



Cassel Salpeter & Co.
INVESTMENT BANKING

Technology Investment Banking
Q2 2018 Update

Cassel Salpeter & Co. is a boutique investment banking firm focused on providing independent and objective advice to middle market and emerging growth companies. Finding the right financial partner in the fragmented technology market requires solid industry positioning and broad industry relationships. We can help.

Our experience and services include:

Mergers & Acquisitions

- Financial advisory
- Sales to strategic and private equity buyers
- Divestitures to strategic and private equity buyers
- Buy-side acquisition programs
- Leveraged & management buyouts
- Going private transactions

Capital Raising

- Financial advisory
- Equity and debt private placements
- Growth capital
- PIPEs
- Recapitalizations

Other Services

- Fairness opinions
- Solvency opinions
- Valuations
- Restructuring, refinancing, and distressed M&A transactions
 - Debtor and creditor representations
 - 363 sales & plans of reorganization



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PUBLIC MARKETS REVIEW

Q2-2018 YTD INITIAL PUBLIC OFFERINGS

Technology Investment Banking

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks				
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA		
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E	
2018 IPOs												
Avalara, Inc.	AVLR	\$ 53.37	89.9% - 152.5%	\$ 3,958.7	\$ 225.6	na	-19.1%	17.55x	na	na	na	na
Carbon Black, Inc.	CBLK	\$ 26.00	74.3% - 115.2%	2,259.7	174.5	23.8%	-28.5%	12.95x	8.99x	na	na	na
Cardlytics, Inc.	CDLX	\$ 21.76	84.6% - 196.0%	420.7	136.2	36.3%	-12.3%	3.09x	1.73x	na	na	43.4x
Ceridian HCM Holding Inc.	CDAY	\$ 33.19	78.2% - 115.8%	5,945.9	772.6	13.9%	14.9%	7.70x	7.55x	nm	na	33.8x
DocuSign, Inc.	DOCU	\$ 52.95	79.3% - 143.1%	9,165.8	560.8	19.2%	-47.7%	16.34x	11.60x	na	na	nm
Domo, Inc.	DOMO	\$ 27.30	94.6% - 124.1%	1,412.5	116.2	na	-142.7%	12.15x	na	na	na	na
Dropbox, Inc.	DBX	\$ 32.42	74.5% - 116.8%	12,408.8	1,175.2	15.9%	-32.0%	10.56x	7.84x	na	na	36.4x
EverQuote, Inc.	EVER	\$ 18.12	82.0% - 109.0%	514.6	135.2	na	-2.7%	3.81x	na	na	na	na
EVO Payments, Inc.	EVOP	\$ 20.58	87.9% - 108.3%	1,195.6	523.4	9.2%	23.2%	2.28x	1.94x	9.8x	na	7.2x
GreenSky, Inc.	GSKY	\$ 21.15	78.3% - 108.5%	1,763.1	345.9	25.6%	43.8%	5.10x	3.05x	11.6x	na	6.9x
i3 Verticals, Inc.	IIIV	\$ 15.22	78.1% - 110.4%	533.9	277.5	na	7.3%	1.92x	na	26.5x	na	na
Inspire Medical Systems, Inc.	INSP	\$ 35.66	87.0% - 158.5%	885.3	33.3	37.4%	-50.3%	nm	15.87x	na	na	na
nLIGHT, Inc.	LASR	\$ 33.06	77.3% - 149.3%	1,219.4	151.2	20.4%	14.1%	8.07x	5.17x	nm	na	29.4x
Pivotal Software, Inc.	PVTL	\$ 24.27	77.7% - 160.6%	6,028.2	544.0	24.9%	-24.2%	11.08x	7.50x	na	na	na
Pluralsight, Inc.	PS	\$ 24.45	81.9% - 127.0%	2,074.3	179.2	30.0%	-37.1%	11.57x	7.35x	na	na	na
Smartsheet Inc.	SMAR	\$ 25.97	79.2% - 143.8%	2,798.8	125.3	35.9%	-39.8%	nm	12.44x	na	na	na
Zscaler, Inc.	ZS	\$ 35.75	81.3% - 144.4%	3,988.5	170.5	25.2%	-16.9%	nm	14.27x	na	na	nm
Zuora, Inc.	ZUO	\$ 27.20	72.0% - 145.1%	2,736.5	187.3	24.9%	-27.7%	14.61x	9.72x	na	na	na
		<i>Mean</i>	<i>81.0% - 134.9%</i>	<i>\$ 3,295.0</i>	<i>\$ 324.1</i>	<i>24.5%</i>	<i>-21.0%</i>	<i>9.25x</i>	<i>8.22x</i>	<i>16.0x</i>	<i>na</i>	<i>26.2x</i>
		<i>Median</i>	<i>79.2% - 135.1%</i>	<i>\$ 2,167.0</i>	<i>\$ 183.3</i>	<i>24.9%</i>	<i>-21.7%</i>	<i>10.56x</i>	<i>7.69x</i>	<i>11.6x</i>	<i>na</i>	<i>31.6x</i>

Market value equals price per share times number of diluted shares outstanding. Enterprise value equals market value plus debt, preferred stock, and non controlling interests, less cash.

Sources of information: S&P Capital IQ.

Q2-2018 YTD MERGERS AND ACQUISITIONS

Technology Investment Banking

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks			
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums	
Ann.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
2018 Announced M&A Transactions										
21-Jun-18	na	Web.com Group, Inc.	Siris Capital Group, LLC	\$ 1,864.3	\$ 750.9	19.5%	2.48x	12.72x	7.8%	35.5%
11-Jun-18	na	Adaptive Insights, Inc.	Workday, Inc.	1,500.0	114.3	-32.6%	13.12x	na	na	na
4-Jun-18	na	GitHub, Inc.	Microsoft Corporation	7,768.6	300.0	na	25.90x	na	na	na
21-May-18	19-Jun-18	Magento, Inc.	Adobe Systems Incorporated	1,680.0	150.0	na	11.20x	na	na	na
7-May-18	na	athenahealth, Inc.	Elliott Management Corporation	6,833.1	1,264.3	16.8%	5.40x	32.25x	26.9%	15.3%
26-Apr-18	na	Mattersight Corporation	NICE Systems Inc.	112.9	49.3	-7.9%	2.29x	na	25.6%	28.6%
24-Apr-18	31-May-18	PeopleFluent, Inc.	Learning Technologies Group plc	150.0	106.6	12.6%	1.41x	11.19x	na	na
23-Apr-18	2-Jul-18	Viewpoint, Inc.	Trimble Inc.	1,200.0	2,650.0	na	0.45x	na	na	na
12-Apr-18	17-Jul-18	Actian Corporation	HCL Tech; Sumeru	330.0	107.1	35.9%	3.08x	8.57x	na	na
9-Apr-18	na	VeriFone Systems, Inc.	Francisco Partners and other	3,275.7	1,818.6	12.1%	1.80x	14.89x	51.9%	24.7%
28-Mar-18	2-Jul-18	Polycom, Inc.	Plantronics, Inc.	2,122.4	1,142.8	na	1.86x	na	na	na
20-Mar-18	1-May-18	MuleSoft, Inc.	salesforce.com, inc.	6,569.5	296.5	-25.6%	22.16x	na	35.9%	45.7%
7-Mar-18	2-Apr-18	ABILITY Network Inc.	Inovalon Holdings, Inc.	1,200.0	140.0	51.5%	8.57x	16.64x	na	na
6-Mar-18	21-May-18	CommerceHub, Inc.	GTCR and Sycamore Partners	1,044.7	112.8	30.5%	9.26x	30.35x	30.2%	21.8%
26-Feb-18	8-May-18	Intermedix Corporation	R1 RCM Inc.	460.0	193.0	24.9%	2.38x	9.58x	na	na
14-Feb-18	21-Feb-18	Dealer Inspire & Launch Digital Mktg	Cars.com Inc.	205.0	41.0	9.8%	5.00x	51.25x	na	na
12-Feb-18	2-Apr-18	CSRA Inc.	General Dynamics Corporation	9,871.1	5,064.0	16.6%	1.95x	11.73x	33.8%	28.6%
5-Feb-18	na	LiquidHub, Inc.	Capgemini SE	500.0	247.7	na	2.02x	na	na	na
2-Feb-18	2-Feb-18	e-Builder, Inc.	Trimble Inc.	500.0	53.0	na	9.43x	na	na	na
30-Jan-18	5-Apr-18	Callidus Software Inc.	SAP America, Inc.	2,425.9	253.1	-2.2%	9.59x	na	10.1%	25.7%
3-Jan-18	31-Jan-18	Cyberinc	KPMG LLP	34.2	27.1	na	1.27x	na	na	na
<i>Mean</i>				\$ 2,364.2	\$ 708.7	11.6%	6.70x	19.92x	27.8%	28.2%
<i>Median</i>				\$ 1,200.0	\$ 193.0	14.6%	3.08x	13.81x	28.6%	27.1%

Sources of information: S&P Capital IQ.

I Q2 YTD NOTABLE TECHNOLOGY DEALS

II M&A TRANSACTIONS

III PUBLIC MARKETS REVIEW

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks			
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums	
Annnc.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
Application Software										
11-Jun-18	na	Adaptive Insights, Inc.	Workday, Inc.	\$ 1,500.0	\$ 114.3	-32.6%	13.12x	na	na	na
26-Apr-18	na	Mattersight Corporation	NICE Systems Inc.	112.9	49.3	-7.9%	2.29x	na	25.6%	28.6%
24-Apr-18	31-May-18	PeopleFluent, Inc.	Learning Technologies Group plc	150.0	106.6	12.6%	1.41x	11.19x	na	na
30-Jan-18	5-Apr-18	Callidus Software Inc.	SAP America, Inc.	2,425.9	253.1	-2.2%	9.59x	na	10.1%	25.7%
25-Jul-17	3-Aug-17	Intacct Corporation	The Sage Group plc	850.0	88.0	na	9.66x	na	na	na
30-May-17	31-Jul-17	Xactly Corporation	Vista Equity Partners	530.6	96.8	-12.6%	5.48x	na	16.8%	34.9%
26-May-17	25-May-17	iSystems, LLC	Asure Software, Inc.	76.7	12.9	6.2%	5.96x	96.61x	na	na
1-May-17	9-Jun-17	Jive Software, Inc.	Wave Systems Corp.	343.5	203.5	2.4%	1.69x	69.06x	4.0%	22.1%
28-Apr-17	12-Sep-17	Guavus, Inc.	Thales S.A.	215.0	30.0	na	7.17x	na	na	na
31-Jan-17	27-Jan-17	IDV Solutions, LLC	Everbridge, Inc.	27.3	10.2	7.4%	2.67x	36.11x	na	na
14-Nov-16	30-Mar-17	Mentor Graphics Corporation	Siemens Industry, Inc.	4,389.9	1,282.5	20.7%	3.42x	16.54x	21.4%	35.4%
9-Nov-16	19-Dec-16	TubeMogul, Inc.	Adobe Systems Incorporated	544.6	212.0	-9.8%	2.57x	na	82.1%	56.3%
31-Aug-16	1-Dec-16	Interactive Intelligence Group, Inc.	Genesys Telecommunications	1,399.0	426.2	-0.3%	3.28x	na	6.8%	17.1%
28-Jul-16	4-Nov-16	NetSuite Inc.	Oracle Corporation	8,708.6	897.5	-5.4%	9.70x	na	19.0%	57.9%
2-Jun-16	22-Aug-16	Qlik Technologies, Inc.	Thoma Bravo, LLC	2,616.8	665.3	2.0%	3.93x	196.32x	5.3%	-1.6%
1-Jun-16	8-Jul-16	Demandware, Inc.	salesforce.com, inc.	2,837.6	254.1	-13.3%	10.38x	na	56.3%	61.6%
31-May-16	16-Aug-16	Marketo, Inc.	Vista Equity Partners	1,706.5	241.4	-21.0%	7.07x	na	9.5%	60.3%
31-May-16	28-Jul-16	JAGGAER, Inc.	Accel-KKR LLC	375.6	106.3	8.9%	3.53x	39.89x	33.8%	28.4%
23-May-16	19-Aug-16	Xura, Inc. (nka:Mavenir Systems)	Siris Capital; Cohesive Capital	671.9	292.7	0.1%	2.30x	na	19.2%	14.3%
18-May-16	14-Nov-16	inContact, Inc.	NICE Systems Ltd. (nka:NICE Ltd.)	918.0	254.7	3.1%	3.60x	117.77x	60.3%	55.5%
18-Apr-16	29-Nov-16	Cvent, Inc.	Vista Equity Partners	1,468.3	219.5	3.5%	6.69x	190.76x	69.0%	66.1%
22-Mar-16	2-May-16	Serena Software, Inc.	Micro Focus International plc	540.0	162.0	49.4%	3.33x	6.75x	na	na
15-Feb-16	14-Apr-16	Diligent Corporation	Insight Venture Partners LLC	581.9	99.3	16.7%	5.86x	35.16x	30.7%	20.4%
11-Feb-16	9-Mar-16	Yodle, Inc.	Web.com Group, Inc.	417.6	172.4	-1.6%	2.01x	na	na	na
25-Jan-16	30-Apr-16	CD-adapco Group, Inc.	Siemens	970.0	200.0	na	4.85x	na	na	na
5-Nov-15	9-Dec-15	MarketShare Partners LLC	NeuStar, Inc.	450.0	51.2	na	8.79x	na	na	na
2-Nov-15	9-Feb-16	Constant Contact, Inc.	Endurance International	910.4	361.9	12.6%	2.48x	19.63x	27.6%	33.5%
<i>Mean</i>				\$ 1,323.7	\$ 254.2	1.7%	5.29x	69.65x	29.2%	36.3%
<i>Median</i>				\$ 671.9	\$ 200.0	2.0%	3.93x	38.00x	21.4%	33.5%

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks			
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums	
Annnc.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
Vertical Software										
21-May-18	19-Jun-18	Magento, Inc.	Adobe Systems Incorporated	\$ 1,680.0	\$ 150.0	na	11.20x	na	na	na
23-Apr-18	2-Jul-18	Viewpoint, Inc.	Trimble Inc.	1,200.0	2,650.0	na	0.45x	na	na	na
6-Mar-18	21-May-18	CommerceHub, Inc.	GTCR, Sycamore Partners	1,044.7	112.8	30.5%	9.26x	30.35x	30.2%	21.8%
14-Feb-18	21-Feb-18	Dealer Inspire & Launch Digital Mktg	Cars.com Inc.	205.0	41.0	9.8%	5.00x	51.25x	na	na
2-Feb-18	2-Feb-18	e-Builder, Inc.	Trimble Inc.	500.0	53.0	na	9.43x	na	na	na
27-Nov-17	1-Feb-18	Bazaarvoice, Inc.	Marlin Equity Partners	456.0	206.3	0.4%	2.21x	na	14.6%	13.4%
28-Sep-17	17-Nov-17	Exa Corporation	Dassault Systèmes Simulia Corp.	385.9	72.7	2.0%	5.31x	260.93x	43.0%	73.0%
27-Jul-16	30-Sep-16	Epiq Systems, Inc.	DTI	1,023.2	529.8	16.5%	1.93x	11.74x	14.4%	17.3%
2-May-16	14-Jun-16	OPOWER, Inc.	Oracle Corporation	563.4	152.0	-27.6%	3.71x	na	30.4%	53.3%
28-Apr-16	9-Jun-16	Textura Corporation	Oracle Corporation	616.0	92.2	-6.9%	6.68x	na	30.7%	37.8%
1-Oct-15	16-Nov-15	New World Systems Corporation	Tyler Technologies, Inc.	651.0	121.8	24.4%	5.34x	21.88x	na	na
			<i>Mean</i>	\$ 756.8	\$ 380.1	6.1%	5.50x	75.23x	27.2%	36.1%
			<i>Median</i>	\$ 616.0	\$ 121.8	5.9%	5.31x	30.35x	30.3%	29.8%
Healthcare Software										
7-Mar-18	2-Apr-18	ABILITY Network Inc.	Inovalon Holdings, Inc.	\$ 1,200.0	\$ 140.0	51.5%	8.57x	16.64x	na	na
26-Feb-18	8-May-18	Intermedix Corporation	R1 RCM Inc.	460.0	193.0	24.9%	2.38x	9.58x	na	na
9-Aug-16	21-Oct-16	Press Ganey Holdings, Inc.	EQT Partners AB	2,392.6	344.3	30.5%	6.95x	22.80x	0.4%	1.1%
13-Jul-16	16-Sep-16	Imprivata, Inc.	Thoma Bravo	496.9	131.1	-14.1%	3.79x	na	32.8%	37.5%
30-Jun-16	1-Jul-16	HY Holdings, Inc.	Teladoc, Inc.	155.8	10.0	na	15.58x	na	na	na
22-Feb-16	4-Apr-16	Brightree LLC	ResMed Corp.	800.0	113.2	37.3%	7.07x	18.93x	na	na
18-Feb-16	7-Apr-16	Truven Holding Corp.	IBM Watson Health	3,578.6	610.7	16.7%	5.86x	34.99x	na	na
25-Nov-15	8-Jan-16	Healthland, Inc.	Computer Programs and System	260.6	113.7	na	2.29x	na	na	na
30-Oct-15	4-Jan-16	HealthFusion Holdings, Inc.	Quality Systems, Inc.	196.9	25.0	17.7%	6.02x	77.22x	na	na
1-Oct-15	1-Oct-15	20/20 Healthcare LLC	Konica Minolta Medical Imaging	75.0	61.3	na	1.22x	na	na	na
11-Aug-15	6-Aug-15	Tea Leaves Health, LLC	Everyday Health, Inc.	50.1	4.9	na	10.18x	na	na	na
			<i>Mean</i>	\$ 878.8	\$ 158.8	23.5%	6.36x	30.03x	16.6%	19.3%
			<i>Median</i>	\$ 460.0	\$ 113.7	24.9%	6.02x	20.87x	16.6%	19.3%

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

Date		Transaction		Enterprise	Metrics		Valuation Benchmarks			
Ann.	Closed	Target	Acquirer	Value	Target TTM		Implied EV /		Stock Price Premiums	
					Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
Infrastructure Software										
4-Jun-18	na	GitHub, Inc.	Microsoft Corporation	\$ 7,907.8	\$ 300.0	na	26.36x	na	na	na
12-Apr-18	17-Jul-18	Action Corporation	HCL Tech; Sumeru Equity	330.0	107.1	35.9%	3.08x	8.57x	na	na
20-Mar-18	1-May-18	MuleSoft, Inc.	salesforce.com, inc.	6,569.5	296.5	-25.6%	22.16x	na	35.9%	45.7%
17-Oct-17	14-Nov-17	IntraLinks Holdings, Inc.	Siris Capital Group, LLC	1,020.8	295.5	7.5%	3.45x	46.06x	na	na
5-Jun-17	26-Jul-17	Covisint Corporation	Open Text Corporation	69.2	70.2	-14.0%	0.99x	na	22.5%	28.9%
31-Jan-17	31-Jan-17	Double-Take Software, Inc.	Carbonite, Inc.	67.3	84.0	16.5%	1.65x	43.39x	na	na
24-Jan-17	22-Mar-17	AppDynamics LLC	Cisco Systems, Inc.	3,902.9	206.2	-51.1%	18.93x	na	na	na
9-Jan-17	24-Jan-17	Trello, Inc.	Atlassian, Inc.	425.0	na	na	na	na	na	na
6-Dec-16	19-Jan-17	IntraLinks Holdings, Inc.	Synchronoss Technologies, Inc.	831.5	290.4	6.9%	2.81x	37.52x	15.4%	33.5%
12-Sep-16	23-Jan-17	EMC Enterprise Content Division	Open Text Corporation	1,620.0	599.0	na	na	na	na	na
8-Sep-16	10-Nov-16	Apigee Corporation	Google Inc. (nka:Google LLC)	561.8	92.0	-42.9%	6.10x	na	6.5%	20.3%
7-Sep-16	1-Sep-17	HPE, Software	Micro Focus International plc	9,049.3	3,172.0	20.7%	na	11.40x	na	na
26-Jul-16	31-Jan-17	Citrix GoTo Family Of Products	LogMeIn, Inc.	2,896.8	600.0	na	4.83x	na	na	na
20-Jun-16	31-Oct-16	Dell SW, Quest and SonicWALL	Francisco Partners; Elliott Mgt	2,400.0	na	na	na	na	na	na
15-Jan-16	5-Jan-16	Jungle Disk, LLC	Porthcawl Holdings, LLC	27.0	12.0	na	2.25x	na	na	na
21-Oct-15	5-Feb-16	SolarWinds, Inc.	Silver Lake; Thoma Bravo, LLC	4,446.3	485.9	30.9%	9.15x	29.64x	19.7%	44.1%
9-Oct-15	15-Oct-15	Marvasol, Inc.	LogMeIn, Inc.	115.7	11.2	-23.7%	10.30x	na	na	na
5-Oct-15	6-Nov-15	Cleversafe, Inc.	International Business Machines	1,309.0	na	na	na	na	na	na
10-Sep-15	8-Dec-15	Premiere Global Services, Inc.	Siris Capital Group	975.1	566.8	13.0%	1.72x	13.23x	25.9%	27.5%
11-Aug-15	29-Jan-16	Veritas Technologies LLC	The Carlyle Group; GIC Pte. Ltd.	7,000.0	2,600.0	na	2.69x	na	na	na
27-May-15	8-Jul-15	Rally Software Development Corp.	CA, Inc.	471.2	92.5	-30.6%	5.09x	na	42.9%	27.5%
26-May-15	9-Jul-15	Virtustream Inc.	EMC Corporation (nka:Dell EMC)	1,219.0	na	na	na	na	na	na
4-May-15	3-Aug-15	Cyan, Inc.	Ciena Corporation	521.5	117.5	-35.8%	4.44x	na	44.4%	24.0%
7-Apr-15	6-Aug-15	Informatica LLC	Microsoft, Permira, and others	5,290.9	1,066.5	18.2%	4.96x	27.31x	6.4%	14.0%
<i>Mean</i>				\$ 2,459.5	\$ 553.3	-4.9%	7.28x	27.14x	24.4%	29.5%
<i>Median</i>				\$ 1,119.9	\$ 293.0	6.9%	4.63x	28.48x	22.5%	27.5%

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

Date		Transaction		Enterprise	Metrics		Valuation Benchmarks				
Ann.	Closed	Target	Acquirer	Value	Target TTM		Implied EV /		Stock Price Premiums		
					Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month	
Security											
3-Jan-18	31-Jan-18	Cyberinc	KPMG LLP	\$ 34.2	\$ 27.1	na	1.27x	na	na	na	
27-Nov-17	12-Feb-18	Barracuda Networks, Inc.	Thoma Bravo	1,433.9	372.5	8.6%	3.85x	nm	16.3%	17.6%	
7-Nov-17	21-Nov-17	Cloudmark Inc.	Proofpoint, Inc.	110.0	na	na	na	na	na	na	
6-Mar-17	3-Apr-17	Veracode, Inc.	CA, Inc.	614.0	na	na	na	na	na	na	
8-Feb-17	22-Mar-17	Invincea, Inc.	Sophos Group plc	120.0	9.8	na	12.24x	na	na	na	
20-Nov-16	9-Feb-17	LifeLock, Inc.	Symantec Corporation	2,362.1	650.2	7.3%	3.63x	nm	15.7%	38.7%	
19-Sep-16	4-Nov-16	Infoblox Inc.	Vista Equity Partners	1,250.0	358.3	0.5%	3.49x	na	16.1%	31.6%	
13-Jul-16	16-Sep-16	Imprivata, Inc.	Thoma Bravo	496.9	131.1	-14.1%	3.79x	na	32.8%	37.5%	
12-Jun-16	1-Aug-16	Blue Coat, Inc.	Symantec Corporation	4,726.7	598.3	1.5%	7.24x	nm	na	na	
1-Jun-16	30-Jun-16	Ping Identity Corporation	Vista Equity Partners	600.0	na	na	na	na	na	na	
18-Apr-16	15-Aug-16	CSIdentity Corporation	Experian Information Solutions, Inc.	360.0	103.0	20.4%	3.50x	17.14x	na	na	
20-Jan-16	14-Jan-16	iSight Security, Inc.	FireEye, Inc.	271.1	40.0	na	6.78x	na	na	na	
11-Dec-15	11-Dec-15	Cyveillance, Inc.	LookingGlass Cyber Solutions Inc.	35.0	18.0	na	1.94x	na	na	na	
9-Nov-15	closed	Elastica, Inc.	Blue Coat Systems Inc.	280.0	na	na	na	na	na	na	
27-Oct-15	21-Dec-15	Lancope, Inc.	Cisco Systems, Inc.	452.5	na	na	na	na	na	na	
21-Oct-15	9-Mar-16	TippingPoint Technologies, Inc.	Trend Micro Incorporated	300.0	169.0	na	1.78x	na	na	na	
19-Oct-15	17-Mar-16	Vormetric, Inc.	Thales e-Security, Inc.	421.0	53.5	na	7.87x	na	na	na	
8-Sep-15	8-Sep-15	Adallom, Inc.	Microsoft Corporation	320.0	na	na	na	na	na	na	
7-Apr-15	1-Sep-15	TrustWave Holdings, Inc.	Singapore Telecommunications	785.7	216.0	na	3.64x	na	na	na	
10-Mar-15	26-May-15	Blue Coat Systems Inc.	Bain Capital Private Equity, LP	2,400.0	na	na	na	na	na	na	
9-Jul-15	9-Jul-15	Caspida, Inc.	Splunk Inc.	190.0	na	na	na	na	na	na	
2-Mar-15	6-Mar-15	Emerging Threats Pro, Inc.	Proofpoint, Inc.	32.3	na	na	na	na	na	na	
9-Dec-14	2-Jan-15	Tripwire, Inc.	Belden Inc.	710.0	118.5	na	5.99x	na	na	na	
8-Aug-14	7-Jan-15	SafeNet, Inc.	Gemalto N.V.	957.0	na	na	na	na	na	na	
2-Jan-14	30-Dec-13	Mandiant, LLC	FireEye, Inc.	1,016.8	102.0	-5.1%	9.97x	na	na	na	
				Mean	\$ 811.2	\$ 197.8	2.7%	5.13x	17.14x	20.2%	31.4%
				Median	\$ 452.5	\$ 118.5	1.5%	3.79x	17.14x	16.2%	34.6%

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks			
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums	
Annnc.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
Enterprise Systems										
28-Mar-18	2-Jul-18	Polycom, Inc.	Plantronics, Inc.	\$ 2,122.4	\$ 1,142.8	8.3%	1.86x	21.00x	na	na
26-Oct-17	27-Dec-17	Gigamon Inc.	Elliott, Qatar Investment Authority	1,329.1	302.9	1.4%	4.39x	na	6.2%	-7.3%
18-Sep-17	5-Jan-18	Silver Spring Networks, Inc.	Itron, Inc.	830.4	425.7	-8.2%	1.95x	na	25.0%	28.2%
7-Mar-17	13-Apr-17	Nimble Storage, Inc.	Hewlett Packard Enterprise Company	1,065.1	402.6	-33.3%	2.65x	na	45.3%	45.9%
13-Oct-16	13-Oct-16	VXi Corporation	GN Netcom A/S	35.0	32.0	12.5%	1.09x	8.75x	na	na
19-Sep-16	4-Nov-16	Infoblox Inc.	Vista Equity Partners	1,250.0	358.3	0.5%	3.49x	na	16.1%	31.6%
11-Aug-16	1-Nov-16	Silicon Graphics International Corp.	Hewlett Packard Enterprise Company	268.4	532.9	1.0%	0.50x	48.58x	40.9%	47.3%
13-May-16	27-Sep-16	Polycom, Inc.	Siris Capital Group, LLC	1,231.7	1,197.8	11.2%	1.03x	9.19x	11.0%	5.8%
19-Apr-16	29-Nov-16	Lexmark International, Inc.	Legend Capital; PAG Asia; Apex Tech.	3,645.2	3,481.5	9.1%	1.05x	11.46x	18.0%	29.6%
7-Apr-16	3-Jun-16	Alliance Fiber Optic Products Inc.	Corning Incorporated	265.9	72.0	22.3%	3.69x	16.58x	24.0%	45.1%
4-Apr-16	27-May-16	Ruckus Wireless, Inc.	Brocade Communications	1,114.4	391.9	4.5%	2.84x	63.51x	44.3%	47.4%
4-Feb-16	29-Jan-16	Pakedge Device & Software, Inc.	Control4 Corporation	31.8	18.6	3.9%	1.71x	43.95x	na	na
21-Dec-15	2-Feb-16	SolidFire	NetApp, Inc.	870.0	na	na	na	na	na	na
2-Nov-15	5-Oct-16	Hutchinson Technology Inc.	Headway Technologies, Inc.	233.4	234.6	8.1%	0.99x	12.28x	128.6%	135.3%
21-Oct-15	12-May-16	SanDisk LLC	Western Digital Technologies, Inc.	13,510.4	5,598.4	24.4%	2.41x	9.90x	13.5%	61.4%
12-Oct-15	7-Sep-16	EMC Corporation (nka:Dell EMC)	Dell, Inc.	63,296.5	24,586.0	20.4%	2.57x	12.61x	19.0%	34.8%
2-Sep-15	1-Oct-15	iBiquity Digital Corporation	DTS, Inc.	612.4	48.3	17.3%	12.68x	73.08x	na	na
18-Aug-15	6-Oct-15	Dot Hill Systems Corp.	Seagate Technology plc	645.4	243.9	7.7%	2.65x	34.31x	79.2%	51.9%
27-May-15	7-Jul-15	Meru Networks, Inc.	Fortinet, Inc.	34.6	87.7	-16.9%	0.39x	na	18.1%	31.5%
22-Apr-15	4-Jun-15	Procera Networks, Inc.	Francisco Partners Management LLC	133.2	81.4	-6.4%	1.64x	na	21.7%	19.1%
16-Apr-15	17-Apr-15	Motion Computing, Inc.	Xplore Technologies	130.1	78.8	-5.7%	1.65x	na	na	na
24-Mar-15	18-Nov-15	PSI Systems, Inc.	Stamps.com Inc.	215.0	58.5	na	3.67x	na	na	na
2-Mar-15	18-May-15	Aruba	Hewlett-Packard	2,689.8	812.4	9.9%	3.31x	33.29x	-0.6%	48.8%
25-Feb-15	5-May-15	Emulex Corporation	Avago Technologies	553.5	411.0	8.1%	1.35x	16.56x	26.4%	16.1%
<i>Mean</i>				\$ 4,004.7	\$ 1,765.2	4.6%	2.59x	27.67x	31.6%	39.5%
<i>Median</i>				\$ 737.9	\$ 358.3	7.9%	1.95x	16.58x	21.7%	34.8%

Sources of information: S&P Capital IQ.

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks				
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums		
Annc.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month	
Internet Content and Search											
24-Jul-17	14-Sep-17	WebMD Health Corp.	KKR	\$ 2,641.2	\$ 709.0	26.0%	3.73x	14.31x	20.5%	12.3%	
3-Jul-17	8-Nov-17	Baton Holding, LLC	Red Ventures Holdco, LP	1,434.7	477.0	21.2%	3.01x	14.18x	8.9%	31.5%	
1-May-17	29-Sep-17	Angie's List, Inc.	HomeAdvisor, Inc.	580.3	302.3	1.2%	1.92x	161.23x	44.6%	49.1%	
10-Apr-17	22-May-17	RetailMeNot, Inc.	Harland Clarke Holdings Corp.	463.9	295.4	10.4%	1.57x	15.12x	49.7%	38.1%	
21-Oct-16	2-Dec-16	Everyday Health, Inc.	Ziff Davis, LLC	465.3	253.9	12.2%	1.83x	15.03x	11.7%	30.9%	
9-Aug-16	28-Oct-16	Monster Worldwide, Inc.	Randstad North America, LP	371.1	635.0	11.9%	0.61x	6.80x	22.7%	30.3%	
27-Jun-16	8-Aug-16	ReachLocal, Inc.	Gannett Co., Inc.	155.6	361.7	-2.5%	0.45x	na	187.5%	184.0%	
13-Jun-16	8-Dec-16	LinkedIn Corporation	Microsoft Corporation	25,984.4	3,615.0	13.2%	7.19x	54.43x	49.5%	54.3%	
5-May-16	17-Jun-16	NextAdvisor, Inc.	Baton Holding, LLC	106.7	70.3	na	1.52x	7.25x	na	na	
12-Apr-16	12-Apr-16	Cracked Entertainment, Inc.	Scripps Media, Inc.	39.0	10.9	na	3.58x	na	na	na	
2-Nov-15	31-Dec-15	Vetstreet Inc.	Butler Schein Animal Health	48.0	43.0	na	1.12x	na	na	na	
28-Oct-15	29-Jan-16	The Weather Company	International Business Machines	2,284.0	na	na	na	na	na	na	
				<i>Mean</i>	\$ 2,881.2	\$ 615.8	11.7%	2.41x	36.04x	49.4%	53.8%
				<i>Median</i>	\$ 464.6	\$ 302.3	12.1%	1.83x	14.67x	33.7%	34.8%
Internet Retail											
7-Apr-17	5-May-17	eBags, Inc.	Samsonite LLC	\$ 105.0	\$ 158.5	na	0.66x	na	na	na	
5-Jan-17	30-Dec-16	Shoebuy.com, Inc.	Jet.com, Inc.	70.0	na	na	na	na	na	na	
7-Nov-16	17-Feb-17	Blue Nile, Inc.	Bain Capital Private Equity	456.2	471.9	3.5%	0.97x	27.82x	33.9%	15.1%	
8-Aug-16	19-Sep-16	Jet.com, Inc.	Wal-Mart Stores, Inc.	3,300.0	na	na	na	na	na	na	
17-Feb-16	4-Mar-16	Ebuys, Inc.	DSW Shoe Warehouse, Inc.	117.5	na	na	na	na	na	na	
7-Jan-16	1-Feb-16	Gilt Groupe, Inc.	Hudson's Bay Company	250.0	na	na	na	na	na	na	
4-Nov-15	14-Dec-15	HomeAway, Inc.	Expedia, Inc. (nka:Expedia Group, Inc.)	3,057.6	485.3	12.6%	6.30x	49.81x	24.3%	41.8%	
7-Oct-15	31-Oct-15	Ticketfly, Inc.	Pandora Media, Inc.	321.9	65.9	-17.0%	4.88x	na	na	na	
17-Aug-15	30-Sep-15	zulily, Inc.	QVC, Inc.	2,180.0	1,281.4	2.2%	1.70x	77.32x	49.2%	34.6%	
29-May-15	17-Jul-15	Geeknet, Inc.	GameStop Corp.	102.7	137.1	-6.0%	0.75x	na	5.5%	125.5%	
27-May-15	13-Jul-15	Orchard Brands Corporation	Bluestem Brands, Inc.	410.0	1,020.0	6.9%	0.40x	5.80x	na	na	
12-Feb-15	17-Sep-15	Orbitz Worldwide, Inc.	Expedia, Inc. (nka:Expedia Group, Inc.)	1,595.1	933.5	11.5%	1.71x	14.81x	24.7%	30.7%	
				<i>Mean</i>	\$ 997.2	\$ 569.2	2.0%	2.17x	35.11x	27.5%	49.5%
				<i>Median</i>	\$ 366.0	\$ 478.6	3.5%	1.33x	27.82x	24.7%	34.6%

Sources of information: S&P Capital IQ.

PROFESSIONAL SERVICES AND DISTRIBUTION

Technology Investment Banking

Selected Transactions Review

(\$ in millions)

Transaction				Metrics			Valuation Benchmarks			
Date		Target	Acquirer	Enterprise Value	Target TTM		Implied EV /		Stock Price Premiums	
Annnc.	Closed				Revenue	EBITDA %	Revenue	EBITDA	1-Day	1-Month
Consulting										
12-Feb-18	2-Apr-18	CSRA Inc.	General Dynamics Corporation	\$ 9,871.1	\$ 5,064.0	16.6%	1.95x	11.73x	33.8%	28.6%
5-Feb-18	na	LiquidHub, Inc.	Capgemini SE	500.0	247.7	na	2.02x	na	na	na
3-Jul-17	15-Aug-17	NCL, Inc.	H.I.G. Capital	285.1	325.4	9.1%	0.88x	9.61x	-5.2%	2.6%
27-Jan-17	28-Apr-17	Harris Corpo, Gov (nka:Peraton)	Veritas Capital	690.0	1,000.0	na	0.69x	na	na	na
20-Oct-16	23-Nov-16	Appirio Inc.	Wipro Limited	500.0	196.0	na	2.55x	na	na	na
24-May-16	31-Mar-17	HP Services	Computer Sciences Corp (nka:DXC)	6,927.0	17,787.0	13.6%	0.39x	2.86x	na	na
28-Mar-16	2-Nov-16	Dell Services	NTT DATA Italia S.p.A.	3,055.0	2,826.0	na	1.08x	na	na	na
18-Jan-16	25-Feb-16	Magnet 360, LLC	Mindtree Limited	50.0	25.0	na	2.00x	na	na	na
27-Apr-15	1-Jul-15	iGATE Corporation	Capgemini North America, Inc.	4,453.6	1,288.1	19.3%	3.46x	17.90x	4.7%	13.5%
9-Mar-15	1-Apr-15	Acentia, LLC	MAXIMUS Federal Services, Inc.	300.7	193.2	11.4%	1.56x	13.67x	na	na
			<i>Mean</i>	\$ 2,663.2	\$ 2,895.2	14.0%	1.66x	11.16x	11.1%	14.9%
			<i>Median</i>	\$ 595.0	\$ 662.7	13.6%	1.75x	11.73x	4.7%	13.5%
Infrastructure Outsourcing										
7-Nov-16	27-Feb-17	EarthLink Holdings Corp.	Windstream Holdings, Inc.	\$ 1,070.3	\$ 959.9	20.6%	1.12x	5.40x	-4.8%	-5.7%
7-Nov-16	6-Jan-17	Datalink Corporation	Insight Enterprises, Inc.	223.1	756.5	2.5%	0.29x	11.72x	19.3%	5.9%
26-Aug-16	3-Nov-16	Rackspace Hosting, Inc.	Inception Parent, Inc.	4,314.1	2,073.4	28.4%	2.07x	7.25x	6.0%	37.8%
4-May-16	1-Jul-16	United Online, Inc.	B. Riley Financial, Inc.	43.8	145.3	10.4%	0.31x	3.71x	1.9%	-2.7%
19-Feb-15	1-Apr-15	MegaPath Managed Services	Global Telecom & Tech Americas	152.4	124.0	16.1%	1.23x	7.62x	na	na
			<i>Mean</i>	\$ 1,160.7	\$ 811.8	15.6%	1.00x	7.14x	5.6%	8.8%
			<i>Median</i>	\$ 223.1	\$ 756.5	16.1%	1.12x	7.25x	3.9%	1.6%
Distribution										
6-Jun-17	1-Sep-17	Westcon Group, Inc.	SYNNEX Corporation	\$ 830.0	\$ 4,532.1	1.2%	0.18x	15.79x	na	na
19-Sep-16	27-Feb-17	Avnet Technology Solutions	Tech Data Corporation	2,645.0	9,652.5	na	0.27x	na	na	na
17-Feb-16	5-Dec-16	Ingram Micro Inc.	Tianjin Tianhai (nka:HNA Tech)	6,597.2	40,998.3	1.9%	0.16x	8.49x	32.2%	43.3%
18-Aug-15	4-Sep-15	KBZ Communications, Inc.	ScanSource, Inc.	61.5	225.0	na	0.27x	na	na	na
			<i>Mean</i>	\$ 2,533.4	\$ 13,852.0	1.5%	0.22x	12.14x	32.2%	43.3%
			<i>Median</i>	\$ 1,737.5	\$ 7,092.3	1.5%	0.23x	12.14x	32.2%	43.3%

Sources of information: S&P Capital IQ.

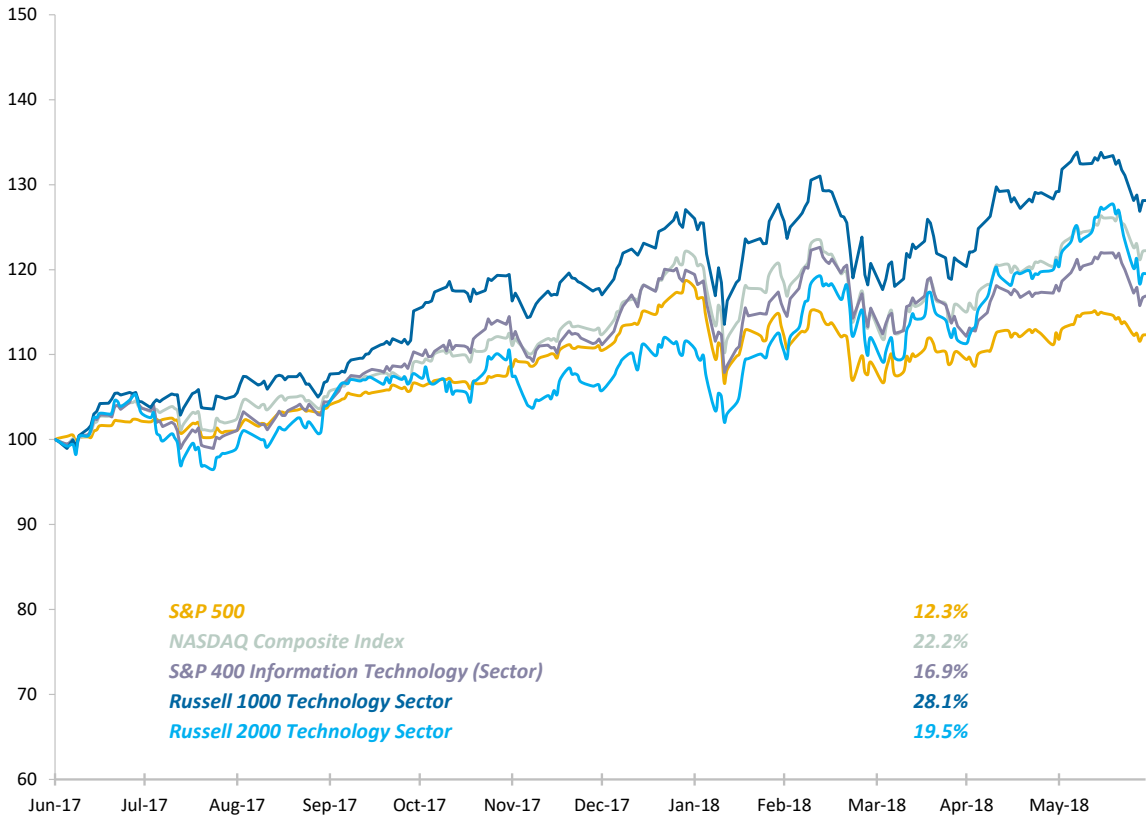
I Q2 YTD NOTABLE TECHNOLOGY DEALS

II M&A TRANSACTIONS

III **PUBLIC MARKETS REVIEW**

June 30, 2017 to June 29, 2018

Relative Performance



Sources of information: S&P Capital IQ.

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Large Diversified											
Adobe Systems Incorporated	ADBE	\$ 243.81	94.2% - 176.3%	\$ 114,934.7	\$ 8,122.0	16.6%	35.9%	14.15x	10.82x	39.5x	23.7x
International Business Machines Corporation	IBM	\$ 139.70	81.6% - 101.6%	161,987.2	80,056.0	0.4%	20.8%	2.02x	2.00x	9.7x	8.2x
Oracle Corporation	ORCL	\$ 43.89	82.1% - 103.1%	172,237.7	39,831.0	2.2%	41.0%	4.32x	4.12x	10.5x	8.8x
		<i>Mean</i>	<i>86.0% - 127.0%</i>	<i>\$ 149,719.9</i>	<i>\$ 42,669.7</i>	<i>6.4%</i>	<i>32.6%</i>	<i>6.83x</i>	<i>5.65x</i>	<i>19.9x</i>	<i>13.6x</i>
		<i>Median</i>	<i>82.1% - 103.1%</i>	<i>\$ 161,987.2</i>	<i>\$ 39,831.0</i>	<i>2.2%</i>	<i>35.9%</i>	<i>4.32x</i>	<i>4.12x</i>	<i>10.5x</i>	<i>8.8x</i>
Application Software											
Avalara, Inc.	AVLR	\$ 53.37	89.9% - 152.5%	\$ 3,958.7	\$ 225.6	<i>na</i>	-19.1%	17.55x	<i>na</i>	<i>na</i>	<i>na</i>
DocuSign, Inc.	DOCU	\$ 52.95	79.3% - 143.1%	9,165.8	560.8	19.2%	-47.7%	16.34x	11.60x	<i>na</i>	<i>nm</i>
Intuit Inc.	INTU	\$ 203.92	94.1% - 156.6%	51,250.4	5,818.0	11.5%	31.1%	8.81x	7.50x	28.3x	20.6x
Manhattan Associates, Inc.	MANH	\$ 47.01	86.7% - 120.2%	3,022.2	581.7	-1.6%	31.6%	5.20x	5.57x	16.5x	23.6x
Smartsheet Inc.	SMAR	\$ 25.97	79.2% - 143.8%	2,798.8	125.3	35.9%	-39.8%	<i>nm</i>	12.44x	<i>na</i>	<i>na</i>
SPS Commerce, Inc.	SPSC	\$ 73.48	93.5% - 163.2%	1,132.2	227.8	9.3%	9.4%	4.97x	4.24x	<i>nm</i>	21.4x
Upland Software, Inc.	UPLD	\$ 34.37	93.2% - 185.6%	880.6	108.8	<i>na</i>	18.6%	8.09x	5.95x	43.6x	16.3x
Workiva Inc.	WK	\$ 24.40	88.4% - 133.0%	1,043.4	215.9	12.7%	-19.6%	4.83x	3.89x	<i>na</i>	<i>na</i>
		<i>Mean</i>	<i>88.0% - 149.7%</i>	<i>\$ 9,156.5</i>	<i>\$ 983.0</i>	<i>14.5%</i>	<i>-4.4%</i>	<i>9.40x</i>	<i>7.31x</i>	<i>29.5x</i>	<i>20.5x</i>
		<i>Median</i>	<i>89.1% - 148.1%</i>	<i>\$ 2,910.5</i>	<i>\$ 226.7</i>	<i>12.1%</i>	<i>-4.8%</i>	<i>8.09x</i>	<i>5.95x</i>	<i>28.3x</i>	<i>21.0x</i>
Human Capital Management											
Benefitfocus, Inc.	BNFT	\$ 33.60	90.9% - 154.5%	\$ 1,141.5	\$ 261.5	13.6%	0.3%	4.37x	3.99x	<i>nm</i>	<i>nm</i>
Cornerstone OnDemand, Inc.	CSOD	\$ 47.43	88.2% - 142.7%	2,763.5	503.5	13.7%	-5.3%	5.49x	4.94x	<i>na</i>	21.6x
Paycom Software, Inc.	PAYC	\$ 98.83	83.4% - 153.2%	5,804.4	467.5	23.2%	19.5%	12.42x	8.62x	<i>nm</i>	21.2x
Paylocity Holding Corporation	PCTY	\$ 58.86	91.7% - 143.0%	3,062.3	357.0	<i>na</i>	8.7%	8.58x	6.11x	<i>nm</i>	25.8x
The Ultimate Software Group, Inc.	ULTI	\$ 257.31	91.1% - 141.7%	7,745.6	989.0	17.9%	9.5%	7.83x	5.93x	<i>nm</i>	23.1x
Workday, Inc.	WDAY	\$ 121.12	86.5% - 128.3%	25,016.7	2,281.8	22.4%	-7.5%	10.96x	7.55x	<i>na</i>	37.1x
		<i>Mean</i>	<i>88.7% - 143.9%</i>	<i>\$ 7,589.0</i>	<i>\$ 810.0</i>	<i>18.2%</i>	<i>4.2%</i>	<i>8.27x</i>	<i>6.19x</i>	<i>na</i>	<i>25.7x</i>
		<i>Median</i>	<i>89.6% - 142.9%</i>	<i>\$ 4,433.3</i>	<i>\$ 485.5</i>	<i>17.9%</i>	<i>4.5%</i>	<i>8.21x</i>	<i>6.02x</i>	<i>na</i>	<i>23.1x</i>

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Sources of information: S&P Capital IQ.

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Sales, Marketing, and Customer Service											
HubSpot, Inc.	HUBS	\$ 125.40	87.7% - 199.0%	\$ 4,812.2	\$ 407.9	23.0%	-8.0%	11.80x	7.86x	na	nm
LivePerson, Inc.	LPSN	\$ 21.10	87.6% - 197.2%	1,268.7	226.2	na	4.4%	5.61x	4.70x	nm	43.1x
salesforce.com, inc.	CRM	\$ 136.40	96.0% - 160.2%	100,057.5	11,089.0	18.6%	9.4%	9.02x	6.35x	nm	28.1x
ServiceSource International, Inc.	SREV	\$ 3.94	88.1% - 151.0%	319.8	241.0	na	-3.1%	1.33x	1.22x	na	11.3x
Shopify Inc.	SHOP	\$ 145.89	83.3% - 172.0%	14,464.2	760.3	33.2%	-4.7%	19.03x	10.35x	na	nm
Yext, Inc.	YEXT	\$ 19.34	97.7% - 182.8%	1,948.7	184.2	28.2%	-34.6%	10.58x	6.54x	na	na
Zendesk, Inc.	ZEN	\$ 54.49	90.4% - 217.2%	5,530.4	466.4	29.6%	-20.2%	11.86x	7.53x	na	nm
		<i>Mean</i>	90.1% - 182.8%	\$ 18,343.1	\$ 1,910.7	26.5%	-8.1%	9.89x	6.36x	na	27.5x
		<i>Median</i>	88.1% - 182.8%	\$ 4,812.2	\$ 407.9	28.2%	-4.7%	10.58x	6.54x	na	28.1x
Business Analytics											
Alteryx, Inc.	AYX	\$ 38.16	92.0% - 204.8%	\$ 2,237.5	\$ 145.9	30.5%	-9.3%	15.34x	9.12x	na	na
Cloudera, Inc.	CLDR	\$ 13.64	60.8% - 108.5%	1,752.3	390.6	19.2%	-53.1%	4.49x	3.33x	na	na
MicroStrategy Incorporated	MSTR	\$ 127.75	65.1% - 104.6%	766.9	505.3	na	11.8%	1.52x	1.47x	12.9x	13.5x
Tableau Software, Inc.	DATA	\$ 97.75	92.4% - 161.8%	7,348.9	923.4	20.5%	-15.9%	7.96x	6.56x	na	nm
Teradata Corporation	TDC	\$ 40.15	90.7% - 141.7%	4,457.5	2,171.0	0.5%	6.2%	2.05x	2.00x	33.3x	10.8x
		<i>Mean</i>	80.2% - 144.3%	\$ 3,312.6	\$ 827.2	17.7%	-12.1%	6.27x	4.50x	23.1x	12.1x
		<i>Median</i>	90.7% - 141.7%	\$ 2,237.5	\$ 505.3	19.8%	-9.3%	4.49x	3.33x	23.1x	12.1x
Design and Engineering											
ANSYS, Inc.	ANSS	\$ 174.18	94.2% - 146.1%	\$ 13,974.1	\$ 1,124.7	9.9%	40.8%	12.42x	10.35x	30.5x	22.7x
Autodesk, Inc.	ADSK	\$ 131.09	91.7% - 132.1%	29,041.3	2,130.8	23.8%	-10.7%	13.63x	9.08x	na	29.9x
Cadence Design Systems, Inc.	CDNS	\$ 43.31	94.2% - 131.8%	12,267.9	1,983.4	5.2%	23.0%	6.19x	5.61x	26.9x	17.0x
PTC Inc.	PTC	\$ 93.81	93.1% - 179.7%	11,172.6	1,212.2	15.9%	10.8%	9.22x	7.80x	nm	27.2x
Synopsys, Inc.	SNPS	\$ 85.57	90.3% - 118.9%	12,857.6	2,938.3	na	18.1%	4.38x	3.91x	24.2x	15.2x
		<i>Mean</i>	92.7% - 141.7%	\$ 15,862.7	\$ 1,877.9	13.7%	16.4%	9.17x	7.35x	27.2x	22.4x
		<i>Median</i>	93.1% - 132.1%	\$ 12,857.6	\$ 1,983.4	12.9%	18.1%	9.22x	7.80x	26.9x	22.7x

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		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E	
Infrastructure												
Appian Corporation	APPN	\$ 36.16	82.9% - 247.7%	\$ 2,231.4	\$ 190.1	18.0%	-19.8%	11.74x	9.29x	na	na	
CA, Inc.	CA	\$ 35.65	95.4% - 117.1%	14,386.2	4,235.0	0.7%	31.2%	3.40x	3.33x	10.9x	8.7x	
Carbonite, Inc.	CARB	\$ 34.90	84.6% - 188.1%	1,146.4	246.4	2.2%	7.5%	4.65x	3.33x	nm	12.2x	
Citrix Systems, Inc.	CTXS	\$ 104.84	95.8% - 143.0%	15,515.8	2,859.2	5.4%	30.0%	5.43x	5.16x	18.1x	16.0x	
Commvault Systems, Inc.	CVLT	\$ 65.85	90.6% - 136.2%	2,604.3	699.4	10.8%	1.5%	3.72x	3.14x	nm	18.4x	
Domo, Inc.	DOMO	\$ 27.30	94.6% - 124.1%	1,412.5	116.2	na	-142.7%	12.15x	na	na	na	
MongoDB, Inc.	MDB	\$ 49.63	83.4% - 201.6%	2,511.1	170.4	30.5%	-61.1%	14.74x	8.51x	na	na	
Progress Software Corporation	PRGS	\$ 38.82	72.4% - 127.2%	1,743.6	403.5	na	36.4%	4.32x	4.29x	11.9x	9.2x	
Pivotal Software, Inc.	PVTL	\$ 24.27	77.7% - 160.6%	6,028.2	544.0	24.9%	-24.2%	11.08x	7.50x	na	na	
Red Hat, Inc.	RHT	\$ 134.37	75.6% - 142.2%	23,158.0	3,057.2	14.1%	19.6%	7.57x	6.12x	38.6x	22.0x	
Splunk Inc.	SPLK	\$ 99.11	81.5% - 177.1%	13,536.9	1,355.7	25.1%	-16.9%	9.99x	6.58x	na	39.9x	
Twilio Inc.	TWLO	\$ 56.02	89.9% - 240.9%	5,301.5	440.8	28.1%	-14.3%	12.03x	7.94x	na	nm	
Varonis Systems, Inc.	VRNS	\$ 74.50	89.7% - 210.2%	2,056.3	231.3	16.8%	-5.9%	8.89x	6.50x	na	nm	
VMware, Inc.	VMW	\$ 146.97	89.1% - 171.5%	51,477.3	8,165.0	7.9%	26.9%	6.30x	5.42x	23.5x	14.8x	
			<i>Mean</i>	85.9% - 170.5%	\$ 10,222.1	\$ 1,622.4	15.4%	-9.4%	8.29x	5.93x	20.6x	17.6x
			<i>Median</i>	86.8% - 166.1%	\$ 3,952.9	\$ 492.4	15.4%	-2.2%	8.23x	6.12x	18.1x	15.4x
Collaboration												
Box, Inc.	BOX	\$ 24.99	83.9% - 144.9%	\$ 3,534.7	\$ 529.4	13.5%	-20.4%	6.68x	4.81x	na	nm	
Dropbox, Inc.	DBX	\$ 32.42	74.5% - 116.8%	12,408.8	1,175.2	15.9%	-32.0%	10.56x	7.84x	na	36.4x	
LogMeIn, Inc.	LOGM	\$ 103.25	76.6% - 103.8%	5,025.7	1,081.5	7.0%	28.4%	4.65x	3.82x	16.3x	10.1x	
RingCentral, Inc.	RNG	\$ 70.35	86.6% - 206.3%	5,339.0	539.6	26.1%	-1.6%	9.89x	6.74x	na	nm	
Workiva Inc.	WK	\$ 24.40	88.4% - 133.0%	1,043.4	215.9	12.7%	-19.6%	4.83x	3.89x	na	na	
			<i>Mean</i>	82.0% - 141.0%	\$ 5,470.3	\$ 708.3	15.0%	-9.0%	7.32x	5.42x	16.3x	23.2x
			<i>Median</i>	83.9% - 133.0%	\$ 5,025.7	\$ 539.6	13.5%	-19.6%	6.68x	4.81x	16.3x	23.2x

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		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Healthcare											
Cerner Corporation	CERN	\$ 59.79	81.0% - 114.9%	19,559.7	5,073.2	7.9%	26.2%	3.86x	3.36x	14.7x	11.0x
Computer Programs and Systems, Inc.	CPSI	\$ 32.90	96.1% - 119.2%	584.7	283.7	8.1%	13.1%	2.06x	1.94x	15.7x	11.4x
HealthStream, Inc.	HSTM	\$ 27.31	93.7% - 129.1%	694.3	250.6	7.3%	11.0%	2.77x	2.91x	25.2x	16.1x
Inovalon Holdings, Inc.	INOV	\$ 9.93	55.8% - 111.5%	1,304.9	433.8	8.9%	12.8%	3.01x	2.03x	23.4x	6.7x
Medidata Solutions, Inc.	MDSO	\$ 80.56	93.8% - 135.2%	4,706.1	567.1	16.8%	15.5%	8.30x	6.19x	nm	23.5x
NantHealth, Inc.	NH	\$ 3.31	62.9% - 127.3%	509.7	89.8	19.7%	-59.0%	5.67x	3.79x	na	43.2x
Quality Systems, Inc.	QSII	\$ 19.50	94.7% - 159.3%	1,254.2	531.0	5.8%	8.4%	2.36x	2.23x	28.2x	14.0x
Veeva Systems Inc.	VEEV	\$ 76.86	90.4% - 147.3%	10,559.2	721.3	16.8%	23.6%	14.64x	10.83x	nm	32.1x
		<i>Mean</i>	<i>83.5% - 130.5%</i>	<i>\$ 4,896.6</i>	<i>\$ 993.8</i>	<i>11.4%</i>	<i>6.4%</i>	<i>5.33x</i>	<i>4.16x</i>	<i>21.5x</i>	<i>19.8x</i>
		<i>Median</i>	<i>92.0% - 128.2%</i>	<i>\$ 1,279.5</i>	<i>\$ 482.4</i>	<i>8.5%</i>	<i>13.0%</i>	<i>3.43x</i>	<i>3.13x</i>	<i>23.4x</i>	<i>15.1x</i>
Other Vertical											
AppFolio, Inc.	APPF	\$ 61.15	89.3% - 196.3%	\$ 2,088.5	\$ 154.0	21.1%	10.7%	13.56x	9.31x	nm	36.6x
Blackbaud, Inc.	BLKB	\$ 102.45	88.3% - 125.5%	5,302.0	807.4	7.1%	17.3%	6.57x	5.51x	37.9x	21.6x
CDK Global, Inc.	CDK	\$ 65.05	85.5% - 107.9%	10,277.6	2,269.4	na	29.8%	4.53x	4.26x	15.2x	10.7x
Ebix, Inc.	EBIX	\$ 76.25	87.1% - 144.4%	2,750.2	393.1	na	33.7%	7.00x	5.95x	20.8x	na
Guidewire Software, Inc.	GWRE	\$ 88.78	92.3% - 130.8%	6,464.8	593.5	na	2.9%	10.89x	7.75x	nm	35.8x
Instructure, Inc.	INST	\$ 42.55	90.6% - 149.3%	1,362.3	172.3	25.7%	-27.0%	7.91x	5.22x	na	na
Q2 Holdings, Inc.	QTWO	\$ 57.05	89.8% - 178.6%	2,409.2	204.3	21.4%	-6.4%	11.80x	8.22x	na	nm
Square, Inc.	SQ	\$ 61.64	88.8% - 272.0%	26,252.1	2,421.3	34.5%	-1.2%	10.84x	13.20x	na	nm
SS&C Technologies Holdings, Inc.	SSNC	\$ 51.90	93.9% - 142.3%	14,707.6	1,689.5	5.1%	37.2%	8.71x	3.52x	23.4x	10.5x
Tyler Technologies, Inc.	TYL	\$ 222.10	92.4% - 134.5%	8,565.5	862.1	9.3%	22.8%	9.94x	8.15x	43.6x	27.0x
Zuora, Inc.	ZUO	\$ 27.20	72.0% - 145.1%	2,736.5	187.3	24.9%	-27.7%	14.61x	9.72x	na	na
		<i>Mean</i>	<i>88.2% - 157.0%</i>	<i>\$ 7,537.8</i>	<i>\$ 886.8</i>	<i>18.6%</i>	<i>8.4%</i>	<i>9.67x</i>	<i>7.35x</i>	<i>28.2x</i>	<i>23.7x</i>
		<i>Median</i>	<i>89.3% - 144.4%</i>	<i>\$ 5,302.0</i>	<i>\$ 593.5</i>	<i>21.3%</i>	<i>10.7%</i>	<i>9.94x</i>	<i>7.75x</i>	<i>23.4x</i>	<i>24.3x</i>

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		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Cyber Security											
Check Point Software Technologies Ltd.	CHKP	\$ 97.68	81.9% - 104.2%	\$ 14,272.0	\$ 1,871.5	4.8%	50.3%	7.63x	7.24x	15.2x	13.4x
Carbon Black, Inc.	CBLK	\$ 26.00	74.3% - 115.2%	2,259.7	174.5	23.8%	-28.5%	12.95x	8.99x	na	na
FireEye, Inc.	FEYE	\$ 15.39	79.5% - 114.9%	2,819.1	765.4	5.5%	-19.4%	3.68x	3.17x	na	22.9x
ForeScout Technologies, Inc.	FSCT	\$ 34.26	90.6% - 158.9%	1,321.4	238.4	20.9%	-35.0%	5.54x	3.99x	na	na
Fortinet, Inc.	FTNT	\$ 62.43	94.1% - 176.2%	9,264.6	1,553.3	10.5%	12.5%	5.96x	4.75x	47.8x	18.8x
Imperva, Inc.	IMPV	\$ 48.25	89.4% - 129.8%	1,303.6	333.7	11.0%	0.4%	3.91x	3.06x	nm	15.2x
MobileIron, Inc.	MOBL	\$ 4.45	67.9% - 139.1%	354.9	178.1	4.2%	-30.6%	1.99x	1.70x	na	nm
Okta, Inc.	OKTA	\$ 50.37	82.6% - 234.1%	5,496.4	291.3	30.1%	-37.3%	18.87x	11.67x	na	na
OneSpan Inc.	OSPN	\$ 19.65	77.2% - 177.8%	618.2	196.8	na	6.4%	3.14x	2.66x	48.7x	20.9x
Palo Alto Networks, Inc.	PANW	\$ 205.47	94.5% - 162.3%	18,237.0	2,124.1	17.7%	-1.0%	8.59x	6.22x	na	23.2x
Proofpoint, Inc.	PFPT	\$ 115.31	88.5% - 139.6%	6,120.8	562.1	26.1%	-5.5%	10.89x	6.80x	na	44.2x
Qualys, Inc.	QLYS	\$ 84.30	86.2% - 213.7%	3,138.1	242.6	12.5%	25.1%	12.94x	9.57x	nm	26.3x
Rapid7, Inc.	RPD	\$ 28.22	83.2% - 191.4%	1,228.6	210.2	21.7%	-21.9%	5.84x	4.39x	na	nm
SailPoint Technologies Holdings, Inc.	SAIL	\$ 24.54	84.8% - 191.4%	2,098.0	200.3	23.9%	7.9%	10.47x	7.50x	nm	nm
SecureWorks Corp.	SCWX	\$ 12.45	93.0% - 159.0%	941.0	480.4	9.5%	-8.2%	1.96x	1.66x	na	nm
Symantec Corporation	SYMC	\$ 20.65	60.4% - 109.5%	15,829.2	4,846.0	2.2%	24.6%	3.27x	3.15x	13.3x	6.8x
Zscaler, Inc.	ZS	\$ 35.75	81.3% - 144.4%	3,988.5	170.5	25.2%	-16.9%	23.39x	14.27x	na	nm
		<i>Mean</i>	<i>82.9% - 156.6%</i>	<i>\$ 5,252.4</i>	<i>\$ 849.4</i>	<i>15.6%</i>	<i>-4.5%</i>	<i>8.30x</i>	<i>5.93x</i>	<i>31.2x</i>	<i>21.3x</i>
		<i>Median</i>	<i>83.2% - 158.9%</i>	<i>\$ 2,819.1</i>	<i>\$ 291.3</i>	<i>15.1%</i>	<i>-5.5%</i>	<i>5.96x</i>	<i>4.75x</i>	<i>31.5x</i>	<i>20.9x</i>

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Large Diversified											
Apple Inc.	AAPL	\$ 185.11	95.3% - 130.0%	\$ 943,741.2	\$ 247,417.0	1.5%	30.9%	3.81x	3.48x	12.4x	11.3x
Hewlett Packard Enterprise Company	HPE	\$ 14.61	75.0% - 114.0%	29,479.7	30,303.0	2.3%	9.6%	0.97x	0.95x	10.2x	5.5x
HP Inc.	HPQ	\$ 22.69	91.7% - 132.7%	37,420.2	55,507.0	1.0%	8.4%	0.67x	0.64x	8.1x	7.7x
International Business Machines Corporation	IBM	\$ 139.70	81.6% - 101.6%	161,987.2	80,056.0	0.4%	20.8%	2.02x	2.00x	9.7x	8.2x
Oracle Corporation	ORCL	\$ 43.89	82.1% - 103.1%	172,237.7	39,831.0	2.2%	41.0%	4.32x	4.12x	10.5x	8.8x
		<i>Mean</i>	85.1% - 116.3%	\$ 268,973.2	\$ 90,622.8	1.5%	22.1%	2.36x	2.24x	10.2x	8.3x
		<i>Median</i>	82.1% - 114.0%	\$ 161,987.2	\$ 55,507.0	1.5%	20.8%	2.02x	2.00x	10.2x	8.2x
Networking											
A10 Networks, Inc.	ATEN	\$ 6.23	73.7% - 110.7%	\$ 323.2	\$ 239.4	na	-2.4%	1.35x	1.25x	na	16.3x
Arista Networks, Inc.	ANET	\$ 257.49	82.6% - 181.6%	18,162.5	1,783.2	18.4%	31.2%	10.19x	7.04x	32.6x	19.9x
Cisco Systems, Inc.	CSCO	\$ 42.70	92.1% - 140.6%	176,254.1	48,619.0	5.9%	29.8%	3.63x	3.42x	12.2x	10.0x
Extreme Networks, Inc.	EXTR	\$ 7.96	51.2% - 104.3%	1,003.5	874.8	na	7.4%	1.15x	0.88x	15.5x	na
F5 Networks, Inc.	FFIV	\$ 172.45	94.1% - 150.4%	9,514.7	2,112.3	3.1%	30.2%	4.50x	4.26x	14.9x	10.5x
Juniper Networks, Inc.	JNPR	\$ 27.42	90.5% - 116.1%	8,780.0	4,888.8	2.8%	21.0%	1.80x	1.79x	8.5x	7.8x
NETGEAR, Inc.	NTGR	\$ 62.50	87.5% - 146.5%	1,623.8	1,428.2	na	7.2%	1.14x	0.95x	15.7x	na
NetScout Systems, Inc.	NTCT	\$ 29.70	80.7% - 128.3%	2,536.4	986.8	na	15.6%	2.57x	2.46x	16.5x	11.3x
		<i>Mean</i>	81.6% - 134.8%	\$ 27,274.8	\$ 7,616.6	7.6%	17.5%	3.29x	2.75x	16.6x	12.6x
		<i>Median</i>	85.1% - 134.5%	\$ 5,658.2	\$ 1,605.7	4.5%	18.3%	2.18x	2.12x	15.5x	10.9x
Storage											
NetApp, Inc.	NTAP	\$ 78.12	98.0% - 208.1%	\$ 17,264.4	\$ 5,911.0	2.1%	18.1%	2.92x	2.69x	16.2x	10.5x
Pure Storage, Inc.	PSTG	\$ 23.88	93.2% - 199.2%	5,367.6	1,096.3	18.5%	-11.6%	4.90x	3.14x	na	26.5x
Quantum Corporation	QTM	\$ 2.20	25.4% - 117.6%	194.4	478.2	na	1.8%	0.41x	na	22.3x	na
		<i>Mean</i>	72.2% - 175.0%	\$ 7,608.8	\$ 2,495.2	10.3%	2.8%	2.74x	2.91x	19.2x	18.5x
		<i>Median</i>	93.2% - 199.2%	\$ 5,367.6	\$ 1,096.3	10.3%	1.8%	2.92x	2.91x	19.2x	18.5x

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Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Internet Retail											
Amazon.com, Inc.	AMZN	\$ 1,699.80	96.4% - 182.4%	\$ 844,312.7	\$ 193,194.0	20.3%	8.9%	4.37x	2.91x	49.0x	21.7x
Blue Apron Holdings, Inc.	APRN	\$ 3.35	34.6% - 194.8%	632.5	833.0	15.7%	-14.8%	0.76x	0.69x	na	na
Booking Holdings Inc.	BKNG	\$ 2,027.09	90.9% - 124.3%	101,101.5	13,189.9	13.0%	38.8%	7.67x	6.10x	19.8x	15.7x
CarGurus, Inc.	CARG	\$ 34.74	85.6% - 134.4%	3,742.0	348.5	18.1%	4.9%	10.74x	7.51x	nm	nm
eBay Inc.	EBAY	\$ 36.26	77.2% - 106.8%	40,491.6	9,844.0	9.4%	30.4%	4.11x	3.40x	13.5x	10.1x
Etsy, Inc.	ETSY	\$ 42.19	92.0% - 310.7%	4,762.8	465.3	19.4%	13.6%	10.24x	6.49x	nm	26.9x
EverQuote, Inc.	EVER	\$ 18.12	82.0% - 109.0%	514.6	135.2	na	-2.7%	3.81x	na	na	na
Expedia Group, Inc.	EXPE	\$ 120.19	74.7% - 122.0%	19,767.1	10,378.8	11.6%	10.4%	1.90x	1.55x	18.3x	9.2x
Groupon, Inc.	GRPN	\$ 4.30	71.8% - 119.4%	1,936.9	2,796.8	2.2%	4.3%	0.69x	0.72x	16.1x	6.3x
GrubHub Inc.	GRUB	\$ 104.91	87.4% - 247.3%	9,438.1	759.5	23.4%	20.5%	12.43x	7.80x	nm	28.1x
Match Group, Inc.	MTCH	\$ 38.74	79.6% - 226.9%	11,932.0	1,439.3	14.3%	30.7%	8.29x	6.18x	27.0x	15.9x
Netflix, Inc.	NFLX	\$ 391.43	92.5% - 271.4%	180,887.6	12,756.9	22.3%	8.7%	14.18x	9.04x	nm	nm
Overstock.com, Inc.	OSTK	\$ 33.65	37.5% - 235.3%	829.0	1,757.7	5.0%	-4.7%	0.47x	0.40x	na	na
Shutterstock, Inc.	SFLY	\$ 90.03	89.7% - 226.5%	3,274.8	1,198.0	5.9%	14.6%	2.73x	1.43x	18.8x	7.7x
Stitch Fix, Inc.	SFIX	\$ 27.44	89.0% - 189.5%	2,466.7	1,166.5	20.0%	3.8%	2.11x	1.55x	nm	nm
TripAdvisor, Inc.	TRIP	\$ 55.71	92.7% - 188.8%	7,014.8	1,562.0	10.6%	10.7%	4.49x	3.95x	42.0x	17.7x
Wayfair Inc.	W	\$ 118.76	99.1% - 214.6%	10,428.6	5,164.3	22.7%	-4.2%	2.02x	1.25x	na	na
		<i>Mean</i>	<i>80.7% - 188.5%</i>	<i>\$ 73,149.0</i>	<i>\$ 15,117.0</i>	<i>14.6%</i>	<i>10.2%</i>	<i>5.35x</i>	<i>3.81x</i>	<i>25.6x</i>	<i>15.9x</i>
		<i>Median</i>	<i>87.4% - 189.5%</i>	<i>\$ 7,014.8</i>	<i>\$ 1,562.0</i>	<i>15.0%</i>	<i>8.9%</i>	<i>4.11x</i>	<i>3.15x</i>	<i>19.3x</i>	<i>15.8x</i>

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Sources of information: S&P Capital IQ.

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Internet Content and Search											
Alphabet Inc.	GOOGL	\$ 1,129.19	94.0% - 123.4%	\$ 681,969.7	\$ 117,251.0	16.6%	31.3%	5.82x	4.26x	18.6x	11.6x
AutoWeb, Inc.	AUTO	\$ 4.52	34.4% - 157.2%	43.8	137.1	na	1.5%	0.32x	0.33x	21.5x	na
Care.com, Inc.	CRCM	\$ 20.88	91.0% - 163.1%	625.3	178.0	11.1%	7.1%	3.51x	2.88x	49.2x	16.5x
CoStar Group, Inc.	CSGP	\$ 412.63	97.7% - 161.6%	14,163.4	1,012.4	19.5%	26.3%	13.99x	10.41x	nm	28.9x
Facebook, Inc.	FB	\$ 194.32	95.5% - 131.5%	519,008.4	44,587.0	22.6%	57.5%	11.64x	7.23x	20.3x	12.1x
Snap Inc.	SNAP	\$ 13.09	61.7% - 124.7%	14,664.3	906.0	41.9%	-170.6%	16.19x	8.65x	na	na
TechTarget, Inc.	TTGT	\$ 28.40	94.1% - 311.7%	785.1	112.3	13.6%	15.9%	6.99x	5.59x	44.1x	20.2x
TripAdvisor, Inc.	TRIP	\$ 55.71	92.7% - 188.8%	7,014.8	1,562.0	10.6%	10.7%	4.49x	3.95x	42.0x	17.7x
Twitter, Inc.	TWTR	\$ 43.67	91.4% - 278.7%	30,162.2	2,559.9	10.1%	18.1%	11.78x	9.13x	nm	23.4x
Yelp Inc.	YELP	\$ 39.18	81.0% - 133.7%	2,566.3	871.7	14.4%	4.5%	2.94x	2.29x	nm	10.8x
Yext, Inc.	YEXT	\$ 19.34	97.7% - 182.8%	1,948.7	184.2	28.2%	-34.6%	10.58x	6.54x	na	na
Zillow Group, Inc.	ZG	\$ 59.75	91.3% - 157.4%	11,815.4	1,130.9	47.7%	6.2%	10.45x	5.83x	nm	31.3x
		<i>Mean</i>	<i>85.2% - 176.2%</i>	<i>\$ 107,064.0</i>	<i>\$ 14,207.7</i>	<i>21.5%</i>	<i>-2.2%</i>	<i>8.23x</i>	<i>5.59x</i>	<i>32.6x</i>	<i>19.2x</i>
		<i>Median</i>	<i>92.0% - 159.5%</i>	<i>\$ 9,415.1</i>	<i>\$ 959.2</i>	<i>16.6%</i>	<i>8.9%</i>	<i>8.72x</i>	<i>5.71x</i>	<i>31.7x</i>	<i>17.7x</i>

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Sources of information: S&P Capital IQ.

PROFESSIONAL SERVICES AND DISTRIBUTION

Technology Investment Banking

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Large Diversified											
International Business Machines Corporation	IBM	\$ 139.70	81.6% - 101.6%	161,987.2	80,056.0	0.4%	20.8%	2.02x	2.00x	9.7x	8.2x
Consulting											
CACI International Inc	CACI	\$ 168.55	96.4% - 142.7%	\$ 5,190.1	\$ 4,435.2	2.9%	9.2%	1.17x	1.09x	12.7x	12.1x
Cognizant Technology Solutions Corporation	CTSH	\$ 78.99	92.8% - 119.6%	42,262.2	15,176.0	7.9%	20.8%	2.78x	2.39x	13.4x	10.7x
DXC Technology Company	DXC	\$ 80.61	74.7% - 106.6%	29,095.7	24,556.0	1.5%	20.4%	1.18x	1.32x	5.8x	5.8x
EPAM Systems, Inc.	EPAM	\$ 124.33	94.4% - 159.5%	6,413.6	1,549.9	20.8%	14.5%	4.14x	2.86x	28.6x	15.8x
ManTech International Corporation	MANT	\$ 53.64	86.2% - 151.7%	2,188.0	1,771.9	7.5%	7.9%	1.23x	1.06x	15.6x	12.7x
Perficient, Inc.	PRFT	\$ 26.37	95.9% - 157.9%	975.0	482.8	6.3%	11.6%	2.02x	1.85x	17.4x	12.6x
Presidio, Inc.	PSDO	\$ 13.10	66.4% - 109.4%	2,101.9	2,821.0	4.8%	7.7%	0.75x	0.69x	9.7x	8.6x
Science Applications International Corporation	SAIC	\$ 80.63	88.8% - 133.9%	4,347.7	4,526.0	5.6%	7.0%	0.96x	0.92x	13.7x	12.3x
Unisys Corporation	UIS	\$ 12.90	92.8% - 187.0%	738.9	2,785.7	-0.9%	8.6%	0.27x	0.27x	3.1x	1.8x
Virtusa Corporation	VRTU	\$ 48.68	89.8% - 171.1%	1,636.7	1,020.7	na	7.2%	1.60x	1.19x	22.1x	12.3x
		<i>Mean</i>	<i>87.8% - 143.9%</i>	<i>\$ 9,495.0</i>	<i>\$ 5,912.5</i>	<i>6.3%</i>	<i>11.5%</i>	<i>1.61x</i>	<i>1.36x</i>	<i>14.2x</i>	<i>10.5x</i>
		<i>Median</i>	<i>91.3% - 147.2%</i>	<i>\$ 3,267.8</i>	<i>\$ 2,803.4</i>	<i>5.6%</i>	<i>8.9%</i>	<i>1.21x</i>	<i>1.14x</i>	<i>13.5x</i>	<i>12.2x</i>
Infrastructure Outsourcing											
Akamai Technologies, Inc.	AKAM	\$ 73.23	88.1% - 164.0%	\$ 12,364.9	\$ 2,571.4	8.7%	25.2%	4.81x	4.19x	19.1x	10.6x
Limelight Networks, Inc.	LLNW	\$ 4.47	73.9% - 156.8%	471.5	191.7	14.2%	11.4%	2.46x	2.12x	21.5x	10.2x
		<i>Mean</i>	<i>81.0% - 160.4%</i>	<i>\$ 6,418.2</i>	<i>\$ 1,381.6</i>	<i>11.5%</i>	<i>18.3%</i>	<i>3.63x</i>	<i>3.15x</i>	<i>20.3x</i>	<i>10.4x</i>
		<i>Median</i>	<i>81.0% - 160.4%</i>	<i>\$ 6,418.2</i>	<i>\$ 1,381.6</i>	<i>11.5%</i>	<i>18.3%</i>	<i>3.63x</i>	<i>3.15x</i>	<i>20.3x</i>	<i>10.4x</i>

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Sources of information: S&P Capital IQ.

PROFESSIONAL SERVICES AND DISTRIBUTION (CONTINUED) Technology Investment Banking

Selected Companies Review

(\$ in millions, except per security)

Company	Ticker	Market Statistics			Metrics			Valuation Benchmarks			
		Closing Price	% of 52-week	Enterprise	Revenue	Rev. Growth	LTM EBITDA	EV / Revenue		EV / EBITDA	
		30-Jun-18	High-Low	Value	LTM	2020 E	Margin	LTM	2019 E	LTM	2019 E
Solution Providers											
CDW Corporation	CDW	\$ 80.79	94.1% - 137.9%	\$ 15,929.0	\$ 15,541.9	5.8%	7.5%	1.02x	0.95x	13.7x	11.9x
ePlus inc.	PLUS	\$ 94.10	94.3% - 139.1%	1,335.3	1,411.0	na	7.2%	0.95x	0.85x	13.1x	11.3x
Insight Enterprises, Inc.	NSIT	\$ 48.93	95.4% - 152.4%	2,123.7	6,989.0	na	3.7%	0.30x	0.29x	8.3x	7.3x
PC Connection, Inc.	CNXN	\$ 33.20	98.1% - 146.5%	815.8	2,866.2	na	3.3%	0.28x	0.28x	8.7x	7.3x
PCM, Inc.	PCMI	\$ 15.15	73.9% - 219.6%	393.5	2,213.5	na	1.4%	0.18x	0.17x	12.8x	6.8x
		<i>Mean</i>	<i>91.2% - 159.1%</i>	<i>\$ 4,119.5</i>	<i>\$ 5,804.3</i>	<i>5.8%</i>	<i>4.6%</i>	<i>0.55x</i>	<i>0.51x</i>	<i>11.3x</i>	<i>8.9x</i>
		<i>Median</i>	<i>94.3% - 146.5%</i>	<i>\$ 1,335.3</i>	<i>\$ 2,866.2</i>	<i>5.8%</i>	<i>3.7%</i>	<i>0.30x</i>	<i>0.29x</i>	<i>12.8x</i>	<i>7.3x</i>
Distribution											
Anixter International Inc.	AXE	\$ 63.30	71.2% - 112.5%	\$ 3,330.4	\$ 7,995.8	na	4.6%	0.42x	0.38x	9.0x	7.2x
Arrow Electronics, Inc.	ARW	\$ 75.28	86.3% - 106.7%	9,684.8	27,951.3	-1.8%	4.4%	0.35x	0.32x	7.8x	7.0x
Avnet, Inc.	AVT	\$ 42.89	95.6% - 120.2%	6,155.6	18,584.1	na	3.8%	0.33x	0.31x	8.8x	7.0x
ScanSource, Inc.	SCSC	\$ 40.30	88.9% - 128.3%	1,279.7	3,769.7	na	3.6%	0.34x	0.32x	9.5x	8.6x
SYNNEX Corporation	SNX	\$ 96.17	67.8% - 102.5%	5,444.1	19,113.5	na	3.7%	0.28x	0.27x	7.6x	7.0x
Tech Data Corporation	TECD	\$ 82.12	73.9% - 109.0%	4,421.0	38,299.7	na	1.6%	0.12x	0.12x	7.0x	5.4x
		<i>Mean</i>	<i>80.6% - 113.2%</i>	<i>\$ 5,052.6</i>	<i>\$ 19,285.7</i>	<i>-1.8%</i>	<i>3.6%</i>	<i>0.31x</i>	<i>0.29x</i>	<i>8.3x</i>	<i>7.0x</i>
		<i>Median</i>	<i>80.1% - 110.8%</i>	<i>\$ 4,932.5</i>	<i>\$ 18,848.8</i>	<i>-1.8%</i>	<i>3.8%</i>	<i>0.34x</i>	<i>0.32x</i>	<i>8.3x</i>	<i>7.0x</i>

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