VISTA POINT advisors

Mergers & Acquisitions | Capital Raising | Strategic Advisory

Software Industry Update Q1 2020

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 Unrivaled Results





Q1 2020 Software Industry Overview

- There were 360 reported software M&A transactions in Q1 2020, representing more than \$49.3B in transaction value
 - Software M&A deal volume in Q1 2020 was down 6.3% relative to Q1 2019, which saw 384 transactions
 - Notable deals include:
 - Morgan Stanley's \$13.0B acquisition of E*Trade, representing 4.5x LTM Revenue
 - Accenture's \$10.7B acquisition of Symantec, a division of Broadcom, representing 4.7x LTM Revenue
 - Visa's \$5.3B acquisition of Plaid, representing 35.3x LTM Revenue
 - Thoma Bravo's \$1.9B public-to-private acquisition of Instructure, representing 7.3x LTM Revenue
- The software IPO market saw one major IPO pricing in Q1 2020:
 - Schrödinger, a provider of software for pharmaceutical, biotechnology, and materials research, raised \$202M on February 6th and
 has traded up 154% through the end of the quarter



Active Acquirers and Notable Transactions



Most Active Acquirers (Since 2010)¹

Notable Recent Transactions

Acquirer	Morgan Stanley	accenture	VISA	THOMABRAVO
Target	E * TRADE	Ø Symantec	🛞 PLAID	INSTRUCTURE
Date	2/20/20	1/7/20	1/17/20	3/23/20
EV	\$13.0B	\$10.7B	\$5.3B	\$1.9B
EV / LTM Rev	4.5x	4.7x	35.3x	7.3x
Sector Categorization	FinTech	Cybersecurity	FinTech	Education Technology

Source: Pitchbook as of 3/31/20. ¹Blanks indicate undisclosed transaction values.

Software M&A Market Overview

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



Security/Accenture deals omitted from top graph

Software M&A Market Overview

Transactions by Reported Value



Transactions by Target Funding



Source: Pitchbook as of 3/31/20

7 Software Industry Update Q1 2020

Despite High Valuations, Investments Lead Exits 4:1

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



Source: Pitchbook as of 3/31/20, Investors ranked by investments made in the last 12 months



Software Public Market Performance Last 3 Months



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	Adobe Systems
ABU ABU ABU ABU ABU ABU ABU ABU	Salesforce
	NICE Systems
	Zendesk
5	HubSpot
	Pegasystems
	Five9
	LivePerson
	Microsoft
	Oracle
	SAP
	International Business Machines
	Intuit
	Wolters Kluwer
-	Coupa
1	The Sage Group (Financial Software)
2	Xero
500	Avalara
ć	Anaplan
	BlackLine
	Technology One
	Workiva
	Zuora
	Qad
	Upland Software
	SAP
	ServiceNow
	Dassault Systemes
	PTC
12 22	Aspen Technology
ALC: 1	Manhattan Associates
	Descartes Systems Group
5	Kinaxis
1200	Endava
-	SPS Commerce
	American Software

Source: Pitchbook as of 3/31/20

Software Public Market Performance Last 3 Months (cont.)

Fiserv

Square

Temenos

Fair Isaac

Q2 Holdings

ACI Worldwide

Veeva Systems

Tyler Technologies

SS&C Technologies

Guidewire Software

Black Knight (US)

Amdocs

RealPage

AppFolio

CDK Global

Q2 Holdings

Blackbaud

CoreLogic

AssetMark

Model N

Cerner

Veeva Systems

Inovalon Holdings

Health Catalyst

HealthStream

NextGen Healthcare

Castlight Health

Phreesia

Cegedim

Chegg

Tabula Rasa Healthcare

Allscripts Healthcare Solutions

NIC

Qad

Envestnet

9F Group

Ebix

MSCI (US)

Jack Henry and Associates

FactSet Research Systems

Guidewire Software

Bottomline Technologies

Broadridge Financial Solutions

Tech

-inancial

Software

Vertical 3

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Oracle
International Business Machines
ServiceNow
VMware
Atlassian
Splunk
Citrix Systems
Akamai Technologies
Hewlett Packard Enterprise
Datadog
MongoDB
Cloudflare
Dynatrace
Juniper Networks
SolarWinds
LogMeIn
Nutanix
New Relic
Appian
Cloudera
Software
Fastly
NetScout Systems
Progress Software
PagerDuty
Cisco Systems
VeriSign
Fortinet
Palo Alto Networks
Check Point Software Technologies
Okta
CrowdStrike
NortonLifeLock
Zscaler
Cloudflare
Proofpoint
Qualys
CyberArk Software
FireEye
Mimecast
Rapid7
Tenable
Ping Identity
ForeScout
SailPoint Technologies
Radware
SecureWorks
Tufin
Absolute Software
Zix
idelity National Information Services

IT / Infrastructure

Security

Software Public Market Performance Last 3 Months (cont.)



Source: Pitchbook as of 3/31/20



Software Public Market Performance

Public Market Performance Since January 1st, 2016





High Growth Software: AFYA, NAS:ZIXI, LON:LTG, NYS:TWLO, NYS:AVX, NAS:SSNC, CRWD, NYS:CLDR, NAS:ZM, NAS:MDB, NAS: DDOG, NAS:ZS, NYS:SMAR, NAS:UPLD, NAS:CVDP, NYS:PLAN, NYSE;SQ, NYS:MDLA, WORK, NAS:PS, NYS:AVLR, NYS:ZEN, NAS:DOCU, NAS:EVBG, NAS:TWOU, NAS:TEAM, NAS:TENB, NAS:APPF, NYS:NET, NAS:SPLK, NYS:HUBS, NAS:FISV, NYS:NOW, NAS:WDAY, NAS:CYBR, NYS:NEWR, NYS:QTWO, NYS:PAYC, NAS:HCAT All Software: See all bucketed companies

High Margin Software: NAS:VRSN, NAS:AZPN, NAS:MSFT, NAS:CHKP, NYS:ORCL, NAS:PAYX, NYSE:SWI, 13124-71, NAS:SSNC, NYS:PAYC, NYS:FIS, NAS:AKAM, TSE:DSG, NAS:ADBE, NAS:FISV, NAS:JKHY, NYS:VEEV, NAS:QLYS, PAR:DSY, NAS:INTU, NAS:PRGS, FRA:SOW Source: Pitchbook as of 3/31/20

Public Company Summary

								Software									
	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	Median	Mean
52-Wk High	71.3%	6 73.2%	72.8%	58.6%	67.7%	61.3%	71.7%	67.2%	66.6%	67.9%	72.5%	50.4%	68.8%	70.8%	68.8%	68.8%	67.35
Aggregate Mkt Cap (\$ in m)	\$316,162		\$254,049	\$146,894	\$229,521	\$65,869	\$1,716,365		\$256,856	\$94,242	\$51,550	\$12,814	\$498,422	\$85,576	\$118,518	\$229,521	
Aggregate EV (\$ in m)			\$267,173	\$140,854	\$235,203	\$65,685	\$1,758,263	\$290,387	\$305,826	\$106,973	\$52,911	\$12,814	\$520,712	\$86,148	\$118,518	\$235,203	
Aggregate EV (5 mm)	ŞS14,430	\$1,745,701	\$207,175	Ş144,240	\$255,205	303,083	\$1,756,205	\$250,567	\$505,620	\$100,975	\$52,511	\$12,528	\$520,712	\$60,146	\$110,157	\$255,205	\$401,51
Quarterly Mkt Cap % Change	90.5%	199.6%	260.1%	(23.0%)	(1.4%)	21.4%	(3.7%)	91.2%	7.3%	21.6%	2.4%	(30.5%)	1.4%	17.8%	74.2%	17.8%	48.6
Quarterly EV % Change	90.3%	6 162.5%	290.0%	(23.7%)	(0.3%)	22.0%	(3.4%)	80.0%	8.5%	27.9%	5.8%	(30.2%)	0.9%	19.9%	76.9%	19.9%	48.5
LTM EV / Revenue	7.7:	c 4.7x	5.8x	5.4x	4.9x	5.2x	5.7x	5.7x	7.7x	5.2x	3.5x	5.3x	7.7x	4.4x	7.9x	5.4x	5.
FY+1 EV / Revenue	6.4		5.7x	5.3x	4.3x			4.7x	7.0x			4.5x			6.5x	5.0x	5.
	5.4		5.7x	4.6x	4.3x 3.7x			4.7x 4.0x				4.5x 3.8x		4.0x 3.6x	5.6x		э. 4.
FY+2 EV / Revenue	5.43	4.5X	5.1X	4.0X	3.7X	4.1x	4.7x	4.UX	6.6x	4.0X	3.4x	3.88	5.3x	3.0X	5.0X	4.6x	4.
LTM EV / EBITDA	36.3	4 16.5x	25.0x	25.8x	16.1x	17.6x	14.0x	29.0x	27.9x	18.8×	14.6x	25.7x	36.3x	9.0x	21.8x	21.8x	22.
FY+1 EV / EBITDA	21.4	4.0x	22.7x	16.6x	18.1x	15.3x	12.8x	20.8x	17.7x	15.4x	13.5x	20.7x	21.4x	14.7x	14.9x	16.6x	17.
FY+2 EV / EBITDA	21.9	4 15.6x	20.4x	15.6x	13.6x	17.0x	11.1x	18.6x	17.7x	16.8x	13.6x	16.0x	34.9x	11.3x	11.8x	16.0x	17.
LTM P / E	38.5	c 28.1x	42.6x	39.6x	26.4x	64.7x	16.1x	31.2x	38.1x	34.1x	44.1x	39.6x	38.5x	12.2x	26.3x	38.1x	34
FY+1 P / E	74.8		35.7x	34.1x	24.8x			33.7x	26.5x	29.7x		32.0x		30.8x	25.3x	30.8x	32
FY+2 P / E	79.6		31.5x	24.1x	24.2x			29.7x	25.3x	25.3x		23.7x		24.2x	37.1x	25.3x	30
LTM Revenue Growth	25%	i 13%	12%	13%	17%	21%	14%	21%	13%	8%	10%	37%	30%	17%	26%	17%	1
FY+1 Revenue Growth	189	6 9%	9%	7%	9%	12%	9%	9%	6%	1%	(1%)	25%	19%	12%	20%	9%	1
FY+2 Revenue Growth	20%	6 10%	10%	13%	10%	16%	10%	17%	8%	9%	6%	19%	22%	10%	18%	10%	1
LTM EBITDA Margin	29	6 19%	21%	15%	(0%)	(3%)	11%	2%	23%	20%	12%	10%	(4%)	(3%)	2%	10%	
FY+1 EBITDA Margin	139		21%	20%	17%			13%	29%	25%		20%		20%	13%	20%	1
																	2
FY+2 EBITDA Margin	159	6 26%	28%	22%	21%	12%	23%	16%	31%	26%	17%	22%	12%	22%	13%	22%	-

Select Q1 2020 M&A Transactions

		Acquirer			Enterprise	Target LTM		Enterprise Value /	
Date	Target		Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue	LTM EBITDA
03/31/20		Niantic	SaaS	Augmented & Virtual Reality					
	Blackboard	Learning Technologies Group	SaaS	Vertical Software	\$32	\$16		2.0x	
03/31/20		Palo Alto Networks	On Premise	Systems / Network	\$420				
03/31/20	Command Alkon	Thoma Bravo	SaaS	Vertical Software					
03/31/20	EDP Software	Shiftboard	SaaS	Human Capital					
	MacPractice	Valsoft	SaaS	Business Software					
03/30/20		Matterport	On Premise	Augmented & Virtual Reality					
	Broadvision	Aurea, ESW Capital	SaaS	Business Software	\$27	\$4	(\$6)	6.2x	N/M
03/29/20		Wilks Brothers	On Premise	Vertical Software	(\$40)	\$184	(\$48)	N/M	0.8x
03/29/20		Undisclosed	On Premise	Content & Services					
03/27/20	Keaz	Wunder Mobility	SaaS	Vertical Software					
03/26/20	Affirmed Networks	Microsoft	On Premise	Systems / Network					
03/26/20	Tikit Group	Advanced Computer Software Group, BC Ptns., Vista Equit	y SaaS	Vertical Software	\$99				
03/26/20	Waterline Data	Hitachi Vantara	On Premise	Governance, Risk, & Compliance					
03/25/20	Bistech	Deloitte Australia	On Premise	Business Intelligence					
03/25/20	Letgo	OfferUp	SaaS	Marketplace	\$120				
03/25/20	TrackX Holdings	FourKites	SaaS	Business Software					
03/24/20	Compose Labs	Brex	SaaS	Vertical Software					
03/24/20	Intercept Music	Sanwire	SaaS	Knowledge / Content (Social)					
03/24/20	Landria	Brex	On Premise	Security / Storage					
03/24/20	Neji	Brex	On Premise	Systems / Network					
03/24/20	SingleTap	Digital Turbine	On Premise	Integration / Middleware					
03/24/20	StreamSpot	Subsplash	SaaS	Video Management					
03/24/20	Thasos	Market Service	On Premise	Business Intelligence					
03/24/20	Vidado	SS&C Technologies	SaaS	Business Intelligence					
	Instructure	Thoma Bravo	SaaS	Vertical Software	\$1,883	\$258	(\$66)	7.3x	N/M
03/20/20	Deltix Labs	EPAM Systems	SaaS	Fintech	. ,				
03/20/20		ZipTel	On Premise	Fintech					
03/20/20	-	Ruby Has Fulfillment	SaaS	Business Software					
	ReliaBill Solutions	424 Cap., Coronis Health, Eagle Private Cap., Plexus	SaaS	Vertical Software					
03/19/20		Lexis Nexis Risk Solutions	SaaS	Security / Storage	\$480	\$500		1.0x	
03/19/20	0	Central Research	On Premise	Vertical Software					
03/19/20	LiftIgniter	Maven Coalition	SaaS	Business Intelligence					
03/19/20	-	Thomson Reuters	On Premise						
03/18/20		Fiserv	SaaS	Business Software					
	Conversion Logic	VideoAmp	SaaS	Advertising & Marketing					
	Aware360	Certified Tracking Solutions, HKW & Co.	SaaS	Human Capital					
03/17/20		MarineMax	On Premise	Vertical Software					
	CAEfatigue	Hexagon	On Premise	Vertical Software					
	HealthAware	Eruptr, H.I.G. Growth Partners	SaaS	Vertical Software					
03/17/20		Nylas	Saas	Telecommunications					
		•	Saas						
03/17/20		Topia	Saas	Governance, Risk, & Compliance Vertical Software					
	NarrativeDx	Press Ganey Associates IRESS	Saas	Fintech					
	O&M Systems								
	•	EMIS Group	On Premise	Vertical Software					
03/1//20	Technology Services Group	Alfresco Software, Guggenheim, Thomas H. Lee Partners	On Premise	Business Software					

					Enterprise	Target LTM	Enterprise Value /
Date	Target	Acquirer	Delivery	Sector	Value	Revenue EBITDA	LTM Revenue LTM EBITDA
	Western Digital	Quantum	On Premise	Security / Storage			
03/16/20		Torch Leadership Labs	SaaS	Human Capital			
03/16/20	•	GitHub	On Premise	Development			
	Teachable	Hotmart	SaaS	Vertical Software	\$250		
03/16/20		Riskonnect, Thoma Bravo	On Premise	Governance, Risk, & Compliance			
	Big Timber Media	Jesse Fawcett	SaaS	Vertical Software			
03/13/20	Cubic Motion	Epic Games	On Premise	Vertical Software			
	•	GI Partners, Harvest Partners, MRI Software, TA	SaaS	Real Estate			
03/13/20		The Mom Project	On Premise	Business Intelligence			
03/12/20		Clearlake Capital Group, Dude Solutions	SaaS	Business Intelligence			
03/12/20	Bede Gaming	Gauselmann	On Premise	Vertical Software			
03/12/20	Madgex	John Wiley & Sons	On Premise	Human Capital			
03/12/20	Packet	Equinix	SaaS	Hosting / Data Center	\$335		
03/12/20	Validate	Accuity	SaaS	Fintech			
03/11/20	Business Collaborator	Bentley Systems	SaaS	Content / Document Management			
03/11/20	coAction.com	CC, Cohesive, Dun & Bradstreet, Motive, Thomas H. Lee	SaaS	Accounting / ERP			
03/11/20	iBlocks	Tracsis	On Premise	Vertical Software	\$16	\$4	4.2x
03/11/20	Nudge	Affinity	On Premise	CRM			
03/11/20	RocketRoute	AFV Partners	SaaS	Vertical Software			
03/11/20	RSM Partners	Bain Capital Ventures, BMC Software, KKR	On Premise	IT Infrastructure & Management			
03/11/20	Vocabulary.com	IXL Learning	SaaS	Vertical Software			
03/10/20	Brismo	LoanClear	SaaS	Fintech			
03/10/20	CashBet	Greentube	On Premise	Vertical Software			
03/10/20	ClearBrain	Amplitude	SaaS	Business Intelligence			
03/10/20	LifeSize	Marlin Equity Partners, Serenova	SaaS	Telecommunications			
03/10/20	Trelar Logistics	HaulHub	On Premise	Human Capital			
03/10/20	Webroster	Hg, TA Associates Management, The Access Group	SaaS	Human Capital			
03/10/20	YouScript	Invitae	SaaS	Vertical Software	\$79		
03/09/20	Authess	Elsevier	SaaS	Vertical Software			
03/09/20		General Atlantic, Greensill Capital, SoftBank	On Premise	Fintech			
	HealthEdge	The Blackstone Group	SaaS	Vertical Software	\$730		
	HouseLens	Seek Now	SaaS	Advertising & Marketing			
	NurseGrid	HealthStream	SaaS	Human Capital	\$25		
03/09/20		NASDAQ	On Premise	Fintech	<i>4</i> 20		
	Talon Storage	NetApp	SaaS	Hosting / Data Center	\$22		
03/09/20	-	Barclays, Microlise	SaaS	Governance, Risk, & Compliance	Y-4		
	XMedius Solutions	OpenText	SaaS	Business Software	\$75	\$40	1.9x
	StayNTouch	Beijing Shiji Information Technology	SaaS	Vertical Software	ر ، پ	Ϋ́ν	1.37
03/06/20	•	Pex	SaaS	Vertical Software	\$38		
03/06/20		Identity Automation, Saratoga Investment, Spotlight Equity		Governance, Risk, & Compliance	ەدب		
03/06/20		San Vicente Acquisition	On Premise	Knowledge / Content (Social)	\$609		
	StreetReader	Service Acquisition	On Premise	Telecommunications	2003		
03/06/20			SaaS		\$9	\$2	4.1x
		Ideagen	Saas Saas	Human Capital	ŞА	γ 2	4.1X
		Ansys		Testing			
	Paragon Software Systems	Aptean, TA Associates Management, Vista Equity Partners	SaaS	Vertical Software			
03/05/20	SwiftStack	Nvidia	SaaS	Hosting / Data Center			

					Enterprise	Target LTM	Enterprise Value /
Date	Target	Acquirer	Delivery	Sector	Value	Revenue EBITDA	LTM Revenue LTM EBITDA
/ /							
	Xtivity (Canada)	Remsoft	SaaS	Supply Chain		4	
	4Sec Group	QBS Technology Group	SaaS	IT Infrastructure & Management	40.10	\$10	
	Azul Systems	Lead Edge Capital, Vitruvian Partners	On Premise	Business Software	\$340		
	Cobalt Strike	Charlesbank, HelpSystems, HGGC, Pamplona, TA	On Premise	Security / Storage			
	Gotcha Mobility	OjO Electric	On Premise	Vertical Software	\$12		
	GuideK12	Forecast5 Analytics, Riverwood Capital	SaaS	Vertical Software			
	Headliner Labs	ForwardPMX, The Stagwell Group	SaaS	Advertising & Marketing			
	Tripleseat Software	Tripleseat Software, Union Square Group, Vista Equity	SaaS	Vertical Software			
03/04/20	ZeeZor	Mindbody, Vista Equity Partners	On Premise	Vertical Software			
	Absolute Data Group	Pennant International Group	On Premise	Vertical Software	\$4		
03/03/20	Collateral Analytics	Black Knight	SaaS	Real Estate			
03/03/20	DocuTech	First American	SaaS	Real Estate	\$350		
03/03/20	Loyale	GTCR, RevSpring	SaaS	Vertical Software			
03/03/20	Managed by Q	Eden	SaaS	Business Software	\$25		
03/03/20	nGUVU	Corp. Capital, Genesys, Hellman & Friedman, Permira, TCV	SaaS	Human Capital			
03/03/20	OutMatch	RUBICON Technology Partners	SaaS	Human Capital			
03/03/20	Parakeet	Brivo Systems	SaaS	Real Estate			
03/03/20	PlanPlus Global	Morningstar	SaaS	Fintech			
03/03/20	Signal Kit	ParentSquare	SaaS	Vertical Software			
03/02/20	Compuware	Bain Capital Ventures, BMC Software, KKR	On Premise	IT Infrastructure & Management			
03/02/20	Edwin	MyBuddy.ai	On Premise	Vertical Software			
03/02/20	GreenFolders	TitleiO	On Premise	Business Software			
03/02/20	Leadpages	Redbrick	SaaS	Development		\$18	
03/02/20	Ninja Number	ECI Partners, Moneypenny	On Premise	Telecommunications			
03/02/20	ProShip	FOG Software Group	SaaS	Vertical Software			
03/02/20	Scivantage	Refinitiv, The Blackstone Group	SaaS	Fintech	\$82		
03/02/20	Semper Plugins	Awesome Motive	SaaS	Advertising & Marketing			
03/02/20	Voicenation	ECI Partners, Moneypenny	SaaS	Business Software			
03/01/20	Expedient Software	BluJay Solutions, Francisco Partners, Temasek Holdings	On Premise	Vertical Software			
03/01/20	Mindesk	Vection	On Premise	CAD / CAM	\$5		
03/01/20	MyShopManager	Performant Capital	SaaS	Advertising & Marketing			
	QuickPlay Media	Firstlight Media, Highview Capital	SaaS	Integration / Middleware			
	Brickchain	Nodle	On Premise	Security / Storage			
	Cloudmills	Hrnx	On Premise	Human Capital			
	Fundslibrary	Broadridge Financial Solutions	SaaS	Fintech			
02/29/20	•	ProProfs	SaaS	Advertising & Marketing			
	Care Experience	QuestionPro	SaaS	Vertical Software			
02/28/20	•	Accenture	On Premise	IT Infrastructure & Management			
	Romax Technology	Hexagon	SaaS	CAD / CAM			
02/28/20		Validity Software	Saas	Business Intelligence			
02/27/20		ArbiterSports	Saas	Vertical Software			
	Games Marketing	Galaxy Gaming	Saas	Vertical Software	\$12		
	Seal Software	· •	Saas		\$12		
	Wellpepper	DocuSign Caravan Health	Saas	Content / Document Management Vertical Software	\$100		
02/27/20		Freshworks	SaaS	CRM			
			Saas	Telecommunications			
02/26/20	CytracOIII	Sverica Capital Management	Sppc	rerecommunications			

					Enterprise	Targ	et LTM	Enterpris	e Value /
Date	Target	Acquirer	Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue	LTM EBITDA
02/26/20	Good Harvest	Surfside Solutions	SaaS	Content / Document Management					
02/26/20	NexuWeb	LANDRY et associés	Saas	Security / Storage					
	ProcessOut	Checkout.com	SaaS	Fintech					
02/25/20		3Gtms	Saas	Vertical Software					
	Router Limits	Bark Technologies	SaaS	IT Infrastructure & Management					
02/25/20	Vlocity	Salesforce	SaaS	CRM	\$1,330				
02/23/20	•	iQSTEL	On Premise	Blockchain	\$1,550				
	JPD Financial	Glantus	SaaS	Fintech		\$12			
						\$12			
	Light Point Security	McAfee	On Premise	Security / Storage	ć a r				
	PeopleVox	Descartes Systems Group	SaaS	Vertical Software	\$25				
	Saba Software	Cornerstone OnDemand	SaaS	Human Capital	\$1,395				
02/24/20		EMK Capital	On Premise	Security / Storage					
	Wirefire Creative	KPMG	SaaS	Accounting / ERP					
	Able Health	Health Catalyst	On Premise	Vertical Software					
	Adaptive Management	Knoema	SaaS	Business Intelligence					
02/21/20	•	Great Hill Partners	SaaS	Fintech	\$85	\$6	(\$8)	14.6x	N/M
02/20/20		Nominet	SaaS	Security / Storage					
02/20/20		Amazon.com	SaaS	Business Software					
02/20/20		Morgan Stanley	SaaS	Fintech	\$13,000	\$2,886		4.5x	
02/20/20	••	BetterWorks	SaaS	Human Capital					
02/20/20	LivingLens	Medallia	SaaS	Video Management	\$26				
	-	Insight Software	SaaS	Fintech					
02/20/20	One	Great Hill Partners	SaaS	Fintech					
02/20/20	Synthio	Vertify	SaaS	Business Software					
02/20/20	Ultimate Software Group	Kronos	SaaS	Human Capital					
02/19/20	Allay	Novo Benefits	SaaS	Fintech					
02/19/20	Biarri Rail	Navis Holdings	On Premise	Vertical Software					
02/19/20	Breezie	VitalTech	SaaS	Vertical Software					
02/19/20	BTC Corporation Holdings	A-Labs Capital	SaaS	Blockchain					
02/19/20	Forge	WorkJam	SaaS	Human Capital					
02/19/20	Functional Solutions	Pear Sports	On Premise	Vertical Software					
02/19/20	Growers	Israel Chemicals	On Premise	Vertical Software	\$28				
02/19/20	Intalent	HR Path	SaaS	Human Capital					
02/19/20	Monitor ML	Arize Al	On Premise	Business Software					
02/19/20	Saber Interactive	Embracer Group	On Premise	Vertical Software	\$525	\$105		5.0x	
02/19/20	Virtual Observer	Five9	SaaS	Human Capital					
	Clinical Systems	CCL Industries	On Premise	Vertical Software	\$19	\$14	\$3.5	1.3x	5.5x
	Data Fusion Technologies	Iridium Technology	SaaS	Accounting / ERP				-	
02/18/20		Quorum Software	SaaS	Content / Document Management					
02/18/20		BitGo	On Premise	Fintech					
	International Computing	Asset General	SaaS	Integration / Middleware					
	Mi-Pay Limited	Alphacomm	On Premise	Fintech	\$1				
	RSA Security	STG Partners	On Premise	Security / Storage	\$2,075				
	Snowflake Software	Cirium	On Premise	Vertical Software	<i>42,075</i>				
02/18/20	Broadway Technology	Long Ridge Equity Partners and ION Group	SaaS	Fintech					
	Cosmopolitan Travel Service	Mondee	SaaS	Vertical Software					
02/14/20	cosmoportan navel service	WONDEE	CDDC						

					Enterprise	Targ	et LTM	Enterprise Value /		
Date	Target	Acquirer	Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue	LTM EBITDA	
02/12/20	Madia Comisso	Cont & Constructure in month Constitution	On Deservice							
	Media Services Realvolve	Cast & Crew Entertainment Services Undisclosed	On Premise SaaS	Accounting / ERP Vertical Software						
02/13/20		Flywire	On Premise	Vertical Software						
	Circle Invest	•	SaaS	Blockchain						
	QGlobal SMS	Voyager Digital	SaaS	Telecommunications						
	Supplylogic	DataSource	On Premise	Supply Chain						
	TROVE Predictive Data Science	E Source	On Premise							
			SaaS	Business Intelligence						
	Wealthtime	AnaCap Financial Partners		Fintech						
	Brandsight	GoDaddy	SaaS	Business Software						
	Information Governance Solutions	Access Information Protected	SaaS	Governance, Risk, & Compliance						
. , , .	Parchment	Brentwood Associates	SaaS	Vertical Software		4				
02/11/20		Synacor	SaaS	Business Software	4	\$25	(\$4)			
02/11/20		Brooks Automation	On Premise	Vertical Software	\$15	\$5		3.0x		
	RXTransparent	Inmar	SaaS	Supply Chain						
	BiblioCommons	Volaris Group	SaaS	Vertical Software						
	ConnectMe Solution	Eyecarrot Innovations	SaaS	Knowledge / Content (Social)						
	Core Computing Solutions	Routeware	On Premise	Vertical Software						
	Driver's Alert	Smith System	SaaS	Vertical Software						
	Oilfield Basics	American Energy Partners	SaaS	Vertical Software						
02/10/20	Strala	ObservePoint	SaaS	Mapping / Tracking						
	Ud Software Solutions Group	Powwr	SaaS	Vertical Software						
02/10/20	Ventanex	Realtime Electronic Payments	SaaS	Fintech	\$50	\$12	\$4	4.2x	11.8x	
02/07/20	Arrow Solutions	AlayaCare	On Premise	Vertical Software						
02/07/20	Localytics	Upland Software	On Premise	Advertising & Marketing	\$68					
02/07/20	Paradigm Education Solutions	Kendall Hunt Publishing	SaaS	Vertical Software						
02/07/20	Star Financial System	AxiCorp Financial Services	SaaS	Fintech						
02/07/20	Triib	Transaction Services Group	SaaS	Vertical Software						
02/07/20	ZingFit	Advent International	SaaS	Vertical Software						
02/06/20	ASC Software	FOG Software Group	On Premise	Supply Chain						
02/06/20	CadmiumCD	STG Partners	SaaS	Vertical Software						
02/06/20	ForeScout (NAS: FSCT)	Advent International	SaaS	Security / Storage	\$1,806	\$337	(\$87)	5.4x	N/M	
02/06/20	UpLaunch	Daxko, GI Partners, Golub Capital BDC	SaaS	CRM						
02/06/20	XIFIN	Avista Capital Partners	SaaS	Vertical Software						
	AirFusion	Universal mCloud	SaaS	Vertical Software						
	Bridge2 Solutions	Intercontinental Exchange	SaaS	CRM						
	Gigavation	NetScout Systems	On Premise	Security / Storage	\$8					
	Revulytics	Flexera Software	On Premise	Business Intelligence						
	Backlash Solutions	Exactuals	On Premise	Vertical Software						
	Donesafe	Health and Safety Institute	SaaS	Governance, Risk, & Compliance						
02/04/20		Cherry Bekaert	On Premise	Business Intelligence						
	LexCharge	Rocket Matter	On Premise	Vertical Software						
	Ten Digit Communications	VHT	On Premise	Telecommunications						
02/04/20	-	Patrizia	SaaS	Real Estate						
02/03/20		Goodworld	SaaS	Vertical Software						
02/03/20	Evergage	Salesforce	SaaS	Advertising & Marketing						
		Cboe Global Markets	On Premise							
02/03/20	Hanweck Associates	CDOE GIODAI Markets	On Premise	Governance, Risk, & Compliance						

		Acquirer		Enterprise	Targe	et LTM	Enterpr	Enterprise Value /		
Date	Target		Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue		
02/03/20	Onereport	NASDAQ	On Premise	Business Software						
	Scytale.io	Hewlett Packard Enterprise	On Premise	Security / Storage						
02/03/20	VisiumKMS	Valsoft	On Premise	Governance, Risk, & Compliance						
02/01/20	Learning Machine	Hyland Software	On Premise	Blockchain						
02/01/20	Minemax	Vela Software	On Premise	Vertical Software						
01/31/20	Pluss Software	Aquiline Capital Partners, Fullsteam	On Premise	Business Intelligence						
01/31/20	Simeio Solutions	ZMC	SaaS	Governance, Risk, & Compliance						
01/30/20	InsPro Technologies	Majesco	On Premise	Vertical Software	\$12	\$16	(\$1)	0.8x	N/M	
01/30/20	The Sports Office	Kitman Labs	SaaS	Vertical Software						
01/29/20	ClusterSeven	Hg, Mitratech Holdings, Noble Rock Advisors	SaaS	Governance, Risk, & Compliance						
01/29/20	Rhino Fleet Tracking	Accel-KKR	SaaS	Mapping / Tracking						
01/29/20	SL	Partner One Software	SaaS	Integration / Middleware						
01/29/20	Trux Route Management Systems	Advanced Manufacturing Control Systems	On Premise	Vertical Software						
01/28/20	Groundcontrol Solutions	Imprivata, Thoma Bravo	On Premise	Integration / Middleware						
01/28/20	Nowinfinity	Class	SaaS	Content / Document Management	\$25					
01/28/20	Passage Al	ServiceNow	SaaS	Business Software						
01/28/20	Phoenix Labs	Sea	On Premise	Vertical Software	\$150					
01/28/20	Quid	NetBase Quid	SaaS	Content & Services						
01/27/20		Stingray Digital Group	On Premise	Ecommerce						
01/27/20	FireMate Software	Halma	On Premise	Vertical Software	\$6					
01/27/20		Zuul Kitchens	On Premise	Marketplace						
	PestRoutes	Gryphon Investors	SaaS	Vertical Software						
01/27/20		Dover	SaaS	Vertical Software						
01/27/20		Golden Gate Capital, LiveVox	SaaS	Speech Recognition						
	Tri Vium Systems	Provana	On Premise	Telecommunications						
01/24/20		Aki	SaaS	Advertising & Marketing						
01/24/20	•	Teleo Capital	On Premise	Systems / Network						
01/24/20		Ontuitive, The Stage Fund	On Premise	Vertical Software						
01/24/20	-	WEX	SaaS	Fintech						
	PlayerSpace US	Daxko, GI Partners, Golub Capital BDC	SaaS	Vertical Software						
01/24/20	1 1	Predictive Oncology	On Premise	Vertical Software						
01/23/20	Intelerad Medical Systems	Hg	SaaS	Vertical Software	\$850					
01/23/20	•	Gryphon Investors	SaaS	Governance, Risk, & Compliance	çoso					
01/23/20		Moody's Analytics	On Premise	Governance, Risk, & Compliance	\$700					
		BMO Financial Group	SaaS	Fintech	\$700					
01/22/20		Ares, Cority, Georgian, Norwest, Teralys, Thoma Bravo	SaaS	Accounting / ERP						
01/22/20		Patron Technology, Providence Equity Partners	Saas	Content & Services						
01/22/20		ActZero	Saas	Security / Storage						
01/22/20	Location		Saas	Mapping / Tracking						
01/22/20		CoreLogic ServiceNow	Saas	Business Intelligence						
	•		SaaS	Vertical Software						
01/22/20	0	Real Page	Saas	Vertical Software						
		Goldman Sachs Private Capital Investing Group, Kaltura				\$2				
01/22/20	-	Bregal Sagemount, GPS Insight	SaaS On Bromico	Business Software		\$Z				
	ThreatInformer	CFC Underwriting, Vitruvian Partners	On Premise	Governance, Risk, & Compliance						
01/22/20	Verve Wireless	Media and Games Invest	SaaS	Advertising & Marketing						
01/21/20	Centerfield Media Holdings	Platinum Equity	On Premise	Advertising & Marketing						

					Enterprise	Targe	t LTM	Enterprise Value /	
Date	Target	Acquirer	Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue	LTM EBITDA
	Lienwaivers	Built Technologies	On Premise	Fintech					
01/21/20		Airlines Reporting Corp	SaaS	Vertical Software					
	Trakopolis IoT	Geoforce, LLR Partners	SaaS	Mapping / Tracking	(\$1)	\$5	(\$1)	N/M	0.5x
01/21/20	Vermont Systems	Clubessential	SaaS	Business Software					
	XebiaLabs	CollabNet, TPG Capital	SaaS	Development					
01/20/20		Molystar Resources	On Premise	Vertical Software					
01/17/20	CannaRegs	Fyllo	SaaS	Content & Services	\$10				
01/17/20	Cloudvisory	FireEye	SaaS	Security / Storage					
01/17/20	IDentilam	CCL Industries	SaaS	Business Software					
01/17/20	IMTI Systems	Utilant	On Premise	Vertical Software					
01/17/20	Plaid	Visa	SaaS	Fintech	\$5,300	\$150		35.3x	
01/16/20	Campus Management	Veritas Capital	SaaS	Vertical Software					
01/16/20	Edcentric	Veritas Capital	SaaS	Vertical Software					
01/16/20	Excitech	Symetri	On Premise	Business Software	\$20				
01/16/20	Preoday	Qikserve	SaaS	Marketplace					
01/16/20	Procentia	BT Pension Scheme	SaaS	Content / Document Management					
01/16/20	Smart Sparrow	Pearson	SaaS	Vertical Software					
01/15/20	Fidelis Cybersecurity	Skyview Capital	On Premise	Security / Storage					
01/15/20	G&E Enterprises	Ardian, Sedgwick Claims Mgmt., Stone Point, Carlyle	On Premise	Business Software					
01/15/20	iPublish Media Solutions	Legacy.com, Pamplona Capital Management	On Premise	Advertising & Marketing					
01/15/20	N2WS	Undisclosed	SaaS	Security / Storage					
01/15/20	Xnor.ai	Apple	On Premise	Business Intelligence	\$200				
01/14/20	AppSheet	Alphabet	SaaS	Development					
		Accel-KKR, Springbrook Software	SaaS	Accounting / ERP					
01/14/20	BlackBag Technologies	Cellebrite, Israel Growth Partners	SaaS	Vertical Software	\$33				
01/14/20	Content IQ	Perion Network	On Premise	Business Intelligence	\$73	\$39	\$6	1.9x	12.4x
01/14/20	EveryCloud Computing	Hornetsecurity	SaaS	Security / Storage					
01/14/20	Lanehub	TPG Capital, Transplace	SaaS	Supply Chain		\$1			
01/14/20	Lucina Health	Unified Physician Management	On Premise	Vertical Software					
01/14/20	Star Lab Software	TPG Capital, Wind River Systems	On Premise	Security / Storage					
	Yardstick Assessment Strategies	Eastside Partners, ProctorU	SaaS	Content & Services					
	Zeal Technology	Ontuitive, The Stage Fund	SaaS	Human Capital					
01/13/20		Goldman Sachs Merchant Banking Division	SaaS	Ecommerce					
	Brisk Synergies	Transoft Solutions	SaaS	Vertical Software					
		Mainstreet Computers	SaaS	Business Software					
	HealthStar.	CareBridge	SaaS	Vertical Software					
01/13/20	Intelligent Insites	Golden Gate Cap., Infor, Koch, Parallax	SaaS	Vertical Software					
01/13/20	Lumere	Global Healthcare Exchange, Temasek, Thoma Bravo	SaaS	Vertical Software					
01/13/20		Elastic Path	SaaS	Ecommerce					
	PatientFinder	22C Cap., Advent, Definitive Healthcare, Spectrum Equity	SaaS	Vertical Software					
01/13/20		R1 RCM	Saas	Vertical Software	\$190				
	Systems Technology	DMC Canotec, Horizon Capital, Souter Investments	Saas	Content / Document Management	\$130				
01/13/20		SonarMD	On Premise	Vertical Software					
		Syneos Health	SaaS	CRM	\$20				
	Silvertrac Software	K1 Investment Management, Trackforce	On Premise	Business Software	<i></i> γ20				
			SaaS	Vertical Software					
01/10/20	SyncOnSet Technologies	Entertainment Partners, TPG Capital	2992	verucai sontware					

					Enterprise	Target	LTM	Enterprise	e Value /
Date	Target	Acquirer	Delivery	Sector	Value	Revenue	EBITDA	LTM Revenue	LTM EBITDA
01/10/20	Teem	iOFFICE, Waud Capital Partners	SaaS	Business Software					
01/10/20	Tribute	Volaris Group	On Premise	Accounting / ERP					
01/10/20	Valify	HCA Management Services	SaaS	Business Intelligence					
01/09/20	Deko	Cinven, CVC Capital Partners, NewDay	On Premise	Fintech	\$53				
01/09/20	Gnergy	Undisclosed	On Premise	Vertical Software					
01/09/20	ImPACT	Alpine Investors, Riverside Insights	On Premise	Vertical Software					
01/09/20	Kuebix	Trimble	SaaS	Supply Chain					
01/09/20	Riskpulse	Columbia Cap., Dhl International, Greenspring	SaaS	Supply Chain	\$22				
01/09/20	Sequr	Genea Energy Partners, Nolan Capital	SaaS	Security / Storage					
01/09/20	Tinfoil Security	Synopsys	SaaS	Security / Storage					
01/08/20	CareCloud	Medical Transcription Billing	SaaS	Vertical Software					
01/08/20	Herefish	Bullhorn, Genstar Capital, Insight Partners	SaaS	Human Capital					
01/08/20	LearnZillion	Edgenuity	SaaS	Vertical Software					
01/08/20	Lytx	Canada Pension Plan, Government of Singapore, Permira	SaaS	Vertical Software	\$2,500		\$100		25.0x
01/07/20	Forecast Horizon	Antuit	SaaS	Business Intelligence					
01/07/20	Springbrook Software	Accel-KKR	SaaS	Accounting / ERP					
01/07/20	Strategic Management Decisions	Abu Dhabi Inv., Ares, British Col. Inv., Gov. of Singapore	SaaS	Human Capital					
01/07/20	Symantec	Accenture	On Premise	Security / Storage	\$10,700	\$2,300		4.7x	
01/07/20	VIA	Beech Tree PE, Royal Bank of Scotland, Wavenet	On Premise	Telecommunications					
01/07/20	Yapta	Соира	SaaS	Vertical Software					
01/06/20	Armis	CapitalG, Insight Partners	On Premise	Security / Storage	\$1,100				
01/06/20	Auto/Mate	DealerSocket, Vista Equity Partners	SaaS	Business Software					
01/06/20	InterDyn Artis	Lbmc Technology Solutions	SaaS	CRM					
01/06/20	Lifecycle Software	Volaris Group	On Premise	Accounting / ERP					
01/06/20	NinjaTrader	Capital Southwest, DRW Venture, Long Ridge	On Premise	Fintech					
01/06/20	Open Lending	Nebula Acquisition	SaaS	Vertical Software					
01/06/20	Ziron	TelcoSwitch	SaaS	Telecommunications					
01/03/20	Aircraft Performance Group	AFV Partners	SaaS	Business Intelligence					
01/03/20	AutoEnginuity	Opus Inspection	On Premise	Vertical Software	\$20	\$4	\$2	5.1x	8.6x
01/03/20	DoxTek	Naviant	On Premise	Content / Document Management					
	Cybercom International	Coastal Insurance Underwriters	On Premise	Development					
01/02/20	,	Enghouse Systems	SaaS	Telecommunications	\$52				
01/02/20	0	Bold Penguin	SaaS	Fintech					
	S2 Systems	Cloudflare	SaaS	Security / Storage	\$39				
	Bay Dynamics	Broadcom	On Premise	Governance, Risk, & Compliance					
	Cummins-Allison	Crane Company	On Premise	Accounting / ERP	\$121				
	Decisive Analytics	H.I.G. Capital, PennantPark, THL Credit	On Premise	Business Intelligence					
	Varicent Software	Great Hill Partners, Spectrum Equity	SaaS	Business Intelligence	\$230				
,, _0					+				
Software M	edian				\$68	\$16	(\$1)	4.2x	8.6x

Software IPOs

					LTM N	Aultiples	Metri	ics and Finan	cings		Share Info	rmation			Fo	llow On Informatio	ı		l	
IPO Date Da	ays on File	D/ 100 A	mount Raised	Market Con	EV / Rev	EV /	Rev Grwth	NTAA Dave		IPO Offer			Chg Since	Days Post	Amount Re			Primary	LTM Rev L	TM EBITDA
IPO Date	File	EV IPO A	mount kaised	Market Cap	EV / Rev	EBITDA	at IPO	Growth	et Cash at IPO	Price F	Price Chg	Price				IPO Raise On Prio	Price Chg	Shares	Growth	Margin
Software										_										
02/06/20	27 Schrödinger	\$1,195	\$202	\$1,111	15.5x	NM	16%	39%	\$85	\$17	6%	\$43	154%	NA	NA	NA N		NA	16%	(28%)
12/13/19	30 Oneconnect	\$3,592	\$312	\$3,826	12.0x 18.8x	NM	249% 69%	61% 66%	(\$234) \$86	\$10		\$10	2% 55%	NA NA	NA	NA NA		NA NA	249% 69%	(67%)
12/12/19 09/19/19	27 Bill.com 27 Datadog	\$1,815 \$8,508	\$216 \$648	\$1,729 \$8,596	10.0X	NM	164%	86%	(\$88)	\$22 \$27	5% 4%	\$34 \$36	33%	NA	NA	NA N		NA	164%	(41%)
09/19/19	27 Ping Identity	\$1,039	\$188	\$1,199	4.8x	28.7x	25%	10%	(\$160)	\$15	470	\$20	33%	NA	NA	NA N		NA	25%	15%
09/13/19	29 Cloudflare	\$4,412	\$525	\$4,703	18.8x	NM	74%	53%	(\$291)	\$15	7%	\$23	57%	NA	NA	NA N		NA	74%	(28%)
08/01/19	27 Dynatrace	\$3,430	\$570	\$4,400	8.0x	NM	8%	30%	(\$970)	\$16	7%	\$24	49%	NA	NA	NA N	A NA	NA	8%	(26%)
07/25/19	28 Health Catalyst	\$1,027	\$182	\$1,042	8.1x	NM	74%	30%	(\$15)	\$26	4%	\$26	1%	NA	NA	NA N		NA	74%	(31%)
07/19/19	25 Afya Educacional	\$1,708	\$261	\$1,666	15.4x	28.5x	64%	65%	\$42	\$19	6%	\$19	0%	NA	NA	NA N		NA	64%	36%
07/19/19 07/18/19	28 Medallia 27 Phreesia	\$3,439 \$681	\$326 \$167	\$3,374 \$709	10.2x 6.5x	NM	29%	26%	\$64 (\$28)	\$21 \$18	17% 6%	\$20 \$21	(5%) 17%	NA	NA	NA NA		NA	29% 31%	(25%) (4%)
06/20/19	55 Slack	\$6.043	\$4,560	\$5,250	13.3x	NM	106%	57%	\$793	\$39	0%	\$27	(30%)	NA	NA	NA N		NA	106%	(88%)
06/12/19	29 CrowdStrike	\$7,575	\$612	\$7,487	NM	NM	110%	110%	\$88	\$34	13%	\$56	64%	NA	NA	NA N		NA	110%	(24%)
06/12/19	33 Mohawk	\$177	\$36	\$176	2.3x	NM	111%	77%	\$0	\$10	(29%)	\$2	(83%)	NA	NA	NA N	A NA	NA	111%	(47%)
05/17/19	28 Fastly	\$1,601	\$180	\$1,619	10.2x	NM	50%	48%	(\$18)	\$16		\$19	19%	NA	NA	NA N	A NA	NA	50%	(16%)
04/18/19	27 Zoom Video Communications	\$10,415	\$751	\$10,352	NM	NM	118%	100%	\$64	\$36	3%	\$146	306%	NA	NA	NA N		NA	118%	5%
04/17/19	19 ReadyTech	\$46	\$36	\$62	2.0x	8.8x	NM	6%	(\$16)	\$1	7%	\$1	(45%)	NA	NA	NA N		NA	NM	23%
04/11/19 04/11/19	36 Tufin 27 PagerDuty	\$565 \$2,217	\$108 \$218	\$536 \$2,090	6.6x 18.8x	NM	32% 48%	21% 48%	\$29 \$128	\$14 \$24	4%	\$9 \$17	(37%)	NA	NA	NA NA		NA	32% 48%	(26%)
03/20/19	26 UP Fintech Holding	\$1,087	\$104	\$1,055	NM	NM	98%	151%	\$32	\$8	14%	\$3	(66%)	NA	NA	NA N		NA	98%	(12%)
11/15/18	97 Weidai	\$975	\$45	\$700	1.6x	NM	124%	NM	\$276	\$10		\$1	(85%)	NA	NA	NA N		NA	124%	NM
10/25/18	24 Stone Pagamentos	\$7,306	\$1,217	\$7,749	NM	23.5x	63%	188%	(\$443)	\$24	4%	\$22	(9%)	NA	NA	NA N	A NA	NA	63%	56%
10/25/18	101 Pintec	\$333	\$44	\$445	2.2x	NM	1,715%	NM	(\$112)	\$12		\$2	(86%)	NA	NA	NA N		NA	1715%	NM
10/19/18	28 SolarWinds	\$2,731	\$375	\$4,692	3.8x	6.8x	NM	24%	(\$1,961)	\$15	(12%)	\$16	4%	NA	NA	NA N		NA	NM	43%
10/12/18	28 Anaplan	\$2,324	\$264	\$2,237	11.6x	NM	19%	50%	\$87	\$17		\$30	78%	NA	NA	NA N		NA	19%	(37%)
10/05/18 09/28/18	30 Elastic 43 CooTek (Cavman)	\$3,209 \$793	\$252 \$52	\$3,158	17.4x 10.1x	NM NM	110% 612%	74%	\$51 \$26	\$36 \$12	3%	\$56 \$7	55% (42%)	NA NA	NA	NA NA		NA	110% 612%	(41%) (19%)
09/28/18	27 LAIX	\$657	\$72	\$767 \$599	6.8x	NM	293%	45%	\$26	\$12		\$7	(42%)	NA	NA	NA N		NA	293%	(19%) NM
09/26/18	28 SurveyMonkey	\$1,153	\$180	\$1,427	4.9x	NM	13%	22%	(\$274)	\$12	9%	\$14	13%	NA	NA	NA N		NA	13%	(7%)
09/26/18	33 Arco Platform Limited	\$372	\$194	\$366	4.4x	30.3x	86%	19%	\$6	\$18		\$42	141%	NA	NA	NA N		NA	86%	8%
09/19/18	22 X Financial	\$3,028	\$105	\$2,927	6.7x	NM	1,259%	12%	\$101	\$10		\$1	(89%)	NA	NA	NA N	A NA	NA	1259%	NM
07/27/18	28 Endava	\$1,055	\$127	\$1,073	4.0x	NM	NM	33%	(\$19)	\$20	5%	\$35	76%	NA	NA	NA N		NA	NM	NM
07/27/18	28 Opera Software	\$4,951	\$115	\$4,915	NM	NM	32%	67%	\$36	\$12		\$5	(55%)	NA	NA	NA N		NA	32%	24%
07/26/18	27 Jiguang	\$708	\$77	\$703	12.4x	NM	442%	139%	\$5	\$9		\$2	(73%)	NA	NA	NA N		NA	442%	NM
07/26/18 07/26/18	34 Shanghai Cango 27 Tenable	\$6,527 \$2,491	\$44 \$288	\$6,517 \$2,464	NM 12.1x	NM	(75%)	1473% 45%	\$11 \$26	\$11 \$23	21%	\$6 \$22	(49%) (5%)	NA	NA	NA NA		NA	(75%)	(24%)
06/29/18	28 Domo	\$729	\$193	\$753	6.3x	NM	56%	31%	(\$24)	\$23	21/0	\$10	(53%)	NA	NA	NA N		NA	56%	(70%)
06/15/18	35 Avalara	\$1,681	\$180	\$1,705	7.5x	NM	35%	33%	(\$25)	\$24	4%	\$75	211%	177	\$249	139% \$69	-	100%	35%	(10%)
05/17/18	31 Pluralsight	\$1,891	\$311	\$1,982	10.6x	NM	36%	48%	(\$91)	\$15	7%	\$11	(27%)	NA	NA	NA N		NA	36%	(39%)
05/04/18	25 VMware (Massachusetts)	\$1,521	\$152	\$1,485	8.7x	NM	55%	23%	\$36	\$19		\$121	537%	NA	NA	NA N	A NA	NA	55%	(29%)
04/27/18	32 Smartsheet	\$1,692	\$175	\$1,640	15.2x	NM	66%	67%	\$52	\$15	7%	\$42	177%	NA	NA	NA N		NA	66%	(34%)
04/27/18	30 DocuSign	\$4,854	\$629	\$4,597	9.4x	NM	36%	40%	\$257	\$29	4%	\$92	219%	NA	NA	NA N		NA	36%	(15%)
04/26/18 04/20/18	99 Ceridian HCM 28 Pivotal Software	\$1,973 \$3,554	\$531 \$555	\$2,998 \$3,501	2.9x	15.9x NM	8% 22%	11% NM	(\$1,026) \$53	\$22 \$15	5%	\$50 \$13	128% (11%)	NA	NA	NA NA		NA	8% 22%	15% (12%)
04/12/18	27 Zuora	\$1,663	\$154	\$1,631	9.7x	NM	51%	39%	\$33	\$13	8%	\$13	(43%)	NA	NA	NA N		NA	51%	(24%)
04/03/18	34 Spotify	\$28,989	\$9,246	\$29,549	6.3x	NM	41%	38%	(\$560)	\$166		\$121	(27%)	NA	NA	NA N		NA	41%	(0%)
03/23/18	28 Dropbox	\$11,305	\$756	\$11,049	10.2x	NM	31%	30%	\$256	\$21	5%	\$18	(14%)	NA	NA	NA N		NA	31%	7%
03/16/18	28 Zscaler	\$2,330	\$192	\$2,259	15.1x	NM	92%	62%	\$72	\$16	7%	\$61	280%	NA	NA	NA N	A NA	NA	92%	(15%)
02/09/18	28 Cardlytics	\$238	\$70	\$266	1.9x	NM	13%	18%	(\$27)	\$13		\$35	169%	NA	NA	NA N		NA	13%	(6%)
11/17/17	28 SailPoint Technologies	\$767	\$240	\$904	4.7x	NM	71%	48%	(\$137)	\$12	9%	\$15	27%	NA	NA	NA N		NA	71%	2%
11/15/17	28 SendGrid	\$960	\$131	\$785	9.3x	NM	77%	NM	\$175	\$16	3%	\$54	238%	NA	NA	NA N		NA	77%	NM
11/01/17	33 Altair Engineering	\$362	\$156	\$415	1.1x	11.6x	9%	13%	(\$54) \$46	\$13		\$27	104% 44%	NA (25)	NA ¢128	NA N		NA	9%	7%
10/27/17 10/19/17	25 ForeScout 28 MongoDB	\$860 \$1,427	\$116 \$192	\$814 \$1,386	4.5x 10.4x	NM NM	52% 111%	31% 44%	\$45	\$22 \$24	9%	\$32 \$137	44%	(35) NA	\$128 NA	110% \$29 NA N		11% NA	52% 111%	(26%)
06/30/17	29 Tintri	\$1,427 \$197	\$192	\$1,386	2.0x	NM	111%	9%	(\$20)	\$24	570	\$137	(100%)	NA	NA	NA N		NA	111%	(34%) NM
06/07/17	69 ShotSpotter	\$107	\$31	\$118	6.3x	17.0x	44%	52%	(\$11)	\$11		\$27	150%	NA	NA	NA N		NA	44%	15%
05/25/17	97 Appian	\$735	\$75	\$755	5.4x	NM	22%	32%	(\$20)	\$12		\$40	235%	NA	NA	NA N	NA NA	NA	22%	(17%)
05/12/17	58 Veritone	\$212	\$38	\$213	23.8x	NM	(36%)	103%	(\$1)	\$15		\$2	(84%)	NA	NA	NA N		NA	(36%)	(117%)
04/28/17	28 Cloudera	\$1,325	\$225	\$2,161	4.9x	NM	64%	37%	(\$836)	\$15	7%	\$8	(48%)	NA	NA	NA N		NA	64%	(31%)
04/13/17	31 Yext	\$1,149	\$116	\$1,129	9.2x	NM	38%	46%	\$19	\$11	10%	\$10	(7%)	NA	NA	NA N		NA	38%	(35%)
04/07/17 Median	25 Okta	\$1,756 \$1.601	\$187 \$187	\$1,733 \$1.631	10.9x 8.0x	NM 17.0x	87% 55%	66% 45%	\$23 \$11	\$17 \$16	6%	\$122	619% 4%	NA 71	NA \$189	NA N. 124% \$49		NA 56%	87% 55%	(31%)
Mean	35	\$1,601 \$2,811	\$187 \$465	\$1,631 \$2,881	8.0x 8.8x	17.0x 19.0x	55% 126%	45% 76%	(\$71)	\$16	6%		4% 57%	71	\$189 \$189	124% \$49		56%	55% 126%	(22%) (18%)
Wean	J J	\$2,011	2405	72,001	0.01	19.04	120%	10/0	(3/1)	320	076		51%	/1	\$105	12470 \$49	24/0	30/0	120/0	(10/0)

Public Company Valuation

	Price	52-Wk			FV	/ Revenue		F	V / EBITDA			P/E	
Company	03/31/20	High	Mkt Cap	EV -	LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
·													
CRM				4									
Adobe Systems	\$318.24	82%	\$153,328	\$153,868	13.2x	11.8x	10.2x	36.3x	25.3x	21.9x	38.5x	32.6x	29.0x
Salesforce	143.98	74%	128,862	126,783	7.4	6.1	5.1	44.6	21.4	17.6	96.5	46.3	37.3
NICE Systems	143.56	78%	9,110	9,261	5.9	5.6	5.2	22.8	17.0	15.6	35.7	25.3	22.5
Zendesk	64.01	67%	7,256	7,361	9.0	7.3	5.8	NM	NM	49.4	NM	145.5	92.3
HubSpot	133.19	64%	5,766	5,412	8.0	6.7	5.6	NM	NM	49.1	NM	145.6	91.5
Pegasystems	71.23	69%	5,674	5,658	6.2	5.3	4.4	NM	NM	NM	NM	NM	131.9
Five9	76.46	94%	4,709	4,612	14.1	12.1	10.3	NM	NM	NM	NM	103.3	79.6
LivePerson	22.75	50%	1,458	1,480	5.1	4.3	3.5	NM	NM	NM	NM	NM	NM
Median		71%	\$6,511	\$6,510	7.7x	6.4x	5.4x	36.3x	21.4x	21.9x	38.5x	74.8x	79.6x
Mean		72%	\$39,520	\$39,304	8.6x	7.4x	6.3x	34.6x	21.2x	30.7x	56.9x	83.1x	69.2x
Accounting / ERP													
Microsoft	\$157.71	83%	\$1,199,550	\$1,142,077	8.5x	8.1x	7.3x	17.7x	17.6x	16.0x	28.9x	27.7x	25.3x
Oracle	48.33	80%	152,413	178,876	4.5	4.5	4.5	10.8	9.5	9.2	12.8	12.5	11.6
SAP	110.50	79%	135,338	144,451	4.7	4.7	4.4	20.6	13.8	12.5	27.4	20.1	17.5
International Business Machines	110.93	70%	98,551	157,985	2.0	2.1	2.1	9.2	9.2	8.2	8.6	10.0	8.9
Intuit	230.00	75%	59,913	57,940	8.1	7.8	7.3	27.0	21.8	19.3	30.3	32.1	28.3
Wolters Kluwer	69.37	88%	18,785	21,423	4.2	4.1	3.9	15.2	14.1	13.4	22.6	21.3	20.2
Соира	139.73	79%	9,058	9,074	23.3	18.6	14.8	NM	NM	NM	NM	NM	NM
The Sage Group (Financial Software)	7.32	70%	7,983	8,468	3.4	3.7	3.7	14.3	15.6	15.2	20.2	23.5	21.9
Xero	41.88	69%	5,957	5,934	12.4	11.8	10.2	NM	NM	37.9	NM	NM	NM
Avalara	74.60	77%	5,820	5,420	14.2	11.8	9.7	NM	NM	NM	NM	NM	NM
Anaplan	30.26	47%	4,140	3,878	11.1	8.8	7.0	NM	NM	NM	NM	NM	NM
BlackLine	52.61	71%	2,966	2,763	9.6	8.2	6.9	NM	NM	NM	132.3	125.3	97.4
Technology One	4.93	76%	1,568	1,535	7.9	7.8	7.0	24.8	22.1	18.7	37.3	37.8	34.0
Workiva	32.33	50%	1,521	1,352	4.5	4.0	3.5	NM	NM	NM	NM	NM	NM
Zuora	8.05	35%	926	832	3.0	2.8	2.4	NM	NM	30.1	NM	NM	NM
Qad	39.93	73%	763	658	2.1	2.1	2.0	NM	NM	31.3	NM	NM	76.1
Upland Software	26.82	49%	677	1,035	4.6	3.9	3.8	NM	11.5	10.7	40.2	12.7	12.5
Median		73%	\$5,957	\$5,934	4.7x	4.7x	4.5x	16.5x	14.1x	15.6x	28.1x	22.4x	21.9x
Mean		69%	\$100,349	\$102,571	7.5x	6.8x	5.9x	17.5x	15.0x	18.5x	36.1x	32.3x	32.2x
Supply Chain Management													
SAP	\$110.50	79%	\$135,338	\$144,451	4.7x	4.7x	4.4x	20.6x	13.8x	12.5x	27.4x	20.1x	17.5x
ServiceNow	286.58	79%	54,393	53,833	15.6	12.4	9.9	NM	41.1	34.0	48.1	67.8	53.7
Dassault Systemes	148.90	82%	38,551	42,366	9.4	8.6	7.9	31.4	25.5	22.4	36.0	37.1	32.0
PTC	61.21	60%	7,069	8,153	6.4	5.8	5.2	NM	18.2	19.5	37.0	26.8	21.6
Aspen Technology	95.07	67%	6,456	6,757	11.2	11.9	11.1	23.8	24.9	21.5	23.9	28.4	25.2
Manhattan Associates	49.82	55%	3,165	3,087	5.0	5.6	5.0	25.0	22.3	19.4	29.6	32.5	30.2
Descartes Systems Group	34.13	72%	2,873	2,842	8.7	8.2	7.4	24.9	21.4	18.8	64.1	59.7	48.9
Kinaxis	76.78	86%	2,027	1,824	9.5	8.5	7.2	41.3	36.9	29.2	62.5	64.5	47.7
Endava	35.16	62%	1,933	1,895	4.7	4.5	3.9	20.8	19.5	18.5	104.2	30.9	29.8
SPS Commerce	46.51	75%	1,621	1,432	5.1	4.7	4.4	25.8	17.7	15.4	35.5	34.3	31.0
American Software	14.21	72%	457	363	3.2	3.2	3.1	23.4	23.4	22.8	53.8	43.1	45.8
Tecsys	12.61	73%	165	172	2.3	2.3	2.1	35.3	23.1	21.4	69.9	80.8	43.3
Median		73%	\$3,019	\$2,964	5.8x	5.7x	5.1x	25.0x	22.7x	20.4x	42.6x	35.7x	31.5x
Mean		72%	\$21,171	\$22,264	7.1x	6.7x	6.0x	27.2x	24.0x	21.3x	49.3x	43.8x	35.6x

	Price	52-Wk			EV/	/ Revenue			V / EBITDA			P/E	
Company	03/31/20	High	Mkt Cap	EV -	LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	F7E FY+1	FY+2
	03/31/20	ingn	Wike Cup	LV	LIN	1114	1112	LIN	1112	11.2	LIIM	1114	11.2
Human Capital Management													
Automatic Data Processing	\$136.68	75%	\$59,012	\$59,869	4.1x	4.1x	4.2x	16.3x	17.0x	16.7x	23.6x	23.9x	24.1x
Workday	130.22	57%	30,211	29,836	8.2	7.0	5.9	NM	35.0	29.5	78.9	62.6	49.1
Paychex	62.92	69%	22,570	22,670	5.5	5.6	5.8	13.4	13.6	14.5	20.7	21.0	22.9
Paycom Software	202.01	59%	11,885	11,784	16.0	14.2	11.7	43.8	34.0	28.2	56.9	55.7	44.7
Ceridian HCM	50.07	63%	7,252	4,483	5.4	5.3	4.6	36.2	27.1	22.8	67.9	136.7	83.8
Smartsheet	41.51	74%	4,933	4,431	16.4	11.8	8.8	NM	NM	NM	NM	NM	NM
Paylocity	88.32	59%	4,735	4,674	9.0	8.4	7.4	48.9	31.8	27.9	46.5	52.6	53.2
TriNet Group	37.66	49%	2,589	2,764	3.0	2.9	3.0	8.5	7.5	7.8	11.2	11.3	11.4
Cornerstone OnDemand	31.75	49%	1,946	1,896	3.3	2.6	2.1	35.4	13.1	9.6	39.6	34.1	18.5
Insperity	37.30	26%	1,469	1,395	0.3	0.3	0.3	6.5	6.4	6.3	8.8	11.3	11.1
Benefitfocus	8.91	19%	292	445	1.5	1.7	1.5	NM	16.1	12.1	NM	NM	NM
Median		59%	\$4,933	\$4,483	5.4x	5.3x	4.6x	25.8x	16.6x	15.6x	39.6x	34.1x	24.1x
Mean		55%	\$13,354	\$13,113	6.6x	5.8x	5.0x	26.1x	20.2x	17.5x	39.3x	45.5x	35.4x
Knowledge / Content Menagement													
Knowledge / Content Management	6210.24	82%	6152 220	61F2 0C0	12.24	11.8x	10.2x	26.24	25.3x	21.9x	38.5x	32.6x	29.0x
Adobe Systems VeriSign	\$318.24 180.09	82%	\$153,328 20.966	\$153,868 21,535	<u>13.2x</u> 17.5	11.8x 17.1	10.2x 16.5	36.3x 24.8	25.3x 24.8	23.5	<u>38.5x</u> 32.7	26.2	<u> </u>
	92.40	94%		16,759	17.5	17.1	10.5	24.8 NM	24.8 NM	23.5 NM	32.7 NM	26.2 NM	110.2
DocuSign			16,767										
Akamai Technologies	91.49	89%	14,811	15,945	5.5	5.1	4.8	16.1	11.9	11.1	20.1	18.6	17.2
OpenText	34.70	72%	9,366	12,491	4.3	4.0	3.7	11.6	11.3	9.9	12.2	12.8	11.3
Dropbox	18.10	69%	7,581	7,429	4.5	3.9	3.5	NM	14.7	12.7	54.3	24.8	20.6
Box	14.04	66%	2,134	2,363	3.4	3.1	2.8	NM	18.1	13.6	NM	36.9	24.2
SVMK	13.51	61%	1,844	2,020	6.6	5.4	4.5	NM	49.2	38.1	NM	NM	NM
Pluralsight	10.98	31%	1,568	1,695	5.3	4.5	3.8	NM	NM	NM	NM	NM	NM
SDL	4.89	58%	445	469	1.0	1.1	1.0	11.3	8.7	7.1	14.4	18.7	13.3
MobileIron	3.80	49%	439	361	1.8	1.8	1.7	NM	NM	NM	NM	NM	NM
Brightcove	6.97	54%	272	267	1.4	1.5	1.3	NM	37.2	15.1	NM	NM	31.7
Median		68%	\$4,858	\$4,896	4.9x	4.3x	3.7x	16.1x	18.1x	13.6x	26.4x	24.8x	24.2x
Mean		67%	\$19,127	\$19,600	6.8x	6.0x	5.4x	20.0x	22.4x	17.0x	28.7x	24.4x	31.9x
Business Intelligence / Analytics													
Splunk	\$126.23	72%	\$20,023	\$20,218	8.6x	8.3x	6.7x	NM	NM	NM	64.7x	NM	132.9x
NICE Systems	143.56	78%	9,110	9,261	5.9	5.6	5.2	22.8	17.0	15.6	35.7	25.3	22.5
Alteryx	95.17	59%	6,225	6,166	14.8	12.3	9.4	NM	NM	NM	90.9	NM	86.5
Pegasystems	71.23	69%	5,674	5,658	6.2	5.3	4.4	NM	NM	NM	NM	NM	131.9
Elasticsearch	55.81	54%	4,561	4,303	11.2	10.2	7.7	NM	NM	NM	NM	NM	NM
Verint Systems	43.00	67%	2,757	3,328	2.6	2.4	2.3	18.5	10.0	8.5	34.1	11.9	10.7
New Relic	46.24	42%	2,740	2,496	4.4	3.7	3.2	NM	10.0	35.7	69.4	NM	110.1
Medallia	20.04	42%	2,683	2,344	5.8	4.9	4.1	NM	NM		09.4 NM	NM	NM
Cloudera	7.87	64%	2,083	2,344	2.7	2.5	2.3	NM	13.6	8.6	NM	30.9	21.0
Teradata	20.49	44%	2,265	2,438	1.3	1.4	1.3	16.1	7.2	6.4	58.4	22.5	15.4
Endava	35.16	62%	1,933	1,895	4.7	4.5	3.9	5.9	19.5	18.5	104.2	30.9	29.8
SVMK	13.51	61%	1,933	2,020	6.6	5.4	4.5	5.9 NM	49.2	38.1	104.2 NM	30.9 NM	29.8 NM
GlobalData	13.51	71%	1,844	1,690	7.4	7.2	<u>4.5</u> 6.9	36.0	26.6	24.2	33.1	37.1	33.8
		71%							12.3			56.2	
MicroStrategy	118.10		1,193	731	1.5	1.5	NM	16.6		NM	96.3		45.4
Talend	22.43	42%	702	685	2.8	2.5	2.2	NM	NM	NM	NM	NM	NM
Domo	9.94	24%	277	279	1.7	1.5	1.4	NM	NM 15.2w	NM	NM	NM	NM
Median		61%	\$2,503	\$2,391	5.2x	4.7x	4.1x	17.6x	15.3x	17.0x	64.7x	30.9x	33.8x
Mean		58%	\$4,117	\$4,105	5.5x	5.0x	4.4x	19.3x	19.4x	19.5x	65.2x	30.7x	58.2x

	Price	52-Wk			EV	/ Revenue		E	V / EBITDA			P/E	
Company	03/31/20	High	Mkt Cap	EV _	LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
IT / Infrastructure													
Microsoft	\$157.71	83% \$	51,199,550	\$1,142,077	8.5x	8.1x	7.3x	17.7x	17.6x	16.0x	28.9x	27.7x	25.3x
Oracle	48.33	80%	152,413	178,876	4.5	4.5	4.5	10.8	9.5	9.2	12.8	12.5	11.6
International Business Machines	110.93	70%	98,551	157,985	2.0	2.1	2.1	9.2	9.2	8.2	8.6	10.0	8.9
ServiceNow	286.58	79%	54,393	53,833	15.6	12.4	9.9	NM	41.1	34.0	48.1	67.8	53.7
VMware	121.10	59%	50,621	54,200	5.0	4.6	4.2	22.0	14.6	13.0	7.0	19.3	16.5
Atlassian	137.26	88%	33,687	32,907	23.2	20.6	16.7	NM	NM	NM	NM	124.8	100.9
Splunk	126.23	72%	20,023	20,218	8.6	8.3	6.7	NM	NM	NM	64.7	NM	132.9
Citrix Systems	141.55	97%	17,320	17,683	5.9	5.6	5.4	24.3	16.8	16.9	20.5	25.4	22.9
Akamai Technologies	91.49	89%	14,811	15,945	5.5	5.1	4.8	16.1	11.9	11.1	20.1	18.6	17.2
Hewlett Packard Enterprise	9.71	55%	12,510	23,265	0.8	0.9	0.9	5.8	5.2	5.2	5.4	8.0	6.9
MongoDB	136.54	74%	7,860	7,797	18.5	15.3	11.9	NM	NM	NM	NM	NM	NM
Datadog	35.98	72%	7,566	6,852	18.9	12.2	9.1	NM	NM	NM	NM	NM	NM
Dynatrace	23.84	64%	6,694	7,046	13.8	11.0	8.9	NM	42.5	33.2	NM	59.6	47.8
Juniper Networks	19.14	67%	6,326	6,214	1.4	1.4	1.4	9.8	7.3	6.6	11.8	12.5	10.8
Cloudflare	23.48	89%	5,713	5,086	17.7	13.0	9.9	NM	NM	NM	NM	NM	NM
SolarWinds	15.67	72%	4,879	6,726	7.2	6.6	6.1	16.9	14.5	12.9	116.9	18.2	16.3
LogMeIn	83.28	96%	4,047	4,226	3.4	3.2	3.0	14.0	10.4	9.7	16.1	16.3	15.5
Nutanix	15.80	36%	3,076	2,892	2.3	2.2	1.9	NM	NM	NM	NM	NM	NM
New Relic	46.24	42%	2,740	2,496	4.4	3.7	3.2	NM	NM	35.7	69.4	NM	110.1
Appian	40.23	63%	2,715	2,607	10.0	9.5	8.3	NM	NM	NM	NM	NM	NM
Cloudera	7.87	64%	2,323	2,174	2.7	2.5	2.3	NM	13.6	8.6	NM	30.9	21.0
Software	29.78	78%	2,203	1,930	1.9	NM	NM	6.8	NM	NM	10.5	NM	NM
Fastly	18.98	54%	1,820	1,719	8.6	6.0	4.7	NM	NM	NM	NM	NM	NM
NetScout Systems	23.67	78%	1,748	1,933	2.2	2.2	2.1	12.0	10.0	9.1	13.5	14.7	13.2
Progress Software	32.00	61%	1,433	1,576	3.6	3.6	3.6	14.8	NM	NM	16.2	11.6	11.3
PagerDuty	17.28	29%	1,345	993	6.0	4.8	3.9	NM	NM	NM	NM	NM	NM
Median		72%	\$6,510	\$6,789	5.7x	5.1x	4.7x	14.0x	12.8x	11.1x	16.1x	18.4x	16.8x
Mean		70%	\$66,014	\$67,664	7.8x	6.8x	5.7x	13.9x	16.0x	15.3x	29.4x	29.9x	35.7x



Price 57% 56% 11/d MAL Co PV1 PV3 PV3 PV2 LIM PV3 PV3 Security Cisca Systems \$39.31 67% \$156,709 \$153,640 3.2x 3.2x 0.7x 8.5x 8.5x 13.5x 12.5x 12.4x VeriSam 180.09 81% 20.046 21.535 17.5 12.1 16.5 24.8 23.3 3.2.7 26.2 23.7 Diplot Divervis's 100.56 65% 15.642 14.44 5.3 16.5 14.8 15.0 14.7 14.3 13.6 15.4 15.2 14.0 15.4 15.6 15.7 14.3 13.6 15.4 15.6 15.7 14.3 13.6 15.4 15.6 12.4 15.6 15.7 14.3 13.6 15.4 15.6 12.4 15.6 12.4 15.6 12.4 15.6 12.4 15.6 12.4 16.6 12.4 12.6 12.6 12.4 12.6 <th></th> <th>Price</th> <th>52-Wk</th> <th></th> <th></th> <th>EV/</th> <th>Povonuo</th> <th></th> <th></th> <th>V / EBITDA</th> <th></th> <th></th> <th>P/E</th> <th></th>		Price	52-Wk			EV/	Povonuo			V / EBITDA			P/E	
Sectory State <	Company			Mkt Can	FV -			FY+2			EY+2	ITM		EY+2
Cisco Systems 539.31 67% 516,700 515,540 3.0v 3.2v 9.7v 8.5x 8.9v 13.5x 12.5x 12.5x 12.7v Fortinet 101.17 83% 17,453 15,288 7.1 6.1 5.3 38.6 22.2 18.4 8.3 35.9 30.7 Fortinet 100.54 76% 15,628 4.8 4.4 3.8 NM 19.5 17.0 58.6 34.2 28.5 Check Hourse 100.54 76% 15,622 14,042 7.8 7.0 6.6 15.7 14.1 13.5 16.4 15.8 15.0 Consoltrike 6.85% 7.87 7.722 2.0 1.8 1.40 NM		00/01/20		mill cup		2			21111			2.1.11		
Verisgin 180.09 81% 20,966 21,335 17.5 17.1 16.5 24.8 24.8 23.5 32.7 26.2 29.7 Paio Atto Networks 163.36 65% 16,448 15,028 4.8 4.4 3.8 NM 19.5 17.0 58.6 34.2 22.5 18.0 16.4 3.5 35.0 35		400.04	630/	4166 300										
Fortinet 101.17 83% 17.433 15.88 7.1 6.1 5.3 88.6 2.22 18.4 36.3 35.9 30.7 Pol Alto Networks 105.54 7.6% 15.522 14.043 7.0 6.8 15.7 14.1 13.6 16.4 15.8 15.0 Okta 122.2 86% 11.471 22.5 19.0 14.7 NM							-		-					
Piol Alto Networks 163.96 65% 15,622 4.8 4.4 3.8 NM 19.5 17.0 58.6 34.2 28.5 Octa 15,622 15,601 14,71 25.1 19.0 14.7 NM	<u> </u>											-		-
Check Point Software Technologies 100.54 76% 15,62 14,043 7.0 6.8 15.7 14.1 13.6 16.4 15.8 15.0 Otta 55.68 55% 11,872 10,960 22.8 15.0 11.6 NM														
Okta 122.26 86% 15,010 14/12 25.1 19.0 14.7 NM NM NM NM NM Crowdstrike 55.6 11.87 10,950 22.8 15.0 11.6 NM				,										
Crowdstrike 55.68 55.88 11.872 10.960 22.8 15.0 11.6 NM														
NortonLifeLock 18.71 65% 11.233 3.057 0.7 1.3 1.2 2.2 2.6 2.3 NM 16.3 12.6 Scaler 60.86 6.8% 7,872 2.92 20.9 18.1 14.0 NM Size Size <td></td>														
Zcaler 60.86 68% 7.872 7.922 20.9 18.1 14.0 NM <														
Prodpoint 102.59 77% 5,848 5,763 6.5 5.6 4.8 NM 41.5 27.6 NM 68.8 50.8 Cloudhare 23.48 89% 57.13 5,086 17.7 13.0 9 NM S3.6 5.2.4 2.8 47.5 5.6 4.7 4.0 43.3 6.6% 2.1.7 2.0 6.7 5.6 4.7 4.0 NM S1.2 S1.2 S1.2 <td></td>														
Cloudinare 23.48 89% 5/13 5/086 17.7 13.0 9.9 NM N														
Qualys 86.99 91% 3.401 3.153 9.8 8.8 7.8 30.7 20.8 18.3 34.0 34.9 31.6 CyberArk Strivare 85.56 58% 3.255 2.681 6.2 5.9 4.9 37.3 30.6 22.4 2.98 47.5 35.4 FireEye 10.58 58% 2.355 2.415 2.7 2.7 2.6 NM 35.1 20.0 NM NM NM S8.0 Rapid7 43.33 66% 2.176 2.201 6.7 5.6 4.7 NM S0.0 5.5 5.5 43.7 NM 31.5 7.0 4.7 7.7 7.3 8.00 NM NM NM NM S0.0 S0.0 S0.0 S0.0 S0.0 S0.0 S0.0 S0.0 S0.0 </td <td></td>														
Cyber Ak Software 85.56 58% 3,255 2,681 6.2 5.9 4.9 37.3 30.6 22.4 2.9.8 47.5 35.4 Minecast 35.30 65% 2,207 2,258 5.6 4.7 4.0 43.5 20.0 MM NM 58.0 Agpld7 43.33 66% 2,176 2,201 6.7 5.6 4.7 NM														
FireFye 10.88 58% 2,355 2,415 2.7 2.6 NM 95.1 20.0 NM NM 58.2 Rapid7 43.33 66% 2,176 2,201 6.7 5.6 4.7 NM														
Mimecast 35.30 65% 2.207 2.258 5.6 4.7 4.0 43.3 18.9 95.0 5.4.7 42.3 Rapid7 43.3 66% 2.176 2.201 6.7 5.6 4.7 NM NM <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>														
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Tenable 21.86 60% 2,173 2,007 5.7 4.7 4.0 NM NM <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></th<>													-	
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Tufin 8.78 28% 312 218 2.1 2.2 1.9 NM Absolute Software Got Software <							-							
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Fidelity National Information Services \$121.64 77% \$74,969 \$94,620 9.2x 7.6x 7.0x 29.6x 17.6x 15.1x 63.9x 22.1x 18.1x Fiserv 94.99 76% 64,508 87,392 8.6 6.3 5.8 27.3 15.9 14.2 53.2 21.6 17.8 MSCI (US) 288.96 86% 24,566 26,295 16.9 15.8 14.6 32.3 28.5 24.7 39.6 41.3 37.0 Square 52.38 60% 22,798 21,657 9.6 8.9 6.8 45.6 NM 42.4 58.2 NM 54.0 Jack Henry and Associates 155.24 89% 11,910 11,837 7.3 7.0 6.6 22.2 22.0 21.4 40.8 40.4 38.6 Broadridge Financial Solutions 94.83 69% 10,877 7.1 7.0 6.7 20.5 20.4 19.4 25.1 26.6 24.5 21.8 38.1 36.8 33.6 5.6 FairIsaac 307.69 70% <th>Mean</th> <th></th> <th>67%</th> <th>\$12,699</th> <th>\$11,615</th> <th>7.9x</th> <th>6.8x</th> <th>5.7x</th> <th>26.6x</th> <th>20.3x</th> <th>20.1x</th> <th>36.2x</th> <th>36.0x</th> <th>30.1x</th>	Mean		67%	\$12,699	\$11,615	7.9x	6.8x	5.7x	26.6x	20.3x	20.1x	36.2x	36.0x	30.1x
Fiserv94.9976%64,50887,3928.66.35.827.315.914.253.221.617.8MSCI (US)288.9686%24,56626,29516.915.814.632.328.525.739.641.337.0Square52.3860%22,79821,6579.68.96.845.6NM42.458.2NM54.0Jack Henry and Associates155.2489%11,91011,8377.37.06.622.222.021.440.840.438.6Broadridge Financial Solutions94.8369%10,88712,7542.92.82.816.713.012.220.419.117.4FactSet Research Systems260.6884%9,88110,3737.17.06.720.520.419.425.126.125.3Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Quidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.375.5Q2 Holdings59.0663%2,8653,19710.18.16.6NMNMNMNMNMEnvestnet53.78	Financial Technology													
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Square52.3860%22,79821,6579.68.96.845.6NM42.458.2NM54.0Jack Henry and Associates155.2489%11,91011,8377.37.06.622.222.021.440.840.438.6Broadridge Financial Solutions94.8369%10,88712,7542.92.82.816.713.012.220.419.117.4FactSet Research Systems260.6884%9,88110,3737.17.06.720.520.419.425.126.125.3Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMCuldewire Software79.3164%6,5745,9548.58.67.5NMNMNMNMQ2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMProverbet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.7<	Fiserv	94.99	76%	64,508	87,392	8.6	6.3	5.8	27.3	15.9	14.2	53.2	21.6	17.8
Jack Henry and Associates155.2489%11,91011,8377.37.06.622.222.021.440.840.438.6Broadridge Financial Solutions94.8369%10,88712,7542.92.82.816.713.012.220.419.117.4FactSet Research Systems260.6884%9,88110,3737.17.06.720.520.419.425.126.125.3Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Guidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.375.5Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,6131,1951.61.31.19.0NMNM14.210.29.4Dottomline Technologies36.65	MSCI (US)	288.96	86%	24,566	26,295	16.9			32.3	28.5	25.7	39.6	41.3	37.0
Broadridge Financial Solutions94.8369%10,88712,7542.92.82.816.713.012.22.0.419.117.4FactSet Research Systems260.6884%9,88110,3737.17.06.720.520.419.425.126.125.3Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,6131,6433.83.73.531.77.710.69.327.626.816.99F Group9.4564%1,6131,6433.83.73.531.77.710.69.327.626.816.99F Group9.4564%1,6131,6433.83.73.531.77.710.69.327.626.816.99F Group<	Square	52.38	60%	22,798	21,657	9.6	8.9	6.8	45.6	NM	42.4	58.2	NM	54.0
FactSet Research Systems260.6884%9,88110,3737.17.06.720.520.419.425.126.125.3Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Guidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.37.5Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,8321,1951.61.31.19.0NMNM14.210.29.4Bottomline Technologies36.6564%1,6131,6433.83.73.531.717.716.114.1731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Fordian67%\$9,174\$10,1157.7x <td>Jack Henry and Associates</td> <td>155.24</td> <td>89%</td> <td>11,910</td> <td>11,837</td> <td>7.3</td> <td>7.0</td> <td>6.6</td> <td>22.2</td> <td>22.0</td> <td>21.4</td> <td>40.8</td> <td>40.4</td> <td>38.6</td>	Jack Henry and Associates	155.24	89%	11,910	11,837	7.3	7.0	6.6	22.2	22.0	21.4	40.8	40.4	38.6
Temenos132.1871%9,37810,39610.711.09.828.624.521.838.136.833.6Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Guidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.375.5Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x18.1x26.5x25.3x	Broadridge Financial Solutions	94.83	69%	10,887	12,754	2.9	2.8	2.8	16.7	13.0	12.2	20.4	19.1	17.4
Fair Isaac307.6970%8,9699,8568.28.27.833.225.024.231.238.135.2Guidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.375.5Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x38.1x26.5x25.3x	FactSet Research Systems	260.68	84%	9,881	10,373	7.1	7.0	6.7	20.5	20.4	19.4	25.1	26.1	25.3
Guidewire Software79.3164%6,5745,9548.58.67.5NMNM46.772.493.375.5Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,8321,1951.61.31.19.0NMNM14.210.29.4Bottomline Technologies36.6564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x38.1x26.5x25.3x	Temenos	132.18	71%	9,378	10,396	10.7	11.0	9.8	28.6	24.5	21.8	38.1	36.8	33.6
Q2 Holdings59.0663%2,8603,19710.18.16.6NMNMNMNMNMNMNMEnvestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,8321,1951.61.31.19.0NMNM14.210.29.4Bottomline Technologies36.6564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x38.1x26.5x25.3x	Fair Isaac	307.69	70%	8,969	9,856	8.2	8.2	7.8	33.2	25.0	24.2	31.2	38.1	35.2
Envestnet53.7861%2,8453,3403.73.53.242.916.414.324.126.122.9ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,8321,1951.61.31.19.0NMNM14.210.29.4Bottomline Technologies36.6564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x38.1x26.5x25.3x	Guidewire Software	79.31	64%	6,574	5,954	8.5	8.6	7.5	NM	NM	46.7	72.4	93.3	75.5
ACI Worldwide24.1561%2,8054,1183.32.92.715.710.69.327.626.816.99F Group9.4564%1,8321,1951.61.31.19.0NMNM14.210.29.4Bottomline Technologies36.6564%1,6131,6433.83.73.531.717.716.141.731.928.0Ebix15.1828%4631,1982.12.31.87.67.85.33.85.13.8Median67%\$9,174\$10,1157.7x7.0x6.6x27.9x17.7x17.7x18.1x26.5x25.3x	Q2 Holdings	59.06	63%	2,860	3,197	10.1	8.1	6.6	NM	NM	NM	NM	NM	NM
9F Group 9.45 64% 1,832 1,195 1.6 1.3 1.1 9.0 NM NM 14.2 10.2 9.4 Bottomline Technologies 36.65 64% 1,613 1,643 3.8 3.7 3.5 31.7 17.7 16.1 41.7 31.9 28.0 Ebix 15.18 28% 463 1,198 2.1 2.3 1.8 7.6 7.8 5.3 3.8 5.1 3.8 Median 67% \$9,174 \$10,115 7.7x 7.0x 6.6x 27.9x 17.7x 17.7x 38.1x 26.5x 25.3x	Envestnet	53.78	61%	2,845	3,340	3.7	3.5	3.2	42.9	16.4	14.3	24.1	26.1	22.9
9F Group 9.45 64% 1,832 1,195 1.6 1.3 1.1 9.0 NM NM 14.2 10.2 9.4 Bottomline Technologies 36.65 64% 1,613 1,643 3.8 3.7 3.5 31.7 17.7 16.1 41.7 31.9 28.0 Ebix 15.18 28% 463 1,198 2.1 2.3 1.8 7.6 7.8 5.3 3.8 5.1 3.8 Median 67% \$9,174 \$10,115 7.7x 7.0x 6.6x 27.9x 17.7x 17.7x 38.1x 26.5x 25.3x	ACI Worldwide	24.15	61%			3.3	2.9	2.7	15.7	10.6	9.3	27.6	26.8	
Ebix 15.18 28% 463 1,198 2.1 2.3 1.8 7.6 7.8 5.3 3.8 5.1 3.8 Median 67% \$9,174 \$10,115 7.7x 7.0x 6.6x 27.9x 17.7x 17.7x 38.1x 26.5x 25.3x	9F Group		64%			1.6	1.3	1.1	9.0	NM	NM	14.2		
Median 67% \$9,174 \$10,115 7.7x 7.0x 6.6x 27.9x 17.7x 17.7x 38.1x 26.5x 25.3x	Bottomline Technologies	36.65	64%	1,613	1,643	3.8	3.7	3.5	31.7	17.7	16.1	41.7	31.9	28.0
Median 67% \$9,174 \$10,115 7.7x 7.0x 6.6x 27.9x 17.7x 17.7x 38.1x 26.5x 25.3x		15.18	28%	,					7.6	7.8			5.1	
	Median		67%	\$9,174	\$10,115			6.6x	27.9x	17.7x	17.7x	38.1x	26.5x	25.3x
	Mean		68%	• •		7.1x	6.6x	5.9x	25.9x	18.3x	20.6x	37.0x	31.4x	28.9x

	Price	52-Wk			EV	/ Revenue		E	V / EBITDA			P/E	
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Vertical Software													
Verva Systems	\$156.37	88%	\$23,339	\$22,307	20.2x	16.1x	13.5x	NM	43.7x	35.5x	66.5x	62.9x	52.0x
Tyler Technologies	296.56	87%	11.683	11,434	10.5	9.9	9.0	48.3	36.0	31.7	56.9	56.2	51.0
SS&C Technologies	43.82	65%	11,204	18,553	4.0	4.0	3.9	10.8	10.4	10.1	21.9	11.2	10.6
Black Knight (US)	58.06	76%	8,710	10,238	8.7	8.7	8.0	19.5	17.7	16.1	56.9	29.9	26.0
Amdocs	54.97	71%	7,398	7,236	1.8	1.8	1.7	9.3	8.8	8.5	14.2	12.6	11.8
Guidewire Software	79.31	64%	6,574	5,954	8.5	8.6	7.5	NM	NM	46.7	72.4	93.3	75.5
RealPage	52.93	80%	5,012	6,093	6.2	5.4	4.8	27.4	20.7	17.6	40.4	29.7	25.3
CDK Global	32.85	51%	3,991	6,543	3.7	3.4	3.2	12.7	9.1	8.6	9.5	10.8	10.0
AppFolio	110.95	75%	3,790	3,833	15.0	12.1	9.9	NM	NM	NM	90.4	NM	144.1
Q2 Holdings	59.06	63%	2,860	3,197	10.1	8.1	6.6	NM	NM	NM	NM	NM	NM
Blackbaud	55.55	57%	2,730	3,261	3.6	3.6	3.6	28.6	18.3	17.4	NM	25.8	25.3
CoreLogic	30.54	59%	2,413	4,078	2.3	2.4	2.4	11.5	8.0	7.9	16.9	10.5	10.2
NIC	23.00	94%	1,560	1,357	3.8	3.6	3.3	18.1	15.4	13.2	27.7	30.3	25.1
AssetMark	20.39	60%	1,476	1,494	5.2	5.2	4.8	26.0	13.7	12.8	20.4	21.8	20.4
Qad	39.93	73%	763	658	2.1	2.1	2.0	NM	NM	31.3	NM	NM	76.1
Model N	22.21	62%	740	735	5.1	4.7	4.3	NM	NM	42.8	NM	74.0	65.3
Median		68%	\$3,890	\$5,016	5.2x	5.0x	4.6x	18.8x	15.4x	16.8x	34.1x	29.7x	25.3x
Mean		70%	\$5,890	\$6,686	6.9x	6.2x	5.5x	21.2x	18.3x	21.4x	41.2x	36.1x	41.9x
Healthcare IT / Life Sciences Software													
Veeva Systems	\$156.37	88%	\$23,339	\$22,307	20.2x	16.1x	13.5x	NM	43.7x	35.5x	66.5x	62.9x	52.0x
Cerner	62.99	78%	19,649	20,146	3.5	3.6	3.4	15.3	11.7	10.3	34.1	22.2	18.8
Inovalon Holdings	16.66	72%	2,583	3,457	5.4	5.1	4.6	19.4	15.3	13.6	111.4	29.5	24.7
Tabula Rasa Healthcare	52.29	75%	1,170	1,380	4.8	4.1	3.4	NM	29.8	22.9	59.6	60.8	51.3
Allscripts Healthcare Solutions	7.04	59%	1,145	2,050	1.2	1.2	1.2	30.9	7.2	6.5	NM	11.7	9.6
Health Catalyst	26.15	52%	974	799	5.2	4.5	3.6	NM	NM	NM	NM	NM	NM
HealthStream	23.95	80%	775	633	2.5	2.7	2.8	13.8	16.8	17.9	44.1	87.1	NM
Phreesia	21.03	60%	755	687	5.8	5.5	4.2	NM	NM	NM	NM	NM	NM
NextGen Healthcare	10.44	49%	686	746	1.4	1.4	1.4	11.5	8.6	7.8	17.0	16.1	13.4
Cegedim	26.25	74%	364	640	1.1	1.1	1.1	8.2	6.2	NM	39.1	16.9	14.7
Castlight Health	0.72	18%	108	68	0.5	0.5	0.5	NM	NM	NM	NM	NM	NM
Median		72%	\$974	\$799	3.5x	3.6x	3.4x	14.6x	13.5x	13.6x	44.1x	25.8x	18.8x
Mean		64%	\$4,686	\$4,810	4.7x	4.2x	3.6x	16.5x	17.4x	16.4x	53.1x	38.4x	26.4x
Education Technology													
Chegg	\$35.78	74%	\$4,361	\$4,513	11.0x	8.3x	6.8x	NM	25.8x	20.6x	110.3x	30.6x	25.6x
Cornerstone OnDemand	31.75	49%	1,946	1,896	3.3	2.6	2.1	35.4	13.1	9.6	39.6	34.1	18.5
Afya Educacional	19.06	55%	1,711	1,574	9.6	8.4	6.3	26.3	21.0	16.0	49.8	29.3	20.5
Pluralsight	10.98	31%	1,568	1,695	5.3	4.5	3.8	NM	NM	NM	NM	NM	NM
20	21.22	29%	1,350	1,500	2.6	2.1	1.8	NM	NM	NM	NM	NM	NM
Learning Technologies Group	1.65	73%	1,106	1.140	7.2	7.2	6.7	25.2	20.7	18.1	28.3	32.0	28.8
K12	18.86	50%	773	610	0.6	0.6	0.5	5.7	4.9	4.1	15.0	36.3	23.7
Median	10.00	50%	\$1,568	\$1,574	5.3x	4.5x	3.8x	25.7x	20.7x	16.0x	39.6x	32.0x	23.7x
Mean		52%	\$1,831	\$1,847	5.7x	4.8x	4.0x	23.1x	17.1x	13.7x	48.6x	32.5x	23.4x
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	Price	52-Wk			FV	/ Revenue		F	V / EBITDA			P/E	
Company	03/31/20	High	Mkt Cap	EV _	LTM	FY+1	FY+2	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Marketing Automation													
Adobe Systems	\$318.24	82%	\$153,328	\$153,868	13.2x	11.8x	10.2x	36.3x	25.3x	21.9x	38.5x	32.6x	29.0x
Oracle	48.33	80%	152,413	178,876	4.5	4.5	4.5	10.8	9.5	9.2	12.8	12.5	11.6
Salesforce	143.98	74%	128,862	126,783	7.4	6.1	5.1	44.6	21.4	17.6	96.5	46.3	37.3
Shopify	416.93	70%	48,406	46,102	29.2	21.2	16.0	NM	NM	NM	NM	NM	NM
Zendesk	64.01	67%	7,256	7,361	9.0	7.3	5.8	NM	NM	49.4	NM	145.5	92.3
HubSpot	133.19	64%	5,766	5,412	8.0	6.7	5.6	NM	NM	49.1	NM	145.6	91.5
LivePerson	22.75	50%	1,458	1,480	5.1	4.3	3.5	NM	NM	NM	NM	NM	NM
Cardlytics	34.96	33%	934	829	3.9	4.4	3.0	NM	NM	47.9	NM	NM	NM
Median		69%	\$27,831	\$26,731	7.7x	6.4x	5.3x	36.3x	21.4x	34.9x	38.5x	46.3x	37.3x
Mean		65%	\$62,303	\$65,089	10.0x	8.3x	6.7x	30.6x	18.7x	32.5x	49.3x	76.5x	52.3x
Storage & Collaboration													
Atlassian	\$137.26	88%	\$33,687	\$32,907	23.2x	20.6x	16.7x	NM	NM	NM	NM	124.8x	100.9x
DocuSign	92.40	94%	16,767	16,759	17.2	13.1	10.5	NM	NM	NM	NM	NM	110.2
OpenText	34.70	72%	9,366	12,491	4.3	4.0	3.7	11.6	11.3	9.9	12.2	12.8	11.3
NetApp	41.69	53%	9,221	8,201	1.5	1.5	1.6	6.5	6.6	7.1	9.1	10.4	10.8
Dropbox	18.10	69%	7,581	7,429	4.5	3.9	3.5	NM	14.7	12.7	54.3	24.8	20.6
Smartsheet	41.51	74%	4,933	4,431	16.4	11.8	8.8	NM	NM	NM	NM	NM	NM
Box	14.04	66%	2,134	2,363	3.4	3.1	2.8	NM	18.1	13.6	NM	36.9	24.2
CommVault Systems	40.48	62%	1,886	1,566	2.3	2.4	2.3	NM	18.0	NM	NM	36.8	28.0
Median		71%	\$8,401	\$7,815	4.4x	4.0x	3.6x	9.0x	14.7x	11.3x	12.2x	30.8x	24.2x
Mean		72%	\$10,697	\$10,769	9.1x	7.6x	6.2x	9.0x	13.8x	10.8x	25.2x	41.1x	43.7x
Communications			,	,									
Zoom Video Communications	\$146.12	89%	\$40,768	\$39,985	64.2x	43.7x	32.7x	NM	NM	NM	NM	NM	NM
RingCentral	211.91	83%	18,458	18,544	20.5	16.6	13.4	NM	NM	NM	NM	NM	NM
Slack	26.84	64%	14,945	14,418	22.9	16.9	12.8	NM	NM	NM	NM	NM	NM
Twilio	89.49	59%	12,503	11,290	10.0	7.4	6.0	NM	NM	NM	NM	NM	NM
NICESystems	143.56	78%	9,110	9,261	5.9	5.6	5.2	22.8	17.0	15.6	35.7	25.3	22.5
Juniper Networks	19.14	67%	6,326	6,214	1.4	1.4	1.4	9.8	7.3	6.6	11.8	12.5	10.8
Nuance	16.78	71%	4,747	6,031	3.5	4.2	4.0	20.7	NM	NM	16.9	21.0	19.1
Five9	76.46	94%	4,709	4,612	14.1	12.1	10.3	NM	NM	NM	NM	103.3	79.6
Everbridge	106.36	80%	3,641	3,539	17.6	13.5	10.7	NM	NM	NM	NM	NM	NM
Vonage Holdings	7.23	53%	1,756	2,288	1.9	1.9	1.8	24.6	15.0	14.2	118.6	51.6	51.6
8X8	13.86	52%	1,420	1,583	3.8	3.0	2.6	NM	NM	NM	NM	NM	NM
Synchronoss Technologies	3.05	34%	136	371	1.2	1.2	1.1	NM	14.7	9.4	NM	NM	76.3
Median	2.50	69%	\$5,537	\$6,123	7.9x	6.5x	5.6x	21.8x	14.9x	11.8x	26.3x	25.3x	37.1x
Mean		68%	\$9,876	\$9,845	13.9x	10.6x	8.5x	19.5x	13.5x	11.5x	45.8x	42.7x	43.3x

Public Company Operating Metrics

	Price	52-Wk			Reve	nue Growt	h	EBIT	DA Margi	n
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2
CRM										
Adobe Systems	\$318.24	82%	\$153,328	\$153,868	22%	16%	16%	36%	47%	47%
Salesforce	143.98	74%	128,862	126,783	22%	21%	19%	17%	29%	29%
NICE Systems	143.56	74%	9,110	9,261	9%	6%	8%	26%	33%	33%
Zendesk	64.01	67%	7,256	7,361	36%	24%	26%	(15%)	<u> </u>	12%
		64%		5,412			20%		9%	12%
HubSpot	133.19	69%	5,766		32% 2%	<u>19%</u> 17%	21%	(3%)	3%	6%
Pegasystems Five9	71.23	94%	5,674 4,709	5,658 4,612	2%	17%	17%	(13%)	3% 16%	18%
LivePerson	22.75	<u>94%</u> 50%	1,458	1,480	17%	19%	22%	(23%)	2%	5%
Median	22.75				25%	<u>19%</u> 18%	22%	(23%) 2%	13%	15%
		71%	\$6,511 \$39,520	\$6,510				2% 4%		20%
Mean		72%	\$39,52U	\$39,304	22%	17%	19%	4%	19%	20%
Accounting / ERP										
Microsoft	\$157.71		\$1,199,550	\$1,142,077	13%	12%	10%	48%	46%	46%
Oracle	48.33	80%	152,413	178,876	1%	0%	0%	42%	48%	49%
SAP	110.50	79%	135,338	144,451	6%	(1%)	8%	23%	34%	35%
International Business Machines	110.93	70%	98,551	157,985	(3%)	(4%)	2%	22%	23%	26%
Intuit	230.00	75%	59,913	57,940	13%	9%	7%	30%	36%	38%
Wolters Kluwer	69.37	88%	18,785	21,423	1%	4%	4%	28%	29%	29%
Coupa	139.73	79%	9,058	9,074	50%	25%	25%	(12%)	8%	10%
The Sage Group (Financial Software)	7.32	70%	7,983	8,468	(0%)	(8%)	1%	24%	24%	24%
Xero	41.88	69%	5,957	5,934	24%	5%	16%	19%	23%	27%
Avalara	74.60	77%	5,820	5,420	41%	20%	22%	(10%)	(2%)	1%
Anaplan	30.26	47%	4,140	3,878	45%	26%	27%	(37%)	(9%)	(1%)
BlackLine	52.61	71%	2,966	2,763	27%	17%	18%	(2%)	12%	12%
Technology One	4.93	76%	1,568	1,535	(13%)	(2%)	10%	32%	35%	38%
Workiva	32.33	50%	1,521	1,352	22%	12%	15%	(14%)	(6%)	(6%)
Zuora	8.05	35%	926	832	17%	9%	15%	(24%)	(8%)	8%
Qad	39.93	73%	763	658	(5%)	(7%)	6%	1%	4%	6%
Upland Software	26.82	49%	677	1,035	49%	18%	4%	2%	34%	35%
Median		73%	\$5,957	\$5,934	13%	9%	10%	19%	23%	26%
Mean		69%	\$100,349	\$102,571	17%	8%	11%	10%	20%	22%
Supply Chain Management										
SAP	\$110.50	79%	\$135,338	\$144,451	6%	(1%)	8%	23%	34%	35%
ServiceNow	286.58	79%	54,393	53,833	33%	26%	25%	9%	30%	29%
Dassault Systemes	148.90	82%	38,551	42,366	10%	10%	9%	30%	34%	35%
PTC	61.21	60%	7,069	8,153	10%	13%	10%	11%	32%	27%
Aspen Technology	95.07	67%	6,456	6,757	11%	(5%)	8%	47%	48%	52%
Manhattan Associates	49.82	55%	3,165	3,087	11%	(11%)	12%	20%	25%	26%
Descartes Systems Group	34.13	72%	2,873	2,842	11%	7%	12%	35%	38%	40%
Kinaxis	76.78	86%	2,873	1,824	27%	12%	10%	23%	23%	25%
Endava	35.16	62%	1,933	1,824	18%	12%	16%	23%	23%	23%
SPS Commerce	46.51	75%	1,955	1,432	12%	8%	9%	22%	23%	21%
American Software	14.21	75%	457	363	12%	<u> </u>	<u> </u>	14%	14%	13%
Tecsys	14.21	72%	165	172	37%	27%	9%	6%	14%	13%
Median	12.01	73%	\$3,019	\$2,964	<u> </u>	<u> </u>	<u> </u>	21%	28%	28%
		73%	\$3,019	\$2,964 \$22,264	12%	9% 9%	10%	21%	28% 28%	28% 28%
Mean		12%	321,1/1	ŞZZ,204	13%	370	1270	2270	20%	20%

Note: \$ in millions. Source: Pitchbook as of 3/31/20

	Price	52-Wk			Reve	nue Growt	th	EBI1	DA Margi	
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Human Capital Management										
Automatic Data Processing	\$136.68	75%	\$59,012	\$59,869	5%	2%	(1%)	25%	24%	25%
Workday	130.22	57%	30,211	29,836	29%	18%	18%	(5%)	20%	20%
Paychex	62.92	69%	22,570	22,670	13%	7%	(4%)	41%	41%	40%
Paycom Software	202.01	59%	11,885	11,784	30%	13%	21%	36%	42%	42%
Ceridian HCM	50.07	63%	7,252	4,483	11%	3%	15%	15%	19%	20%
Smartsheet	41.51	74%	4,933	4,431	52%	38%	34%	(34%)	(15%)	(8%)
Paylocity	88.32	59%	4,735	4,674	24%	19%	13%	18%	26%	27%
TriNet Group	37.66	49%	2,589	2,764	4%	3%	(3%)	35%	39%	38%
Cornerstone OnDemand	31.75	49%	1,946	1,896	7%	25%	25%	9%	20%	22%
Insperity	37.30	26%	1,469	1,395	13%	(3%)	(1%)	5%	5%	5%
Benefitfocus	8.91	19%	292	445	14%	(12%)	11%	(1%)	11%	13%
Median		59%	\$4,933	\$4,483	13%	7%	13%	15%	20%	22%
Mean		55%	\$13,354	\$13,113	18%	10%	12%	13%	21%	22%
Knowledge / Content Management	6210.24	0.20/	6153 220	¢152.000	22%	1.0/	1 C 0/	2.0/	470/	47%
Adobe Systems	\$318.24	82%	\$153,328	\$153,868		16%	16%	36%	47%	
/eriSign	180.09	81%	20,966	21,535	1%	2%	4%	71%	69%	70%
DocuSign	92.40	94%	16,767	16,759	39%	31%	26%	(15%)	11%	14%
Akamai Technologies	91.49	89%	14,811	15,945	7%	7%	6%	34%	43%	44%
OpenText	34.70	72%	9,366	12,491	3%	8%	9%	37%	35%	37%
Dropbox	18.10	69%	7,581	7,429	19%	14%	11%	7%	27%	28%
3ox	14.04	66%	2,134	2,363	14%	10%	10%	(12%)	17%	21%
SVMK	13.51	61%	1,844	2,020	21%	21%	20%	(7%)	11%	12%
Pluralsight	10.98	31%	1,568	1,695	37%	19%	19%	(39%)	(12%)	(5%)
SDL	4.89	58%	445	469	20%	1%	6%	9%	12%	14%
MobileIron	3.80	49%	439	361	6%	(4%)	7%	(21%)	NA	NA
Brightcove	6.97	54%	272	267	12%	(2%)	11%	(7%)	4%	9%
Median		68%	\$4,858	\$4,896	17%	9%	10%	(0%)	17%	21%
Mean		67%	\$19,127	\$19,600	17%	10%	12%	8%	24%	26%
Business Intelligence / Analytics										
Splunk	\$126.23	72%	\$20,023	\$20,218	31%	3%	24%	(9%)	0%	9%
NICE Systems	143.56	78%	9,110	9,261	9%	6%	8%	26%	33%	33%
Alteryx	95.17	59%	6,225	6,166	65%	20%	31%	9%	13%	14%
Pegasystems	71.23	69%	5,674	5,658	2%	17%	20%	(13%)	3%	6%
lasticsearch	55.81	54%	4,561	4,303	60%	55%	33%	(41%)	(11%)	(8%)
/erint Systems	43.00	67%	2,757	3,328	6%	5%	8%	14%	24%	26%
New Relic	46.24	42%	2,740	2,496	28%	40%	17%	0%	6%	9%
Medallia	20.04	45%	2,683	2,344	28%	19%	21%	(25%)	2%	7%
Cloudera	7.87	64%	2,323	2,174	65%	9%	9%	(31%)	18%	27%
Teradata 🛛 👘	20.49	44%	2,265	2,438	(13%)	(6%)	4%	8%	19%	21%
Endava	35.16	62%	1,933	1,895	18%	14%	16%	22%	23%	21%
SVMK	13.51	61%	1,844	2,020	21%	21%	20%	(7%)	11%	12%
GlobalData	13.17	71%	1,559	1,690	8%	3%	5%	21%	27%	28%
MicroStrategy	118.10	72%	1,193	731	(2%)	(2%)	NA	9%	12%	NA
Talend	22.43	42%	702	685	20%	11%	13%	(20%)	(13%)	(8%)
Domo	9.94	24%	277	279	25%	32%	10%	(70%)	(29%)	(24%)
Median	2.51	61%	\$2,503	\$2,391	21%	12%	16%	(3%)	12%	12%
viedian		01/0	32,303	32.331	2170	12/0	10/0	(3/0)	12/0	

Note: \$ in millions. Source: Pitchbook as of 3/31/20

	Price	52-Wk			Reve	nue Growt	th	EBIT	DA Margi	n
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2
IT / Infrastructure										
Microsoft	\$157.71	83%	\$1,199,550	\$1,142,077	13%	12%	10%	48%	46%	46%
Oracle	48.33	80%	152,413	178,876	1%	0%	0%	42%	48%	49%
International Business Machines	110.93	70%	98,551	157,985	(3%)	(4%)	2%	22%	23%	26%
ServiceNow	286.58	79%	54,393	53,833	33%	26%	25%	9%	30%	29%
VMware	121.10	59%	50,621	54,200	12%	9%	10%	23%	32%	32%
Atlassian	137.26	88%	33,687	32,907	37%	32%	24%	(6%)	23%	24%
Splunk	126.23	72%	20,023	20,218	31%	3%	24%	(9%)	0%	9%
Citrix Systems	141.55	97%	17,320	17,683	1%	5%	4%	24%	33%	32%
Akamai Technologies	91.49	89%	14,811	15,945	7%	7%	6%	34%	43%	44%
Hewlett Packard Enterprise	9.71	55%	12,510	23,265	(7%)	(12%)	1%	14%	18%	17%
MongoDB	136.54	74%	7,860	7,797	58%	21%	28%	(34%)	(12%)	(5%)
Datadog	35.98	72%	7,566	6,852	83%	55%	34%	(1%)	4%	8%
Dynatrace	23.84	64%	6,694	7,046	19%	48%	24%	(26%)	26%	27%
Juniper Networks	19.14	67%	6,326	6,214	(4%)	(3%)	4%	14%	20%	21%
Cloudflare	23.48	89%	5,713	5,086	49%	36%	31%	(28%)	(5%)	4%
SolarWinds	15.67	72%	4,879	6,726	12%	9%	9%	43%	46%	47%
LogMeIn	83.28	96%	4,047	4,226	5%	5%	6%	24%	31%	31%
Nutanix	15.80	36%	3,076	2,892	1%	5%	17%	(60%)	(34%)	(24%)
New Relic	46.24	42%	2,740	2,496	28%	40%	17%	0%	6%	9%
Appian	40.23	63%	2,715	2,607	15%	5%	15%	(17%)	(16%)	(8%)
Cloudera	7.87	64%	2,323	2,174	65%	9%	9%	(31%)	18%	27%
Software	29.78	78%	2,203	1,930	(2%)	NA	NA	29%	NA	NA
Fastly	18.98	54%	1,820	1,719	39%	42%	29%	(16%)	2%	4%
NetScout Systems	23.67	78%	1,748	1,933	(1%)	(3%)	7%	18%	22%	23%
Progress Software	32.00	61%	1,433	1,576	16%	5%	(0%)	25%	NA	NA
PagerDuty	17.28	29%	1,345	993	41%	25%	24%	(32%)	(9%)	(4%)
Median		72%	\$6,510	\$6,789	14%	9%	10%	11%	21%	23%
Mean		70%	\$66,014	\$67,664	21%	15%	14%	4%	16%	19%

	Price	52-Wk			Reve	nue Growt	h	EBIT	DA Margi	n
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Security										
Cisco Systems	\$39.31	67%	\$166,709	\$155,640	1%	(5%)	0%	31%	37%	35%
VeriSign	180.09	81%	20,966	21,535	1%	2%	4%	71%	69%	70%
Fortinet	101.17	83%	17,453	15,388	20%	16%	16%	18%	28%	29%
Palo Alto Networks	163.96	65%	16,348	15,028	20%	17%	17%	2%	23%	22%
Check Point Software Technologies	100.54	76%	15,622	14,043	4%	1%	3%	45%	50%	50%
Okta	122.26	86%	15,010	14,712	47%	32%	30%	(31%)	(3%)	1%
CrowdStrike	55.68	55%	11,872	10,960	93%	51%	30%	(24%)	1%	9%
NortonLifeLock	18.71	65%	11,233	3,057	37%	(49%)	3%	33%	48%	54%
Zscaler	60.86	68%	7,872	7,522	48%	37%	29%	(15%)	8%	9%
Proofpoint	102.59	77%	5,848	5,763	24%	15%	17%	(2%)	14%	17%
Cloudflare	23.48	89%	5,713	5,086	49%	36%	31%	(28%)	(5%)	4%
Qualys	86.99	91%	3,401	3,153	15%	11%	13%	32%	42%	43%
CyberArk Software	85.56	58%	3,401	2,681	26%	5%	19%	17%	19%	22%
FireEve	10.58	58%	2,355	2,081	7%	0%	6%	(12%)	8%	13%
Mimecast	35.30	65%	2,333	2,258	26%	41%	18%	13%	20%	21%
Rapid7	43.33	66%	2,207	2,258	34%	20%	18%	(9%)	20%	5%
Tenable	21.86	60%	2,178	2,201	33%	20%	18%	(24%)	(3%)	1%
PingIdentity	21.80	67%	1,596	1,580	21%	0%	21%	15%	12%	14%
ForeScout	31.59	72%	1,530	1,497	13%	(3%)	20%	(26%)	(0%)	9%
SailPoint Technologies	15.22	52%	1,370	1,278	16%	9%	14%	2%	4%	4%
Radware	21.07	78%	989	831	9%	5%	10%	12%	NA	4 /0 NA
SecureWorks	11.51	58%	938	781	7%	(0%)	7%	(2%)	2%	4%
Tufin	8.78	28%	312	218	22%	(0%)	17%	(2%)	(45%)	(33%)
Absolute Software	6.08	76%	257	218	6%	5%	7%	19%	23%	21%
Zix	4.31	39%	237	526	146%	23%	11%	9%	23%	23%
Median	4.51	67%	\$3,255	\$2,681	21%	<u>9%</u>	17%	<u>2%</u>	13%	16%
Mean		67%	\$12,699	\$11,615	21%	12%	15%	2 % 5%	16%	19%
		0770	<i>Ş12,033</i>	<i></i> ,013	23/0	12/0	13/0	370	10/0	1370
Financial Technology	6121 64	770/	674.000	¢04.620	220/	200/	0.0/	210/	420/	4.00/
Fidelity National Information Services	\$121.64	77%	\$74,969	\$94,620	23%	20%	8%	31%	43%	46%
Fiserv	94.99	76%	64,508	87,392	75%	37%	7%	31%	39%	. =
MSCI (US)	288.96	86%	24,566	26,295	9%	7%	8%	52%	56%	57%
Square	52.38	60%	22,798	21,657	42%	8%	31%	21%	7%	16%
Jack Henry and Associates	155.24	89%	11,910	11,837	7%	9%	5%	33%	32%	31%
Broadridge Financial Solutions	94.83	69%	10,887	12,754	1%	3%	3%	18%	22%	23%
FactSet Research Systems	260.68	84%	9,881	10,373	5%	4%	3%	35%	34%	35%
Temenos	132.18	71%	9,378	10,396	16%	(3%)	12%	37%	45%	45%
Fair Isaac	307.69	70%	8,969	9,856	16%	4%	5%	25%	33%	32%
Guidewire Software	79.31	64%	6,574	5,954	(4%)	(3%)	14%	0%	12%	16%
Q2 Holdings	59.06	63%	2,860	3,197	31%	26%	23%	(12%)	4%	7%
Envestnet	53.78	61%	2,845	3,340	11%	6%	10%	9%	21%	22%
ACI Worldwide	24.15	61%	2,805	4,118	25%	14%	8%	21%	27%	29%
9F Group	9.45	64%	1,832	1,195	(0%)	9%	16%	18%	NA	NA
Bottomline Technologies	36.65	64%	1,613	1,643	5%	4%	8%	12%	21%	22%
Ebix	15.18	28%	463	1,198	17%	(10%)	28%	27%	29%	34%
Median		67%	\$9,174	\$10,115	13%	6%	8%	23%	29%	31%
Mean		68%	\$16,053	\$19,114	17%	8%	12%	22%	28%	30%

Note: \$ in millions. Source: Pitchbook as of 3/31/20

	Price	52-Wk			Reve	nue Growt		EBIT	DA Margi	
Company	03/31/20	High	Mkt Cap	EV	LTM	FY+1	FY+2	LTM	FY+1	FY+2
Vertical Software										
Veeva Systems	\$156.37	88%	\$23,339	\$22,307	28%	26%	19%	28%	37%	38%
Tyler Technologies	296.56	87%	11,683	11,434	16%	6%	10%	22%	28%	28%
SS&C Technologies	43.82	65%	11,204	18,553	35%	(0%)	3%	37%	39%	39%
Black Knight (US)	58.06	76%	8,710	10,238	6%	0%	8%	45%	49%	50%
Amdocs	54.97	71%	7,398	7,236	3%	1%	3%	19%	20%	20%
Guidewire Software	79.31	64%	6,574	5,954	(4%)	(3%)	14%	0%	12%	16%
RealPage	52.93	80%	5,012	6,093	14%	15%	11%	22%	26%	27%
CDK Global	32.85	51%	3,991	6,543	11%	1%	4%	29%	37%	38%
AppFolio	110.95	75%	3,790	3,833	35%	24%	22%	13%	16%	17%
Q2 Holdings	59.06	63%	2,860	3,197	31%	26%	23%	(12%)	4%	7%
Blackbaud	55.55	57%	2,730	3,261	6%	(1%)	2%	13%	20%	21%
CoreLogic	30.54	59%	2,413	4,078	(1%)	(3%)	1%	20%	30%	30%
NIC	23.00	94%	1,560	1,357	3%	7%	10%	21%	23%	25%
AssetMark	20.39	60%	1,476	1,494	16%	(0%)	8%	20%	38%	38%
Qad	39.93	73%	763	658	(5%)	(7%)	6%	1%	4%	6%
Model N	22.21	62%	740	735	(4%)	10%	9%	(6%)	9%	10%
Median		68%	\$3,890	\$5,016	8%	1%	9%	20%	25%	26%
Mean		70%	\$5,890	\$6,686	12%	6%	10%	17%	24%	26%
Healthcare IT / Life Sciences Software										
Veeva Systems	\$156.37	88%	\$23,339	\$22,307	28%	26%	19%	28%	37%	38%
Cerner	62.99	78%	19,649	20,146	6%	(1%)	6%	23%	31%	33%
Inovalon Holdings	16.66	72%	2,583	3,457	22%	6%	10%	28%	33%	34%
Tabula Rasa Healthcare	52.29	75%	1,170	1,380	39%	18%	21%	1%	14%	15%
Allscripts Healthcare Solutions	7.04	59%	1,145	2,050	1%	(4%)	4%	4%	17%	18%
Health Catalyst	26.15	52%	974	799	38%	15%	22%	(31%)	(14%)	(7%)
HealthStream	23.95	80%	775	633	10%	(7%)	(5%)	18%	16%	16%
Phreesia	21.03	60%	755	687	19%	25%	31%	(4%)	(1%)	4%
NextGen Healthcare	10.44	49%	686	746	2%	(2%)	5%	12%	17%	17%
Cegedim	26.25	74%	364	640	2%	(1%)	4%	14%	19%	NA
Castlight Health	0.72	18%	108	68	(8%)	(9%)	4%	(24%)	(12%)	(6%)
Median	0.72	72%	\$974	\$799	10%	(1%)	<u> </u>	12%	17%	17%
Mean		64%	\$4,686	\$4,810	14%	6%	11%	6%	14%	16%
			+ .,	+ .,==3						
Education Technology	625 7 0	7401	64.264	Ć4 542	200/	220/	240/	4 70/	220/	220/
Chegg	\$35.78	74%	\$4,361	\$4,513	28%	33%	21%	17%	32%	33%
Cornerstone OnDemand	31.75	49%	1,946	1,896	7%	25%	25%	9%	20%	22%
Afya Educacional	19.06	55%	1,711	1,574	80%	105%	34%	36%	40%	39%
Pluralsight	10.98	31%	1,568	1,695	37%	19%	19%	(39%)	(12%)	(5%)
20	21.22	29%	1,350	1,500	40%	25%	16%	(31%)	(1%)	2%
Learning Technologies Group	1.65	73%	1,106	1,140	84%	(5%)	8%	28%	35%	37%
K12	18.86	50%	773	610	5%	2%	9%	10%	12%	13%
Median		50%	\$1,568	\$1,574	37%	25%	19%	10%	20%	22%
Mean		52%	\$1,831	\$1,847	40%	29%	19%	5%	18%	20%

	Price 03/31/20	52-Wk High	Mkt Cap	EV –		Revenue Growth		EBITDA Margin		
Company					LTM	FY+1	FY+2	LTM	FY+1	FY+2
Marketing Automation										
Adobe Systems	\$318.24	82%	\$153,328	\$153,868	22%	16%	16%	36%	47%	47%
Oracle	48.33	80%	152,413	178,876	1%	0%	0%	42%	48%	49%
Salesforce	143.98	74%	128,862	126,783	29%	21%	19%	17%	29%	29%
Shopify	416.93	70%	48,406	46,102	47%	38%	32%	(7%)	2%	3%
Zendesk	64.01	67%	7,256	7,361	36%	24%	26%	(15%)	9%	12%
HubSpot	133.19	64%	5,766	5,412	32%	19%	21%	(3%)	9%	11%
LivePerson	22.75	50%	1,458	1,480	17%	19%	22%	(23%)	2%	5%
Cardlytics	34.96	33%	934	829	40%	(11%)	48%	(6%)	(10%)	6%
Median		69%	\$27,831	\$26,731	30%	19%	22%	(4%)	9%	12%
Mean		65%	\$62,303	\$65,089	28%	16%	23%	5%	17%	20%
Storage & Collaboration										
Atlassian	\$137.26	88%	\$33,687	\$32,907	37%	32%	24%	(6%)	23%	24%
DocuSign	92.40	94%	16,767	16,759	39%	31%	26%	(15%)	11%	14%
OpenText	34.70	72%	9,366	12,491	3%	8%	9%	37%	35%	37%
NetApp	41.69	53%	9,221	8,201	(10%)	(12%)	(3%)	23%	23%	22%
Dropbox	18.10	69%	7,581	7,429	19%	14%	11%	7%	27%	28%
Smartsheet	41.51	74%	4,933	4,431	52%	38%	34%	(34%)	(15%)	(8%)
Box	14.04	66%	2,134	2,363	14%	10%	10%	(12%)	17%	21%
CommVault Systems	40.48	62%	1,886	1,566	(4%)	(8%)	5%	(0%)	13%	NA
Median		71%	\$8,401	\$7,815	17%	12%	10%	(3%)	20%	22%
Mean		72%	\$10,697	\$10,769	19%	14%	14%	0%	17%	20%
Communications										
Zoom Video Communications	\$146.12	89%	\$40,768	\$39,985	88%	47%	34%	5%	21%	20%
RingCentral	211.91	83%	18,458	18,544	34%	24%	24%	0%	13%	14%
Slack	26.84	64%	14,945	14,418	57%	36%	32%	(88%)	(11%)	(4%)
Twilio	89.49	59%	12,503	11,290	75%	34%	23%	(20%)	6%	7%
NICE Systems	143.56	78%	9,110	9,261	9%	6%	8%	26%	33%	33%
Juniper Networks	19.14	67%	6,326	6,214	(4%)	(3%)	4%	14%	20%	21%
Nuance	16.78	71%	4,747	6,031	(5%)	(21%)	4%	17%	NA	NA
Five9	76.46	94%	4,709	4,612	27%	17%	17%	7%	16%	18%
Everbridge	106.36	80%	3,641	3,539	37%	31%	25%	(15%)	2%	5%
Vonage Holdings	7.23	53%	1,756	2,288	13%	0%	6%	8%	13%	13%
8X8	13.86	52%	1,420	1,583	24%	47%	19%	(28%)	(4%)	NA
Synchronoss Technologies	3.05	34%	136	371	(5%)	(0%)	6%	(8%)	8%	12%
Median		69%	\$5,537	\$6,123	26%	20%	18%	2%	13%	13%
Mean		68%	\$9,876	\$9,845	29%	18%	17%	(7%)	11%	14%

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		
 Software-as-a-Service On-premise Application Software Healthcare IT Financial Tech 	 Advertising and Marketing Digital Media Gaming Content Platforms 	 Consumer Applications Enterprise Applications Gaming Payments Infrastructure 	 Communications Entertainment Industrial Systems Consumer 		
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