

Update: Report Q3 2023

2023-12-06

Crunchfish: Competition on the horizon

- Commercialisation delays due to launch of UPI Lite X from NPCI
- We have revised our valuation model and financial forecast
- We lower our fair value to SEK 12.70 (25.80) per share

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Ticker: CFISH
Industry: Technology
Listed on: Nasdaq First North
Latest share price (SEK): 4.46
Market cap (MSEK): 177
Enterprise Value (MSEK): 158
Total number of shares (M): 39.65
- of which free float (M): 17.80

VHCF fair value per share

DCF model SEK 12.70

Crunchfish AB

Address: Stora Varvsgatan 6A
211 19 Malmö
Webpage: crunchfish.com
CEO: Joachim Samuelsson

Main owners (30 Sep 2023)

Owner	Capital (%)
Femari Invest AB	22.7
Corespring Invest AB	18.1
Paul Cronholm	3.3
Carlquist Holding AB	3.0
Mikael Kretz	2.2

Share price history (SEK)



Change (%)	-1m	-3m	-12m
Change (%)	-35.9	-76.4	-79.4
52 wk range (Low/Hi) - SEK	4,03 / 40,60		

Source: Börnsdata

In the preceding quarter, the company marked a significant milestone by securing its inaugural commercial deal in the business area of Digital Cash with IDFC First Bank in India. In a strategic move, the bank opted to integrate Digital Cash telecom into its Digital Rupee app. While the solution awaits its debut on the Indian market, the pending launch is contingent upon the final approval from the Reserve Bank of India (RBI). The timing of the approval remains uncertain, and no specific timeframe has been provided.

In our [recent research report](#), we explained that the service through IDFC would initially be offered to a select group of customers. If IDFC chooses to expand its customer base, additional fees will be charged in a 7-layer structure. However, the anticipated scale-up, as envisioned by Crunchfish, has encountered delays due to the introduction of UPI Lite X by the National Payments Corporation of India (NPCI).

UPI Lite X closely resembles the Crunchfish Digital Cash solution. It facilitates seamless money transfers even in offline environments, enabling users to initiate and complete transactions in areas with limited or no connectivity. The UPI Lite X requires both the sender and receiver to have devices equipped with Near Field Communication (NFC) support. Currently, specific details regarding the maximum amount of money that can be sent through UPI Lite X are not available.

During the [web conference](#) in relation to the Q3 report, CEO Joachim Samuelsson explained the parallels and distinctions between UPI Lite X and Crunchfish Digital Cash. Samuelsson highlighted that UPI Lite X essentially mirrors Crunchfish Digital Cash, as much of the technology embedded in the Crunchfish solution is present in UPI Lite X.

Table 1: Financial Overview

MSEK	2021	2022	2023e	2024e	2025e
Net sales	4,0	6,2	0,9	1,1	9,0
Growth (%)	-64%	56%	-86%	23%	730%
EBITDA	-29,2	-18,1	-24,6	-24,3	-16,3
EBITDA margin (%)	neg	neg	neg	neg	neg
EBT	-38,5	-24,0	-30,4	-34,3	-28,1
Cash holdings	32,8	29,3	32,5	49,3	11,9
Total assets	64,2	66,5	81,8	108,1	80,5
Total equity	55,8	58,8	71,6	97,3	69,2
Solidity (%)	87%	88%	87%	90%	86%
P/E	neg	neg	neg	neg	neg
ROE	neg	neg	neg	neg	neg
EV/EBIT (x)	neg	neg	neg	neg	neg
EV/Sales (x)	7,7	7,3	8,1	7,9	5,5

Source: Västra Hamnen Corporate Finance

However, UPI Lite X has some limitations compared to Digital Cash. Digital Cash is more secure because it has a trusted application in its software. Digital Cash also provides a wider range of interactions, including telecom, QR, Bluetooth, and more.

It's essential to know that NPCI has not promoted a software solution. Instead, UPI Lite X acts as a specification that outlines how offline payments should connect with the NPCI backend. UPI Lite X complements Crunchfish Digital Cash rather than replacing it. The activities in payment apps and in the banks' backend will still be managed by individual banks, connecting to the NPCI backend. The banks will continue to act as Payment-Service-Providers and can license Crunchfish Digital Cash for a comprehensive service package for offline payments.

Crunchfish and NPCI has entered into a NDA

Crunchfish holds patents regarding its Digital Cash solution, and there is an indication that UPI Lite X may be infringing upon these patents, although the concerned patents have yet to be officially granted in India. Notably, the specification provided by NPCI seems to acknowledge and draw from the principles of Crunchfish Digital Cash, particularly regarding the facilitation of offline payments toward the NPCI backend. During the quarter, Crunchfish formalised a non-disclosure agreement (NDA) with NPCI, with the ambition to explore how Crunchfish Digital Cash could complement NPCI. The outcome of these discussions will be revealed in due course.

Rights issue brought in net SEK 35.5 million

In September, the company unveiled its plans for a rights issue of SEK 85 million, secured to 60 per cent. In November, the company announced that 60 per cent of the issue was subscribed, resulting in a total of SEK 51.2 million being raised. Of this sum, SEK 8.2 million was allocated to issue-related costs, and the company used parts of the funds to repay a loan of SEK 7.5 million. In net, SEK 35.5 million was added to the company. These funds are earmarked for the ongoing development of Crunchfish's operations and are expected to sustain the company's financial runway through 2024. Further details on the company's financing will be discussed later in this report.

The AR market becomes increasingly competitive

Progress in Gesture Interaction has been relatively sluggish, with Lenovo's daystar AR glasses, utilising Crunchfish's hand tracking, yet to witness significant breakthrough. Although volumes from Crunchfish's partner Ximmerse are on the rise, they remain relatively modest. Furthermore, the deal with OPPO, which yielded sales of USD 500 thousand in Q3 2022, will not be extended. The augmented reality (AR) technology market is becoming intensely competitive, with major players increasing their investments to meet future demands.

Crunchfish, being a small tech company with limited resources, faces challenges within the AR landscape. While the company holds applicable patents for its unique inventions, it is well-known that technology has a short lifespan and rapidly becomes outdated. Although we do not categorically state that this might be the case for Crunchfish, we express concerns about the future of Gesture Interaction.

Evaluating strategic alternatives

Currently, Crunchfish is engaged in evaluating strategic options, and we suspect that the viability of Gesture Interaction is one of the key points under discussion. Samuelsson disclosed that advisers have been enlisted to explore strategic alternatives. This entails the possibility of securing a significant investor or identifying a potential acquirer to divest some of Crunchfish's business areas.

Turning to the financials, Table 2 below depicts our estimates versus the actual outcome. As has been the case for the previous quarters, Crunchfish's revenue came in lower than we estimated in Q3. This is because we expected the IDFC deal to generate more revenue for the company. On a more positive note, the costs for the quarter came in lower than we had expected.

We projected a capital injection one quarter early

The large discrepancies regarding cash holdings and equity are explained by our projection of a capital injection for this quarter. As the issue was finalised after the quarter, the funds raised are not included in this report. Moreover, the company raised less capital than we expected.

Table 2: Estimates vs actual, Q3 2023

kSEK	Q3 '22	Q3 '23e	Q3 '23a	Diff
Net revenues	5 806	461	189	-272
Capitalised development cost	3 133	3 815	4 048	233
Other revenues	467	526	555	29
Total revenue	9 406	4 801	4 791	-10
Cost of goods	0	0	0	0
Personnel costs	-5 103	-6 600	-5 558	1 042
Other expenses	-3 644	-5 874	-4 950	924
Profit from affiliated companies	-20	0	0	0
EBITDA	639	-7 673	-5 717	1 956
Amortisation and Depreciation	-1 635	-2 029	-1 239	791
EBIT	-995	-9 702	-6 955	2 747
Other financial items, net	95	-6	-67	-61
EBT	-900	-9 708	-7 022	2 686
Net Profit	-900	-9 708	-6 916	2 792
Cash and Equivalents	10 833	56 881	4 770	-52 111
Total Equity	46 025	93 723	36 488	-57 235

Source: Västra Hamnen Corporate Finance

We have revised our financial forecast

To accommodate the recent developments, we have revised our financial forecast. The dynamic landscape of the Indian market has transformed, causing delays in the commercialisation phase. Consequently, we have adjusted our projections, postponing the forecasted sales timeline for Digital Cash by one year across all markets.

Moreover, we have substantially reduced the projected sales for 2024. The revised expectation aligns with the sales performance observed in Q3 2023, a period marked by the IDFC deal. Although our initial projections anticipated an increase in sales for the upcoming year, we have recalibrated the forecast to align with the Q3 2023 levels.

Restructuring of the cost-base

As we initially expected a sales ramp-up for the next year, associated costs were also projected to rise. However, we have restructured our approach, aligning the company's cost base to scale up in tandem with sales. We are effectively lowering the costs for the coming year as we do not expect any significant ramp-up in sales.

Await further proof-of-concept for Gesture Interaction

In the context of Gesture Interaction, we have chosen to refine our sales projections, primarily influenced by the adverse consequences of OPPO not renewing the contract. In a broader perspective, we are analysing Gesture Interaction's market position, anticipating a more challenging journey ahead. Consequently, we have adopted a cautious approach in our projections for Gesture Interaction, opting to await additional proof-of-concept before attributing any substantial value to this domain.

We expect further financing needs

The revision of our model now implies that the company will need to raise additional cash in 2024. The new forecast shows that the company will become free cash flow positive in Q4 2026, and to get there, an additional SEK 60 million is needed. This could be achieved from loans or an issue, we speculate that an issue is the more likely alternative.

The recent rights issue resulted in the stock price falling below the subscription price, and a substantial portion being subscribed for by guarantees. Throughout the year, Crunchfish has experienced a decline in its market capitalisation. Historically relying on equity offerings to fund its operations, the company, now facing the need for additional cash next year, risks entering a negative spiral where the cost of equity and dilution will escalate.

We decrease the probability of success

Recognising extended lead times, disappointing financial performance, added issuing costs, and the current challenging financial environment for microcaps, we have opted to adjust our valuation parameters. Therefore, we have decreased our probability of success from 50 to 40 per cent. Furthermore, the recent rights issue emitted an additional 6.6 million shares, impacting our estimated share price. This effect is enlarged as the raised cash is not included in the financials of the quarter. To address this, we have added the net amount from the issue of SEK 35.5 million to our valuation's net cash position.

We still believe in the scalability

While our model indicates a fair value surpassing the present market cap, it is imperative to emphasize the substantial risk associated with this valuation. To address this uncertainty, Crunchfish must demonstrate tangible progress. On the other hand, we still believe in the company's scalability. If Crunchfish can secure additional agreements related to offline cash and increase the volume of their existing contract with IDFC, we do see an upside from their current market cap.

In summary, our model changes result in a fair value of SEK 12.70 per share for Crunchfish.

Table 2: DCF model assumptions

MSEK	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
EBIT	-27.7	-24.2	-30.4	-34.3	-28.1	3.6	59.5	147.9
Adj. Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NOPLAT (= EBIT - tax)	-27.7	-24.2	-30.4	-34.3	-28.1	3.6	59.5	147.9
Depreciation	7.7	6.1	5.8	10.0	11.7	13.2	14.4	15.4
Profit share, Blippit	-9.2	-0.1	-0.0	0.0	0.0	0.0	0.0	0.0
Capex + Working cap	-14.3	-13.9	-16.4	-18.7	-20.9	-25.8	-31.3	-40.8
Net cash flow	-43.5	-32.0	-41.1	-43.0	-37.2	-9.1	42.5	122.5

DCF (MSEK)	
WACC	18%
Enterprise value (EV)	1 159.5
Prob of profitability	40%
Risk adjusted EV	463.8
Net cash	39.3
Fair value market cap	503.1
Diluted no of shares (M)	39.6
Fair value/share (SEK)	12.70

Sensitivity analysis (value per share, SEK)

		Prob of profitability			
		30%	40%	50%	60%
WACC	22%	6.80	8.70	10.60	12.60
	20%	8.10	10.40	12.80	15.10
	18%	9.80	12.70	15.60	18.50
	16%	12.10	15.70	19.40	23.10
	14%	15.30	20.00	24.80	29.60

Source: Västra Hamnen Corporate Finance

Income Statement - Annual Data

kSEK	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
Net revenues	3 957	6 187	885	1 088	9 028	49 256	120 288	260 133
Capitalised development cost	14 342	13 555	16 362	16 556	16 805	17 071	17 345	17 623
Other revenues	2 045	1 976	2 100	2 378	2 574	2 786	3 016	3 265
Total revenues	20 344	21 718	19 348	20 022	28 407	69 114	140 649	281 021
Cost of goods sold	-211	0	0	0	0	0	0	0
Personnel costs	-23 388	-21 735	-24 026	-23 023	-23 254	-27 234	-34 727	-59 570
Other external costs	-16 011	-16 175	-19 545	-19 570	-19 766	-23 149	-29 518	-53 613
Other operating expenses	-755	-1 857	-412	-1 704	-1 721	-2 015	-2 570	-4 527
Profit from affiliated companies	-9 186	-68	-0	0	0	0	0	0
EBITDA	-29 207	-18 116	-24 636	-24 275	-16 335	16 716	73 834	163 312
Amortisation & depreciation	-7 661	-6 139	-5 754	-10 014	-11 720	-13 158	-14 379	-15 425
EBIT	-36 868	-24 255	-30 389	-34 289	-28 055	3 559	59 455	147 886
Financial items, net	-1 600	214	25	-44	-34	-25	-15	-5
EBT	-38 468	-24 042	-30 364	-34 333	-28 089	3 534	59 440	147 881
Taxes	0	0	106	0	0	0	0	0
Net profit	-38 468	-24 042	-30 258	-34 333	-28 089	3 534	59 440	147 881
Earnings per share (SEK)	-1.26	-0.73	-0.80	-0.60	-0.43	0.05	0.91	2.26
Growth (%)								
Net revenues	-63.6%	56.4%	-85.7%	22.9%	729.7%	445.6%	144.2%	116.3%
EBITDA	na	na	na	na	na	na	341.7%	121.2%
EBIT	na	na	na	na	na	na	1570.8%	148.7%
Net profit	na	na	na	na	na	na	1582.1%	148.8%
% of revenues (%)								
EBITDA margin	neg	neg	neg	neg	neg	24.2%	52.5%	58.1%
EBIT margin	neg	neg	neg	neg	neg	5.1%	42.3%	52.6%
EBT margin	neg	neg	neg	neg	neg	5.1%	42.3%	52.6%
Profit margin	neg	neg	neg	neg	neg	5.1%	42.3%	52.6%
Personnel costs	591.1%	351.3%	2714.9%	2116.1%	257.6%	55.3%	28.9%	22.9%
Total OPEX	1014.8%	642.8%	4970.0%	4071.3%	495.6%	106.4%	55.5%	45.2%
Profitability (%)								
ROE	neg	neg	neg	neg	neg	4.9%	45.0%	52.8%
ROIC	neg	neg	neg	neg	neg	4.0%	54.0%	104.0%

Source: Västra Hamnen Corporate Finance

Balance Sheet - Annual Data

kSEK	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
Inventories	0	0	0	0	0	0	0	0
Account receivable	771	1 548	177	242	2 204	9 268	21 264	42 501
Receivables fr affiliated comp	33	0	0	0	0	0	0	0
Prepaid costs & accrued income	1 384	1 089	1 619	1 730	1 811	1 898	1 990	2 086
Other receivables	1 093	450	863	1 037	1 121	1 183	1 241	1 302
Cash and cash equivalents	32 756	29 293	32 495	49 279	11 864	2 551	44 842	167 148
Total current assets	36 037	32 380	35 154	52 288	17 001	14 899	69 336	213 037
Tangible assets	696	535	2 142	4 124	5 739	7 054	8 125	8 997
Intangible assets	27 323	33 509	44 376	51 501	57 537	62 701	67 161	71 053
Long-term receivables	0	0	107	107	107	107	107	107
Affiliated companies	137	69	68	68	68	68	68	68
Total fixed assets	28 155	34 113	46 694	55 801	63 451	69 931	75 462	80 226
Total assets	64 192	66 493	81 848	108 089	80 452	84 830	144 798	293 263
Accounts payable	1 104	1 914	2 162	2 173	2 181	2 569	2 597	2 626
Accrued cost & prepaid income	4 188	4 645	5 776	6 431	6 992	7 568	8 186	8 854
Other liabilities	3 057	1 161	1 338	1 442	1 520	1 595	1 672	1 753
Loans	0	0	0	0	0	0	0	0
Total current liabilities	8 349	7 721	9 276	10 046	10 692	11 732	12 455	13 234
Total non-current liabilities	0	0	958	763	568	373	178	-17
Total equity	55 843	58 771	71 614	97 280	69 191	72 725	132 165	280 046
Total equity and liabilities	64 192	66 493	81 848	108 089	80 452	84 830	144 798	293 263

Source: Västra Hamnen Corporate Finance

Cash flow statement

kSEK	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e
Operating activities	-20 952	-16 604	-24 696	-24 319	-16 370	16 691	73 819	163 306
Changes in working capital	1 566	79	1 984	419	-1 481	-6 172	-11 423	-20 616
Investing activities	-15 837	-13 616	-18 237	-19 121	-19 370	-19 637	-19 910	-20 189
Financing activities	59 303	26 840	43 958	59 805	-194	-195	-195	-195
Cash flow for the period	24 022	-3 687	2 996	16 784	-37 415	-9 313	42 291	122 306
Beginning cash balance	-7 767	16 321	12 715	15 711	32 495	-4 921	-14 233	28 057
Adjustments	65	80	0	0	0	0	0	0
Ending cash balance	16 321	12 715	15 711	32 495	-4 921	-14 233	28 057	150 364

Source: Västra Hamnen Corporate Finance

Income Statement - Quarterly Data

kSEK	Q1 2023	Q2 2023e	Q3 2023e	Q4 2023e	Q1 2024e	Q2 2024e	Q3 2024e	Q4 2024e
Net revenues	171	295	189	230	232	237	304	315
Capitalised development cost	4 104	4 163	4 048	4 048	4 132	4 138	4 132	4 154
Other revenues	465	515	555	566	577	589	600	612
Total revenues	4 739	4 973	4 791	4 844	4 940	4 964	5 036	5 081
Cost of goods sold	0	0	0	0	0	0	0	0
Personnel costs	-6 154	-6 594	-5 558	-5 720	-5 734	-5 749	-5 763	-5 777
Other external costs	-4 315	-5 999	-4 941	-4 290	-4 874	-4 886	-4 899	-4 911
Other operating expenses	-1 857	-2	0	-9	-400	-424	-425	-426
Profit from affiliated companies	-0	0	0	0	0	0	0	0
EBITDA	-7 587	-7 623	-5 708	-5 175	-6 069	-6 095	-6 051	-6 033
Amortisation & depreciation	-1 039	-1 274	-1 239	-2 202	-2 326	-2 448	-2 565	-2 675
EBIT	-8 626	-8 897	-6 946	-7 377	-8 395	-8 543	-8 616	-8 709
Financial items, net	-57	255	-67	-106	-12	-11	-11	-10
EBT	-8 683	-8 642	-7 013	-7 483	-8 407	-8 554	-8 626	-8 719
Taxes	0	0	106	0	0	0	0	0
Net profit	-8 683	-8 642	-6 907	-7 483	-8 407	-8 554	-8 626	-8 719
Earnings per share (SEK)	-0,29	-0,21	-0,26	-0,17	-0,16	-0,17	-0,17	-0,13
Y-o-Y Growth (%)								
Net revenues	-21,2%	119,2%	-96,7%	656,7%	35,8%	-19,4%	60,4%	36,8%
EBITDA	na							
EBIT	na							
Net profit	na							
% of revenues (%)								
EBITDA margin	neg							
EBIT margin	neg							
EBT margin	neg							
Profit margin	neg							
Personnel costs	3608,0%	2237,3%	2938,1%	2481,6%	2475,4%	2420,9%	1898,7%	1831,8%
Total OPEX	7226,1%	4273,6%	5549,8%	4346,8%	4752,4%	4657,3%	3652,8%	3524,0%
Profitability (%)								
ROE	neg							
ROIC	neg	neg	neg	0,0%	0,0%	0,0%	0,0%	0,0%

Source: Västra Hamnen Corporate Finance

Balance Sheet - Quarterly Data

kSEK	Q1 2023	Q2 2023e	Q3 2023e	Q4 2023e	Q1 2024e	Q2 2024e	Q3 2024e	Q4 2024e
Inventories	0	0	0	0	0	0	0	0
Account receivable	545	566	1 590	177	178	182	233	242
Receivables fr affiliated comp	0	0	0	0	0	0	0	0
Prepaid costs & accrued income	2 140	1 529	1 528	1 619	1 755	1 656	1 689	1 730
Other receivables	612	778	1 511	863	969	1 061	1 134	1 037
Cash and cash equivalents	19 029	9 130	4 770	32 495	21 682	11 035	60 019	49 279
Total current assets	22 327	12 002	9 399	35 154	24 584	13 934	63 075	52 288
Tangible assets	482	1 011	1 580	2 142	2 676	3 184	3 666	4 124
Intangible assets	36 627	39 578	42 451	44 376	46 289	48 113	49 839	51 501
Long-term receivables	0	0	107	107	107	107	107	107
Affiliated companies	68	68	68	68	68	68	68	68
Total fixed assets	37 177	40 657	44 206	46 694	49 141	51 472	53 681	55 801
Total assets	59 504	52 659	53 605	81 848	73 724	65 407	116 756	108 089
Accounts payable	1 107	1 071	1 209	2 162	2 176	2 166	2 169	2 173
Accrued cost & prepaid income	5 184	6 155	6 020	5 776	6 073	6 306	6 346	6 431
Other liabilities	1 139	1 516	1 382	1 338	1 384	1 447	1 429	1 442
Loans	0	0	7 500	0	0	0	0	0
Total current liabilities	7 430	8 742	16 110	9 276	9 632	9 919	9 944	10 046
Total non-current liabilities	0	487	1 007	958	909	860	811	763
Total equity	52 073	43 431	36 488	71 614	63 183	54 627	106 000	97 280
Total equity and liabilities	59 504	52 660	53 605	81 848	73 724	65 407	116 756	108 089

Source: Västra Hamnen Corporate Finance

Cash flow statement

kSEK	Q1 2023	Q2 2023e	Q3 2023e	Q4 2023e	Q1 2024e	Q2 2024e	Q3 2024e	Q4 2024e
Operating activities	-5 753	-7 592	-5 747	-5 673	-6 105	-6 107	-6 063	-6 045
Changes in working capital	-476	1 671	-2 035	2 636	112	289	-131	149
Investing activities	-4 104	-4 754	-4 689	-4 689	-4 773	-4 780	-4 774	-4 795
Financing activities	105	552	8 094	35 451	-49	-49	59 951	-49
Cash flow for the period	-10 228	-10 124	-4 377	27 726	-10 814	-10 647	48 984	-10 740
Beginning cash balance	29 293	19 029	9 130	4 770	32 495	21 682	11 035	60 019
Adjustments	0	0	0	0	0	0	0	0
Ending cash balance	19 029	9 130	4 770	32 495	21 682	11 035	60 019	49 279

Source: Västra Hamnen Corporate Finance

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