

# DECISIONPOINT

## QUARTERLY VIEWPOINT:

For the Quarter Ended September 30, 2018 and the Latest Twelve Months

Q3 | 18

<b>1. Market Leader for Mid-Market Technology M&amp;A</b>	<b>3</b>
<b>2. Software</b>	
I. Software as a Service (SaaS)	4
II. Internet Software & Services	5
III. Enterprise Software	6
IV. Business Intelligence Software	7
V. Infrastructure Software	8
<b>3. Services</b>	
I. IT Services	9
II. Hosted Services	10
III. IT Outsourcing	11
IV. IT Staffing	12
V. Value Added Resellers	13

# Market Leader for Mid-Market Technology M&A:

This Quarterly ViewPoint covers trends, public valuation multiples and relevant M&A activity for the software and services sectors. To illustrate general capital market and M&A trends within these sectors, DecisionPoint has selected a group of representative public comparables and transactions. This data is provided for informational purposes only. All data represents publicly available information.

DecisionPoint is a unique leader in M&A advisory services for middle-market technology companies and their venture capital investors in the software, services, and healthcare IT sectors.



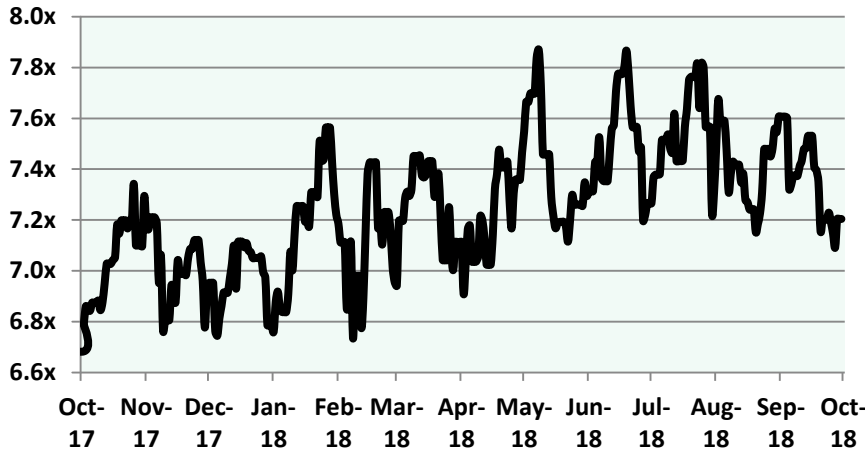
The information in this Quarterly ViewPoint was prepared by DecisionPoint Advisors, LLC ("DecisionPoint"). DecisionPoint has issued the material contained within this report for information purposes only. The material contained within this report is not and should not be construed as an offer to sell or solicitation of an offer to purchase or subscribe for any investment. Information presented was obtained from various sources that are believed to be reliable. DecisionPoint makes no guarantees, representations or warranties and accepts no responsibility or liability as to the accuracy or completeness of the information provided. Opinions, estimates, and analyses in this report do not necessarily reflect the opinions of DecisionPoint and are subject to change without notice. DecisionPoint has no obligation to update, modify, or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein changes or subsequently becomes inaccurate.

# Software: Software as a Service (SaaS)

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP SaaS Index EV/Revenue Multiple  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Salesforce	\$159.03	\$119,765.2	\$121,309.0	10.3x	72.2x
ServiceNow	\$195.63	\$34,155.5	\$33,910.1	15.0x	NM
Workday	\$145.98	\$30,992.4	\$29,869.6	12.3x	NM
Red Hat	\$136.28	\$25,461.8	\$22,616.9	7.4x	37.3x
Ultimate Software	\$322.19	\$10,007.7	\$9,252.9	8.9x	80.8x
RealPage	\$65.90	\$5,617.4	\$6,407.8	8.3x	47.3x
Athenahealth	\$133.60	\$5,484.3	\$5,452.7	4.2x	19.4x
LogMeIn	\$89.10	\$4,807.7	\$4,625.4	4.1x	13.6x
Medidata Solutions	\$73.31	\$4,436.8	\$4,447.1	7.6x	43.4x
Ellie Mae	\$94.77	\$3,389.5	\$3,039.9	6.6x	34.0x
Cornerstone OnDemand	\$56.75	\$3,273.6	\$3,232.7	6.2x	NM
Ebix	\$79.15	\$2,504.1	\$3,016.2	7.0x	21.1x
LivePerson	\$25.95	\$1,488.7	\$1,549.8	6.6x	NM
Evertz Technologies	\$12.60	\$963.8	\$887.6	2.8x	12.8x
<b>Median:</b>	<b>\$91.94</b>	<b>\$5,146.0</b>	<b>\$5,039.0</b>	<b>7.2x</b>	<b>35.6x</b>

### SECTOR HIGHLIGHTS

- The median SaaS index was trading at 7.2x revenue (based on Enterprise Value) at the closing of Q3.
- According to Research and Markets, the worldwide SaaS market will grow 213% from \$10.6 billion today to over \$33.2 billion in 2022
- In The Work-Bench Enterprise Almanac: 2018 Edition, Work-Bench calls out several SaaS predictions including the shift to in-house software production that could possibly bypass SaaS vendors. With some enterprises being forced to undergo massive customizations for their new SaaS services, it may start making sense to build versus buy especially since cloud infrastructure is cheap and readily available.
- The report contrasts these SaaS busting trends with a few caveats including that no one will fire you for buying Salesforce, it's easier to budget for SaaS than manage the development of your own software, SaaS out-of-the-box functionalities are often hard to match and the current reliance on SaaS platforms makes it hard to change.
- Adobe's Q3 announcement of its acquisition of Marketo for \$4.75 billion is set to shake up the B2B marketing space, giving enterprises the ability to create, manage and execute marketing engagement at scale.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-20	Adobe Systems	Marketo	4,750.0
2018-09-06	SS&C Technologies	Intralinks Holdings	1,500.0
2018-09-04	Coupa Software	DCR Workforce	25.0
2018-09-04	Thoma Bravo	Apttus Inc.	1,600.0
2018-08-29	Move	Opcity Inc.	210.0
2018-08-20	Tanla Solutions	Karix Mobile Pvt.	33.9
2018-08-15	Accel-KKR Company	SugarCRM	190.0
2018-08-14	Intapp	DealCloud	
2018-08-08	Q2 Holdings	Cloud Lending	105.0
2018-07-31	DocuSign	SpringCM	220.0
2018-07-21	Splunk	KryptonCloud	
2018-07-17	BC Partners	NAVEX Global	1,400.0
2018-07-16	Nutrien	Agrible	63.0
2018-07-16	salesforce.com	Datorama	743.6
2018-07-09	Morneau Shepell	LifeWorks Corporation	325.2

# Software: Internet Software and Services

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

**DP Internet Software & Services Index EV/Revenue Multiple**  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (EV)	EV/ LTM Revenue	EV / LTM EBITDA
Amazon.com	\$2,003.00	\$995,491.0	\$974,533.6	4.7x	45.6x
Alphabet	\$1,207.08	\$850,139.8	\$736,703.8	5.9x	19.8x
Facebook	\$164.46	\$485,239.2	\$432,523.0	8.9x	15.9x
Netflix	\$374.13	\$168,119.8	\$167,353.4	12.1x	NM
Booking Holdings	\$1,815.35	\$89,620.0	\$94,914.6	6.9x	17.4x
eBay	\$33.02	\$33,829.0	\$37,871.9	3.7x	12.4x
Twitter	\$28.46	\$21,466.6	\$18,603.4	6.9x	27.7x
Expedia Group	\$130.48	\$20,397.4	\$20,753.4	1.9x	14.8x
IAC	\$216.72	\$19,310.9	\$18,926.5	4.9x	30.5x
Snap	\$8.48	\$10,721.1	\$9,261.9	9.4x	NM
Cimpress	\$136.61	\$4,401.6	\$5,145.1	2.0x	17.8x
Pandora Media	\$9.51	\$2,397.7	\$2,900.4	2.0x	NM
Groupon	\$3.77	\$2,147.7	\$1,704.6	0.6x	16.8x
<b>Median:</b>	<b>\$136.61</b>	<b>\$21,466.6</b>	<b>\$20,753.4</b>	<b>4.9x</b>	<b>17.6x</b>

### SECTOR HIGHLIGHTS

- The median Internet Software and Services index was trading at 4.9x revenue (based on Enterprise Value) at the closing of Q3.
- The social media sector had a tumultuous Q3 with Facebook, Twitter, and Snapchat stock declining an average of 30%. During the quarter, Facebook announced slower projected growth as privacy initiatives ramp up internally, the departure of Instagram founders, and another security breach affecting 30m users. In addition, Twitter and Facebook faced scrutiny in an FCC trial, where congressmen threatened to increase regulation on the sector.
- Sirius XM's acquisition announcement to buy Pandora for \$3.5b in September ended a frustrating era for Pandora shareholders hoping to see the company recover from its 85% decline from March 2014 to May 2018. While Spotify was able to successfully convert customers to a premium offering, Pandora lagged behind, unable to shift its business model and turn cash flow positive. Sirius XM hopes to right the ship, using cross-promotion to increase market share.
- The online wedding industry underwent major consolidation in September as WeddingWire made an acquisition announcement to buy XO Group, the parent company of The Knot, for \$933m, a 27% premium over the prior stock price. The combined entity, which will have a foothold on the industry with over 1,500 employees, hopes to use the acquisition to offer a broader wedding solution set, enhance financial flexibility, and streamline research and development.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-25	Vistaprint	BuildASign.com	280.0
2018-09-25	WeddingWire	XO Group	933.0
2018-09-24	Sirius XM Radio	Pandora Media	3,500.0
2018-08-08	CC Capital/Cannae Holdings/Thomas H. Lee Partners	Dun & Bradstreet	5,383.3
2018-07-30	AMC Networks	RLJ Entertainment	274.0
2018-07-25	FiscalNote	CQ Roll Call	180.0
2018-07-18	Scout24	FINANZCHECK.de	333.5
2018-07-13	LendingTree	Student Loan Hero	60.0
2018-07-04	Fosun International	Baihe	600.8
2018-07-02	Chegg	StudyBlue	20.8
2018-07-02	Uzabase	Quartz Media	75.0

# Software: Enterprise Software

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP Enterprise Software Index EV/Revenue Multiple  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (EV)	EV / LTM Revenue	EV / LTM EBITDA
Microsoft	\$114.37	\$891,399.8	\$820,549.0	7.4x	16.6x
Oracle	\$51.56	\$214,837.6	\$193,874.2	4.9x	11.8x
SAP	\$123.35	\$147,465.5	\$154,783.9	5.5x	20.0x
IBM	\$151.21	\$140,132.0	\$171,937.7	2.1x	10.4x
Dassault Systemes	\$149.82	\$38,917.2	\$36,475.5	9.2x	29.9x
Autodesk	\$156.11	\$34,195.9	\$34,545.6	15.4x	NM
Ansys	\$186.68	\$16,121.4	\$15,040.6	12.9x	31.5x
Constellation Software	\$728.17	\$15,431.4	\$15,374.3	5.5x	23.1x
PTC	\$106.19	\$12,635.3	\$12,916.5	10.5x	NM
Tyler Technologies	\$245.06	\$9,744.9	\$9,319.2	10.5x	41.7x
Amdocs	\$65.98	\$9,480.0	\$8,833.4	2.2x	12.8x
Blackbaud	\$101.48	\$4,870.8	\$5,380.9	6.5x	37.5x
Manhattan Associates	\$54.60	\$3,716.5	\$3,507.1	6.2x	20.8x
Verint Systems	\$50.10	\$3,238.8	\$3,654.0	3.1x	19.5x
Stratasys Ltd.	\$23.11	\$1,234.9	\$924.9	1.4x	21.5x
<b>Median:</b>	<b>\$114.37</b>	<b>\$15,431.4</b>	<b>\$15,040.6</b>	<b>6.2x</b>	<b>20.8x</b>

### SECTOR HIGHLIGHTS

- The median Enterprise Software index was trading at 6.2x revenue (based on Enterprise Value) at the closing of Q3.
- Anaplan is heading to the public market. With more than \$100m in just the first two quarters of this year, Anaplan's scale and trajectory put it more in line with other recent enterprise software debutants such as Pluralsight and Zuora, which have both enjoyed strong offerings this year.
- Software spending growth continues to outpace broader IT spending growth, partly due to how companies are prioritizing investments in areas such as security, analytics and marketing software.
- Almost 30 percent of spending in key enterprise IT markets is expected to shift to the cloud by 2022, according to research from Gartner. "The shift to cloud until the end of 2022 represents a critical period for traditional infrastructure providers, as competitors benefit from increasing cloud-driven disruption and spending triggers based on infrastructure asset expiration," Gartner research vice president Michael Warrillow said.
- State Street Corp. shares fell 7.4% after they announced plans to acquire Charles River Systems for nearly 9x 2017 revenue at \$2.6 billion. Investors worry State Street is paying too much and are skeptical the company can meet targets laid out in the deal. "Our overall strategy . . . [is] about this idea that information delivered in an appropriate way and in a usable way is the most powerful tool we can provide to market," said State Street President Ron O'Hanley.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-27	Global Payments Inc.	SICOM	415.0
2018-09-20	Vonage Holdings	NewVoiceMedia	350.0
2018-08-10	Amadeus IT Group SA	TravelClick Inc.	1,520.0
2018-08-03	Intertek Group plc	Alchemy Systems LP	480.0
2018-08-02	ARM Holdings plc	Treasure Data Inc.	
2018-08-02	RealPage Inc.	Leaselabs Inc.	103.0
2018-07-20	Ebix Inc.	Indus Software Technologies	29.0
2018-07-20	State Street Corporation	Charles River Systems Inc.	2,600.0
2018-07-20	Wipro Ltd.	Alight Solutions (India operations)	117.0
2018-07-17	Ultimate Software Group Inc., The	PeopleDoc SAS	300.0
2018-07-09	Morneau Shepell	LifeWorks Corporation Ltd.	325.2
2018-07-03	Kerridge Commercial Systems	Electronic Data Processing	15.6

# Software: Business Intelligence Software

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP BI Software Index EV/Revenue Multiple  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Tableau Software	\$111.74	\$9,018.5	\$8,356.0	8.4x	NM
Pegasystems	\$62.60	\$5,211.4	\$4,679.6	5.5x	NM
Alteryx	\$57.21	\$3,421.9	\$3,320.3	20.5x	NM
Cloudera	\$17.65	\$2,551.3	\$2,288.8	5.6x	NM
MicroStrategy	\$140.62	\$1,616.4	\$913.0	1.8x	19.6x
PROS Holdings	\$35.02	\$1,127.8	\$1,224.5	6.7x	NM
Domo	\$21.45	\$563.9	\$423.2	3.4x	NM
Datawatch	\$11.65	\$144.4	\$143.9	3.6x	NM
<b>Median:</b>	<b>\$46.12</b>	<b>\$2,083.8</b>	<b>\$1,756.6</b>	<b>5.5x</b>	<b>19.6x</b>

### SECTOR HIGHLIGHTS

- The median Business Intelligence Software index was trading at 5.5x revenue (based on Enterprise Value) at the closing of Q3.
- The global big data warehouse market is set to consolidate following Cloudera and Hortonworks' planned merger announced in early October. The companies, whose combined equity value was equal to \$5.2b at the merger announcement, will have \$720m in combined revenue and 2500 customers. The move follows a tumultuous 2018 for Cloudera, whose stock dropped 40% in April following weak guidance and never fully recovered. The combined company hopes to utilize cost and solution synergies to become the industry's first enterprise data cloud.
- Qlik announced its second acquisition in July since being taken private by Thoma Bravo, buying data management vendor Podium Data. Qlik intends to use the acquired functionality to serve as the foundation for what it describes as a new 'data hub' offering. The move could signal a trend towards increased integration between self-service analytics and data management vendors, as Tableau has also built out data preparation capabilities and partnered with data management vendor Alation.
- 451 Research estimates that the combined data science and analytics sector will grow at a CAGR of 10.8% to reach \$36.5b by 2022. In recent years, data science platforms and tools have been sought after due to their ability to deliver insights via AI and machine learning. Consolidation through M&A has been rampant, with large strategic acquirers such as Oracle, Accenture, and TIBCO making purchases in the last year, and is expected to continue as large analytic vendors seek to build out data science capabilities.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-25	Flipkart	Upstream Commerce	
2018-09-17	Waystar	Connance	
2018-08-24	Alliance MMA	SCWorx	50.0
2018-08-08	Providence Equity Partners	KPA	
2018-07-30	Resurgens Technology Partners	MSCI (InvestorForce asset)	
2018-07-21	Splunk	Krypton	
2018-07-17	BC Partners	NAVEX Global	1,400.0
2018-07-16	Nutrien	Agrible	63.0
2018-07-12	Accenture	Kogentix	
2018-07-03	Illuminate Education	IO Education	

# Software: Infrastructure Software

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

**DP Infrastructure Software Index EV/Revenue Multiple**  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Red Hat	\$136.28	\$25,461.8	\$22,616.9	7.4x	37.3x
Check Point Software	\$117.67	\$19,174.8	\$17,031.8	9.1x	18.5x
Citrix Systems	\$111.16	\$16,644.9	\$15,718.2	5.4x	19.4x
Symantec	\$21.28	\$14,294.8	\$15,933.3	3.3x	11.2x
F5 Networks	\$199.42	\$12,483.4	\$11,043.9	5.2x	16.8x
Trend Micro	\$64.47	\$8,971.2	\$7,571.4	5.4x	15.6x
CommVault Systems	\$70.00	\$3,172.6	\$2,739.8	3.9x	NM
Progress Software	\$35.29	\$1,677.2	\$1,559.4	3.9x	11.7x
Radware	\$26.47	\$1,199.2	\$1,076.2	4.8x	NM
Magic Software	\$8.96	\$399.6	\$378.3	1.4x	9.5x
Allot Communications	\$6.36	\$212.9	\$127.1	1.4x	NM
<b>Median:</b>	<b>\$64.47</b>	<b>\$8,971.2</b>	<b>\$7,571.4</b>	<b>4.8x</b>	<b>16.2x</b>

### SECTOR HIGHLIGHTS

- The median Infrastructure Software index was trading at 4.8x revenue (based on Enterprise Value) at the closing of Q3.
- IDC predicts that by 2020, corporate spending on cloud-infrastructure software will finally exceed spending on non-cloud IT infrastructure, which includes all the boxes inside corporate data centers from vendors like Dell, IBM, Cisco, and HP.
- Broadcom is acquiring CA Technologies for a sum of \$18.9 billion. The goal of the acquisition is to build a combined infrastructure technology company that continues Broadcom’s growth into the growing and fragmented infrastructure software market.
- 451 Research’s Voice of the Enterprise: Servers & Converged Infrastructure, Organizational Dynamics 2018 survey examines the benefits and potential drawbacks of using service providers to manage infrastructure. According to the survey, security is still the most prevalent concern for using third-party services by a large margin at 46%.
- In addition, according to the survey, freeing up internal resources for other purposes was the top reason for outsourcing IT infrastructure management at 43%; however, other prominent reasons included accessing skills or knowledge not present internally (39%) and increasing efficiency for time-consuming or low-level functions (28%). It is increasingly difficult to find staff with the right skillsets – specialists command high salaries and applicants often lack skills in key areas.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-28	Software AG	Built.io	45.0
2018-09-18	NetApp	StackPointCloud	
2018-09-14	CSG International	Forte Payment Systems	85.0
2018-09-13	Microsoft	Lobe Artificial Intelligence	
2018-09-04	Atlassian	OpsGenie	295.0
2018-08-28	SmartBear Software	D Software	140.0
2018-08-27	VMware	CloudHealth Technologies	550.0
2018-08-02	Nutanix	Mainframe2	165.0
2018-07-31	SS&C Technologies	Eze Software Group	1,450.0
2018-07-12	Accenture	Real Time Analytics Platform	
2018-07-11	Broadcom	CA	18,900.0
2018-07-02	EQT	SUSE [Micro Focus]	2,535.0

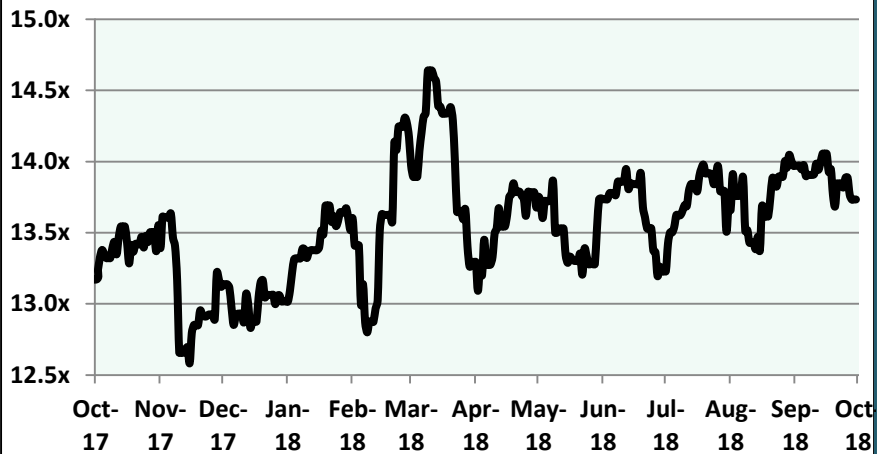


# Services: IT Services

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP IT Services Index EV/EBITDA Multiple  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Accenture	\$170.20	\$111,531.4	\$104,231.3	2.5x	15.6x
DXC Technology	\$93.52	\$27,099.3	\$31,111.2	1.3x	7.9x
Capgemini	\$126.14	\$21,646.7	\$23,500.0	1.5x	13.5x
NTT Data	\$13.87	\$19,421.2	\$22,954.9	1.2x	8.6x
Atos	\$119.28	\$12,586.2	\$13,014.4	0.9x	7.8x
CDW	\$88.92	\$13,778.2	\$16,598.9	1.1x	13.8x
Booz Allen	\$49.63	\$7,268.6	\$8,727.5	1.4x	14.4x
CACI International	\$184.15	\$4,650.7	\$5,550.7	1.2x	13.4x
ManTech International	\$63.30	\$2,503.5	\$2,527.7	1.4x	17.0x
ICF	\$75.45	\$1,450.3	\$1,660.3	1.3x	15.2x
Perficient	\$26.65	\$905.4	\$938.7	1.9x	18.3x
The Hackett Group	\$20.15	\$644.9	\$593.9	2.1x	13.6x
<b>Median:</b>	<b>\$82.19</b>	<b>\$9,927.4</b>	<b>\$10,870.9</b>	<b>1.3x</b>	<b>13.7x</b>

### SECTOR HIGHLIGHTS

- The median IT Services index was trading at 13.7x EBITDA (based on Enterprise Value) at the closing of Q3.
- Atos' \$3.4b acquisition of Syntel in July came at a rich valuation with Atos paying a 13.7x EBITDA multiple and 3.8x revenue multiple. The deal will help Atos acquire North American market share, which has been a focus since acquiring Xerox's IT Outsourcing business in 2014, and expand digital services capabilities for end-to-end digital transformation projects.
- SAIC announced its intent to acquire Engility in September for \$2.5b. SAIC plans to utilize Engility's expertise in next-generation systems integration services to help build out a more comprehensive suite of services. The acquisition continues a consolidation trend in the federal IT industry due to the demand from the federal government for comprehensive solution sets on large contracts.
- The IT services industry has transformed from large enterprise implementation projects to projects that offer agile development of a data-driven digital business strategy. As legacy vendors seek to keep-up with the transition, 451 Research believes that they will utilize M&A to acquire specialist SIs with skill sets, certifications, and software assets required to swiftly deploy new projects.
- AWS and DXC announced a multi-billion integrated services practice in August focused on cloud migration. The move marks a shift for AWS, which already had a professional services group and relationships with Deloitte and Accenture, as it seeks to make it easier for customers to utilize its suite of services.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

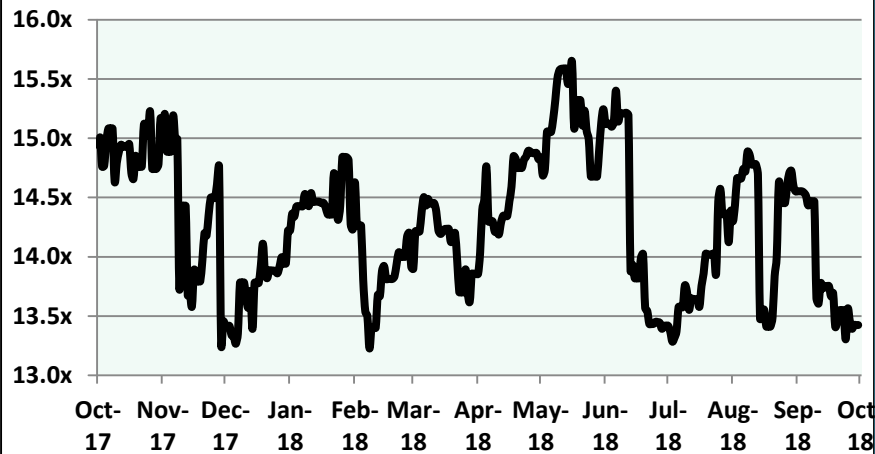
Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-28	H.I.G. Capital	Iron Bow Partners	
2018-09-10	SAIC	Engility	1,495.0
2018-08-23	Cognizant	SaaSfocus	
2018-08-22	ScanSource	Canpango	
2018-08-17	Arlington Capital Partners	Black Box Corporation (federal government business)	75.0
2018-08-17	Shearwater Group	Brookcourt Solutions	38.5
2018-08-14	Acando	Alterview Net Solutions	
2018-07-24	Hitachi Vantara	REAN Cloud	
2018-07-22	Atos	Syntel	3,400.0
2018-07-12	FPT	Intellinet	
2018-07-12	Getronics	Pomeroy	

# Services: Hosted Services

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP Hosted Services Index EV/EBITDA Multiple  
Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Equinix	\$432.89	\$34,373.2	\$44,823.7	9.3x	22.3x
Interxion	\$67.30	\$4,825.3	\$5,916.3	9.4x	23.5x
SAIC	\$80.60	\$3,514.2	\$4,315.0	0.9x	13.4x
Cancom	\$45.29	\$1,618.3	\$1,498.1	1.0x	13.5x
ePlus	\$92.70	\$1,285.0	\$1,269.0	0.9x	12.4x
Presidio	\$15.25	\$1,467.5	\$1,889.2	0.7x	9.9x
NCC Group	\$2.61	\$730.3	\$763.1	2.4x	16.2x
iomart	\$5.67	\$621.0	\$650.7	5.0x	13.3x
Sify Technologies	\$1.51	\$269.8	\$270.1	0.8x	5.7x
Redcentric	\$1.16	\$174.4	\$212.4	1.6x	9.6x
Maintel Holdings	\$9.35	\$135.4	\$166.6	0.9x	26.4x
<b>Median:</b>	<b>\$12.30</b>	<b>\$1,007.7</b>	<b>\$1,016.1</b>	<b>1.0x</b>	<b>13.4x</b>

### SECTOR HIGHLIGHTS

- The median Hosted Services index was trading at 13.4x EBITDA (based on Enterprise Value) at the closing of Q3.
- Orange Business Services has continued to evolve its portfolio of IT-centric services, acquiring Europe-based Basefarm for \$411m in July. Orange, which plans to expand its cloud services business to \$500m by 2020, plans for the acquisition to enable it to expand services around big data and cloud computing services. The managed services sector has been a popular expansion area for telecom companies in recent years, with companies including Cincinnati Bell, Century Link and Singtel acquiring companies in the space.
- Businesses providing migration, integration and other IT services for the three most popular IaaS players are being acquired at a record pace, totaling 9 acquisitions thus far in 2018. The rate at which companies are migrating off-premises is driving the high activity, as 66% of companies are projected to utilize off-premises infrastructure in 2020, up from 48% in 2018.
- 451 Research projects the managed security service provider market to grow to over \$24bn by 2022 at a CAGR of 16.9%. The demand for managed security services is being fueled by increasing instances of cyber attacks, growing government and industry regulations, customer demands and expectations, and growth in public cloud usage. While a large opportunity exists for SME MSPs to expand into security services, they have found it difficult to locate talent, which is in high demand and expensive.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-24	Digital Realty Trust	Ascenty	1,826.1
2018-09-14	MTS	Avantazh	128.5
2018-09-05	ABRY Partners	Donuts	500.0
2018-08-20	Immedion	Integral Solutions Group	
2018-08-07	ADT Corporation	Secure Designs Inc.	30.0
2018-08-01	Insight Enterprises	Cardinal Solutions	79.0
2018-07-20	Evolve IP	AiTech	
2018-07-16	Orange Business Services	Basefarm	408.9
2018-07-05	Claranet	NotSoSecure	
2018-07-02	Riverside Company, The	K&R Network Solutions	
2018-07-02	Riverside Company, The	Winxnet	

# Services: IT Outsourcing

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

DP IT Outsourcing Index EV/EBITDA Multiple

Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 9/30/2018	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Tata Consultancy	\$29.90	\$103,342.2	\$96,302.1	5.7x	19.0x
Automatic Data	\$150.66	\$66,787.6	\$65,737.1	4.9x	25.6x
Cognizant Technology	\$77.15	\$45,441.4	\$41,267.0	2.7x	13.6x
Infosys	\$10.00	\$22,568.0	\$39,538.0	3.6x	12.9x
Wipro	\$4.44	\$20,747.1	\$17,056.9	2.0x	10.2x
CGI Group	\$63.84	\$18,748.4	\$19,201.9	2.2x	13.7x
Atos Syntel	\$40.98	\$3,418.1	\$3,540.7	3.7x	13.3x
CSG International	\$40.14	\$1,323.4	\$1,520.3	1.9x	10.0x
Unisys	\$20.40	\$1,260.5	\$1,136.1	0.4x	3.8x
<b>Median:</b>	<b>\$ 40.14</b>	<b>\$ 20,747.12</b>	<b>\$19,201.94</b>	<b>2.7x</b>	<b>13.3x</b>

### SECTOR HIGHLIGHTS

- The median IT Outsourcing index was trading at 13.3x EBITDA (based on Enterprise Value) at the closing of Q3.
- HTF Market Intelligence released a new research report forecasting the Global IT Outsourcing Market to grow at a CAGR of 4.42% during the period 2018-2022.
- 451 Research expects that inorganic growth will continue to play a role in driving digital transformation across traditional consulting, systems integration and outsourcing businesses to position these service providers as enterprise partners for new technology areas such as advanced analytics, the Internet of Things (IoT) and artificial intelligence (AI), via practices that are aligned with enterprise investment in technology platform vendors.
- The Carlyle Group announced that it will become a majority investor in Sedgwick Claims, the largest U.S. insurance claims service provider, for \$6.7 billion. KKR took over Sedgwick in 2014 for \$2.4 billion and will be fully exiting their position.
- Keywords Studios continued their acquisition spree in Q3 and reported an excellent first half of 2018 with a 72% increase in revenue and 70% increase in profit when compared to the first half of calendar 2017. These figures include contributions from acquisitions.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-28	Questel	MultiLing	
2018-09-18	Keywords Studios	Technicolor	
2018-09-12	Carlyle Group, The	Sedgwick Claims Management Services	6,700.0
2018-08-20	Keywords Studios	Studio Gobo	19.1
2018-08-15	Coinbase	Distributed Systems	
2018-08-09	Accenture	Mindtribe	
2018-08-09	Accenture	Pillar Technology Group	
2018-07-25	AGC	Park Electrochemical Corp. (electronics business)	145.0
2018-07-20	Keywords Studios	Snowed In Studios	3.0
2018-07-18	Hut Group, The	Language Connect	
2018-07-17	Publicis Healthcare Communications Group	Payer Sciences	
2018-07-16	Equifax	DataX	
2018-07-03	UDG Healthcare	SmartAnalyst	18.0

# Services: IT Staffing

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

#### DP IT Staffing Index EV/EBITDA Multiple

Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Robert Half International	\$70.38	\$8,677.9	\$8,309.8	1.5x	13.6x
ManpowerGroup	\$85.96	\$5,755.0	\$5,982.9	0.3x	6.6x
ASGN	\$78.93	\$4,181.5	\$5,328.4	1.8x	17.4x
Kforce	\$37.60	\$954.5	\$1,084.6	0.8x	13.7x
Mastech Digital	\$9.57	\$105.2	\$141.9	0.8x	11.4x
Computer Task Group	\$5.22	\$78.5	\$72.1	0.2x	11.0x
RCM Technologies	\$4.27	\$52.2	\$81.2	0.4x	29.6x
Hudson Global	\$1.59	\$51.1	\$12.3	0.0x	NM
<b>Median:</b>	<b>\$23.59</b>	<b>\$529.8</b>	<b>\$613.2</b>	<b>0.6x</b>	<b>13.6x</b>

### SECTOR HIGHLIGHTS

- The median IT Staffing index was trading at 13.6x EBITDA (based on Enterprise Value) at the closing of Q3.
- According to SIA, the global advisor on staffing and workforce solutions, the US staffing industry is forecasted to grow 3% in 2018 and 2019 and reach \$152 billion next year.
- ASGN (NASD: ASGN), the largest among the publicly traded firms in the US in terms of IT staffing revenue, reported total revenue for the quarter of \$878.5 million (up 34.5% year over year). This reflects the acquisition of ECS, a large government services contractor. Removing ECS contributions, total revenue increased 10.1% year over year on a pro forma basis.
- In a survey conducted with 17 participants representing \$1.7 billion in US IT staffing revenue in 2017, trends in IT staffing varied widely by occupation with revenue from programmer/coding staffing declined by 22% and cyber/data security staffing revenue grew by 46%.
- According to 451 Research the evolution of legacy, complex IT into hybrid-enabled, agile ecosystems is not guaranteed by technology alone. The ability of internal IT teams must evolve along with transformative technologies, but staffing difficulties and skill shortages represent significant barriers for many organizations along this process.
- New York-based staffing provider Staffing 360 Solutions acquired Clement May, a London-based recruitment firm that will bolster Staffing 360's international business and broaden their offerings across the IT staffing sector. After the deal was announced, Staffing 360's shares tripled to finish at \$5.50. According to the press release Clement May generated approximately \$50 million in revenue and operated profitably in the company's last twelve months prior to the acquisition.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-21	ASAP HR Group	Expertum	
2018-09-20	System One Holdings	TPGS Holdings	
2018-09-05	FutureTech Holding Company	PDS	
2018-08-28	CLPS Incorporation	InfoGain Solutions Pte.	
2018-07-12	Getronics	Pomeroy Group	
2018-07-09	Staffing 360 Solutions	Clement May	

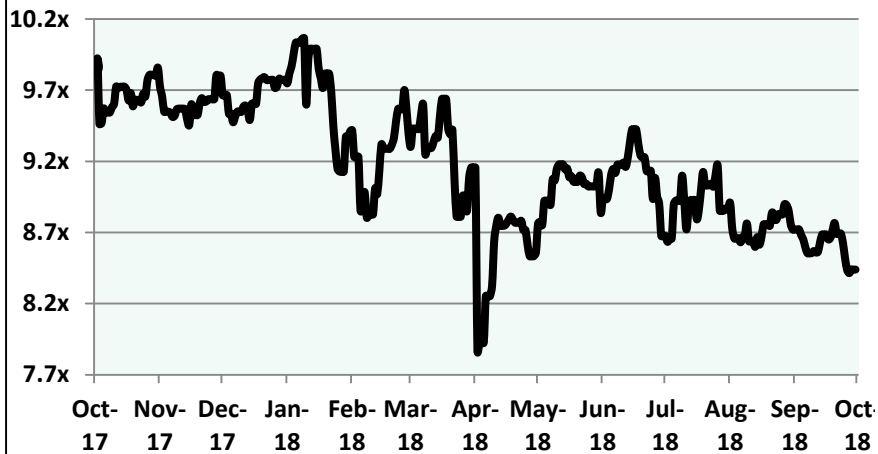
# Services: Value Added Resellers

## HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

### MARKET PERFORMANCE

#### DP VAR Index EV/EBITDA Multiple

Latest Twelve Months



### VALUATION METRICS

Company	Stock Price 09/30/18	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Arrow Electronics	\$73.72	\$6,569.4	\$9,965.5	0.3x	8.4x
Synnex	\$84.70	\$3,373.9	\$4,774.5	0.2x	7.4x
Tech Data	\$71.57	\$2,757.7	\$3,471.0	0.1x	6.1x
Insight Enterprises	\$54.09	\$1,954.7	\$1,832.1	0.3x	7.3x
ALSO Holding	\$125.88	\$1,614.7	\$1,815.6	0.2x	11.8x
PC Connection	\$38.89	\$1,045.6	\$977.5	0.3x	10.0x
PCM	\$19.55	\$242.9	\$405.9	0.2x	11.4x
<b>Median:</b>	<b>\$71.57</b>	<b>\$1,954.7</b>	<b>\$1,832.1</b>	<b>0.2x</b>	<b>8.4x</b>

### SECTOR HIGHLIGHTS

- The median VAR index was trading at 8.4x EBITDA (based on Enterprise Value) at the closing of Q3.
- As IT spending moves away from the CIO, with IDC reporting that 60% of IT spend is now controlled by executives other than the CIO, it has become important for VARs to build relationships beyond those with IT personnel. In order to facilitate these relationships, distributors have emphasized that channel partners must bring skill sets and knowledge that go beyond technology infrastructure.
- Following the announcement of its CloudBlue platform in May, Ingram Micro is now redefining itself as a solution aggregator. Ingram Micro, which has focused on bringing a wide variety of ISVs into the platform, believes that cloud services accessibility is driving the shift away from hardware distribution, with distributors and IT services vendors both wanting to expand into cloud services.
- HP's acquisition of digital imaging equipment distributor Apogee in August for \$499m continues a trend in the managed printing sector of manufacturers acquiring reseller partners. HP plans to use the acquisition to aggressively target the contractual office business and plans to broaden Apogee's portfolio to include other device-as-a-service offerings. Xerox, Sharp, and Kyocera have also conducted their own acquisition of reseller partners in recent years while still retaining relationships with other reseller partners.
- GTDC has identified a shift in how distributors are viewed as their role has transitioned from "pick-pack-ship machines" to critical players that collaborate in strategic problem solving with vendor partners. Partner innovation is now critical in the interconnected ecosystems environment and the shift has proven successful in 2018 with US distribution sales for the first 7 months up \$2 billion vs. 2017.

### MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2018-09-26	Vectorworks	Paxar Technologies (assets)	
2018-09-10	Tiger Peak Capital	Voice Comm	
2018-08-22	QAD	PT Iris Sistem Inforindo (assets)	
2018-08-07	Vision Group	CFS	
2018-08-01	Hewlett-Packard Company	Apogee Corporation	498.7
2018-07-10	Bertram Capital Management	BearCom	
2018-07-02	Konica Minolta Business Solutions	MWA Intelligence	

Our team of professionals brings a unique combination of technological, financial, and operational experience to our clients and their transactions. With backgrounds and deal experience spanning Wall Street investment banks, multi-billion dollar corporations, and high growth start-ups, we have an exceptional understanding of how to successfully achieve our clients' strategic initiatives.



**DecisionPoint**

3420 Toringdon Way

Suite 350

Charlotte, NC 28277

Phone: 704.248.1111

Fax: 704.248.1121

**[www.decisionpointint.com](http://www.decisionpointint.com)**

Research Inquiries Can Be Directed To:

**Chase Thompson**

Analyst

[cthompson@decisionpointint.com](mailto:cthompson@decisionpointint.com)

704.750.1006

**Holden Sasser**

Analyst

[hsasser@decisionpointint.com](mailto:hsasser@decisionpointint.com)

704.989.8824