

Software & IT services M&A Pulse

Q1 – Q3 2018 review

November 2018



C O R P O R A T E F I N A N C E

I N T E R N A T I O N A L

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Introduction

Corporate Finance International ('CFI') is pleased to present the Software and IT Services M&A Pulse – Q1 – Q3 2018 Review. This report provides commentary and analysis on current trading market trends and merger and acquisition dynamics within the Software and IT Services sector.

We hope you find this edition informative and we would encourage you to reach out to our European sector specialists, Ramon Schuitevoerder, Clément Barbot, Nicolas Gutbrod, Tim Brotherton & João Santos, if you would like to discuss our perspective on current sector trends and M&A opportunities or our relevant sector and transaction experience.

CFI is a group of middle-market investment banks and corporate finance advisory boutiques with over 200 bankers specializing in cross-border acquisitions, divestitures, capital raising, and related services all over the world. CFI focuses exclusively on middle-market transactions, with deal sizes ranging from €10 million to €500 million. In 2017, CFI completed 97 M&A transactions, involving parties in 21 countries and 4 continents.

Our Software and IT Services team is dedicated to providing best-in-class, cross-border merger & acquisition advisory services to family and entrepreneurially owned companies, private equity funds and financial sponsors, and publicly traded companies. Our extensive sector knowledge and transaction experience spans the Infrastructure & IT Management, Security, BI/Data Analytics, Horizontal and Vertical Enterprise Software, Fintech, Adtech & Martech, IT Services, Near- and Offshoring and Managed Services domains.

Our professionals have global relationships with leading technology companies and financial investors. Thoughtful advice, deep experience, sector focus that supports in-depth understanding of trends and developments impacting our clients, and years of experience structuring and negotiating complex transactions have resulted in a relevant track record of many long-term relationships with clients who are seeking extraordinary value.

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Contact details



C O R P O R A T E F I N A N C E I N T E R N A T I O N A L

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Recent transactions

 FINANCIAL SERVICES TECHNOLOGY REDEFINED has been acquired by 	SELISOFT sold a minority stake to ADVANTAGE SMOLLAN
Sell-side	Sell-side
Management Team has completed a Buy-Out of COMPUTER WORLD Helping Businesses Define Tomorrow	 has been acquired by AMETEK
Buy-side	Sell-side
 has been acquired by ASM Pacific Technology	VISEO #viseospirit raised capital and acquired
Sell-side	Buy-side
 has acquired 	 and have been sold to a consortium including
Buy-side	Sell-side

Company overview

Critical Manufacturing provides the most modern, flexible and configurable manufacturing execution system (MES) available. Critical Manufacturing's MES helps manufacturers stay ahead of stringent product traceability and compliance requirements; reduce risk with inherent closed-loop quality; integrate seamlessly with enterprise systems and factory automation; and provide deep intelligence and visibility of global production operations.

As a result, their customers are Industry 4.0 ready. They can compete effectively and profitably by easily adapting their operations to changes in demand, opportunity or requirements, anywhere, at any time. For more information about Critical Manufacturing, please visit www.criticalmanufacturing.com

Marketing highlights

- Critical Manufacturing has significant expertise in the integration and networking of machines and systems, as well as IT systems and cloud solutions. This strategic investment would accelerate ASM Pacific Technology's (ASMPT) efforts to build a portfolio of Industry 4.0 solutions and will boost ASMPT's software competence in enabling smart factories.
- Günter Lauber, CEO of ASMPT SMT Solutions Segment and serving concurrently as an Executive Committee member responsible for ASMPT's software solutions, explains the rationale behind this strategic investment: "We want to focus more on comprehensive software solutions to help customers improve their quality, flexibility and efficiency with smart factories. Initiatives like The Hermes Standard and ADAMOS already represent major steps in this direction, but we want to speed up our integration and smart manufacturing capabilities and extend our reach beyond hardware solutions."
- In 2017, through the joint venture ADAMOS (ADaptive Manufacturing Open Solutions), ASMPT, DMG MORI, Dürr, Software AG, as well as Zeiss have established a strategic alliance for Industry 4.0 and the Industrial Internet of Things (IIoT). This was Germany's first alliance of well-known industrial and software companies established to promote ADAMOS as a global standard.

Transaction type

Buy-side M&A

Sector

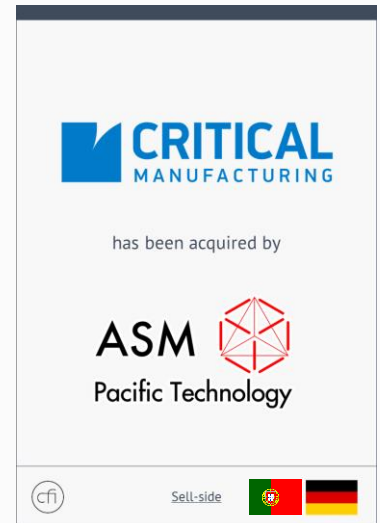
Enterprise software

Deal value

Undisclosed

Date

August 2018



Buyer

ASM Pacific Technology is a manufacturer of electronics manufacturing machines and equipment. The company's electronics manufacturing machines and equipment include wafer separation, die attach equipment, wire bonding equipment, dispensing equipment, singulation, trim and form system, test and finish handling system etc. The Company has over EUR 2bn in revenues and ca. EUR 450m EBITDA.

Process highlights

CFI acted as the lead corporate finance advisor to the buyer, with the German and Portuguese teams seamlessly coordinating and executing important aspects of the transaction, which resulted in CFI exceeding our clients' expectations.

Deal maker(s)



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Company overview

Miles Software Solution's Pvt. Ltd. (www.milessoft.com) ("Miles"), is India's leading wealth and asset management on-demand software provider to banks, asset managers and wealth management firms, besides having 300+ financial service customers across 18 different countries in Europe, Middle East and South-East Asia.

Marketing highlights

- Leading digital wealth & asset management platform.
- Comprehensive product suite for wealth & asset managers.
- Experienced India-based R&D and delivery teams.
- Tier 1, Referenceable client base across all focus geographies.
- Strong revenue visibility with high operating leverage driving profitability.
- Rapidly expanding market opportunity.

Buyer

Ebix, Inc. (NASDAQ: EBIX, www.ebix.com), a leading international supplier of On-Demand software and E-commerce services to the insurance, financial, healthcare and e-learning industries. It has 50+ offices across 5 continents and a market capitalization of approximately USD 2.6bn.

Process highlights

CFI India acted as the lead advisor to all the sellers (including promoters, management team and two Private Equity Funds), exclusively involved in negotiating and executing important aspects of the transaction, which ultimately resulted in successful closure of transaction.

Transaction type

Sell-side M&A

Sector

Fintech

Deal value

Undisclosed

Date

September 2018



Deal maker(s)



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Company overview

ComputerWorld is a managed services provider and value-added reseller delivering expert-led business IT solutions, consultancy and training services typically within a managed support wrapper. The business specialises in infrastructure modernisation, virtualisation and cloud, workspace transformation and security solutions and partners with Dell EMC, VMware and Microsoft amongst others.

One of the longest established IT solutions and services providers in the UK, ComputerWorld has been working closely with its customers for over 25 years.

Headquartered in Bristol, UK, ComputerWorld recorded a turnover of GDP 15m in 2017.

The company's experienced management team had led the company through a successful growth period for over ten years in the lead up to the buy out.

Marketing highlights

- The management buy-out was a result of a long term succession strategy for the business agreed between the vendor and the management team.
- The transaction was structured so that no external finance was required, with the vendor continuing to retain an involvement and minority equity holding in the short term. This has enabled the management team to take complete control on the strategic direction of the business, without significant equity dilution or a highly leveraged capital structure.

Process highlights

CFI acted as lead corporate finance advisers to the management team, initiating the transaction. Our role included agreeing the valuation with the vendor, structuring the transaction and overseeing the transaction to completion.

Transaction type

Management buy-out

Sector

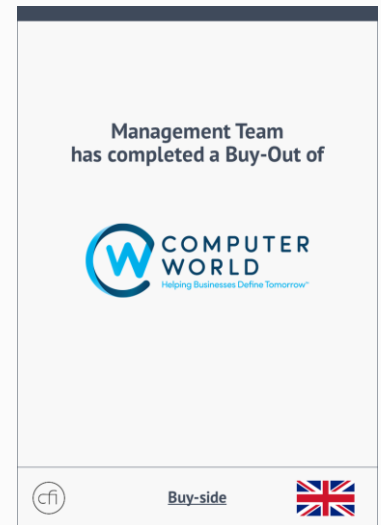
IT Services

Deal value

Undisclosed

Date

May 2018



Deal maker(s)



Tim Brotherton

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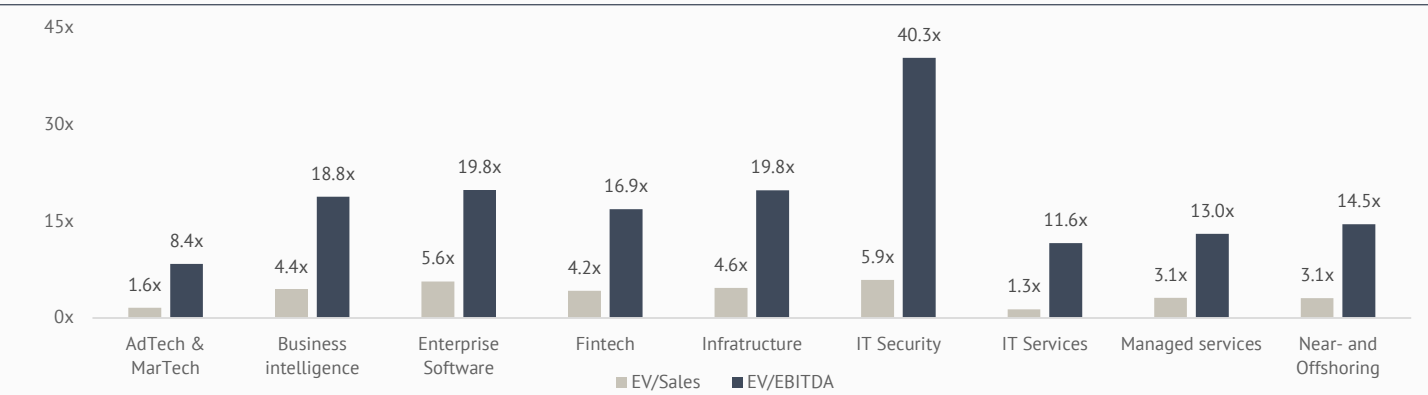


Geraint Rowe

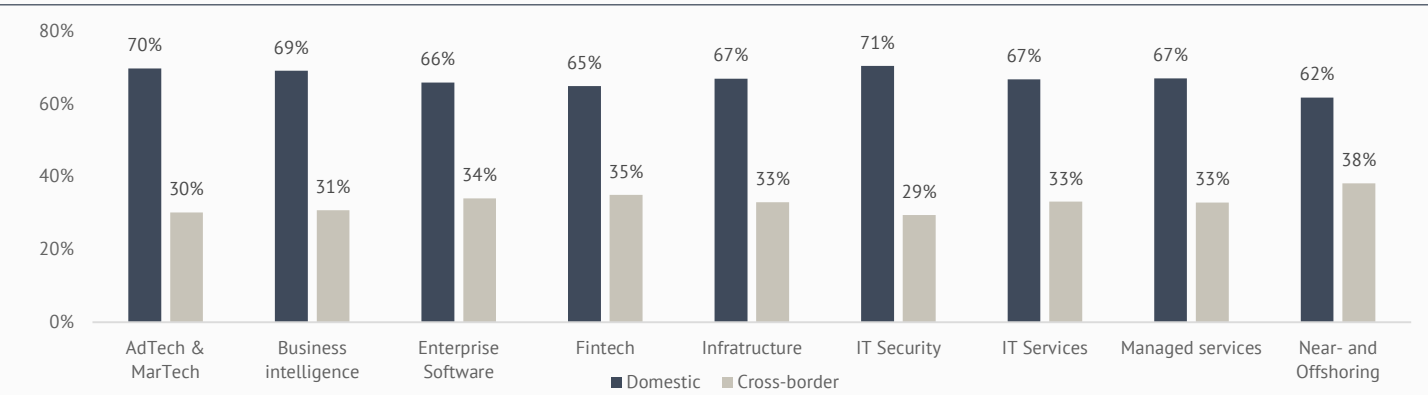
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Summary

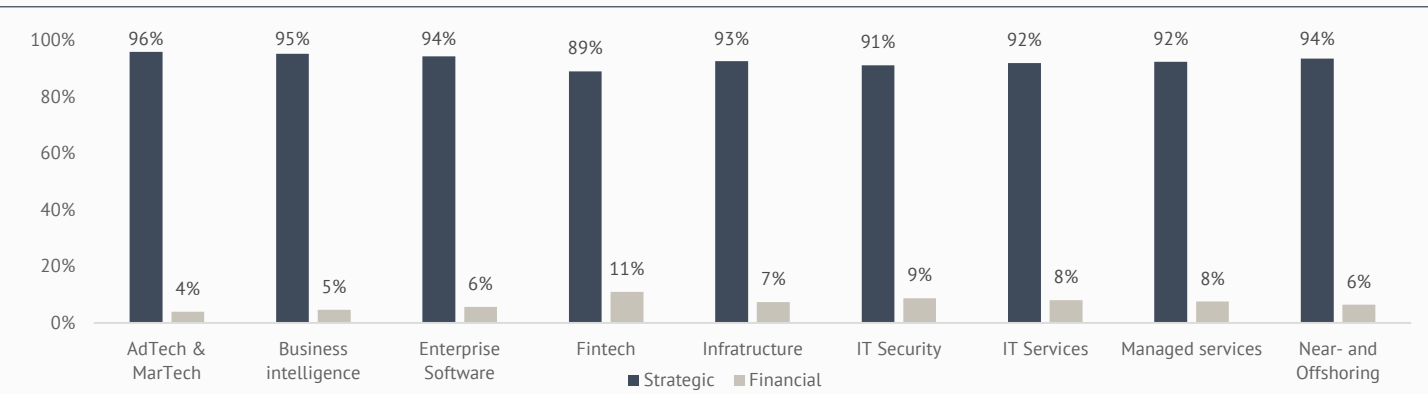
Trading multiple per category



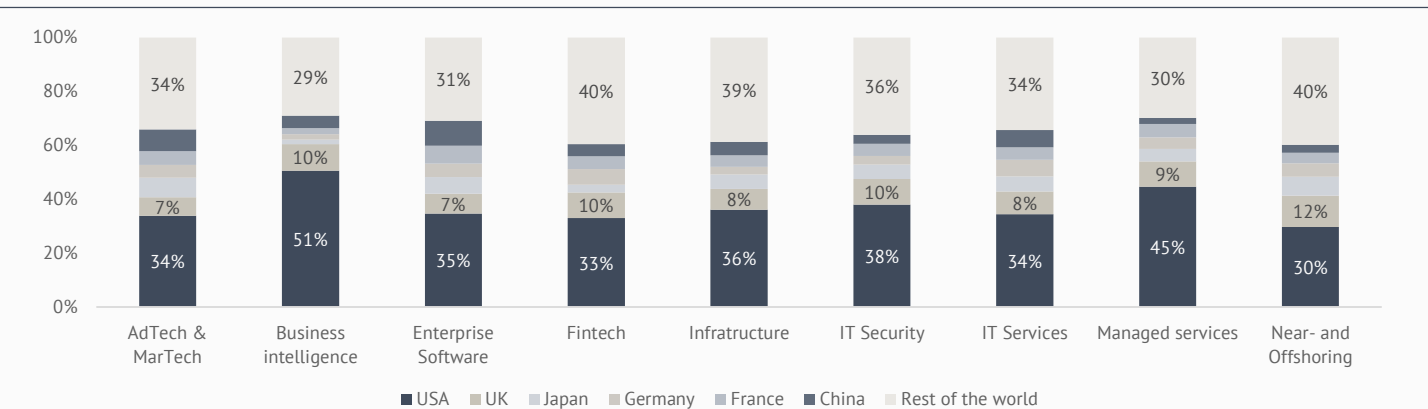
Type of deals



Type of buyers



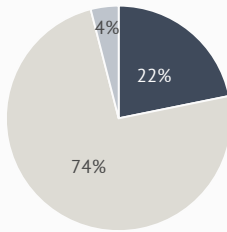
Target's country



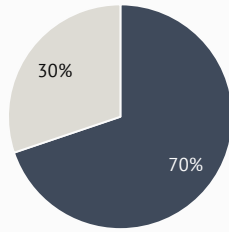
Trends

- As the new Data Protection Regulation (EU) 2016/679 ("GDPR") came into force in May 2018, the law on handling of personal data has been significantly tightened up. Stricter regulations for data collection and the need for higher transparency need to be respected – a challenge especially for the firms in the Adtech & Martech sector.
- With regards to the M&A market, the role of financial investors in Adtech & Martech transactions is relatively modest with a share of 4%, especially compared to other sectors.
- Stock market valuations show lower revenue multiples (1.6x) and lower EBITDA multiples (8.4x – current / 9.6x – 3y average), compared to 2017 (Revenue multiples (2.1x); EBITDA multiples (14.8x)) and compared with other sub-sectors.
- The fifteen largest comparable transactions in the Adtech sector range between EUR 100m and EUR 4bn with a very broad range of (disclosed) EBITDA multiples up to 28.9x.

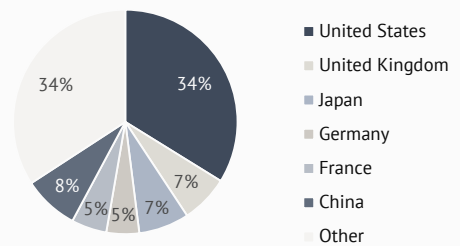
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Albert Technologies Ltd	Israel	0	2	4	-10	28				
BrightView Holdings, Inc.	United States	1,976	2,065	2,058	240	1,415				
Brightcove Inc.	United States	136	138	146	-10	260	1.6x			
Criteo SA Sponsored ADR	France	1,622	2,053	841	213	1,303	0.9x	8.4x	9.6x	6.3x
HubSpot, Inc.	United States	245	333	435	-22	5,042				
Marin Software, Inc.	United States	90	66		-14	16	1.2x			
Matomy Media Group Ltd	Israel	250	217		40	33	0.6x	3.1x	4.6x	
New Relic, Inc.	United States	164	240	403	-39	4,585				
RhythmOne plc	United States	105	136	331	0	196	1.6x		19.1x	7.0x
Taptica International Ltd.	Israel	114	187	281	30	286	2.0x	12.7x	9.4x	8.7x
Rubicon Project, Inc.	United States	252	138	103	-18	157	1.3x			
Mean							1.1x	6.1x	10.7x	7.3x
Median							1.3x	5.8x	9.5x	7.0x

Selected transactions

Announced date	Buyer	Target	Description	Enterprise value	EV/Revenue	EV/EBITDA
Aug-18	AT&T, Inc.	Otter Media Holdings	Subscription, advertising and content company	USD 1.7bn		
Jul-18	Exponent Private Equity	Dennis Publishing (UK)	Company engaged in the publication of magazines for the computer, gaming, general interest & lifestyle sector	EUR 224m		
Jun-18	AT&T, Inc.	AppNexus, Inc.	Provider of trading solutions and powers marketplaces for Internet advertising	USD 1.4bn		
Jun-18	Cineworld Group Plc;	National CineMedia LLC	Company engaged in providing in-theatre and online advertising, promotions, and entertainment programming	EUR 945m	2.5x	
May-18	Silver Lake Technology	ZPG Plc	Provider of property & household-related digital information & software solutions for the real estate agents	USD 2.9bn	9.1x	28.8x
May-18	Gannett Co., Inc.	WordStream, Inc.	Provider of online advertising software and services	EUR 126m	3.2x	
Apr-18	RazerVentures	MOL Global, Inc.	Provider of e-payment solutions for online goods and service	EUR 64m	1.4x	
Feb-18	Quad/Graphics, Inc.	Ivie & Associates, Inc.	Provider of marketing, staff enhancement and general project management services	USD 87m	0.2x	
Feb-18	M3 USA Corp.	Wake Research Associates LLC	Multi-specialty and multi-center research organization	USD 4.0bn		
Jan-18	CJ O SHOPPING Co., Ltd.	CJ E&M Corp.	Company engaged in the media and entertainment business	USD 3.1bn	2.4x	10.4x

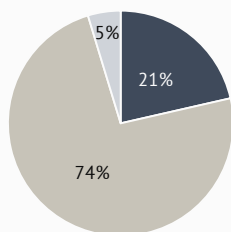
Trends

- Increasing usage of data analytics, raising penetration of cloud technologies, and growing dependency on data in decision making are the factors fuelling the market growth. In addition, increasing adoption of business intelligence in small and medium-sized enterprises is an important drive of market demand.
- Unstructured data segment is expected to dominate the global business intelligence market with higher CAGR owing to increasing adoption of data analytics and

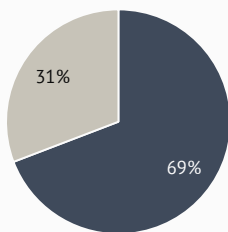
growing market for IoT devices.

- According to Statistics MRC, the Global Business Intelligence (BI) market is expected to grow from USD 15.6bn in 2016 to reach USD 29.5bn by 2022 with a CAGR of 11.1%.
- Some of the key players in global Business Intelligence (BI) market include Microsoft Corporation, Oracle Corporation, Pentaho, Qlik Technologies, SAP SE and Tableau Software.

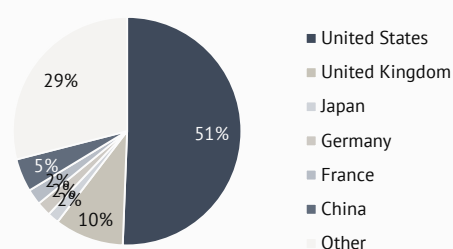
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Datwatch Corporation	United States	27	33	41	-3	128	3.7x			
Hortonworks, Inc.	United States	167	232	298	-168	1,598	5.3x			675.6x
Inovalon Holdings, Inc. Class A	United States	387	398	498	82	623	3.5x	17.3x	13.6x	8.4x
MicroStrategy Incorporated Class A	United States	463	447	446	79	1,142	3.6x	20.2x	27.3x	119.4x
Open Text Corporation	Canada	1,644	2,102	2,541	700	8,769	5.0x	15.1x	14.8x	12.4x
Splunk Inc.	United States	606	860	1,471	-282	15,263	12.5x			73.9x
Tableau Software, Inc. Class A	United States	748	778	855	-130	6,739	5.7x			
Teradata Corporation	United States	2,099	1,911	1,869	207	3,867	2.8x	26.2x	16.6x	19.0x
Mean							5.3x	19.7x	18.1x	151.4x
Median							4.4x	18.8x	15.7x	46.5x

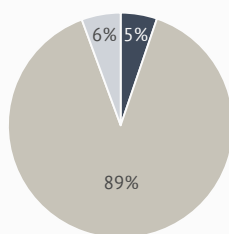
Selected transactions

Announced date	Buyer	Target	Description	Enterprise value	EV/Revenue	EV/EBITDA
Jul-18	Broadcom	CA Technologies	Developer of an enterprise information technology (IT) software	EUR 1.6bn	4.5x	14.3x
Apr-18	SAP	Callidus Software	Developer of a cloud-based performance management platform	EUR 2.0bn	9.5x	
Sep-18	Fortive	Accruent	Provider of enterprise contract management software	EUR 1.7bn	7.4x	
Aug-18	IHS Markit	Ipreeo	Developer and provider of market intelligence, data and technology services	EUR 1.6bn		16.0x
Apr-18	Roche	Flatiron	Developer of a database platform designed to organize the oncology information	EUR 1.5bn		
Jul-18	Salesforce	Datorama	Provider of a cross-channel marketing analytics platform created to connect data	EUR 727m		
May-18	AlpInvest Partners and others	Raet	Provider of HR cloud software and services	EUR 623m	4.3x	
Aug-18	Orange Business Services	Basefarm	Provider of cloud-based management of critical applications and data analysis	EUR 350m		
Jun-18	KKR and Goldman Sachs	OutSystems	Developer of an application development and delivery platform designed to seamlessly integrate custom code	EUR 308m	3.6x	

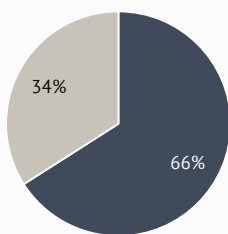
Trends

- Strong M&A activity in the sector with 517 deals in the first three quarters of 2018.
- The retraction of private equity acquisitions continues, representing 6% of the total transactions in Q3 2018. The remaining 89% are strategic buyers but operating in different sectors.
- Public companies continue their uptick in valuations since Jan 2017.
- USA is still under the buyer's radar, counting for 35% of the transactions in the sector.
- As relevant transactions we have Outsystems, the global leading low-code developer of enterprise applications, which raised a USD 360m from KKR and Goldman Sachs.
- Microsoft was the most acquisitive company in the sector (8) followed by Francisco Partners (6), TA Associates (6), Visiativ (5) and Google (4).

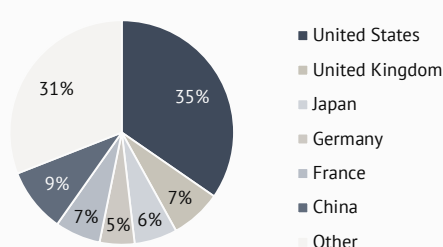
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
AVEVA Group plc	UK	275	514	834	117	5,240	4.0x	17.4x	22.1x	24.9x
Constellation Software Inc.	Canada	1,921	2,198	2,661	570	13,408	5.2x	20.0x	20.7x	21.5x
Dassault Systemes SA	France	3,056	3,228	3,440	977	33,673	8.2x	27.1x	28.1x	32.1x
Enghouse Systems Limited	Canada	209	224	233	64	1,486	5.3x	18.7x	20.9x	22.5x
International Business Mach. Corp.	United States	72,247	70,163	69,958	13,092	118,829	2.4x	12.8x	11.9x	10.0x
Intuit Inc.	United States	4,229	4,734	5,760	1,491	50,643	7.3x	23.2x	23.9x	25.3x
Micro Focus International plc	UK	1,124	1,264	3,357	583	6,908	11.0x	23.9x	12.3x	5.4x
Microsoft Corporation	United States	76,348	88,082	107,083	33,604	755,070	8.4x	22.1x	22.2x	20.6x
Oracle Corporation	United States	33,400	34,611	34,912	14,428	168,151	7.9x	18.9x	17.7x	17.1x
SAP SE	Germany	22,062	23,461	24,590	6,331	130,221	5.3x	19.8x	18.4x	17.8x
Sage Group plc	UK	1,839	1,969	2,113	572	7,141	5.6x	19.4x	16.0x	11.9x
Mean							6.4x	20.3x	19.5x	19.0x
Median							5.6x	19.8x	20.7x	20.6x

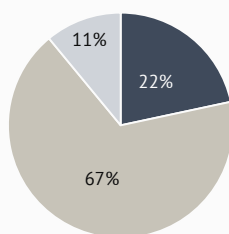
Selected transactions

Announced date	Buyer	Target	Description	Enterprise value	EV/Revenue	EV/EBITDA
Jul-18	salesforce.com	Datorama, Inc.	Provider of software as a service platform for advertisers & ad agencies	EUR 686m		
May-18	Karmijn Kapital	Picturae	Provider of cultural heritage maintenance services and software	n.a		
Jun-18	KKR;	Outsystems	Leading low-code developer of enterprise applications	USD 360m		
May-18	Visma AS;	Raet BV	Provider of information technology services in the field of human resources and payroll	EUR 623m	3.9x	12.5x
Aug-18	Siemens AG	Mendix holding B.V.	Provider of an application-development platform	EUR 626m	21.7x	
Apr-18	Sandvik Machining Solutions AB	Metrologic Group SAS	Designer and manufacturer of three-dimensional control software and electronics	EUR 360m	8.3x	
Mrt-18	salesforce.com,	MuleSoft, Inc.	Open source infrastructure and integration software provider	EUR 5.7bn	23.6x	
Feb-18	Trimble, Inc.	e-Builder, Inc.	Provider of integrated, cloud-based construction program management software for facility owners and associated companies	EUR 401m	11.5x	
Jan-18	SS&C Technologies	DST Systems, Inc.	Provider of information processing and software services	EUR 4.6bn	2.5x	12.6x
Jan-18	SAP America, Inc.	Callidus Software, Inc.	Provider of sales performance management and incentive compensation management software solutions	EUR 1.8bn		

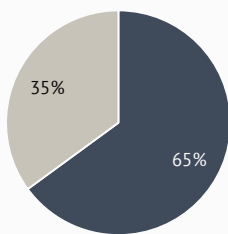
Trends

- Financial investors with a share of 11% have become less important as buyers of Fintech companies compared to Q3 2017 as many fintech companies have matured.
- The dominance of investors from the same sector has diminished throughout 2018; in contrast, the share of buyers from a different sector has grown from 50% to more than 67%.
- In the area of stock market valuations, revenue multiples have slightly grown from 4.1x to 4.2x; a larger growth in EBITDA multiples from 15.6x to 16.9x - current (18.0x - 3y average).
- The ten largest comparable transactions in the Fintech sector are all above EUR 2bn with (disclosed) EBITDA multiples between 9.3x and 32.5x.

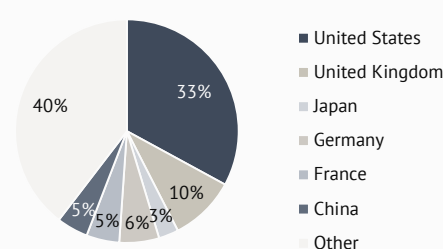
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Basware Oyj	Finland	149	149	141	17	513	5.1x	44.7x	55.5x	105.5x
Bottomline Technologies (de), Inc.	United States	309	321	373	31	2,655	4.5x	47.2x	35.4x	32.1x
Dalenys SA	Belgium	64								
Earthport plc	UK	30	35	36	-6	58	2.7x			
Fidelity National Information Services, Fiserv, Inc.	United States	8,354	8,088	7,422	2,714	30,878	4.2x	12.5x	13.4x	14.1x
Ingenico Group SA	United States	4,977	5,050	5,078	1,733	28,720	5.4x	15.6x	16.2x	17.1x
Jack Henry & Associates, Inc.	France	2,312	2,510	2,682	509	4,132	3.3x	16.2x	14.8x	13.1x
PayPoint plc	United States	1,221	1,313	1,431	463	10,637	5.8x	16.6x	18.1x	21.6x
Qiwi Plc Sponsored ADR Class B	UK	290	252	137	72	711	3.0x	10.6x	11.1x	11.0x
SimCorp A/S	Cyprus	245	319	221	75	529	3.1x	13.4x	12.1x	11.7x
Temenos AG	Denmark	296	343	386	93	3,020	5.8x	21.4x	25.7x	28.2x
Worldline SA	Switzerland	573	652	735	364	9,969	12.4x	22.2x	24.8x	37.1x
Worldpay, Inc. Class A	France	1,309	1,594	1,692	337	7,360	3.6x	17.2x	18.0x	20.3x
Worldpay, Inc. Class A	United States	3,259	3,591	3,424	809	26,311	4.1x	18.4x	18.0x	19.0x
Mean							4.8x	21.3x	21.9x	27.6x
Median							4.2x	16.9x	18.0x	19.7x

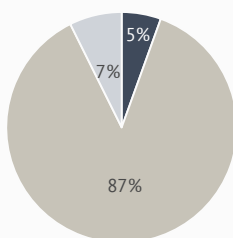
Selected transactions

Announced date	Buyer	Target	Description	Enterprise Value	EV/Revenue	EV/EBITDA
Jun-18	ACE & Company	Blackhawk Network	Provider of prepaid products and payment services	USD 2.9bn	1.5x	29.3x
Jun-18	Roper Technologies	Powerplan	Developer of financial software designed for asset-centric companies	USD 942m		
Jun-18	Former investors	Ant Financial	Operator of a cloud-based financial platform	USD 11.9bn	1.6x	
Apr-18	ION Group	Fidessa Group	Provider of financial information technology services	USD 1.7bn	4.6x	18.4x
Apr-18	Total System Services	Cayan	Provider of payment and merchant services	USD 862m		
Sep-18	Initial Public Offering (IPO)	Funding Circle	Provider of a peer-to-peer lending platform	EUR 493m	6.8x	
Sep-18	EBIX	Miles	Developer of financial, portfolio and asset management software	USD 24m		
Sep-18	SS&C Technologies	IntraLinks	Provider of secure collaboration software and secure online document sharing solutions	USD 1.3bn		10.9x
Apr-18	S&P Global	Kensho	Provider of a cloud-based financial analytics software	USD 447m		
Jun-18	Initial Public Offering (IPO)	Adyen	Provider of an end-to-end multi-channel payment platform	EUR 1.0bn	0.9x	8.9x

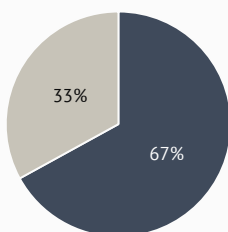
Trends

- Cloud computing, increasing demand for aligned IT infrastructure and a lack of storage capability are acting as positive growth drivers in the software and services infrastructure sector.
- Infrastructure as a Service (IaaS) is the fastest growing segment of the cloud market while traditional mainframe technologies are suffering.
- Valuations in the sector remain buoyant with median trading multiples of 4.6x revenue and 19.8x EBITDA.
- Broadcom's shock USD 18.9bn acquisition of CA Technologies was much talked about as the semiconductor company looks to leverage a long-standing blue-chip client base and the combination of hardware and software capabilities.

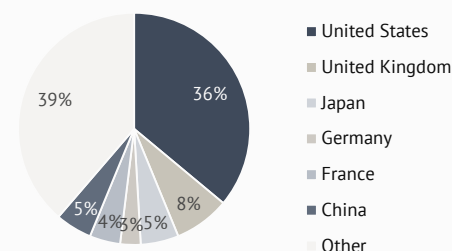
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/ Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Akamai Technologies, Inc.	United States	2,115	2,219	2,352	680	10,675	4.6x	15.2x	14.8x	12.8x
Arista Networks, Inc.	United States	1,021	1,459	1,855	435	17,127	10.7x	36.0x	25.2x	27.2x
CA, Inc.	United States	3,647	3,680	3,720	1,353	15,895	4.6x	12.5x	13.7x	16.8x
Citrix Systems, Inc.	United States	2,473	2,504	2,568	722	12,983	5.7x	19.8x	19.5x	17.5x
CommVault Systems, Inc.	United States	539	588	651	9	2,756	4.1x	285.3x	64.5x	29.6x
F5 Networks, Inc.	United States	1,797	1,894	1,882	574	10,442	4.1x	13.4x	15.0x	14.2x
Micro Focus International plc	UK Kingdom	1,124	1,264	3,357	583	6,908	11.0x	23.9x	12.3x	5.4x
NetApp, Inc.	United States	5,006	5,048	5,486	849	19,172	3.7x	22.1x	21.1x	18.6x
NetScout Systems, Inc.	United States	866	1,070	835	207	1,751	2.7x	14.1x	17.5x	
Pegasystems Inc.	United States	678	745	774	56	4,239	4.4x	57.7x	53.9x	56.6x
Software AG	Germany	872	879	871	267	2,905	4.9x	16.0x	14.0x	12.9x
Progress Software Corporation	United States	365	356	345	121	1,368	5.5x	16.2x	14.9x	11.2x
Radware Ltd.	Israel	178	187	203	-2	1,032	4.6x		146.9x	50.2x
Red Hat, Inc.	United States	1,864	2,191	2,944	381	20,811	9.0x	51.9x	37.5x	29.1x
ServiceNow, Inc.	United States	1,257	1,714	2,269	12	29,963	12.4x	1,723.1x	126.5x	56.2x
VMware, Inc. Class A	United States	6,412	6,412	7,695	1,660	14,610	3.1x	11.9x	10.2x	9.1x
Mean							5.9x	154.6x	38.0x	24.5x
Median							4.6x	19.8x	18.5x	17.5x

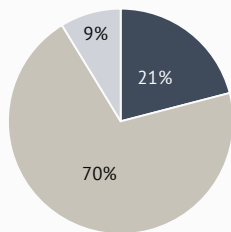
Selected transactions

Announced date	Buyer	Target	Description	Enterprise Value	EV/ Revenue	EV/ EBITDA
Aug-18	Nutanix	Mainframe2	Leader in cloud-based Windows desktop and application delivery	USD 165m		
Jul-18	Getronics	Pomeroy	Provider of digital workplace transformation services			
Jul-18	Broadcom	CA Technologies	Software provider for system mainframes and infrastructure	USD 18.9bn	4.4x	11.7x
Jun-18	Smart Global	Penguin Computing	Supplier of enterprise and high-performance computing and cloud computing solutions	USD 85m	0.5x	10.5x
May-18	HPE	Plexxi	Specialist in software-defined data center solutions			
May-18	KKR	BMC Software	Specialist in IT solutions for digital enterprise	USD 8.3bn		
Aug-18	ASM Pacific	CRITICAL Manufacturing	Operator of a software company intended to focus on providing automation and manufacturing software for high-tech industries			
May-18	Karmijn Kapitaal	Picturae	Provider of cultural heritage maintenance services			
Jan-18	Internap	SingleHop	Provider of hosted private cloud & on-demand servers	USD 132m	2.6x	8.3x

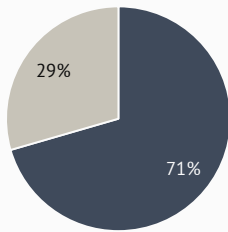
Trends

- Inside the Cybersecurity sector, deal activity has been driven by economic environment, interest for digital security software & services, ease of access to capital for both industrial and financial acquirers and regulation environment.
- Best in class industrial players and large private equity funds have been generally in charge of driving sector deal value. Moreover, while there has been a slight decrease in M&A volume, deal value seems to have been stable YoY.
- Worldwide spending on information security products and services will reach more than USD 114bn in 2018, an increase of 12.4% from last year, according to the latest forecast from Gartner, Inc. In 2019, the market is forecast to grow 8.7% to USD 124bn.

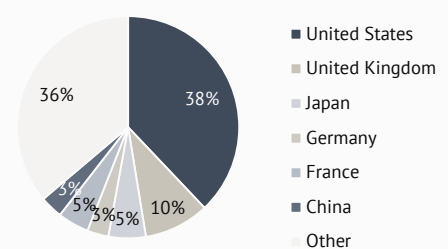
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Barracuda Networks, Inc.	United States	291	320		35		4.4x	41.1x	41.6x	
Check Point Software Technologies Ltd.	Israel	1,574	1,644	1,657	834	15,826	9.3x	18.3x	19.0x	19.1x
SecureWorks Corp. Class A	United States	308	389	453	-24	149	0.5x			
CyberArk Software Ltd.	Israel	196	232	282	25	2,479	6.2x	58.0x	45.2x	40.7x
FireEye, Inc.	United States	646	666	721	-140	2,854	5.4x			56.8x
Fortinet, Inc.	United States	1,153	1,325	1,552	148	13,436	5.6x	49.6x	45.1x	37.9x
Intercede Group plc	UK	15	10	10	-5	16	2.9x			
F-Secure Oyj	Finland	158	170	195	16	494	4.2x	45.6x	35.3x	49.0x
Palo Alto Networks, Inc.	United States	1,242	1,611	2,419	-92	18,196	7.9x			35.8x
Proofpoint, Inc.	United States	339	457	618	-26	4,694	8.2x			59.4x
Qualys, Inc.	United States	179	205	243	51	2,992	10.3x	41.2x	35.9x	35.5x
VeriSign, Inc.	United States	1,033	1,033	1,059	672	16,807	13.0x	20.0x	21.5x	27.6x
Varonis Systems, Inc.	United States	149	193	233	-9	1,843	6.4x			
Trend Micro Incorporated	Japan	1,098	1,177	1,263	398	7,773	6.6x	19.5x	18.9x	21.7x
OneSpan Inc.	United States	174	171	181	15	660	3.5x	39.6x	44.2x	61.8x
Zix Corporation	United States	54	58	61	12	259	4.0x	19.4x	20.1x	16.8x
Mean							6.1x	35.2x	32.9x	37.5x
Median							5.9x	40.3x	35.3x	36.9x

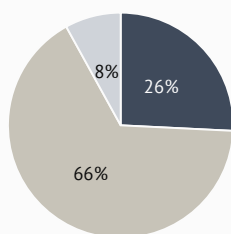
Selected transactions

Announced date	Buyer	Target	Description	Enterprise value	EV/Revenue	EV/EBITDA
Feb-18	Pamplona Capit.	Cofense	Cofense engages in the sale of anti-phishing solutions worldwide	USD 325m	7.3x	
Mar-18	Wipro	Denim Group (33% Stake)	Denim Group designs and develops security software	EUR 21m	2.3x	
Apr-18	Permira Advisers	Exclusive Networks	Exclusive Networks distributes cyber security, networking, and infrastructure solutions	USD 1.5bn	0.8x	
Jun-18	CS Com.	Novidy's	Novidy's provides consultancy in the areas of cyber security, networks, & IT	USD 36m	1.1x	11.1x
Apr-18	Splunk	Phantom	Provider of a security automation and orchestration platform created to integrate with existing security technologies	EUR 285m		
Oct-18	Thoma Bravo	Imperva	Imperva engages in the sale of cyber security solutions for cloud business critical data	USD 1.5bn	5.4x	
Oct-18	Cisco Systems	Duo Security	Provider of cloud-based internet security services	EUR 2.0bn		
Feb-18	Thoma Bravo	Barracuda Networks	Provider of online security products and services to secure all threat vectors	EUR 1.3bn	4.3x	38.7x
Feb-18	RELX Group	ThreatMetrix	Provider of cloud based security and fraud prevention services	EUR 657m		

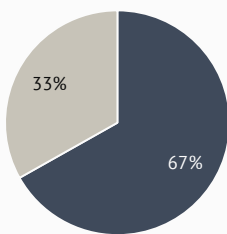
Trends

- As firms use Technology to enhance scale, digitalization, automated robotics & 4.0 industrial applications, IT services continue generating significant investment interests among acquisitive companies in YTD 2018.
- Mapping and software development for several segments from Industrials and Chemicals to Transportation and Logistics to even Pharma, Medical and Biotech all have tremendous potential, especially as most sectors, if not all, try to digitize.
- Such a pattern is probably going to continue forward for quite a while confirming past year trends. Consulting on the different kinds of new Tech innovations will likewise be an area to pay special attention to in the near future as 2018 saw some large transactions being completed.

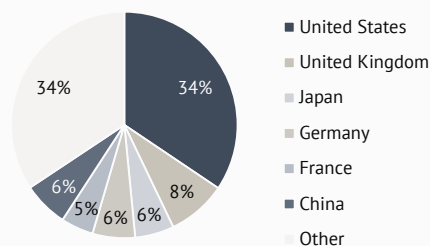
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Accenture Plc Class A	Ireland	31,334	33,470	37,294	5,520	93,636	2.5x	14.9x	15.1x	15.4x
Acando AB Class B	Sweden	233	254	273	27	365	1.2x	11.4x	12.1x	12.8x
Atea ASA	Norway	3,357	3,479	3,638	134	1,504	0.4x	11.1x	11.3x	13.6x
Atos SE	France	12,138	12,691	12,381	1,661	10,933	1.3x	10.3x	9.4x	8.6x
Bechtle AG	Germany	3,094	3,570	4,193	186	3,673	0.9x	17.3x	16.6x	17.2x
Capgemini SE	France	12,539	12,792	13,100	1,729	18,300	1.7x	12.9x	12.4x	12.8x
Capita plc	UK	5,315	4,759	4,532	656	2,677	1.4x	10.1x	12.7x	13.7x
Computacenter Plc	UK	3,959	4,331	4,867	157	1,622	0.4x	11.8x	11.0x	11.4x
CGI Group Inc. Class A	Canada	7,260	7,480	7,726	1,211	14,187	1.7x	10.7x	10.5x	10.1x
DXC Technology Co.	United States	6,438	6,935	18,839	1,007	22,638	3.8x	26.3x	11.6x	7.6x
Devoteam SA	France	479	540	650	55	920	1.4x	13.5x	13.4x	13.7x
Fujitsu Limited	Japan	35,759	34,798	29,923	2,765	12,703	0.6x	7.1x	7.2x	7.6x
Ordina N.V.	Netherlands	344	345	358	20	160	0.5x	7.6x	7.4x	8.3x
GFI Informatique SA	France	1,015	1,132	1,289	87	696	0.6x	8.0x	9.0x	10.0x
Indra Sistemas, S.A. Class A	Spain	2,709	3,011	3,033	302	1,746	1.3x	13.4x	13.2x	12.7x
NEC Corp.	Japan	21,314	22,438	22,219	1,115	6,199	0.5x	10.6x	9.8x	11.7x
Neurones SA	France	447	485	490	45	551	1.8x	19.2x	15.3x	13.6x
Nippon Telegraph and Telephone	Japan	87,079	95,907	91,670	25,897	75,870	1.3x	4.9x	5.0x	4.6x
Reply S.p.A.	Italy	781	884	988	106	2,217	2.1x	17.9x	16.8x	17.2x
Sopra Steria Group SA	France	3,741	3,845	4,090	316	2,836	1.1x	12.8x	10.7x	9.4x
Mean							1.3x	12.6x	11.5x	11.6x
Median							1.3x	11.6x	11.5x	12.2x

Selected transactions

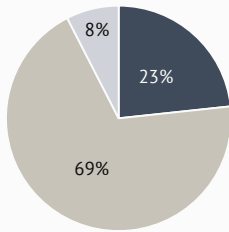
Announced date	Buyer	Target	Description	Enterprise value	EV/Revenue	EV/EBITDA
Jan-18	NEC Corporation	Northgate Public serv.	Provider of software and outsourcing services worldwide	USD 539m	2.9x	17.5x
Feb-18	GFI Inform.	RealDolmen	RealDolmen provides ICT solutions in Belgium and Luxemburg	EUR 164m	0.7x	11.6x
Jun-18	HCL Tech.	H&D Int.	H&D International provides information technology services	EUR 30m	0.4x	
Jun-18	Synnex Corp.	Convergys Corp.	Convergys Corp. provides customer management services to diversified clients worldwide	USD 2.2bn	0.9x	7.7x
Jul-18	Atos SE	Syntel	Syntel provides integrated information technology service and knowledge process services	EUR 3.1bn	3.9x	14.5x

Managed services

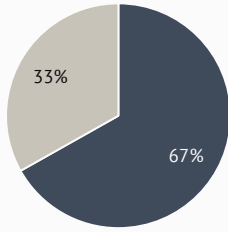
Trends

- The managed services companies post higher valuations compared to their (generic) IT services peers, due to the higher level of repeat business from contracts or SLA's.
- The managed services market size is expected to grow from USD 152.5bn in 2017 to USD 257.8bn by 2022, at a CAGR of 11.1% during the forecast period. Growing IT infrastructure of enterprises and growing number of compliances are the driving factors for managed services market.
- Moreover, increase in the adoption rate of cloud deployment among Small and Medium-sized Enterprises (SMEs), have led to the adoption of managed services.
- SMEs have been the slow adopters of managed services in the current market. However, with increasing emphasis on adoption of advanced IT technologies and demand for secure IT infrastructure, SMEs are expected to adopt managed services at a fast rate over the coming years.

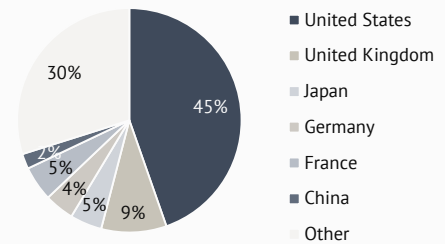
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Dada S.p.A.	Italy	64							4.9x	
Endurance International Group Hold.	United States	1,004	1,043	1,000	251	1,087	2.5x	10.6x	11.4x	9.4x
GoDaddy, Inc. Class A	United States	1,670	1,978	2,310	241	11,883	4.1x	33.4x	25.3x	22.8x
Intermap Corporation	United States	270	249	282	76	231	2.9x	9.5x	7.7x	6.8x
Interxion Holding N.V.	Netherlands	422	489	563	206	4,149	8.9x	21.2x	19.6x	19.6x
iomart Group plc	UK	104	106	123	41	527	4.8x	12.3x	11.3x	11.5x
Proact IT Group AB	Sweden	308	338	307	23	158	0.6x	9.1x	9.1x	8.8x
Redcentric Plc	UK	140	124	113	15	149	1.7x	13.7x	11.5x	9.9x
United Internet AG	Germany	3,808	4,206	5,178	947	8,354	3.3x	14.9x	11.6x	8.9x
Mean							3.6x	15.6x	12.5x	12.2x
Median							3.1x	13.0x	11.4x	9.6x

Selected transactions

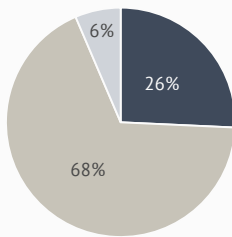
Announced date	Buyer	Target	Description	Enterprise Value	EV/Revenue	EV/EBITDA
Mar-18	Altran Technologies	Aricent	Provider of BPO systems integration and user-interface platform services	EUR 1.7bn		
Feb-18	NEC Corporation	GCI Telecom Group	Provider of integrated software outsourcing services	EUR 538m	3.4x	142x
May-18	Mayfair Equity Partners	Mphasis	Provider of managed information technology services	EUR 228m	2.1x	
Jul-18	Eli Global	Evolve IP	Provider of information technology products and integration services	EUR 140m		
Mar-18	Wipro	Netcom Group	Provider of managed hosting and cloud infrastructure services	EUR 45m	0.2x	
Jul-18	Societe Generale CP	Presidio	Provider of telecommunications and IT services in France	EUR 30m		
Aug-18	TransIP Group	IT-Erinity Internet Services	Provider of business-critical managed services and shared hosting for small-scale enterprises	n.a		

Near- and offshoring

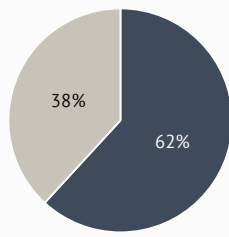
Trends

- Performance and valuations in the sector are still driven by scale and critical mass of service providers. A key growth strategy for market participants is acquisitions to accelerate growth and capture market share.
- Incumbent companies are often acquiring outside of their own sectors to expand service offerings and the ability to generate greater sales and customer longevity.
- Trading multiples in the sector have improved throughout the year as companies move to more tech-enabled services to differentiate themselves from providing a commodity service. This shift in strategy is also providing companies with the opportunity to increase prices and margin.
- Businesses with automated technology that reduces the need for human and manual processes are benefiting from higher valuations.

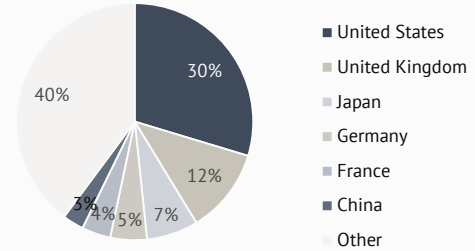
Transactions by buyer type



Cross-border transactions



Target countries



Stock market valuations

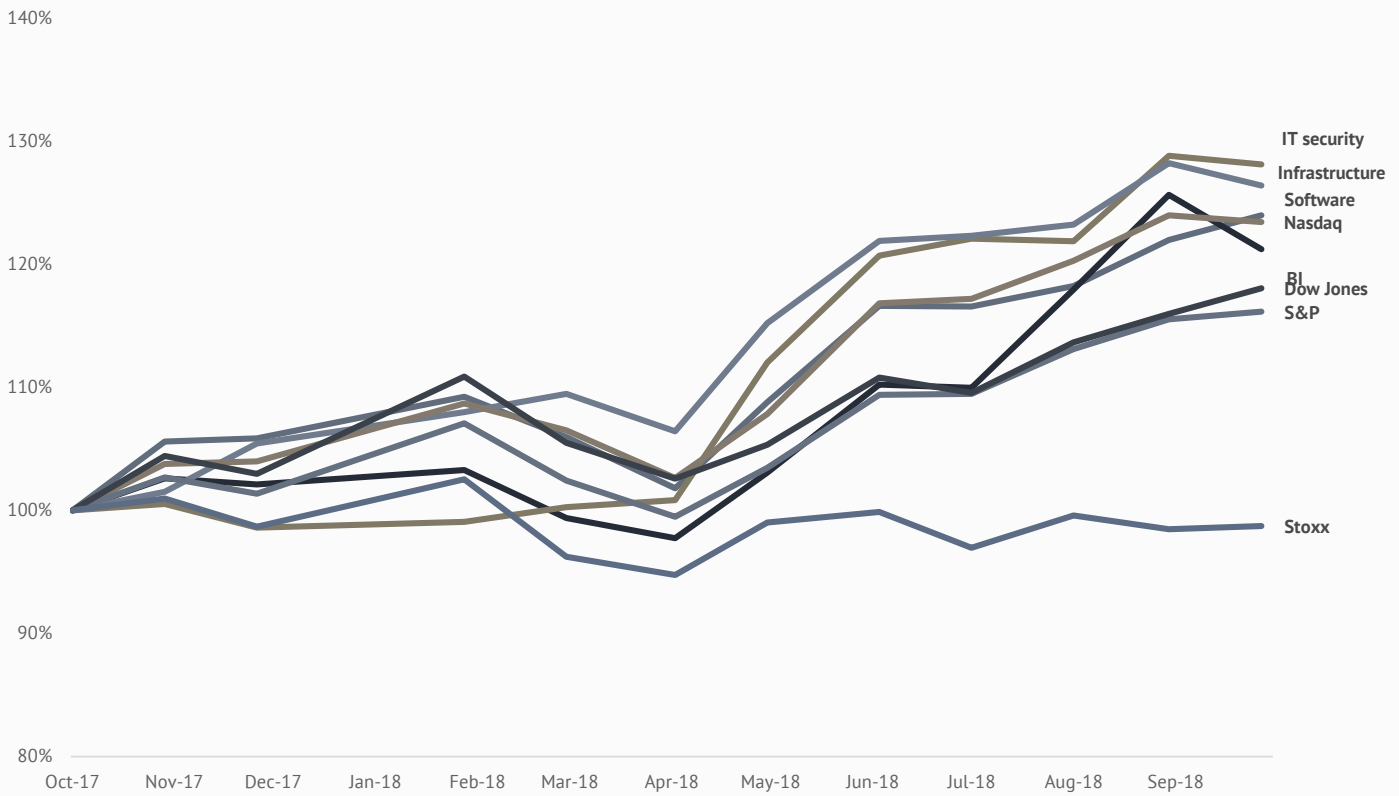
Company	Country HQ	Revenues FY 16	Revenues FY 17	Revenues FY 18E	EBITDA FY 17	Market Cap	EV/Revenues	EV/EBITDA current	EV/EBITDA 3 year avg	EV/EBITDA next FY
Cognizant Technology Solutions Corp.	United States	12,192	13,130	14,095	2,542	38,541	3.0x	15.7x	14.8x	13.3x
HCL Technologies Limited	India	5,745	6,467	6,976	1,418	17,996	2.8x	12.5x	12.8x	11.8x
Infosys Limited	India	8,641	9,311	9,567	2,580	37,763	3.7x	13.4x	15.1x	16.4x
Larsen & Toubro Infotech Ltd	India	809	884	1,078	167	3,930	3.1x	16.3x	16.7x	20.7x
Persistent Systems Limited	India	320	391	417	64	746	2.1x	13.0x	13.0x	12.4x
Tata Consultancy Services Limited	India	15,036	16,039	17,031	4,393	97,356	4.6x	16.9x	18.5x	22.2x
Tech Mahindra Limited	India	3,667	3,962	4,143	581	8,678	1.9x	12.9x	13.0x	13.7x
Wipro Limited	India	7,092	7,483	6,899	1,484	17,420	3.4x	17.3x	16.4x	17.4x
Mean							3.1x	14.7x	15.0x	16.0x
Median							3.1x	14.5x	14.9x	15.1x

Selected transactions

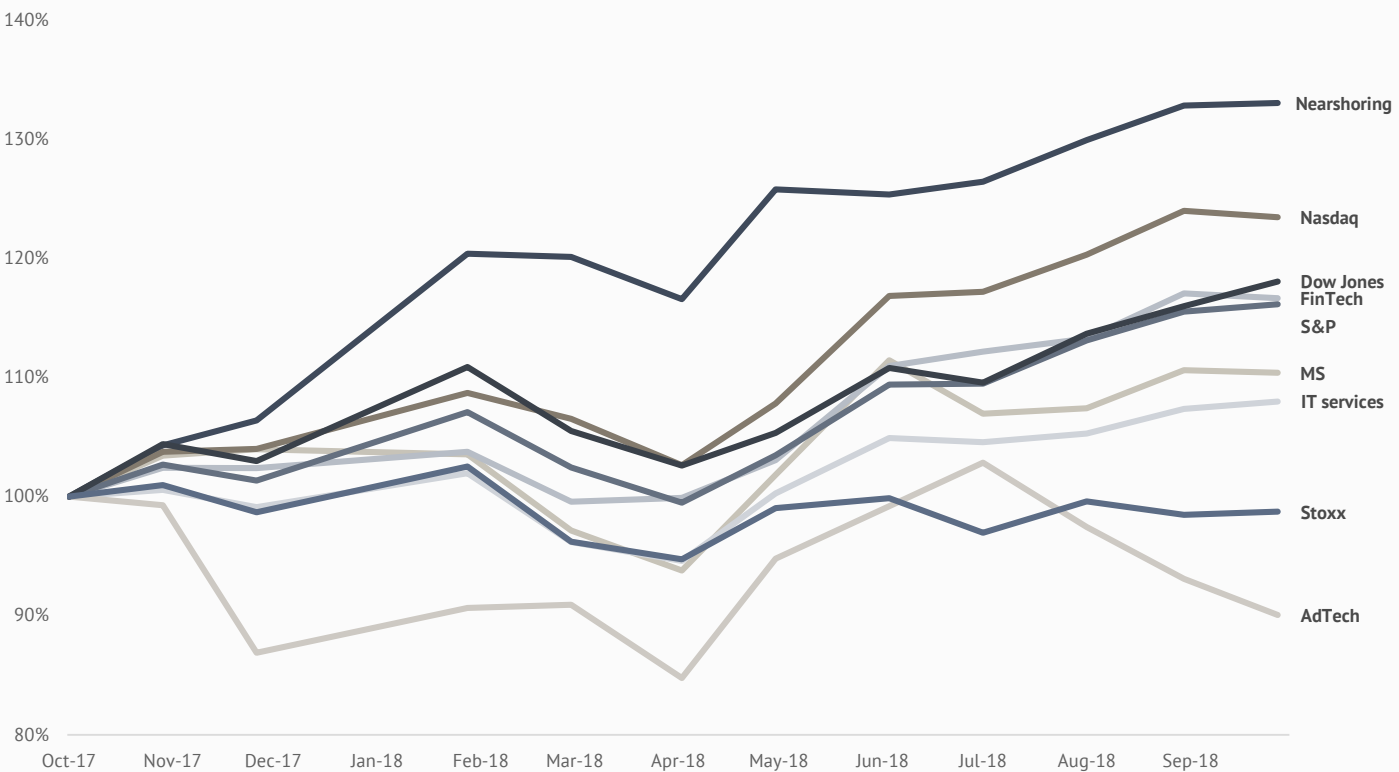
Announced date	Buyer	Target	Description	Enterprise Value	EV/Revenue	EV/EBITDA
Sep-18	Infosys	Fluidio	Cloud consulting, implementation and training partner	EUR 65m		
Jul-18	Wipro	Alight Solutions	Technology-enabled outsourced health, wealth, HR and finance solutions	USD 117m	1.6x	9.5x
Jul-18	Synnex	Convergys	Technology-enabled business process services company	USD 2.8bn	1.0x	8.2x
Jun-18	Teleperformance	Intelent Global Services	High-end business services and digital transformation solutions provider	USD 1.0bn	2.2x	12.1x
Apr-18	HCL Technologies	C3i Solutions	Multi-channel customer engagement services provider	USD 60m	0.3x	8.4x
Apr-18	SS&C	DST Systems	Technology, strategic advisory and business operations outsourcing	USD 5.4bn	1.4x	11.8x

Stock performance

Stock market performance 2018LTM



Stock market performance 2018LTM

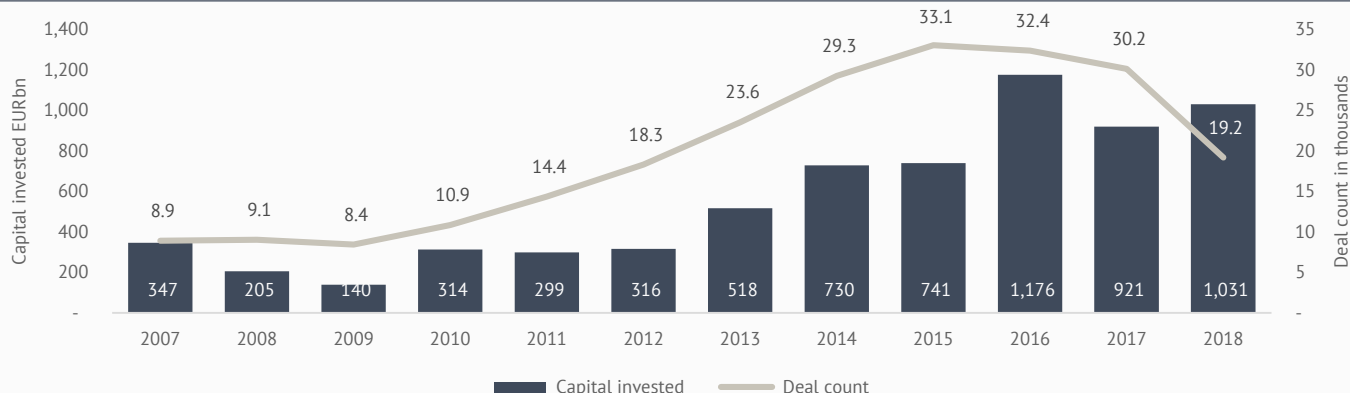


Private equity trends

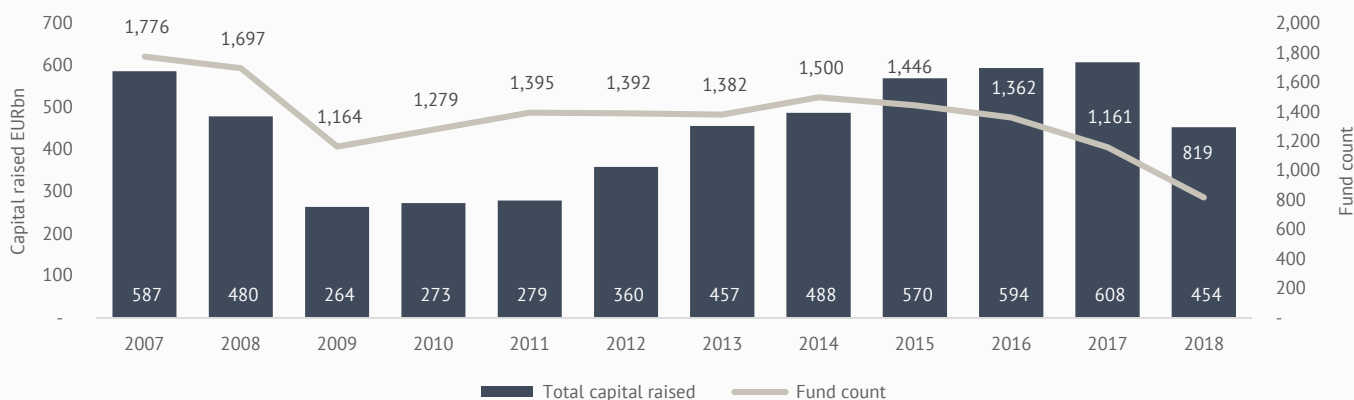
Trends

- Private equity continues to serve as a significant factor in Software and IT Services, M&A valuations and ongoing transaction activities in the various sub-sectors.
- PE assets under management (AUM) in North America and Europe hit a record in 2017, approaching the USD 2tn mark. This trend will continue in 2018.
- AUM rose 6.3% over the prior year, though dry powder diminished as general partners (GPs) are quickly putting capital to work.
- While fewer funds are raising capital than in recent years, these funds are raising greater sums of money than ever before, leading to record-setting average and median fund sizes in 2018.
- 2018 marks a new high-water mark for average and median fund size, making this the second consecutive year average and median fund size crested their previous highs, though 2018 represents partial-year figures.

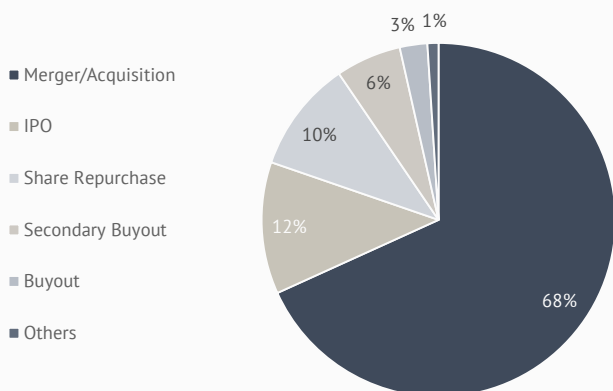
Capital invested and deal count



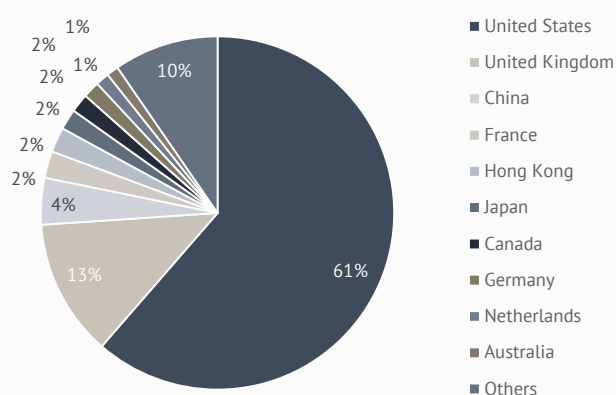
Total capital raised and fund count














































Capital invested by exit type 2018



Capital raised by countries 2018



Selection of transactions in 2017 and 2018

<p>MILES SOFTWARE FINANCIAL SERVICES TECHNOLOGY REDEFINED</p> <p>has been acquired by</p> <p>EBIX</p> <p>cfi Sell-side  </p>	<p>SELSOFT</p> <p>sold a minority stake to</p> <p>ADVANTAGE SMOLLAN</p> <p>cfi Sell-side  </p>	<p>CRITICAL MANUFACTURING</p> <p>has been acquired by</p> <p>ASM  Pacific Technology</p> <p>cfi Sell-side  </p>	<p>VISEO #viseospirit</p> <p>raised capital and acquired</p> <p>birchman </p> <p>cfi Buy-side  </p>
<p>Management Team has completed a Buy-Out of</p> <p>COMPUTER WORLD Helping Businesses Defeat Tomorrow</p> <p>cfi Buy-side </p>	<p>SoundCom SYSTEMS </p> <p>has been acquired by</p> <p>AMETEK</p> <p>cfi Sell-side </p>	<p>UNIRITA</p> <p>has acquired</p> <p></p> <p>cfi Buy-side </p>	<p> bigdata REPUBLIC</p> <p>and</p> <p>JCORE  pariven</p> <p>have been sold to a consortium including</p> <p> QUADRIUM  NAVITAS</p> <p>cfi Sell-side </p>
<p>devoteam </p> <p>has sold a minority stake in</p> <p>between TECHNOLOGICAL WATERWORKS</p> <p>cfi Sell-side  </p>	<p>Galitt </p> <p>has been sold to</p> <p>sopra  steria</p> <p>cfi Sell-side </p>	<p>INSL  TECHNOLOGY</p> <p>has acquired a majority stake in</p> <p>Deltagon </p> <p>cfi Buy-side  </p>	<p>DREYER Ventures & Management</p> <p>has sold</p> <p>BNS enabling excellence</p> <p>to</p> <p>MHP Solutions Group </p> <p>cfi Sell-side  </p>
<p>cla.com.groupe</p> <p>has repurchased a minority stake held by</p> <p>QZULIS capital </p> <p>cfi Buy-side </p>	<p>Do-IT></p> <p>raised capital from private investors</p> <p>cfi Capital Raising </p>	<p>AURELIUS </p> <p>has sold</p> <p>brightone</p> <p>to</p> <p>crmpartners Empowering Your Customer Needs</p> <p>cfi Sell-side  </p>	<p>Écart </p> <p>has sold</p> <p>Log-in consultants</p> <p>to</p> <p>orange </p> <p>cfi Sell-side  </p>

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Resources

Factset	Pitchbook
Company reports	CFI desk research

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