

# Artificial Solutions

Sector: Software/ Artificial Intelligence

## Capitalizing on an accelerated market

Redeye updates its estimates and valuation on the back of the Q4 2022 report and recent right issue. We believe the recent launch of ChatGPT has increased the awareness of AI solutions, which likely will accelerate sales going forward.

### Q4 report – ARR higher than expectations

ARR grew 39% y/y and came in at SEK49.5m in Q4 2022, growing 10% QoQ. Underlying SaaS ARR (excluding legacy platform) reached SEK25.1m, up 167% y/y. Driven by stronger volume, as SaaS API calls reached 13.8m. Furthermore, the SaaS API calls were up 14% in January 2023 versus December 2022.

### Estimate changes

We make limited ARR changes in 2023e but raise our ARR forecast for 2024e-2025e due to higher SaaS API calls (volume). We still expect Artificial Solution to post negative EBITDA until 2025e. However, as the company is overlooking its cost base, we forecast lower losses in 2023e-2024e.

### Lowered fair value range due to the right issue

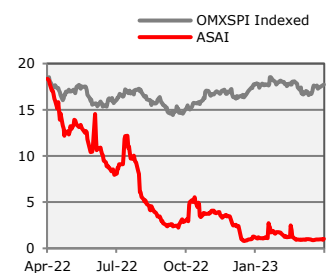
On the back of the Q4 2022 report, the recent capital injection and higher discount rate due to changes in Redeye rating model, we adjust our valuation range. Our new valuation range is between SEK2.3 - SEK11, with a base case of SEK3.6. Derived from a DCF model and earnings multiple approaches. Our base case corresponds to 12x EV/EBITDA(26e) and 3x EV/S(26e), rather modest multiples for a SaaS company with >90% gross margins at scale. Thus, should the company deliver on its financial targets, there is further potential on the upside. We apply a Wacc of 13% in all scenarios and given that the valuation is highly affected by the Wacc, we provide a sensitivity table in our valuation section to illustrate different assumptions.

Key Financials (SEKm)	2022	2023E	2024E	2025E	2026E
Net sales	46	64	119	164	220
Sales growth	18%	39%	88%	38%	34%
EBITDA	-76	-50	-14	20	55
EBIT	-89	-63	-29	4	35
EBIT Margin (%)	-195%	-99%	-25%	2%	16%
Net Income	-85	-74	-41	-8	18
EV/S	5.5	5.7	3.4	2.5	1.8
EV/EBITDA	neg	neg	neg	20.3	7.1
EV/EBIT	neg	neg	neg	106.1	11.1

### FAIR VALUE RANGE

BEAR	BASE	BULL
2.3	3.6	11

### ASAI VERSUS OMXSPI



### REDEYE RATING



### KEY STATS

Ticker	ASAI
Market	First North
Share Price (SEK)	1.15
Market Cap (SEKm)	118
Net Debt 2022 (SEKm)	246
Free Float (%)	80

### ANALYSTS

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## Investment Case

### One of the market leaders in the fast-growing conversational AI market

Artificial Solution offers attractive exposure to the fast-growing conversational AI market, which is expected to grow by a CAGR of 48% until 2031e. Supported by enhanced efficiencies, cost reductions, and stronger NPS (net promoter scores) from customers, yielding stronger customer satisfaction and reduced churn. Artificial Solution held a market share of 10-15% of the world's total number of automated call center interactions in 2022. In December 2022, the implied annual SaaS API calls reached 166m, while the volume in January 2023e was up 14% versus December 2022. Suggesting implied annual SaaS API calls of 189m. According to our understanding, no other competitor has reached the same volumes. In addition, The Teneo platform support applications in 86 different languages, which makes the platform easy to implement across geographies.

### Clear potential for upselling on existing customers

Artificial Solution primarily focuses on large blue-chip customers (+500 employees at each call center). Given that the SaaS ARR per customer is at SEK2.1m (Q4'2022) and that management indicates that it only penetrates 5-10% of the volume potential on existing customers, large customers could generate c20m each in SaaS ARR in some years. Indicates that its financial targets of reaching ARR above SEK200m in 2025e could be reached solely on its existing customer base. Once Artificial Solutions begins to scale its SaaS offering, we should expect, over time, a gross margin >90% as incremental revenues from usage (SaaS API volume) requires close-to-zero incremental costs. Illustrating the scalable business model.

### Microsoft integration proves its leading technology

Artificial Solution has collaborated with Microsoft since 2021 and is fully integrated into the Microsoft Azure ecosystem. By being integrated into the Microsoft ecosystem, Microsoft's sales team could promote the Teneo platform to its +1,700 enterprise customers. In addition, Microsoft has previously been pursuing its own solution called Microsoft Composure, which it decided to close down. Opening up for open-sources solutions. Thus, Teneo could somewhat replace Microsoft's solution, proving the technology. In addition, we argue this could accelerate the proposals from new customers.

### Challenges – High leverage and negative cash flows

We don't expect Artificial Solution to post positive EBITDA until 2025e. Artificial Solutions has debt terms at 4% - which will be accumulated to principal at maturity in December 2026e. Given the net debt position of SEK242m, versus its market cap of cSEK118m, the leverage ratio is high and will take time before it can repay its debt position. However, the refinancing is due in 2026e and there are changes of more favourable capital markets in the coming years, especially if the company delivers on its growth agenda.

### Valuation

Considering the company's leading position in the fast-growing market, the scalable business model, and its high net debt. We apply a rather wide valuation range to illustrate the different scenarios if the company succeeds on reaching its targets. Our new valuation range is between SEK2.3 - SEK11, with a base case of SEK3.6. Derived from a DCF model and earnings multiple approaches. Our base case corresponds to 12x EV/EBITDA(26e) and 3x EV/S(26e), rather modest multiples for a SaaS company with >90% gross margins at scale. Thus, should the company deliver on its financial targets, there are further potential on the upside.

## Q4 2022 review

The Q4 2022 report showed stronger ARR growth than expected, driven by stronger underlying SaaS API calls. However, as Artificial Solution continues to invest across its organization, profitability came in lower than forecast.

### Deviation table

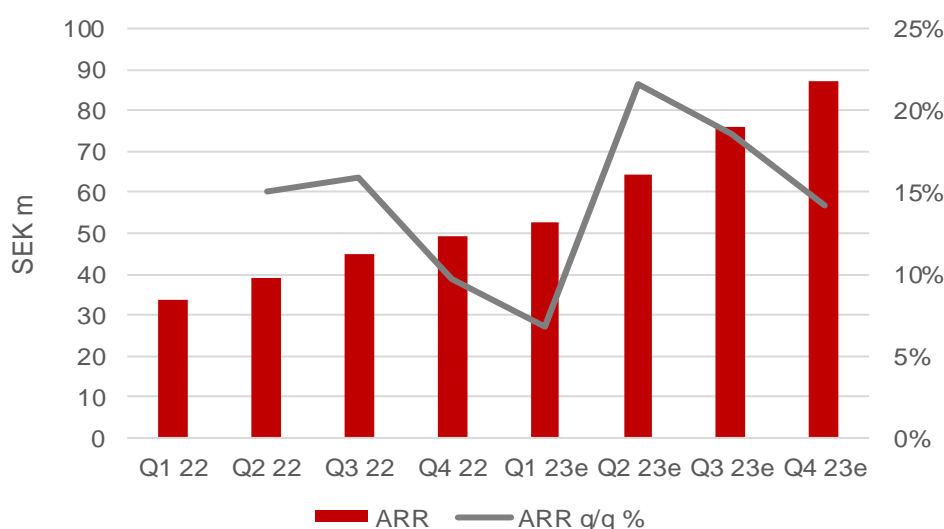
Artificial Solutions: Forecast deviations					
SEKm	Q4 21	Q4 22e	Actuals Q4 22	Diff (%)	Diff absolute
License & Support	5.5	6.3	6.2	-2%	-0.1
Usage	3.3	5.5	5.7	4%	0.2
Other	1.0	1.0	1.0	0%	0.0
<b>Net sales</b>	<b>9.8</b>	<b>12.8</b>	<b>12.9</b>	<b>1%</b>	<b>0.1</b>
Personnel	-17.9	-21.1	-23.3	10%	-2.2
External	-9.7	-8.9	-14.3	61%	-5.4
Cap development	3.9	3.9	4.4	13%	0.5
<b>Opex</b>	<b>-29.3</b>	<b>-30.0</b>	<b>-33.2</b>	<b>11%</b>	<b>-3.2</b>
EBITDA adj	-16.6	-13.8	-18.8	36%	-5.0
EBITDA adj (%)	-169%	-108%	-146%	37pp	
D&A	-3.1	-2.7	-3.0	11%	-0.3
EBIT	-16.2	-16.5	-17.5	6%	-1.0
EBIT (%)	-165%	-129%	-136%	42pp	
Net finance	-2.2	-8.0	-4.8		3.2
PTP	-18.4	-24.5	-22.3		
Net income	-18.4	-24.5	-22.5	-8%	2.0
<b>Recurring revenues</b>	<b>8.8</b>	<b>11.8</b>	<b>11.9</b>	<b>1%</b>	<b>0.1</b>
<b>ARR</b>	<b>35.5</b>	<b>46.6</b>	<b>49.5</b>	<b>6%</b>	<b>2.9</b>

Source: Redeye (estimates), company data (historicals)

ARR grew 39% y/y and came in at SEK49.5m in Q4 2022, growing 10% QoQ (SEK45.1m in Q3 2022). More importantly, the SaaS ARR (excluding the legacy platform) reached SEK25.1m, up 167% y/y. Driven by stronger volume, as SaaS API calls reached 13.8m, better than we anticipated as well as price increases for connected seats. In total, this was SEK2.9m, better than our expectations.

The 13.8m SaaS monthly API calls imply an annual volume of 165.6m. In addition, the API call volume was up 14% in January 2023 versus December 2022, indicating that 2023 is off to a strong start. However, it is still far from its financial target of reaching over one billion API calls annually during 2024. Indicating there is plenty of room for growth.

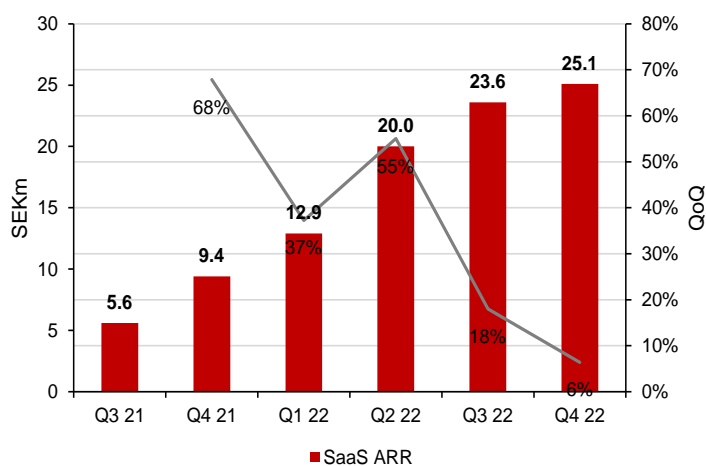
**Artificial Solutions: ARR and growth Q/Q %**



Source: Redeye research

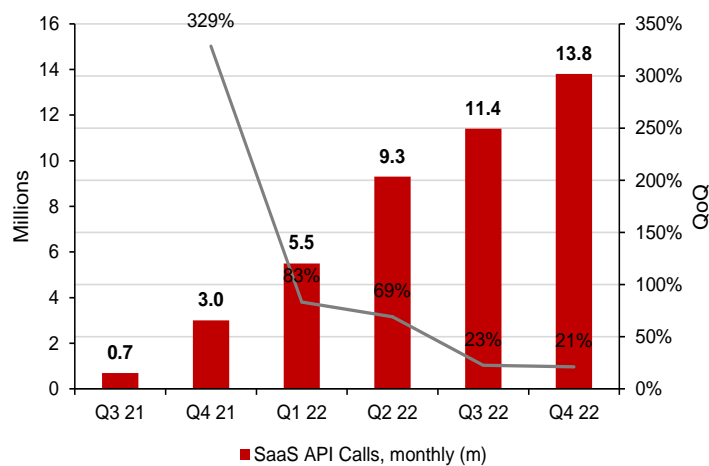
Furthermore, the ARR per SaaS customer came in at SEK2.1m, up 78% y/y and 15% QoQ. This is one of the most important metrics to keep an eye on as Artificial Solutions aim to reach its financial targets primarily from the growth of its existing customer base. Hence, scaling up the price per existing customer, from volume and new seats, are vital for reaching its financial targets. Thus, we are pleased to see the development and believe upselling on existing customers will be the major ARR growth driver until 2026.

**Artificial Solutions: SaaS ARR and growth QoQ %**



Source: Redeye, company data

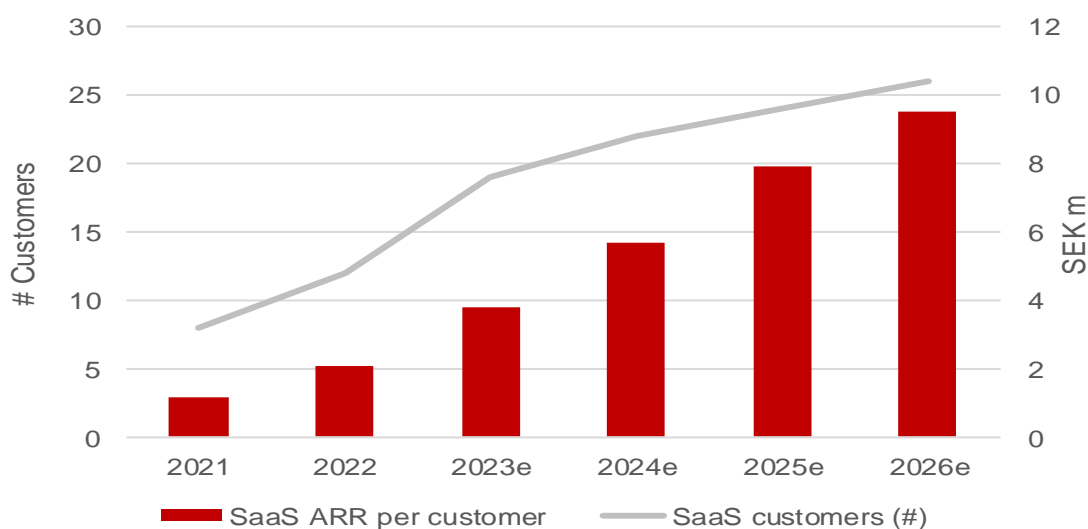
**Artificial Solutions: SaaS API calls, monthly**



Source: Redeye, company data

Artificial ended Q4 2022 with 13 SaaS customers and continues to focus on existing blue-chip customers. Artificial Solutions renewed the quarter's SaaS agreements with GrapeTree, Skoda, Hellofresh, and Scania. In addition, regular renewal agreements with the Italian bank BPM and an additional US-based large bank. Furthermore, one of its largest customers, leading national healthcare providers, went live in Q4'2022 and had an initial commitment for 36 months. Furthermore, the company aims to sign new customers on its SaaS platform and has recently established a new sales team in the US to gain traction in the market.

**Artificial Solutions: SaaS customers and ARR per customer**

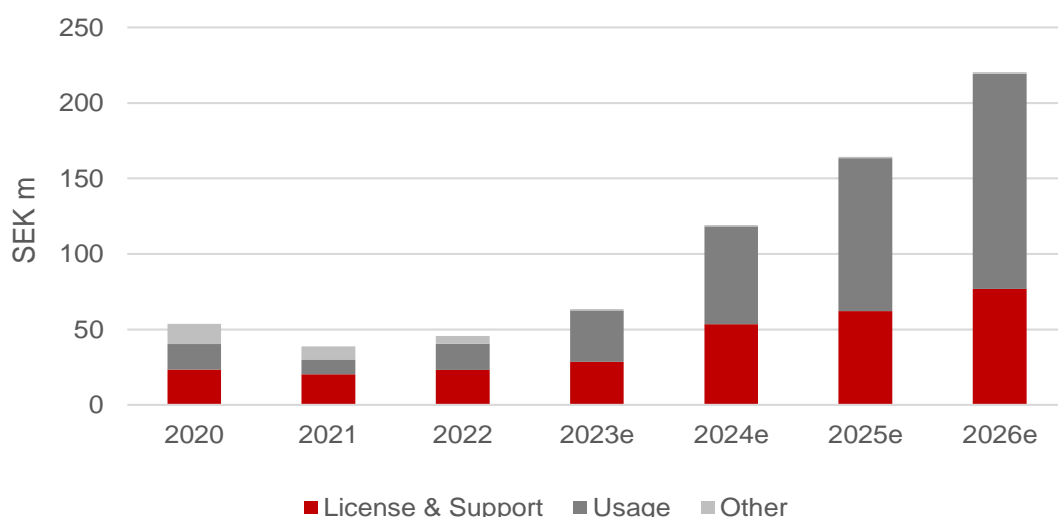


Source: Redeye research

The number of SaaS API calls was up 14% in January 2023e versus December 2022. Indicating a further acceleration of usage on its customer base. In addition, Artificial Solution signed a partnership agreement with the venture capitalist firm Accelerate Venture Holdings (AVH), which will gradually scale up its business on the Teneo platform.

Net sales amounted to SEK12.9m (9.8), growing 32% YoY and up 4% QoQ. This was above our expectations of SEK12.8m. Particularly driven by higher usage from existing customers. Recurring revenues came in at SEK11.9m and represented 92% of net sales in the quarter. On an LTM basis, recurring revenues reached SEK40.7m, up 35% y/y. SaaS ARR and recurring revenues are the most important metrics for Artificial Solutions.

**Artificial Solutions: Net sales distribution**

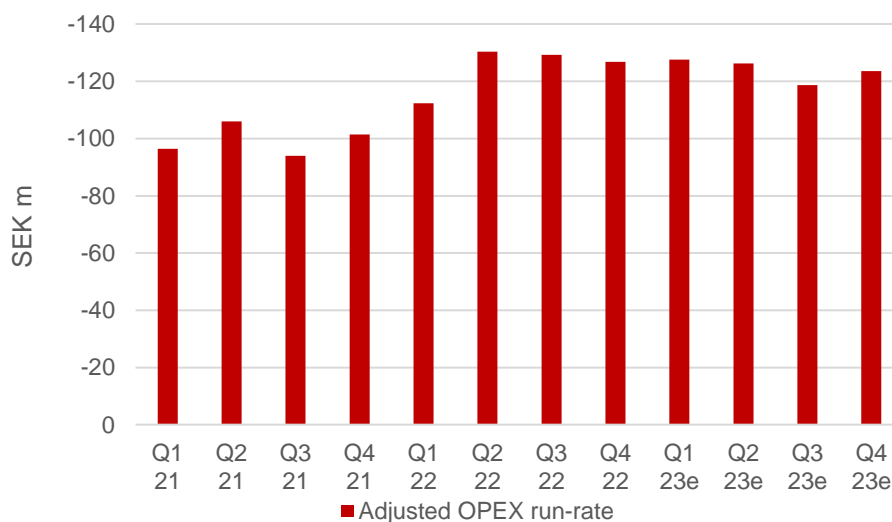


Source: Redeye research

We expect SaaS API calls to be the major growth driver going forward as large customers scale up their operations. Usage represented 51% of net sales in 2022. We estimate it to represent 61% in 2025e. Leading to an improved gross margin, as once Artificial Solutions begins to scale its SaaS offering, we should expect, over time, a gross margin >90%. Incremental usage revenues require close-to-zero incremental costs. We expect the gross margin to reach 84% in 2025e, up from 65% in 2022.

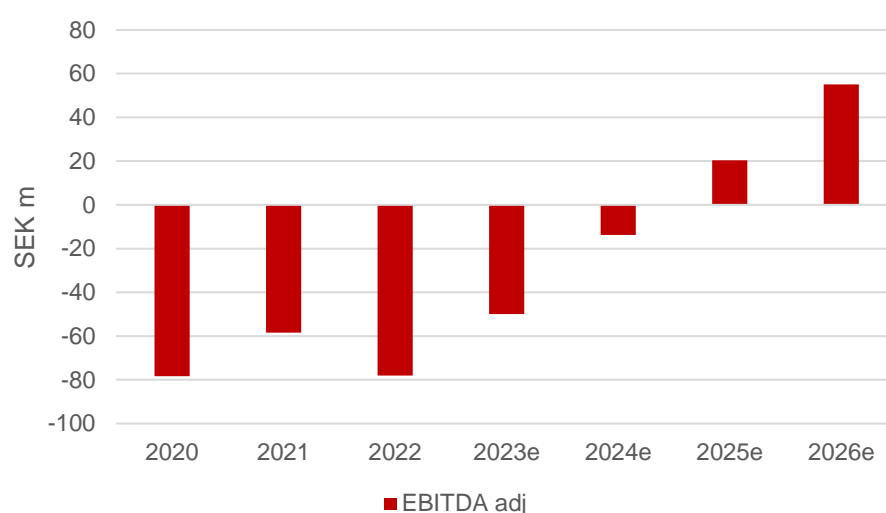
Total Opex came in at SEK-33.2m in Q4'2022. Somewhat higher than our estimates, driven by higher personnel and other external expenses. On an annualized basis, this reached SEK-126m in 2022, up versus SEK-107m in 2021. The company intends to scale down on new hires from 2023e, which will slow down the cost acceleration going forward. Furthermore, as personnel expenses are the largest cost item and are more or less fixed, lower personnel expenses have a clear positive effect on profitability as Artificial Solutions business model is highly scalable.

#### Artificial Solutions: Adj Opex annualized



Source: Redeye research

Adj EBITDA came in at SEK-78m, down from SEK-58.5m in 2021. We expect Artificial Solutions EBITDA to move towards a positive trajectory and reach positive EBITDA levels in 2025e, for a margin of 14%, which will rapidly scale towards 26% in 2026e. The positive EBITDA levels will be reached by higher sales volume, stronger gross margin, and a more efficient cost structure.

**Artificial Solutions: Adj EBITDA**

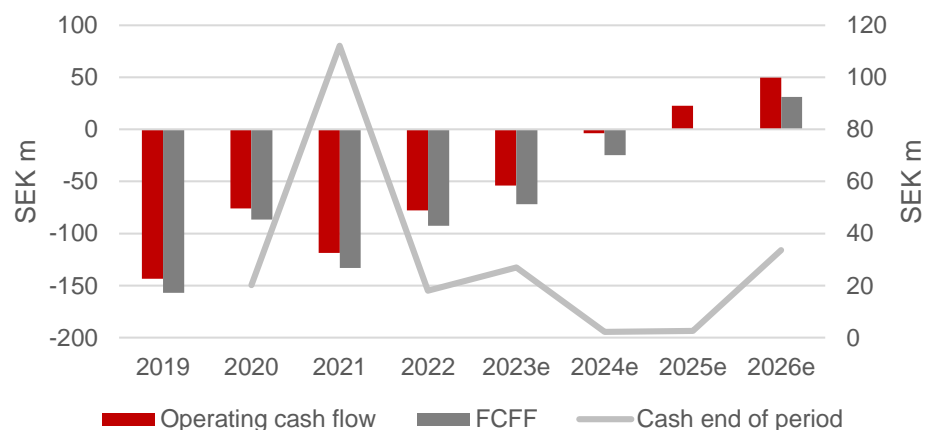
Source: Redeye research

**Right issue of SEK95.9m**

Artificial Solutions closed a right issue in Q1 2023, providing the company with SEK95m in gross proceeds. The subscription price was SEK1 per share. In total, the total number of shares increased from 6.57m to 102.43m.

Artificial Solutions will primarily use the proceeds to further develop the Teneo platform (R&D), as it intends to remain one of the market leaders in the CAI market and scale up its marketing and sales initiatives.

In accordance with the right issue, the company communicated that it refinanced its long-term financing agreement with Capital Four. The parties have agreed that the accumulated interest of SEK28m will be written off and that the annual interest rate going forward will be a 4% flat rate. Rather favorable terms for small growth companies in the current market climate. According to the new terms, accrued PIK interest will amount to SEK40m by year-end 2026. This means the debt value will be SEK290m by 2026, an improvement vis-a-vis the old terms where the debt value would have been around SEK435m at maturity.

**Artificial Solutions: Cash flow (LHS) and cash position (RHS)**

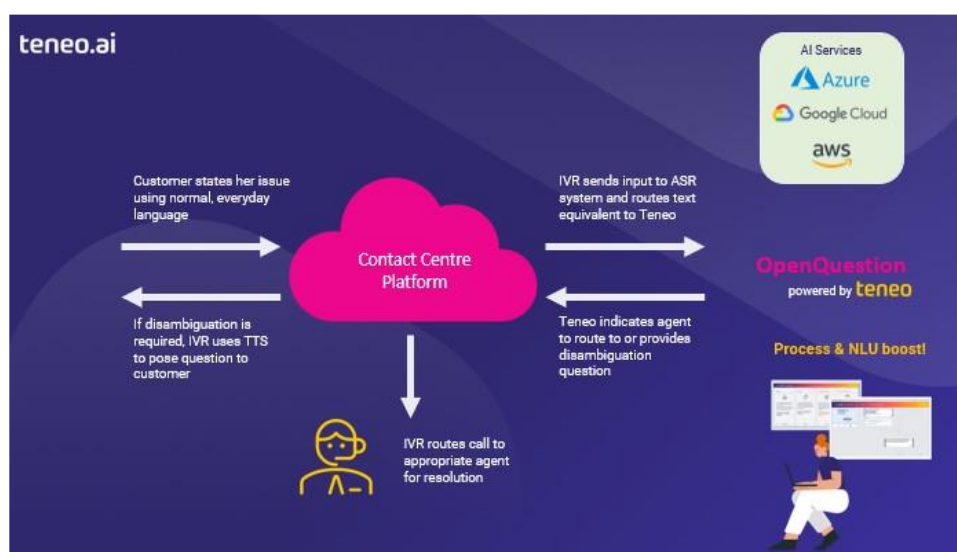
Source: Redeye research

## OpenQuestion

Artificial Solutions recently launched its solution, OpenQuestion. This secure and high-performing SaaS product integrates with your voice contact center to achieve first-time-right routing based on open questions. Enabling companies to get rid of keypad navigation which frustrates their customers. It is based and fully integrated on the Teneo platform, and customers can continue to build other solutions on Teneo once Open Question has been implemented.

The solution is already proven as it is already in place for several of its largest customers, such as Telefonica, Swisscom and Hellofresh US. The solution is productized and is sold as a standard package with several available add-ons. Pricing is the same as for Teneo. OpenQuestion could deploy customers in 90 days, and thereby, the solution enables shorter lead times and customer acquisition costs, which should boost customer intake going forward.

The fact is that c25% of the self-service calls are abandoned as customers do not understand how to manoeuvre across call centers, leading to a bad customer experience. With OpenQuestion, the customer experience is improved as a single voice of the company could match the voice of the customer. Furthermore, the total cost of ownership is reduced as the solution offers predictable business values. Thus, the value proposition is high. Furthermore, Artificial Solution is currently the sole vendor that can handle large-volume implementations, as evidenced by official references such as Telefonica O2.



Source: Redeye research, Company data



**Market tailwinds**

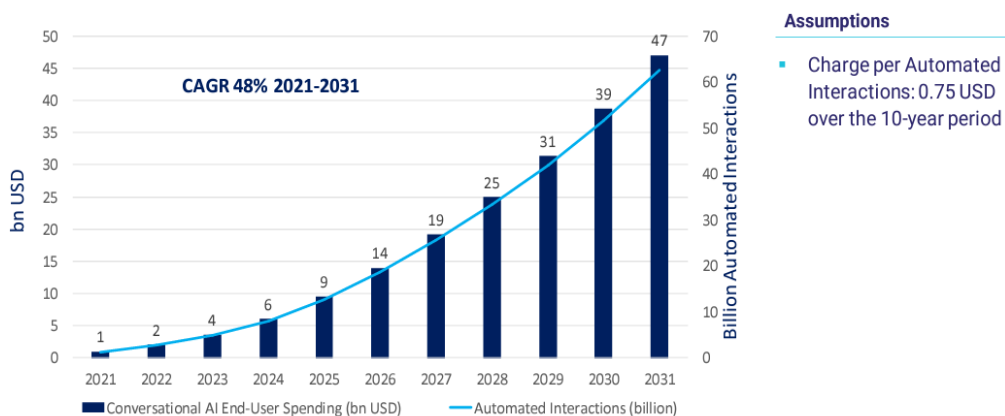
The market for contact centers is going digital, and the software market for contact centers is expected to increase from USD29.5bn in 2021 to USD165bn in 2030e, for a CAGR of 21%. However, the virtual assistant market is a subset of this market, which is the core of Artificial Solutions market and has been sized by Gartner as a USD2bn market this year, with an expected **2021–2031e CAGR of 48%**.

The key drivers for implementing conversational AI centers are reduced costs, increased value creation, increased ARPC, improved employee satisfaction, and attracting new customers.

Artificial Solutions is estimated to have at least a 15% market share of the total number of interactions this year (2.7bn). It is currently at a c166m API call run rate with existing SaaS customers and likely generates as much (at least) with legacy customers. However, this leadership is not reflected in current revenues. We understand that the market projections include a substantial portion of professional services. This is provided by Artificial Solutions’ partners.

**GARTNER PREDICTS HIGH GROWTH IN CONVERSATIONAL AI**

**| ARTIFICIAL SOLUTIONS KEY NICHE CONTACT CENTER - 48% CAGR TO 2031**



\* Gartner June 2022: Conversational AI End-User Spending from Contact Center Deployments Worldwide 2021-2031



Source: company data

## Estimate changes

On the back of the Q4 2022 report, we leave our ARR assumptions for 2023e unchanged. However, we raise our forecast for 2024e-2025e due to higher SaaS ARR per customer, as the company is prioritizing large blue-chip customers. The raised ARR assumptions led us to up our Net sales estimate across the board (2023e is up due to a higher conversion rate from ARR as usage accounts for the majority).

In addition, we cut our Opex assumptions due to some cost-cutting in personnel as well as a higher focus on cost-efficient measures. As such, we increase our Adj EBITDA estimates from SEK9m to SEK20m in 2025e.

Artificial Solutions: F	New Estimates			Old Estimates			Diff %			Diff absolute		
	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e	2023e	2024e	2025e
<b>SEKm</b>												
License & Support	28.4	53.5	62.1	27.8	54.7	63.1	2%	-2%	-2%	1	-1	-1
Usage	34.1	64.7	101.2	28.0	54.7	94.7	22%	18%	7%	6	10	7
Other	1.0	1.0	1.0	4.5	4.0	3.6	-78%	-75%	-72%	-3	-3	-3
<b>Net sales</b>	<b>63.5</b>	<b>119.2</b>	<b>164.3</b>	<b>60.3</b>	<b>113.4</b>	<b>161.4</b>	<b>5%</b>	<b>5%</b>	<b>2%</b>	<b>3</b>	<b>6</b>	<b>3</b>
Gross profit	47.1	95.3	138.0	43.4	93.0	138.8	9%	2%	-1%	4	2	-1
Gross margin (%)	74%	80%	84%	72%	82%	86%						
Personnel	-86.8	-94.4	-101.0	-89.9	-96.1	-101.9	-3%	-2%	-1%	3	2	1
External	-37.6	-41.3	-43.4	-42.0	-44.9	-47.6	-11%	-8%	-9%	4	4	4
<b>Opex</b>	<b>-107.6</b>	<b>-119.1</b>	<b>-127.2</b>	<b>-131.9</b>	<b>-141.1</b>	<b>-149.5</b>	<b>-18%</b>	<b>-16%</b>	<b>-15%</b>	<b>24</b>	<b>22</b>	<b>22</b>
EBITDA adj	<b>-50.0</b>	<b>-13.7</b>	<b>20.3</b>	<b>-70.2</b>	<b>-28.9</b>	<b>9.3</b>	<b>-29%</b>	<b>-53%</b>	<b>117%</b>	<b>20</b>	<b>15</b>	<b>11</b>
EBITDA adj (%)	-79%	-12%	12%	-116%	-26%	6%						
EBIT	<b>-63.1</b>	<b>-29.2</b>	<b>3.9</b>	<b>-85.9</b>	<b>-48.2</b>	<b>-13.3</b>	<b>-27%</b>	<b>-39%</b>	<b>-129%</b>	23	19	17
Net finance	-10.6	-11.4	-11.9	-17.3	-18.5	-19.7	-39%	-38%	-40%	7	7	8
PTP	-73.7	-40.6	-8.0	-103.2	-66.7	-32.9	-29%	-39%	-76%	30	26	25
Net income	-73.7	-40.6	-8.0	-103.2	-66.7	-32.9	<b>-29%</b>	<b>-39%</b>	<b>-76%</b>	30	26	25
<b>Recurring revenues</b>	<b>62.5</b>	<b>111.5</b>	<b>163.3</b>	<b>55.8</b>	<b>109.4</b>	<b>157.8</b>	<b>12%</b>	<b>2%</b>	<b>3%</b>	<b>7</b>	<b>2</b>	<b>6</b>
<b>ARR</b>	<b>87.1</b>	<b>135.9</b>	<b>190.7</b>	<b>87.4</b>	<b>131.5</b>	<b>184.1</b>	<b>0%</b>	<b>3%</b>	<b>4%</b>	<b>0</b>	<b>4</b>	<b>7</b>

Source: Redeye (estimates), company data (historicals)

## Financials

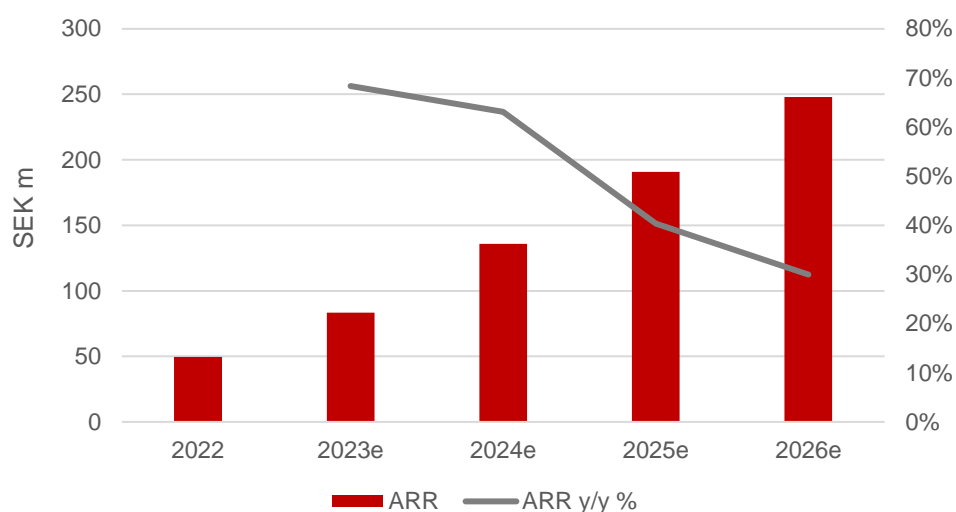
Artificial Solutions announced new financial targets in accordance with its Q3 2022 report. Moreover, these projections are based mainly on existing customers, which adds a dimension of reliability.

- Generate >1bn API calls at an annualized run rate during 2024
- Reach >SEK200m in ARR during 2025
- Generate positive cash flow from operations during 2024
- Achieve a long-term EBITA margin of >30% in a mature state

We forecast ARR to reach SEK248m in 2026, up from SEK50m in 2022, delivering a 2022-2026e CAGR of 50%. As the ARR is the leading indicator of net sales, we expect net sales to grow at a similar rate. The positive development will be reached by higher SaaS API calls, which indicates higher usage from existing customers as well as from newly signed customers. We argue that the recently launched product OpenQuestion, the newly signed partnership with Valcon, and the gained access to Microsoft customer base will increase customer intake. As Artificial Solution won the Microsoft ISV (independent software vendor) of the year in 2022, Microsoft will promote Artificial solutions techniques acting as organic marketing.

Furthermore, the recently launched ChatGPT solution will most likely increase the awareness of AI, and we believe this will accelerate the adoption rate of AI solutions across enterprises.

### Artificial Solutions: ARR



Source: Redeye research

Despite the strong ARR and net sales growth, We expect Artificial Solutions to post negative EBITDA until 2025e, as the company is investing in future growth opportunities. However, as the business model is scalable and the company primarily aims to reach its financial targets on its existing customer base, newly signed customers could lead to positive EBITDA levels earlier than expected.

Artificial Solutions: Key financials											
SEKm	2020	2021	2022	Q1 23e	Q2 23e	Q3 23e	Q4 23e	2023e	2024e	2025e	2026e
License & Support	23.5	20.4	23.3	6.4	6.7	7.1	8.2	28.4	53.5	62.1	76.8
Usage	16.9	9.7	17.4	6.6	7.5	8.9	11.1	34.1	64.7	101.2	142.6
Other	13.3	8.6	5.0	0.3	0.3	0.3	0.3	1.0	1.0	1.0	1.0
<b>Net sales</b>	<b>53.7</b>	<b>38.8</b>	<b>45.6</b>	<b>13.3</b>	<b>14.5</b>	<b>16.3</b>	<b>19.5</b>	<b>63.5</b>	<b>119.2</b>	<b>164.3</b>	<b>220.3</b>
Recurring revenues	40.4	30.2	40.7	13.0	14.2	16.0	19.3	62.5	111.5	163.3	219.3
<b>ARR</b>	<b>0.0</b>	<b>0.0</b>	<b>49.5</b>	<b>52.9</b>	<b>64.3</b>	<b>76.2</b>	<b>87.1</b>	<b>87.1</b>	<b>135.9</b>	<b>190.7</b>	<b>247.9</b>
<b>SaaS ARR</b>	<b>0.0</b>	<b>9.4</b>	<b>25.1</b>	<b>31.3</b>	<b>43.3</b>	<b>56.4</b>	<b>71.9</b>	<b>71.9</b>	<b>124.9</b>	<b>190.7</b>	<b>247.9</b>
ARR y/y %				56%	65%	69%	76%	76%	56%	40%	30%
SaaS customers (#)	0	8	12	13	15	17	19	19	22	24	26
SaaS ARR per customer	0.0	1.2	2.1	2.4	2.9	3.3	3.8	3.8	5.7	7.9	9.5

Source: Redeye (forecasts), company data (historicals)

Artificial Solutions: Financial forecast											
SEKm	2020	2021	2022	Q1 23e	Q2 23e	Q3 23e	Q4 23e	2023e	2024e	2025e	2026e
<b>Net sales</b>	<b>54</b>	<b>39</b>	<b>46</b>	<b>13</b>	<b>14</b>	<b>16</b>	<b>20</b>	<b>64</b>	<b>119</b>	<b>164</b>	<b>220</b>
Growth YoY (%)	10%	-28%	18%	31%	42%	31%	51%	39%	88%	38%	34%
COGS	-18	-12	-16	-4	-4	-4	-4	-16	-24	-26	-33
Gross profit	35	27	30	9	10	12	15	47	95	138	187
Gross margin (%)	66%	70%	65%	70%	72%	75%	78%	74%	80%	84%	85%
Capitalised development	0	12	13	4	4	4	5	17	17	17	18
Personnel	-116	-71	-85	-23	-22	-21	-22	-87	-94	-101	-112
External	-25	-30	-39	-9	-10	-9	-10	-38	-41	-43	-47
Other costs	0	-2	0	0	0	0	0	0	0	0	0
<b>Total Opex</b>	<b>-141</b>	<b>-91</b>	<b>-112</b>	<b>-28</b>	<b>-27</b>	<b>-26</b>	<b>-27</b>	<b>-108</b>	<b>-119</b>	<b>-127</b>	<b>-142</b>
<b>EBITDA adj</b>	<b>-78</b>	<b>-59</b>	<b>-78</b>	<b>-14</b>	<b>-15</b>	<b>-12</b>	<b>-10</b>	<b>-50</b>	<b>-14</b>	<b>20</b>	<b>55</b>
EBITDA adj (%)	-146%	-151%	-171%	-103%	-100%	-73%	-50%	-79%	-12%	12%	25%
Non-recurring	0	-4	-3	0	0	0	0	0	0	0	0
EBITDA	-86	-58	-76	-14	-15	-12	-10	-50	-14	20	55
EBITDA (%)	-160%	-150%	-167%	-103%	-100%	-73%	-50%	-79%	-12%	12%	25%
D&A	-12	-13	-13	-3	-3	-3	-4	-13	-15	-16	-20
<b>EBIT</b>	<b>-98</b>	<b>-71</b>	<b>-89</b>	<b>-17</b>	<b>-18</b>	<b>-15</b>	<b>-13</b>	<b>-63</b>	<b>-29</b>	<b>4</b>	<b>35</b>
EBIT (%)	-182%	-182%	-195%	-127%	-123%	-93%	-68%	-99%	-25%	2%	16%
Net finance	-57	1	4	-3	-3	-3	-3	-11	-11	-12	-12
PTP	-154	-69	-85	-19	-20	-18	-16	-74	-41	-8	23
Net income	-154	-69	-85	-19	-20	-18	-16	-74	-41	-8	18
EPS	-36.2	-10.6	-13.0	-0.2	-0.2	-0.2	-0.2	-0.7	-0.4	-0.1	0.2

Source: Redeye (forecasts), company data (historicals)

## Valuation

### DCF

We derive our fair value range from a fundamental DCF framework and earnings multiple approach. We also supplement our DCF analysis with a peer group comparison. We apply a WACC of 13% across all scenarios. We also supplement our DCF analysis with a peer group comparison.

### Lowered fair value range

Our updated fair value range spans from SEK2.3–11.0, and our Base Case is SEK3.6. The fair value range is wide, owing to the unpredictable nature of Artificial Solutions' long-term growth and profitability levels and its high net debt of SEK244m in 2023e versus the current market cap of SEK118m. Once Artificial Solutions scales its SaaS offering, we should expect, over time, a gross margin of >90%. Incremental usage revenues require close-to-zero incremental costs. In turn, this should support high long-term operating margins. We forecast a terminal EBITDA margin of 35%.

### Trading above Nordic SaaS peers and below global AI peers on near-term EV/S multiples

In relation to a group of Nordic SaaS companies (as seen on the next page), Artificial Solutions is trading at a slight premium in 2023e, while in line with on 2024e-2025e. The group trades at a median 2023e EV/S multiple of 4.5x. This falls to 2.5x by 2025e. In contrast, global AI peers trades at a median 2023e EV/S multiple of 5x on 2023e, fading down to 3.7x in 2025e.

Artificial Solution trades at 5.6x EV/S on 2023e and at 2.5x on 2025e. Indicating that the company trades in line with global peers on 2023e but at a discount on 2024e-2025e. Given the business model and its geographic presence, we argue that global peers are most comparable.

### Bear Case: SEK2.3

We base our bear case scenario on a EV/S multiple of 3.0x in 2026e. Indicates a premium to Nordic SaaS peers but a discount versus Global peers.

Furthermore, Artificial Solutions has patents worth cSEK1,500m, which we argue acts as a support for the technique.

### Base Case: SEK3.6

Sales CAGR 2022-2026e: 49%  
Sales CAGR 2026e-2034e: 17%  
Avg. EBIT-m 2022-2026e: -76%  
Avg. EBIT-m 2026e-2034e: 22%  
Terminal growth: 2%  
Terminal EBIT-m: 29%  
WACC: 13.0%  
Equivalent to 12x EV/EBITDA(26e)

### Bull Case: SEK11.0

Sales CAGR 2022-2026e: 54%  
Sales CAGR 2026e-2034e: 20%  
Avg. EBIT-m 2022-2026e: -66%  
Avg. EBIT-m 2026e-2034e: 32%  
Terminal growth: 2%  
Terminal EBIT-m: 39%  
WACC: 13.0%  
Equivalent to 25x EV/EBITDA(26e)

### Artificial Solutions: valuation in base case sensitivity analysis

		WACC				
		11.0%	12.0%	13.0%	14.0%	15.0%
EBITDA-m	30.0%	5.0	3.9	2.9	2.2	1.6
	32.5%	5.5	4.2	3.3	2.5	1.8
	35.0%	6.0	4.6	3.6	2.7	2.0
	37.5%	6.5	5.0	3.9	3.0	2.3
	40.0%	6.9	5.4	4.2	3.3	2.5

Source: Redeye research

## Peer table

Company name	EV SEKm	EV/S			EV/EBITDA			EV/EBIT		
		2023	2024	2025	2023	2024	2025	2023	2024	2025
<b>Artificial Solutions International AB (</b>	<b>238</b>	<b>5.6</b>	<b>3.3</b>	<b>2.5</b>	<b>-7.2</b>	<b>-28.0</b>	<b>20.0</b>	<b>-5.7</b>	<b>-13.5</b>	<b>104.0</b>
<b>Nordic SaaS</b>										
Admicom Oyj	2,441	6.4	5.9	5.3	16.7	15.3	13.2	18.9	17.1	14.7
Bambuser AB	264	1.0	0.9	0.7	neg	neg	neg	neg	neg	neg
Carasent ASA	552	2.3	1.9	1.6	11.4	6.6	4.6	64.7	19.7	10.0
Checkin.com Group AB	1,086	9.0	5.1	2.9	32.9	15.1	8.7	72.4	21.7	10.7
Efecte Oyj	757	2.7	2.3	1.9	>100	32.5	17.8	neg	55.5	21.9
Fortnox AB	42,927	25.6	19.3	15.2	51.9	37.4	28.8	63.9	44.7	33.9
Irisity AB	249	2.0	1.6	1.3	na	13.8	8.9	neg	neg	neg
Pexip Holding ASA	1,159	1.3	1.2	1.1	8.2	7.7	4.6	24.8	22.1	7.1
Physitrack Limited	226	1.3	1.0	0.8	4.3	3.0	2.2	11.9	6.0	3.5
SignUp Software AB	1,395	4.5	3.7	3.1	28.8	19.8	14.1	39.0	21.8	14.5
SmartCraft ASA Class A	3,209	8.3	7.2	6.3	20.0	16.6	14.4	24.7	20.5	17.0
Upsales Technology AB	798	4.7	3.7	3.0	16.0	12.5	10.8	19.9	15.3	12.9
<b>Average - Nordics</b>	<b>4,254</b>	<b>5.7</b>	<b>4.4</b>	<b>3.5</b>	<b>14.1</b>	<b>11.7</b>	<b>11.4</b>	<b>25.7</b>	<b>17.8</b>	<b>19.2</b>
<b>Median - Nordics</b>	<b>798</b>	<b>4.5</b>	<b>3.3</b>	<b>2.5</b>	<b>16.3</b>	<b>14.4</b>	<b>12.0</b>	<b>24.8</b>	<b>20.5</b>	<b>14.5</b>
<b>Global peers</b>										
C3.ai, Inc. Class A	17,462	6.4	5.3	4.3	neg	neg	neg	neg	neg	neg
Jamf Holding Corp	25,607	4.4	3.7	3.4	63.4	31.5	26.3	63.4	38.8	32.4
RingCentral, Inc. Class A	44,898	2.0	1.8	1.6	8.6	7.1	6.2	11.0	8.8	7.5
Intapp, Inc.	29,172	8.2	7.1	6.3	>100	>100	>100	>100	>100	>100
nCino Inc	27,951	5.6	4.8	4.0	46.1	33.7	23.4	57.2	39.9	28.7
ACI Worldwide, Inc.	41,064	2.7	2.6	2.4	10.3	9.5	8.5	17.8	16.0	13.9
<b>Average - Global</b>	<b>31,026</b>	<b>4.9</b>	<b>4.2</b>	<b>3.7</b>	<b>21.4</b>	<b>13.6</b>	<b>10.7</b>	<b>24.9</b>	<b>17.2</b>	<b>13.7</b>
<b>Median - Global</b>	<b>28,562</b>	<b>5.0</b>	<b>4.3</b>	<b>3.7</b>	<b>28.2</b>	<b>20.5</b>	<b>16.0</b>	<b>37.5</b>	<b>27.4</b>	<b>21.3</b>
<i>ASAI - Discount / premium versus Nordics peers</i>		25%	0%	0%	(144%)	(294%)	67%	(123%)	(166%)	618%
<i>ASAI - Discount / premium versus Global peers</i>		12%	(23%)	(32%)	(126%)	(236%)	25%	(115%)	(149%)	388%

Source: FactSet, Redeye

Company name	EV SEKm	Sales growth			Sales CAGR 2022-25e	Gross margin			Avg EBITDAm 2023-25e
		2023	2024	2025		2023	2024	2025	
<b>Artificial Solutions International AB</b>	<b>238</b>	<b>39%</b>	<b>88%</b>	<b>38%</b>	<b>53%</b>	<b>75%</b>	<b>80%</b>	<b>85%</b>	<b>-26%</b>
<b>Nordic SaaS</b>									
Admicom Oyj	2,441	13%	9%	11%	11%	65%	65%	66%	39%
Bambuser AB	264	22%	19%	19%	20%	na	na	na	-17%
Carasent ASA	552	18%	19%	19%	18%	82%	82%	82%	28%
Checkin.com Group AB	1,086	71%	78%	77%	75%	85%	85%	85%	31%
Efecte Oyj	757	24%	17%	17%	19%	84%	86%	85%	6%
Fortnox AB	42,927	32%	32%	27%	30%	92%	92%	91%	51%
Irisity AB	249	43%	25%	27%	31%	85%	85%	85%	9%
Pexip Holding ASA	1,159	1%	4%	13%	6%	90%	89%	90%	18%
Physitrack Limited	226	35%	25%	20%	27%	100%	100%	100%	34%
SignUp Software AB	1,395	27%	21%	17%	22%	77%	78%	78%	19%
SmartCraft ASA Class A	3,209	10%	16%	14%	14%	92%	92%	92%	43%
Upsales Technology AB	798	30%	28%	24%	27%	100%	100%	100%	29%
<b>Average - Nordics</b>	<b>4,254</b>	<b>28%</b>	<b>29%</b>	<b>25%</b>	<b>27%</b>	<b>79%</b>	<b>80%</b>	<b>80%</b>	<b>20%</b>
<b>Median - Nordics</b>	<b>798</b>	<b>27%</b>	<b>21%</b>	<b>19%</b>	<b>22%</b>	<b>85%</b>	<b>86%</b>	<b>85%</b>	<b>28%</b>
<b>Global peers</b>									
C3.ai, Inc. Class A	17,462	22%	20%	23%	22%	76%	76%	77%	-17%
Jamf Holding Corp	25,607	20%	19%	10%	16%	81%	82%	85%	11%
RingCentral, Inc. Class A	44,898	13%	12%	12%	12%	79%	79%	77%	25%
Intapp, Inc.	29,172	42%	15%	14%	23%	71%	70%	71%	4%
nCino Inc	27,951	19%	17%	19%	18%	69%	70%	69%	15%
ACI Worldwide, Inc.	41,064	4%	6%	7%	6%	52%	52%	55%	28%
<b>Average - Global</b>	<b>31,026</b>	<b>19.9%</b>	<b>14.7%</b>	<b>14.3%</b>	<b>16.2%</b>	<b>71.3%</b>	<b>71.3%</b>	<b>72.2%</b>	<b>10.7%</b>
<b>Median - Global</b>	<b>28,562</b>	<b>19.3%</b>	<b>16.1%</b>	<b>13.2%</b>	<b>17.3%</b>	<b>73.3%</b>	<b>72.9%</b>	<b>73.9%</b>	<b>12.5%</b>
<i>ASAI - Discount / premium versus Nordics peers</i>		<i>12pp</i>	<i>67pp</i>	<i>19pp</i>	<i>31pp</i>	<i>-10pp</i>	<i>-6pp</i>	<i>0pp</i>	<i>-54pp</i>
<i>ASAI - Discount / premium versus Global peers</i>		<i>20pp</i>	<i>72pp</i>	<i>25pp</i>	<i>36pp</i>	<i>2pp</i>	<i>7pp</i>	<i>11pp</i>	<i>-39pp</i>

Source: FactSet, Redeye

## Summary Redeye Rating

The rating consists of three valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 1 points. The maximum score for a valuation key is 5 points.

### Rating changes in the report:

#### People: 2 (3)

Artificial Solutions appointed Per Ottosson as CEO in November 2020. Ottosson brings extensive C-suite experience from highly successful companies within software and AI – most recently as CRO at IPSoft. Additionally, Ottosson has attracted many high-profile senior recruitments to Artificial Solutions. So far, management has delivered on its goals, i.e., transition to a SaaS model, expand partnerships, and decrease the cost base. Also, we value SEB-Stiftelsen ownership and long-term commitment (c11% of the capital and votes) and some founders and reputable technology investors having meaningful stakes. Board and management hold approximately 7% of the capital. Greater consistency in capital allocation could help improve the rating going forward.

#### Business: 3 (3)

Since transitioning to a SaaS business model in 2021, the company has operated an asset-light (Kubernetes cloud infrastructure) and highly scalable venture, owing to its usage-based revenues – creating product stickiness. Additionally, it relies on global partners such as Microsoft, Deloitte, and CGI to drive sales – which on the flip side, makes some dependencies. Artificial Solutions core market grows at a 48% CAGR – the prospect of achieving long-term organic growth is highly feasible. However, Artificial Solutions is not immune to competition and innovations in the space and have, to some degree, high customer concentration, although this is steadily decreasing.

#### Financials: 1 (1)

Artificial Solutions has a negative FCF profile and will likely remain unprofitable until 2025e, as it invests significant resources in sales growth. The rating's retrospective nature limits the company from achieving a higher score. However, we positively regard the increasing gross profit margin and expect it to, over time, increase to >90%.





## Redeye Rating and Background Definitions

### Company Quality

Company Quality is based on a set of quality checks across three categories; PEOPLE, BUSINESS, FINANCE. These are the building blocks that enable a company to deliver sustained operational outperformance and attractive long-term earnings growth.

Each category is grouped into multiple sub-categories assessed by five checks. These are based on widely accepted and tested investment criteria and used by demonstrably successful investors and investment firms. Each sub-category may also include a complementary check that provides additional information to assist with investment decision-making.

If a check is successful, it is assigned a score of one point; the total successful checks are added to give a score for each sub-category. The overall score for a category is the average of all sub-category scores, based on a scale that ranges from 0 to 5 rounded up to the nearest whole number. The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

### People

At the end of the day, people drive profits. Not numbers. Understanding the motivations of people behind a business is a significant part of understanding the long-term drive of the company. It all comes down to doing business with people you trust, or at least avoiding dealing with people of questionable character.

The People rating is based on quantitative scores in seven categories:

- Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

### Business

If you don't understand the competitive environment and don't have a clear sense of how the business will engage customers, create value and consistently deliver that value at a profit, you won't succeed as an investor. Knowing the business model inside out will provide you some level of certainty and reduce the risk when you buy a stock.

The Business rating is based on quantitative scores grouped into five sub-categories:

- Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

### Financials

Investing is part art, part science. Financial ratios make up most of the science. Ratios are used to evaluate the financial soundness of a business. Also, these ratios are key factors that will impact a company's financial performance and valuation. However, you only need a few to determine whether a company is financially strong or weak.

The Financial rating is based on quantitative scores that are grouped into five separate categories:

- Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

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### Redeye Rating (2023-04-18)

Rating	People	Business	Financials
5p	7	6	2
3p - 4p	147	145	38
0p - 2p	24	27	138
Company N	178	178	178

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### CONFLICT OF INTERESTS

Viktor Lindström owns shares in the company : No  
Redeye performs/have performed services for the company and receives/have received compensation from the company in connection with this.