

DECISIONPOINT

QUARTERLY VIEWPOINT:

For the Quarter Ended December 31, 2019 and the Latest Twelve Months

Q4 | 19

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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.



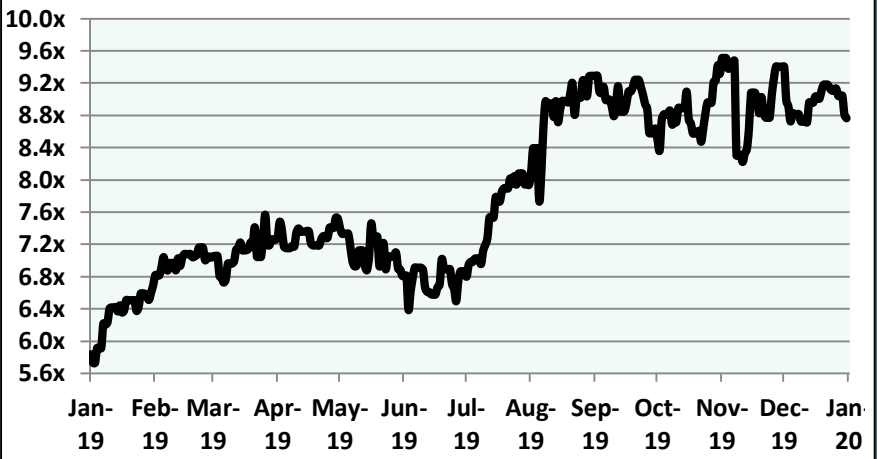
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Software: Software as a Service (SaaS)

HIGHLIGHTS, VALUATION METRICS, AND RECENT M&A ACTIVITY

MARKET PERFORMANCE

DP SaaS Index EV/Revenue Multiple
Latest Twelve Months



VALUATION METRICS

Company	Stock Price 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Salesforce	\$162.64	\$132,998.9	\$143,826.7	9.1x	52.8x
ServiceNow	\$282.32	\$54,347.0	\$52,898.8	16.4x	NM
Shopify	\$395.25	\$43,853.0	\$43,249.9	30.5x	NM
Workday	\$164.45	\$36,943.9	\$37,271.3	10.8x	NM
RealPage	\$53.75	\$5,159.3	\$5,549.4	5.8x	26.8x
LogMeIn	\$85.74	\$4,311.8	\$4,355.3	3.5x	13.6x
Cornerstone OnDemand	\$58.55	\$3,486.3	\$3,553.5	6.3x	86.8x
LivePerson	\$37.00	\$2,290.5	\$2,438.9	8.8x	NM
Ebix	\$33.41	\$1,027.5	\$1,710.7	3.0x	10.3x
Median:	\$85.74	\$5,159.3	\$5,549.4	8.8x	26.8x

SECTOR HIGHLIGHTS

- The median SaaS index was trading at 8.8x revenue (based on Enterprise Value) at the closing of Q4.
- The SaaS industry reached record levels in 2019 with deal value of \$96.4b across 1200 deals, up from \$85.9b across 960 deals in 2018. Median announced SaaS revenue multiples also climbed in 2019, reaching 5.2x. Vista Equity Partners and Google were the most active acquirers in the space, conducting 34 and 23 deals.
- While the rule of 40 (EBITDA margin + revenue growth > 40%) has historically been used to identify SaaS companies deserving of premium valuations, Norwest Venture Partners believes that methodology is antiquated, proposing that the rule of 100 is a better metric. They define the rule of 100 as 3x revenue growth plus EBITDA margin, believing that it is a more accurate measure of SaaS performance since it rewards the compounding nature of SaaS revenue growth.
- According to Synergy Research Group, SaaS revenue surpassed \$100b in 2019. However, it still only accounts for 23% of the total enterprise software market, up from 15% in 2017. The shift has been driven primarily by dramatic improvements in hosting capabilities and increased comfort in moving to a cloud-based operational mode with large enterprise software companies finally making the switch from perpetual license models to SaaS models over the past 5 years. The HCM industry has largely embraced the SaaS sales model, whereas the ERP industry has been slower to convert to a SaaS model.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$M)
2019-12-19	The Rubicon Project	Telaria	363.7
2019-12-19	F5 Networks	Shape Security	1,000.0
2019-12-13	Great Hill Partners	VersaPay	95.0
2019-12-04	Thoma Bravo	Instructure	1,811.1
2019-11-25	Palo Alto Networks	Aporeto	150.0
2019-11-19	Kape Technologies	Private Internet Access	127.6
2019-11-06	RealPage	Buildium	580.0
2019-11-04	Workday	ScoutRFP	540.0
2019-10-23	PTC	Onshape	470.0
2019-10-21	Insight Partners	commercetools	145.0
2019-10-14	Thoma Bravo	Sophos	3,820.0
2019-10-02	Oracle	CrowdTwist	130.0

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 12/31/19	Market Cap.	Enterprise Value (EV)	EV/ LTM Revenue	EV / LTM EBITDA
Alphabet	\$1,339.39	\$937,176.2	\$815,214.9	5.3x	17.1x
Amazon.com	\$1,847.84	\$928,077.6	\$932,282.9	3.5x	27.5x
Facebook	\$205.25	\$590,914.8	\$542,184.0	8.1x	19.2x
Netflix	\$323.57	\$146,157.8	\$149,795.7	7.9x	13.4x
Booking Holdings	\$2,053.73	\$91,554.8	\$87,481.3	5.9x	14.9x
Uber	\$29.74	\$37,195.1	\$46,566.9	3.6x	NM
eBay	\$36.11	\$32,128.9	\$34,702.4	3.2x	9.3x
Twitter	\$32.05	\$25,075.4	\$21,611.0	6.4x	24.4x
IAC	\$249.11	\$22,474.2	\$22,086.3	4.8x	23.8x
Snap	\$16.33	\$22,304.2	\$21,815.7	14.1x	NM
Expedia Group	\$108.14	\$16,331.3	\$18,163.0	1.5x	10.2x
Cimpress	\$125.77	\$3,971.1	\$4,890.8	1.7x	12.2x
Groupon	\$2.39	\$1,359.5	\$1,153.4	0.5x	14.2x
Median:	\$125.77	\$32,128.9	\$34,702.4	4.8x	14.9x

SECTOR HIGHLIGHTS

- The median Internet Software and Services index was trading at 4.8x revenue (based on Enterprise Value) at the closing of Q4.
- Despite total deal volume dropping, announced deal value in the internet software and services sector was at a record high of \$88.6b in 2019, up from \$82b in 2018. In 2019, blockbuster deals in the financial data industry led the way with Charles Schwab’s acquisition of TD Ameritrade and the London Stock Exchange’s acquisition of Refinitiv accounting for \$40b in deal value.
- In December, European-based DeliveryHero announced its intent to acquire South Korean-based Woowa Brothers for \$4b. If approved, the deal will enable DeliveryHero to expand its food delivery services to Asia. The food delivery market has undergone intense competition in recent years with US-based Grubhub rumored to be up for sale after losing 23% market share since 2017.
- In November, eBay announced its intent to divest StubHub for \$4.05b to swiss competitor viagogo after facing pressure from activist investors to divest non-core business units. Viagogo plans to use the acquisition to grow Viagogo’s presence in the US, building on their success in Europe. StubHub has faced increased competition in recent years as start-ups have entered the ticket resale market and venues have created a more aggressive primary ticketing market.
- Facebook and Google have continued to face pressure from antitrust investigations with 47 states joining an investigation into Facebook and authorities expanding their investigation into Google’s search and Android businesses. However, the investigation hasn’t slowed Google’s stock growth which jumped over 16% in Q4.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value
2019-12-23	Diamond Eagle	DraftKings	2,055.0
2019-12-20	IAC	Care.com	500.0
2019-12-17	Hellman & Friedman	Scout24	3,224.0
2019-12-13	Delivery Hero	Woowa Brothers	3,994.7
2019-12-09	E*Trade	Gradifi	30.0
2019-12-05	Euronext	Nord Pool	61.1
2019-11-25	Charles Schwab	TD Ameritrade	26,261.6
2019-11-25	Viagogo	StubHub [eBay]	4,050.0
2019-11-20	PayPal	Honey	4,000.0
2019-11-18	NV5	Quantum Spatial	318.0
2019-10-02	Flutter Entertainment	The Stars Group	2,974.4

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 12/31/19	Market Cap.	Enterprise Value (EV)	EV/ LTM Revenue	EV / LTM EBITDA
Microsoft	\$157.70	\$1,220,440.3	\$1,142,580.6	8.8x	18.8x
Oracle	\$52.98	\$183,469.7	\$194,788.2	4.9x	11.8x
SAP	\$134.53	\$160,633.0	\$177,234.9	5.8x	24.3x
IBM	\$134.04	\$120,058.4	\$179,523.8	2.3x	10.6x
Dassault Systemes	\$164.16	\$42,903.9	\$40,214.7	9.2x	29.9x
Autodesk	\$183.46	\$40,627.2	\$41,386.3	13.3x	NM
Ansys	\$257.41	\$22,020.3	\$21,364.9	14.8x	37.0x
Constellation Software	\$965.47	\$20,459.7	\$20,906.7	6.2x	22.1x
Tyler Technologies	\$300.02	\$11,963.4	\$11,526.9	11.1x	NM
Amdocs	\$72.19	\$9,901.9	\$9,305.2	2.3x	12.1x
PTC	\$74.89	\$8,816.4	\$9,020.9	7.2x	NM
Manhattan Associates	\$79.75	\$5,202.1	\$5,016.4	8.2x	37.9x
Blackbaud	\$79.60	\$3,833.3	\$4,508.7	5.1x	36.3x
Verint Systems	\$55.36	\$3,732.4	\$4,167.7	3.2x	21.6x
Stratasys	\$20.23	\$1,094.5	\$776.9	1.2x	18.9x
Median:	\$134.04	\$20,459.7	\$20,906.7	6.2x	21.8x

SECTOR HIGHLIGHTS

- The median Enterprise Software index was trading at 6.2x revenue (based on Enterprise Value) at the end of Q4.
- Deal volume surged to a record amount in the enterprise software sector in 2019 with 886 deals and \$58.8b in deal value, up from 822 deals in 2018. Private equity firms dominated the upper end of the market with some of 2019's highlights including Thoma Bravo's \$1.75b acquisition of ConnectWise and Hellman & Friedman's \$11b acquisition of Ultimate Software.
- Thoma Bravo's announcement to acquire Instructure for \$2b, if approved by shareholders, will come at a steep 8x revenue multiple. While Instructure has exhibited impressive growth in its education product line, Canvas, over the past few years, its employee development product, Bridge, has struggled to gain traction in the marketplace and a key post-acquisition question will revolve around Thoma Bravo's plans for the product line.
- In 2019, HCM software was a hot spot for PE acquirers with financial sponsors accounting for 71 of 121 acquisitions (59%). The reason for the increased activity revolved around HR technology being a fragmented industry, positioning it as a favorable area for financial sponsors to execute consolidation strategies.
- ComputerWorld expects that edge computing and robotic process automation will gain traction in enterprise technology in 2020 as companies continue to embrace IoT devices. As OEMs have begun to harness the power of RPA to improve product quality and fasten production cycle, it has become critical to have fast network speeds to process the zettabytes of data that IoT devices output.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-18	Akerna	Ample Organics	38.0
2019-12-13	Great Hill Partners	VersaPay	95.0
2019-12-12	Pushpay	Church Community Builder	87.5
2019-12-05	Motive Partners	Fiserv (Investment services business)	510.0
2019-12-04	iA Financial Group	Innovative Aftermarket Systems	720.0
2019-11-20	Invitae	Clear Genetics	50.0
2019-11-07	PAR Technology	Restaurant Magic	42.0
2019-10-22	Mastercard	SessionM	215.0
2019-10-22	Roku	dataxu	150.0
2019-10-07	FM:Systems	Asure Software (workspace management business)	120.0
2019-10-01	Q2 Holdings	Lender Performance Group	510.0

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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Verisk Analytics	\$149.34	\$24,916.2	\$27,105.5	10.7x	26.7x
Pegasystems	\$79.65	\$6,640.1	\$6,263.2	7.0x	NM
Alteryx	\$100.07	\$6,369.4	\$6,358.8	17.1x	NM
Elastic	\$64.30	\$4,742.7	\$4,926.3	14.4x	NM
Cloudera	\$11.63	\$2,973.0	\$3,160.2	4.3x	NM
PROS Holdings	\$59.92	\$2,328.9	\$2,519.5	10.6x	NM
MicroStrategy	\$142.63	\$1,503.0	\$991.4	2.0x	32.3x
Domo	\$21.72	\$589.7	\$589.4	3.5x	NM
Median:	\$71.98	\$3,857.8	\$4,043.3	8.8x	NM

SECTOR HIGHLIGHTS

- The median Business Intelligence Software index was trading at 8.8x revenue (based on Enterprise Value) at the closing of Q4.
- In 2019, the business intelligence sector had a record year with \$18.6b in deal value across 101 deals. Salesforce was responsible for much of the deal value in 2019 through its \$15.5b acquisition of Tableau.
- 451 Research believes that the 'enterprise intelligence platform', the combined functionality of three distinct product categories: data integration, data storage and processing, and analytics, is the next big frontier in the data analytics industry. While companies have historically utilized separate vendors to achieve capabilities, M&A and R&D activity have enabled companies such as Google, AWS, Oracle, & IBM to provide one comprehensive data analytics product suite.
- 451 Research believes that machine learning operations is poised to be an active M&A sector in 2020. While many companies are strong in machine learning data collection, structuring, and modeling, there are clear market deficiencies in the deployment of models into production environments. Potential buyers in the space include Oracle, TIBCO, and H2O.ai who are all looking to strengthen their data science portfolios.
- ZoomInfo's acquisition of Komiko is representative of an industry shift where traditional suppliers of data have needed to move into software due to marketers shifting their budget towards BI & CRM software. Dun & Bradstreet has also looked to expand their software offerings, acquiring Lattice Engines in June 2019.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

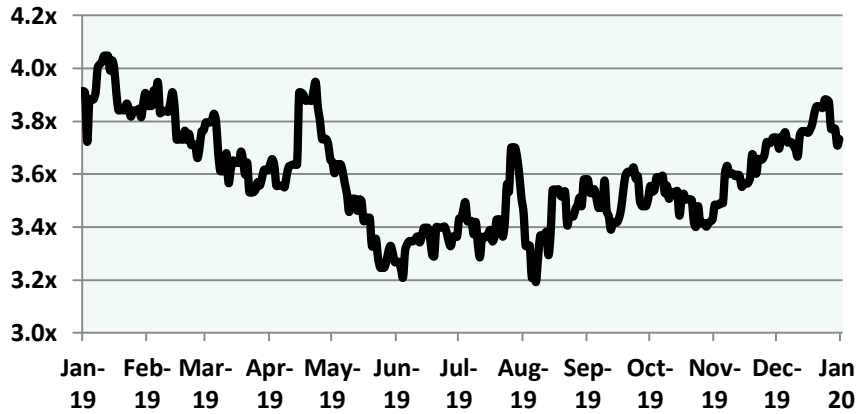
Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-23	PeopleStrong	qilo Technologies	
2019-12-12	Qualitest	AlgoTrace	
2019-11-20	TrustArc	Nymity	
2019-11-19	Compass	Detectica	
2019-11-19	Visma Group	OneStop Reporting	
2019-11-05	UST Global	ComplyUSA	
2019-10-30	TapClicks	Megalytic	
2019-10-28	RIB Software	datapine	
2019-10-15	Workfront	Atiim	
2019-10-09	New Frontier Data	Zefyr	15.0
2019-10-04	Alteryx	Feature Labs	

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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Check Point Software	\$110.96	\$17,135.1	\$15,556.6	7.9x	17.6x
Citrix Systems	\$110.90	\$15,331.0	\$14,855.9	4.9x	20.7x
F5 Networks	\$139.65	\$8,442.7	\$7,517.6	3.4x	12.3x
Trend Micro	\$51.17	\$7,150.1	\$5,541.7	3.7x	11.3x
CommVault Systems	\$44.64	\$2,118.1	\$1,583.6	2.3x	NM
Progress Software	\$41.55	\$1,883.0	\$2,011.9	4.9x	17.0x
Radware	\$25.78	\$1,240.8	\$1,008.4	4.1x	33.2x
Magic Software	\$9.70	\$475.3	\$452.4	1.5x	9.8x
Allot Communications	\$8.50	\$289.9	\$205.1	1.9x	NM
Median:	\$44.64	\$2,118.1	\$2,011.9	3.7x	17.0x

SECTOR HIGHLIGHTS

- The median Infrastructure Software index was trading at 3.7x revenue (based on Enterprise Value) at the closing of Q4.
- Infrastructure software stayed stable in 2019 with 130 announced transactions, dropping slightly from 147 deals in 2018. Strategic acquires dominated the sector, accounting for 88 deals in the sector with Splunk's \$1.05b acquisition of SignalFX at a 21x revenue multiple being the largest of the year.
- 451 Research projects the cloud computing as a service market (CCaaS), which includes IaaS, PaaS, and infrastructure SaaS, to reach \$70b by 2023, growing at a CAGR of 15%. IaaS still dominates the industry, accounting for 56% of total CCaaS revenue. The CCaaS market as a whole is also very top heavy with 76% of vendors below \$25m in revenue, setting up potential consolidation plays.
- Forrester believes that 2020 will be the year where large infrastructure software vendors will focus on using the cloud to modernize core business apps and processes rather than building new apps and rehosting infrastructure. In order to differentiate themselves from leaders AWS and Azure with whom they cannot compete, Forrester predicts companies such as IBM and Oracle will alter their strategy to focus on more specialized strengths.
- The communications PaaS industry has been an active M&A target over the past 2 years with 21 deals. 451 Research projects this growth to continue in 2020 as vendors look to grow their portfolios of communications APIs via M&A and continue to position themselves based on broad, distinct product categories for customer and employee engagement.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-23	NCR	Zynstra	131.0
2019-12-17	Instana	StackImpact	
2019-12-12	Reliance Industries	NowFloats Technologies	20.0
2019-12-11	SolarWinds	VividCortex	117.5
2019-11-18	Google	CloudSimple	
2019-11-18	Vista Equity Partners	Sonatype	
2019-11-13	Mirantis	Docker (enterprise technology assets)	
2019-11-12	Aqua	CloudSploit	8.0
2019-10-24	Micron Technology	FWDNXT	
2019-10-03	Unity Technologies	ChilliConnect	
2019-10-01	Epicor	1 EDI Source	

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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Accenture	\$210.57	\$136,768.2	\$131,912.9	3.0x	17.7x
CDW	\$142.84	\$21,308.2	\$23,722.5	1.4x	17.7x
Capgemini	\$121.99	\$20,876.4	\$23,271.3	1.5x	10.3x
NTT Data	\$13.41	\$18,801.4	\$23,802.5	1.2x	7.9x
DXC Technology	\$37.59	\$10,114.7	\$17,859.9	0.9x	14.9x
Booz Allen	\$71.13	\$10,077.3	\$11,642.2	1.6x	16.0x
CACI International	\$249.99	\$6,355.2	\$8,100.7	1.6x	17.2x
ManTech International	\$79.88	\$3,204.3	\$3,322.2	1.6x	18.4x
ICF International	\$91.62	\$1,768.2	\$2,116.8	1.5x	16.2x
Perficient	\$46.07	\$1,486.5	\$1,617.9	2.9x	22.5x
The Hackett Group	\$16.14	\$524.2	\$476.9	1.7x	13.4x
Median:	\$79.88	\$10,077.3	\$11,642.2	1.6x	16.2x

SECTOR HIGHLIGHTS

- The median IT Services index was trading at 16.2x EBITDA (based on Enterprise Value) at the closing of Q4.
- While deal value was down in 2019, deal volume in the IT services sector surged to a record high in 2019 with 393 deals across \$8.9b in deal activity. Strategic acquirers were highly active in the sector conducting 252 acquisitions. Accenture and Presidio were the leading acquirers in the sector with each conducting 15 acquisitions in 2019.
- 451 Research believes that the business models of IT service providers are being disrupted by the requirements of enterprise digital transformation projects as enterprise organizations continue to respond to digital competition from cloud-native entrants. For IT service providers to successfully transform themselves to survive and prosper in the era of digital services, they need to move to a platform-powered way of delivering their services. Such professional service digital business platforms enable smart, technology-augmented services that help providers transition to new business models, preparing them for future phases of professional services market development.
- Since announcing a new CEO in September, IT services behemoth DXC has already implemented new strategic priorities, announcing plans to divest three of its business units in an effort to restart growth. DXC is currently seeking strategic alternatives for its health and human services business, horizontal BPS business, and workplace and mobility business with potential divestitures in 2020.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-16	Alithya Group Inc. [aka Groupe	Travercent LLC	18.0
2019-12-09	Qusitive Technology Solutions Inc.	Menlo Technologies Inc.	12.7
2019-12-09	Altron	Ubusha Technologies	24.6
2019-11-14	Accenture	Silveo	
2019-11-04	DXC Technology	Bluleader	
2019-10-24	Atos	X-perion Consulting	
2019-10-22	Retelit	PA Group	66.9
2019-10-17	ASGN	Intersys Consulting	67.0
2019-10-16	Cognizant	Contino	270.0
2019-10-10	Sapiens	Calculo	
2019-10-03	Converge	Datatrend	15.0
2019-10-02	QinetiQ Group	Manufacturing Techniques	105.0

Services: Hosted & Managed 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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Equinix	\$583.70	\$48,679.0	\$60,614.9	11.1x	25.3x
Interxion	\$83.81	\$6,143.4	\$8,064.2	11.6x	23.9x
SAIC	\$87.02	\$4,875.3	\$6,806.1	1.1x	16.5x
Cancom	\$58.81	\$2,094.0	\$2,179.3	1.5x	15.5x
ePlus	\$84.29	\$1,136.5	\$1,184.4	0.8x	10.4x
NCC Group	\$2.96	\$825.8	\$847.0	2.6x	15.2x
iomart	\$4.88	\$544.7	\$604.5	4.4x	11.3x
Sify Technologies	\$1.23	\$208.9	\$348.8	1.1x	7.4x
Redcentric	\$1.33	\$199.9	\$246.9	2.2x	10.2x
Median:	\$31.85	\$981.2	\$1,015.7	2.2x	15.2x

SECTOR HIGHLIGHTS

- The median Hosted & Managed Services index was trading at 15.2x EBITDA (based on Enterprise Value) at the end of Q4.
- Following a drop in sector activity in 2018, M&A in the hosted & managed services sector picked back up in 2019 with \$12.2b in deal activity across 164 deals, up from 131 deals in 2018. Colocation and Managed Security Services were two of the most active subsectors in the industry, totaling 33 and 27 deals in 2019.
- According to 451 Research, a widespread shortage of cloud expertise has exposed an opportunity for managed service providers to fill the void and address new organizational challenges. In a recent survey, 86% of enterprises currently identify some form of gap associated with implementing the cloud, particularly across cloud platform expertise, information security, and machine learning knowledge. MSPs that can address these deficiencies are poised to succeed, particularly as digital transformation becomes a necessity for enterprises.
- In October, Australia-based BGH Capital implemented a managed security roll-up, acquiring 12 cybersecurity firms and launching CyberX, a company specializing in managed security services. The move follows a larger trend of PE firms acquiring MSSPs in 2019 with a similar US-based roll-up completed by Sunstone Partners in May.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

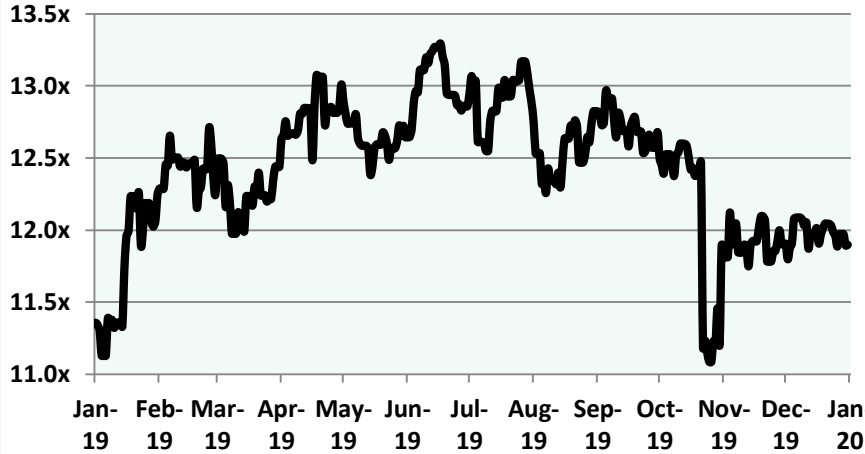
Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-30	The Probe Group	Salmat (MicroSourcing managed services business)	69.3
2019-12-17	GCI	Nasstar	105.8
2019-12-09	Summit Hosting	iNSYNQ	
2019-11-18	Converge Technology	VSS Holdings	
2019-11-11	OpenText	Carbonite	1,450.0
2019-11-05	EPAM	NAYA	
2019-10-29	Digital Realty	Interxion	8,700.0
2019-10-10	Baymark Partners	Presidium Network Services	
2019-10-07	J2 Global	OffsiteDataSync (certain assets)	
2019-10-04	Equinix	AXTEL (3 Mexico-based datacenters)	175.0
2019-10-03	BPM	Infinitech	

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 12/31/2019	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Tata Consultancy Services	\$30.21	\$103,342.2	\$96,302.1	5.0x	17.7x
Automatic Data	\$170.50	\$74,419.0	\$74,722.8	5.2x	21.0x
Infosys	\$10.22	\$44,126.2	\$41,122.9	3.3x	13.3x
Cognizant Technology	\$62.02	\$35,196.4	\$32,559.0	2.0x	10.5x
CGI Group	\$83.19	\$23,109.3	\$23,681.2	2.6x	14.8x
Wipro	\$3.44	\$20,645.3	\$16,481.7	1.9x	9.0x
CSG International	\$51.78	\$1,683.1	\$1,991.0	2.0x	10.3x
Unisys	\$11.86	\$697.0	\$1,025.1	0.3x	3.5x
Median:	\$ 40.99	\$ 29,152.82	\$ 28,120.13	2.3x	11.9x

SECTOR HIGHLIGHTS

- The median IT Outsourcing index was trading at 11.9x EBITDA (based on Enterprise Value) at the closing of Q4.
- In 2019, the IT outsourcing sector was defined by large deals with \$97.2b in deal value across 232 deals, more than double 2018's record of \$42.1b in announced deal value. The sector was dominated by acquisitions of large payment processors with FIS acquiring Worldpay for \$35.5b, Fiserv acquiring First Data for \$22b, and Global Payments acquiring TSYS for \$21.2b.
- Boston Consulting Group believes that the IT outsourcing industry has undergone a shift over the past few years due to the rise of public cloud services and agile delivery methodologies which have siloed teams, limited transparency of activities, and created inflexible contracts. From these shifts, an opportunity has arisen for outsourcing firms who are able to drive modern collaboration and delivery methods to break down silos.
- In order to thrive, IT outsourcing firms must also bring the latest tools and technologies segmented into three areas. These areas include development infrastructure to enable new features testing, project management optimization through collaboration tooling and the use of modern cloud infrastructures.
- The Tech Times believes that Latin America is rapidly catching up to China and India as a premiere destination for IT outsourcing. Due to the region's high-level professionals and factors like English proficiency and cultural and geographical compatibility, companies are reevaluating their outsourcing needs and moving business away from the traditional IT outsourcing leaders.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-12-12	Thompson Street Capital Partners	Data Dimensions	
2019-12-04	TELUS	Competence Call Center	1,010.2
2019-12-03	Beta Systems Software	infinIT Codelab	0.8
2019-12-01	Accenture	Apis Group	
2019-11-28	Altruist Technologies	HGS (CRM business)	5.6
2019-11-18	Elavon	Sage Pay	299.2
2019-11-13	ChaSerg	Grid Dynamics	224.0
2019-11-11	ProKarma	Yotabites Consulting	
2019-10-09	Infosys Technologies	Eishtec	
2019-10-03	Accenture	Nytec	

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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Robert Half International	\$63.15	\$7,430.1	\$7,290.9	1.2x	10.6x
ManpowerGroup	\$97.10	\$5,920.7	\$6,280.4	0.3x	7.6x
ASGN	\$70.97	\$3,787.0	\$4,756.5	1.2x	12.1x
Kforce	\$39.70	\$973.5	\$947.3	0.7x	11.6x
Computer Task Group	\$5.18	\$69.4	\$88.4	0.2x	13.4x
Mastech Digital	\$11.07	\$123.9	\$152.4	0.8x	8.0x
RCM Technologies	\$3.00	\$38.6	\$76.7	0.4x	9.9x
Median:	\$39.70	\$973.5	\$947.3	0.7x	10.6x

SECTOR HIGHLIGHTS

- The median IT Staffing index was trading at 10.6x EBITDA (based on Enterprise Value) at the closing of Q4.
- According to CEIPAL, the staffing industry is jumping into the world of AI, with two-thirds of staffing firms planning to implement an artificial intelligence-driven ATS by the end of 2020. Enterprise staffing firms, those with more than 100 recruiters, are expected to lead the initiative with 79% reporting AI as a priority. Some of the major drivers of the shift include marketing requirements, productivity, quality and reporting needs.
- CIO predicts that 2020 will be the year when business units outside of IT will begin to feel the strain from the tech talent shortage. The shift is due to the proliferation of technology across business units, with each unit having different technology needs. In order to combat the talent shortage, companies will need to use upskilling to keep current talent trained on new initiatives.
- In addition, companies are also expected to use flexible staffing strategies to help IT departments stay agile so they can quickly jump into new IT projects, upgrades, implementations and cloud migrations without disturbing daily operations. This continues a trend started in 2019, where companies responded to the talent shortage by turning to more project-based consultants and other interim professionals.
- In October, A&M Capital conducted a roll-up of ettain group, Global Employment Solutions, and Leido's EHR consulting practice in order to build a platform that will be a leader in IT staffing solutions. The combined entity has over 3,000 employees across multiple verticals. In order to expand specialization, A&M Capital may acquire other niche IT staffing companies to execute on its roll-up strategy.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer Name	Target Name	Enterprise Value (\$m)
2019-11-27	Norvestor Equity	Cegal	
2019-11-22	Maslow Media Group	IQS	
2019-11-07	American Well	Aligned Telehealth	
2019-10-22	A&M Capital Advisors	ettain group	
2019-10-14	ProAct IT Group	PeopleWare	18.7

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 12/31/19	Market Cap.	Enterprise Value (\$M)	EV/ LTM Revenue	EV / LTM EBITDA
Arrow Electronics	\$84.74	\$7,207.9	\$9,992.3	0.3x	26.4x
Synnex	\$128.80	\$6,418.2	\$9,644.9	0.4x	8.6x
TechData	\$143.60	\$5,294.6	\$5,540.0	0.1x	8.3x
Insight Enterprises	\$70.29	\$2,531.9	\$3,174.5	0.4x	11.7x
ALSO Holding	\$167.79	\$2,152.2	\$2,544.5	0.2x	14.8x
PC Connection	\$49.66	\$1,319.2	\$1,219.8	0.4x	9.7x
Median:	\$106.77	\$3,913.2	\$4,357.2	0.4x	10.7x

SECTOR HIGHLIGHTS

- The median VAR was trading at 10.7x EBITDA (based on Enterprise Value) at the end of Q4.
- M&A activity in the value added reseller industry stayed flat in 2019 with 41 announced details, identical to 2018. There were no serial acquirers in 2019 with 38 different acquirers and no acquirer completing more than 2 acquisitions in the space.
- According to GTDC, distributors are becoming more interconnected and instrumental across a variety of technology market segments and are playing an increasingly vital role in multi-channel success. In a survey of 50 tech executives, GTDC found that 61% of survey participants said they anticipate their business growing more than 10% through 2025 via distribution. The survey also found virtual warehouse support for SaaS and cloud solutions as the two most important areas for distributor core competencies.
- Apollo's acquisition announcement to buy Tech Data for \$145 / share came after a bidding war with Berkshire Hathaway who had outbid Apollo's initial bid of \$130 / share. The acquisition is not the first technology acquisition for Apollo which also acquired Presidio in 2014 and Rackspace in 2016. If Berkshire has continued interest in the sector, Barron's believes that Arrow Electronics and Avnet could be potential targets.
- IT Pro Portal believes that the value added reseller industry will need to evolve in 2020 as companies increasingly turn to eCommerce offerings for buying decisions. In order to thrive, resellers must tie in value-adding services to new products, offering value that eCommerce companies cannot match.

MERGERS & ACQUISITIONS (SAMPLE DEALS)

Announced Date	Acquirer	Target	Enterprise Value (\$m)
2019-12-27	Marco	Image Systems for Business	
2019-12-16	Tech Data	Inflow Technologies	
2019-11-26	Toadman	Sold Out	20.5
2019-11-13	Apollo Global Management	Tech Data	5,609.9
2019-11-01	DAS Health	Automated Medical Systems	
2019-11-01	Charlesbank Capital Partners	DoiT	100.0
2019-10-30	Tech Data	DLT Solutions	
2019-10-16	CATI	Fisher Unitech	
2019-10-11	CMS Distribution	Avesta	
2019-10-09	Audax	EIS	

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

Research Inquiries Can Be Directed To:

Chase Thompson

Associate

cthompson@decisionpointint.com

704.750.1006

Wilson Hope

Analyst

whope@decisionpointint.com

704.448.3671