

# Crunchfish: Third time a charm? New offline strategy targets system integration

Johan Widmark | 2025-05-26 08:00

With its third attempt to scale offline payments in India, Crunchfish hopes that its new Offline Terminal Infrastructure (OTI) will mark a turning point. With the OTI, the company addresses the ecosystem-wide barriers that stalled its previous attempts, this time with a model directly aligned with India's payment architecture. Following a revision of our rNPV model, we now find support for an rNPV of SEK 2.3 (1.7) per share, while noting that this remains based on very crude assumptions, detailed on page 2 of this report.

## Rethinking the approach: from wallets to infrastructure

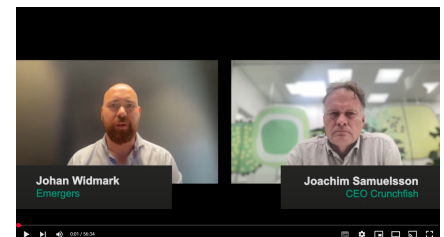
Crunchfish's first two attempts (pilots with banks in 2023 and a top-down push for wallet adoption via NPCI in 2024), highlighted a key structural flaw: offline payments cannot scale without ecosystem-level buy-in. Now the company's third iteration flips the model. By introducing a modular, interoperable Offline Terminal Infrastructure (OTI), Crunchfish embeds offline payment reception directly into existing rails like UPI and the Digital Rupee. Banks and TPAPs remain free to innovate with their own offline wallets, ensuring decentralised control while maintaining interoperability. It's a cleaner architecture and crucially, one aligned with how card infrastructure scaled globally.

## An EMVCo blueprint for CBDCs and beyond

The OTI draws explicit parallels to EMVCo's card terminal infrastructure: a standardised, network-level backbone for reception, paired with competitive freedom for issuers. By mirroring this proven model, Crunchfish's architecture balances the RBI/NPCI's control over specifications with room for bank-led wallet innovation. OTI provides the missing piece, scalable infrastructure, which could unlock commercial deals not just in India, but also with global CBDC initiatives such as the Digital Euro, where Crunchfish already plays a role in conditional payment pilots. Additionally, Crunchfish has received a Decision to Grant from the European Patent Office for its initial Digital Cash patent, covering core aspects of offline payments using the Reserve, Pay, and Settle model. This follows the earlier US grant and strengthens Crunchfish's strategic position in the growing field of offline payments, including potential use in the Digital Euro.

## Support for an rNPV of SEK 2.3 (1.7) per share

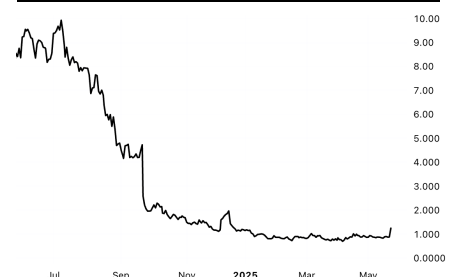
Cash at the end of Q1'25 amounted to SEK 14m, including SEK 5.2m from the exercise of TO10. This is below the expected OPEX for 2025 of SEK -30m, although TO11, closing on May 30, could provide an additional SEK 5.6m. Absent a commercial deal with a significant upfront payment during the course of 2025, we anticipate that further funding will be needed toward year-end before the long-term potential has a chance to materialise in the P&L. We have now made several adjustments to our model, estimating 11 PSPs and 160m upfront paid users by 2028 and a value capture tapering off to reflect scale-driven pricing pressure. Using a 24% discount rate, 5% terminal growth, and 25% success probability, including also a rights issue (at 30% discount if a new deal is closed, at 50% discount if no deal is closed before then) this supports an rNPV around SEK 2.3 (1.7) per share, though we emphasise that this remains based on very crude assumptions, most of the detailed on page 2 in the report. While the case still carries some characteristics of an out-of-the-money option, we also see an interesting opportunity in the possibility that the new OTI approach could act as a catalyst for commercial discussions and a path toward a viable long-term business model.



Watch the lunch talk with CEO Joachim Samuelsson (in Swedish) [here](#)

## Crunchfish

Current Price, SEK	1.25
Shares (M)	65.5
Market Capitalisation (MSEK)	82
Net Debt (+) / Cash (-) (MSEK)	-14.1
Enterprise Value (MSEK)	68
Market	First North



## Crunchfish rNPV model

rNPV	2025E	2026E	2027E	2028E	2029E	2030E	Terminal Value
Total Users (m)	2.5	20.3	73.5	164.8	332.8	506.0	G: 5% r: 24%
New licenses	2.5	17.8	53.3	91.3	168.0	173.3	
Renewals (2y)	0.0	0.0	2.5	17.8	55.8	109.0	
Invoiced licenses	2.5	17.8	55.8	109.0	223.8	282.3	
ARPU, SEK (for 2y upfront)	3.6	3.2	2.8	2.5	2.2	1.9	
Annual Revenue	9.0	56.8	156.2	267.4	482.1	544.3	
OPEX	-30.2	-36.2	-43.4	-52.1	-62.5	-68.8	
EBIT	-21.2	20.6	112.8	215.3	419.6	475.5	
CAPEX	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	
Deferred Paym & Earn-out						0.0	
Tax	0.0	0.0	0.0	-33.7	-83.9	-95.1	2077
FCF	-21.7	20.1	112.3	181.0	335.1	379.8	
Discount factor 24%							
Discount Period	1	2	3	4	5	6	7
Discount factor	1.000	0.805	0.648	0.522	0.420	0.338	0.272
PV	-22	16	73	94	141	128	566
NPV	996.9						
Likelihood of Success	25%						
rNPV	249.2						
Current Number of Shares	65.5						
Equity raise 2025/2026, SEKm	35						
Discount at rights issue	40%						
New shares in rights issue	46.7						
New NOS TO 11	8.9						
Fully Dilluted NOS post issue	121.1						
rNPV per Share	2.3						

Source: Emergers

## Crunchfish rNPV Key Model Assumptions

PSPs and End users at full rollout	Roll-out coverage	2025E	2026E	2027E	2028E	2029E	2030E	Average customers (m)
Number of PSPs at full scale								
Large PSPs (>100m )	50%			1	2	3	4	150
Mid PSP (10-100m)	50%	1	2	3	4	5	6	40
Small PSP (<10m)	50%	1	2	3	5	8	14	5
ARPU per PSP (2y term)								
Large PSPs (>100m )				2.5	2.3	2.0	1.8	
Mid PSP (10-100m)		3.5	3.2	2.8	2.6	2.3	2.1	
Small PSP (<10m)		4.0	3.6	3.2	2.9	2.6	2.4	
Roll-out of end users (Estimated to be 20% y1, 50% y2 and 100% y3)								
Large PSPs (>100m )				15.0	67.5	195.0	322.5	
Mid PSP (10-100m)		2.0	18.0	52.0	86.0	120.0	154.0	
Small PSP (<10m)		0.5	2.3	6.5	11.3	17.8	29.5	
Sum		2.5	20.3	73.5	164.8	332.8	506.0	

Source: Emergers

### Discount rate

Equity Beta	Crunchfish
Unlevered beta	0.92
Debt to Total Capital (D/(D+E))	0.0%
Equity to Total Capital ratio (E/(D+E))	100.0%
Debt to Equity (D/E)	0.0%
Tax rate	22.0%
Relevered beta	0.92

### Capital Asset Pricing Model

Risk-free rate (20 yr. U.S. gov. bond yield)	5.0%
Market Risk Premium	10.0%
Size premium	10.0%
Cost of equity	24.2%
WACC	
Cost of Equity	24.2%
Pre-tax cost of debt	0.0%
Post-tax cost of debt	0.0%
% net debt	0.0%
Discount Rate	24.2%

Source: Emergers

## Addressing growing problems on a global scale

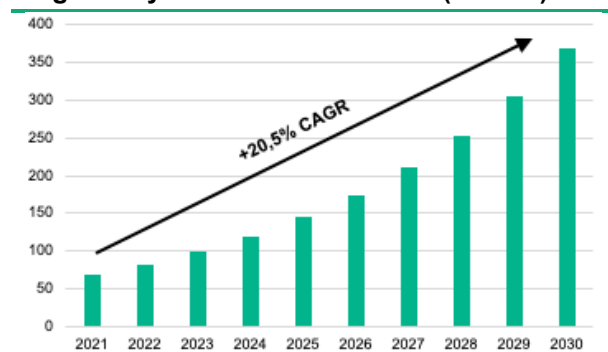
### Offline digital payments

Even though internet connectivity is good throughout the developed world, it doesn't work everywhere, all the time. Payment rails, built on circuit-switched systems, only works if everything else supporting it works, making modern societies vulnerable to IT-attacks, system failures or even just downtime maintenance.

Connectivity in general is a major concern in other parts of the world. In India for example, only about 50% of the 1,4 billion citizens enjoy a stable connection. The same goes for a country like Nigeria, where 70% of the population lives without solid internet connection.

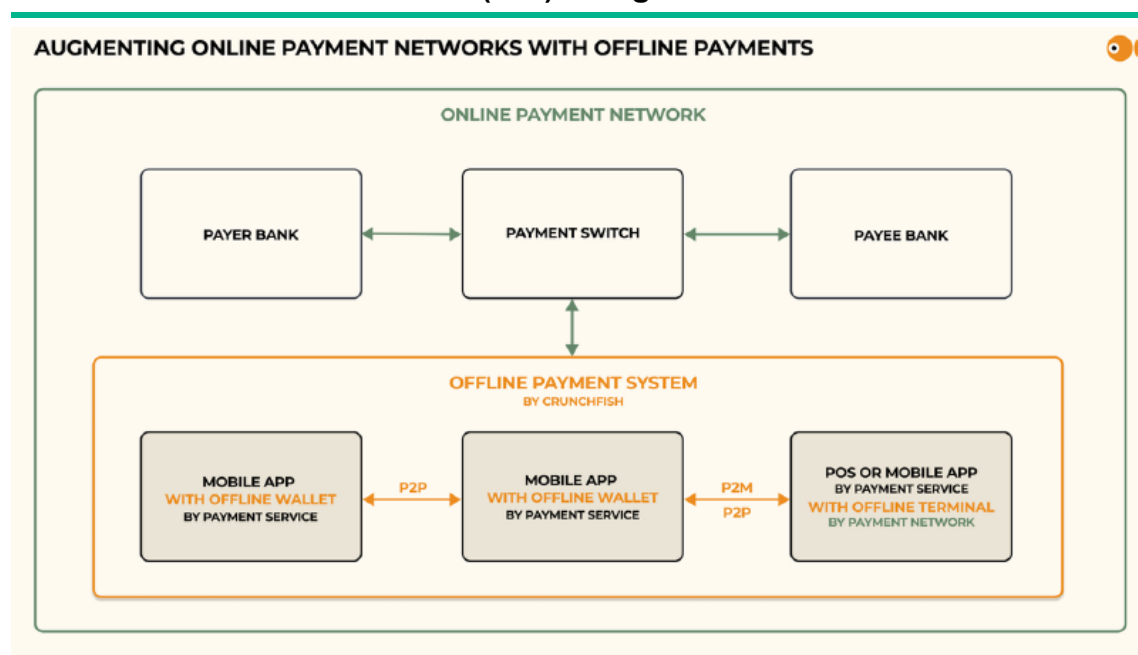
As internet connectivity varies a lot between regions, systems are prone to downtime, and internet connection has become a vital part of existing payment infrastructure, this adds up to a problem in urgent need of a solution. Despite the poor connectivity, India is the supreme leader in real-time payments, where over 74 billion transactions were made through UPI (India's version of Swish) in 2022 alone. This compares to the 4 billion transactions that has been made on Swedish Swish since the service launched in 2012.

### Digital Payments Market Growth (USDbn)



Source: Grandviewresearch, Emergers

## Offline Terminal Infrastructure (OTI) Design



Source: Crunchfish

### **IDFC First Bank Commercial Agreement**

On the 29<sup>th</sup> of June 2023 Crunchfish signed their first commercial agreement for its Digital Cash Offline-solution with IDCF First Bank. The first release to the bank's customers was launched in Q3 2023, and the initial use case was to enable offline UPI payments over the telecom network.

The 3-year license includes a first trench of users, out of a maximum of seven. Should IDFC Bank decide they want to offer the service to more of its customers, additional licenses will have to be purchased.

### **SaaS business model with high scalability**

As both of Crunchfish's verticals are fully based on software, the business is highly scalable by nature with high margins. With an annual OPEX currently at about SEK 40m per year (which the company expects to keep intact going forward), future profitability will be high should high volume deals be signed.

### **Risks**

**Unproven business model:** Even though one Digital Cash commercial deal has been signed, the business model, earning capacity and rollout-pace are still highly uncertain.

**Addressing a slow-moving market:** Crunchfish's business is focused on critical financial infrastructure, such as payment systems. We believe that even though the technology works, an investor needs to keep in mind that these institutions are slow to change and that a rollout might take longer than expected.

### **Corporate Governance**

**CEO of Crunchfish AB** Joachim Samuelsson has a Master of Science in industrial Engineering and Management from Linköping University. As a serial entrepreneur since 1996, Samuelsson has had successful engagements in ComOpt AB, Actix Ltd and Biomain AB. Before that Samuelsson worked several years for Ericsson in international technical and marketing roles.

**Chairman of the board** Göran Linder has a Master of Science in Engineering from KTH Royal Institute of Technology in Stockholm. Linder also serves as CEO of Corespring New Technology AB and serves on the board in Powercell AB, Promore Pharma AB, Minesto AB and QCG Sweden AB.

**CEO of Crunchfish Digital Cash AB** Patrik Lindeberg has a Master of Science in Electrical Engineering from Lund University and National University of Singapore, bringing experience in commercial and technical areas of responsibility.

## Crunchfish

### Income Statement

MSEK	2021	2022	2023	2024	2025E	2026E	2027E
Sales	4.0	6.2	1.0	3.0	9.0	56.8	156.2
Operating Costs	-49.3	-39.8	-46.1	-39.1	-30.2	-36.2	-43.4
EBITDA	-29.2	-18.1	-26.5	-21.0	-10.8	27.0	117.2
Depreciation	-7.7	-6.1	-22.8	-5.4	-2.0	-1.9	-1.8
Amortisation of Goodwill	0.0	0.0	0.0	0.0	1.0	1.0	1.0
EBIT	-36.9	-24.3	-49.4	-26.4	-11.8	26.1	116.4
Non-recurring Items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Associated Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Financial Items	-1.6	0.2	0.1	-0.1	-0.3	-0.3	-0.3
<b>Pre-tax Result</b>	<b>-38.5</b>	<b>-24.0</b>	<b>-49.3</b>	<b>-26.5</b>	<b>-12.0</b>	<b>25.9</b>	<b>116.2</b>
Tax	0.0	0.0	0.0	-0.1	0.0	-5.2	-23.8
Minority Interest	0.0	0.0	0.0	0.0	1.0	1.0	1.0
<b>Net Result</b>	<b>-38.5</b>	<b>-24.0</b>	<b>-49.3</b>	<b>-26.5</b>	<b>-11.0</b>	<b>21.7</b>	<b>93.4</b>

### Capital Expenditure

	2021	2022	2023	2024	2025E	2026E	2027E
Capital Expenditure, Absolute	15.8	13.6	1.2	0.0	-0.5	-2.8	-7.8
As a Pct of Sales	400%	220%	125%	0%	-5%	-5%	-5%
Depreciation Multiple	2.1	2.2	0.1	0.0	-0.2	-1.5	-4.3

### Key Ratios

Share Price: SEK 1.25

	2021	2022	2023	2024	2025E	2026E	2027E
Share Price at 31 Dec	25.00	20.00	7.00	1.18	1.25	1.25	1.25
Number of Shares (Millions)	30.93	33.04	39.65	57.51	65.53	65.53	65.53
Market Cap	773.1	660.8	277.5	67.9	81.9	81.9	81.9
Enterprise Value	740.9	631.9	248.2	51.5	76.3	52.4	-56.7
EPS (Reported)	-1.24	-0.73	-1.24	-0.46	-0.20	0.30	1.39
EPS (Adjusted)	-1.24	-0.73	-1.24	-0.46	-0.20	0.30	1.39
CEPS	-1.24	-0.73	-1.24	-0.46	-0.20	0.30	1.39
P/CEPS	n.a.	n.a.	n.a.	n.a.	-6.3	4.2	0.9
Book Value/Share	1.8	1.8	1.3	0.8	0.5	0.8	2.2
P/BV	13.8	11.2	5.3	1.4	2.4	1.5	0.6
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend Payout Ratio (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EV/Sales	187.3	102.1	639.7	211.1	8.5	0.9	-0.4
EV/EBITDA	-25.4	-34.9	-23.8	-30.1	-7.1	1.9	-0.5
EV/EBIT	-20.1	-26.1	-12.8	-23.9	-6.5	2.0	-0.5
P/E (Adjusted)	-20.1	-27.5	-5.6	-2.6	-6.3	4.2	0.9
Sales Growth, Y/Y (%)	-63.6	56.4	-84.0	203.0	200.7	531.1	175.1
EBIT Growth, Y/Y (%)	46.2	-34.2	103.6	-46.5	-55.4	-321.7	346.0
EPS Growth (Adjusted), Y/Y (%)	39.2	-41.5	71.0	-62.9	-57.0	-251.1	364.3
EBITDA Margin (%)	-738.2	-292.8	-2687.2	-702.3	-119.7	47.5	75.0
EBIT Margin (%)	-931.8	-392.0	-5000.1	-882.3	-130.8	46.0	74.5
Return on Equity (%)	-84.8	-41.9	-88.8	-53.4	-32.0	44.7	91.8
Tax Rate (%)	0.0	0.0	0.0	0.0	0.0	-20.8	-20.6

### Financial Position

	2021	2022	2023	2024	2025E	2026E	2027E
Interest-Bearing Net Debt	-32	-29	-29	-16	-6	-30	-139
Net Debt/Equity	-0.6	-0.5	-0.6	-0.3	-0.2	-0.5	-1.0
Equity Ratio	0.9	0.9	0.8	0.9	0.9	0.6	0.6
Net Debt/EBITDA	1.1	1.6	1.1	0.8	0.0	0.0	0.0

Source: Emergers, Company reports

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