1 2025	Q1 2024	2024
47 163 250	52 262 120	52 262 120
4 652 632	0	25 899 999
-327 579	0	-5 242 030
0	0	821 205
-31 961	770	-52 264
-5 108 688	-6 254 983	-26 525 780
46 347 654	46 007 907	47 163 250

# Group cash flow statement (SEK)

	Q1 2025	Q1 2024	2024
Operating activities			
Operating profit or loss	-5 031 007	-6 289 463	-26 387 990
Adjustments for non-cash intems	447 695	2 437 229	5 307 962
Interest received etc.	63 824	891	105 772
Interest paid	-76 073	-16 453	-214 230
Income tax paid	0	0	0
Cash flow from operating activities before			
changes in working capital	-4 595 561	-3 867 796	-21 188 486
Cash flow from changes in working capital			
Decrease(+)/increase(-) in receivables	-1 021 990	-1 408 572	136 818
Decrease(-)/increase(+) in current liabilities	286 159	806 950	-990 937
Cash flow from operating activities	-5 331 392	-4 469 418	-22 042 605
Investing activities			
Investments in technology development	-2 072 978	-4 264 171	-12 708 120
Cash flow from investing activities	-2 072 978	-4 264 171	-12 708 120
Financing activities			
Share issue	4 325 053	0	20 657 969
Loans from shareholders	0	0	5 000 000
Repayment loans from shareholders	0	0	-5 000 000
Amortization of financial leasing agreements	-49 713	-56 616	-227 125
Warrant premiums paid	0	0	821 205
Cash flow from financing activities	4 275 340	-56 616	21 252 049
Change in cash and cash equivalents	-3 129 030	-8 790 205	-13 498 676
Cash and cash equivalents at beginning of period/ year	17 276 249	30 725 483	30 725 483
Exchange rate difference in cash and cash equivalents	-65 432	50 042	49 442
Cash and cash equivalents at end of period/year	14 081 787	21 985 320	17 276 249

# Parent company income statment (SEK)

Operating income	
Net sales	
Other operating income	
Total operating income	
Operating expenses	
Other external expenses	
Personnel expenses	
Depreciation of tangible and intangible fixed asset	
Other operating expenses	
Total operating expenses	
Operating profit	
Financial items	
Profit/loss from participation in group companies	
Other interest income and similar profit items	
Interest expense and similar loss items	
Profit or loss from financial items	
Profit or loss before tax	
Taxes	
Tax on income for the period	
Profit or loss for the period/year	
Key figures	
EBITDA	
Earnings per share	
Number of shares, average	
Number of shares at balance sheet date	
Earnings per share after full dilution	
Number of shares after full dilution, average	
Number of shares after full dilution, balance sheet date	

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Q1 2025	Q1 2024	2024
3 386 499	4 172 874	14 667 941
585 591	580 760	2 361 074
3 972 090	4 753 634	17 029 015
-1 804 200	-2 723 678	-8 936 349
-2 058 316	-1 796 019	-7 711 561
-3 010	-3 010	-12 040
0	0	-86 386
-3 865 526	-4 522 707	-16 746 336
106 564	230 927	282 679
100 504	230 527	202 075
-135 000	-2 000 000	-119 900 000
13 018	41 238	449 875
-14 830	-19 208	-205 328
-136 812	-1 977 970	-119 655 453
-30 248	-1 747 043	-119 372 774
0	0	0
0	0	0
-30 248	-1 747 043	-119 372 774
109 574	233 937	294 719
0,00	-0,04	-2,71
60 182 901	39 646 906	44 112 423
65 530 754	39 646 906	57 508 974
0,00	-0,04	-2,71
75 738 312	41 059 706	49 923 224
75 738 312	41 059 706	76 628 676

## Parent company balance sheet (SEK)

Assets	Mar 31, 2025	Mar 31, 2024	Dec 31, 2024
Fixed assets			
Tangible fixed assets			
Equipment	24 049	36 089	27 059
Total tangible fixed assets	24 049	36 089	27 059
Financial assets			
Participations in group companies	34 484 145	123 298 538	34 619 145
Receivables from group companies	6 896 274	7 006 982	0
Total financial assets	41 380 419	130 305 520	34 619 145
Total fixed assets	44.49.4.469		
	41 404 468	130 341 609	34 646 204
Current assets			
Current receivables			
Account receivables	854 122	1 600 501	282 289
Other receivables	373 881	374 191	359 727
Prepayments and accrued income	1 285 920	1 313 130	1 057 877
Total current receivables	2 513 923	3 287 822	1 699 893
Cash and bank balances			
Cash and bank balances	10 605 660	20.024.020	
	13 685 668	20 021 690	16 109 962
Total cash and bank balances	13 685 668	20 021 690	16 109 962
Total current assets	16 199 591	23 309 512	17 809 855
Total assets	57 604 059	153 651 121	52 456 059

## Parent company balance sheet cont. (SEK)

Equity and liabilites	Mar 31, 2025	Mar 31, 2024	Dec 31, 2024
Equity			
Restricted equity			
Share capital	3 014 415	1 823 758	2 645 413
Total restricted equity	3 014 415	1 823 758	2 645 413
Unrestricted equity			
Profit brought forward	49 870 271	144 629 474	165 286 994
Profit or loss for the period/year	-30 248	-1 747 043	-119 372 774
Total unrestriced equity	49 840 023	142 882 431	45 914 220
Total equity	52 854 438	144 706 189	48 559 633
Current liabilities			
Accounts payable	601 127	442 081	233 651
Liabilities to group companies	1 040 891	5 279 910	652 663
Other liabilities	520 051	357 049	328 077
Accrued expenses and accrued income	2 587 552	2 865 892	2 682 035
Total current liabilities	4 749 621	8 944 932	3 896 426
Total equity and liabilities	57 604 059	153 651 121	52 456 059
Key Figures			
Equity-assets-ratio	91,8%	94,2%	92,6%
Debt-to-equity ratio	0,0%	0,0%	0,0%
Interest-bearing net debt	n/a	n/a	n/a

# Changes in parent company equity (SEK)

Equity at beginning of period/year

Share issues

lssue costs

Warrant premiums

Profit or loss for the period/year

Equity at end of period /year

Q1 2025	Q1 2024	2024
48 559 633	146 453 232	146 453 232
4 652 632	0	25 899 999
-327 579	0	-5 242 030
0	0	821 206
-30 248	-1 747 043	-119 372 774

52 854 438

144 706 189

48 559 633

# Parent company cash flow statement (SEK)

	Q1 2025	Q1 2024	2024
Operating activities			
Operating profit or loss	106 564	230 927	282 679
Adjustments for non-cash intems	3 010	3 010	12 041
Interest received etc.	26 977	15 364	438 436
Interest paid	-14 830	-19 208	-205 328
Income tax paid	0	0	0
Cash flow from operating activities before			
changes in working capital	121 721	230 093	527 828
Cash flow from changes in working capital			
Decrease(+)/increase(-) in receivables	-814 030	-1 353 315	234 614
Decrease(-)/increase(+) in current liabilities	464 967	56 604	-364 655
Cash flow from operating activities	-227 342	-1 066 618	397 787
Investing activities			
Loans provided to group companies	-6 508 046	-8 727 072	-34 746 739
Cash flow from investing activities	-6 508 046	-8 727 072	-34 746 739
Financing activities			
Share issue	4 325 053	0	20 657 969
Loans from shareholders	0	0	5 000 000
Repayment loans from shareholders	0	0	-5 000 000
Cash flow from financing activities	4 325 053	0	20 657 969
Change in cash and cash equivalents	-2 410 335	-9 793 690	-13 690 983
Cash and cash equivalents at beginning of period/ year	16 109 962	29 789 506	29 789 506
Exchange rate difference in cash and cash equiva- lents	-13 959	25 874	11 439
Cash and cash equivalents at end of period/ year	13 685 668	20 021 690	16 109 962



