

Software Engineering – Market Performance

Company Name	EV € mn	Sales 2019E € mn	Sales Growth 2019E	2019E EV/Sales	2019E EV/EBITDA
<b>ARTHOS Software Engineering Peers</b>					
Addnode	469,2	314,8	14,3%	1,5x	11,8x
Akka	1.536,6	1.825,9	21,3%	0,8x	9,0x
Alten	3.739,6	2.613,2	15,1%	1,4x	13,7x
Altran	4.889,7	3.248,6	11,4%	1,5x	9,8x
Aubay	419,8	426,9	6,6%	1,0x	9,2x
Beyondsoft	452,8	414,5	33,1%	1,1x	16,4x
Capgemini	20.388,4	14.190,7	7,5%	1,4x	9,4x
Cognizant	31.070,4	15.002,6	3,5%	2,1x	10,6x
Data Respons	259,3	38,6	23,6%	1,4x	12,2x
DXC	17.696,3	18.548,7	(13,6%)	1,0x	4,3x
Econocom	1.038,9	2.937,0	3,2%	0,4x	6,3x
EPAM Systems	9.000,6	2.026,9	22,4%	4,4x	23,9x
Etteplan	272,9	257,0	8,7%	1,1x	7,6x
EVRY	1.889,7	1.344,6	1,8%	1,4x	8,7x
Groupe Open	117,8	323,0	(0,2%)	0,4x	4,7x
HCL Technologies	17.594,3	8.741,8	14,7%	2,0x	8,8x
Infosys	41.894,3	11.453,2	10,4%	3,7x	15,1x
Leidos	13.179,8	9.734,1	6,3%	1,4x	13,5x
Mindtree Limited	1.477,0	974,1	12,3%	1,5x	11,6x
Persistent	413,4	447,1	4,2%	0,9x	6,0x
SAIC	6.251,6	5.905,2	41,1%	1,1x	12,8x
SII	526,4	679,6	10,6%	0,8x	8,2x
Sopra Steria	3.273,5	4.408,9	7,7%	0,7x	7,3x
Tata Consultancy	103.436,2	20.224,7	10,3%	5,1x	19,2x
Tieto	2.063,3	1.626,7	1,7%	1,3x	8,4x
<b>Mean</b>			<b>11,1%</b>	<b>1,6x</b>	<b>10,7x</b>
<b>Median</b>			<b>10,3%</b>	<b>1,4x</b>	<b>9,4x</b>

Peer Group includes companies with business focus on Software Engineering; Enterprise value as of 31.07.2019; Estimates as of July 2019.

Personal Note



Industry-wide digital transformation and mega trends, such as automation and connectivity (IoT), have fueled M&A activity of the software engineering (SE) sector and also led to progressive market consolidation. Next to the benefit of strengthening the geographic footprint, companies engage in acquisitions with the primary purpose of extending competences and expertise across additional

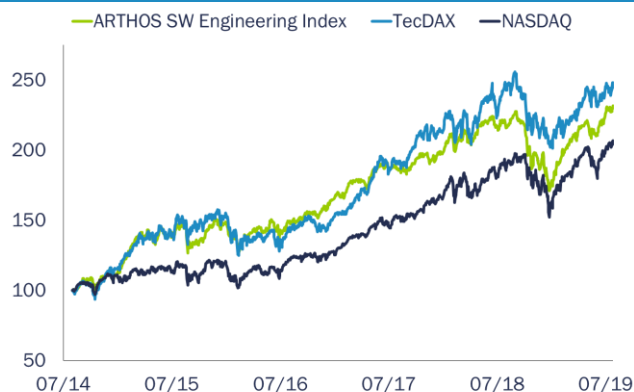
verticals. For instance, the prominent landmark deal of Bosch acquiring ITK demonstrates the degree of vertical integration and can be regarded as an inflection point within the industry.

However, the SE sector also experiences increasing horizontal market consolidation. Driven by the market, large IT players are aiming to position themselves as end-to-end technology providers by offering comprehensive IT services and solutions. In other words, IT and business consultancies have started to merge with embedded software and high-end technology companies to offer full-service support to their customers. The recently announced EUR 3.6 billion Capgemini-Altran deal serves as an example to show the willingness of expanding the product portfolio to their clients.

From a valuation perspective, we would like to emphasize that EBITDA multiples of the SE Industry continue to be on historic very high levels after having recovered from a short decline in Q4 of 2018.

Overall, demand for SE companies and valuation levels are still strong underlining an attractive market environment for sellers.

ARTHOS Software Engineering Index



ARTHOS Software Engineering Index includes the companies listed above.

Historic Multiple Analysis (past 5 years)



Median development of historic EV/EBITDA Multiple of the ARTHOS Software Engineering Peer Group.

Current Relevant M&A and Market News

**Oct 10, 2018:** ZF acquired a 35% stake in Engineering Services Provider ASAP to pursue its strategy of securing additional resources for autonomous driving and e-mobility to better meet the ever-growing demands from customers in these areas.

**Feb 01, 2019:** SoftwareONE, a leading global Platform, Solutions and Services company, acquired COMPAREX, a global IT service provider. The acquisition is a continuation of SoftwareONE's business transformation as it allows them to gain scale, further invest in innovation and expand in geographies.

**Mar 15, 2019:** Audius AG acquired a majority stake in IT Competence Group. Audius offers software, security & audit services, consulting, managed services and physical risk management. The acquisition strengthens their core competencies and broadens their service portfolio.

**Apr 09, 2019:** DATAGROUP acquired UBL Informationssysteme. The acquisition extends the competencies in infrastructure as well as platform and software solutions.

**Jun 19, 2019:** Tieto announced to acquire EVRY for EUR 1.4 billion to create one of the most competitive digital services and software companies in the Nordics.

**Jun 24, 2019:** DXC Technology acquired Luxoft Holding, Inc. for EUR 1.9 bn. The addition of Luxoft will bring clients new capabilities in digital engineering, additional depth in key verticals and an expanded portfolio of digital offerings.

**Jun 25, 2019:** Larsen and Toubro acquired majority stake in Mindtree. One of the largest engineering and construction companies in India, L&T gained control of the IT services firm Mindtree after weeks of tussle with the management.

**Jul 04, 2019:** Etteplan Oyj expands its operations in Germany to engineering services and acquires EMP Engineering Alliance, a company specializing in industrial automation and process engineering.

Notable Recent M&A Transactions



**Aug 13, 2018:** Allgeier SE is accelerating its development into an internationally operating software development company with the acquisition of a majority stake (67%) in the Germany-based software development company iQuest for a purchase price in the double-digit million Euro range. The company generated revenues of more than EUR 30 million in 2017. It develops individual software solutions particularly in the life sciences, telecommunications, financial services, transportation and energy sectors.



**Sep 20, 2018:** CGI acquired ckc AG for EUR 15.5 million, a specialized provider of agile software development and management services, focused on the automotive sector. With the merger of ckc, CGI strengthens its local client proximity model by adding two new locations in Brunswick and Halle, along with more than 300 highly qualified specialists to its network of 3,000 professionals across 15 locations in Germany.



**Oct 02, 2018:** HCL Technologies (HCL), a leading global technology company, acquired Wolfsburg-based IT and engineering services provider, H&D International Group (H&D) for EUR 30 million. The acquisition is part of HCL's long-term growth plan in Germany. This landmark deal sees HCL attain significant in-country front office and delivery capabilities and will further enhance the company's domain expertise in the global automotive sector. H&D International Group generated revenues of more than EUR 70 million in 2017.



**Jun 24, 2019:** Publicly listed Capgemini, a global leader in consulting, IT services and digital transformation, and Altran Technologies, the global leader in Engineering and R&D services, also publicly listed, agreed for exclusive negotiations, whereby Capgemini is to acquire Altran for EUR 3.6 billion. The agreement was approved by the Boards of Directors of Capgemini and Altran. Completion of the transaction is expected by the end of 2019.



**Jul 03, 2019:** Data Respons ASA acquired 100% of the shares in DONAT group GmbH, a German R&D Services company headquartered in Ingolstadt with more than 140 employees. The company is a leading niche provider of SW solutions and specialist services within software development and architecture, system integration and test management as well as business critical R&D IT services (DevOps). ARTHOS Corporate Finance acted as financial advisors to Data Respons.

Software Engineering Companies Benchmarking (last 12 months)

