

VISTA POINT

ADVISORS

Mergers & Acquisitions | Capital Raising | Strategic Advisory

Software Industry Update

Q2 2019

Vista Point Advisors Overview

Vista Point Advisors was founded on the principle that founder-led technology companies in the emerging and middle markets are unique and require specialized attention and advice when considering investment and exit opportunities. Our unique focus on sell-side processes provides our clients with unconflicted advice that assures our interests are completely aligned with the entrepreneur. VPA is focused exclusively on working with founder-owned and operated businesses to deliver the most favorable transactions at premium valuations.



Unconflicted Advice

Vista Point exclusively provides sell-side M&A and Capital Raising advisory services to technology businesses removing the conflict of interest associated with working both sides of the table.



Deep Technology Domain Expertise

Vista Point bankers are industry specialists that focus exclusively on core technology markets allowing us to provide relevant insights into our client's business and create the strategic framework to optimize valuation.



Differentiated Negotiation Framework

The firm utilizes a unique negotiation framework to increase the competitiveness of the transaction process, and ultimately yield higher valuations at better terms for clients.

Our Differentiated Model Yields Differentiated Results

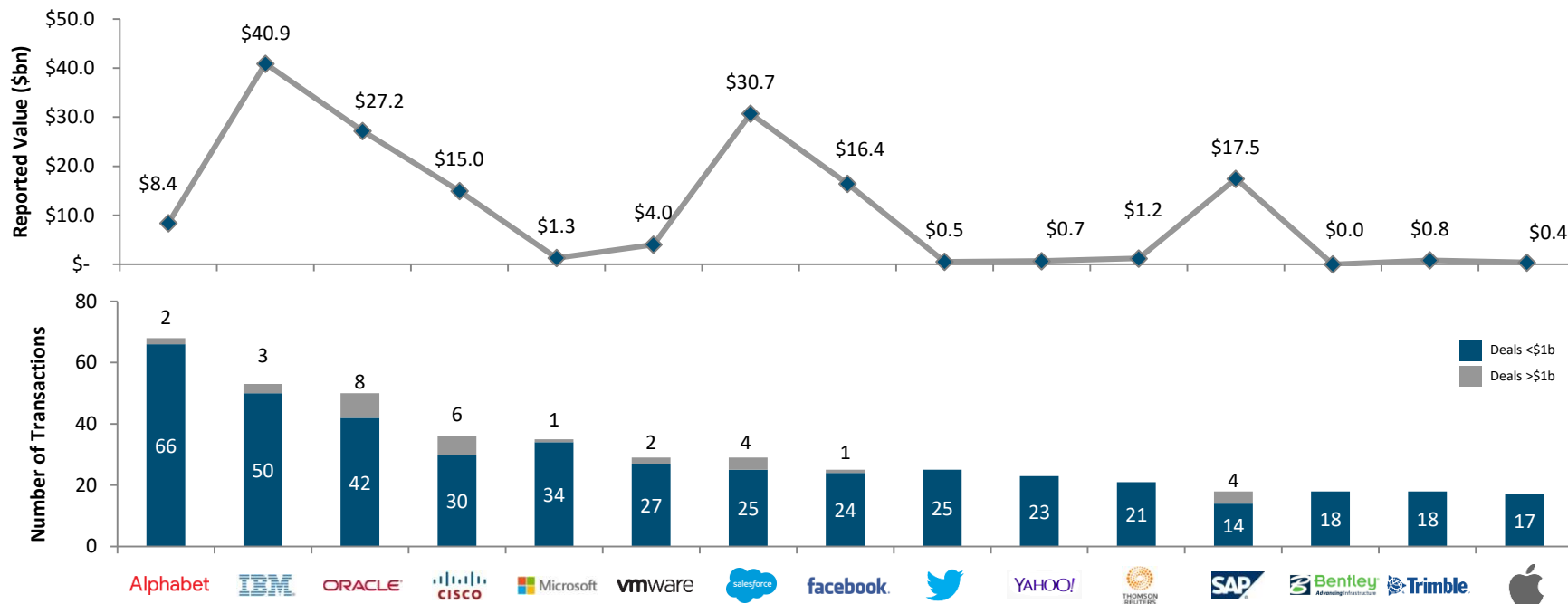
 <i>acquired by</i>  July 2019	Confidential Seller <i>acquired by</i>  a portfolio company of  PROVIDENCEEQUITY May 2019	 Freckle <i>acquired by</i>  a portfolio company of  FRANCISCO PARTNERS May 2019	 <i>acquired by</i>  May 2019	 <i>acquired by</i>  a portfolio company of  May 2019	 <i>acquired by</i>  a portfolio company of  GI PARTNERS January 2019	 <i>acquired by</i>  December 2018
 <i>acquired by</i>  November 2018	 <i>investment from</i>  November 2018	 <i>acquired by</i>  October 2018	 <i>acquired by</i>  July 2018	 <i>investment from</i>  July 2018	 <i>investment from</i>  June 2018	 <i>investment from</i>  May 2018
 <i>acquired by</i>  a portfolio company of  April 2018	 <i>acquired by</i>  March 2018	 <i>investment from</i>  PERELLA WEINBERG PARTNERS January 2018	 <i>investment from</i>  December 2017	 <i>investment from</i>  November 2017	 <i>acquired by</i>  a portfolio company of  September 2017	 <i>acquired by</i>  September 2017
 <i>investment from</i>  September 2017	 <i>investment from</i>  August 2017	 <i>investment from</i>  August 2017	 <i>acquired by</i>  March 2017	 <i>acquired by</i>  a portfolio company of  February 2017	 <i>acquired by</i>  a subsidiary of  January 2017	 <i>acquired by</i>  November 2016

Q2 2019 Software Industry Overview












- There were 361 reported software M&A transactions in Q2 2019 totaling \$45.8B in reported transaction value
 - Software M&A deal volume in Q2 2019 was down 5.0% relative to Q2 2018, which saw 380 transactions
 - Notable deals include:
 - Salesforce's \$14.6B acquisition of Tableau Software, representing 12.3x LTM Revenue
 - Dassault Systèmes' \$5.8B acquisition of Medidata Solutions, representing 8.8x LTM Revenue
 - Evergreen Coast Capital (Elliott Management) and Siris Capital's \$4.4B acquisition of Travelport Worldwide, representing 1.7x LTM Revenue
 - Alphabet's \$2.6B acquisition of Looker, representing 26.0x LTM Revenue
 - Thoma Bravo's \$3.4B acquisition of Ellie Mae, representing 7.1x LTM Revenue
- The Software IPO market saw six major IPO pricings in Q2 2019:
 - Zoom Video Communications (NAS: ZM), the provider of remote conference services, raised \$9.6B on 4/18/19 and has traded up 43.2% through the end of the quarter
 - Slack (NYS: WORK), which offers a team collaboration software platform, raised \$4.6B on 6/20/19 and has traded down 2.9% through the end of the quarter
 - PagerDuty (NYS: PD), the provider of an incident response platform, raised \$1.6B on 4/11/19 and has traded up 23.0% through the end of the quarter
 - Fastly (NYS: FSLY), the provider of cloud computing services, raised \$1.4B on 5/17/19 and has traded down 15.5% through the end of the quarter
 - Tradeweb (NAS: TW), the provider of an over-the-counter financial services marketplace, raised \$1.1B on 4/4/19 and has traded up 22.3% through the end of the quarter
 - CrowdStrike (NAS: CRWD), the cybersecurity company, raised \$612M on 6/12/19 and has traded up 17.7% through the end of the quarter

Active Acquirers and Notable Transactions

Most Active Acquirers (Since 2010)¹



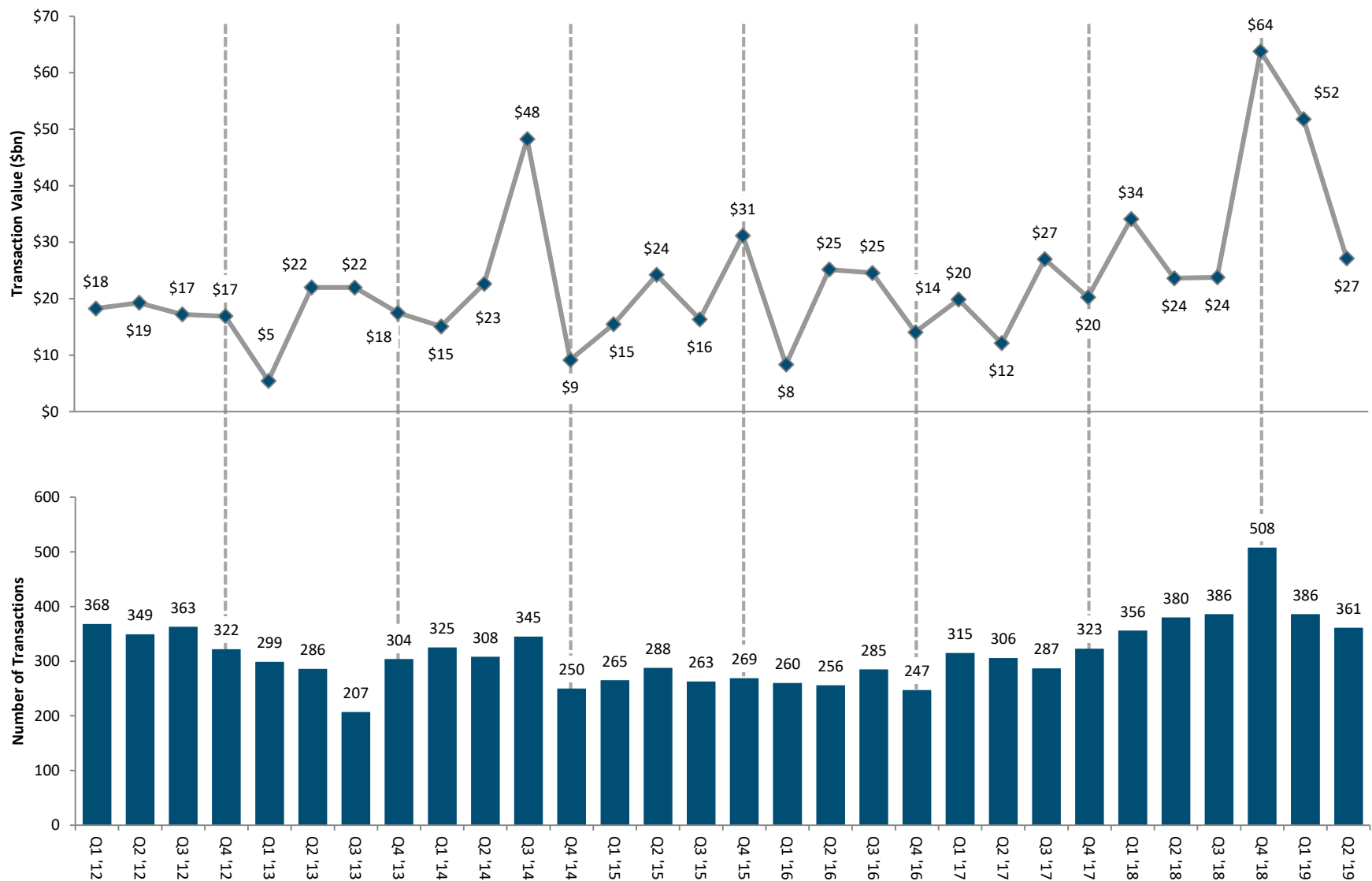
Notable Recent Transactions

Acquirer			 		
Target					
Date	6/10/19	6/12/19	5/30/19	6/6/19	4/17/19
EV	\$14.6B	\$5.8B	\$4.4B	\$2.6B	\$3.4B
EV / LTM Rev	12.3x	8.8x	1.7x	26.0x	7.1x
EV / LTM EBITDA	N/M	N/M	8.7x	N/A	N/A

Source: Capital IQ and Pitchbook as of 6/30/19. ¹Does not include undisclosed transactions.

Software M&A Market Overview

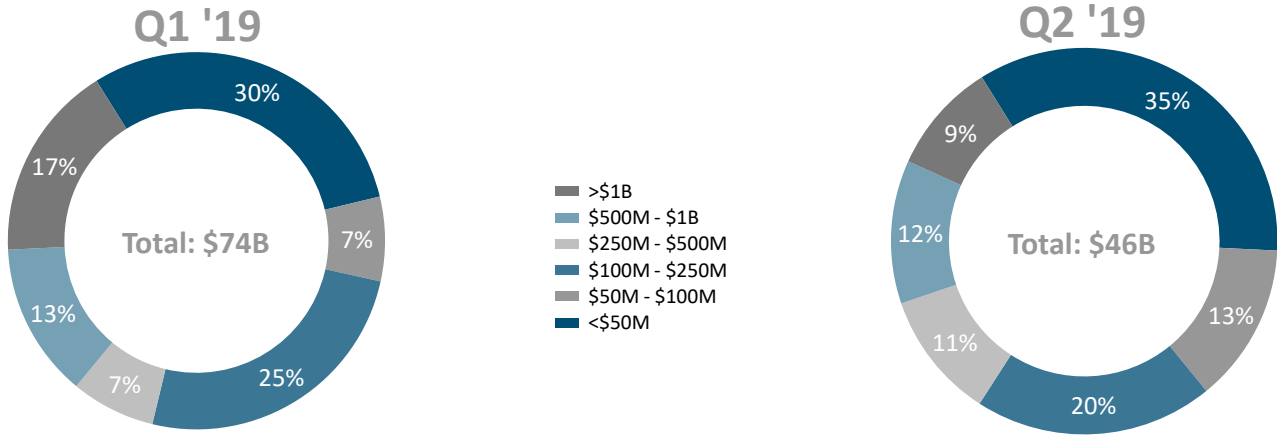
Quarterly Software M&A Value and Deal Count (Since 2012)



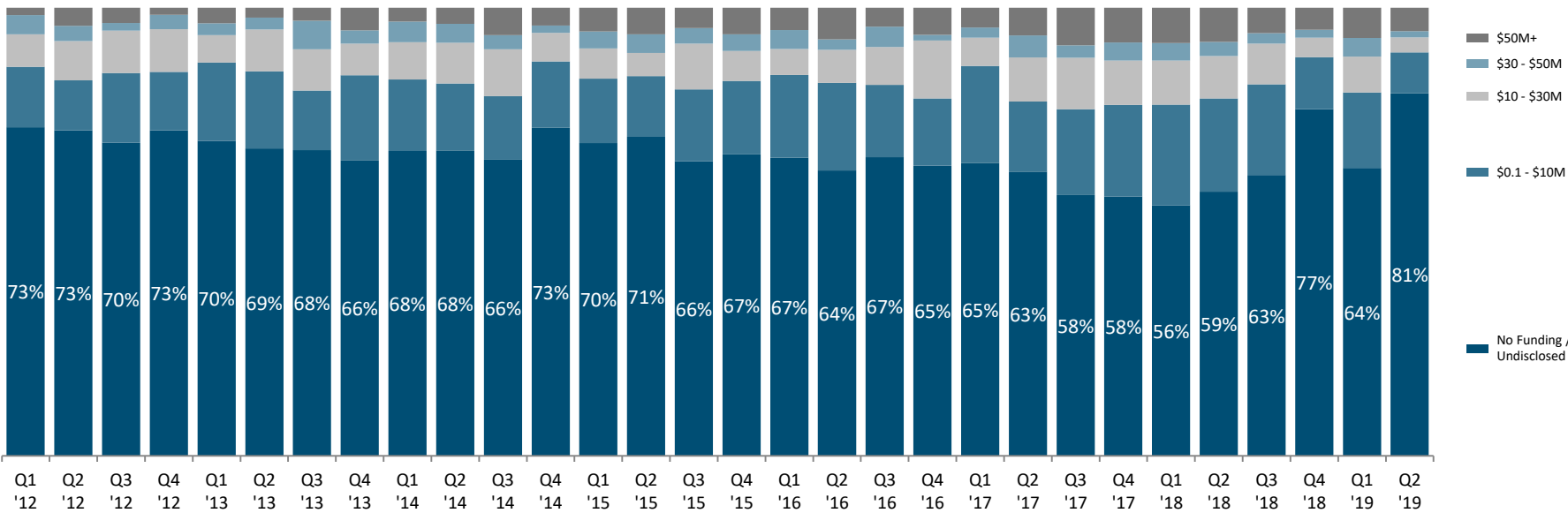
Source: Capital IQ and Pitchbook as of 6/30/19. WhatsApp/Facebook, Broadcom/Avago, EMC/Denali, CA Technologies/Broadcom, Red Hat/IBM, Refinitiv/Blackstone, BMC/KKR, First Data / Fiserv, and Tableau / Salesforce deals omitted from top graph

Software M&A Market Overview

Transactions by Reported Value



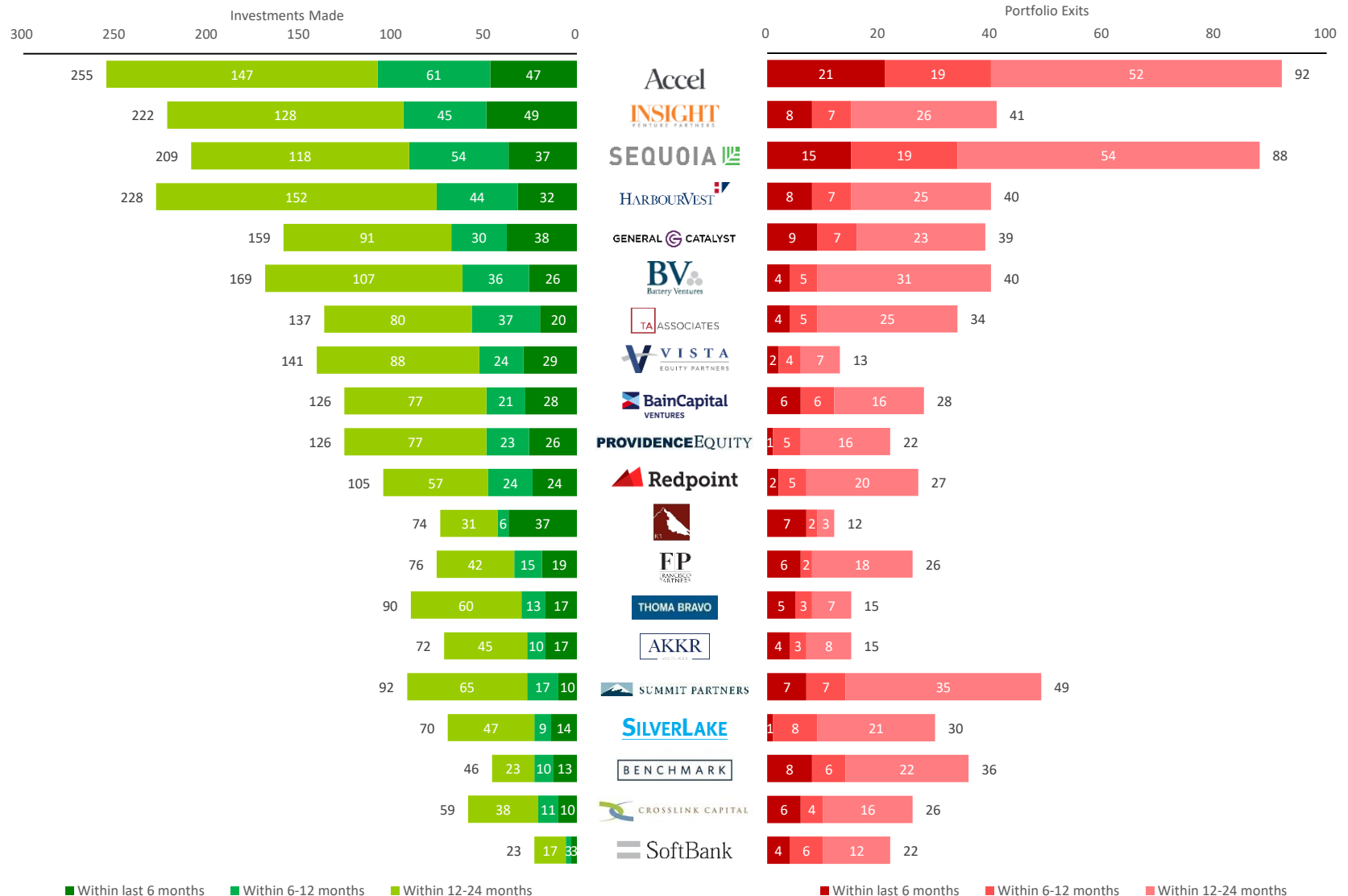
Transactions by Target Funding



Source: Capital IQ and Pitchbook as of 6/30/19

Despite High Valuations, Investments Lead Exits 3:1

Top 20 Most Active Investors Across Software & Internet Over the Last 2 Years



Source: Capital IQ and Pitchbook as of 6/30/19, Investors ranked by investments made in the last 12 months

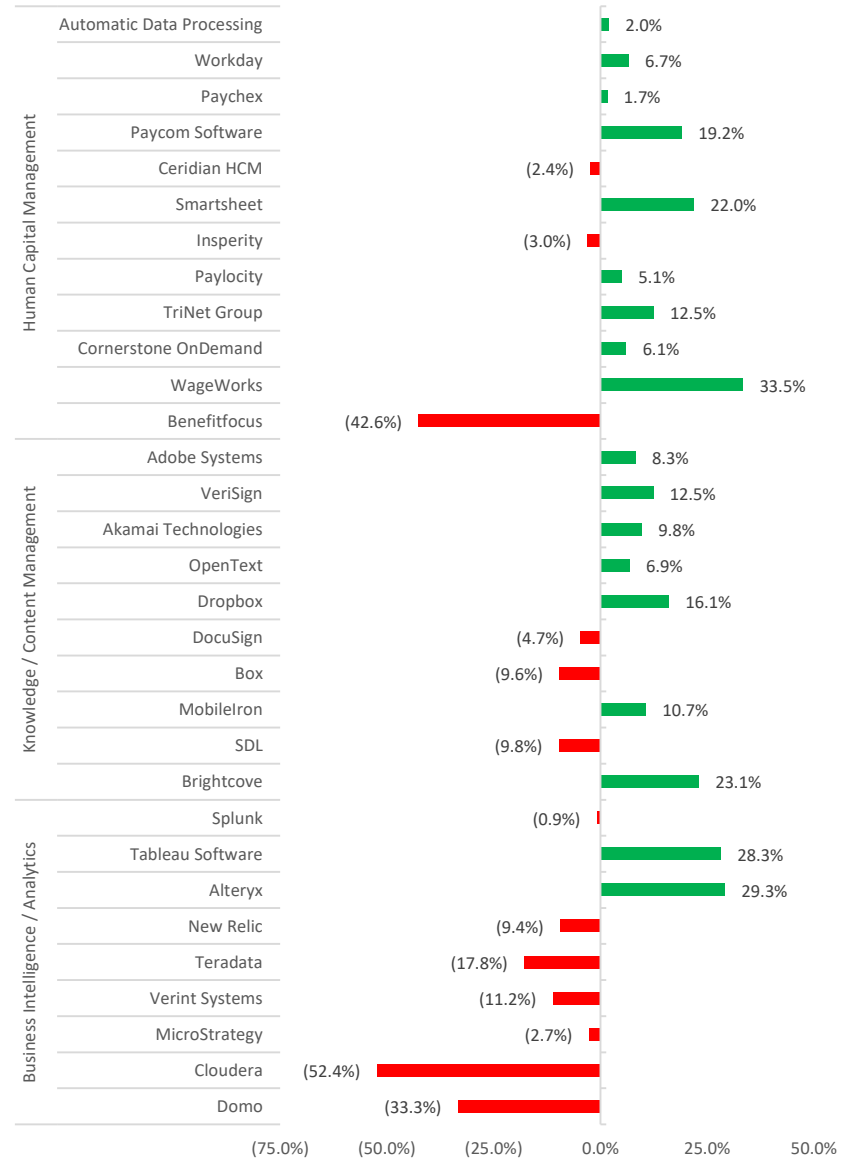
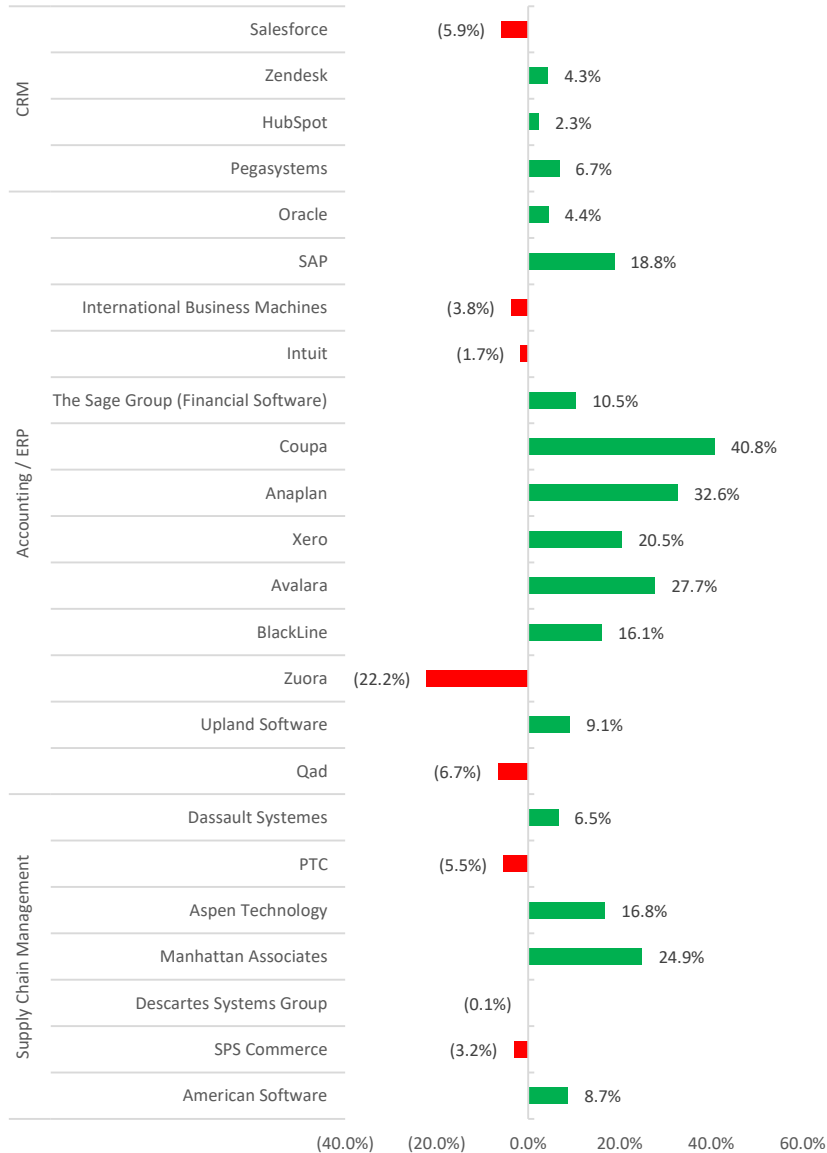
IPO Summary

The IPO market experienced a strong surge in Q2 2019, with 17 major technology pricings on U.S. stock exchanges

Year	IPOs		First Follow-On ("FO") Offering			
	# of IPOs / Capital Raised	File to Price Change	# of FOs	% of FOs	Avg. Days Post Lockup Expiration	IPO to FOs Price Change
2019	<p>■ Software ■ Internet ■ Hardware \$ in billions</p> <p>Capital Raised: \$7.8, \$14.9, \$22.7</p> <p># of IPOs: 11, 8, 19</p>	<p>■ Increase ■ No Change ■ Decrease</p> <p>58%, 37%, 5%</p>	N/A	N/A	N/A	N/A
2018	<p>Capital Raised: \$16.7, \$22.9, \$40.2</p> <p># of IPOs: 30, 14, 6, 50</p>	<p>36%, 54%, 10%</p>	<p>\$0.2, 1</p>	2%	177	100%
2017	<p>Capital Raised: \$1.9, \$3.4, \$5.6</p> <p># of IPOs: 14, 12, 17</p>	<p>41%, 53%, 6%</p>	<p>\$0.1, 1</p>	6%	-35	100%

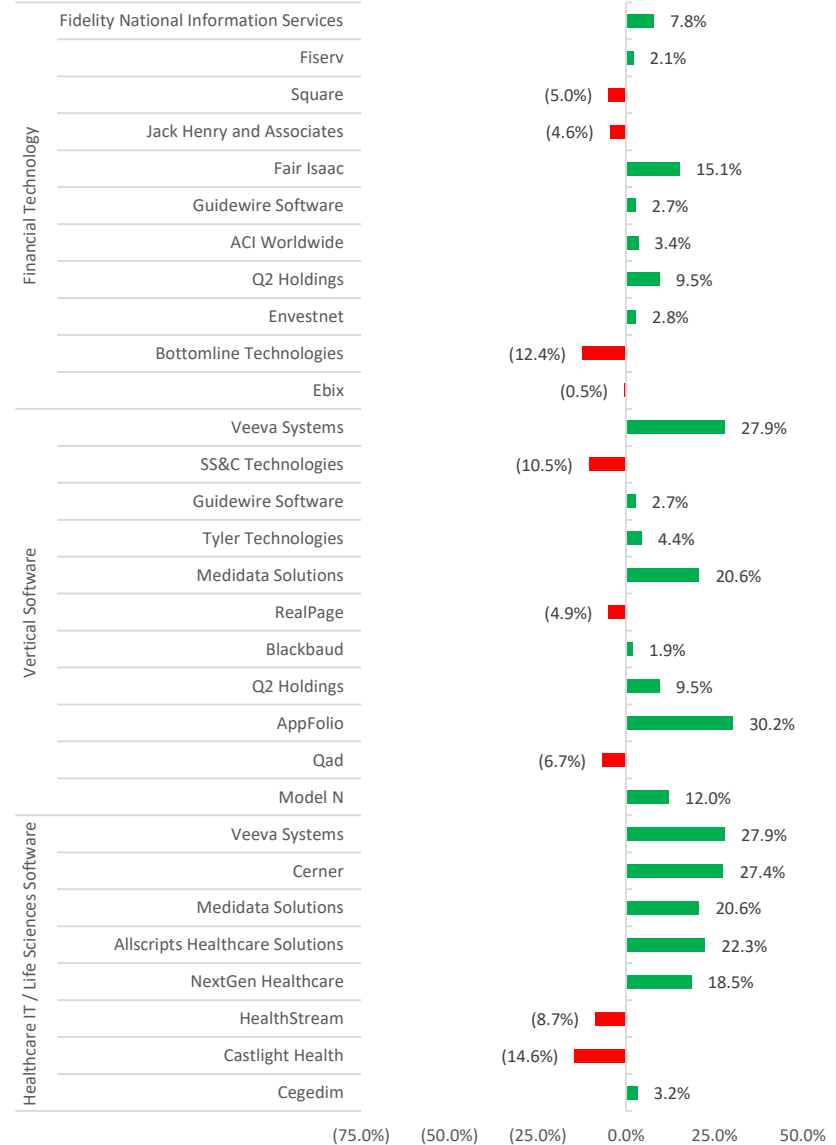
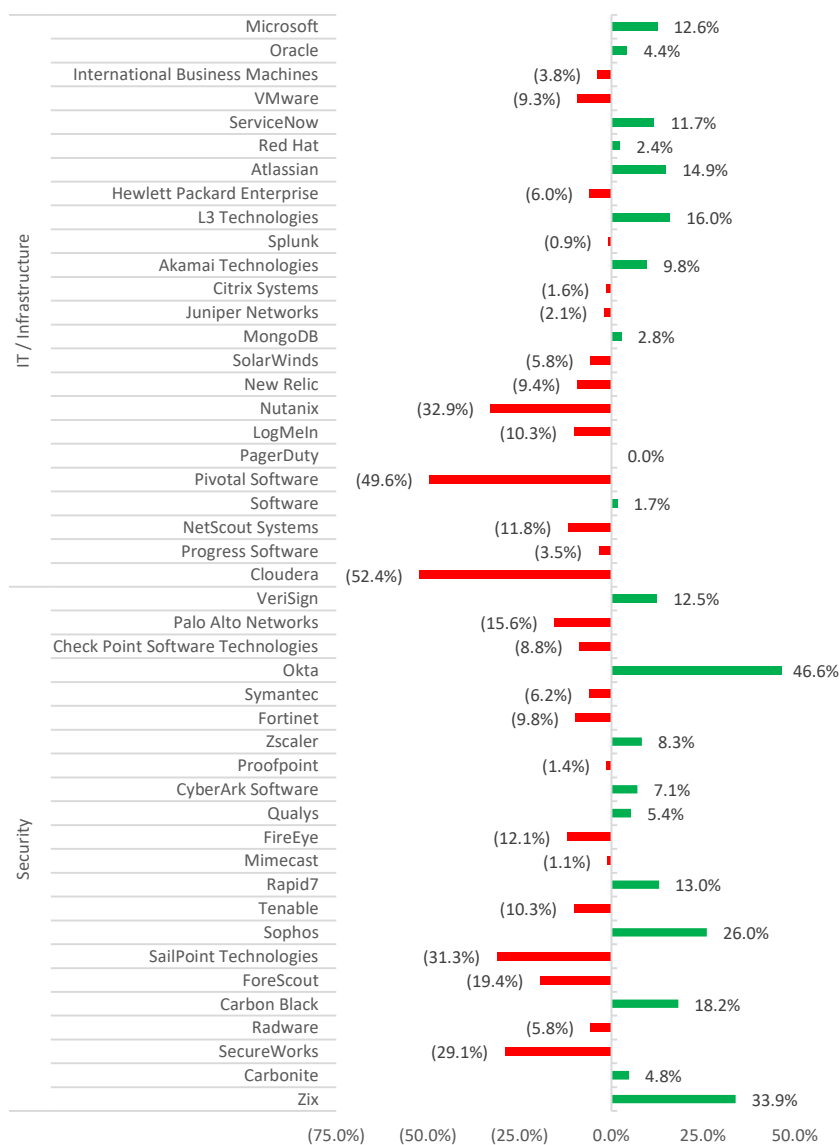
Source: Capital IQ and Pitchbook as of 6/30/19

Software Public Market Performance Last 3 Months



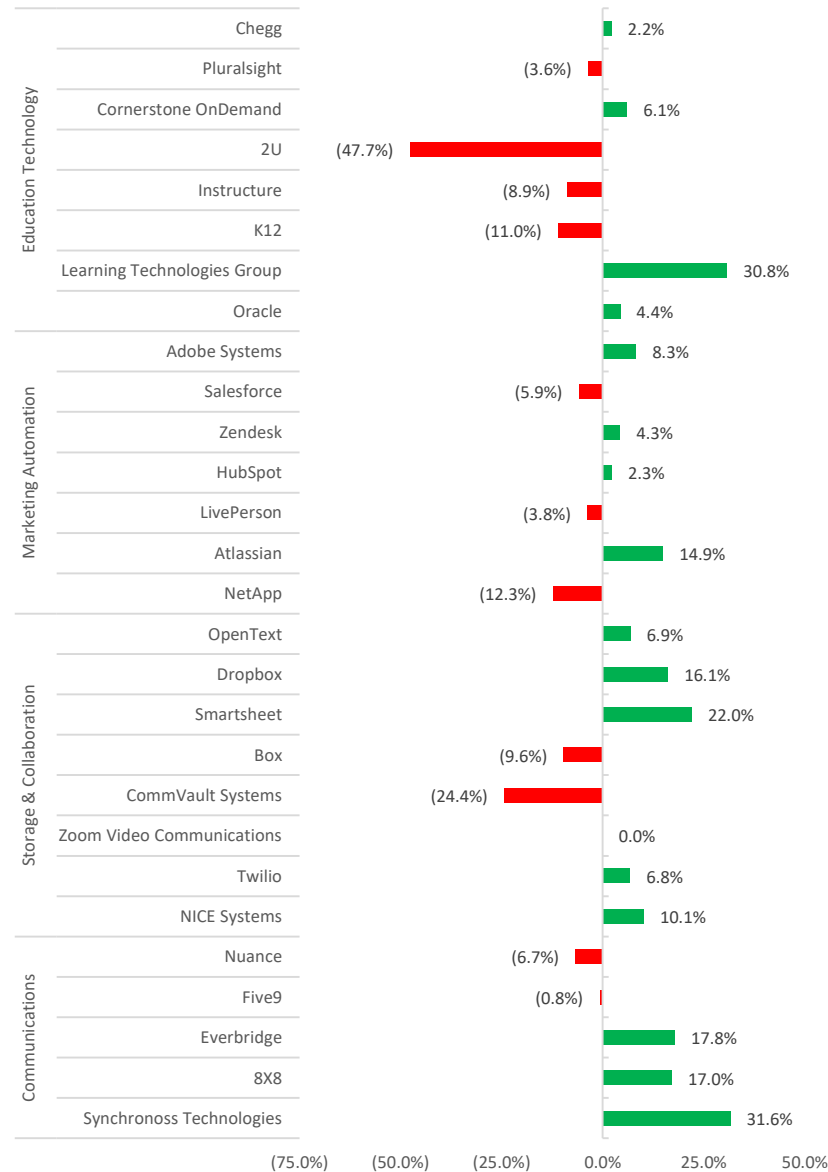
Source: Capital IQ and Pitchbook as of 6/30/19

Software Public Market Performance Last 3 Months (cont.)



Source: Capital IQ and Pitchbook as of 6/30/19

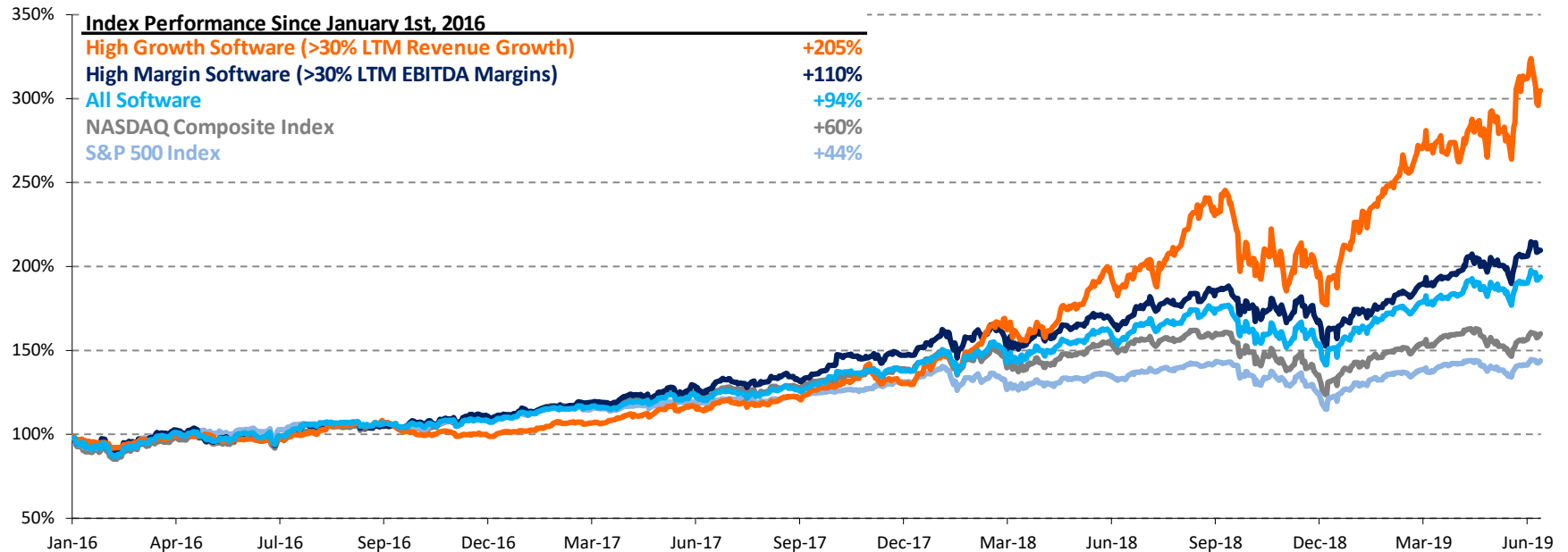
Software Public Market Performance Last 3 Months (cont.)



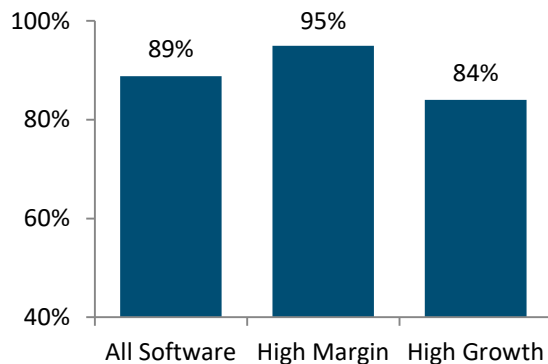
Source: Capital IQ and Pitchbook as of 6/30/19

Software Public Market Performance

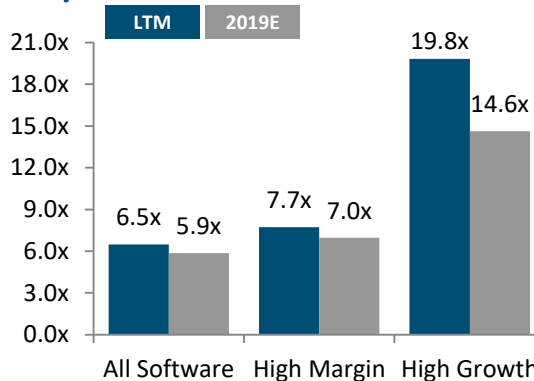
Public Market Performance Since January 1st, 2016



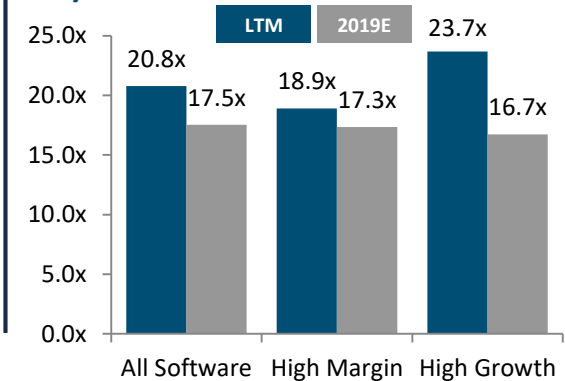
% of 52 Week High



EV / Revenue



EV / EBITDA



High Growth Software: NAS:VRSN, NAS:CHKP, NAS:AZPN, NAS:MSFT, NAS:PAYX, NYS:ORCL, NYSE:SWI, NYS:PAYC, NAS:OTEX, NAS:FISV, NAS:JKHY, NYS:FIS, NAS:ADBE, NYS:VMW, TSE:DSG, NAS:EBIX, NAS:PRGS, NAS:AKAM

All Software: See all bucketed companies

High Margin Software: NAS:SSNC, LON:LTG, NYS:AYX, NAS:ZM, NYS:TWLO, NAS:MDB, NYS:PD, NAS:ZS, NYS:SMAR, NAS:UPLD, NAS:OKTA, NYSE:SQ, NYS:CLDR, NAS:EVBG, NAS:COUP, NAS:TWOU, NAS:TENB, NYS:ZEN

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Summary

	Software															Median	Mean
	CRM	Accounting / ERP	Supply Chain Management	Human Capital Management	Knowledge / Content Management	Business Intelligence / Analytics	IT / Infrastructure	Security	Financial Technology	Vertical Software	Healthcare IT / Life Sciences Software	Education Technology	Marketing Automation	Storage & Collaboration	Communications		
52-Wk High	92%	96%	89%	93%	94%	84%	86%	84%	94%	92%	83%	81%	93%	72%	91%	91%	88%
Aggregate Mkt Cap (\$ in m)	\$140,378	\$586,667	\$70,046	\$194,603	\$215,405	\$56,622	\$1,658,754	\$149,671	\$148,317	\$78,806	\$58,321	\$18,198	\$469,653	\$77,775	\$63,123	\$140,378	\$265,756
Aggregate EV (\$ in m)	\$139,590	\$648,686	\$68,416	\$186,074	\$217,870	\$53,573	\$1,661,726	\$145,509	\$163,277	\$85,700	\$57,078	\$17,186	\$488,592	\$75,917	\$62,943	\$139,590	\$271,476
Quarterly Mkt Cap % Change	(1.8%)	6.6%	7.1%	5.8%	10.0%	2.9%	8.6%	0.3%	3.9%	10.1%	26.0%	(8.3%)	3.6%	6.2%	75.9%	6.2%	10.5%
Quarterly EV % Change	(1.2%)	7.7%	7.5%	5.1%	10.4%	4.0%	8.6%	0.5%	3.7%	9.8%	26.4%	(8.4%)	4.1%	7.8%	68.9%	7.5%	10.3%
LTM EV / Revenue	10.3x	7.4x	8.6x	5.7x	4.6x	4.6x	5.0x	7.5x	6.4x	8.5x	2.7x	6.6x	10.3x	4.5x	8.5x	6.6x	6.8x
FY+1 EV / Revenue	8.7x	5.9x	8.1x	5.4x	4.4x	4.0x	5.0x	6.2x	6.2x	7.6x	2.6x	5.8x	8.7x	4.2x	7.5x	5.9x	6.0x
FY+2 EV / Revenue	7.1x	5.5x	7.2x	4.7x	4.2x	3.3x	4.9x	5.3x	5.8x	6.6x	2.5x	4.8x	7.1x	4.2x	6.6x	5.3x	5.3x
LTM EV / EBITDA	49.5x	17.1x	32.9x	21.1x	16.0x	21.6x	16.6x	27.8x	20.3x	35.8x	15.9x	18.2x	42.9x	10.7x	35.5x	21.1x	25.5x
FY+1 EV / EBITDA	28.5x	16.9x	26.8x	17.3x	26.4x	20.2x	11.4x	24.4x	17.9x	26.4x	13.5x	22.6x	28.5x	13.5x	15.2x	20.2x	20.6x
FY+2 EV / EBITDA	23.2x	16.1x	23.8x	15.6x	22.5x	13.7x	11.8x	19.4x	16.4x	25.1x	14.4x	19.3x	23.2x	13.4x	15.4x	16.4x	18.2x
LTM P / E	NM	31.0x	59.1x	37.5x	35.8x	93.2x	23.9x	60.2x	50.7x	111.6x	52.4x	38.7x	36.8x	24.7x	54.5x	44.7x	50.7x
FY+1 P / E	92.8x	24.8x	46.5x	43.9x	28.5x	70.3x	20.1x	38.0x	31.5x	49.3x	27.4x	45.6x	45.2x	28.8x	26.2x	38.0x	41.3x
FY+2 P / E	112.4x	23.4x	36.4x	34.4x	41.3x	49.6x	18.1x	32.6x	26.5x	49.0x	33.0x	35.3x	45.2x	33.5x	23.9x	34.4x	39.6x
LTM Revenue Growth	30%	28%	10%	10%	13%	30%	13%	26%	11%	25%	10%	27%	25%	19%	24%	24%	20%
FY+1 Revenue Growth	25%	16%	8%	16%	10%	22%	12%	19%	10%	16%	5%	24%	23%	13%	19%	16%	16%
FY+2 Revenue Growth	22%	10%	9%	13%	10%	19%	10%	18%	12%	11%	7%	18%	20%	12%	18%	12%	14%
LTM EBITDA Margin	(3%)	8%	25%	12%	9%	1%	16%	8%	21%	15%	15%	7%	6%	2%	(4%)	8%	9%
FY+1 EBITDA Margin	11%	21%	27%	24%	17%	13%	23%	17%	28%	20%	18%	13%	19%	23%	9%	19%	19%
FY+2 EBITDA Margin	12%	23%	30%	26%	25%	16%	24%	19%	29%	20%	18%	14%	20%	25%	8%	20%	21%

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
06/30/19	ReachForce	Leadspace	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/28/19	Verifi	Visa	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/27/19	Bombshell Technologies	Grow capital	SaaS	Development	N/A	N/A	N/A	N/A	N/A
06/27/19	GammaNow	Animoca Brands	SaaS	Content and Services	\$3	N/A	N/A	N/A	N/A
06/27/19	Karen HR	Alexander Mann Solutions, OMERS Private Equity	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/27/19	LifeWhere	Resideo Technologies	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
06/27/19	Units of Sound	Nisai Group	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/26/19	Aerohive Networks	Extreme Networks	SaaS	Systems / Network	\$210	N/A	N/A	N/A	N/A
06/26/19	Drive.ai	Apple	On Premise	Business Intelligence	\$77	N/A	N/A	N/A	N/A
06/26/19	EnterpriseDB	Great Hill Partners	SaaS	Content / Document Management	N/A	N/A	N/A	N/A	N/A
06/26/19	Ushr	Dynamic Map Platform	On Premise	Mapping / Tracking	\$200	N/A	N/A	N/A	N/A
06/25/19	AppBuddy	Providence Equity, Silversmith Capital, Validity Software	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/25/19	FastBridge Learning	Illuminate Education, Insight Partners, LLR Partners	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/25/19	RevX	Affle	On Premise	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
06/25/19	Waltz	The We Company	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/24/19	Cypress Private Security	Allied Universal, Caisse de dépôt et placement du Québec	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
06/24/19	Eazy Collect Services	Hg, TA Associates Management, The Access Group	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/24/19	EveryAction's Digital Tools	Ares Capital, Insight Partners, NGP VAN	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/24/19	Flywheel	Silver Lake Management, WP Engine	SaaS	Content / Document Management	N/A	N/A	N/A	N/A	N/A
06/24/19	Seed (Banking)	Battery Ventures, Cross River Bank, KKR, LionTree Partners	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/24/19	shopKick	Boyu, DC Thomson, Investec, Trax, Vulpes, Warburg Pincus	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/24/19	Sporting Group	FDJ Gaming Solutions	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
06/24/19	Xpansiv Data Systems	CBL Markets	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/21/19	Capital Confirmation	Thomson Reuters	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/21/19	Insurity	GI Partners	SaaS	Real Estate	N/A	N/A	N/A	N/A	N/A
06/20/19	BSave	Celsius	On Premise	Blockchain	N/A	N/A	N/A	N/A	N/A
06/20/19	intelligentgolf	Aquiline Capital Partners, ClearCourse Partnership	On Premise	CRM	N/A	N/A	N/A	N/A	N/A
06/20/19	RapidILL	Ex Libris Group	SaaS	Hosting / Data Center	N/A	N/A	N/A	N/A	N/A
06/20/19	Root Robotics	iRobot	On Premise	Human Capital	N/A	N/A	N/A	N/A	N/A
06/19/19	Acumatica	EQT, Industrial & Financial Systems	SaaS	Accounting / ERP	N/A	N/A	N/A	N/A	N/A
06/19/19	Archeio Technologies	Quorum Software, Thoma Bravo	On Premise	Hosting / Data Center	N/A	N/A	N/A	N/A	N/A
06/19/19	Capsenta	data.world	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/19/19	Dude Solutions	Clearlake Capital Group	SaaS	Business Software	\$500	\$100	N/A	5.0x	N/A
06/19/19	Phoebus Software	NorthEdge Capital	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/19/19	Practice Insight	eSolutions, Francisco Partners, WestView Capital Partners	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/19/19	Safeguard Software	Smoothwall, Tenzing Private Equity	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
06/19/19	Thoughtonomy	Blue Prism	SaaS	Business Software	\$136	\$13	(\$5)	10.6x	N/M
06/18/19	Antimatter Games	Toadman Interactive	On Premise	Content and Services	N/M	N/A	N/A	N/A	N/A
06/18/19	Jibe	iCIMS, Susquehanna Growth Equity, Vista Equity Partners	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
06/18/19	Sensible Object	Niantic	On Premise	Content and Services	N/A	N/A	N/A	N/A	N/M
06/17/19	FirstFuel Software	Tendril Networks	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
06/17/19	Pull Panda	GitHub	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
06/16/19	ArisGlobal	Nordic Capital	SaaS	Vertical Software	\$800	\$100	N/A	8.0x	N/A
06/15/19	Altcoin.io	BNkToTheFuture	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/14/19	PhotoLynx	ImageQuix	On Premise	CAD / CAM	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
06/14/19	SCISYS	CGI Group	On Premise	Business Software	\$134	\$78	\$7	1.7x	19.8x
06/14/19	SoNET Systems	RM	SaaS	Business Software	\$12	N/A	N/A	N/A	N/A
06/13/19	BuildBox	AppOnboard	On Premise	CAD / CAM	N/A	N/A	N/A	N/A	N/A
06/13/19	Lattice Engines	CC Capital, Cohesive Capital Partners, Dun & Bradstreet	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/13/19	Quadriga Worldwide	Mimir Invest	On Premise	CRM	N/A	N/A	N/A	N/A	N/A
06/13/19	The Center for Legal Studies	BarBri Group, Leeds Equity Partners	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/12/19	DecisionInsite	Boathouse Capital, Hoonuit, Renovus Capital Partners	On Premise	Mapping / Tracking	N/A	N/A	N/A	N/A	N/A
06/12/19	Hipercept	RealPage	On Premise	Hosting / Data Center	N/A	N/A	N/A	N/A	N/A
06/12/19	Houseparty	Epic Games	On Premise	Knowledge / Content (Social)	N/A	N/A	N/A	N/A	N/A
06/12/19	i2i Infinity	SGS	On Premise	Governance, Risk, & Compliance	N/A	N/A	N/A	N/A	N/A
06/12/19	Infinite Esports & Entertainment	Immortals Gaming Club	SaaS	Content and Services	\$100	N/A	N/A	N/A	N/A
06/12/19	Medidata Solutions	Dassault Systemes	SaaS	Business Intelligence	\$5,800	\$660	\$91	8.8x	N/M
06/12/19	Simplifile	Intercontinental Exchange	SaaS	Content / Document Management	\$335	N/A	N/A	N/A	N/A
06/12/19	TapHeaven	Target Circle	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
06/11/19	Jordan Lawrence	Exterro, Leeds Equity Partners	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
06/11/19	RouteOptix	Banneker Partners, L Capital, Routeware	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/11/19	Wave Financial	H&R Block	SaaS	Fintech	\$405	N/A	N/A	N/A	N/A
06/10/19	DoubleDutch	Cvent, Vista Equity Partners	On Premise	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
06/10/19	PraxSoft	DTN	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/10/19	RateFactory	Aurora Capital, Hancock Capital, The Cambria Group	SaaS	Content and Services	N/A	N/A	N/A	N/A	N/A
06/10/19	Redland Solutions	Ideagen	On Premise	Governance, Risk, & Compliance	\$23	\$5	N/A	5.0x	N/A
06/10/19	Tableau Software	Salesforce	SaaS	Business Intelligence	\$14,645	\$1,192	(\$70)	12.3x	N/M
06/09/19	Double Fine Productions	Microsoft	On Premise	Development	N/A	N/A	N/A	N/A	N/A
06/07/19	BankSight	Bottomline Technologies	On Premise	CRM	\$5	N/A	N/A	N/A	N/A
06/07/19	E.M.A Computer Solutions	ARMS Business Solutions	On Premise	CRM	N/A	N/A	N/A	N/A	N/A
06/07/19	nCipher Security	Aqton, Entrust Datacard	SaaS	Security / Storage	N/A	\$118	N/A	N/A	N/A
06/06/19	Chronically Simple	Innomar Strategies	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/06/19	DonorTrends	Ares Capital, EveryAction, Insight Partners	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/06/19	Intelix Technologies	Industrial Scientific	SaaS	Governance, Risk, & Compliance	\$570	N/A	N/A	N/A	N/A
06/06/19	Looker	Alphabet	SaaS	Business Intelligence	\$2,600	\$100	N/A	26.0x	N/A
06/06/19	MBMS	American Mortgage Consultants, Stone Point Capital	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
06/06/19	Rabbit Office Automation	Xerox	On Premise	Content / Document Management	N/A	N/A	N/A	N/A	N/A
06/06/19	Syndeste	National General Insurance	SaaS	Mapping / Tracking	N/A	N/A	N/A	N/A	N/A
06/06/19	Vitech Systems Group	CVC Capital Partners	On Premise	Business Software	N/A	N/A	\$50	N/A	N/A
06/05/19	Endgame	Elasticsearch	SaaS	Security / Storage	\$234	N/A	N/A	N/A	N/A
06/05/19	HT2 Labs	Cardinal Capital Group, Learning Pool, The Carlyle Group	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
06/05/19	International TechneGroup	Wipro	On Premise	CAD / CAM	\$45	\$23	N/A	1.9x	N/A
06/05/19	Mindseye Solutions	Gallant Capital, Reveal Data	On Premise	Business Intelligence	N/A	N/A	N/A	N/A	N/A
06/05/19	Prattlie Analytics	Liquidnet Holdings	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
06/05/19	RxNet	Ares, Cohesive Capital Partners, Constitution Capital	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
06/04/19	BetterDrive	Avinew	SaaS	Mapping / Tracking	N/A	N/A	N/A	N/A	N/A
06/04/19	Decisions Express	Silverbear	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
06/04/19	Distil Networks	Imperva, Thoma Bravo	SaaS	Security / Storage	N/A	\$20	N/A	N/A	N/A
06/04/19	eServGlobal	Seamless Distribution Systems	On Premise	Fintech	\$3	\$8	(\$11)	0.3x	N/M
06/04/19	Perillon	Lisam Systems	On Premise	Governance, Risk, & Compliance	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
06/04/19	RISC Networks	American Capital, Flexera Software, OTPP	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
06/04/19	SafePlans	ALICE Training Institute	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
06/04/19	Zoomdata	Logi Analytics, Marlin Equity Partners	On Premise	Business Intelligence	N/A	N/A	N/A	N/A	N/A
06/03/19	Averetek	E2open, Elliott Management, Insight Partners	On Premise	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
06/03/19	Bluberi Gaming Technologies	Catalyst Capital Group	On Premise	Content and Services	\$55	N/A	N/A	N/A	N/A
06/03/19	Health Data Link	Datavant	On Premise	Systems / Network	N/A	N/A	N/A	N/A	N/A
05/31/19	Advantage 360	Volaris Group	On Premise	CRM	N/A	N/A	N/A	N/A	N/A
05/31/19	Cloudability	Apptio, Vista Equity Partners	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/31/19	Dynamic Internet Solutions	ManageBac	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
05/31/19	Grendel	EquiSoft	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
05/31/19	Litera Microsystems	Hg	On Premise	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/31/19	Profitect	Zebra Technologies	On Premise	Business Intelligence	\$100	N/A	N/A	N/A	N/A
05/31/19	vCreative	Banyan Software	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/30/19	AheadWorks	Rave Infosys	On Premise	Development	N/A	N/A	N/A	N/A	N/A
05/30/19	Appslate	Zscaler	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/30/19	Microgen Financial Systems	Silverfleet Capital	On Premise	Fintech	\$87	N/A	N/A	N/A	N/A
05/30/19	Placed	Foursquare	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/30/19	Recorded Future	Insight Partners	SaaS	Security / Storage	\$780	N/A	N/A	N/A	N/A
05/30/19	Terra Verde	Avertium, Sunstone Partners	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/30/19	Travelport Worldwide	Evergreen Coast Capital (Elliott Management), Siris Capital	On Premise	Vertical Software	\$4,400	\$2,530	\$504	1.7x	8.7x
05/30/19	TruShield Security Solutions	Avertium, Sunstone Partners	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/29/19	Black Mountain Systems	Vista Equity Partners	On Premise	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/29/19	Dorsett Technologies	MC Controls, Midwest Mezzanine Funds	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/29/19	Eagle Technology Management	Hg, HgCapital Trust, Noble Rock Advisors	SaaS	Real Estate	N/A	N/A	N/A	N/A	N/A
05/29/19	StagingPilot	Pantheon	On Premise	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
05/29/19	Twistlock	Palo Alto Networks	On Premise	Security / Storage	\$410	N/A	N/A	N/A	N/M
05/29/19	UMG Gaming	Blackhawk Resource Corporation	SaaS	Content and Services	N/A	\$2	N/A	N/A	N/A
05/28/19	Cority	Thoma Bravo	On Premise	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/28/19	Drawbridge	LinkedIn	On Premise	Human Capital	N/A	N/A	N/A	N/A	N/A
05/28/19	Kapost	Upland Software	On Premise	Content / Document Management	\$50	N/A	N/A	N/A	N/A
05/28/19	MyCheck	Beijing Shiji Information Technology	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/28/19	Origami Logic	Intuit	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/28/19	Repost Network	SoundCloud	SaaS	Content and Services	N/A	N/A	N/A	N/A	N/A
05/28/19	Torch LMS	Absorb LMS, Silversmith Capital Partners	On Premise	Human Capital	N/A	N/A	N/A	N/A	N/A
05/28/19	Verodin	FireEye	On Premise	Security / Storage	\$250	N/A	N/A	N/A	N/A
05/27/19	CreditGenie	Purpose Financial	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/27/19	Netcoins	Big Blockchain Intelligence Group	On Premise	Fintech	\$2	\$58	(\$4)	N/M	N/M
05/24/19	Tantiv4	Spiridon	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/23/19	AlphaDesk	CPPIB, GIC Private, Refinitiv, The Blackstone Group	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/23/19	BinWise	BlueCart	SaaS	Accounting / ERP	N/A	N/A	N/A	N/A	N/A
05/23/19	Dependabot	GitHub	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
05/23/19	SearchSpring	Scaleworks	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/23/19	Sira Defence & Security	NICE Systems	On Premise	Security / Storage	\$5	N/A	N/A	N/A	N/A
05/22/19	CVM Solutions	supplier.io	On Premise	Supply Chain	N/A	N/A	N/A	N/A	N/A
05/22/19	Masternaut	Groupe Michelin	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.
Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
05/22/19	Prospress	Automattic	SaaS	Ecommerce	N/A	N/A	N/A	N/A	N/A
05/22/19	Smooch	Zendesk	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/22/19	Tellus Safety Solutions	Bain Capital, CentralSquare Technologies, Vista Equity	On Premise	Integration / Middleware	N/A	N/A	N/A	N/A	N/A
05/22/19	Validated	moovel North America	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/22/19	Vendini	AudienceView, RUBICON Technology Partners	SaaS	Ecommerce	N/A	N/A	N/A	N/A	N/A
05/21/19	Brandyay	She Beverage Company	On Premise	Ecommerce	N/A	N/A	N/A	N/A	N/A
05/21/19	Natero	Freshworks	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/21/19	RPM Technologies	Broadridge Financial Solutions	On Premise	Fintech	\$300	N/A	N/A	N/A	N/A
05/21/19	Selerio	Stream	On Premise	Augmented & Virtual Reality	N/A	N/A	N/A	N/A	N/A
05/21/19	Visual Next	Computer Generated Solutions	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
05/21/19	Ximble	Apax Partners, Paycor	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
05/20/19	CStorePro	Genstar Capital, Harvest Partners, Insight Partners	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/20/19	Decurtis	Shamrock Capital Advisors	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/20/19	EditShare	ParkerGale Capital	On Premise	Video Management	N/A	N/A	N/A	N/A	N/A
05/20/19	Freckle Education	Francisco Partners, NB Private Equity, Renaissance	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/20/19	Heritage Designs	Arreva Software	On Premise	CRM	N/A	N/A	N/A	N/A	N/A
05/20/19	ICS Learning Group	Acendire, Strattam Capital	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/20/19	KLDiscovery	Pivotal Acquisition	On Premise	Governance, Risk, & Compliance	N/A	N/A	N/A	N/A	N/A
05/20/19	Nexenta	DataDirect Networks	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/20/19	Payment Plus	NxGen, Parthenon Capital Partners	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/20/19	Prometheus Group Enterprises	Genstar Capital	SaaS	Business Software	\$1,000	N/A	N/A	N/A	N/A
05/20/19	Recruitale	Koine Money	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/20/19	School by Design	Always Be Learning	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/20/19	Spiramid	CVC Capital Partners, VelocityEHS	On Premise	Governance, Risk, & Compliance	N/A	N/A	N/A	N/A	N/A
05/20/19	Tpp Wholesale	CentralNic	SaaS	Hosting / Data Center	\$12	N/A	N/A	N/A	N/A
05/19/19	Ad Opt Technologies	IBS Software, The Blackstone Group	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
05/17/19	Caliber Software	CIP Capital, Frontsteps, Saratoga Investment	On Premise	Real Estate	N/A	N/A	N/A	N/A	N/A
05/17/19	Criteria	Sumeru Equity Partners	SaaS	Human Capital	\$56	N/A	N/A	N/A	N/A
05/17/19	InstaMed	JPMorgan Chase	SaaS	Platform / OS	\$600	\$58	N/A	10.3x	N/A
05/17/19	Secova	Altruist Technologies	SaaS	Human Capital	N/A	\$9	N/A	N/A	N/A
05/16/19	Envisiontel	Remote-Learner US	SaaS	Ecommerce	N/A	N/A	N/A	N/A	N/A
05/16/19	HealthMind	Carrick Capital Partners, Discovery Health Partners	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
05/16/19	Rolout IO	Ascent Venture Partners, CloudBees, Delta-v Capital	SaaS	Development	N/A	N/A	N/A	N/A	N/A
05/16/19	SugarWOD	Daxko, GI Partners, Golub Capital BDC	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
05/16/19	Transactis	MasterCard	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/16/19	TruSignal	TransUnion	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/16/19	VUE Software	Bain Capital, Vertafore, Vista Equity Partners	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
05/15/19	Bitnami	Vmware	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
05/15/19	CentsApp	Appliqate	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/15/19	Credex Systems	Valsoft	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/15/19	InMoment	Madison Dearborn Partners	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/15/19	Kinderlime	Ares Capital, Procare Software, TA Associates Management	SaaS	Content and Services	N/A	N/A	N/A	N/A	N/A
05/15/19	Razor Logic Systems	Nest Wealth Asset Management	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/15/19	Real Data Management	BPEA Private Equity, Building Engines, Camber Creek	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
05/15/19	Sitter	UrbanSitter	SaaS	Content and Services	N/A	N/A	N/A	N/A	N/A
05/15/19	StatX	Boathouse Capital, TapClicks	On Premise	Content and Services	N/A	N/A	N/A	N/A	N/A
05/15/19	Surely Group	Certua	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/15/19	Symphony AyasdiAI	SymphonyAI	On Premise	Development	N/A	N/A	N/A	N/A	N/A
05/15/19	Vidyo	Enghouse Systems	SaaS	Knowledge / Content (Social)	\$40	N/A	N/A	N/A	N/A
05/14/19	3Play Media	Riverside Partners	SaaS	Speech Recognition	N/A	N/A	N/A	N/A	N/A
05/14/19	Clickable	AEA Investors, Brand Networks, PineBridge Investments	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/14/19	Digital Balance	MyCleverGroup	On Premise	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/14/19	eRequester	Fraxion	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/14/19	Experlogix	Featheringill Capital	SaaS	Development	N/A	N/A	N/A	N/A	N/A
05/14/19	HeadsUp Weather	Nodin	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
05/14/19	Periscope Data	Sisense	SaaS	Business Intelligence	\$100	N/A	N/A	N/A	N/A
05/14/19	Target Emission Services	Montrose Environmental Group, Oaktree, Yukon Capital	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/14/19	Vutue	CM Group, Insight Partners	On Premise	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/13/19	Amber Road	E2open, Elliott Management, Insight Partners	SaaS	Supply Chain	\$415	\$86	(\$4)	4.8x	N/M
05/13/19	Digital Map Products	Battery Ventures, LightBox, Silver Lake Management	SaaS	Mapping / Tracking	N/A	N/A	N/A	N/A	N/A
05/13/19	iContracts	Datix, Five Arrows Managers, TA Associates Management	SaaS	Human Capital	\$200	N/A	N/A	N/A	N/A
05/13/19	In the Chat Communications	Pegasystems	SaaS	Knowledge / Content (Social)	N/A	N/A	N/A	N/A	N/A
05/13/19	Keynetix	Bentley Systems	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/13/19	Lighthouse IO	Accel-KKR, TEAM Software	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
05/13/19	Lucidity	Health Carousel	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/13/19	PowWow Mobile	Magic Software Enterprises	On Premise	Development	N/A	N/A	N/A	N/A	N/A
05/13/19	Public Finance Resources	Forecast5 Analytics, Riverwood Capital	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/13/19	Real Capital Markets	Battery Ventures, LightBox, Silver Lake Management	SaaS	Marketplace	N/A	N/A	N/A	N/A	N/A
05/13/19	RSRCHXchange	Liquidnet Holdings	SaaS	Systems / Network	N/A	N/A	N/A	N/A	N/A
05/13/19	SimpleLegal	K1 Investment Management, Onit	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/13/19	The Windward Group	Avenu Insights & Analytics, Mill Point Capital	SaaS	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/13/19	Videotel Marine International	Oakley Capital	On Premise	Augmented & Virtual Reality	\$90	\$17	N/A	5.3x	N/A
05/12/19	ICONICS	Mitsubishi Electric	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/10/19	Crimson Consultants	Tribal Group	On Premise	Development	N/A	N/A	N/A	N/A	N/A
05/10/19	EU Supply	Mercell Holding	SaaS	Supply Chain	\$22	\$7	\$1	3.3x	23.2x
05/10/19	Joyful	Hg, TA Associates Management, The Access Group	On Premise	Development	N/A	N/A	N/A	N/A	N/A
05/10/19	Provable Things	Poseidon Group of Companies	On Premise	Blockchain	N/A	N/A	N/A	N/A	N/A
05/10/19	Salesfusion	Accel-KKR, SugarCRM	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/09/19	Commercial Network Services	Beeks Financial Cloud	SaaS	Fintech	N/A	N/A	N/A	1.4x	N/A
05/09/19	Icon Laboratories	Francisco Partners, Sectigo	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/09/19	Imanis Data	Cohesity	On Premise	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/09/19	Management Mentors	Engagedly	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/09/19	Mautic	Acquia	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
05/09/19	Two Point Studios	Sega Holdings	On Premise	Diversified Media	N/A	N/A	N/A	N/A	N/A
05/09/19	Walletron	ACI Worldwide	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/08/19	Healthcare Engagement Solutions	Harris Healthcare	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/08/19	InCyber Security	Drawbridge Partners	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/07/19	Bowtie	Mindbody, Vista Equity Partners	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/07/19	Decision Insight	TABS Analytics	On Premise	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
05/07/19	Design Manager	1stdibs	SaaS	Accounting / ERP	N/A	N/A	N/A	N/A	N/A
05/07/19	Eloquent Labs	Square	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/07/19	Faxi	Toyota Financial Services	SaaS	Content and Services	N/A	N/A	N/A	N/A	N/A
05/07/19	Magnitude Software	3i Group	On Premise	Content / Document Management	N/A	\$100	N/A	N/A	N/A
05/06/19	Complia	NIC	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/06/19	Intermolecular	Merck	On Premise	Vertical Software	\$35	\$31	(\$1)	1.1x	N/M
05/06/19	Knewton	John Wiley & Sons	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/06/19	SiteHawk	Genstar Capital, Sphera Solutions	SaaS	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/06/19	Texas P.O.S	NCR	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/03/19	Conteneo	Scaled Agile	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/03/19	Crafty Clicks	Aquiline Capital Partners, ClearCourse Partnership	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/03/19	Delaware Board Of Trade	Ideanomics	SaaS	Fintech	\$18	N/A	N/A	N/A	N/A
05/03/19	EnergySavvy	Morgan Stanley, RUBICON Technology, Tendril Networks	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/03/19	inFactor	SouthStar Capital	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/03/19	Professional Insurance Agents	Cavendish Munro Professional Risks	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/02/19	E-Connect Software	Sonasoftware	On Premise	Business Intelligence	N/A	\$3	N/A	N/A	N/A
05/02/19	Gould Hall Computer Services	Sanderson Group	On Premise	Supply Chain	\$10	N/A	N/A	N/A	N/A
05/02/19	Jet Global Data Technologies	Insightssoftware, TA Associates Management	On Premise	Business Intelligence	N/A	N/A	N/A	N/A	N/A
05/02/19	Payscape / NxGen	Parthenon Capital Partners	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/02/19	Phish5	Elevate Security	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
05/02/19	Venga	Booking Holdings	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
05/01/19	10,000ft	Smartsheet	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
05/01/19	Allocate	Sage Intacct	SaaS	Content / Document Management	N/A	N/A	N/A	N/A	N/A
05/01/19	Bellvedi	Tracsis	On Premise	Business Software	\$21	N/A	N/A	N/A	N/A
05/01/19	FinanceGenius	Alogent, Battery Ventures	On Premise	Fintech	N/A	N/A	N/A	N/A	N/A
05/01/19	GitPrime	Pluralsight	SaaS	Business Intelligence	\$170	N/A	N/A	N/A	N/A
05/01/19	Handshake	Shopify	SaaS	Ecommerce	\$100	N/A	N/A	N/A	N/A
05/01/19	Payscape	Parthenon Capital Partners	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
05/01/19	Psyonix	Epic Games	On Premise	Content and Services	N/A	N/A	N/A	N/A	N/A
05/01/19	Return Path	Silversmith Capital Partners, TPG, Validity Software	SaaS	Advertising and Marketing	N/A	\$100	N/A	N/A	N/A
05/01/19	Shareworks	Morgan Stanley	SaaS	Business Software	\$747	\$108	\$14	6.9x	N/M
04/30/19	General Dynamics Information Technology	Comtech Telecommunications	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/30/19	Islands Media	The We Company	SaaS	Knowledge / Content (Social)	N/A	N/A	N/A	N/A	N/A
04/30/19	Receptive	Pendo	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
04/30/19	Rideau Recognition Solutions	Comvest Partners, Engage2Excel	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/30/19	Zego	Paylease, Vista Equity Partners	SaaS	Development	N/A	N/A	N/A	N/A	N/A
05/01/19	Cengage Learning	Apollo Global Management, McGraw-Hill Education	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
05/01/19	Sigma Systems Canada	Hansen Technologies	SaaS	Business Software	\$92	N/A	N/A	N/A	N/A
04/30/19	Flexible Workforce	OpenForce, Riverside Partners	SaaS	Supply Chain	N/A	N/A	N/A	N/A	N/A
04/30/19	Autodata Solutions	Thoma Bravo	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
04/30/19	Lendwell	CBANC	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/29/19	Soho Digital Cinema	Visual Data Media Services	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
04/29/19	Pregin Solutions	Dynamo Software, Francisco Partners	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/29/19	Power Analytics	WaveTech Global	SaaS	Testing	N/A	N/A	N/A	N/A	N/A
04/28/19	SplashLink	WatrHub	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
04/25/19	PayScale	Francisco Partners	SaaS	Human Capital	\$325	N/A	N/A	N/A	N/A
04/25/19	eCore Software	ESO Solutions	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/24/19	Whiplash	Endeavour Capital, Port Logistics Group, Tritium Partners	SaaS	eCommerce	N/A	N/A	N/A	N/A	N/A
04/24/19	Realm	MongoDB	SaaS	Knowledge / Content (Social)	\$39	N/A	N/A	N/A	N/A
04/24/19	UnionWare	GI Partners, Togetherwork	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
04/24/19	Lendesk Technologies	Quicken Loans	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/23/19	Ayuda Media Systems	BroadSign International, JEDFam	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
04/23/19	AbsenceSoft	Bow River Capital Partners	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/23/19	Acuity Scheduling	General Atlantic, Squarespace	SaaS	CRM	N/A	N/A	N/A	N/A	N/A
04/23/19	Sodius-Willert	Willert Software Tools	SaaS	Knowledge / Content (Social)	N/A	N/A	N/A	N/A	N/A
04/23/19	Club Speed	Bellwether Financial Group, Nadavon Capital Partners	SaaS	Business Software	\$20	N/A	N/A	N/A	N/A
04/22/19	PostUp	Upland Software	SaaS	Advertising and Marketing	\$35	N/A	N/A	N/A	N/A
04/19/19	MapAnything	Salesforce	SaaS	Supply Chain	N/A	N/A	N/A	N/A	N/A
04/19/19	Percentile	Torstone Technology	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/18/19	SAMSentry	Kohlberg Kravis Roberts, SoftwareONE	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
04/18/19	ApexSQL	Elliott Management, Fisher Lynch, Francisco Partners	On Premise	Business Software	N/A	N/A	N/A	N/A	N/A
04/18/19	Electric Cloud	CloudBees	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
04/18/19	Express Logic	Microsoft	SaaS	Platform / OS	N/A	N/A	N/A	N/A	N/A
04/18/19	3Gtms	Sumeru Equity Partners	SaaS	Supply Chain	\$87	N/A	N/A	N/A	N/A
04/18/19	The Athena Group	Mercury Systems	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/18/19	RS2 Technologies	Access Control Related Enterprises, Egis Capital Partners	On Premise	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/17/19	FiREapps	Bridgepoint Advisers, Daher Capital, Iris Capital	SaaS	Fintech	N/A	\$480	N/A	N/A	N/A
04/17/19	Ellie Mae	Thoma Bravo	SaaS	Vertical Software	\$3,397	\$480	\$86	7.1x	39.3x
04/17/19	Respin	PKA Alternative Investment Partners	On Premise	Vertical Software	\$1	N/A	N/A	N/A	N/A
04/17/19	Allegro Development	ION Group, The Carlyle Group	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
04/17/19	KushAmerica	CAVU Resources	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/17/19	GlobalEnglish	Learnship, THI Investments	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/17/19	CloudIO	Xoriant	SaaS	Integration / Middleware	N/A	\$4	N/A	N/A	N/A
04/17/19	Breezy HR	Learning Technologies Group	SaaS	Human Capital	\$30	N/A	N/A	N/A	N/A
04/16/19	Senet International	Gaming Laboratories International	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/16/19	Skuid	Marlin Equity Partners	SaaS	Integration / Middleware	N/A	N/A	N/A	N/A	N/A
04/16/19	Exari	Coupa	SaaS	Business Software	\$215	N/A	N/A	N/A	N/A
04/16/19	Practi	Just Eat Holding	SaaS	Business Intelligence	\$11	N/A	N/A	N/A	N/A
04/16/19	Bioproduction Group	Emerson	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
04/16/19	Vyze	MasterCard	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/15/19	Synovia Solutions	CalAmp	SaaS	Mapping / Tracking	\$50	N/A	N/A	N/A	N/A
04/15/19	TivaCloud	First Analysis, Fleetworthy Solutions, The Argentum Group	SaaS	Governance, Risk, & Compliance	N/A	N/A	N/A	N/A	N/A
04/12/19	Wibmo	PayU	SaaS	Fintech	\$70	N/A	N/A	N/A	N/A
04/12/19	RecordXpress	StorageVault Canada	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/12/19	Samanage	SolarWinds	SaaS	Business Software	\$350	N/A	N/A	N/A	N/A
04/12/19	HigherEducation.com	General Atlantic, QED Investors, Red Ventures	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/12/19	Ambiental Risk	Royal HaskoningDHV	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/12/19	RinoCloud	Integumen	SaaS	Business Intelligence	\$5	N/A	N/A	N/A	N/A
04/12/19	DCR Workforce	Workspend	SaaS	IT Infrastructure & Management	N/A	\$110	N/A	N/A	N/A
04/11/19	Kyriba	Bridgepoint Advisers	SaaS	Fintech	\$1,200	N/A	N/A	N/A	N/A

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Select Q2 2019 M&A Transactions (cont.)

Date	Target	Acquirer	Delivery	Sector	Enterprise Value	Target LTM		Enterprise Value /	
						Revenue	EBITDA	LTM Revenue	LTM EBITDA
04/11/19	Polymorph	Walmart	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
04/11/19	TE21	Brook Venture Partners, Certica Solutions, New Harbor	On Premise	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/10/19	Determine	Corcentric	SaaS	Business Software	\$24	N/A	(\$10)	N/A	N/M
04/10/19	Silversphere	Periscope Equity, Sentrics	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/10/19	Sellbrite	GoDaddy	SaaS	eCommerce	N/A	N/A	N/A	N/A	N/A
04/10/19	TechCanary	Applied Systems, Hellman & Friedman, JMI Equity	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/10/19	Weaveability	Itelligence	SaaS	eCommerce	N/A	N/A	N/A	N/A	N/A
04/09/19	Content Analytics	Syndigo, The Jordan Company	SaaS	eCommerce	N/A	N/A	N/A	N/A	N/A
04/09/19	RedSeal	STG Partners	SaaS	Security / Storage	\$100	N/A	N/A	N/A	N/A
04/09/19	Ozmotik	AirPR	SaaS	Advertising and Marketing	N/A	\$100	N/A	N/A	N/A
04/09/19	Axioma	Deutsche Börse Group, General Atlantic	SaaS	Fintech	\$876	N/A	N/A	N/A	N/A
04/09/19	Webaspx	Routeware, Banneker Partners, L Capital	SaaS	Mapping / Tracking	N/A	\$0	N/A	N/A	N/A
04/08/19	Kirona	Advanced Computer Software Group, Vista Equity Partners	SaaS	Mapping / Tracking	N/A	N/A	N/A	N/A	N/A
04/08/19	Trilogy Education Services	2U	SaaS	Vertical Software	\$750	N/A	N/A	N/A	N/A
04/08/19	BSM Technologies	Geotab	SaaS	Mapping / Tracking	N/A	\$73	(\$2)	N/A	N/A
04/08/19	Securadine Systems	Allied Universal, Partners Group, Warburg Pincus	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/08/19	ReServe Interactive	Golden Gate Capital, Infor Global, Kayne Anderson	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/08/19	Net Data	i3 Verticals	SaaS	Vertical Software	\$24	N/A	N/A	N/A	N/A
04/07/19	Amberjack	LDC	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/05/19	CitySourced	Rock Solid Technologies, Strattam Capital	SaaS	Vertical Software	N/A	\$5	N/A	N/A	N/A
04/05/19	Fundata Canada	ND	SaaS	Fintech	\$110	N/A	N/A	N/A	N/A
04/04/19	Firmstep	Granicus, K1 IM, Vista Equity Partners	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/04/19	Segovia Technology	Crown Agents, Helios Investment Partners	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/04/19	Haptik	Reliance Jio Infocomm	SaaS	CRM	\$115	N/A	N/A	N/A	N/A
04/04/19	ReStream Solutions	RedBird Capital Partners, Sallyport, Tally Energy Services	SaaS	Business Software	N/A	N/A	N/A	N/A	N/A
04/03/19	Torc Robotics	Daimler Trucks North America	On Premise	Development	N/A	N/A	N/A	N/A	N/A
04/03/19	Managed by Q	The We Company	SaaS	Business Software	N/A	\$115	N/A	N/A	N/A
04/03/19	Truckstop.com	ICONIQ Capital	SaaS	Supply Chain	N/A	\$1,600	N/A	N/A	N/A
04/03/19	GlobalTranz	Providence Equity Partners	SaaS	Supply Chain	\$930	N/A	N/A	N/A	N/A
04/03/19	Consolidated Asset Recovery Systems	Kinderhook Industries, Primeritus Financial Services	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/03/19	RDBTools	Redis Labs	SaaS	Business Intelligence	N/A	N/A	N/A	N/A	N/A
04/02/19	American Megatrends	HGGC	On Premise	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
04/02/19	AgileHR	Accel-KKR, PrismHR, Summit Partners	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/02/19	SecurityCoverage	NeoNova Network Services	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
04/02/19	Videalert	Marston	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/01/19	KEMP Technologies	Mill Point Capital	SaaS	IT Infrastructure & Management	N/A	N/A	N/A	N/A	N/A
04/01/19	Mailgun	Thoma Bravo	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
04/01/19	A3 Communications	Littlejohn & Co, The Cook & Boardman Group	SaaS	Security / Storage	N/A	N/A	N/A	N/A	N/A
04/01/19	Powerhouse Dynamics	Middleby	SaaS	Vertical Software	N/A	N/A	N/A	N/A	N/A
04/01/19	NewTek	Nordic Capital, Vizrt	SaaS	Video Management	N/A	N/A	N/A	N/A	N/A
04/01/19	T.A.P. Tag Technology	Rental Retreat	SaaS	Advertising and Marketing	N/A	N/A	N/A	N/A	N/A
04/01/19	Jog.ai	Evolve IP	SaaS	Telecommunications	N/A	N/A	N/A	N/A	N/A
04/01/19	Funderbolt	CampusLogic	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
04/01/19	Oyez Waterlow HR	ND	SaaS	Human Capital	N/A	N/A	N/A	N/A	N/A
04/01/19	Sum180	FlexWage Solutions	SaaS	Fintech	N/A	N/A	N/A	N/A	N/A
Software Median					\$100	\$75	(\$1)	5.0x	31.2x
Software Mean					\$627	\$236	\$43	6.1x	35.0x

Note: \$ in millions. EV/EBITDA multiples in excess of 50x or less than 0x are considered not meaningful.

Source: Capital IQ and Pitchbook as of 6/30/19

Software IPOs

IPO Date	Days on File	Company	EV	IPO Amount Raised	Market Cap	LTM Multiples		Metrics and Financials			Share Information			Follow On Information						LTM Rev Growth	LTM EBITDA Margin	
						EV / Rev	EV / EBITDA	Rev Growth at IPO	NTM Rev Growth	Net Cash at IPO	IPO Offer Price	File to Price Chg	Current Price	Chg Since IPO	Days Post Lock-Up	Amount Raised	Relative to IPO Raise	Follow On Price	IPO to Price Chg			Primary Shares
Software																						
06/20/19	55	Slack	\$5,250	\$4,560	\$9,810	11.6x	NM	106%	NM	\$793	\$39	--	\$38	(3%)	NA	NA	NA	NA	NA	NA	106%	(31%)
06/12/19	29	CrowdStrike	\$6,875	\$612	\$7,487	NM	NM	NM	NM	\$88	\$34	13%	\$68	101%	NA	NA	NA	NA	NA	NA	NM	(49%)
06/12/19	33	Mohawk	\$140	\$36	\$176	NM	NM	NM	NM	\$0	\$10	(29%)	\$8	(19%)	NA	NA	NA	NA	NA	NA	NM	(36%)
05/17/19	28	Fastly	\$1,439	\$180	\$1,619	9.1x	NM	50%	36%	\$21,316	\$16	--	\$20	27%	NA	NA	NA	NA	NA	NA	50%	(10%)
04/18/19	27	Zoom Video Communications	\$9,600	\$751	\$10,352	NM	NM	118%	76%	\$64	\$36	3%	\$89	147%	NA	NA	NA	NA	NA	NA	118%	5%
04/17/19	19	ReadyTech	\$27	\$36	\$63	NM	NM	NM	NM	(\$16)	\$1	9%	\$1	(1%)	NA	NA	NA	NA	NA	NA	NM	NM
04/11/19	36	Tufin	\$428	\$108	\$536	5.0x	NM	32%	26%	\$29	\$14	--	\$26	85%	NA	NA	NA	NA	NA	NA	32%	(6%)
04/11/19	27	PagerDuty	\$1,654	\$218	\$1,872	14.0x	NM	48%	46%	\$128	\$24	4%	\$47	96%	NA	NA	NA	NA	NA	NA	48%	(35%)
04/04/19	28	Tradeweb	\$3,970	\$1,080	\$5,050	NM	NM	NM	NM	\$410	\$27	4%	\$44	62%	NA	NA	NA	NA	NA	NA	NM	NM
03/20/19	26	UP Fintech Holding	\$951	\$104	\$1,055	NM	NM	104%	144%	\$32	\$8	14%	\$6	(30%)	NA	NA	NA	NA	NA	NA	104%	NM
11/20/18	28	TuanChe.com	\$3,469	\$20	\$3,489	NM	NM	NM	NM	(\$5)	\$8	--	\$3	(61%)	NA	NA	NA	NA	NA	NA	NM	(14%)
11/15/18	97	Weidai	\$655	\$45	\$700	1.1x	5.9x	124%	NM	\$276	\$10	--	\$9	(10%)	NA	NA	NA	NA	NA	NA	124%	19%
10/25/18	24	Stone Pagamentos	\$6,532	\$1,217	\$7,749	NM	NM	293%	192%	(\$443)	\$24	4%	\$30	23%	NA	NA	NA	NA	NA	NA	293%	17%
10/25/18	101	Pintec	\$19,637	\$44	\$19,681	NM	NM	1,715%	NM	(\$112)	\$12	--	\$3	(75%)	NA	NA	NA	NA	NA	NA	1715%	7%
10/19/18	28	SolarWinds	\$4,317	\$375	\$4,692	5.9x	12.9x	NM	25%	(\$1,961)	\$15	(12%)	\$18	22%	NA	NA	NA	NA	NA	NA	NM	39%
10/12/18	28	Anaplan	\$1,974	\$264	\$2,237	9.9x	NM	19%	48%	\$87	\$17	--	\$50	197%	NA	NA	NA	NA	NA	NA	19%	NM
10/05/18	30	Elastic	\$2,906	\$252	\$3,158	15.7x	NM	110%	72%	\$51	\$36	3%	\$75	107%	NA	NA	NA	NA	NA	NA	110%	(34%)
09/28/18	43	CooTek (Cayman)	\$715	\$52	\$767	9.1x	NM	612%	144%	\$26	\$12	--	\$10	(20%)	NA	NA	NA	NA	NA	NA	612%	6%
09/27/18	27	LAIX	\$528	\$72	\$599	NM	NM	NM	NM	\$57	\$13	--	\$10	(16%)	NA	NA	NA	NA	NA	NA	NM	(56%)
09/26/18	28	SVMK	\$1,247	\$207	\$1,454	5.3x	NM	13%	22%	(\$274)	\$12	9%	\$17	38%	NA	NA	NA	NA	NA	NA	13%	(34%)
09/26/18	33	Arco Platform Limited	\$172	\$194	\$366	2.0x	NM	86%	25%	\$6	\$18	--	\$44	150%	NA	NA	NA	NA	NA	NA	86%	(20%)
09/19/18	22	X Financial	\$2,822	\$105	\$2,927	6.3x	NM	1,259%	13%	\$101	\$10	--	\$4	(61%)	NA	NA	NA	NA	NA	NA	1259%	NM
07/27/18	28	Endava	\$946	\$127	\$1,073	3.6x	23.5x	NM	29%	(\$19)	\$20	5%	\$40	101%	NA	NA	NA	NA	NA	NA	NM	11%
07/27/18	28	Opera Software	\$4,800	\$115	\$4,915	NM	NM	32%	46%	\$36	\$12	--	\$10	(13%)	NA	NA	NA	NA	NA	NA	32%	27%
07/26/18	27	Jiguang	\$626	\$77	\$703	10.9x	NM	442%	139%	\$5	\$9	--	\$5	(44%)	NA	NA	NA	NA	NA	NA	442%	(8%)
07/26/18	34	Shanghai Cango	\$6,473	\$44	\$6,517	NM	NM	(75%)	1473%	\$11	\$11	--	\$7	(37%)	NA	NA	NA	NA	NA	NA	(75%)	29%
07/26/18	27	Tenable	\$2,176	\$288	\$2,464	10.5x	NM	66%	45%	\$26	\$23	21%	\$29	24%	NA	NA	NA	NA	NA	NA	66%	(25%)
06/29/18	28	Domo	\$560	\$193	\$753	4.8x	NM	56%	35%	(\$24)	\$21	--	\$27	30%	NA	NA	NA	NA	NA	NA	56%	(89%)
06/15/18	35	Avalara	\$1,525	\$180	\$1,705	6.8x	NM	35%	33%	(\$25)	\$24	4%	\$72	201%	NA	NA	NA	NA	NA	NA	35%	(19%)
05/17/18	31	Pluralsight	\$1,672	\$311	\$1,982	9.3x	NM	36%	48%	(\$91)	\$15	7%	\$30	102%	NA	NA	NA	NA	NA	NA	36%	(53%)
05/04/18	25	Carbon Black	\$1,333	\$152	\$1,485	7.6x	NM	55%	23%	\$36	\$19	--	\$17	(12%)	NA	NA	NA	NA	NA	NA	55%	(35%)
04/27/18	32	SmartSheet	\$1,466	\$175	\$1,640	13.2x	NM	66%	69%	\$52	\$15	7%	\$48	223%	NA	NA	NA	NA	NA	NA	66%	(26%)
04/27/18	30	DocuSign	\$3,968	\$629	\$4,597	7.7x	NM	36%	41%	\$257	\$29	4%	\$50	71%	NA	NA	NA	NA	NA	NA	36%	(19%)
04/26/18	99	Ceridian HCM	\$2,467	\$531	\$2,998	3.7x	22.6x	8%	12%	(\$1,026)	\$22	5%	\$50	128%	NA	NA	NA	NA	NA	NA	8%	15%
04/20/18	28	Pivotal Software	\$2,854	\$638	\$3,492	5.6x	NM	22%	33%	\$53	\$15	--	\$11	(30%)	NA	NA	NA	NA	NA	NA	22%	(17%)
04/12/18	27	Zuora	\$1,477	\$154	\$1,631	8.8x	NM	49%	45%	\$32	\$14	8%	\$15	9%	NA	NA	NA	NA	NA	NA	49%	(28%)
04/03/18	34	Spotify	\$20,303	\$9,246	\$29,549	4.4x	NM	41%	38%	(\$560)	\$166	--	\$146	(12%)	NA	NA	NA	NA	NA	NA	41%	3%
03/23/18	28	Dropbox	\$10,293	\$756	\$11,049	9.3x	NM	31%	30%	\$256	\$21	5%	\$25	19%	NA	NA	NA	NA	NA	NA	31%	9%
03/16/18	28	Zscaler	\$2,067	\$192	\$2,259	13.4x	NM	92%	62%	\$72	\$16	7%	\$77	379%	NA	NA	NA	NA	NA	NA	92%	(9%)
02/09/18	28	Cardlytics	\$195	\$70	\$266	1.5x	NM	13%	18%	(\$27)	\$13	--	\$26	100%	NA	NA	NA	NA	NA	NA	13%	(22%)
11/17/17	28	SailPoint Technologies	\$664	\$240	\$904	4.1x	36.5x	71%	48%	(\$137)	\$12	9%	\$20	67%	NA	NA	NA	NA	NA	NA	71%	7%
11/15/17	28	SendGrid	\$654	\$131	\$785	6.3x	NM	77%	NM	\$175	\$16	3%	\$54	238%	NA	NA	NA	NA	NA	NA	77%	3%
11/01/17	33	Altair Engineering	\$259	\$156	\$415	0.8x	4.6x	9%	13%	(\$54)	\$13	--	\$40	211%	NA	NA	NA	NA	NA	NA	9%	13%
10/27/17	25	ForeScout	\$698	\$116	\$814	3.7x	NM	52%	37%	\$46	\$22	--	\$34	54%	(35)	\$128	110%	\$29	10%	11%	52%	(22%)
10/19/17	28	MongoDB	\$1,194	\$192	\$1,386	8.7x	NM	111%	47%	\$41	\$24	9%	\$152	534%	NA	NA	NA	NA	NA	NA	111%	(30%)
06/30/17	29	Tintri	\$156	\$60	\$216	1.6x	NM	13%	9%	(\$20)	\$7	--	\$0	(100%)	NA	NA	NA	NA	NA	NA	13%	NM
06/07/17	69	ShotSpotter	\$87	\$31	\$118	5.1x	36.9x	44%	53%	(\$11)	\$11	--	\$44	302%	NA	NA	NA	NA	NA	NA	44%	6%
05/25/17	97	Appian	\$680	\$75	\$755	5.0x	NM	22%	32%	(\$20)	\$12	--	\$36	201%	NA	NA	NA	NA	NA	NA	22%	(23%)
05/12/17	58	Veritone	\$176	\$38	\$213	19.7x	NM	(36%)	89%	(\$1)	\$15	--	\$8	(44%)	NA	NA	NA	NA	NA	NA	(36%)	(174%)
04/28/17	28	Cloudera	\$1,936	\$225	\$2,161	7.1x	NM	64%	38%	(\$836)	\$15	7%	\$5	(65%)	NA	NA	NA	NA	NA	NA	64%	(35%)
04/13/17	31	Xelt	\$1,014	\$116	\$1,129	8.2x	NM	38%	46%	\$19	\$11	10%	\$20	83%	NA	NA	NA	NA	NA	NA	38%	(28%)
04/07/17	25	Oktta	\$1,546	\$187	\$1,733	9.6x	NM	87%	67%	\$23	\$17	--	\$124	627%	NA	NA	NA	NA	NA	NA	87%	(28%)
03/24/17	28	Alteryx	\$819	\$126	\$945	9.5x	20.2x	59%	60%	\$31	\$14	--	\$109	679%	NA	NA	NA	NA	NA	NA	59%	14%
03/17/17	28	MuleSoft	\$2,553	\$221	\$2,774	13.6x	NM	70%	NM	\$35	\$17	6%	\$44	157%	NA	NA	NA	NA	NA	NA	70%	NM
10/28/16	28	BlackLine	\$768	\$146	\$914	7.5x	NM	97%	52%	(\$21)	\$17	--	\$54	215%	NA	NA	NA	NA	NA	NA	97%	(4%)
10/06/16	28	Coupa	\$917	\$133	\$1,051	8.4x	NM	115%	47%	\$80	\$18	--	\$127	603%	NA	NA	NA	NA	NA	NA	115%	(14%)
09/30/16	283	Nutanix	\$2,279	\$238	\$2,517	4.5x	NM	NM	69%	\$26	\$16	23%	\$26	62%	NA	NA	NA	NA	NA	NA	NM	(35%)
09/23/16	28	Apptio	\$578	\$96	\$674	3.8x	NM	42%	NM	\$8	\$16	--	\$38	138%	NA	NA	NA	NA	NA	NA	42%	(8%)
09/23/16	28	Beijing Gridsum Technology	\$317	\$87	\$405	6.9x	NM	127%	58%	\$16	\$13	4%	\$3	(79%)	NA	NA	NA	NA	NA	NA	127%	(167%)
09/16/16	28	Everbridge	\$224	\$90	\$314	3.3x	NM	58%	40%	(\$14)	\$12	--	\$89	645%	21	\$74	82%	\$20	(18%)	92%	58%	(19%)
07/29/16	31	Talend	\$409	\$95	\$503	5.0x	NM	31%	55%	(\$2)	\$18	6%	\$39	114%	NA	NA	NA	NA	NA	NA	31%	(20%)
Median	29		\$1,194	\$133	\$1,386	6.7x	16.5x	60%	47%	\$11	\$15	6%	\$30	71%	147	\$125	116%	\$28	16%	96%	60%	(14%)
Mean	47		\$2,433	\$376	\$2,809	7.0x	17.7x	128%	81%	(\$386)	\$18	5%	\$45	167%	196	\$164	142%	\$29	42%	76%	128%	(16%)

Source: Capital IQ and Pitchbook as of 6/30/19

Internet and Digital Media IPOs

IPO Date	Days on File	Company	EV	IPO Amount Raised	Market Cap	LTM Multiples		Metrics and Financials			Share Information				Follow On Information					LTM Rev Growth	LTM EBITDA Growth	
						EV / Rev	EV / EBITA	Rev Growth at IPO	NTM Rev Growth	Net Cash at IPO	IPO Offer Price	File to Price Chg	Current Price	Chg Since IPO	Days Post Lock-up	Amount Raised	Relative to IPO Raise	Follow On Price	IPO to Price Chg			Primary Shares
Internet and Digital Media																						
06/28/19	28	The RealReal	\$2,134	\$420	\$2,554	9.3x	NM	72%	NM	\$86	\$28	65%	\$29	3%	NA	NA	NA	NA	NA	NA	72%	(33%)
06/21/19	23	Trainline	\$950	\$1,241	\$2,192	3.4x	15.0x	18%	NM	(\$229)	\$5	3%	\$5	14%	NA	NA	NA	NA	NA	NA	18%	23%
06/14/19	46	Chewy	\$7,827	\$1,023	\$8,850	2.2x	NM	68%	NM	\$88	\$22	16%	\$35	59%	NA	NA	NA	NA	NA	NA	68%	(7%)
06/13/19	28	Fiverr	\$595	\$111	\$705	NM	NM	NM	NM	\$32	\$21	5%	\$30	41%	NA	NA	NA	NA	NA	NA	NM	(31%)
06/07/19	252	REVOLVE	\$1,179	\$212	\$1,391	2.3x	27.2x	31%	NM	\$27	\$18	--	\$35	92%	NA	NA	NA	NA	NA	NA	31%	8%
05/10/19	29	Uber	\$68,662	\$8,100	\$76,762	6.1x	NM	42%	33%	\$1,871	\$45	--	\$46	3%	NA	NA	NA	NA	NA	NA	42%	(25%)
05/03/19	43	Yunji Weidian	\$23,380	\$121	\$23,501	11.9x	NM	106%	NM	\$228	\$11	--	\$11	3%	NA	NA	NA	NA	NA	NA	106%	0%
04/18/19	27	Pinterest	\$9,919	\$1,425	\$11,344	13.1x	NM	60%	53%	\$617	\$19	12%	\$27	43%	NA	NA	NA	NA	NA	NA	60%	(5%)
03/29/19	28	Lyft	\$18,716	\$2,340	\$21,056	8.7x	NM	103%	62%	\$518	\$72	--	\$66	(9%)	NA	NA	NA	NA	NA	NA	103%	(73%)
12/12/18	71	Tencent Music Entertainment Group	\$20,163	\$1,066	\$21,229	7.7x	NM	301%	44%	\$759	\$13	--	\$15	15%	NA	NA	NA	NA	NA	NA	301%	9%
12/06/18	27	MOGU Inc.	\$1,430	\$67	\$1,497	9.5x	NM	(9%)	22%	\$49	\$14	--	\$3	(80%)	NA	NA	NA	NA	NA	NA	(9%)	(31%)
10/03/18	27	Upwork	\$1,674	\$187	\$1,861	7.3x	NM	39%	25%	(\$3)	\$15	7%	\$16	7%	NA	NA	NA	NA	NA	NA	39%	(4%)
09/21/18	32	Farfetch	\$5,408	\$885	\$6,293	11.2x	NM	99%	52%	\$340	\$20	5%	\$21	4%	NA	NA	NA	NA	NA	NA	99%	(28%)
09/20/18	28	Eventbrite	\$1,876	\$230	\$2,106	7.3x	NM	91%	21%	\$192	\$23	10%	\$16	(30%)	NA	NA	NA	NA	NA	NA	91%	(13%)
09/14/18	28	Qutoutiao	\$1,633	\$84	\$1,717	9.4x	NM	1,892%	367%	\$267	\$7	--	\$4	(44%)	NA	NA	NA	NA	NA	NA	1892%	(61%)
09/12/18	28	111 Group	\$4,119	\$100	\$4,220	21.3x	NM	47%	138%	\$74	\$14	--	\$6	(60%)	NA	NA	NA	NA	NA	NA	47%	(21%)
07/26/18	27	Pinduoduo	\$19,422	\$1,626	\$21,048	NM	NM	516%	469%	\$106	\$19	--	\$21	9%	NA	NA	NA	NA	NA	NA	516%	(78%)
06/28/18	27	EverQuote	\$411	\$84	\$496	3.3x	NM	3%	41%	(\$3)	\$18	6%	\$13	(28%)	NA	NA	NA	NA	NA	NA	3%	(9%)
06/27/18	29	Youxinpai (Beijing) Information Technology Co.	\$2,332	\$225	\$2,557	18.3x	NM	3%	NM	(\$527)	\$9	(14%)	\$2	(76%)	NA	NA	NA	NA	NA	NA	3%	(23%)
06/27/18	35	HyreCar	(\$4)	\$13	\$8	0.0x	NM	24,780%	NM	\$7	\$5	--	\$4	(16%)	NA	NA	NA	NA	NA	NA	24780%	(80%)
05/24/18	27	GreenSky	\$874	\$874	\$1,748	2.7x	6.0x	24%	45%	(\$528)	\$23	--	\$12	(47%)	NA	NA	NA	NA	NA	NA	24%	33%
03/28/18	26	Bilibili	\$2,814	\$483	\$3,297	7.7x	NM	365%	75%	\$117	\$12	--	\$16	41%	NA	NA	NA	NA	NA	NA	365%	(16%)
03/02/17	28	Snap	\$15,653	\$3,400	\$19,053	NM	NM	590%	127%	\$987	\$17	6%	\$14	(16%)	NA	NA	NA	NA	NA	NA	590%	(87%)
03/29/18	30	iQIYI.com	\$73,286	\$16,758	\$90,044	NM	NM	52%	53%	\$21	\$18	--	\$21	15%	NA	NA	NA	NA	NA	NA	52%	NM
12/16/16	32	Trivago	\$3,442	\$287	\$3,729	4.5x	NM	85%	70%	\$5	\$11	(15%)	\$4	(62%)	NA	NA	NA	NA	NA	NA	85%	4%
09/21/16	30	The Trade Desk	\$604	\$84	\$688	4.1x	5.3x	234%	67%	(\$18)	\$18	--	\$228	1,165%	NA	NA	NA	NA	NA	NA	234%	22%
07/15/16	35	LINE	\$6,896	\$7,225	\$14,121	6.6x	NM	29%	37%	(\$66)	\$33	1%	\$28	(15%)	NA	NA	NA	NA	NA	NA	29%	3%
06/23/16	28	Twilio	\$1,245	\$150	\$1,395	6.5x	NM	117%	60%	\$103	\$15	7%	\$136	809%	NA	NA	NA	NA	NA	NA	117%	(18%)
12/18/15	32	Yirendai	\$1,020	\$75	\$1,095	6.5x	NM	4,927%	184%	\$20	\$10	--	\$14	38%	NA	NA	NA	NA	NA	NA	4927%	0%
11/19/15	34	Match Group	\$23	\$400	\$423	0.0x	0.0x	18%	29%	(\$49)	\$12	--	\$67	461%	NA	NA	NA	NA	NA	NA	18%	34%
05/21/15	34	Baozun Commerce	\$1,348	\$110	\$1,458	4.7x	25.1x	17%	45%	\$28	\$10	(17%)	\$50	399%	385	\$81	74%	\$12	(26%)	NA	17%	6%
04/08/15	89	JMU	\$2,999	\$40	\$3,039	NM	NM	NM	NM	\$1	\$10	--	\$1	(86%)	NA	NA	NA	NA	NA	NA	NM	(337%)
04/01/15	296	GoDaddy	\$1,662	\$460	\$2,122	1.2x	4.0x	23%	19%	(\$1,282)	\$20	5%	\$70	251%	585	\$928	202%	\$39	102%	2%	23%	15%
Median	30		\$1,775	\$228	\$2,114	6.5x	5.3x	85%	52%	\$21	\$15	5%		(5%)	485	\$505	138%	\$25	38%	2%	68%	(11%)
Mean	45		\$7,097	\$1,455	\$8,552	7.0x	8.1x	1489%	95%	\$25	\$15	0%		111%	485	\$505	138%	\$25	38%	2%	1121%	(26%)

Source: Capital IQ and Pitchbook as of 6/30/19

Hardware & Tech-Enabled Services IPOs

IPO Date	Days on File	Company	EV	IPO Amount Raised	Market Cap	LTM Multiples		Metrics and Financials			Share Information				Follow On Information					LTM Rev Growth	LTM EBITDA Growth	
						EV / Rev	EV / EBITDA	Rev Growth at IPO	NTM Rev Growth	Net Cash at IPO	IPO Offer Price	File to Price Chg	Current Price	Chg Since IPO	Days Post Lock-Up	Amount Raised	Relative to IPO Raise	Follow On Price	IPO to Price Chg			Primary Shares
Hardware and Tech-Enabled Services																						
10/19/18	25	Niu	\$543	\$63	\$606	3.4x	NM	201%	92%	(\$2)	\$9	--	\$6	(34%)	NA	NA	NA	NA	NA	NA	201%	(16%)
08/03/18	28	Arlo Technologies	\$1,000	\$188	\$1,188	NM	NM	NM	NM	\$70	\$16	(11%)	\$4	(75%)	NA	NA	NA	NA	NA	NA	NM	(25%)
08/02/18	27	Sonos	\$1,509	\$208	\$1,717	1.4x	NM	21%	9%	\$78	\$15	(12%)	\$11	(24%)	NA	NA	NA	NA	NA	NA	21%	1%
04/26/18	27	nLIGHT	\$9,946	\$96	\$10,042	NM	NM	37%	36%	\$19	\$16	7%	\$19	20%	NA	NA	NA	NA	NA	NA	37%	11%
02/08/18	27	Huami	\$8,060	\$55	\$8,115	NM	NM	NM	NM	\$53	\$11	--	\$10	(9%)	NA	NA	NA	NA	NA	NA	NM	11%
02/01/18	45	One Stop Systems	\$617	\$19	\$636	22.9x	NM	43%	17%	(\$3)	\$5	(17%)	\$2	(66%)	NA	NA	NA	NA	NA	NA	43%	(7%)
09/28/17	27	Roku	\$1,303	\$219	\$1,523	3.0x	NM	36%	43%	\$47	\$14	--	\$91	547%	NA	NA	NA	NA	NA	NA	36%	(0%)
05/24/17	26	Smart Modular Technologies	\$181	\$58	\$239	NM	1.3x	NM	NM	(\$192)	\$11	(15%)	\$23	109%	NA	NA	NA	NA	NA	NA	NM	11%
11/02/16	29	GDS Services	\$7,333	\$193	\$7,526	NM	NM	109%	25%	\$512	\$10	(17%)	\$38	276%	NA	NA	NA	NA	NA	NA	109%	36%
10/28/16	29	Quantenna Communications	\$500	\$107	\$607	4.3x	NM	75%	40%	\$11	\$16	--	\$25	53%	NA	NA	NA	NA	NA	NA	75%	5%
08/12/16	28	Airgain	\$50	\$12	\$62	1.6x	NM	20%	47%	\$0	\$8	(11%)	\$14	77%	(61)	\$40	333%	\$18	233%	57%	20%	(1%)
07/11/16	244	Monster Digital	\$24	\$9	\$33	NM	NM	NM	NM	\$1	\$5	--	\$24	427%	NA	NA	NA	NA	NA	NA	NM	NM
11/19/15	34	Mimecast	\$503	\$78	\$581	3.9x	17.7x	45%	34%	\$24	\$10	--	\$47	367%	NA	NA	NA	NA	NA	NA	45%	8%
11/12/15	38	Xtera Communications	\$63	\$25	\$88	NM	NM	NM	NM	(\$39)	\$5	(44%)	\$0	(100%)	NA	NA	NA	NA	NA	NA	NM	NM
10/09/15	63	CPI Card Group	\$420	\$150	\$570	1.2x	15.1x	72%	NM	(\$154)	\$10	(17%)	\$3	(75%)	NA	NA	NA	NA	NA	NA	72%	10%
10/07/15	56	Pure Storage	\$3,468	\$425	\$3,893	12.7x	NM	541%	128%	\$128	\$17	--	\$15	(10%)	NA	NA	NA	NA	NA	NA	541%	(10%)
06/26/15	35	Alarm.com	\$571	\$98	\$669	3.2x	15.6x	36%	17%	\$32	\$14	--	\$54	282%	NA	NA	NA	NA	NA	NA	36%	8%
06/18/15	42	Fitbit	\$3,981	\$732	\$4,713	4.1x	NM	259%	108%	\$78	\$20	5%	\$4	(78%)	(33)	\$493	67%	\$29	(33%)	NA	259%	(8%)
05/20/15	148	Black Knight (US)	\$1,130	\$441	\$1,571	1.3x	2.4x	NM	13%	(\$2,073)	\$25	--	\$60	146%	NA	NA	NA	NA	NA	NA	NM	42%
03/26/15	36	Solaredge Technologies	\$651	\$126	\$777	3.0x	4.7x	173%	108%	\$19	\$18	--	\$62	247%	NA	NA	NA	NA	NA	NA	173%	14%
Median	32		\$634	\$103	\$723	3.2x	9.9x	59%	38%	\$15		(14%)		37%	(47)	\$266	200%	\$24	100%	57%	59%	6%
Mean	51		\$2,093	\$165	\$2,258	5.1x	9.5x	119%	51%	(\$121)		(13%)		104%	(47)	\$266	200%	\$24	100%	57%	119%	5%

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Valuation

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	EV / Revenue			EV / EBITDA			P / E			
					LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2	
CRM														
Salesforce	\$151.73	91%	\$117,825	\$117,677	8.4x	7.2x	6.0x	49.5x	28.5x	23.2x	NM	52.7x	45.2x	
Zendesk	89.03	95%	9,755	9,775	15.0	12.1	9.3	NM	NM	NM	NM	NM	146.0	
HubSpot	170.52	89%	7,179	6,721	12.2	10.2	8.2	NM	NM	NM	NM	133.0	100.9	
Pegasystems	71.21	93%	5,619	5,417	6.2	5.9	5.2	NM	NM	NM	NM	NM	123.8	
Median		92%	\$8,467	\$8,248	10.3x	8.7x	7.1x	49.5x	28.5x	23.2x	NM	92.8x	112.4x	
Mean		92%	\$35,095	\$34,898	10.5x	8.9x	7.2x	49.5x	28.5x	23.2x	NM	92.8x	104.0x	
Accounting / ERP														
Oracle	\$56.97	99%	\$190,042	\$208,960	5.3x	5.2x	5.0x	12.9x	10.8x	10.6x	17.9x	14.7x	13.7x	
SAP	137.30	100%	163,893	173,417	5.9	5.6	5.2	25.0	16.9	15.4	36.0	25.1	22.4	
International Business Machines	137.90	89%	122,268	159,267	2.0	2.1	2.1	9.2	8.7	8.5	14.7	9.9	9.7	
Intuit	261.33	96%	67,748	64,467	9.8	9.5	8.7	32.7	26.1	23.1	47.3	39.1	34.8	
The Sage Group (Financial Software)	10.17	99%	11,049	11,634	4.7	4.8	4.5	17.1	18.3	16.8	25.9	26.8	24.7	
Coupa	126.61	98%	7,821	7,680	26.9	22.3	17.6	NM	NM	NM	NM	NM	NM	
Anaplan	50.47	95%	6,519	6,191	23.4	18.8	14.6	NM	NM	NM	NM	NM	NM	
Xero	41.98	96%	5,892	5,880	15.2	12.2	9.6	NM	NM	41.7	NM	NM	141.3	
Avalara	72.20	96%	5,050	4,904	16.6	14.1	11.5	NM	NM	NM	NM	NM	NM	
BlackLine	53.51	92%	2,946	2,832	11.8	10.2	8.4	NM	NM	NM	NM	NM	NM	
Zuora	15.32	43%	1,702	1,536	6.2	5.6	4.8	NM	NM	NM	NM	NM	NM	
Upland Software	45.53	83%	978	1,242	7.4	5.9	5.5	NM	15.9	14.5	NM	21.4	20.1	
Qad	40.21	65%	760	636	2.0	1.9	1.8	NM	39.4	25.8	124.6	100.5	55.1	
Median		96%	\$6,519	\$6,191	7.4x	5.9x	5.5x	17.1x	16.9x	16.1x	31.0x	25.1x	23.5x	
Mean		89%	\$45,128	\$49,896	10.5x	9.1x	7.6x	19.4x	19.4x	19.5x	44.4x	33.9x	40.2x	
Supply Chain Management														
Dassault Systemes	\$159.52	97%	\$41,318	\$39,257	9.3x	8.9x	8.2x	30.7x	25.8x	23.6x	54.3x	40.4x	36.5x	
PTC	89.76	84%	10,326	10,745	8.6	8.1	7.2	NM	29.8	23.8	NM	49.9	35.1	
Aspen Technology	124.28	98%	8,571	8,725	16.1	15.4	14.0	35.0	32.0	27.0	94.2	35.9	31.7	
Manhattan Associates	69.33	98%	4,478	4,373	7.6	7.4	7.1	30.6	32.9	31.4	43.8	48.1	46.4	
Descartes Systems Group	37.00	89%	3,112	3,325	11.6	9.9	9.0	36.2	26.8	23.9	80.7	99.3	65.8	
SPS Commerce	102.21	89%	1,831	1,667	6.5	6.0	5.5	39.2	25.2	22.0	63.9	46.5	41.4	
American Software	13.15	69%	409	323	2.9	2.9	2.7	25.8	21.0	16.7	54.2	46.1	35.5	
Median		89%	\$4,478	\$4,373	8.6x	8.1x	7.2x	32.9x	26.8x	23.8x	59.1x	46.5x	36.5x	
Mean		89%	\$10,007	\$9,774	8.9x	8.4x	7.7x	32.9x	27.6x	24.1x	65.2x	52.3x	41.8x	

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Valuation (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	EV / Revenue			EV / EBITDA			P / E		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Human Capital Management													
Automatic Data Processing	\$165.33	97%	\$71,956	\$72,132	5.2x	4.8x	4.4x	24.5x	18.8x	16.7x	37.5x	27.1x	23.6x
Workday	205.58	93%	46,461	46,098	15.2	13.0	10.5	NM	NM	NM	NM	121.6	93.0
Paychex	82.29	93%	29,574	29,648	8.1	7.1	6.7	19.6	17.3	16.1	30.7	26.7	24.7
Paycom Software	226.72	97%	13,265	11,802	19.3	16.4	13.4	NM	39.7	31.7	91.1	68.9	54.8
Ceridian HCM	50.20	93%	7,070	2,973	4.0	3.7	3.2	27.2	16.2	13.2	NM	110.3	75.5
Smartsheet	48.40	96%	5,158	4,954	25.1	18.8	13.7	NM	NM	NM	NM	NM	NM
Insperty	122.14	92%	5,039	4,731	1.2	1.1	1.0	21.1	16.7	14.2	31.2	26.0	22.2
Paylocity	93.82	90%	4,970	3,109	7.0	5.5	4.6	39.8	18.9	15.1	117.5	56.9	43.2
TriNet Group	67.80	96%	4,745	4,845	1.4	5.2	4.7	15.3	12.6	11.2	23.7	20.1	18.3
Cornerstone OnDemand	57.93	96%	3,456	3,442	6.3	6.1	5.3	NM	27.5	22.8	NM	56.2	40.0
WageWorks	50.79	89%	2,025	1,280	2.8	2.7	2.6	13.9	9.6	8.8	94.1	31.5	28.9
Benefitfocus	27.15	45%	883	1,014	3.8	3.3	2.9	NM	NM	31.9	NM	NM	NM
Median		93%	\$5,098	\$4,788	5.7x	5.4x	4.7x	21.1x	17.3x	15.6x	37.5x	43.9x	34.4x
Mean		90%	\$16,217	\$15,502	8.3x	7.3x	6.1x	23.1x	19.7x	18.2x	60.8x	54.5x	42.4x
Knowledge / Content Management													
Adobe Systems	\$294.65	97%	\$143,035	\$143,689	14.2x	12.9x	10.9x	42.9x	28.7x	23.8x	55.7x	37.8x	30.3x
VeriSign	209.16	98%	24,928	25,469	20.8	20.7	19.7	28.8	28.4	27.1	43.6	40.1	37.3
Akamai Technologies	80.14	93%	13,151	12,916	4.7	4.5	4.3	14.9	11.1	10.0	35.8	19.3	17.1
OpenText	41.20	97%	11,121	12,973	4.5	4.2	4.2	12.6	10.8	10.4	35.5	13.4	12.8
Dropbox	25.05	72%	10,300	10,078	6.9	6.1	5.3	NM	26.4	21.2	NM	58.9	45.2
DocuSign	49.71	73%	8,640	8,505	11.2	9.2	7.5	NM	NM	NM	NM	NM	136.2
Box	17.61	64%	2,580	2,743	4.3	4.0	3.5	NM	NM	29.6	NM	NM	74.9
MobileIron	6.20	94%	674	567	2.9	2.7	2.4	NM	NM	NM	NM	NM	88.6
SDL	6.46	82%	586	568	1.3	1.2	1.1	16.0	11.6	10.2	20.6	18.1	15.7
Brightcove	10.33	97%	391	362	2.2	2.0	1.8	NM	48.2	31.1	NM	NM	73.8
Median		94%	\$9,470	\$9,291	4.6x	4.4x	4.2x	16.0x	26.4x	22.5x	35.8x	28.5x	41.3x
Mean		87%	\$21,541	\$21,787	7.3x	6.8x	6.1x	23.0x	23.6x	20.4x	38.2x	31.3x	53.2x
Business Intelligence / Analytics													
Splunk	\$125.75	88%	\$18,884	\$18,041	9.4x	8.0x	6.6x	NM	NM	38.0x	NM	70.3x	54.2x
Tableau Software	166.02	96%	14,493	13,690	11.5	10.0	8.4	NM	NM	NM	NM	96.8	72.7
Alteryx	109.12	98%	6,825	6,634	23.1	18.5	13.8	NM	NM	NM	NM	NM	NM
New Relic	86.51	75%	5,028	4,692	9.8	7.8	6.2	NM	NM	39.4	NM	143.0	78.7
Teradata	35.85	73%	4,198	4,031	1.9	2.0	2.0	24.1	9.8	8.8	NM	24.1	17.7
Verint Systems	53.78	84%	3,537	3,880	3.1	2.8	2.6	19.0	11.4	9.9	51.3	14.7	12.9
MicroStrategy	143.31	94%	1,467	916	1.9	1.8	1.7	NM	29.0	15.5	135.2	NM	45.1
Cloudera	5.26	26%	1,442	998	1.8	1.3	1.2	NM	38.4	11.8	NM	NM	NM
Domo	27.32	58%	748	692	4.6	4.0	3.3	NM	NM	NM	NM	NM	NM
Median		84%	\$4,198	\$4,031	4.6x	4.0x	3.3x	21.6x	20.2x	13.7x	93.2x	70.3x	49.6x
Mean		77%	\$6,291	\$5,953	7.4x	6.3x	5.1x	21.6x	22.1x	20.6x	93.2x	69.8x	46.9x

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Valuation (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	EV / Revenue			EV / EBITDA			P / E		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
IT / Infrastructure													
Microsoft	\$133.96	97%	\$1,026,511	\$967,993	7.9x	7.0x	6.4x	17.4x	16.1x	14.0x	30.3x	26.4x	23.2x
Oracle	56.97	99%	190,042	208,960	5.3	5.2	5.0	12.9	10.8	10.6	17.9	14.7	13.7
International Business Machines	137.90	89%	122,268	159,267	2.0	2.1	2.1	9.2	8.7	8.5	14.7	9.9	9.7
VMware	167.21	81%	68,424	69,357	7.5	6.9	6.3	22.9	17.9	16.6	36.8	25.7	22.9
ServiceNow	274.57	94%	50,937	50,368	17.9	14.6	11.4	NM	NM	41.0	NM	86.2	65.2
Red Hat	187.76	99%	33,439	31,342	9.0	8.0	7.0	48.4	29.5	27.3	71.7	45.8	41.6
Atlassian	130.84	95%	31,541	30,612	27.5	19.8	15.8	NM	NM	NM	NM	130.8	98.7
Hewlett Packard Enterprise	14.95	85%	20,020	28,924	1.0	1.0	1.0	5.8	5.5	5.6	24.3	8.8	8.3
L3 Technologies	245.17	94%	19,479	22,403	2.1	2.0	1.9	16.8	14.2	13.1	21.6	20.9	19.0
Splunk	125.75	88%	18,884	18,041	9.4	8.0	6.6	NM	NM	38.0	NM	70.3	54.2
Akamai Technologies	80.14	93%	13,151	12,916	4.7	4.5	4.3	14.9	11.1	10.0	35.8	19.3	17.1
Citrix Systems	98.14	84%	12,920	13,039	4.4	4.2	4.0	16.6	11.7	11.5	23.5	16.3	14.9
Juniper Networks	26.63	86%	9,169	7,753	1.7	1.7	1.7	10.2	8.5	8.0	15.9	15.3	13.4
MongoDB	152.09	82%	8,415	8,172	26.5	21.5	16.4	NM	NM	NM	NM	NM	NM
SolarWinds	18.34	86%	5,686	7,173	8.4	7.6	6.8	21.4	15.9	14.1	11.3	22.6	19.5
New Relic	86.51	75%	5,028	4,692	9.8	7.8	6.2	NM	NM	39.4	NM	143.0	78.7
Nutanix	25.94	41%	4,824	4,334	3.5	3.5	3.1	NM	NM	NM	NM	NM	NM
LogMeIn	73.68	65%	3,669	3,839	3.1	3.1	2.9	11.2	9.3	9.7	89.8	14.8	15.1
PagerDuty	47.05	79%	3,580	3,242	24.9	19.2	15.5	NM	NM	NM	NM	NM	NM
Pivotal Software	10.56	36%	2,871	2,164	3.1	2.8	2.4	NM	NM	NM	NM	NM	NM
Software	34.41	67%	2,545	1,996	2.0	NM	NM	6.7	NM	NM	13.3	NM	NM
NetScout Systems	25.39	80%	1,967	2,031	2.2	2.2	2.2	30.8	10.1	9.0	NM	17.9	15.4
Progress Software	43.62	92%	1,941	2,111	5.4	5.0	4.9	17.4	NM	NM	31.7	17.0	15.9
Cloudera	5.26	26%	1,442	998	1.8	1.3	1.2	NM	38.4	11.8	NM	NM	NM
Median		86%	\$11,045	\$10,544	5.0x	5.0x	4.9x	16.6x	11.4x	11.8x	23.9x	20.1x	18.1x
Mean		80%	\$69,115	\$69,239	8.0x	6.9x	5.9x	17.5x	14.8x	16.9x	31.3x	39.2x	30.4x
Security													
VeriSign	\$209.16	98%	\$24,928	\$25,469	20.8x	20.7x	19.7x	28.8x	28.4x	27.1x	43.6x	40.1x	37.3x
Palo Alto Networks	203.76	78%	19,556	18,081	6.6	6.2	5.2	NM	24.4	20.1	NM	37.8	32.6
Check Point Software Technologies	115.61	87%	17,964	16,205	8.5	8.1	7.8	17.7	16.0	14.8	21.9	19.1	17.9
Okta	123.51	90%	14,097	13,825	31.4	25.3	19.3	NM	NM	NM	NM	NM	NM
Symantec	21.76	88%	13,452	15,861	3.4	3.3	3.2	17.8	8.3	7.9	68.0	12.7	11.8
Fortinet	76.83	79%	13,120	11,318	6.0	5.4	4.8	37.7	21.3	18.1	37.3	36.1	32.1
Zscaler	76.64	93%	9,631	9,278	34.0	31.1	23.5	NM	NM	NM	NM	NM	NM
Proofpoint	120.25	91%	6,695	6,438	8.5	7.3	6.1	NM	48.4	35.0	NM	82.0	60.7
CyberArk Software	127.84	92%	4,808	4,342	11.8	10.4	8.7	NM	40.2	33.0	86.4	59.5	49.7
Qualys	87.08	89%	3,410	3,146	10.9	9.8	8.4	37.2	25.4	21.0	55.4	45.4	39.5
FireEye	14.81	72%	3,037	2,881	3.4	3.2	2.9	NM	25.9	18.7	NM	98.7	47.8
Mimecast	46.71	86%	2,865	2,830	8.3	6.7	5.6	NM	39.5	29.3	NM	113.9	69.7
Rapid7	57.84	98%	2,788	2,714	10.3	8.6	7.0	NM	NM	NM	NM	NM	NM
Tenable	28.54	72%	2,753	2,454	8.5	7.1	5.7	NM	NM	NM	NM	NM	NM
Sophos	5.00	59%	2,415	2,543	3.6	3.3	3.1	26.9	18.2	14.8	NM	38.5	32.1
SailPoint Technologies	20.04	58%	1,777	1,731	6.7	6.2	5.3	NM	NM	49.0	NM	133.6	79.8
ForeScout	33.86	73%	1,531	1,418	4.5	3.8	3.2	NM	NM	NM	NM	NM	NM
Carbon Black	16.72	61%	1,197	1,043	4.7	4.3	3.6	NM	NM	NM	NM	NM	NM
Median		84%	\$2,951	\$2,856	7.5x	6.2x	5.3x	27.8x	24.4x	19.4x	60.2x	38.5x	32.6x
Mean		79%	\$6,803	\$6,614	9.6x	8.3x	7.0x	28.1x	25.1x	22.3x	60.0x	52.8x	38.1x

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Valuation (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	EV / Revenue			EV / EBITDA			P / E		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Financial Technology													
Fidelity National Information Services	\$122.68	98%	\$39,728	\$48,374	5.7x	5.7x	5.5x	17.3x	14.7x	13.7x	42.7x	16.4x	15.1x
Fiserv	91.16	99%	35,775	41,198	7.0	6.7	6.3	20.3	17.5	16.4	36.6	26.4	23.6
Square	72.53	72%	30,678	30,053	8.4	13.2	9.8	NM	NM	47.0	NM	95.4	63.1
Jack Henry and Associates	133.92	82%	10,339	10,339	6.4	6.2	5.8	18.9	19.5	17.3	35.5	36.2	31.0
Fair Isaac	314.02	98%	9,103	9,849	9.1	8.7	7.9	38.1	28.4	25.0	58.7	44.1	36.6
Guidewire Software	101.38	93%	8,294	7,603	10.1	10.6	9.5	NM	NM	NM	138.1	72.7	78.9
ACI Worldwide	34.34	96%	3,797	4,287	4.3	3.3	2.9	20.5	11.8	10.1	64.8	21.1	17.3
Q2 Holdings	76.36	96%	3,597	3,618	14.0	11.6	9.5	NM	NM	NM	NM	NM	NM
Envestnet	68.37	94%	3,546	3,764	4.6	4.1	3.5	NM	19.4	15.6	NM	32.1	25.7
Bottomline Technologies	44.24	60%	1,926	1,944	4.6	4.3	3.8	31.7	18.4	16.6	104.8	30.9	27.3
Ebix	50.22	56%	1,533	2,248	4.2	3.6	3.1	13.3	10.4	9.6	14.4	11.7	9.3
Median		94%	\$8,294	\$7,603	6.4x	6.2x	5.8x	20.3x	17.9x	16.4x	50.7x	31.5x	26.5x
Mean		86%	\$13,483	\$14,843	7.1x	7.1x	6.2x	22.9x	17.5x	19.0x	61.9x	38.7x	32.8x
Vertical Software													
Veeva Systems	\$162.11	93%	\$23,873	\$22,563	24.8x	21.5x	18.1x	NM	NM	47.4x	91.2x	79.9x	68.7x
SS&C Technologies	\$57.61	85%	\$14,575	\$22,537	5.4	4.8	4.6	19.3	11.9	11.1	55.8	15.0	13.7
Guidewire Software	\$101.38	93%	\$8,294	\$7,603	10.1	10.6	9.5	NM	NM	NM	138.1	72.7	78.9
Tyler Technologies	\$216.02	86%	\$8,283	\$8,291	8.6	7.6	6.9	38.3	27.0	23.9	60.7	40.8	36.6
Medidata Solutions	\$90.51	92%	\$5,639	\$5,631	8.5	7.6	6.6	NM	31.6	26.2	99.4	49.3	42.9
RealPage	\$58.85	89%	\$5,567	\$6,016	6.7	6.1	5.5	34.3	21.4	18.4	138.7	33.4	28.4
Blackbaud	\$83.50	69%	\$4,107	\$4,665	5.4	5.2	5.0	37.3	25.7	24.3	123.8	38.1	34.4
Q2 Holdings	\$76.36	96%	\$3,597	\$3,618	14.0	11.6	9.5	NM	NM	NM	NM	NM	NM
AppFolio	\$102.27	93%	\$3,478	\$3,512	17.1	13.8	11.0	NM	NM	NM	NM	NM	129.5
Qad	\$40.21	65%	\$760	\$636	2.0	1.9	1.8	NM	39.4	25.8	124.6	100.5	55.1
Model N	\$19.50	96%	\$633	\$628	4.3	4.5	4.0	NM	NM	46.2	NM	139.3	79.6
Median		92%	\$5,567	\$5,631	8.5x	7.6x	6.6x	35.8x	26.4x	25.1x	111.6x	49.3x	49.0x
Mean		87%	\$7,164	\$7,791	9.7x	8.7x	7.5x	32.3x	26.2x	27.9x	104.0x	63.2x	56.8x
Healthcare IT / Life Sciences Software													
Veeva Systems	\$162.11	93%	\$23,873	\$22,563	24.8x	21.5x	18.1x	NM	NM	47.4x	91.2x	79.9x	68.7x
Cerner	73.30	100%	23,852	23,387	4.3	4.1	3.8	16.3	14.0	12.3	38.0	27.4	23.1
Medidata Solutions	90.51	92%	5,639	5,631	8.5	7.6	6.6	NM	31.6	26.2	99.4	49.3	42.9
Allscripts Healthcare Solutions	11.63	78%	1,936	2,585	1.5	1.4	1.4	9.5	8.5	7.8	NM	17.1	15.4
NextGen Healthcare	19.90	84%	1,290	1,268	2.4	2.3	2.2	16.9	13.0	12.0	50.9	22.1	19.9
HealthStream	25.86	81%	838	691	2.9	2.7	2.7	15.9	17.1	16.6	53.9	78.4	71.8
Castlight Health	3.23	54%	465	401	2.6	2.6	2.3	NM	NM	27.2	NM	NM	46.1
Cegedim	30.59	77%	428	552	1.0	1.0	1.0	7.2	5.3	5.1	21.7	18.5	15.7
Median		83%	\$1,613	\$1,926	2.7x	2.6x	2.5x	15.9x	13.5x	14.4x	52.4x	27.4x	33.0x
Mean		82%	\$7,290	\$7,135	6.0x	5.4x	4.8x	13.1x	14.9x	19.3x	59.2x	41.8x	38.0x

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Valuation (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	EV / Revenue			EV / EBITDA			P / E		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Education Technology													
Chegg	\$38.59	93%	\$4,575	\$4,380	12.8x	11.0x	9.1x	NM	37.0x	28.7x	NM	70.8x	47.6x
Pluralsight	30.32	79%	4,198	4,048	17.4	12.8	9.5	NM	NM	NM	NM	NM	NM
Cornerstone OnDemand	57.93	96%	3,456	3,442	6.3	6.1	5.3	NM	27.5	22.8	NM	56.2	40.0
2U	37.64	40%	2,374	1,951	4.4	3.6	2.9	NM	NM	NM	NM	NM	NM
Instructure	42.50	85%	1,555	1,513	6.9	5.9	4.8	NM	NM	NM	NM	NM	NM
K12	30.41	81%	1,223	1,020	1.0	1.0	0.9	8.3	7.5	6.6	27.4	35.0	30.7
Learning Technologies Group	1.22	56%	818	832	6.6	5.2	4.8	28.1	17.7	15.8	50.1	25.2	22.3
Median		81%	\$2,374	\$1,951	6.6x	5.9x	4.8x	18.2x	22.6x	19.3x	38.7x	45.6x	35.3x
Mean		76%	\$2,600	\$2,455	7.9x	6.5x	5.3x	18.2x	22.4x	18.5x	38.7x	46.8x	35.2x
Marketing Automation													
Oracle	\$56.97	99%	\$190,042	\$208,960	5.3x	5.2x	5.0x	12.9x	10.8x	10.6x	17.9x	14.7x	13.7x
Adobe Systems	294.65	97%	143,035	143,689	14.2	12.9	10.9	42.9	28.7	23.8	55.7	37.8	30.3
Salesforce	151.73	91%	117,825	117,677	8.4	7.2	6.0	49.5	28.5	23.2	NM	52.7	45.2
Zendesk	89.03	95%	9,755	9,775	15.0	12.1	9.3	NM	NM	NM	NM	NM	146.0
HubSpot	170.52	89%	7,179	6,721	12.2	10.2	8.2	NM	NM	NM	NM	133.0	100.9
LivePerson	28.04	91%	1,818	1,771	6.9	6.1	5.1	NM	NM	NM	NM	NM	NM
Median		93%	\$63,790	\$63,726	10.3x	8.7x	7.1x	42.9x	28.5x	23.2x	36.8x	45.2x	45.2x
Mean		93%	\$78,276	\$81,432	10.3x	8.9x	7.4x	35.1x	22.7x	19.2x	36.8x	59.5x	67.2x
Storage & Collaboration													
Atlassian	\$130.84	95%	\$31,541	\$30,612	27.5x	19.8x	15.8x	NM	NM	NM	NM	130.8x	98.7x
NetApp	61.70	70%	14,809	12,703	2.1	2.0	1.9	8.9	7.7	7.2	13.8	12.4	11.1
OpenText	41.20	97%	11,121	12,973	4.5	4.2	4.2	12.6	10.8	10.4	35.5	13.4	12.8
Dropbox	25.05	72%	10,300	10,078	6.9	6.1	5.3	NM	26.4	21.2	NM	58.9	45.2
Smartsheet	48.40	96%	5,158	4,954	25.1	18.8	13.7	NM	NM	NM	NM	NM	NM
Box	17.61	64%	2,580	2,743	4.3	4.0	3.5	NM	NM	29.6	NM	NM	74.9
CommVault Systems	49.62	70%	2,267	1,808	2.5	2.5	2.3	NM	16.2	13.4	NM	28.8	21.8
Median		72%	\$10,300	\$10,078	4.5x	4.2x	4.2x	10.7x	13.5x	13.4x	24.7x	28.8x	33.5x
Mean		81%	\$11,111	\$10,839	10.4x	8.2x	6.7x	10.7x	15.3x	16.4x	24.7x	48.9x	44.1x
Communications													
Zoom Video Communications	\$88.79	83%	\$24,191	\$23,506	59.9x	43.5x	32.1x	NM	NM	NM	NM	NM	NM
Twilio	136.35	90%	17,216	16,758	22.2	15.1	11.4	NM	NM	NM	NM	NM	NM
NICE Systems	137.00	93%	8,413	8,300	5.6	5.3	4.9	22.3	17.2	15.5	48.6	26.3	24.0
Nuance	15.97	88%	4,634	5,924	2.9	3.2	3.0	48.8	7.6	NM	60.4	13.6	12.9
Five9	51.29	89%	3,061	2,962	10.8	9.7	8.3	NM	NM	44.2	NM	78.9	63.3
Everbridge	89.42	92%	2,944	2,782	17.5	14.1	11.2	NM	NM	NM	NM	NM	NM
8X8	24.10	95%	2,325	2,194	6.2	5.2	4.4	NM	NM	NM	NM	NM	NM
Synchronoss Technologies	7.91	93%	338	517	1.6	1.5	1.4	NM	15.2	12.9	NM	NM	NM
Median		91%	\$3,847	\$4,443	8.5x	7.5x	6.6x	35.5x	15.2x	15.5x	54.5x	26.3x	24.0x
Mean		90%	\$7,890	\$7,868	15.8x	12.2x	9.6x	35.5x	13.3x	24.2x	54.5x	39.6x	33.4x

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Operating Metrics

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
CRM										
Salesforce	\$151.73	91%	\$117,825	\$117,677	26%	22%	21%	17%	25%	26%
Zendesk	89.03	95%	9,755	9,775	40%	35%	30%	(17%)	9%	10%
HubSpot	170.52	89%	7,179	6,721	35%	28%	24%	(4%)	12%	14%
Pegasystems	71.21	93%	5,619	5,417	0%	4%	13%	(3%)	5%	7%
Median		92%	\$8,467	\$8,248	30%	25%	22%	(3%)	11%	12%
Mean		92%	\$35,095	\$34,898	25%	22%	22%	(2%)	13%	14%
Accounting / ERP										
Oracle	\$56.97	99%	\$190,042	\$208,960	0%	3%	3%	41%	48%	48%
SAP	137.30	100%	163,893	173,417	8%	5%	8%	23%	33%	34%
International Business Machines	137.90	89%	122,268	159,267	(2%)	(3%)	0%	22%	24%	24%
Intuit	261.33	96%	67,748	64,467	10%	13%	10%	30%	37%	38%
The Sage Group (Financial Software)	10.17	99%	11,049	11,634	6%	(2%)	6%	27%	26%	27%
Coupa	126.61	98%	7,821	7,680	41%	32%	27%	(14%)	3%	8%
Anaplan	50.47	95%	6,519	6,191	33%	37%	29%	(47%)	(17%)	(10%)
Xero	41.98	96%	5,892	5,880	31%	25%	27%	13%	21%	23%
Avalara	72.20	96%	5,050	4,904	31%	28%	23%	(19%)	(0%)	4%
BlackLine	53.51	92%	2,946	2,832	28%	22%	21%	(4%)	7%	8%
Zuora	15.32	43%	1,702	1,536	32%	16%	17%	(28%)	(15%)	(11%)
Upland Software	45.53	83%	978	1,242	53%	41%	8%	8%	37%	38%
Qad	40.21	65%	760	636	2%	(1%)	7%	3%	5%	7%
Median		96%	\$6,519	\$6,191	28%	16%	10%	8%	21%	23%
Mean		89%	\$45,128	\$49,896	21%	17%	14%	4%	16%	18%
Supply Chain Management										
Dassault Systemes	\$159.52	97%	\$41,318	\$39,257	10%	8%	8%	30%	34%	35%
PTC	89.76	84%	10,326	10,745	3%	6%	13%	10%	27%	30%
Aspen Technology	124.28	98%	8,571	8,725	12%	13%	11%	46%	48%	52%
Manhattan Associates	69.33	98%	4,478	4,373	(1%)	5%	5%	25%	23%	22%
Descartes Systems Group	37.00	89%	3,112	3,325	14%	22%	10%	32%	37%	38%
SPS Commerce	102.21	89%	1,831	1,667	13%	11%	9%	17%	24%	25%
American Software	13.15	69%	409	323	2%	(1%)	6%	11%	14%	16%
Median		89%	\$4,478	\$4,373	10%	8%	9%	25%	27%	30%
Mean		89%	\$10,007	\$9,774	8%	9%	9%	24%	30%	31%
Human Capital Management										
Automatic Data Processing	\$165.33	97%	\$71,956	\$72,132	7%	14%	8%	21%	25%	27%
Workday	205.58	93%	46,461	46,098	33%	26%	23%	(8%)	20%	21%
Paychex	82.29	93%	29,574	29,648	9%	23%	6%	42%	41%	42%
Paycom Software	226.72	97%	13,265	11,802	31%	27%	23%	36%	41%	42%
Ceridian HCM	50.20	93%	7,070	2,973	11%	9%	13%	15%	23%	24%
Smartsheet	48.40	96%	5,158	4,954	58%	48%	37%	(26%)	(18%)	(13%)
Insperity	122.14	92%	5,039	4,731	16%	13%	12%	6%	7%	7%
Paylocity	93.82	90%	4,970	3,109	24%	49%	20%	18%	29%	30%
TriNet Group	67.80	96%	4,745	4,845	7%	(73%)	10%	9%	41%	42%
Cornerstone OnDemand	57.93	96%	3,456	3,442	8%	6%	14%	7%	22%	23%
WageWorks	50.79	89%	2,025	1,280	(3%)	1%	4%	20%	28%	29%
Benefitfocus	27.15	45%	883	1,014	10%	18%	16%	(8%)	6%	9%
Median		93%	\$5,098	\$4,788	10%	16%	13%	12%	24%	26%
Mean		90%	\$16,217	\$15,502	18%	13%	15%	11%	22%	24%

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Operating Metrics (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
Knowledge / Content Management										
Adobe Systems	\$294.65	97%	\$143,035	\$143,689	24%	24%	18%	33%	45%	46%
VeriSign	209.16	98%	24,928	25,469	4%	1%	5%	72%	73%	73%
Akamai Technologies	80.14	93%	13,151	12,916	8%	5%	7%	31%	41%	42%
OpenText	41.20	97%	11,121	12,973	6%	9%	2%	36%	39%	40%
Dropbox	25.05	72%	10,300	10,078	24%	18%	15%	9%	23%	25%
DocuSign	49.71	73%	8,640	8,505	35%	31%	24%	(19%)	8%	10%
Box	17.61	64%	2,580	2,743	19%	13%	12%	(14%)	8%	12%
MobileIron	6.20	94%	674	567	9%	9%	12%	(20%)	3%	NA
SDL	6.46	82%	586	568	17%	8%	6%	8%	11%	11%
Brightcove	10.33	97%	391	362	4%	12%	9%	(6%)	4%	6%
Median		94%	\$9,470	\$9,291	13%	10%	10%	9%	17%	25%
Mean		87%	\$21,541	\$21,787	15%	13%	11%	13%	25%	29%
Business Intelligence / Analytics										
Splunk	\$125.75	88%	\$18,884	\$18,041	37%	25%	22%	(12%)	16%	17%
Tableau Software	166.02	96%	14,493	13,690	29%	19%	19%	(6%)	16%	17%
Alteryx	109.12	98%	6,825	6,634	87%	41%	34%	14%	10%	12%
New Relic	86.51	75%	5,028	4,692	35%	26%	25%	4%	10%	16%
Teradata	35.85	73%	4,198	4,031	(2%)	(8%)	3%	8%	21%	22%
Verint Systems	53.78	84%	3,537	3,880	8%	12%	10%	16%	25%	26%
MicroStrategy	143.31	94%	1,467	916	(3%)	(0%)	8%	1%	6%	11%
Cloudera	5.26	26%	1,442	998	43%	57%	13%	(35%)	3%	10%
Domo	27.32	58%	748	692	30%	22%	21%	(89%)	NA	NA
Median		84%	\$4,198	\$4,031	30%	22%	19%	1%	13%	16%
Mean		77%	\$6,291	\$5,953	29%	21%	17%	(11%)	13%	16%

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Operating Metrics (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
IT / Infrastructure										
Microsoft	\$133.96	97%	\$1,026,511	\$967,993	15%	25%	10%	46%	43%	46%
Oracle	56.97	99%	190,042	208,960	0%	3%	3%	41%	48%	48%
International Business Machines	137.90	89%	122,268	159,267	(2%)	(3%)	0%	22%	24%	24%
VMware	167.21	81%	68,424	69,357	13%	12%	10%	33%	39%	38%
ServiceNow	274.57	94%	50,937	50,368	35%	32%	28%	5%	27%	28%
Red Hat	187.76	99%	33,439	31,342	14%	16%	14%	19%	27%	26%
Atlassian	130.84	95%	31,541	30,612	38%	77%	25%	(32%)	24%	25%
Hewlett Packard Enterprise	14.95	85%	20,020	28,924	0%	(3%)	1%	16%	18%	17%
L3 Technologies	245.17	94%	19,479	22,403	10%	7%	6%	13%	14%	15%
Splunk	125.75	88%	18,884	18,041	37%	25%	22%	(12%)	16%	17%
Akamai Technologies	80.14	93%	13,151	12,916	8%	5%	7%	31%	41%	42%
Citrix Systems	98.14	84%	12,920	13,039	5%	4%	4%	26%	36%	35%
Juniper Networks	26.63	86%	9,169	7,753	(7%)	(4%)	3%	17%	20%	21%
MongoDB	152.09	82%	8,415	8,172	68%	42%	31%	(30%)	(14%)	(8%)
SolarWinds	18.34	86%	5,686	7,173	8%	13%	12%	39%	48%	48%
New Relic	86.51	75%	5,028	4,692	35%	26%	25%	4%	10%	16%
Nutanix	25.94	41%	4,824	4,334	12%	7%	12%	(35%)	(17%)	(20%)
LogMeIn	73.68	65%	3,669	3,839	14%	4%	5%	28%	33%	30%
PagerDuty	47.05	79%	3,580	3,242	63%	38%	29%	(35%)	(15%)	(7%)
Pivotal Software	10.56	36%	2,871	2,164	26%	16%	18%	(17%)	(4%)	NA
Software	34.41	67%	2,545	1,996	2%	NA	NA	29%	NA	NA
NetScout Systems	25.39	80%	1,967	2,031	(8%)	(1%)	3%	7%	22%	24%
Progress Software	43.62	92%	1,941	2,111	(3%)	7%	1%	31%	NA	NA
Cloudera	5.26	26%	1,442	998	43%	57%	13%	(35%)	3%	10%
Median		86%	\$11,045	\$10,544	13%	12%	10%	16%	23%	24%
Mean		80%	\$69,115	\$69,239	18%	18%	12%	9%	20%	23%

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Operating Metrics (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
Security										
VeriSign	\$209.16	98%	\$24,928	\$25,469	4%	1%	5%	72%	73%	73%
Palo Alto Networks	203.76	78%	19,556	18,081	30%	27%	19%	3%	26%	26%
Check Point Software Technologies	115.61	87%	17,964	16,205	3%	4%	4%	48%	51%	53%
Okta	123.51	90%	14,097	13,825	53%	37%	31%	(28%)	(9%)	(1%)
Symantec	21.76	88%	13,452	15,861	(2%)	2%	2%	19%	40%	41%
Fortinet	76.83	79%	13,120	11,318	21%	16%	13%	16%	25%	27%
Zscaler	76.64	93%	9,631	9,278	60%	57%	32%	(9%)	6%	6%
Proofpoint	120.25	91%	6,695	6,438	34%	22%	21%	(3%)	15%	17%
CyberArk Software	127.84	92%	4,808	4,342	34%	22%	19%	18%	26%	26%
Qualys	87.08	89%	3,410	3,146	19%	15%	16%	29%	39%	40%
FireEye	14.81	72%	3,037	2,881	6%	8%	9%	(13%)	12%	16%
Mimecast	46.71	86%	2,865	2,830	30%	24%	21%	8%	17%	19%
Rapid7	57.84	98%	2,788	2,714	25%	29%	23%	(13%)	4%	9%
Tenable	28.54	72%	2,753	2,454	40%	29%	25%	(25%)	(14%)	(8%)
Sophos	5.00	59%	2,415	2,543	11%	7%	8%	13%	18%	21%
SailPoint Technologies	20.04	58%	1,777	1,731	30%	12%	16%	7%	8%	11%
ForeScout	33.86	73%	1,531	1,418	30%	25%	21%	(22%)	(2%)	5%
Carbon Black	16.72	61%	1,197	1,043	27%	16%	18%	(35%)	(15%)	(9%)
Radware	24.73	87%	1,161	869	11%	8%	11%	11%	NA	NA
SecureWorks	13.29	53%	1,083	1,000	9%	4%	7%	(1%)	0%	2%
Carbonite	26.04	60%	897	1,295	27%	68%	19%	17%	27%	27%
Zix	9.09	82%	505	756	25%	138%	24%	9%	22%	24%
Median		84%	\$2,951	\$2,856	26%	19%	18%	8%	17%	19%
Mean		79%	\$6,803	\$6,614	24%	26%	17%	5%	18%	20%
Financial Technology										
Fidelity National Information Services	\$122.68	98%	\$39,728	\$48,374	(2%)	0%	4%	33%	39%	40%
Fiserv	91.16	99%	35,775	41,198	2%	6%	5%	34%	38%	39%
Square	72.53	72%	30,678	30,053	48%	(31%)	35%	2%	18%	21%
Jack Henry and Associates	133.92	82%	10,339	10,339	9%	8%	7%	34%	32%	34%
Fair Isaac	314.02	98%	9,103	9,849	11%	10%	9%	24%	30%	32%
Guidewire Software	101.38	93%	8,294	7,603	28%	10%	12%	9%	17%	15%
ACI Worldwide	34.34	96%	3,797	4,287	0%	31%	13%	21%	28%	29%
Q2 Holdings	76.36	96%	3,597	3,618	26%	29%	23%	(10%)	7%	11%
Envestnet	68.37	94%	3,546	3,764	12%	12%	17%	8%	21%	23%
Bottomline Technologies	44.24	60%	1,926	1,944	10%	16%	11%	15%	23%	23%
Ebix	50.22	56%	1,533	2,248	35%	26%	15%	32%	34%	33%
Median		94%	\$8,294	\$7,603	11%	10%	12%	21%	28%	29%
Mean		86%	\$13,483	\$14,843	16%	11%	14%	18%	26%	27%

Source: Capital IQ and Pitchbook as of 6/30/19

Public Company Operating Metrics (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
Storage & Collaboration										
Atlassian	130.84	95%	31,541	30,612	38%	77%	25%	(32%)	24%	25%
NetApp	61.70	70%	14,809	12,703	4%	3%	5%	23%	26%	27%
OpenText	41.20	97%	11,121	12,973	6%	9%	2%	36%	39%	40%
Dropbox	25.05	72%	10,300	10,078	24%	18%	15%	9%	23%	25%
Smartsheet	48.40	96%	5,158	4,954	58%	48%	37%	(26%)	(18%)	(13%)
Box	17.61	64%	2,580	2,743	19%	13%	12%	(14%)	8%	12%
CommVault Systems	49.62	70%	2,267	1,808	2%	2%	8%	2%	15%	17%
Median		72%	\$10,300	\$10,078	19%	13%	12%	2%	23%	25%
Mean		81%	\$11,111	\$10,839	21%	24%	15%	(0%)	17%	19%
Communications										
Zoom Video Communications	88.79	83%	24,191	23,506	79%	63%	36%	5%	2%	0%
Twilio	136.35	90%	17,216	16,758	71%	70%	33%	(18%)	8%	8%
NICE Systems	137.00	93%	8,413	8,300	9%	9%	8%	25%	31%	31%
Nuance	15.97	88%	4,634	5,924	6%	(9%)	5%	6%	42%	NA
Five9	51.29	89%	3,061	2,962	29%	19%	17%	7%	16%	19%
Everbridge	89.42	92%	2,944	2,782	42%	34%	26%	(19%)	2%	5%
8X8	24.10	95%	2,325	2,194	19%	19%	20%	(14%)	(9%)	(0%)
Synchronoss Technologies	7.91	93%	338	517	(17%)	6%	6%	(46%)	10%	11%
Median		91%	\$3,847	\$4,443	24%	19%	18%	(4%)	9%	8%
Mean		90%	\$7,890	\$7,868	30%	26%	19%	(7%)	13%	10%
Vertical Software										
Veeva Systems	\$162.11	93%	\$23,873	\$22,563	25%	22%	19%	30%	38%	38%
SS&C Technologies	57.61	85%	14,575	22,537	145%	37%	4%	28%	40%	41%
Guidewire Software	101.38	93%	8,294	7,603	28%	10%	12%	9%	17%	15%
Tyler Technologies	216.02	86%	8,283	8,291	11%	16%	10%	23%	28%	29%
Medidata Solutions	90.51	92%	5,639	5,631	17%	16%	15%	14%	24%	25%
RealPage	58.85	89%	5,567	6,016	25%	14%	11%	19%	28%	30%
Blackbaud	83.50	69%	4,107	4,665	7%	5%	5%	15%	20%	20%
Q2 Holdings	76.36	96%	3,597	3,618	26%	29%	23%	(10%)	7%	11%
AppFolio	102.27	93%	3,478	3,512	33%	34%	25%	15%	18%	20%
Qad	40.21	65%	760	636	2%	(1%)	7%	3%	5%	7%
Model N	19.50	96%	633	628	(1%)	(10%)	11%	(10%)	8%	9%
Median		92%	\$5,567	\$5,631	25%	16%	11%	15%	20%	20%
Mean		87%	\$7,164	\$7,791	29%	16%	13%	12%	21%	22%
Healthcare IT / Life Sciences Software										
Veeva Systems	162.11	93%	23,873	22,563	25%	22%	19%	30%	38%	38%
Cerner	73.30	100%	23,852	23,387	6%	7%	7%	26%	29%	31%
Medidata Solutions	90.51	92%	5,639	5,631	17%	16%	15%	14%	24%	25%
Allscripts Healthcare Solutions	11.63	78%	1,936	2,585	10%	3%	4%	16%	17%	18%
NextGen Healthcare	19.90	84%	1,290	1,268	(0%)	4%	NA	14%	18%	NA
HealthStream	25.86	81%	838	691	11%	11%	0%	18%	16%	16%
Castlight Health	3.23	54%	465	401	10%	(0%)	13%	(19%)	4%	8%
Cegedim	30.59	77%	428	552	7%	0%	4%	14%	19%	19%
Median		83%	\$1,613	\$1,926	10%	5%	7%	15%	18%	19%
Mean		82%	\$7,290	\$7,135	11%	8%	9%	14%	21%	22%

Source: Capital IQ and Pitchbook as of 6/30/19

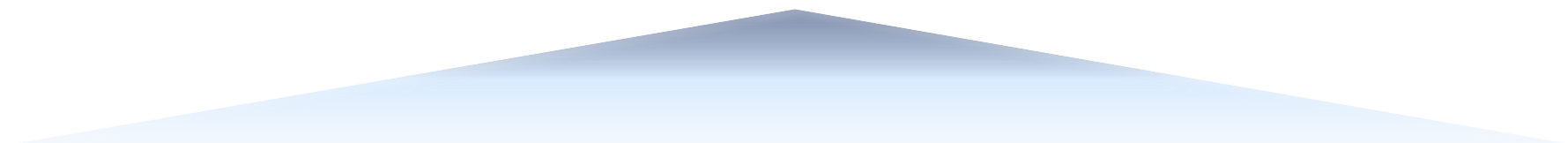
Public Company Operating Metrics (cont.)

Company	Price 06/30/19	52-Wk High	Mkt Cap	EV	Revenue Growth			EBITDA Margin		
					LTM	FY+1	FY+2	LTM	FY+1	FY+2
Education Technology										
Chegg	38.59	93%	4,575	4,380	27%	24%	21%	7%	30%	32%
Pluralsight	30.32	79%	4,198	4,048	39%	36%	35%	(53%)	(15%)	(1%)
Cornerstone OnDemand	57.93	96%	3,456	3,442	8%	6%	14%	7%	22%	23%
2U	37.64	40%	2,374	1,951	41%	30%	26%	(5%)	2%	3%
Instructure	42.50	85%	1,555	1,513	26%	23%	NA	(19%)	(5%)	NA
K12	30.41	81%	1,223	1,020	12%	16%	6%	12%	13%	14%
Learning Technologies Group	1.22	56%	818	832	89%	27%	8%	24%	29%	31%
Median		81%	\$2,374	\$1,951	27%	24%	18%	7%	13%	18%
Mean		76%	\$2,600	\$2,455	34%	23%	18%	(4%)	11%	17%
Marketing Automation										
Oracle	56.97	99%	190,042	208,960	0%	3%	3%	41%	48%	48%
Adobe Systems	294.65	97%	143,035	143,689	24%	24%	18%	33%	45%	46%
Salesforce	151.73	91%	117,825	117,677	26%	22%	21%	17%	25%	26%
Zendesk	89.03	95%	9,755	9,775	40%	35%	30%	(17%)	9%	10%
HubSpot	170.52	89%	7,179	6,721	35%	28%	24%	(4%)	12%	14%
LivePerson	28.04	91%	1,818	1,771	14%	16%	19%	(8%)	4%	7%
Median		93%	\$63,790	\$63,726	25%	23%	20%	6%	19%	20%
Mean		93%	\$78,276	\$81,432	23%	21%	19%	10%	24%	25%

Source: Capital IQ and Pitchbook as of 6/30/19

Vista Point Advisors Overview

Vista Point Advisors is a boutique investment bank focused on capital raises and M&A advisory for growing technology companies



Software	Internet	Mobile	Hardware
<ul style="list-style-type: none">• Software-as-a-Service• On-premise• Application Software• Healthcare IT• Financial Tech	<ul style="list-style-type: none">• Advertising and Marketing• Digital Media• Gaming• Content• Platforms	<ul style="list-style-type: none">• Consumer Applications• Enterprise Applications• Gaming• Payments• Infrastructure	<ul style="list-style-type: none">• Communications• Entertainment• Industrial• Systems• Consumer
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