



14 May 2019

**Market data**

EPIC/TKR	ASAI.SE
Price (SEK)	20.0
12m High (SEK)	90.0
12m Low (SEK)	15.2
Shares (m)	22.0
Mkt Cap (SEKm)	440
EV (SEKm)	617
Free Float*	20%
Market	Nasdaq First North

*As defined by AIM Rule 26

Description

Artificial Solutions is a leading global vendor of artificial intelligence (AI) software to large enterprises. Headquartered in Sweden, the company comprises around 104 people.

Company information

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CFO	Chris Bushnell
Chairman	Åsa Hedin
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ARTIFICIAL SOLUTIONS**1Q'19 results – customer traction, numbers on track**

Artificial Solutions' 1Q results for the three months ended March 2019 confirm that the company remains on track to meet its FY'19 expectations. A number of new customer wins have been achieved, together with several extended and expanded commitments with existing customers. The strategic focus on increasing the proportion of revenue from systems integrator (SI) partners continues to pay dividends, with 50% of 1Q revenue from key partners. Notably, Capgemini and Deloitte were added to the partner list during 1Q. Enterprise interest in productive and scalable AI capabilities has never been greater, and we believe Artificial Solutions is well placed to benefit from this demand.

- ▶ **1Q'19 results:** Revenue for the quarter was SEK12.6m (EUR1.17m), up 2% YoY, with an EBITDA loss, as expected, of SEK27.7m (EUR2.56m), vs. a loss of SEK20.9m a year ago (we use 10.8 SEK:EUR conversion rate). Order intake backlog rose to SEK40.8m (EUR3.78m), up 28% YoY, despite specific sizeable deals slipping into 2Q'19, some of which have since been closed.
- ▶ **Solid customer traction:** Despite lengthy sales cycles that are an inevitable consequence of the focus on large, global enterprises, 1Q saw extensive customer activity. New contracts were signed with i) a US public sector organisation, ii) a major postal services organisation in Asia, and iii) a large airline. Existing contracts were extended with each of AT&T, Shell and Vodafone.
- ▶ **Partner revenue share growth:** An important strategic initiative for a number of years has been cultivation of a productive base of SI partners. In 1Q, 50% of revenue came from partners, a metric that will oscillate quarterly. New partner additions in 1Q were Capgemini and Deloitte, the latter bringing the US public sector deal that was signed in 1Q, with further opportunities in the pipeline.
- ▶ **Valuation:** Artificial Solutions trades on the Nasdaq First North exchange in Stockholm. A DCF analysis produces a mid-point-implied fair equity value of €97m, while a detailed valuation of the company's intellectual property (IP) assets, comprising patents and software licences, undertaken in 2016, came in at \$96m.
- ▶ **Risks:** Competing with some of the world's largest technology companies brings challenges, such as keeping pace with developments, retaining talented people and creating enterprise mindshare vs. strong brands. SIs are a route to market but may reduce the company's visibility into potentially lengthy sales cycles, but, to date, Artificial Solutions has proven adept at managing these factors.

Financial summary and valuation

Year-end Dec (€m)	2017	2018	2019E	2020E	2021E
Total income	7.06	6.09	8.39	11.47	17.96
Gross profit	3.67	3.23	4.62	6.54	10.60
Gross margin	52%	53%	55%	57%	59%
EBITDA	-6.79	-9.26	-6.86	-2.70	3.44
EBIT	-9.44	-11.58	-9.41	-5.51	0.35
PTP	-10.93	-14.24	-8.81	-4.75	1.45
Net income	-10.93	-14.24	-8.81	-4.75	1.45
EPS (diluted, €)	-0.50	-0.65	-0.40	-0.22	0.07
EV/revenue (x)	8.4	9.7	7.1	5.2	3.3
EV/EBITDA (x)	-8.7	-6.4	-8.6	-22.0	17.3

Source: Hardman & Co Research

Analyst

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Investment summary

Standalone AI companies with a global enterprise customer base and strong SI engagement are a rarity. Artificial Solutions has the proven technology platform and an experienced management with which to monetise the opportunity, in our view. 1Q'19 results confirm an expanding list of large-scale customers, strong order intake (with further acceleration expected), growing SI deal flow and a significant new platform release. The company's recurring revenue model means that revenue will build progressively over time, even as large deals are announced. The high level of existing customer renewals and extensions resulted in a partner proportion of order intake at 10%, which was significantly lower than the 50% of revenue represented by partner-led deals. The partner order intake proportion is expected to be higher going forward.

Personnel costs increased by 10% YoY, while headcount fell by 6, to 104, in 1Q'19 compared with 1Q'18, due to salary increases, the cost of migrating headcount away from services and the hiring of employees in the US and Asia-Pacific.

The April 2019 launches of the Teneo Fusion platform and the Teneo Developers application are designed to facilitate ease of use by partners and end-enterprises, in turn assisting the company to scale. The recent share price volatility is due to smaller retail transactions following the reverse takeover transaction.

Artificial Solutions – 1Q'19 results			
(€m)	1Q'19	1Q'18	FY'18
Net sales	1.2	1.2	4.4
EBITDA	-3.0	-2.1	-9.8
Adjusted EBITDA	-2.6	-2.1	-9.8
Operating profit	-5.5	-2.8	-11.6
Adjusted operating profit	-2.9	-2.8	-11.6
Net profit per share (€)	-0.3	n/a	n/a

Source: Company data, Hardman & Co Research

- ▶ **AI platform vendor:** Artificial Solutions is a leading vendor of conversational AI solutions, or smart chatbots, as these technologies are sometimes called. These are virtual assistants that can respond accurately and appropriately to customer queries, based on a deep understanding of what the customer is seeking to do. Machine learning from millions of pieces of data is the method by which the chatbots gain the “intelligence” to engage in a conversation with the end-user. The more human-like the interaction, the more successful the chatbot is likely to be in delivering an acceptable level of satisfaction.
- ▶ **Transition from consultancy to platform licence sales:** The revenue mix continues to trend towards licences. Since completing the initial development of the core software platform, called Teneo, in 2013, the company has focused on reducing its proportion of services revenue through engaging with SI partners to sell and implement its Teneo platform. Three primary drivers of this shift were i) the higher margins associated with software revenue, ii) the greater predictability of term licence and usage-based revenue streams, and iii) the scope to scale the customer base at a faster rate, with the benefit of SI partners actively selling the platform through dedicated AI practices worldwide. The inevitable shorter-term impact, pending an uplift in usage revenue, has been a flatter revenue profile, as the services revenue continues to play a diminishing profile in the revenue mix. Going forward, this is expected to be far more than offset by the revenue backlog converting into revenue.

Artificial Solutions

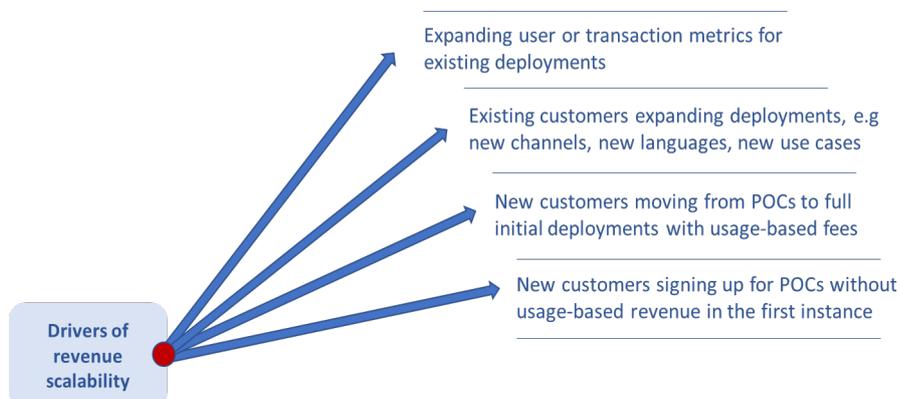
- ▶ **SI engagement remains high:** SIs actively engaged with Artificial Solutions today include Accenture, Capgemini, KPMG, Sapien, Deloitte, Teleperformance and Cognizant – a very healthy list for a company of this size. These relationships are evolving quickly from an implementation-led set of relationships with the SIs to growing evidence that the latter are able to sell the Teneo platform without significant, or, in some cases, any input from Artificial Solutions. Notably, new SIs are seeking out Artificial Solutions to meet their own customers’ requirements. The US Government deal, announced in 1Q’19, was won through Deloitte – without which Artificial Solutions would not have been able to access this opportunity.
- ▶ **Acknowledged market leader:** Artificial Solutions has consistently achieved strong rankings within the AI industry, and more widely in the technology sector. In 2018, ETR Research published the results of its survey of around 700 enterprise CIOs from companies that it calculated represented some \$300bn in annual IT spend. Of these participating companies, 229 were in the top Global 2000 IT decision makers (ITDMs), and 66 were in the Fortune 100. The overlap between these enterprises and Artificial Solutions’ target market is, therefore, significant. The results from Artificial Solutions’ perspective are impressive, with the company ranking third among all “emerging technology companies to keep an eye on” and, perhaps even more significantly, considered to be the best-positioned company its sector.

ETR Research: emerging technology companies to keep an eye on



Source: ETR Research

- ▶ **Inherent revenue scalability:** Artificial Solutions sells term licences that grant an enterprise the right to use its Teneo platform for a specified period – usually two or three years. Alongside the term licences, and associated support and maintenance contracts, each customer contract incorporates a usage-based revenue element. The enterprise-grade nature of the company’s conversational AI capabilities allows the company to focus its attention on the largest enterprises with the highest numbers of users. The other side of the coin is that sales cycles are typically fairly extended and usually require pilot deployments in some form. However, once these enterprises have accepted that Artificial Solutions delivers on their requirements, the opportunity to scale revenue is substantial. The diagram below sets out the ways in which these deployments have, to date, tended to evolve.

Artificial Solutions – drivers of revenue scalability


Source: Hardman & Co Research

Profit and loss

Artificial Solutions – profit and loss

Year-end Dec (€m)	2016	2017	2018	2019E	2020E	2021E
Income						
Net sales	3.620	4.951	4.389	6.777	9.756	16.102
Capitalised costs	0.636	0.872	1.187	1.203	1.384	1.591
Other operating income	0.901	1.234	0.517	0.413	0.331	0.264
Total income	5.158	7.057	6.093	8.393	11.471	17.958
Operating expenses						
Other external costs	-3.379	-4.278	-5.022	-4.616	-3.212	-3.232
Personnel costs	-7.873	-9.572	-10.326	-10.636	-10.955	-11.284
Other operating expenses	-0.002	0.000	-0.003	-0.004	-0.004	-0.005
Total operating expenses	-11.254	-13.851	-15.352	-15.256	-14.171	-14.522
EBITDA (reported)	-6.096	-6.794	-9.259	-6.863	-2.701	3.436
EBITDA (adj., excl. capitalised costs)	-6.732	-7.666	-10.446	-8.066	-4.084	1.845
Depreciation & amortisation	-2.293	-2.641	-2.320	-2.552	-2.807	-3.088
EBIT (reported)	-8.389	-9.435	-11.579	-9.415	-5.508	0.348
EBIT (adj., excl. capitalised costs)	-9.025	-10.307	-12.766	-10.618	-6.892	-1.243
Interest income	0.278	0.449	0.366	0.120	0.150	0.165
Interest expenses	-2.059	-1.941	-3.023	-2.072	-2.201	-2.155
Net financial income	-1.781	-1.492	-2.657	-1.952	-2.051	-1.990
PTP	-10.171	-10.927	-14.236	-8.815	-4.752	1.446
PTP (adj., excl. capitalised costs)	-10.810	-11.799	-15.423	-10.018	-6.135	-0.145
Taxation	-0.003	0.000	-0.002	0.000	0.000	0.000
Net income	-10.174	-10.927	-14.238	-8.815	-4.752	1.446

Source: Company data, Hardman & Co Research

Balance sheet

Artificial Solutions – balance sheet						
@ 31 Dec (€m)	2016	2017	2018	2019E	2020E	2021E
Assets						
Fixed intangible assets						
Capitalised exp. for licences & software	3.480	3.107	2.870	1.203	1.384	1.591
Goodwill	2.081	0.767	0.000	0.000	0.000	0.000
Total intangible assets	5.561	3.873	2.870	1.203	1.384	1.591
Fixed tangible assets						
Equipment, furniture & fittings	0.240	0.227	0.174	0.207	0.250	0.305
Total tangible fixed assets	0.240	0.227	0.174	0.207	0.250	0.305
Total fixed assets	5.801	4.100	3.044	1.410	1.633	1.897
Other non-current receivables	0.380	0.517	0.538	0.591	0.651	0.716
Total non-current assets	6.181	4.618	3.581	2.001	2.284	2.612
Current assets						
Accounts receivable – trade	0.734	0.399	0.560	0.755	1.020	1.377
Tax receivable	0.515	0.369	0.883	0.000	0.000	0.000
Other receivables	0.109	0.088	0.329	0.361	0.398	0.437
Prepaid expenses & accrued income	0.609	0.583	0.470	0.517	0.568	0.625
Total current receivables	1.967	1.439	2.241	1.634	1.986	2.439
Cash & bank balances	0.810	0.491	4.564	1.010	-0.317	2.003
Total current assets	2.777	1.930	6.804	2.644	1.669	4.442
Total assets	8.958	6.547	10.386	4.645	3.953	7.054
Equity & Liabilities						
Equity						
Share capital	2.849	3.092	3.646	4.193	4.822	5.545
Share premium reserve	58.128	62.776	75.566	77.355	79.818	80.532
Other equity including result for year	-62.784	-73.394	-87.638	-96.453	-101.204	-99.758
Total equity	-1.807	-7.526	-8.427	-14.905	-16.565	-13.681
Long-term liabilities						
Liabilities to other lenders	4.715	2.537	5.102	4.592	4.132	3.719
Total long-term liabilities	4.715	2.537	5.102	4.592	4.132	3.719
Current liabilities						
Liabilities to other lenders	2.609	7.776	9.132	9.589	10.068	9.565
Accounts payable – trade	0.167	0.395	0.364	0.491	0.663	0.895
Income tax liability	0.011	0.005	0.002	0.000	0.000	0.000
Other liabilities	0.183	0.241	0.347	0.433	0.541	0.677
Accrued expenses & deferred income	3.080	3.119	3.866	4.446	5.113	5.879
Total current liabilities	6.050	11.536	13.711	14.959	16.385	17.016
Total equity & liabilities	8.958	6.547	10.386	4.645	3.953	7.054

Source: Company data, Hardman & Co Research

Cashflow

Artificial Solutions – cashflow statement						
Year-end Dec (€m)	2016	2017	2018	2019E	2020E	2021E
Operating loss	-8.389	-9.435	-11.579	-9.415	-5.508	0.348
Depreciation	2.293	2.641	2.320	2.552	2.807	3.088
Other items excluded from cashflow	1.036	0.320	0.030	0.000	0.000	0.000
	-5.061	-6.474	-9.229	-6.863	-2.701	3.436
Interest received	0.208	0.363	0.298	0.120	0.150	0.165
Interest paid	-0.879	-0.888	-1.740	-2.072	-2.201	-2.155
Taxation paid & received	-0.513	0.140	0.000	0.000	0.000	0.000
Operating cashflow before working capital changes	-6.245	-6.858	-10.671	-8.815	-4.752	1.446
Changes in working capital						
Increase/(decrease) in receivables	0.066	0.359	-1.961	-0.607	0.352	0.454
Increase/(decrease) in liabilities	-0.435	0.360	0.821	1.248	1.426	0.631
Net change in working capital	-0.369	0.719	-1.139	0.641	1.779	1.084
Cashflow from operating activities	-6.613	-6.139	-11.810	-8.174	-2.973	2.531
Investing activities						
Purchases of tangible fixed assets	-0.112	-0.063	-0.025	-0.033	-0.043	-0.056
Purchases of intangible fixed assets	-0.640	-0.882	-1.244	-0.622	-0.311	-0.155
Change in fixed assets	0.000	0.000	0.000	0.000	0.000	0.000
Cashflow from investing activities	-0.752	-0.945	-1.269	-0.655	-0.354	-0.211
Financing activities						
Issue of new shares	8.267	3.833	12.820	4.500	0.000	0.000
Costs of new share issues	-0.179	-0.187	-0.346	-0.225	0.000	0.000
Issue of new non-registered shares	1.244	0.000	0.000	0.000	0.000	0.000
Change in loans	-1.304	3.118	4.678	1.000	2.000	0.000
Cashflow from financing activities	8.029	6.764	17.152	5.275	2.000	0.000
Net change in cash & cash equivalents	0.664	-0.320	4.073	-3.554	-1.327	2.319
Cash & cash equivalents at start of year	0.147	0.810	0.491	4.564	1.010	-0.317
Cash & cash equivalents at end of year	0.810	0.491	4.564	1.010	-0.317	2.003

Source: Company data, Hardman & Co Research

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