



VISTA POINT ADVISORS

Software Market Update

July 2020

I. Vista Point Advisors Overview

A Truly Unconflicted Approach

**Vista Point Advisors Is
The Leading Sell-Side
Investment Bank
Exclusively Focused On
M&A and Capital Raising
For Founder-Led Software
And Internet Companies**

- Focus on **Founder-Led** minimally-funded businesses
- Unconflicted advice:
exclusively a sell-side advisor
- Software and Internet domain expertise

Key Metrics

58

TRANSACTIONS

17

INVESTMENT BANKERS

26%

CROSS BORDER
TRANSACTIONS

\$25-\$300M

TRANSACTION SIZE RANGE

\$4.0B

TOTAL ENTERPRISE VALUE

8 Years

AVERAGE SENIOR
BANKER TENURE AT VPA

100%

SELL SIDE TRANSACTIONS

1,100+

LOIs RECEIVED

800+

BUYER RELATIONSHIPS

Leading Advisor to Founder-Led SaaS Companies

We have worked with exceptional companies over the years. Here are our results:

 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	<i>Undisclosed</i> <i>acquired by</i> 	 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>acquired by</i> 
<i>Undisclosed</i> <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>acquired by</i> 
 <i>acquired by</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>acquired by</i> 
 <i>acquired by</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 
 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>acquired by</i> 	 <i>investment from</i> 	 <i>investment from</i> 

Resources for Founders

VPA knows the process of selling your business or raising capital can be opaque and confusing for many founders. That's why we have created a dedicated guide specifically designed to educate founders on the process and address the challenges they face including:

- Deciding to sell your business
- How to position your company
- How to run a competitive process
- Diligence and life post-transaction

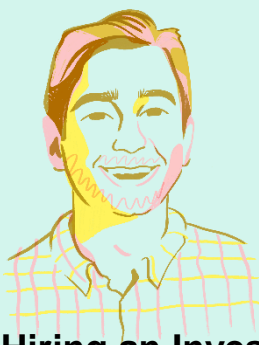
[CLICK HERE TO ACCESS
FOUNDER RESOURCES](#)



**Reaching a High Valuation
Through Strategic
Positioning**

By: Jake Harrington

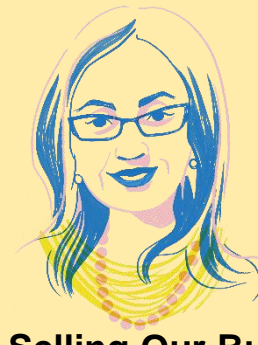
Founder, On-Site



**Hiring an Investment Bank
to Maximize Transaction
Value**

By: Neal Taparia

Co-Founder, ImagineEasy



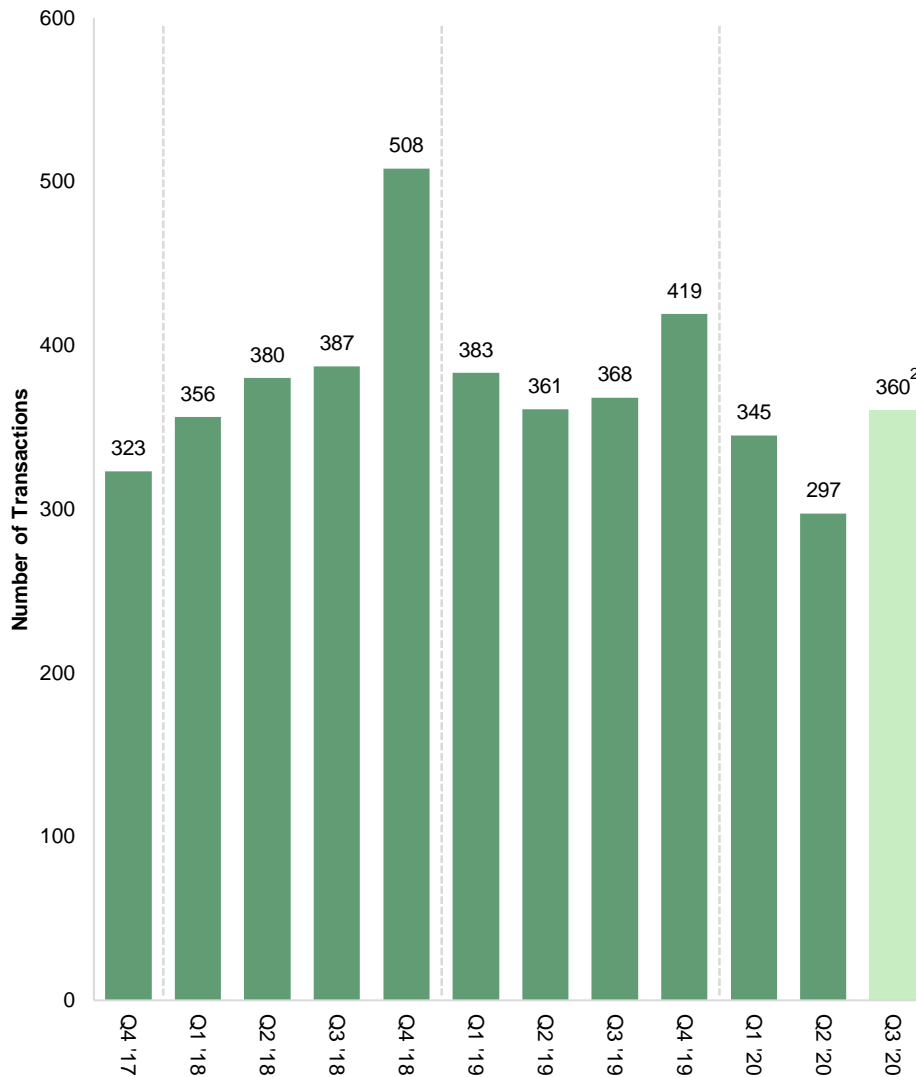
**Selling Our Business to
Accelerate Growth**

By: Smita Bakshi

Co-Founder, zyBooks

II. M&A and Financing Activity

Software M&A Activity







1) Rank and deal count for the past 36 months





2) Estimated by run-rating July 2020

Source: Pitchbook as of 7/31/2020

















Top Strategic Acquirers¹

Rank	Buyer	Deal Count
1	 Microsoft	35
2		22
3	Alphabet	17
4	 CISCO	15
5		12

Top PE Acquirers¹

















Rank	Buyer	Deal Count
1	 VISTA EQUITY PARTNERS	98
2	 TA ASSOCIATES	91
3	 THOMABRAVO	80
4	 INSIGHT PARTNERS	72
5	PROVIDENCEEQUITY	65

Select Software M&A Transactions

Date	Target	Buyer	Sector	Deal Size	EV/Revenue	Commentary
July-28	 JUVARE	 Rothschild & Co Merchant Banking	Vertical Software	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of emergency preparedness and critical incident management and response software The acquisition will allow Juvare to streamline growth initiatives both in the US and internationally
July-28	 pepperjam	 PARTNERIZE	Marketing	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of digital marketing services for the e-commerce sector The acquisition will allow Partnerize to maximize growth from partnerships, diversify revenue streams, and offset escalating sales costs
July-28	 REFLEXIS	 ZEBRA	Business Software	\$575m	Undisclosed	<ul style="list-style-type: none"> Provider of retail execution management software The acquisition will allow Zebra to combine its software capabilities with the Reflexis platform in order to unify the store associate experience and empower front-line workers to execute the best next action
July-22	 Pype	 AUTODESK	Vertical Software	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of innovative construction software solutions using AI and machine learning algorithms The acquisition will allow Autodesk to provide increased manual construction automation solutions
July-20	 GLOBALSCAPE	 helpsystems	Security	\$217m	5.1x	<ul style="list-style-type: none"> Globalscape is a leader in the secure managed file transfer software industry The merger will increase Helpsystems' data security, loss prevention, and classification software capabilities
July-20	 MAJESCO	 THOMABRAVO	Fintech	\$594m	3.7x	<ul style="list-style-type: none"> Provider of core insurance software, consulting, and services The acquisition will allow Majesco to utilize Thoma Bravo's knowledge and domain expertise to focus on its long-term objective of helping global insurers transition to the cloud
July-20	 methodics	 PERFORCE	Legal Tech	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of intellectual property lifecycle management and traceability solutions The acquisition will enable improved design capabilities and distinguish Perforce as the leading solutions provider for tech teams
July-20	 OPAQ Security without Boundaries	 FORTINET	Security	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of cloud-based security-as-a-service management platform The acquisition will expand Fortinet's customers and partners networking and security solutions, allowing the company to deliver the most complete Secure Access Service Edge on the market

















Source: Pitchbook as of 7/31/20

Select Software M&A Transactions

Date	Target	Buyer	Sector	Deal Size	EV/Revenue	Commentary
July-16			Business Software	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of excel-based reporting solutions, offering data analysis and integration solutions for construction and real estate markets The acquisition will provide customers with the tools necessary to help manage cash flows and prepare for future growth
July-16			Business Software	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of software procurement services The acquisition will further Datto's commitment to MSP growth, as the Glüh platform has been shown to boost sales and significantly improve operational efficiency and increased profitability for MSP's
July-16			Transportation	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of transit system software The acquisition will create new innovations allowing agencies to provide improved solutions to their riders through an expanded suite of technologies
July-15			Systems/ Networks	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of wireless systems for security, industrial, and mission-critical applications The acquisition will enhance Cisco's Wireless Solutions for the Industrial Internet of Things (IoT)
July-15			Security	\$1,430m	4.2x	<ul style="list-style-type: none"> Provider of an agentless approach to network security to address the growth of mobile computing, IoT, and cloud computing Advent International will support Forescout's cybersecurity solutions expansion
July-15			HR Tech	\$100m	Undisclosed	<ul style="list-style-type: none"> Developer of an employee communication and engagement platform intended to transform the way workers and organizations connect Social Chorus will use the funding to accelerate growth and product innovation
July-14			Telecomm.	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of cloud native communications software based in the United Kingdom The acquisition will expand Microsoft's range of offerings available for the telecommunications industry
July-13			Advertising & Marketing	\$150m	Undisclosed	<ul style="list-style-type: none"> Developer of a data analytics and social intelligence platform Infusing 4C's intelligence and optimization into Mediaocean's foundational platform will establish a modern system of record for omnichannel advertising














Source: Pitchbook as of 7/31/20

Select Software M&A Transactions

Date	Target	Buyer	Sector	Deal Size	EV/Revenue	Commentary
July-13	 COHESIVE solutions	 Bentley®	Business Software	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Provider of asset management software and digital twins services for advancing design, construction, operations, and infrastructure Cohesive Companies will act as a digital integrator to help infrastructure asset owners upgrade their enterprise environments
July-13	 spot	 NetApp®	IT Infrastructure	\$450m	Undisclosed	<ul style="list-style-type: none"> Developer of a cloud-based infrastructure-as-a-service platform designed to improve performance and reduce complexity and cost Together, Spot and NetApp will enable customers to deploy more applications to public clouds while increasing efficiency
July-10	 atarlabs	 MICRO FOCUS	Security	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of a security operations management platform designed to simplify and streamline security operations for a safe and secure future The acquisition will allow Micro Focus to detect threats with greater speed and confidence and focus resources on high value activities
July-10	 stitchlabs	 Square	Accounting ERP	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of operations management software designed to help high-growth companies manage people and inventory The acquisition will allow Square to integrate tools such as inventory and order management, and fulfillment solutions
July-8	 ampleorganics	 AKERNA	Vertical Software	\$46m	Undisclosed	<ul style="list-style-type: none"> Developer of a cannabis software platform designed to offer data collection and compliance The acquisition will enable Akerna to further execute on its business strategy of complementing growth with synergistic tech companies
July-8	 CURALATE	 b: bazaar voice	eCommerce	\$22m	Undisclosed	<ul style="list-style-type: none"> Provider of a visual analytics and marketing platform designed to connect people to pictures and products The acquisition will allow Bazaar Voice to increase user engagement and offer brands the ability to drive sales through its retail network
July-8	 healthfinch	 HealthCatalyst	Healthcare	\$40m	Undisclosed	<ul style="list-style-type: none"> Developer of a practice automation platform designed to transform healthcare delivery by automating and simplifying routine clinical tasks The acquisition will allow Health Catalyst customers to enhance clinical workflows in the EMR and strengthen its portfolio
July-8	 MIRROR	 lululemon	Vertical Software	\$500m	Undisclosed	<ul style="list-style-type: none"> Developer of an interactive gym designed to bring the essential components of a studio workout home to its users The acquisition will enable Lululemon to increase ambassador presence and product innovation as the ultimate lifestyle fitness brand









Source: Pitchbook as of 7/31/20

Select Software M&A Transactions

Date	Target	Buyer	Sector	Deal Size	EV/Revenue	Commentary
July-8	 RANCHER	ARDIAN	IT Infrastructure	\$650m	Undisclosed	<ul style="list-style-type: none"> Developer of a container technology intended for enterprises looking to run containers and Kubernetes in production The acquisition will position both companies to support global enterprises from on-premises IT to hybrid, cloud environments
July-8	 rimeto	 slack	HR Tech	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of a workplace directory intended to offer information about people, projects, and teams The acquisition will allow Slack to grow its employee search capabilities and improve employee communication channels
July-8	 Spiral	 Discovery EDUCATION	EdTech	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of 1:1 learning platform offering a suite of serious tools for classroom-based collaborative learning The acquisition will support Discovery Education's efforts to keep students connected to learning wherever it is taking place
July-7	 EXOSTAR	 THOMABRAVO	Security	\$100m	Undisclosed	<ul style="list-style-type: none"> Provider of a cloud-based information sharing platform designed to help organizations mitigate risk & solve identity issues The acquisition will provide Exostar with financial resources needed for growth and expansion of its security solutions
July-7	 LIVEOAK TECHNOLOGIES	DocuSign	HR Tech	\$38m	Undisclosed	<ul style="list-style-type: none"> Provider of a collaboration and eSignature platform intended to improve workflow for paperwork and forms DocuSign will leverage LiveOak's technology and expertise to accelerate the launch of its new product, DocuSign Notary
July-7	 Orions Systems	 Microsoft	Business Intelligence	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of an artificial intelligence-based video analysis platform designed to offer a better approach for handling unstructured data The acquisition will help Microsoft expand its technology platform and grow its AI capabilities
July-7	 pango	ĀURA™	Security	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of an online privacy and security software designed to securely browse information on the web The acquisition will allow Aura to continue to scale and bring improved protection to customers
July-6	 BID FX	 SGX SINGAPORE EXCHANGE	Fintech	\$128m	Undisclosed	<ul style="list-style-type: none"> Developer of a cloud-based FX trading platform designed to provide foreign exchange e-trading services The acquisition will allow SGX to advance its global ambitions by offering an end-to-end FX platform and solutions










Source: Pitchbook as of 7/31/20

Select Software M&A Transactions

Date	Target	Buyer	Sector	Deal Size	EV/Revenue	Commentary
July-6	 STITCHER	 SiriusXM	Vertical Software	\$325m	Undisclosed	<ul style="list-style-type: none"> Developer of a podcast listening application intended to offer the easiest way to listen to podcasts for free The acquisition will develop and strengthen SiriusXM's fast-growing podcasting market
July-6	 THE MEET GROUP	 GENERAL ATLANTIC	Knowledge/Content	\$500m	2.2x	<ul style="list-style-type: none"> Leading provider of interactive livestreaming solutions designed to meet the universal need for human connection The acquisition will allow The Meet Group to achieve a new level of financial scale and backing to further accelerate growth
July-2	 RaiseMe	 campuslogic	EdTech	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of an education management platform intended to provide online services that aggregate scholarship opportunities The acquisition will drive integration and innovation in this mission-critical category
July-1	 Datrium	 vmware	Storage	Undisclosed	Undisclosed	<ul style="list-style-type: none"> Developer of a virtual server flash storage system designed to simplify the multi-cloud data lifecycle easily The acquisition will enable VMWare to support major cloud platforms, expand partner community, and increase innovation

Source: Pitchbook as of 7/31/20

Select Software Financings

Date	Target	Lead/Select Investor	Sector	Deal Size	Funding to Date	Commentary
July-28	 conexiom	ICONIQ	Accounting / ERP	\$40m	\$40m	<ul style="list-style-type: none"> Developer of a cloud-based automation software that automates data entry, enabling revenue growth and enhance supply chain performance The funding will be used to accelerate platform development and expand its footprint in global markets
July-28	 CHORUS	Georgian Partners	CRM	\$45m	\$100m	<ul style="list-style-type: none"> Developer of a conversation intelligence platform designed to identify and help teams replicate the performance of top-performing sales reps The funding raised will be used to help sales teams be more productive and reach their quotas
July-28	 Comply Advantage	 ONTARIO TEACHERS' <small>PERSONNEL ENSEIGNANT - ORDRE DES ENSEIGNANTS ET DES ENSEIGNANTES</small>	FinTech	\$50m	\$86m	<ul style="list-style-type: none"> Developer of a financial risk and crime analysis platform intended to provide real-time insight through the use of aggregated data sources The funds will be used to accelerate the development of the company's products to serve diverse institutions & clients
July-28	 Density	 KLEINER PERKINS	Other	\$51m	\$67m	<ul style="list-style-type: none"> Developer of door sensors designed to measure how people use space in real-time without invading privacy The funds will be used to accelerate investment in the company's software and product, expand its sales team and scale their platform
July-28	 Thought Machine	 Draper Esprit	Fintech	\$125m	\$148m	<ul style="list-style-type: none"> Developer of a microservice API architecture platform to provide cloud-native core banking solution to suit banking needs The funds will be used to invest in growing the company's businesses at international scale and key roles to develop new products
July-24	 FREIGHTWAVES	 Kayne Anderson <i>Capital Advisors, L.P.</i>	Logistics	\$30m	\$75m	<ul style="list-style-type: none"> Provider of a data and content forum platform designed to provide market participants with near-time analytics on the freight market The company plans to use the additional capital for growth initiatives, including product development and strategic acquisitions
July-24	 Revolut	TCV	Fintech	\$580m	\$845m	<ul style="list-style-type: none"> Provider of a mobile foreign exchange and money transferring application designed to help in global money transfer The funds will be used to enhance product development in regions and to launch banking operations in Europe
July-23	 CYCOGNITO	Accel	Security	\$30m	\$53m	<ul style="list-style-type: none"> Developer of a cloud-based network security analysis platform designed to discover an organization's security weak spots The funds will be used to take advantage of the company's lead and unique position in identifying externally exposed systems










Note: Includes financings \$20m or more.
Source: Pitchbook as of 7/31/20

Select Software Financings

Date	Target	Lead/Select Investor	Sector	Deal Size	Funding to Date	Commentary
July-23			Security	\$63m	\$89m	<ul style="list-style-type: none"> Developer of entity resolution and network analytics technology designed to improve the quality of data-driven decisions The funds will be used to accelerate product innovation roadmap and enable the company to invest globally
July-23			Design	\$100m	\$134m	<ul style="list-style-type: none"> Provider of an interactive content creation software designed to create rich, engaging content without code The funds will be used to expand the company's growth in the creative digital space
July-23			Communications	\$143m	\$269m	<ul style="list-style-type: none"> Developer of a cloud-based call center software designed to help growing businesses improve customer satisfaction at a reduced cost The funds will be used to capitalize on the company's current momentum and continue its growth, research, sales, & development
July-22			Restaurant	\$33m	\$37m	<ul style="list-style-type: none"> Developer of an online food ordering platform intended to offer authentic Asian food to people The funds will be used to grow the company's existing business, launch in new cities, and expand its product line
July-21			Marketing	\$24m	\$39m	<ul style="list-style-type: none"> Developer of enterprise marketing platform designed to manage and optimize influencer campaigns at scale The funding will be used to grow in areas like user experience, data science, paid media, global expansion, and strategic partnerships
July-17			Consumer Finance	\$37m	\$66m	<ul style="list-style-type: none"> Developer of mobile savings and investment application intended to offer the opportunity to save and invest for the future The funds will be used to build on the company's product offering, invest in new technology, and scale the team
July-17			eLearning	\$130m	\$463m	<ul style="list-style-type: none"> Developer of an online education and learning platform designed to offer courses to empower learners around the world The funds will be used to double down on the company's product and engineering efforts, expand catalog, and grow internationally
July-16			Real Estate	\$36m	\$63m	<ul style="list-style-type: none"> Developer of an access control system designed to bring frictionless access and better security to the workplace The funds will be used to accelerate the company's product engineering, development and expand clients across verticals




Note: Includes financings \$20m or more.
Source: Pitchbook as of 7/31/20

Select Software Financings

Date	Target	Lead/Select Investor	Sector	Deal Size	Funding to Date	Commentary
July-16	 Gem	greylockpartners.	HCM	\$37m	\$48m	<ul style="list-style-type: none"> Developer of an all-in-one recruiting platform designed to find and engage new talent The funding will be used to double-down on product innovation, particularly diversity features
July-16	 BlueVoyant	TEMASEK	Security	\$68m	\$276m	<ul style="list-style-type: none"> Developer of an analytics-driven cybersecurity platform intended to protect against agile and well-financed cyber attackers The funding will be used to boost technical, sales and marketing resources, supporting cyber defense services, and risk teams
July-15	 BOND	COATUE	FinTech	\$32m	\$42m	<ul style="list-style-type: none"> Developer of a financial technology platform designed to accelerate the pace of financial innovation and access to capital The funds will be used to accelerate the company's hiring and product launch with its first brand and bank partners
July-14	Arista MD	 Cigna. VENTURES	Healthcare	\$24m	\$39m	<ul style="list-style-type: none"> Developer of an electronic consultation platform designed to improve the specialty referral process The company intends to use the funds to accelerate expansion of its proprietary eConsult platform across the country
July-14	 NASUNI		Infrastructure	\$40m	\$201m	<ul style="list-style-type: none"> Provider of an enterprise cloud storage and file-sharing platform designed to solve the file data growth challenge for enterprises The funds will be used to use to fund acquisitions and other strategic projects
July-14	 Lattice	TIGERGLOBAL	HCM	\$45m	\$94m	<ul style="list-style-type: none"> Developer of an employee performance management platform designed to streamline the performance management processes The funds will be used to further develop existing and future products and to ramp the engineering and product teams' growth.
July-14	Drivewyze	SAGEVIEW CAPITAL	Logistics	\$60m	\$72m	<ul style="list-style-type: none"> Developer of smart mobility platform intended to deliver highway safety and transportation management The funds will be used to scale its connected truck platform and achieve continued strong SaaS revenue growth
July-14	 Auth0	 salesforce ventures	Infrastructure	\$120m	\$333m	<ul style="list-style-type: none"> Developer of identity and authentication platform designed to verify users and tackle identity fraud The funds will be used to fuel continued innovation and go-to-market expansion

Note: Includes financings \$20m or more.
Source: Pitchbook as of 7/31/20

Select Software Financings

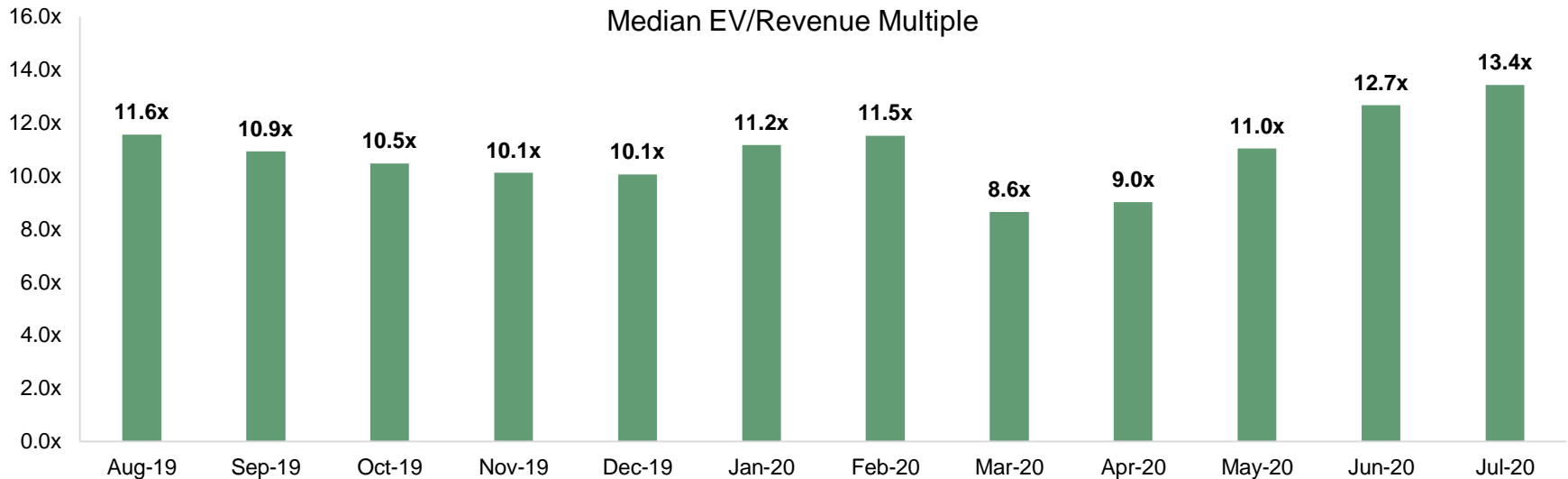
Date	Target	Lead/Select Investor	Sector	Deal Size	Funding to Date	Commentary
July-14	 Qumulo	BlackRock	Infrastructure	\$125m	\$357m	<ul style="list-style-type: none"> Provider of a cloud-based enterprise data storage platform to manage and store digital assets data through real-time analytics The funds will be used to fuel the global market expansion, strategic partnerships and to accelerate innovation
July-13	 UiPath™	ALKEON CAPITAL MANAGEMENT	Process Automation	\$225m	\$1,202m	<ul style="list-style-type: none"> Developer of robotic process automation software designed to deliver RPA that enhances business performance at unlimited scale The funds will be used to meet mounting customer demands and scale the opportunity to bring automation to every developer
July-13	 robinhood	SEQUOIA 红杉	Capital Markets	\$600m	\$1,512m	<ul style="list-style-type: none"> Developer of an investment platform intended to help teach people to invest in the stock market The funds will be used to invest in scaling their platform, building new products, and accelerating build-out of their operations
July-09	 taulia™	中国平安 PING AN 保险·银行·投资	Supply Chain Mgmt	\$60m	\$222m	<ul style="list-style-type: none"> Developer of a SaaS financial supply chain platform intended to help companies strengthen supplier relationships The funds will be used to accelerate growth as the company sets its sights on further global expansion
July-08	 GROWERS EDGE	COX ENTERPRISES	Agriculture	\$40m	\$58m	<ul style="list-style-type: none"> Provider of novel fintech products intended to help growers and farmers manage risk and obtain access to capital for their operations The funds will be used to continue growing, develop and advance its AI platform, and market expansion
July-08	 Chainalysis	Accel	Compliance Software	\$49m	\$67m	<ul style="list-style-type: none"> Provider of regulatory compliance software intended to protect the junction between finance and the decentralized internet The funds will be used to bolster its government relationships and further unite the private and public sectors for the industry growth
July-07	 Own{backup}	INSIGHT PARTNERS	Data Protection	\$50m	\$100m	<ul style="list-style-type: none"> Provider of cloud-to-cloud backup and recovery services designed to restore lost data The funding will be used to accelerate product development and expand marketing
July-01	 Palantir	 SOMPO	Other	\$550m	\$3,352m	<ul style="list-style-type: none"> Developer of data fusion platform designed to integrate, visualize, secure, and analyze information, helping human experts perform collaborative analysis of data at scale The use of funds is undisclosed

Note: Includes financings \$20m or more.
Source: Pitchbook as of 7/31/20

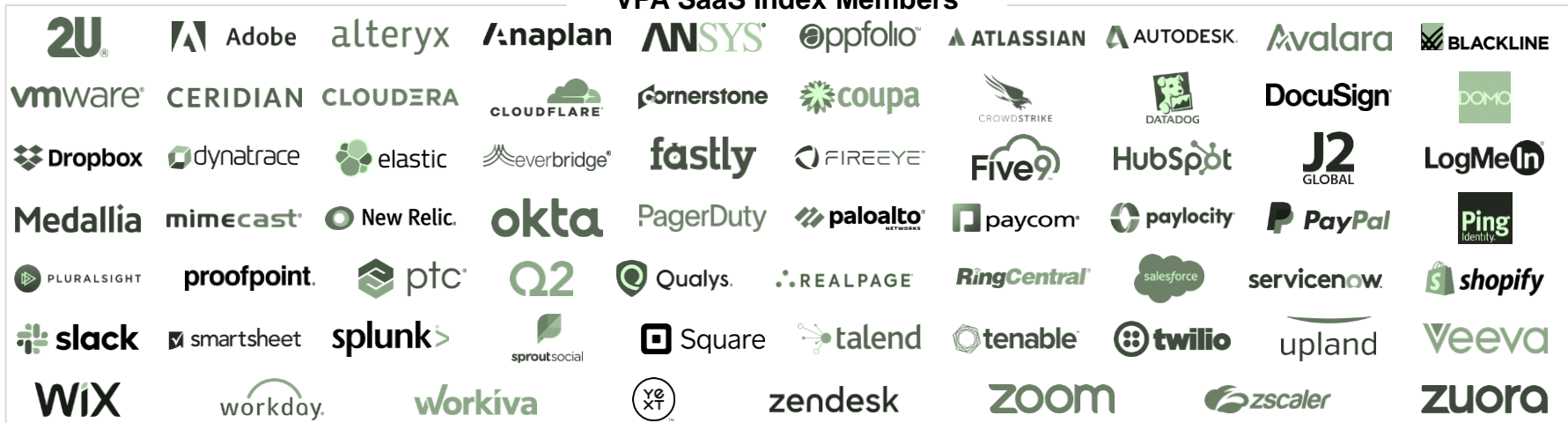
III. Public Company Performance

VPA SaaS Index Snapshot

The VPA SaaS Index is comprised of 68 public SaaS companies and is designed to track the performance of emerging public companies primarily involved in providing cloud software

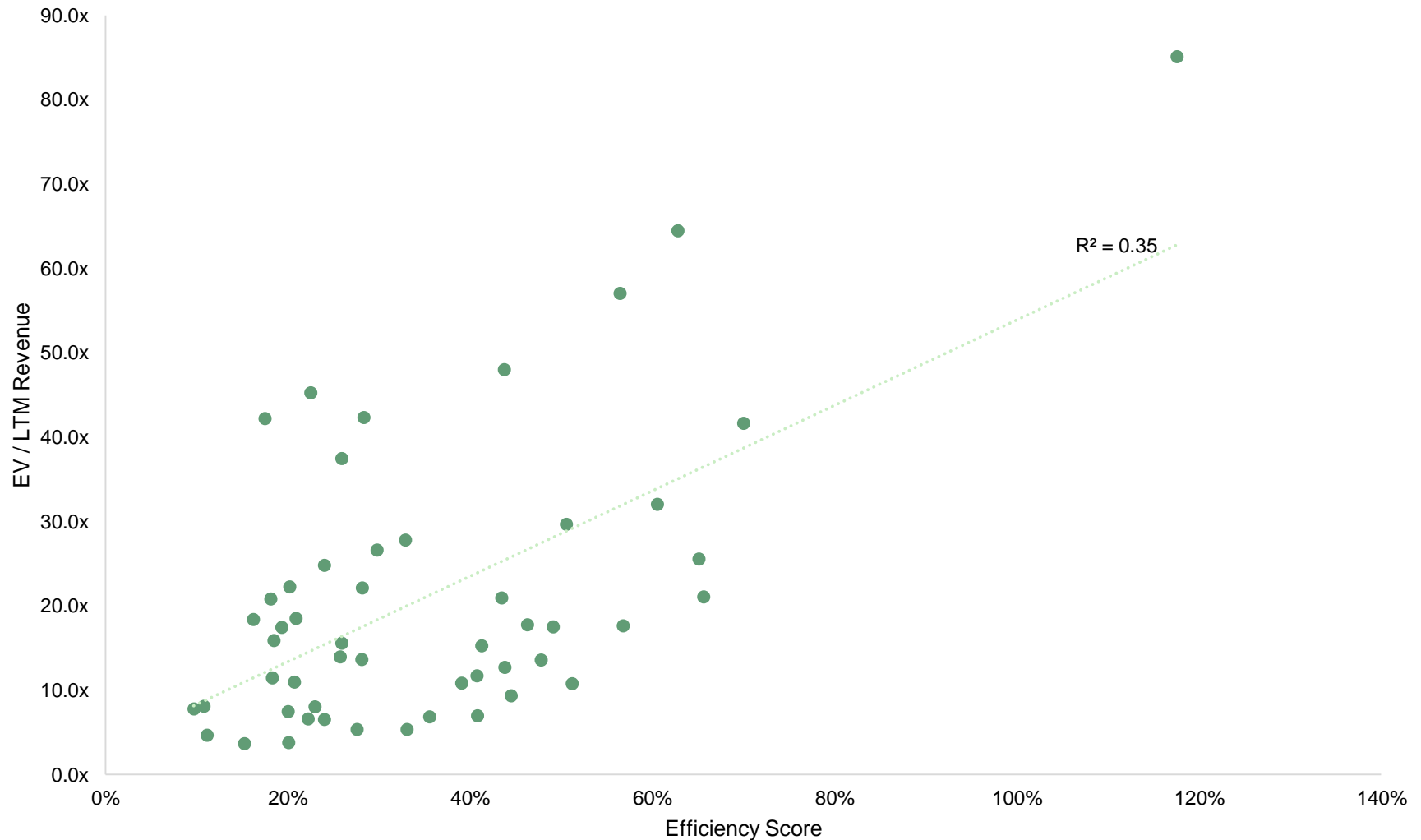


VPA SaaS Index Members



SaaS Valuations vs. Efficiency Score¹ (“Rule of 40%”)

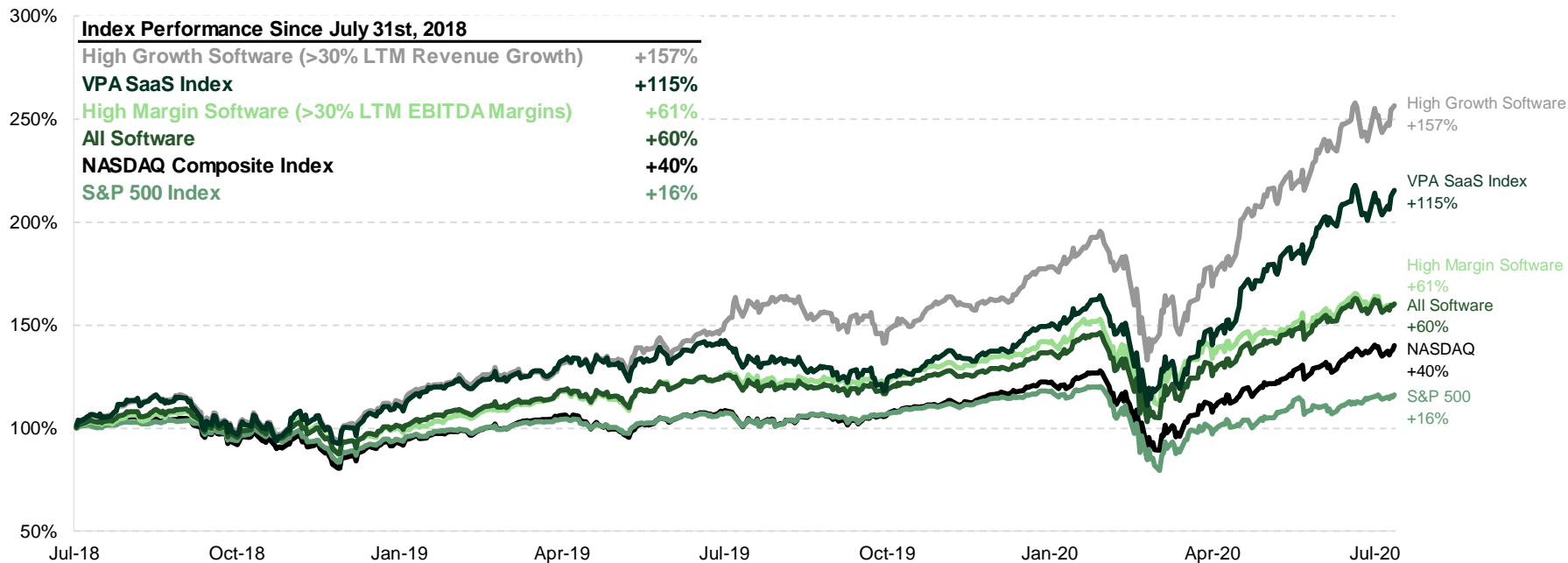
Sustaining revenue growth and profitability is rewarded with a significant valuation premium



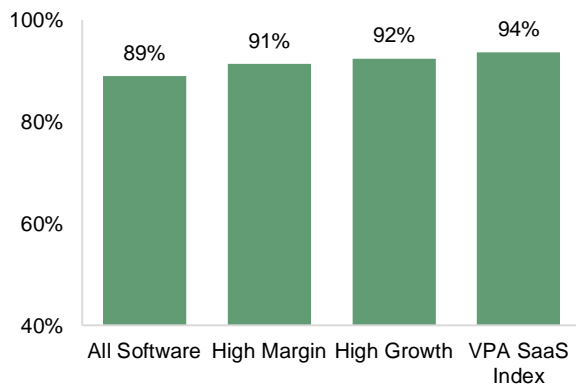
1) Efficiency Score = LTM Revenue Growth % + LTM EBITDA Margin
Source: Pitchbook as of 7/31/20

Software Public Market Performance

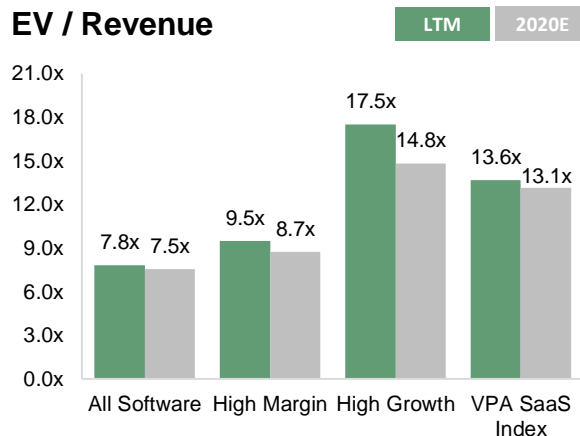
Public Market Performance Over Last 24 Months



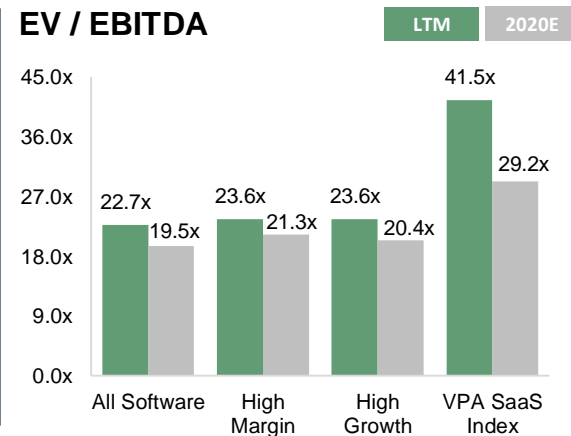
% of 52 Week High



EV / Revenue











EV / EBITDA



Source: Pitchbook as of 7/31/20

Ten Most Recent Software IPOs

Date	Company	As of IPO Date				Price Change Since IPO	Sector	Company Description
		Raised	Mkt Cap	EV	EV/Rev			
July-20 ¹	 Duck Creek Technologies			In IPO Registration			Insurance	<ul style="list-style-type: none"> Developer of property and casualty insurance SaaS software designed to optimize outcomes through streamlined operations
July-20		\$403m	\$805m	\$658m	2.0x	24%	Tax	<ul style="list-style-type: none"> Provider of tax software and services for companies in more than 19,000 Jurisdictions globally
July-20		\$468m	\$856m	\$677m	3.0x	56%	Infrastructure	<ul style="list-style-type: none"> Developer of mobile device enterprise management software (MDM) for Apple products
July-20		\$250m	\$698m	\$797m	5.2x	155%	FinTech	<ul style="list-style-type: none"> Cloud-based operating system providing single platform for the financial services industry
July-20	 Blue City Holdings LLC	\$85m	\$149m	\$189m	1.6x	(1%)	Communication	<ul style="list-style-type: none"> Developer of a mobile based social app designed to connect LGBTQ users
July-20		\$1,723m	\$3,445m	\$10,154m	6.2x	16%	Data Analytics	<ul style="list-style-type: none"> Provider of business information and software for risk and supply management decisions
June-20	 Powered by DiscoverOrg	\$935m	\$8,034m	\$6,859m	23.4x	95%	Marketing	<ul style="list-style-type: none"> Developer of a sales and marketing platform designed to provide highly accurate sales data
May-20		\$510m	\$3,478m	\$4,627m	8.1x	106%	Database	<ul style="list-style-type: none"> Provider of cloud computing services intended to offer data center and storage facilities
Apr-20	 微美全息	\$26m	\$325m	\$331m	8.3x	22%	Communication	<ul style="list-style-type: none"> Provider of holographic technology for communication and video platforms
Feb-20		\$202m	\$1,111m	\$1,195m	15.5x	326%	Healthcare	<ul style="list-style-type: none"> Leading scientific provider of chemical simulation software for various research verticals

1) Filing date

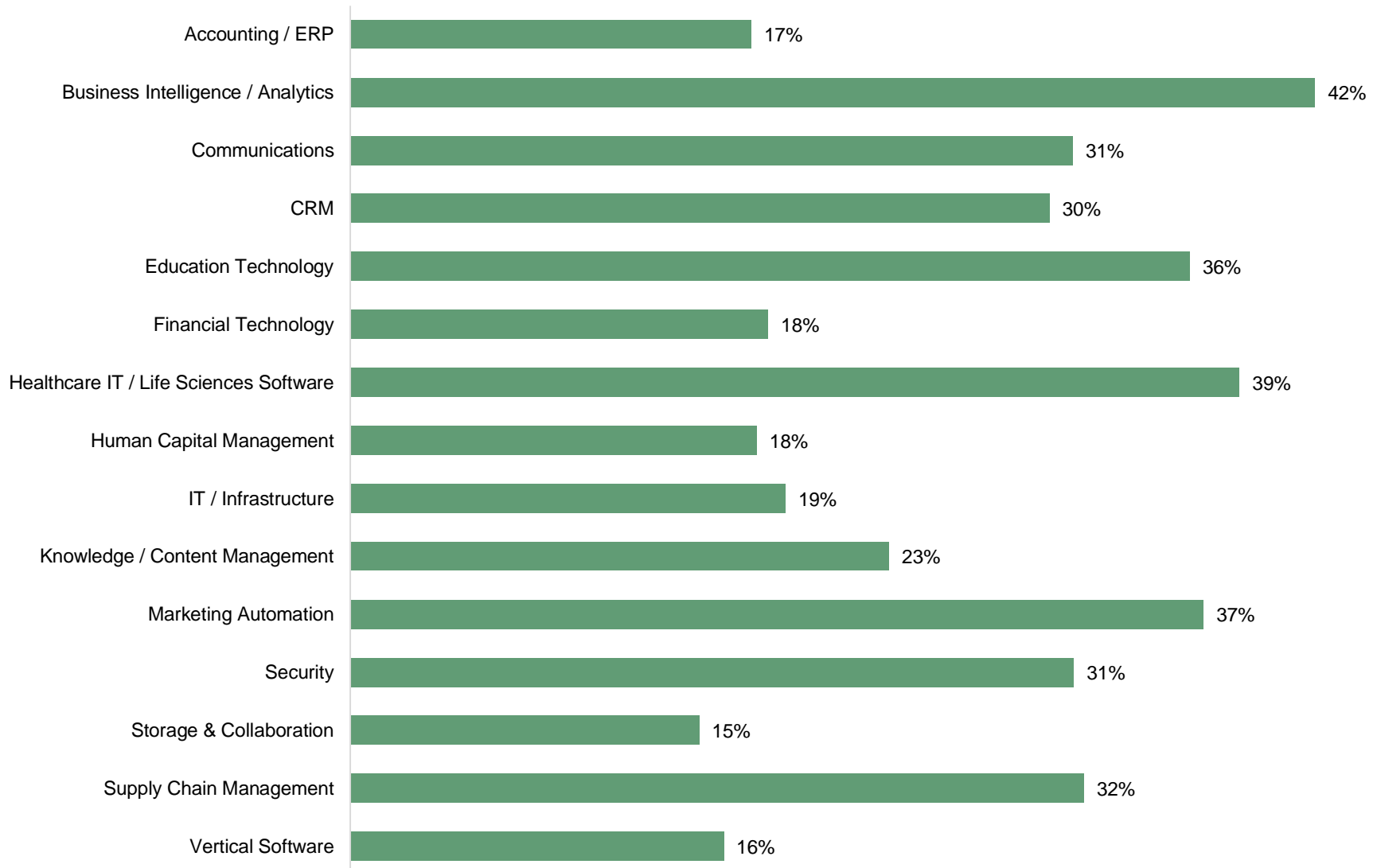
Note: \$ in millions. EV/Revenue multiples in excess of 50x are considered not meaningful. All figures are as of the IPO date.

Source: Pitchbook as of 7/31/20

VPA Public Company Coverage

<div>IT / Infrastructure</div> <div><div>Akamai</div><div>Appian</div><div>ATLASSIAN</div><div>CITRIX</div><div>CLOUDERA</div><div>CLOUDFLARE</div><div>DATADOG</div><div>dynatrace</div><div>fastly</div><div>Hewlett Packard Enterprise</div><div>IBM</div><div>jamf</div><div>JUNIPER NETWORKS</div><div>LogMeIn</div><div>Microsoft</div><div>mongoDB.</div><div>NETSCOUT</div><div>New Relic.</div><div>NUTANIX</div><div>ORACLE</div><div>PagerDuty</div><div>Progress</div><div>servicenow</div><div>solarwinds</div><div>splunk></div><div>uCloudlink</div><div>vmware</div><div>Software</div></div>	<div>CRM</div> <div><div>Adobe</div><div>Five9</div><div>HubSpot</div><div>LIVEPERSON</div><div>NICE</div><div>salesforce</div><div>PEGA</div><div>zendesk</div></div>	<div>Accounting / ERP</div> <div><div>Anaplan</div><div>Avalara</div><div>BLACKLINE</div><div>coupa</div><div>IBM</div><div>intuit.</div><div>Microsoft</div><div>ORACLE</div><div>QAD</div><div>THE SAGE GROUP</div><div>SAP</div><div>technologyone</div><div>upland</div><div>Wolters Kluwer</div><div>workiva</div><div>xero</div><div>ZUORA</div><div>VERTEX</div></div>	<div>Business Intelligence / Analytics</div> <div><div>alteryx</div><div>CLOUDERA</div><div>DOMO</div><div>dun&bradstreet</div><div>elasticsearch</div><div>endava</div><div>GlobalData.</div><div>Medallia</div><div>MicroStrategy</div><div>New Relic.</div><div>NICE</div><div>PEGA</div><div>splunk></div><div>SurveyMonkey</div><div>talend</div><div>teradata.</div><div>VERINT.</div></div>	<div>Marketing Automation</div> <div><div>Adobe</div><div>cardlytics</div><div>HubSpot</div><div>LIVEPERSON</div><div>ORACLE</div><div>salesforce</div><div>shopify</div><div>Wish Hologram</div><div>zendesk</div><div>zoominfo</div></div>	<div>Security</div> <div><div>ABSOLUTE</div><div>Check Point SOFTWARE TECHNOLOGIES LTD</div><div>CISCO</div><div>CLOUDFLARE</div><div>CROWDSTRIKE</div><div>CYBERARK</div><div>FIREEYE</div><div>FORESCOUT.</div><div>FORTINET.</div><div>mimecast</div><div>NortonLifeLock</div><div>okta</div><div>paloalto</div><div>Ping Identity</div><div>proofpoint.</div><div>Qualys.</div><div>radware</div><div>RAPID7</div><div>SailPoint</div><div>Secureworks</div><div>tenable</div><div>tufin</div><div>VERISIGN</div><div>zix</div><div>zscaler</div></div>	
	<div>EdTech</div> <div><div>2U</div><div>Afya</div><div>Chegg</div><div>cornerstone</div><div>K12</div><div>ltg</div><div>PLURALSIGHT</div></div>	<div>Financial Technology</div> <div><div>ACI</div><div>UNIVERSAL PAYMENTS.</div><div>Bottomline</div><div>Broadridge</div><div>EBIX</div><div>ENVESTNET</div><div>FACTSET</div><div>FICO</div><div>FIS</div><div>fiserv.</div><div>GUIDEWIRE</div><div>Jack Henry & ASSOCIATES INC.</div><div>MSCI</div><div>ncino.</div><div>Q2</div><div>Shift4 PAYMENTS</div><div>TEMENOS</div></div>	<div>Vertical Software</div> <div><div>amdocs</div><div>appfolio</div><div>ASSETMARK.</div><div>BLACK KNIGHT</div><div>blackbaud</div><div>CDK Global.</div><div>CoreLogic</div><div>GUIDEWIRE</div><div>Model N</div><div>niC</div><div>Q2</div><div>QAD</div><div>REALPAGE</div><div>SS&C</div><div>tyler</div><div>veeva</div></div>	<div>Storage & Collaboration</div> <div><div>ATLASSIAN</div><div>box</div><div>COMMVAULT</div><div>DocuSign</div><div>Dropbox</div><div>Kingsoft Cloud</div><div>NetApp</div><div>opentext</div><div>smartsheet</div></div>		
	<div>Supply Chain Management</div> <div><div>AMERICAN SOFTWARE</div><div>aspentech</div><div>DASSAULT SYSTEMES</div><div>DESCARTES</div><div>endava</div><div>kinaxis</div><div>Manhattan Associates</div><div>ptc</div><div>SAP</div><div>servicenow</div><div>tecsys</div></div>	<div>Human Capital Management</div> <div><div>ADP</div><div>Benefitfocus</div><div>CERIDIAN</div><div>cornerstone</div><div>Insperity</div><div>PAYCHEX</div><div>paycom</div><div>paylocity</div><div>smartsheet</div><div>TriNet</div><div>workday.</div></div>	<div>Knowledge / Content</div> <div><div>Adobe</div><div>Akamai</div><div>box</div><div>brightcove</div><div>DocuSign</div><div>Dropbox</div><div>mobileiron</div><div>opentext</div><div>PLURALSIGHT</div><div>SDL*</div><div>SurveyMonkey</div><div>VERISIGN</div></div>	<div>Healthcare IT / Life Sciences</div> <div><div>Allscripts</div><div>Castlight</div><div>cegedim</div><div>Cerner</div><div>HealthCatalyst</div><div>HealthStream.</div><div>inovalon</div><div>nextgen</div><div>Phreesia</div><div>TABULARASA</div><div>veeva</div></div>	<div>Communications</div> <div><div>8x8</div><div>BLUECITY</div><div>everbridge</div><div>Five9</div><div>JUNIPER NETWORKS</div><div>NICE</div><div>NUANCE</div><div>RingCentral</div><div>slack</div><div>twilio</div><div>synchronoss</div><div>VONAGE</div><div>zoom</div></div>	

Public Market Performance Over The Last 3 Months



Source: Pitchbook as of 7/31/20

Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA	
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Accounting / ERP												
Microsoft	\$1,551,445	\$1,485,916	95%	\$143,015	14%	68%	48%	61%	10.4x	9.5x	21.7x	20.3x
SAP	189,579	201,984	96%	31,066	4%	70%	29%	33%	6.5	6.1	22.7	17.8
Oracle	170,158	199,341	96%	39,068	-1%	80%	42%	41%	5.1	5.1	12.1	10.5
International Business Machines	109,488	165,286	77%	75,498	-3%	48%	20%	17%	2.2	2.2	11.1	10.0
Intuit	79,893	76,585	97%	6,857	3%	81%	26%	29%	11.2	9.6	43.5	25.5
Wolters Kluwer	20,800	20,800	96%	5,069	1%	69%	28%	28%	4.1	3.9	14.8	12.9
Coupa	20,555	20,567	96%	428	50%	64%	-6%	44%	48.1	42.0	NM	NM
Avalara	10,544	10,163	93%	409	38%	70%	-11%	27%	24.9	22.1	NM	NM
The Sage Group (Financial Software)	10,437	10,732	93%	2,483	-1%	93%	30%	29%	4.3	4.4	14.6	17.8
Xero	9,228	9,204	95%	477	24%	85%	19%	43%	19.3	16.4	NM	NM
Anaplan	6,246	5,996	71%	376	42%	75%	-34%	8%	15.9	13.8	NM	NM
BlackLine	5,013	4,810	98%	307	28%	80%	-2%	26%	15.6	14.3	NM	NM
Vertex	3,369	3,515	89%	336	23%	63%	7%	30%	10.5	NM	NM	NM
Workiva	2,635	2,464	87%	314	23%	72%	-13%	10%	7.9	7.4	NM	NM
Technology One	1,930	1,897	91%	201	-10%	87%	31%	21%	9.5	8.9	30.7	25.2
Zuora	1,349	1,253	70%	286	16%	53%	-24%	-8%	4.4	4.2	NM	NM
Upland Software	871	1,312	73%	242	45%	68%	-2%	43%	5.4	5.0	NM	14.5
Qad	770	660	72%	307	-6%	56%	3%	-2%	2.2	2.2	NM	41.2
Median	\$9,833	\$9,684	93%	\$418	15%	70%	13%	29%	8.7x	7.4x	18.3x	17.8x
Mean	\$121,906	\$123,471	88%	\$17,041	16%	71%	10%	27%	11.5x	10.4x	21.4x	19.6x

1) Efficiency Score = LTM Revenue Growth % + LTM EBITDA Margin

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

Source: Pitchbook as of 7/31/20

Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA	
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Business Intelligence / Analytics												
Splunk	\$33,334	\$33,677	98%	\$2,368	24%	80%	-15%	8%	14.2x	13.8x	NM	NM
NICE Systems	12,655	12,786	99%	1,607	8%	66%	26%	34%	8.0	7.7	30.8	23.4
Alteryx	11,576	11,559	94%	451	61%	90%	4%	65%	25.6	23.1	NM	NM
Dun & Bradstreet	10,487	15,552	90%	1,635	-5%	NM	27%	22%	9.5	8.8	35.2	19.9
Pegasystems	9,400	9,450	100%	986	12%	68%	-11%	2%	9.6	8.9	NM	NM
Elasticsearch	8,203	7,942	97%	428	57%	71%	-37%	21%	18.6	14.8	NM	NM
Medallia	4,337	3,977	71%	422	25%	64%	-30%	-5%	9.4	8.6	NM	NM
New Relic	4,272	3,961	75%	600	25%	83%	-1%	24%	6.6	5.9	NM	NM
Cloudera	3,329	3,129	81%	817	45%	72%	-25%	20%	3.8	3.7	NM	21.0
SVMK	3,311	3,468	97%	327	24%	76%	-7%	16%	10.6	9.4	NM	NM
Verint Systems	2,897	3,412	75%	1,276	2%	65%	13%	15%	2.7	2.7	20.0	10.9
Endava	2,839	2,794	91%	428	20%	29%	7%	26%	6.5	5.3	NM	25.5
GlobalData	2,374	2,478	98%	222	0%	42%	23%	23%	11.2	10.7	48.2	34.1
Teradata	2,279	2,547	59%	1,865	-12%	51%	8%	-4%	1.4	1.4	16.5	7.6
MicroStrategy	1,200	768	75%	475	-2%	80%	8%	5%	1.6	1.7	20.6	13.0
Talend	1,107	1,087	82%	258	19%	77%	-21%	-2%	4.2	4.0	NM	NM
Domo	927	953	84%	181	20%	68%	-59%	-40%	5.3	4.8	NM	NM
Median	\$3,329	\$3,468	90%	\$475	20%	70%	-1%	16%	8.0x	7.7x	25.7x	20.4x
Mean	\$6,737	\$7,032	86%	\$844	19%	68%	-5%	14%	8.8x	7.9x	28.5x	19.4x

1) Efficiency Score = Revenue Growth % + EBITDA Margin

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

Source: Pitchbook as of 7/31/20

Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA	
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Communications												
Zoom Video Communications	\$71,629	\$70,595	90%	\$829	111%	76%	6%	118%	85.2x	39.3x	NM	NM
Twilio	38,853	37,658	100%	1,266	68%	53%	-17%	51%	29.7	24.6	NM	NM
RingCentral	25,515	25,837	97%	969	34%	74%	-4%	30%	26.7	22.7	NM	NM
Slack	16,657	15,988	74%	697	53%	85%	-85%	-32%	22.9	18.4	NM	NM
NICE Systems	12,655	12,786	99%	1,607	8%	66%	26%	34%	8.0	7.7	30.8	23.4
Juniper Networks	8,410	8,434	96%	4,442	-3%	59%	14%	11%	1.9	1.9	13.4	9.6
Five9	7,823	7,725	99%	349	28%	59%	1%	28%	22.2	19.3	NM	NM
Nuance	7,693	9,051	98%	1,707	1%	57%	17%	18%	5.3	6.3	31.3	24.8
Everbridge	4,906	4,844	86%	217	36%	68%	-16%	20%	22.3	18.4	NM	NM
Vonage Holdings	2,932	3,475	87%	1,207	12%	57%	8%	21%	2.9	2.9	35.0	22.8
8X8	1,650	1,886	63%	446	27%	55%	-30%	-4%	4.2	3.6	NM	NM
BlueCity Holdings	566	762	44%	118	55%	30%	-5%	50%	6.5	NM	NM	NM
Synchronoss Technologies	147	407	36%	298	-10%	51%	-9%	-19%	1.4	1.3	NM	16.2
Median	\$7,823	\$8,434	90%	\$829	28%	59%	-4%	21%	8.0x	13.1x	31.1x	22.8x
Mean	\$15,341	\$15,342	82%	\$1,089	32%	61%	-7%	25%	18.4x	13.9x	27.6x	19.4x
CRM												
Adobe Systems	\$213,125	\$213,471	94%	\$12,045	19%	86%	38%	57%	17.7x	16.8x	47.2x	35.2x
Salesforce	175,560	171,595	96%	18,226	30%	75%	14%	44%	9.4	8.6	NM	28.7
NICE Systems	12,655	12,786	99%	1,607	8%	66%	26%	34%	8.0	7.7	30.8	23.4
Zendesk	10,521	10,674	89%	924	31%	74%	-13%	18%	11.5	10.5	NM	NM
HubSpot	10,235	9,877	96%	722	31%	81%	-3%	28%	13.7	12.3	NM	NM
Pegasystems	9,400	9,450	100%	986	12%	68%	-11%	2%	9.6	8.9	NM	NM
Five9	7,823	7,725	99%	349	28%	59%	1%	28%	22.2	19.3	NM	NM
LivePerson	2,845	2,874	95%	303	18%	73%	-30%	-12%	9.5	8.3	NM	NM
Median	\$10,378	\$10,276	96%	\$955	23%	73%	-1%	28%	10.6x	9.7x	39.0x	28.7x
Mean	\$55,271	\$54,807	96%	\$4,395	22%	73%	3%	25%	12.7x	11.5x	39.0x	29.1x

1) Efficiency Score = Revenue Growth % + EBITDA Margin

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

Source: Pitchbook as of 7/31/20

Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA	
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Education Technology												
Chegg	\$10,012	\$10,179	100%	\$445	30%	75%	18%	49%	22.9x	16.6x	NM	NM
Pluralsight	3,058	3,268	94%	359	31%	79%	-36%	-5%	9.1	8.5	NM	NM
2U	3,033	3,183	98%	675	41%	70%	-30%	11%	4.7	4.3	NM	NM
Afya Educacional	2,432	2,279	75%	214	94%	61%	41%	135%	10.6	11.0	25.9	26.9
Cornerstone OnDemand	2,267	2,178	55%	587	8%	73%	8%	15%	3.7	3.0	49.2	14.8
K12	1,877	1,971	89%	1,028	3%	33%	10%	13%	1.9	1.8	20.0	13.2
Learning Technologies Group	1,286	1,297	77%	166	33%	NM	33%	66%	7.8	7.8	23.6	23.2
Median	\$2,432	\$2,279	89%	\$445	31%	71%	10%	15%	7.8x	7.8x	24.7x	19.0x
Mean	\$3,424	\$3,479	84%	\$496	34%	65%	6%	40%	8.7x	7.6x	29.7x	19.5x
Financial Technology												
Fidelity National Information Services	\$90,395	\$109,414	92%	\$11,354	35%	36%	31%	66%	9.6x	8.7x	30.9x	20.4x
Fiserv	66,808	89,583	80%	12,454	112%	46%	34%	146%	7.2	6.4	21.2	16.2
Square	57,050	55,769	97%	5,135	43%	40%	8%	51%	10.9	22.8	NM	NM
MSCI (US)	31,446	33,582	94%	1,627	10%	82%	52%	62%	20.6	20.0	39.7	35.6
Broadridge Financial Solutions	15,425	17,621	100%	4,378	-2%	27%	17%	15%	4.0	3.8	23.1	16.8
Jack Henry and Associates	13,661	13,606	91%	1,680	9%	41%	33%	42%	8.1	7.6	24.6	24.1
FactSet Research Systems	13,157	13,556	97%	1,475	4%	54%	34%	39%	9.2	9.1	26.7	25.6
Fair Isaac	12,736	13,612	99%	1,226	10%	71%	26%	36%	11.1	11.0	43.2	34.4
Temenos	10,540	11,545	83%	958	10%	80%	36%	46%	12.1	12.2	33.7	26.9
Guidewire Software	9,787	9,189	95%	706	-6%	53%	-3%	-9%	13.0	11.8	NM	NM
Ncino	7,091	6,996	86%	153	67%	55%	-15%	52%	45.7	NM	NM	NM
Q2 Holdings	5,004	5,364	97%	337	31%	47%	-12%	18%	15.9	13.5	NM	NM
Envestnet	4,345	4,972	93%	947	16%	69%	7%	23%	5.3	5.1	NM	24.0
ACI Worldwide	3,106	4,400	68%	1,344	34%	50%	21%	54%	3.3	3.3	15.7	12.9
Shift4 Payments	3,080	3,761	80%	776	6%	24%	9%	15%	4.8	10.8	NM	26.7
Bottomline Technologies	2,120	2,137	84%	440	5%	57%	12%	17%	4.9	4.5	40.9	20.7
Ebix	673	1,382	48%	576	8%	62%	27%	36%	2.4	2.7	8.7	9.0
9F Group	381	(268)	13%	640	-24%	74%	-57%	-81%	NM	NM	0.7	NM
Median	\$10,163	\$10,367	92%	\$1,092	10%	53%	19%	37%	9.2x	8.9x	25.7x	24.0x
Mean	\$19,267	\$22,012	83%	\$2,567	20%	54%	14%	35%	11.1x	9.6x	25.8x	22.6x

1) Efficiency Score = Revenue Growth % + EBITDA Margin

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Source: Pitchbook as of 7/31/20

Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA		
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward	
Healthcare IT / Life Sciences Software													
Veeva Systems	\$39,724	\$38,396	100%	\$1,196	31%	72%	29%	60%	32.1x	27.6x	NM	NM	
Cerner	21,209	22,106	86%	5,614	2%	82%	24%	26%	3.9	4.0	16.4	12.9	
Inovalon Holdings	3,655	4,523	92%	656	12%	75%	27%	40%	6.9	6.6	25.1	19.5	
Allscripts Healthcare Solutions	1,467	2,431	76%	1,718	-2%	39%	12%	10%	1.4	1.4	11.7	8.4	
Health Catalyst	1,326	1,174	70%	165	30%	50%	-32%	-2%	7.1	6.6	NM	NM	
Tabula Rasa Healthcare	1,294	1,512	81%	297	34%	37%	1%	35%	5.1	4.5	NM	32.6	
Phreesia	1,133	1,069	86%	130	24%	65%	-4%	20%	8.2	7.9	NM	NM	
NextGen Healthcare	975	1,008	79%	539	2%	50%	10%	13%	1.9	1.9	18.0	10.5	
HealthStream	703	587	74%	247	-1%	62%	21%	20%	2.4	2.5	11.5	14.1	
Cegedim	448	724	84%	564	2%	94%	14%	16%	1.3	1.2	9.3	6.9	
Castlight Health	166	137	61%	146	-5%	60%	-51%	-56%	0.9	1.0	NM	NM	
Median	\$1,294	\$1,174	81%	\$539	2%	62%	12%	20%	3.9x	4.0x	14.1x	12.9x	
Mean	\$6,554	\$6,697	81%	\$1,025	12%	62%	5%	17%	6.5x	5.9x	15.3x	15.0x	
Human Capital Management													
Automatic Data Processing	\$57,138	\$57,579	73%	\$14,757	6%	43%	26%	31%	3.9x	4.1x	15.2x	18.1x	
Workday	42,516	42,017	89%	3,821	26%	70%	-5%	21%	11.0	10.0	NM	NM	
Paychex	25,803	25,769	79%	4,041	7%	68%	41%	49%	6.4	6.6	15.4	16.7	
Paycom Software	16,654	16,505	83%	780	27%	86%	38%	66%	21.2	19.9	NM	48.8	
Ceridian HCM	11,354	8,165	90%	843	12%	44%	14%	26%	9.7	9.6	NM	49.1	
Paylocity	7,151	7,053	85%	551	24%	68%	20%	44%	12.8	11.2	NM	42.3	
Smartsheet	5,717	5,247	79%	300	52%	80%	-33%	19%	17.5	14.4	NM	NM	
TriNet Group	4,442	4,399	89%	3,983	9%	21%	12%	21%	1.1	4.6	9.1	11.3	
Inspireity	2,592	2,599	62%	4,391	11%	17%	5%	16%	0.6	0.6	12.0	11.9	
Cornerstone OnDemand	2,267	2,178	55%	587	8%	73%	8%	15%	3.7	3.0	49.2	14.8	
Benefitfocus	376	553	41%	294	11%	51%	1%	11%	1.9	2.1	NM	20.5	
Median	\$7,151	\$7,053	79%	\$843	11%	68%	12%	21%	6.4x	6.6x	15.2x	18.1x	
Mean	\$16,001	\$15,642	75%	\$3,122	17%	56%	11%	29%	8.2x	7.8x	20.2x	25.9x	

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Public Company Valuation & Operating Metrics

Company	Mkt Cap	EV	52-Wk High	LTM Operating Metrics					EV / Revenue		EV / EBITDA	
				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
IT / Infrastructure												
Microsoft	\$1,551,445	\$1,485,916	95%	\$143,015	14%	68%	48%	61%	10.4x	9.5x	21.7x	20.3x
Oracle	170,158	199,341	96%	39,068	-1%	80%	42%	41%	5.1	5.1	12.1	10.5
International Business Machines	109,488	165,286	77%	75,498	-3%	48%	20%	17%	2.2	2.2	11.1	10.0
ServiceNow	84,239	83,094	97%	3,955	31%	78%	12%	43%	21.0	18.8	NM	NM
VMware	58,755	61,326	80%	11,279	12%	83%	21%	33%	5.4	5.3	26.1	14.7
Atlassian	43,355	42,352	89%	1,518	35%	83%	-2%	33%	27.9	22.1	NM	NM
Splunk	33,334	33,677	98%	2,368	24%	80%	-15%	8%	14.2	13.8	NM	NM
Datadog	28,100	27,364	95%	424	59%	77%	3%	63%	64.5	48.6	NM	NM
Akamai Technologies	18,328	19,640	97%	2,951	7%	66%	34%	41%	6.7	6.2	19.5	14.4
Citrix Systems	17,635	18,698	82%	3,203	7%	85%	23%	30%	5.8	5.8	24.9	16.9
Hewlett Packard Enterprise	12,681	24,313	56%	27,390	-10%	33%	10%	0%	0.9	1.0	9.0	5.7
Cloudflare	12,638	12,101	98%	317	35%	78%	-30%	5%	38.2	30.9	NM	NM
Dynatrace	11,757	12,066	94%	579	27%	78%	-9%	18%	20.8	18.4	NM	NM
MongoDB	11,610	11,590	94%	463	51%	71%	-33%	18%	25.1	21.9	NM	NM
Fastly	9,958	9,873	94%	218	38%	56%	-16%	22%	45.3	34.6	NM	NM
Juniper Networks	8,410	8,434	96%	4,442	-3%	59%	14%	11%	1.9	1.9	13.4	9.6
SolarWinds	5,725	7,507	85%	964	13%	73%	41%	54%	7.8	7.4	18.9	16.2
Jamf	4,724	4,903	80%	220	8%	74%	7%	15%	22.3	NM	NM	NM
Nutanix	4,428	4,336	59%	1,280	3%	77%	-60%	-57%	3.4	2.9	NM	NM
New Relic	4,272	3,961	75%	600	25%	83%	-1%	24%	6.6	5.9	NM	NM
LogMeIn	4,207	4,262	99%	1,313	6%	74%	24%	30%	3.2	3.1	13.4	10.5
Software	3,469	3,171	98%	996	-2%	77%	27%	24%	3.2	NM	11.9	NM
Appian	3,449	3,352	79%	280	19%	66%	-14%	5%	12.0	12.2	NM	NM
Cloudera	3,329	3,129	81%	817	45%	72%	-25%	20%	3.8	3.7	NM	21.0
PagerDuty	2,399	2,083	73%	179	37%	85%	-29%	8%	11.6	10.0	NM	NM
NetScout Systems	1,845	1,949	86%	892	-2%	73%	16%	14%	2.2	2.2	13.5	9.8
Progress Software	1,570	1,684	66%	434	14%	84%	26%	40%	3.9	3.8	15.1	NM
uCloudlink Group	382	354	55%	167	6%	39%	6%	11%	2.1	NM	37.0	NM
Median	\$10,784	\$10,731	87%	\$980	13%	75%	9%	21%	6.6x	6.2x	14.3x	12.4x
Mean	\$79,346	\$80,563	85%	\$11,601	18%	71%	5%	23%	13.5x	11.9x	17.7x	13.3x

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				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Knowledge / Content Management												
Adobe Systems	\$213,125	\$213,471	94%	\$12,045	19%	86%	38%	57%	17.7x	16.8x	47.2x	35.2x
DocuSign	39,790	39,706	100%	1,057	39%	75%	-13%	26%	37.6	30.2	NM	NM
VeriSign	24,312	24,911	96%	1,246	2%	86%	71%	72%	20.0	19.7	28.3	28.8
Akamai Technologies	18,328	19,640	97%	2,951	7%	66%	34%	41%	6.7	6.2	19.5	14.4
OpenText	12,170	15,189	94%	3,030	5%	68%	34%	40%	5.0	4.4	14.6	11.6
Dropbox	9,401	9,384	94%	1,731	18%	76%	9%	28%	5.4	5.0	NM	18.5
SVMK	3,311	3,468	97%	327	24%	76%	-7%	16%	10.6	9.4	NM	NM
Pluralsight	3,058	3,268	94%	359	31%	79%	-36%	-5%	9.1	8.5	NM	NM
Box	2,754	2,957	81%	717	14%	69%	-9%	5%	4.1	3.9	NM	19.5
MobileIron	728	653	80%	215	6%	79%	-15%	-9%	3.0	3.1	NM	NM
SDL	552	560	72%	480	11%	52%	13%	24%	1.2	1.2	9.1	12.9
Brightcove	417	409	79%	190	11%	60%	-5%	6%	2.2	2.2	NM	38.3
Median	\$6,356	\$6,426	94%	\$887	12%	75%	2%	25%	6.0x	5.6x	19.5x	19.0x
Mean	\$27,329	\$27,801	90%	\$2,029	16%	73%	9%	25%	10.2x	9.2x	23.7x	22.4x
Marketing Automation												
Adobe Systems	\$213,125	\$213,471	94%	\$12,045	19%	86%	38%	57%	17.7x	16.8x	47.2x	35.2x
Salesforce	175,560	171,595	96%	18,226	30%	75%	14%	44%	9.4	8.6	NM	28.7
Oracle	170,158	199,341	96%	39,068	-1%	80%	42%	41%	5.1	5.1	12.1	10.5
Shopify	123,312	119,464	92%	2,080	60%	53%	-4%	56%	57.4	46.1	NM	NM
Zoom Information	15,912	17,331	63%	341	44%	78%	40%	84%	50.8	31.0	NM	NM
Zendesk	10,521	10,674	89%	924	31%	74%	-13%	18%	11.5	10.5	NM	NM
HubSpot	10,235	9,877	96%	722	31%	81%	-3%	28%	13.7	12.3	NM	NM
LivePerson	2,845	2,874	95%	303	18%	73%	-30%	-12%	9.5	8.3	NM	NM
Cardlytics	1,791	1,702	62%	220	43%	37%	-8%	35%	7.7	9.1	NM	NM
WiMi Hologram Cloud	447	441	23%	46	36%	54%	40%	76%	9.5	5.3	23.6	13.5
Median	\$13,216	\$14,003	93%	\$823	31%	74%	6%	43%	10.5x	9.8x	23.6x	21.1x
Mean	\$72,391	\$74,677	81%	\$7,398	31%	69%	12%	43%	19.2x	15.3x	27.6x	22.0x

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				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Security												
Cisco Systems	\$198,870	\$186,380	87%	\$50,575	-1%	64%	31%	30%	3.7x	3.8x	11.8x	10.7x
Okta	27,536	27,232	98%	644	46%	73%	-29%	17%	42.3	35.0	NM	NM
Palo Alto Networks	24,688	24,470	100%	3,264	19%	72%	1%	20%	7.5	6.2	NM	27.7
CrowdStrike	24,450	23,486	95%	563	89%	72%	-19%	70%	41.7	30.5	NM	NM
VeriSign	24,312	24,911	96%	1,246	2%	86%	71%	72%	20.0	19.7	28.3	28.8
Fortinet	22,356	20,955	91%	2,261	21%	77%	20%	41%	9.3	8.4	45.8	30.3
Check Point Software Technologies	17,574	15,982	96%	2,027	4%	89%	44%	48%	7.9	7.8	17.7	15.6
Zscaler	16,948	16,597	99%	391	43%	79%	-15%	28%	42.4	30.0	NM	NM
NortonLifeLock	12,676	14,735	75%	2,490	1%	84%	52%	53%	5.9	6.0	11.4	12.5
Cloudflare	12,638	12,101	98%	317	35%	78%	-30%	5%	38.2	30.9	NM	NM
Proofpoint	6,667	6,531	87%	979	22%	73%	0%	22%	6.7	6.3	NM	44.1
Qualys	4,811	4,528	100%	333	15%	79%	33%	48%	13.6	12.7	41.5	29.7
CyberArk Software	4,564	3,964	81%	445	21%	85%	14%	35%	8.9	8.7	NM	44.9
Tenable	3,436	3,248	93%	399	28%	82%	-18%	11%	8.1	7.5	NM	NM
FireEye	3,405	3,513	82%	916	7%	65%	-16%	-9%	3.8	3.8	NM	32.8
Rapid7	3,008	3,036	93%	348	32%	72%	-11%	21%	8.7	7.7	NM	NM
Mimecast	2,955	3,011	86%	427	25%	74%	15%	41%	7.1	6.1	46.0	30.6
SailPoint Technologies	2,841	2,730	97%	303	16%	77%	2%	19%	9.0	8.6	NM	NM
Ping Identity	2,764	2,764	96%	254	26%	77%	13%	39%	10.9	11.2	NM	NM
ForeScout	1,437	1,395	72%	318	2%	75%	-36%	-34%	4.4	4.3	NM	NM
Radware	1,184	983	95%	249	2%	82%	10%	11%	4.0	4.0	41.4	23.5
SecureWorks	982	850	66%	561	7%	55%	-1%	6%	1.5	1.5	NM	42.3
Absolute Software	502	473	98%	103	5%	87%	19%	24%	4.6	4.2	23.9	19.6
Zix	405	696	70%	197	136%	53%	14%	151%	3.5	3.3	25.2	13.8
Tufin	337	243	43%	102	14%	79%	-39%	-25%	2.4	2.4	NM	NM
Median	\$4,564	\$3,964	93%	\$427	19%	77%	2%	24%	7.9x	7.5x	26.8x	28.8x
Mean	\$16,854	\$16,193	88%	\$2,788	25%	76%	5%	30%	12.6x	10.8x	29.3x	27.1x

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				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Storage & Collaboration												
Atlassian	\$43,355	\$42,352	89%	\$1,518	35%	83%	-2%	33%	27.9x	22.1x	NM	NM
DocuSign	39,790	39,706	100%	1,057	39%	75%	-13%	26%	37.6	30.2	NM	NM
OpenText	12,170	15,189	94%	3,030	5%	68%	34%	40%	5.0	4.4	14.6	11.6
NetApp	9,832	8,762	68%	5,412	-12%	67%	21%	9%	1.6	1.7	7.7	7.6
Dropbox	9,401	9,384	94%	1,731	18%	76%	9%	28%	5.4	5.0	NM	18.5
Kingsoft Cloud	7,205	8,086	82%	646	13%	3%	-29%	-16%	12.5	8.6	NM	NM
Smartsheet	5,717	5,247	79%	300	52%	80%	-33%	19%	17.5	14.4	NM	NM
Box	2,754	2,957	81%	717	14%	69%	-9%	5%	4.1	3.9	NM	19.5
CommVault Systems	2,045	1,704	85%	682	-2%	83%	2%	0%	2.5	2.5	NM	12.4
Median	\$9,401	\$8,762	85%	\$1,057	14%	75%	-2%	19%	5.4x	5.0x	11.1x	12.4x
Mean	\$14,696	\$14,821	86%	\$1,677	18%	67%	-2%	16%	12.7x	10.3x	11.1x	13.9x
Supply Chain Management												
SAP	\$189,579	\$201,984	96%	\$31,066	4%	70%	29%	33%	6.5x	6.1x	22.7x	17.8x
ServiceNow	84,239	83,094	97%	3,955	31%	78%	12%	43%	21.0	18.8	NM	NM
Dassault Systemes	47,745	50,282	97%	4,756	11%	83%	28%	39%	10.6	9.4	37.8	27.6
PTC	9,899	10,893	96%	1,346	7%	75%	15%	23%	8.1	7.7	NM	24.4
Aspen Technology	6,575	6,853	68%	587	4%	89%	45%	49%	11.7	11.5	26.1	22.2
Manhattan Associates	6,085	5,990	95%	605	3%	53%	20%	23%	9.9	10.6	49.2	42.6
Descartes Systems Group	4,748	4,714	99%	331	16%	74%	36%	52%	14.2	13.8	39.5	34.6
Kinaxis	4,019	3,794	97%	199	24%	71%	22%	46%	19.1	17.6	NM	NM
Endava	2,839	2,794	91%	428	20%	29%	7%	26%	6.5	5.3	NM	25.5
SPS Commerce	2,641	2,437	97%	293	11%	68%	21%	32%	8.3	8.0	39.4	29.4
American Softw are	534	443	77%	115	6%	55%	12%	18%	3.8	3.8	33.1	31.1
Tecsys	321	309	93%	79	35%	48%	8%	43%	3.9	3.7	NM	47.8
Median	\$5,417	\$5,352	96%	\$507	11%	71%	21%	36%	9.1x	8.7x	37.8x	28.5x
Mean	\$29,935	\$31,132	92%	\$3,647	14%	66%	21%	36%	10.3x	9.7x	35.4x	30.3x

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				Revenue	Revenue Growth	Gross Margin	EBITDA Margin	Efficiency Score ¹	LTM	Forward	LTM	Forward
Vertical Software												
Veeva Systems	\$39,724	\$38,396	100%	\$1,196	31%	72%	29%	60%	32.1x	27.6x	NM	NM
SS&C Technologies	14,755	21,728	86%	4,669	13%	44%	36%	49%	4.7	4.7	12.8	12.1
Tyler Technologies	14,376	13,993	93%	1,112	11%	48%	22%	33%	12.6	12.3	NM	43.3
Black Knight (US)	11,766	13,335	96%	1,185	5%	NM	45%	50%	11.3	11.3	25.3	23.1
Guidewire Software	9,787	9,189	95%	706	-6%	53%	-3%	-9%	13.0	11.8	NM	NM
Amdocs	8,290	8,198	80%	4,145	3%	35%	19%	22%	2.0	2.0	10.4	10.0
RealPage	6,426	7,095	90%	1,031	14%	56%	21%	36%	6.9	6.2	32.3	23.2
CDK Global	5,525	8,023	80%	1,999	32%	52%	29%	60%	4.0	4.0	14.0	10.8
CoreLogic	5,416	6,942	98%	1,806	4%	52%	27%	32%	3.8	3.7	14.1	11.7
Q2 Holdings	5,004	5,364	97%	337	31%	47%	-12%	18%	15.9	13.5	NM	NM
AppFolio	4,774	4,841	77%	271	33%	61%	14%	46%	17.8	15.1	NM	NM
Blackbaud	3,100	3,644	64%	908	6%	53%	13%	19%	4.0	4.0	30.0	16.2
AssetMark	2,016	2,087	82%	441	19%	31%	12%	30%	4.7	7.2	40.0	18.3
NIC	1,469	1,260	85%	362	6%	38%	21%	27%	3.5	3.3	16.3	14.1
Model N	1,318	1,303	97%	150	2%	56%	-5%	-3%	8.7	8.4	NM	NM
Qad	770	660	72%	307	-6%	56%	3%	-2%	2.2	2.2	NM	41.2
Median	\$5,470	\$7,018	88%	\$969	8%	52%	20%	31%	5.8x	6.7x	16.3x	16.2x
Mean	\$8,407	\$9,129	87%	\$1,289	12%	50%	17%	29%	9.2x	8.6x	21.7x	20.4x

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