

Quarterly Enterprise Software Market Review

Q4 2022

Boston

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About Our Firm

1	2	35+	\$45Bn+	20+	135+
Firm focused exclusively on enterprise software	Offices in Boston and San Francisco	Professionals focused on the software industry	Aggregate advised deal value	Average years of experience amongst our senior bankers	Transactions completed representing billions of dollars in value

Mergers & Acquisitions, Private Placements & Capital Raising

Shea & Company has advised on important transactions representing billions of dollars in value across the strategic acquirer and financial investor landscape with clients in the U.S. as well as Canada, Europe, Israel and Australia.

 has been acquired by  Shea & Company served as the exclusive financial advisor to Rave Mobile Safety	 has acquired  Shea & Company served as the exclusive financial advisor to MBS Highway	 has been acquired by  Shea & Company served as the exclusive financial advisor to iWave	 has acquired  Shea & Company served as the exclusive financial advisor to Granicus	 has agreed to acquire  Shea & Company served as the exclusive financial advisor to OpenGov	 has been acquired by  Shea & Company served as financial advisor to Castellan	 has received a strategic investment from  Shea & Company served as the exclusive financial advisor to Gearset
 has been acquired by  Shea & Company served as the exclusive financial advisor to Optimere	 has made a strategic investment in  Shea & Company served as the exclusive financial advisor to Sumeru Equity Partners	 has received a majority investment from  Shea & Company served as the exclusive financial advisor to BlueConic	 has been acquired by  Shea & Company served as the exclusive financial advisor to Angus Systems	 has made a majority investment in  Shea & Company served as the exclusive financial advisor to CVC Growth Funds	 has received an equity investment from  Shea & Company served as the exclusive financial advisor to Tango	 has made an investment in  Shea & Company served as the exclusive financial advisor to Hg
 has been acquired by  Shea & Company served as the exclusive financial advisor to T2 Systems	 has been acquired by  Shea & Company served as financial advisor to Lexipol	 has been acquired by  Shea & Company served as the exclusive financial advisor to Envisage	 has been acquired by  Shea & Company served as the exclusive financial advisor to GovQA	 has made an investment in  Shea & Company served as the exclusive financial advisor to TPG	 has been acquired by  Shea & Company served as the exclusive financial advisor to Emergency Reporting	 has received a minority investment from  Shea & Company served as the exclusive financial advisor to Lansweeper

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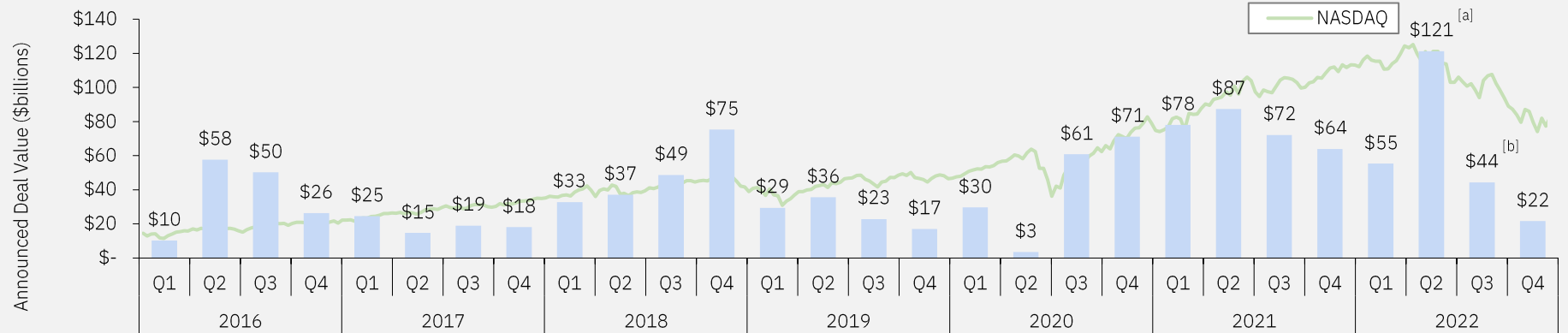
Agenda

→ M&A Activity

Public Equity Market Valuations

Equity Financing Activity

Software M&A Summary: 2016 – 2022



Transaction Count by Deal Size

Deal Size	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2022 Q4
> \$1bn	2	10	13	5	5	2	6	5	6	12	11	13	5	5	5	4	9	0	10	14	19	15	16	13	8	9	6	5
\$500m - \$1bn	3	6	4	8	4	2	5	3	3	0	4	7	9	3	3	3	1	2	8	6	10	7	5	5	9	2	1	3
\$250m - \$500m	5	8	7	3	7	5	11	5	7	5	7	5	7	8	1	1	3	2	1	5	7	11	10	12	3	4	1	2
< \$250m	42	49	37	29	55	60	43	32	58	39	51	55	40	35	38	26	28	27	46	41	36	26	37	30	41	35	17	12
No Reported Value	170	200	171	147	160	175	171	145	179	158	153	172	209	192	198	159	199	139	201	292	262	272	209	255	346	299	198	217
Total	222	273	232	192	231	244	236	190	253	214	226	252	270	243	245	193	240	170	266	358	334	331	277	315	407	349	223	239

Notable Transactions: Q4 2022 (\$ millions)

Acquirer	THOMABRAVO	Veeva	K1	THOMABRAVO	VOYA	Cinven	THOMSON REUTERS	ptc	Trimble	THOMABRAVO
Target	ForgeRock	KnowBe4 Human error. Conquered.	ELMO	UserTesting	Benefitfocus	TaxAct	SurePrep	SERVICEMAX	TRANSPOREON	coupa
Date	10/11/22	10/12/22	10/26/22	10/27/22	11/01/22	11/01/22	11/11/22	11/17/22	12/12/22	12/12/22
Enterprise Value	\$2,252	\$4,299	\$338	\$991	\$588	\$720	\$500	\$1,458	\$1,981	\$8,000
EV / LTM Rev	11.2x	13.8x	5.4x	5.3x	2.4x	n/a	n/a	n/a	n/a	9.8x
EV / LTM EBITDA	nm	nm	nm	nm	nm	n/a	n/a	n/a	n/a	nm

Sources: Company releases, Wall Street research

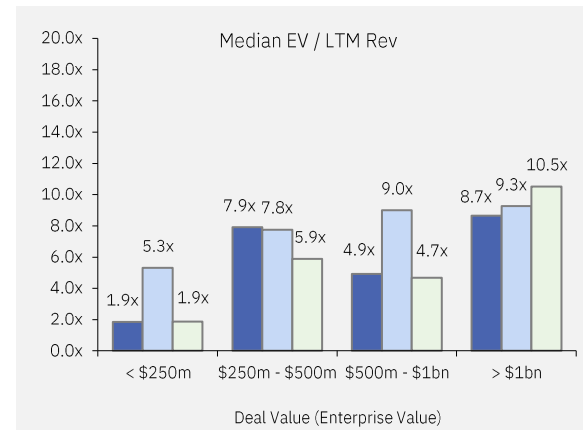
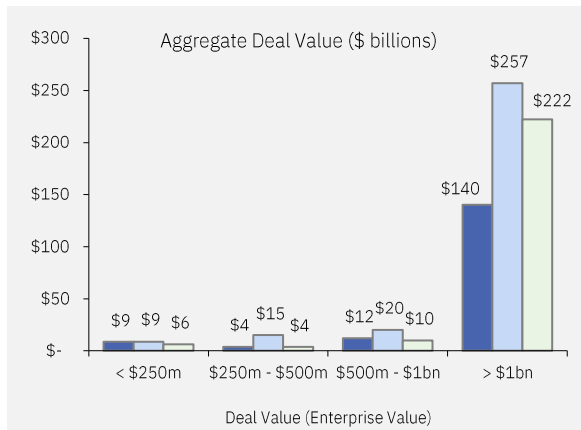
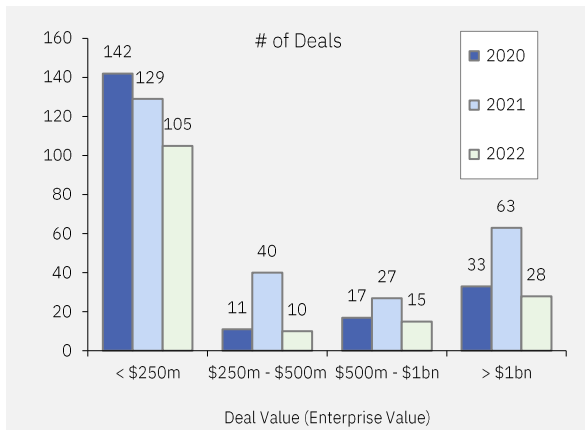
Note: EV / Revenue multiples in excess of 30x and EV / EBITDA multiples in excess of 50x or less than 0x are not considered to be meaningful

[a]: Broadcom's ~\$69Bn acquisition of VMware represents ~57% of Q2 2022 announced deal value

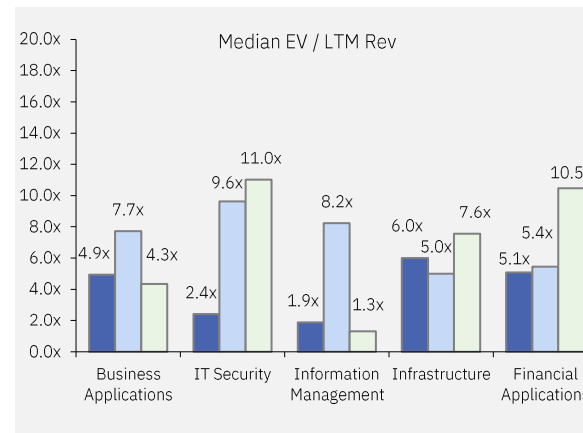
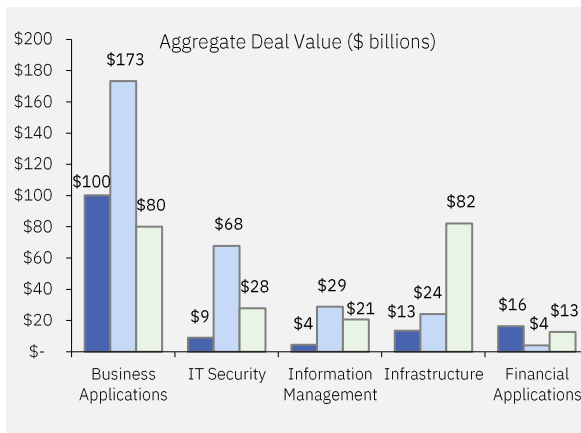
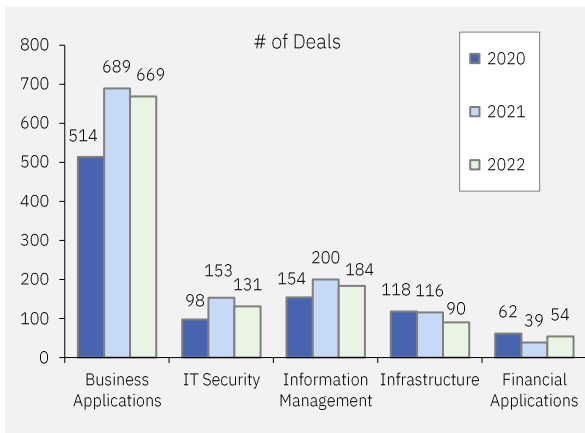
[b]: Adobe's ~\$19Bn acquisition of Figma represents ~45% of Q3 2022 announced deal value

Software Acquisitions: 3-Year Trend Analysis

By Transaction Size (2020 – 2022)



By Target Segment (2020 – 2022)



Notes:

Aggregate Deal Value only includes transactions for which data is publicly available

Business Applications includes: Advertising Technology; Communications; ERP & Business Applications; Human Capital Management; Marketing Applications; Real Estate Applications; Supply Chain Management; Technical & Embedded Applications

Information Management includes: Business Intelligence; Content Management

Infrastructure includes: Application Delivery & Network Acceleration; DevOps & Software Development Tools; IT Operations Management; Storage Management

Sources: Company releases, Wall Street research

Publicly Available Software M&A Transaction Data: Q4 2022

(\$ millions)

Announced	Target	Acquirer(s)	Consideration		Equity Value	Enterprise Value	EV / Revenue			Revenue Growth %	EV / EBITDA			EBITDA Margin %
			% Cash	% Stock			LTM	Current yr	Fwd yr		LTM	Current yr	Fwd yr	
12/28/22	SalesDirector.ai	BTC Mobility	67%	33%	-	\$1	-	-	-	-	-	-	-	-
12/22/22	A10 Group	NowVertical Group	90%	10%	-	\$6	-	-	-	-	-	-	-	-
12/16/22	FormSwift	Dropbox	100%	0%	-	\$95	-	-	-	-	-	-	-	-
12/12/22	Simpliconnect (assets)	Ackroo	84%	16%	-	\$2	-	-	-	-	-	-	-	-
12/12/22	Coupa	Thoma Bravo	100%	0%	\$6,168	\$8,000	9.8x	9.5x	8.1x	17%	nm	nm	nm	10%
12/12/22	Transporeon	Trimble	100%	0%	-	\$1,981	-	-	9.9x	-	-	-	-	-
12/09/22	CognitiveScale (assets)	Tecnotree	100%	0%	-	\$6	-	-	-	-	-	-	-	-
12/08/22	Hyros	Banzai International	-	-	-	\$110	-	-	-	-	-	-	-	-
12/01/22	Stericycle Communication Solutions	Carenet Health	100%	0%	-	\$45	-	-	-	-	-	-	-	-
11/30/22	Saab (assets)	Agilitas Private Equity	-	-	-	\$41	-	-	-	-	-	-	-	-
11/17/22	ServiceMax	PTC	100%	0%	-	\$1,458	-	-	-	-	-	-	-	-
11/17/22	Cider Security	Palo Alto Networks	100%	0%	-	\$195	-	-	-	-	-	-	-	-
11/11/22	SurePrep	Thompson Reuters	100%	0%	-	\$500	-	-	8.3x	-	-	-	-	-
11/01/22	TaxAct	Cinven	100%	0%	-	\$720	-	-	-	-	-	-	-	-
11/01/22	Integritie	enChoice	100%	0%	-	\$2	-	-	-	-	-	-	-	-
11/01/22	Benefitfocus	Voya Financial	100%	0%	-	\$588	2.4x	2.3x	2.3x	2%	nm	13.0x	13.2x	18%
10/27/22	UserTesting	Thoma Bravo, Sunstone Partners	100%	0%	\$1,139	\$991	5.3x	5.2x	4.3x	19%	nm	nm	nm	(20%)
10/26/22	Elmo Software	K1 Investment Management	100%	0%	\$311	\$338	5.4x	4.3x	2.6x	66%	nm	23.6x	12.8x	18%
10/12/22	KnowBe4	Vista Equity Partners	100%	0%	-	\$4,299	13.8x	12.9x	10.3x	25%	nm	nm	nm	18%
10/11/22	Community Data Solutions	VitalHub	100%	0%	-	\$5	2.0x	-	-	-	6.1x	-	-	-
10/11/22	ForgeRock	Thoma Bravo	100%	0%	-	\$2,252	11.2x	10.6x	8.5x	25%	nm	nm	nm	(15%)
10/10/22	Authlogics	Intercede	100%	0%	-	\$3	-	-	-	-	-	-	-	-

Notes:

EV / Revenue multiples greater than 30x and EV / EBITDA multiples greater than 50x are considered not meaningful

Includes only transactions for which data was publicly available

Sources: Company releases, Wall Street research

Announced Software Acquisitions: Q4 2022

(\$ millions)

Announced	Target	Acquirer(s)	Target Segment & Description	Price
12/29/22	Madison Logic	BC Partners	Marketing Applications - Machine learning-based B2B account-based marketing platform	n/a
12/28/22	SalesDirector.ai	BTC Mobility	Business Intelligence - AI-enabled revenue intelligence and sales data insights platform	\$1
12/27/22	Remediant	Netwrix	IT Security - Security management platform for corporations	n/a
12/27/22	Build Labs	DKS Systems	DevOps & Software Development Tools - Infrastructure management platform for immersive coding	n/a
12/22/22	A10 Group	NowVertical Group	Business Intelligence - AI- and big data-based business intelligence and analytics platform	\$6
12/21/22	SVCapture	Hamilton Exhibits	Marketing Applications - Trade show and event lead generation platform	n/a
12/21/22	DailyEndorphin (assets)	Wellable	Human Capital Management - Employee wellness management platform and mobile application	n/a
12/21/22	DOT Loves Data	Australian and New Zealand Banking Group	DevOps & Software Development Tools - AI-based data analytics platform and APIs	n/a
12/21/22	Underlie	Fintech Galaxy	Financial Applications - AI-enabled open banking platform	n/a
12/21/22	TeamDynamix	Level Equity	IT Operations Management - Enterprise work, IT service and project portfolio management platform	n/a
12/20/22	Recibo Technologies	Eazy ERP	ERP & Business Applications - AI-based sales and distribution management platform	n/a
12/20/22	Bynder	THL	ERP & Business Applications - Digital asset management platform and mobile application	n/a
12/19/22	Propay Partners	Activapayroll	Human Capital Management - Payroll and human resources management platform and mobile application	n/a
12/19/22	Acadia	London Stock Exchange Group	Financial Applications - Open-source portfolio risk management	n/a
12/19/22	Qognify	Hexagon	ERP & Business Applications - Enterprise incident management platform and mobile application	n/a
12/16/22	FormSwift	Dropbox	Content Management - Document creation and management for the legal sector	\$95
12/15/22	LearnPlatform	Instructure	Human Capital Management - Online education and learning management platform	n/a
12/14/22	Rave Mobile Safety	Motorola Solutions	Communications - Critical communication and incident collaboration platform	n/a
12/14/22	ButterCMS	Tiugo Technologies	Content Management - Content management platform and APIs	n/a
12/13/22	Livejourney	QAD	DevOps & Software Development Tools - AI-based business process mining platform	n/a
12/13/22	Pycom (assets)	Season Group	Network Infrastructure - IoT connectivity management platform	n/a
12/13/22	Versalus Health	CorroHealth	ERP & Business Applications - Healthcare analytics platform	n/a
12/12/22	Toxnot	3E	Supply Chain Management - Supply chain compliance management for manufacturers and suppliers	n/a
12/12/22	Coriolis Technologies	TradeSun	Business Intelligence - AI-enabled ESG data analytics and rating	n/a
12/12/22	Simpliconnect (assets)	Ackroo	Marketing Applications - Customer engagement and marketing application tools	\$2
12/12/22	Motus Consumer Insights	Vi Labs	Marketing Applications - AI-based member acquisition analytics, site selection and marketing intelligence	n/a
12/12/22	Illusive	Proofpoint	IT Security - Identity threat detection and response management	n/a
12/12/22	Coupa	Thoma Bravo	ERP & Business Applications - AI-based business spend management and ERP platform	\$8,000
12/12/22	Transporeon	Trimble	Supply Chain Management - E-logistics, transport management, supply chain insights and market intelligence	\$1,981
12/12/22	Crashtest Security	Veracode	IT Security - Dynamic application security testing for European businesses	n/a
12/09/22	CognitiveScale (assets)	Tecnotree	Business Intelligence - AI-based big data interpretation and analytics	\$6
12/08/22	Vizir	LumApps	Communications - AI-based no-code digital assistant and chatbot builder	n/a
12/08/22	Callstats.io	Spearline Labs	Business Intelligence - AI-enabled WebRTC monitoring and analytics	n/a
12/08/22	Hyros	Banzai International	Marketing Applications - AI-based multi-channel attribution, ad tracking and optimization	\$110
12/07/22	intentX	Ad.net	Marketing Applications - E-commerce digital content monetization and advertising	n/a
12/07/22	Fathom	Delphia	Content Management - Digital rights, data integration and relationship intelligence platform	n/a
12/07/22	SOPRISM	Audiense	Business Intelligence - Digital consumer insights and know-your-consumer intelligence platform	n/a
12/07/22	Riviera Partners	Insight Partners	Human Capital Management - AI-based executive search and recruiting	n/a
12/06/22	CaseLoad	Volari's Group	ERP & Business Applications - Case management platform and workflows for government agencies	n/a
12/06/22	Riskhandler	Applied Systems	ERP & Business Applications - Insurance risk management platform offering quoting and referral tools	n/a
12/06/22	Proven Optics	Silversmith Capital Partners	Financial Applications - Data-driven financial management platform for IT and finance businesses	n/a
12/06/22	DemandStar	GTY Technology	ERP & Business Applications - Public sector bidding management platform for government agencies	n/a
12/06/22	Prevasio	AlgoSec	IT Security - Cloud-native application protection and security platform with related APIs	n/a
12/05/22	Helpshift	Keywords Studios	Marketing Applications - AI-based customer support automation platform and mobile applications	n/a
12/02/22	Linecraft AI	Wipro Infrastructure Engineering	Business Intelligence - AI-based industrial manufacturing platform with reporting and analytics	n/a
12/01/22	GlobalTrade Corporation	Komgo	Financial Applications - Digital trade platform with automated financial reporting and documentation	n/a
12/01/22	COINS	The Access Group	Supply Chain Management - SCM platform for construction businesses with time management capabilities	n/a
12/01/22	Till	Marlette Holdings	Real Estate - Rent management platform with rent payment analytics	n/a
12/01/22	Stericycle Communication Solutions	Carenet Health	ERP & Business Applications - Patient engagement and referral management solution for the healthcare sector	\$45
12/01/22	Sellerdeck	ClearCourse	Marketing Applications - E-commerce solution for SMBs with website design and development capabilities	n/a

Sources: Company releases, Wall Street research

Announced Software Acquisitions: Q4 2022 continued

(\$ millions)

Announced	Target	Acquirer(s)	Target Segment & Description	Price
12/01/22	Global HR Research	DISA Global Solutions	Human Capital Management - Employee screening and analytics with compliance, monitoring and tracking features	n/a
12/01/22	Mistral Group	Aptean	ERP & Business Applications - ERP and CRM platform for businesses in France	n/a
12/01/22	GeoPro	Aware360	Human Capital Management - Employee check-in and safety alert monitoring solution	n/a
12/01/22	Pulse	Mozilla Corporation	Communications - AI-enabled business collaboration and productivity platform	n/a
12/01/22	Princeton TMX	The Stephens Group	Supply Chain Management - Transportation management solution with freight management and analytics	n/a
11/30/22	Saab (assets)	Agilitas Private Equity	Supply Chain Management - Maritime traffic management solutions of Saab	\$41
11/30/22	KPMG Spark	Decimal	Financial Applications - AI-based accounting management for small and medium-sized businesses	n/a
11/29/22	Nethone	MANGOPAY	IT Security - AI-based fraud prevention platform, APIs and related mobile application	n/a
11/29/22	Boxcryptor (assets)	Dropbox	IT Security - File storage and document encryption, APIs, and related mobile application	n/a
11/29/22	VisualCron	SMA Technologies	ERP & Business Applications - Process automation, integration and task scheduling platform	n/a
11/29/22	GovReady	RegScale	IT Security - Open-source cybersecurity and compliance platform	n/a
11/28/22	Sensato	CloudWave	IT Security - Cybersecurity platform, APIs and related managed cybersecurity	n/a
11/28/22	Xeeva	Simfoni	ERP & Business Applications - AI-based spend management and procurement platform	n/a
11/28/22	Kloudio	Alation	Network Infrastructure - Data processing automation platform and APIs for businesses	n/a
11/28/22	Rosette	Babel Street	Communications - AI-based text analytics platform and APIs for software vendors	n/a
11/28/22	FieldConnect	Cordance	Human Capital Management - Field service management platform and mobile application	n/a
11/28/22	Explain Everything (assets)	Promethean	ERP & Business Applications - Digital whiteboard mobile platform for businesses in the education sector	n/a
11/28/22	Titan Communications	Hazel Finn	IT Operations Management - Managed mobility platform and APIs for businesses	n/a
11/28/22	The Echo Group	Therapy Brands	Content Management - Electronic health records management platform	n/a
11/28/22	Eduspire Solutions	Securly	ERP & Business Applications - Administration and classroom management platform	n/a
11/23/22	IoThink Solutions	Wireless Logic	IT Operations Management - Industrial IoT platform, APIs and mobile applications for corporations	n/a
11/22/22	Roivenuue	ScanmarQED	Marketing Applications - Marketing attribution analytics and budget optimization	n/a
11/22/22	REVIEWS.io	AppHub	ERP & Business Applications - Review and comparison management for e-commerce businesses	n/a
11/22/22	ALPIMA	Quantifeed	Financial Applications - Financial portfolio construction, management and analytics	n/a
11/22/22	TimePlan	Main Capital Partners	Human Capital Management - Workforce management for time reporting, scheduling and communication	n/a
11/22/22	DPSI	Valsoft	ERP & Business Applications - Computerized maintenance management platform	n/a
11/22/22	Hub Planner	Monterro	Human Capital Management - HR management, scheduling, timesheets and planning solutions	n/a
11/22/22	AzurSoft	Harris Computer	IT Security - Risk management, security and health and safety solutions	n/a
11/21/22	NeoXam	Eurazeo	Financial Applications - Portfolio management for financial institutions and asset managers	n/a
11/21/22	Streamwise	Amagi	Business Intelligence - Data aggregation and reporting analytics for content distributors	n/a
11/17/22	ServiceMax	PTC	Real Estate - Cloud-based, product-focused field service management	\$1,458
11/17/22	Lexicon Travel Technologies	RedAwning	Marketing Applications - Channel marketing and revenue management platform	n/a
11/17/22	Factmata	Cision	Business Intelligence - Business intelligence platform for social and news media monitoring and analytics	n/a
11/17/22	Cider Security	Palo Alto Networks	IT Security - Application and software supply chain security management platform	\$195
11/16/22	B.fine	Regnology	Business Intelligence - AI-based regulatory reporting platform for the European financial industry	n/a
11/16/22	eversign	PDFTron Systems	Content Management - E-signature and document automation platform for legal validity and compliance	n/a
11/16/22	Truckmore	Karmak	ERP & Business Applications - Business dealership management platform for the Canadian transportation sector	n/a
11/16/22	Rented	TravelNet Solutions	Real Estate - Price optimization and rental revenue management	n/a
11/16/22	AnswerHub	IgniteTech	Human Capital Management - Knowledge management and collaboration platform to increase employee productivity	n/a
11/16/22	PingPong	Hotjar	DevOps & Software Development Tools - Remote UX testing and tester recruitment platform	n/a
11/15/22	Revegy	Dura Software	ERP & Business Applications - Sales optimization and enablement provider for relationship mapping	n/a
11/15/22	Agora	Payscale	ERP & Business Applications - Workforce compensation management and analytics platform	n/a
11/15/22	ecountabl	Climate First Bank	ERP & Business Applications - Climate and social justice, ESG data and performance management platform	n/a
11/13/22	Speakfully	HR Acuity	Human Capital Management - HR data and analytics platform providing data analysis and workforce management	n/a
11/11/22	SurePrep	Thomson Reuters	Financial Applications - AI-based tax workflow automation and outsourced tax filing	\$500
11/10/22	ListReports	MBS Highway	Real Estate - Real estate data insights and marketing automation platform	n/a
11/10/22	artegic	UNITED Marketing Technologies	Marketing Applications - Marketing automation platform featuring email marketing and E-CRM	n/a
11/10/22	ePACT	Clubessential Holdings	Content Management - Electronic health record form automation for North American businesses	n/a
11/09/22	OPTANO	Kearney	ERP & Business Applications - AI-based operations optimization and API provider	n/a
11/09/22	IPlytics	LexisNexis	Business Intelligence - AI-enabled IP market intelligence and management	n/a

Sources: Company releases, Wall Street research

Announced Software Acquisitions: Q4 2022 continued

(\$ millions)

Announced	Target	Acquirer(s)	Target Segment & Description	Price
11/09/22	Nextup.ai	Appfire	DevOps & Software Development Tools - Microsoft Teams and Slack-focused development for enterprise messaging	n/a
11/09/22	FinDox	Reorg	Content Management - Document, compliance and data management platform	n/a
11/08/22	Templarbit	BOXX Insurance	IT Security - Global AI-based cyber threat intelligence provider	n/a
11/08/22	Marketing 1B1	Sarbacane Software	Marketing Applications - AI-based customer data and services	n/a
11/08/22	Zendoc	SirionLabs	Content Management - AI-based contract automation	n/a
11/08/22	EDOIQ	KE Andrews	ERP & Business Applications - Credits and incentives project management platform	n/a
11/08/22	Inturn	Mad Street Den	ERP & Business Applications - AI-based slow-moving and excess inventory optimization and management	n/a
11/08/22	Blockthrough	Eyeo	IT Security - Anti-malware analysis and detection platform	n/a
11/08/22	Flex Applications	Visma	Human Capital Management - HRM for outsourcing services, APIs and related mobile applications	n/a
11/08/22	Area Technologies	Homeflow	Real Estate - Lead management and automation for the real estate sector	n/a
11/08/22	Fabrik Technology	Gravty Technologies	ERP & Business Applications - Alumni engagement and fundraising solutions for schools, colleges and universities	n/a
11/08/22	TwinWave Security	Splunk	IT Security - Cyber threat analysis and related APIs	n/a
11/08/22	ClearTrack Information Network	MercuryGate International	Supply Chain Management - Supply chain management platform for businesses globally	n/a
11/07/22	Napkin Technologies	Klaviyo	DevOps & Software Development Tools - Server-less cloud and APIs build, hosting and deployment management	n/a
11/07/22	Plano Group (assets)	Allegion	Human Capital Management - Advanced workforce management platform	n/a
11/07/22	Ionic	OutSystems	DevOps & Software Development Tools - Web, desktop and mobile application development	n/a
11/07/22	Equiplano Sistemas	Volaris Group	ERP & Business Applications - Public administration and management platform for government agencies	n/a
11/04/22	Disruptel	Samba TV	Content Management - AI-based content engagement and advertising management	n/a
11/03/22	Finmark	Bill.com	ERP & Business Applications - Financial planning and cash flow insights along with related APIs for SMBs	n/a
11/03/22	Cloudcraft	Datadog	Network Infrastructure - Cloud infrastructure visualization and application architecture	n/a
11/03/22	Passage Identity	1Password	IT Security - Passwordless authentication management	n/a
11/03/22	SeeQuestor	Gorilla Technology Group	Business Intelligence - AI-based video analytics platform	n/a
11/03/22	Quorbit	UKG	Human Capital Management - Strategic workforce planning platform	n/a
11/03/22	Clean.io	Human Security	IT Security - Digital engagement security platform	n/a
11/03/22	Harmari	Avenu Insights & Analytics	ERP & Business Applications - Fraud identification, monitoring and compliance for the government sector	n/a
11/03/22	Airgrid	MiQ Digital	Marketing Applications - AI-enabled privacy-first audience modeling and advertising enablement	n/a
11/02/22	Yuhu	HappyCo	Real Estate - Property operations and rental lifecycle management platform for property owners	n/a
11/02/22	Shipamax	WiseTech Global	Content Management - Data entry and document automation platform for logistics businesses globally	n/a
11/02/22	Stalice	Anonos	IT Security - AI-based data anonymization, privacy and access management platform	n/a
11/02/22	Unblu	Swiss Post	Communications - AI-based customer engagement platform with conversational and collaborative features	n/a
11/02/22	SpiderFoot	Intel 471	IT Security - Open-source cyberthreat intelligence platform with attack surface monitoring	n/a
11/02/22	SCM Connections	McKinsey & Company	Supply Chain Management - Supply chain management planning and analytics platform for businesses globally	n/a
11/02/22	Opti	Aliaxis	Business Intelligence - Cloud-based stormwater monitoring and control platform with forecasting solutions	n/a
11/01/22	DatumCloud	Initium SoftWorks	Network Infrastructure - Cloud-based platform enabling codeless, bi-directional integrations with CRMs and ERPs	n/a
11/01/22	TaxAct	Cinven	Financial Applications - Online tax filing assistance platform and related mobile applications for businesses	\$720
11/01/22	AdaptaLogix	BDO USA	ERP & Business Applications - Medical ERP platform with features including inventory management, customer billing and CRM	n/a
11/01/22	Prosmar Bunkering AS	ZeroNorth	Supply Chain Management - Bunker and freight risk management platform providing bunker monitoring and analysis	n/a
11/01/22	Pixlee TurnTo	Emplifi	Content Management - AI-enabled social media marketing and content management platform for businesses	n/a
11/01/22	Moviynt	Vuzix Corporation	ERP & Business Applications - Mobile warehouse, field services and work order management ERP platform	n/a
11/01/22	AeroDPC	Hint Health	ERP & Business Applications - Electronic medical record and practice management platform for businesses	n/a
11/01/22	ISMS Solutions	ProcessUnity	IT Security - AI-enabled enterprise security and compliance management platform	n/a
11/01/22	Integritie	enChoice	Content Management - Cloud-based content management, social media and content analytics platform	\$2
11/01/22	Benefitfocus	Voya Financial	Human Capital Management - Corporate benefits administration and analytics platform for employers	\$588
10/31/22	Remix Software	Shopify	DevOps & Software Development Tools - Open-source web development and UI platform for businesses globally	n/a
10/31/22	Rinicom Intelligent Solutions	Operational Solutions	Business Intelligence - AI-enabled video analytics platform and optical drones system with site tracking	n/a
10/28/22	Intelligo	SD Worx	Human Capital Management - Human resource and payroll management platform for businesses	n/a
10/27/22	Knowledge Based Systems	MediQuant	Business Intelligence - SQL-based data management platform with data extraction, security and analytics	n/a
10/27/22	ServiceCentral Technologies	Valsoft Corporation	Storage Management - After-sales product lifecycle, logistics, service and repair management platform	n/a
10/27/22	UserTesting	Thoma Bravo, Sunstone Partners	Marketing Applications - Video-based user experience platform with customer testing functionalities	\$991
10/27/22	Paycircle	Access People	Human Capital Management - Payroll management solution for businesses in the United Kingdom	n/a

Sources: Company releases, Wall Street research

Announced Software Acquisitions: Q4 2022

 continued

(\$ millions)

Announced	Target	Acquirer(s)	Target Segment & Description	Price
10/26/22	Elmo Software	K1 Investment Management	Human Capital Management - HR and payroll management platform with recruiting and staffing capabilities	\$338
10/26/22	SkillSurvey	iCIMS	Human Capital Management - Talent recruitment and management solutions	n/a
10/26/22	Thomson Reuters (assets)	IRIS Software	ERP & Business Applications - myPay Solutions of Thomson Reuters with payroll management and tax reporting	n/a
10/26/22	OutSmart International	Visma	ERP & Business Applications - Field service management and related mobile application	n/a
10/25/22	DealerDOCX	Docufree	Content Management - Document management solution for the automotive sector	n/a
10/25/22	Smarking	ParkHub	Real Estate - Parking analytics for real estate owners, parking operators and municipalities	n/a
10/25/22	MedTek	National Medical Billing Services	ERP & Business Applications - Revenue cycle management for the healthcare industry	n/a
10/25/22	TitleTap	ProfitSolv	Marketing Applications - Digital marketing and web design platform for attorneys and title agents in the United States	n/a
10/25/22	Fenestrae	Dura Software	Content Management - Cloud-enabled faxing and document management platform	n/a
10/25/22	Acqueon	Long Ridge Equity Partners	Marketing Applications - Omnichannel customer engagement solution	n/a
10/24/22	Boostrs (assets)	Visier	Human Capital Management - Talent development and management platform of Boostrs	n/a
10/24/22	MediaLogic	Nimonik	ERP & Business Applications - Regulatory compliance monitoring platform for businesses in Western Canada	n/a
10/24/22	Technically Creative	Reveal	Business Intelligence - AI-enabled governance and compliance platform for the financial industry	n/a
10/20/22	Cubeware	insightsoftware	Business Intelligence - Performance analytics and data management solution	n/a
10/20/22	indaHash	ArabyAds	Marketing Applications - Marketing solution with brand engagement and data analysis capabilities	n/a
10/20/22	iWave	Incline Equity Partners	ERP & Business Applications - AI-based fundraising enablement and management platform for nonprofits	n/a
10/20/22	Naborly	SingleKey	Real Estate - AI-based property management solution for landlords	n/a
10/19/22	Utmost Software	Beeline	ERP & Business Applications - Workforce and vendor management platform and open APIs	n/a
10/19/22	Noonlight	Alarm.com	ERP & Business Applications - Emergency response and safety and event management solutions, APIs and SDKs	n/a
10/19/22	Epicenter Experience	Stagwell	Marketing Applications - Consumer behavior analytics platform	n/a
10/19/22	TM3 Software	proLogistik	ERP & Business Applications - Warehouse and logistics management platform for retail companies and fulfillment providers	n/a
10/19/22	School Innovations & Achievement	SchoolStatus`	ERP & Business Applications - Real-time dashboard, time-saving workflow, compliance, privacy and security for K-12	n/a
10/18/22	Worldox	NetDocuments	Content Management - Document and email management for industries across verticals	n/a
10/18/22	ThreatSwitch	Sign In Solutions	ERP & Business Applications - Workspace security and compliance management solution	n/a
10/18/22	Pronestor	Sign In Solutions	Human Capital Management - Workspace collaboration management platform	n/a
10/18/22	IFS	Denys	ERP & Business Applications - AI-based ERP, CRM, project management, EAM and BPM solution	n/a
10/18/22	DCOYA	NINJIO	IT Security - Behavior-based cybersecurity awareness and training platform	n/a
10/18/22	Edammo	Verseon	Business Intelligence - Real-time predictive analytics solution	n/a
10/18/22	Nutshell	WebFX	Marketing Applications - CRM and email marketing platform for sales automation, contact and pipeline management	n/a
10/17/22	Suitecx	QuestionPro	Marketing Applications - CX and journey mapping and analytics platform	n/a
10/17/22	Photon Dynamics	CSI Enterprises	Financial Applications - AP automation and invoice management	n/a
10/17/22	Revv	LegalZoom.com	Content Management - Document automation, forms template and e-signature tools	n/a
10/17/22	Parkki	Aximum S.A.	ERP & Business Applications - Parking management, smart mobility sensors and related mobile application	n/a
10/13/22	Hardenize	Redsift	IT Security - Internet asset discovery and network monitoring platform	n/a
10/13/22	Sestek	Unifonic	Communications - Conversational automation and analytics platform	n/a
10/13/22	Flare Build Systems	Bitrise	DevOps & Software Development Tools - Bazel-focused build management platform	n/a
10/13/22	Pridatect	Borneo Data	Business Intelligence - Data protection and privacy compliance platform	n/a
10/13/22	Sierra Interactive	Alpine	Real Estate - Real estate CRM platform	n/a
10/13/22	Talenya	Paycor	Human Capital Management - AI-based recruitment management and talent engagement platform	n/a
10/13/22	WompMobile	DexCare	DevOps & Software Development Tools - E-commerce, online merchandising and mobile website development platform	n/a
10/12/22	Rialtas Business Solutions	Harris Computer	ERP & Business Applications - Accounting and administration management platform for local agencies	n/a
10/12/22	Applied Educational Systems	CEV Multimedia	Human Capital Management - Career and technical education curriculum management platform	n/a
10/12/22	FivePoint Solutions	Versaterm	ERP & Business Applications - Data integration and case management platform for state and local agencies	n/a
10/12/22	MARU Group	Stagwell	Marketing Applications - AI-based customer experience and data insights platform	n/a
10/12/22	Providerflow	Data Dimensions	Content Management - AI-based electronic health records platform	n/a
10/12/22	Boardgent	Auvik Networks	IT Operations Management - Device management platform providing information protection and encryption	n/a
10/12/22	Saaslio	Auvik Networks	App Delivery & Network Acceleration - Application discovery and management platform	n/a
10/12/22	Singularity Education Group (assets)	Talespin Reality Labs	Human Capital Management - AI-based and immersive learning management platform for businesses	n/a
10/12/22	Rock Solid	Granicus	ERP & Business Applications - Citizen engagement platform for government agencies	n/a
10/12/22	KnowBe4	Vista Equity Partners	IT Security - Cybersecurity awareness training and simulated phishing platform	\$4,299

Sources: Company releases, Wall Street research

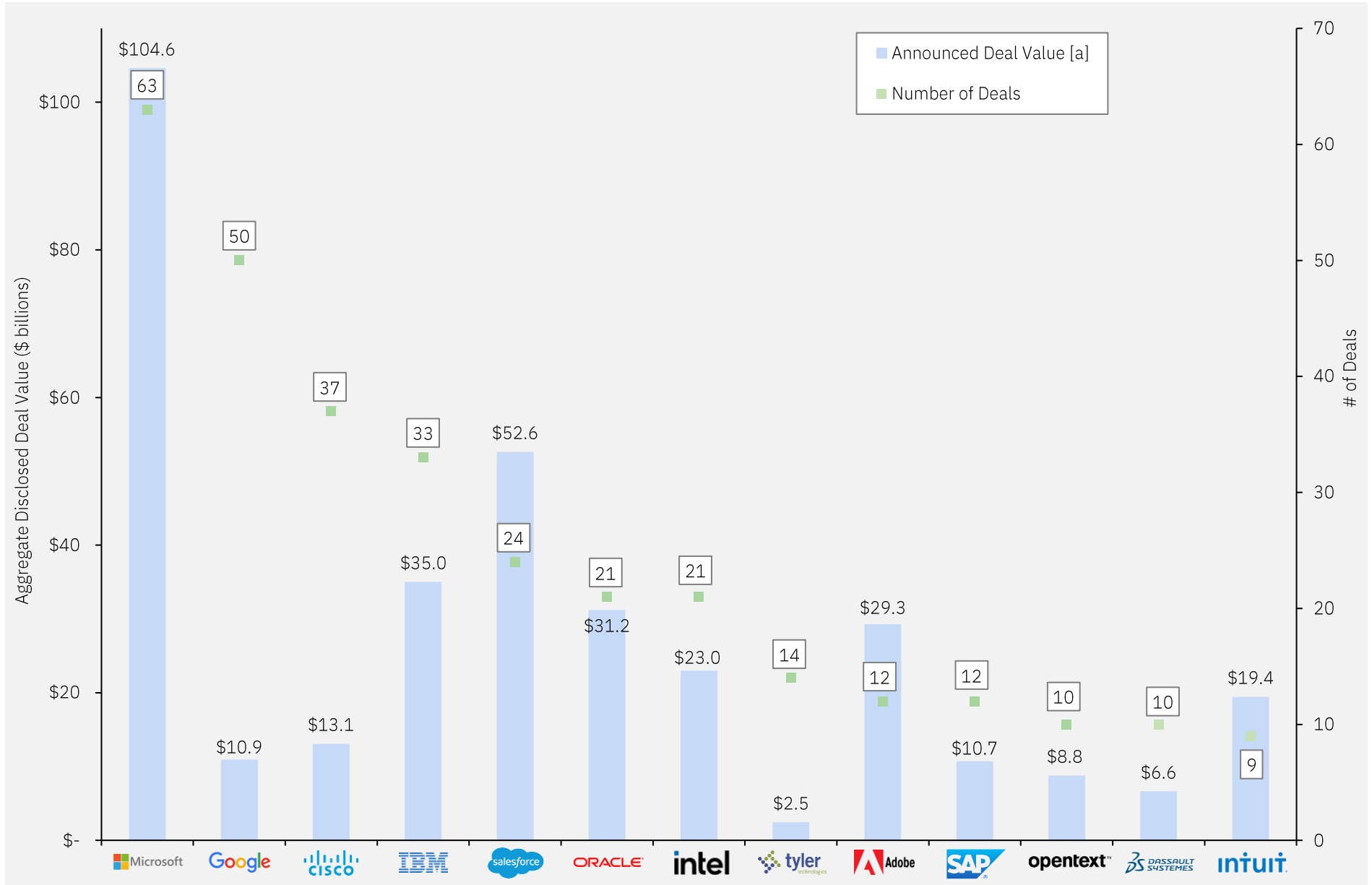
Announced Software Acquisitions: Q4 2022 continued

(\$ millions)

Announced	Target	Acquirer(s)	Target Segment & Description	Price
10/11/22	CloudMD	WELL Health Technologies	Content Management - Electronic medical record management platform	n/a
10/11/22	Zebrium	ScienceLogic	Business Intelligence - AI-based automatic root cause analysis platform	n/a
10/11/22	StoCastic	Beckman Coulter Life Sciences	ERP & Business Applications - AI and evidence-based decision support management for healthcare businesses	n/a
10/11/22	Workterra	Businessolver	Human Capital Management - HR benefits administration and enrollment platform	n/a
10/11/22	Networx	IRIS Software	Human Capital Management - Applicant tracking and recruitment management for businesses in the UK	n/a
10/11/22	Planimetron	Yardi	Real Estate - Space management platform for commercial and corporate real estate	n/a
10/11/22	AccuSystems	Alogent	Content Management - Document imaging and tracking for businesses in the financial industry	n/a
10/11/22	KMP Digitata	SP Plus	ERP & Business Applications - Online booking for parking and other travel services	n/a
10/11/22	Rummel Software	STP Group	ERP & Business Applications - Legal office, document, bankruptcy and insolvency management platform	n/a
10/11/22	Basketful	SmartCommerce	Marketing Applications - In-context e-commerce optimization and analytics platform and mobile application	n/a
10/11/22	Community Data Solutions	VitalHub	ERP & Business Applications - CRM and case management for non-profit and community service organizations	\$5
10/11/22	ForgeRock	Thoma Bravo	IT Security - AI-based digital identity and access management	\$2,252
10/11/22	Certified Tracking Solutions	GPS Insight	Supply Chain Management - AI-based GPS tracking fleet management	n/a
10/10/22	Authlogics	Intercede	IT Security - Multi factor authentication and password security management	\$3
10/10/22	Learning Nexus	AdviserPlus	Human Capital Management - Learning management solutions for private, public and non-profit organizations	n/a
10/07/22	Beeple	Visma	Human Capital Management - Workforce scheduling and management platform and mobile application	n/a
10/07/22	ES Tech Group	ECI Software Solutions	Marketing Applications - E-commerce management for manufacturers and distributors	n/a
10/07/22	DevSkills	Alva Labs	Human Capital Management - Talent assessment and management for developers	n/a
10/06/22	SwiftMotion	Ninth Street Capital Partners	ERP & Business Applications - Image and video-based ergonomic and safety risk assessments for employees	n/a
10/05/22	InterTrade	SPS Commerce	Supply Chain Management - SCM collaboration platform for retail, healthcare, food and automotive sectors	n/a
10/05/22	Era Software	ServiceNow	Network Infrastructure - AI-enabled Kubernetes-based log management	n/a
10/05/22	Kinzen	Spotify	IT Security - AI-based online cybersecurity and threats management	n/a
10/05/22	Epoq	AB Tasty	Marketing Applications - AI-based e-commerce personalization platform	n/a
10/04/22	Blue Hexagon	Qualys	IT Security - AI-based threat detection and response management	n/a
10/04/22	Material Intellect	Corsair M360	Business Intelligence - AI-based structured and unstructured data analytics platform	n/a
10/04/22	Bluecrew	EmployBridge	Human Capital Management - AI-based labor and workforce management	n/a
10/04/22	Shipup	Global Blue	Marketing Applications - AI-based e-commerce post purchase CRM platform	n/a
10/04/22	Blue	Generac Power	DevOps & Software Development Tools - Industrial IoT network management and platform developer	n/a
10/04/22	eFlex Systems	Epicor Software	Supply Chain Management - Manufacturing execution system and process control IoT platform	n/a
10/04/22	Sensibill	Q2	Financial Applications - AI-based expense management platform	n/a
10/04/22	DoiT Software	March	Business Intelligence - AI- and big data-based business analytics platform	n/a
10/04/22	Myxx	SmartCommerce	Marketing Applications - Omnichannel marketing and e-commerce management	n/a
10/04/22	Bluecity	Velodyne Lidar	ERP & Business Applications - AI-based real time traffic monitoring and analytics	n/a
10/04/22	Structural	Augeo	Human Capital Management - Employee engagement, people directory and internal opportunity marketplace for enterprises	n/a
10/04/22	iOFFICE	Condeco Software	Real Estate - Facilities and workplace management with space planning capabilities	n/a
10/04/22	Kapstone	iC Consult	IT Security - Identity and access management for complete cloud security program lifecycle	n/a
10/03/22	bswift	Francisco Partners	Human Capital Management - Employee benefits management	n/a
10/03/22	SafetySkills	HSI	Human Capital Management - EHS training platform for businesses globally	n/a
10/03/22	Saasu	OWNA	Financial Applications - Online accounting management	n/a

Sources: Company releases, Wall Street research

Most Active Strategic Acquirers: 2017 – 2022



[a] Includes only transactions for which data is publicly available

Most Active Strategic Software Acquirers

2017 – 2022 (\$ millions)

Announced	Target	Consideration		Equity Value	Enterprise Value	Announced	Target	Consideration		Equity Value	Enterprise Value		
		% Cash	% Stock					% Cash	% Stock				
Adobe						Cisco (continued)							
		Known acquired value (since 2017):						Known acquired value (since 2017):					
09/15/22	Figma	50%	50%	-	\$19,411	08/21/17	Springpath	100%	0%	-	\$320		
12/08/21	ContentCal	-	-	-	-	07/13/17	Observable Networks	-	-	-	-		
08/19/21	Frame.io	100%	0%	-	\$1,275	05/11/17	MindMeld	-	-	-	\$125		
11/09/20	Workfront	100%	0%	-	\$1,500	05/04/17	Saggezza (assets)	-	-	-	-		
12/06/19	Oculus Medium	-	-	-	-	05/01/17	Viptela	100%	0%	-	\$610		
01/23/19	Allegorithmic	100%	0%	-	\$105	01/24/17	AppDynamics	100%	0%	\$3,700	\$3,593		
09/20/18	Marketo	100%	0%	-	\$4,750	Dassault Systemes							
05/21/18	Magento	-	-	-	\$1,680	Known acquired value (since 2017):				\$6,643			
04/27/18	Uru	-	-	-	-	11/30/21	Armonica Retail	-	-	-	-		
04/16/18	Sayspring	-	-	-	-	11/25/20	NuoDB	-	-	-	-		
10/18/17	KyleBrush	-	-	-	-	07/23/20	Proxem	-	-	-	-		
06/21/17	Mettle	-	-	-	-	06/12/19	Medidata Solutions	100%	0%	\$5,744	\$5,818		
Cisco						Google							
		Known acquired value (since 2017):				\$13,068			Known acquired value (since 2017):				\$10,948
01/28/22	Opsani	-	-	-	-	06/14/18	Centric Software	-	-	-	-		
10/25/21	replex	-	-	-	-	10/25/17	No Magic	-	-	-	-		
08/13/21	Epsagon	-	-	-	-	09/28/17	Exa Corporation	100%	0%	-	\$400		
05/14/21	Kenna Security	-	-	-	-	06/20/17	Outscale	-	-	-	-		
05/12/21	Socio Labs	-	-	-	-	06/12/17	AITAC	-	-	-	-		
05/11/21	Sedonasys Systems	-	-	-	-	IBM							
12/22/20	Dashbase	-	-	-	-	06/14/18	Centric Software	-	-	-	-		
12/07/20	Slido	-	-	-	-	10/25/17	No Magic	-	-	-	-		
12/06/20	IMImobile	100%	0%	-	\$710	09/28/17	Exa Corporation	100%	0%	-	\$400		
11/16/20	Banzai Cloud (assets)	-	-	-	-	06/20/17	Outscale	-	-	-	-		
10/01/20	Portshift	-	-	-	-	06/12/17	AITAC	-	-	-	-		
08/25/20	BabbleLabs	-	-	-	-	Intel							
08/03/20	Modcam	-	-	-	-	04/29/22	MobiledgeX	-	-	-	-		
05/28/20	ThousandEyes	-	-	-	-	03/16/22	Raxium	-	-	-	-		
04/06/20	Fluidmesh Networks	-	-	-	-	03/08/22	Mandiant	100%	0%	\$5,400	\$5,326		
12/16/19	Exablaze	-	-	-	-	01/04/22	Siemplify	-	-	-	-		
08/26/19	CloudCherry	-	-	-	-	11/17/21	Tempow	-	-	-	-		
08/12/19	42hertz	-	-	-	-	10/20/21	CompilerWorks	-	-	-	-		
08/06/19	Voicea	-	-	-	-	09/03/21	Playspace	-	-	-	-		
07/09/19	Acacia Communications	100%	0%	\$2,840	\$2,530	12/14/20	Dysonics Corporation	-	-	-	-		
06/06/19	Sentryo	-	-	-	-	12/11/20	Neverware	-	-	-	-		
01/30/19	Singularity Networks	-	-	-	-	12/07/20	Dataform	-	-	-	-		
12/18/18	Luxtera	-	-	-	\$660	12/02/20	Actifio	-	-	-	-		
11/21/18	Ensoft	-	-	-	-	08/24/20	StratoZone	-	-	-	-		
08/02/18	Duo Security	100%	0%	-	\$2,350	06/30/20	North Inc	-	-	-	-		
06/19/18	July Systems	-	-	-	-	02/19/20	Cornerstone Technology	-	-	-	-		
05/01/18	Accompany	100%	0%	-	\$270	01/14/20	Pomo Search	-	-	-	-		
01/24/18	Skyport Systems	-	-	-	-	01/14/20	AppSheet	-	-	-	-		
12/07/17	47Line Technologies	-	-	-	-	12/19/19	Typhoon Studios	-	-	-	-		
10/23/17	BroadSoft	100%	0%	\$1,737	\$1,900	11/18/19	CloudSimple	-	-	-	-		
10/19/17	Perspica	-	-	-	-	11/01/19	Fitbit	100%	0%	-	\$1,824		
						10/25/19	Zya	-	-	-	-		
						08/15/19	Socratic	-	-	-	-		
						07/09/19	Elastifile	-	-	-	-		
						06/06/19	Looker	-	-	-	\$2,600		
						02/19/19	Alooma	-	-	-	-		
						01/17/19	Fossil Group	-	-	-	\$40		

Note: "Known acquired value" includes only transactions for which data is publicly available

"Most Active Strategic Software Acquirers" are defined as diversified software vendors that have made 8+ acquisitions with a known acquired value >\$2.5Bn in the past 5 years

continued

Adobe

Cisco

Dassault Systemes

Google

IBM

Intel

Intuit

Microsoft

OpenText

Oracle

Salesforce.com

SAP

Tyler Technologies

Most Active Strategic Software Acquirers continued

2017 – 2022 (\$ millions)

Announced	Target	Consideration		Equity Value	Enterprise Value	Announced	Target	Consideration		Equity Value	Enterprise Value
		% Cash	% Stock					% Cash	% Stock		
Google (continued)						IBM (continued)					
01/03/19	SuperPod	-	-	-	-	12/21/20	Nordcloud Oy	-	-	-	-
12/20/18	DevOps Research and Assessment	-	-	-	\$9	12/15/20	Expertus Technologies	-	-	-	-
12/10/18	Sigmoid Labs Private	-	-	-	-	11/18/20	Instana	-	-	-	-
11/27/18	cwist	-	-	-	-	11/16/20	TruQua Enterprises	-	-	-	-
10/02/18	Terraform Labs	-	-	-	-	07/08/20	WDG Automation	-	-	-	-
08/06/18	GraphicsFuzz	-	-	-	-	06/05/20	Spanugo	-	-	-	-
07/11/18	LucidLogix	-	-	-	-	01/11/19	Deutsche Telekom (T-Systems)	-	-	-	\$986
05/14/18	Cask Data	-	-	-	-	10/28/18	Red Hat	100%	0%	\$33,435	\$34,026
05/09/18	Velostrata	-	-	-	-	06/15/18	Oniqua	-	-	-	-
03/27/18	Tenor	-	-	-	-	05/03/18	Armanta	-	-	-	-
03/21/18	Lytro	-	-	-	-	10/04/17	Vivant Digital	-	-	-	-
02/15/18	Xively	-	-	-	\$50	09/14/17	Cloudigo	-	-	-	-
12/13/17	NVF Tech	-	-	-	-	05/31/17	TIMETOACT GROUP	100%	0%	-	\$3
10/10/17	Tiny Garage	-	-	-	-	05/02/17	Verizon (assets)	-	-	-	-
10/10/17	Relay Media	-	-	-	-	01/23/17	Agile 3 Solutions	100%	0%	-	\$14
09/26/17	Bitium	-	-	-	-	Intel Known acquired value (since 2017):					\$23,000
09/20/17	HTC Corporation	100%	0%	-	\$1,100	06/01/22	Codeplay	-	-	-	-
08/17/17	ANIMATTER	-	-	-	-	05/03/22	Siru Innovations	-	-	-	-
08/14/17	Senosis Health	-	-	-	-	04/12/22	Ananki	-	-	-	-
07/11/17	Halli Labs	-	-	-	-	03/31/22	Granulate	-	-	-	-
05/10/17	Owlchemy	-	-	-	-	02/23/22	Linutronix	-	-	-	-
03/09/17	AppBridge	-	-	-	-	02/15/22	Tower Semiconductor	100%	0%	\$5,736	\$5,400
03/08/17	Kaggle	-	-	-	-	12/06/21	Screenovate	-	-	-	-
01/18/17	Twitter (Fabric assets)	-	-	-	-	11/09/21	RemoteMyApp	-	-	-	-
01/05/17	Limes Audio	-	-	-	-	11/04/21	Centaur Technology (assets)	-	-	-	-
IBM Known acquired value (since 2017):						\$37,085	10/29/20	SigOpt	-	-	-
06/06/22	Randori	-	-	-	-	05/20/20	Rivet Networks	-	-	-	-
02/15/22	Neudesic	-	-	-	-	05/04/20	Moovit	100%	0%	-	\$900
02/01/22	Sentaca Consulting	-	-	-	-	12/16/19	Habana Labs	100%	0%	-	\$2,000
01/11/22	Envizi	-	-	-	-	10/15/19	Smart-edge	-	-	-	-
11/30/21	SXiQ	-	-	-	-	06/10/19	Barefoot	-	-	-	-
11/08/21	Phlyt	-	-	-	-	04/16/19	Omnitek	-	-	-	-
11/02/21	ReaQta	-	-	-	-	02/18/19	Ineda Systems	-	-	-	-
10/27/21	McD Tech Labs	-	-	-	-	09/10/18	NetSpeed Systems	-	-	-	-
10/19/21	Volta Networks	-	-	-	-	08/16/18	Vertex.AI	-	-	-	-
10/19/21	Rego Consulting	-	-	-	-	07/12/18	eASIC	-	-	-	-
07/15/21	Bluetab	-	-	-	-	03/13/17	Mobileye	100%	0%	-	\$14,700
07/08/21	BoxBoat Technologies	-	-	-	-	Intuit Known acquired value (since 2017):					\$19,440
05/25/21	Catalogic	-	-	-	-	09/13/21	Mailchimp	49%	51%	-	\$12,000
05/18/21	Waeg BVBA	-	-	-	\$61	02/03/21	OneSaas	-	-	-	-
04/29/21	Turbonomic	-	-	-	\$1,995	08/03/20	TradeGecko	-	-	-	-
04/15/21	myInvenio	-	-	-	-	02/24/20	Credit Karma	50%	50%	-	\$7,100
01/14/21	Taos Mountain	-	-	-	-	11/18/19	Chronobooks	-	-	-	-
01/11/21	7Summits	-	-	-	-						

Note: "Known acquired value" includes only transactions for which data is publicly available

"Most Active Strategic Software Acquirers" are defined as diversified software vendors that have made 8+ acquisitions with a known acquired value >\$2.5Bn in the past 5 years

continued

Adobe

Cisco

Dassault Systemes

Google

IBM

Intel

Intuit

Microsoft

OpenText

Oracle

Salesforce.com

SAP

Tyler Technologies

Most Active Strategic Software Acquirers continued

2017 – 2022 (\$ millions)

Announced	Target	Consideration		Equity Value	Enterprise Value	Announced	Target	Consideration		Equity Value	Enterprise Value	
		% Cash	% Stock					% Cash	% Stock			
Intuit (continued)						Microsoft (continued)						
05/28/19	Origami Logic	-	-	-	-	11/14/18	XOXCO	-	-	-	-	
01/29/18	Applatix	-	-	-	-	11/12/18	InXile Entertainment	-	-	-	-	
12/05/17	TSheets	100%	0%	-	\$340	11/10/18	Obsidian	-	-	-	-	
10/26/17	Exactor	-	-	-	-	10/08/18	Glint	-	-	-	-	
Microsoft						Microsoft						
					Known acquired value (since 2017):						Known acquired value (since 2017):	
					\$104,607						\$104,607	
06/14/22	Miburo	-	-	-	-	06/20/18	Bonsai AI	-	-	-	-	
03/31/22	Minit	-	-	-	-	06/18/18	Flipgrid	-	-	-	-	
01/18/22	Activision Blizzard	100%	0%	\$74,010	\$68,700	06/10/18	Playground Games	-	-	-	-	
12/21/21	Xandr	-	-	-	-	06/04/18	GitHub	0%	100%	-	\$7,500	
10/29/21	Two Hat	-	-	-	-	05/20/18	Semantics Machines	-	-	-	-	
10/22/21	Clear Software	-	-	-	-	04/02/18	Forerunner Software (BI reporting assets)	-	-	-	-	
10/07/21	Ally.io	-	-	-	-	02/13/18	Chalkup	-	-	-	-	
09/10/21	TakeLessons	-	-	-	-	01/29/18	PlayFab	100%	0%	-	-	
09/07/21	Clipchamp	-	-	-	-	01/03/18	Avere Systems	-	-	-	-	
08/11/21	Peer5	-	-	-	-	11/06/17	Swing Technologies (assets)	-	-	-	-	
07/28/21	Suplari	-	-	-	\$60	10/03/17	AltspacVR	-	-	-	-	
07/21/21	CloudKnox	-	-	-	\$200	08/15/17	Cycle Computing	-	-	-	-	
07/12/21	RiskIQ	-	-	-	\$650	06/29/17	Cloudyn	100%	0%	-	-	
06/02/21	ReFirm Labs	-	-	-	-	05/30/17	Heighten Software (assets)	-	-	-	-	
04/29/21	Kinvolk	-	-	-	-	05/24/17	Hexadite	-	-	-	\$100	
04/12/21	Nuance Communications	100%	0%	\$19,700	\$19,897	04/18/17	Intentional Software	-	-	-	-	
03/16/21	The Marsden Group	-	-	-	-	04/10/17	Deis	-	-	-	-	
12/02/20	Smashgg	-	-	-	-	01/17/17	Donya Labs	-	-	-	-	
09/21/20	ZeniMax	100%	0%	-	\$7,500	01/13/17	Maluuba	-	-	-	-	
07/07/20	Orions Digital Systems	-	-	-	-	OpenText					Known acquired value (since 2017):	\$8,794
06/22/20	CyberX	-	-	-	-	08/25/22	Micro Focus	100%	0%	\$2,192	\$5,880	
06/18/20	ADRM Software	-	-	-	-	11/24/21	Bricata	-	-	-	-	
05/19/20	Softomotive	-	-	-	-	11/08/21	Zix	100%	0%	-	\$860	
05/14/20	Metaswitch Networks	-	-	-	-	03/09/20	XMedius Solutions	100%	0%	-	\$75	
03/26/20	Affirmed Networks	-	-	-	-	11/11/19	Carbonite	100%	0%	\$805	\$1,297	
03/16/20	npm	-	-	-	-	01/31/19	Catalyst Repository Systems	100%	0%	-	\$75	
10/21/19	Mover	-	-	-	-	10/31/18	Liaison Technologies	100%	0%	-	\$310	
09/18/19	Semmlle	-	-	-	-	02/14/18	Hightail	100%	0%	-	-	
09/04/19	Movere	-	-	-	-	07/26/17	Guidance Software	100%	0%	\$240	\$222	
08/19/19	JClarity	-	-	-	-	06/05/17	Covisint	100%	0%	-	\$75	
08/05/19	PromoteIQ	-	-	-	-	Oracle					Known acquired value (since 2017):	\$31,203
07/29/19	BlueTalon	-	-	-	-	12/20/21	Cerner	100%	0%	\$28,300	\$29,678	
06/17/19	Good Software	-	-	-	-	06/25/21	GloriaFood Tech	-	-	-	-	
06/09/19	Double Fine Productions	-	-	-	-	11/18/20	Nor1	-	-	-	-	
05/28/19	Drawbridge	-	-	-	-	05/06/20	Sauce Video	-	-	-	-	
04/18/19	Express Logic	-	-	-	-	10/02/19	CrowdTwist	100%	0%	-	-	
02/04/19	BrightBytes	-	-	-	-	07/11/19	Speak Ai	-	-	-	-	
01/24/19	Citus Data	-	-	-	-	06/26/19	Oxygen Systems	-	-	-	-	
11/19/18	FSLogix	-	-	-	-							

Note: "Known acquired value" includes only transactions for which data is publicly available

"Most Active Strategic Software Acquirers" are defined as diversified software vendors that have made 8+ acquisitions with a known acquired value >\$2.5Bn in the past 5 years

continued

Adobe

Cisco

Dassault Systemes

Google

IBM

Intel

Intuit

Microsoft

OpenText

Oracle

Salesforce.com

SAP

Tyler Technologies

Most Active Strategic Software Acquirers continued

2017 – 2022 (\$ millions)

Announced	Target	Consideration		Equity Value	Enterprise Value	Announced	Target	Consideration		Equity Value	Enterprise Value		
		% Cash	% Stock					% Cash	% Stock				
Oracle (continued)						SAP (continued)						Adobe	
11/15/18	Talari Networks	-	-	-	-	02/11/21	AppGyver	-	-	-	-		
10/22/18	DataFox	-	-	-	-	01/27/21	Signavio	-	-	-	-	Cisco	
10/17/18	goBalto	-	-	-	-	10/01/20	Emarsys	-	-	-	-		
09/25/18	Iridize	-	-	-	-	11/19/18	Contextor	-	-	-	-		
05/16/18	Datascience	-	-	-	-	11/11/18	Qualtrics	100%	0%	-	\$8,000	Dassault Systemes	
04/30/18	Vocado	-	-	-	-	06/05/18	Coresystems	-	-	-	-		
04/24/18	Grapeshot	-	-	-	\$325	01/30/18	CallidusCloud	100%	0%	-	\$2,400		
04/10/18	Sparkline Data	-	-	-	-	01/22/18	Recast.AI SAS	-	-	-	-		
02/15/18	Zenedge	-	-	-	-	09/24/17	Gigya	-	-	-	\$325	Google	
12/17/17	Aconex	100%	0%	-	\$1,200	Tyler Technologies Known acquired value (since 2017):					\$2,471		
04/18/17	Moat	-	-	-	-	02/08/22	US eDIRECT	-	-	-	-		
04/17/17	Wercker US	-	-	-	-	09/09/21	Arx Solutions	-	-	-	-	IBM	
03/13/17	Webtrends (marketing analytics assets)	-	-	-	-	06/03/21	VendEngine	100%	0%	-	\$84		
01/19/17	Apiary	-	-	-	-	04/05/21	ReadySub	-	-	-	-		
Salesforce.com Known acquired value (since 2017):						\$52,637	03/31/21	DataSpec	-	-	-	-	
05/09/22	Troops	-	-	-	-	02/10/21	NIC	100%	0%	\$2,277	\$2,040	Intel	
02/25/22	Traction on Demand	-	-	-	-	10/30/19	Courthouse Technologies	-	-	-	-		
02/02/22	Atonit	-	-	-	-	02/07/19	Civic	-	-	-	-		
11/15/21	Narrative Science	-	-	-	-	02/01/19	MicroPact	100%	0%	-	\$185		
09/24/21	LevelJump	-	-	-	-	12/10/18	SceneDoc	-	-	-	-	Intuit	
09/13/21	Lintao	-	-	-	-	10/01/18	TradeMaster	100%	0%	-	\$5		
08/02/21	Servicetree	-	-	-	-	09/04/18	CaseloadPRO	-	-	-	-		
12/01/20	Acumen Solutions	-	-	-	-	04/18/18	Socrata	100%	0%	-	\$150		
12/01/20	Slack	58%	42%	\$28,445	\$27,945	05/30/17	Modria	100%	0%	-	\$7	Microsoft	
09/04/20	Mobify	-	-	-	-								
03/02/20	C Level Club	-	-	-	-								
02/25/20	Vlocity	100%	0%	-	\$1,330								
02/03/20	Evergage	-	-	-	-								
08/07/19	ClickSoftware	-	-	-	\$1,350								
06/10/19	Tableau	0%	100%	\$15,080	\$14,579								
05/06/19	Bonobo	-	-	-	-								
04/17/19	MapAnything	-	-	-	-								
01/28/19	Griddable.io	-	-	-	-								
10/05/18	Rebel	-	-	-	-								
07/16/18	Datorama	16%	84%	\$744	\$726								
03/20/18	MuleSoft	80%	20%	\$6,580	\$6,500								
03/12/18	CloudCraze	-	-	-	\$182								
01/08/18	Attic Labs	-	-	-	-								
01/24/17	Sequence	-	-	-	\$26								
SAP Known acquired value (since 2017):						\$10,725							
07/21/22	Askdata	-	-	-	-								
01/27/22	Taulia	-	-	-	-								
08/16/21	SwoopTalent	-	-	-	-								

Note: "Known acquired value" includes only transactions for which data is publicly available

"Most Active Strategic Software Acquirers" are defined as diversified software vendors that have made 8+ acquisitions with a known acquired value >\$2.5Bn in the past 5 years

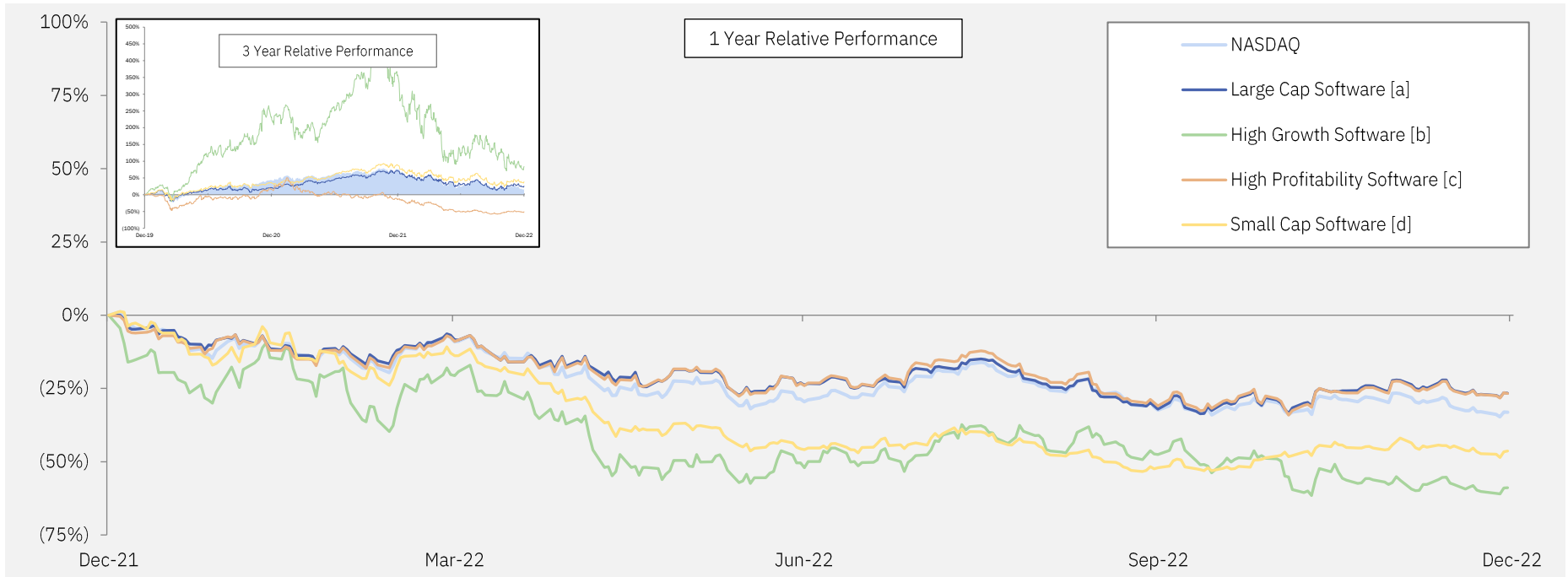
Agenda

M&A Activity

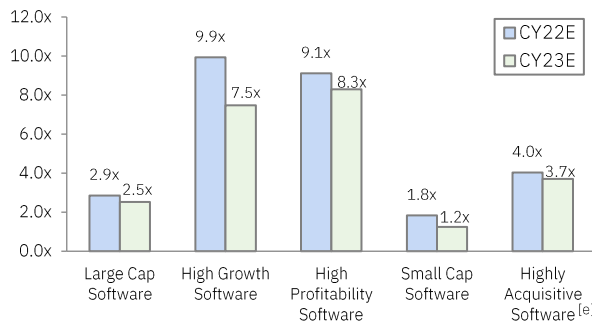
—————> **Public Equity Market Valuations**

Equity Financing Activity

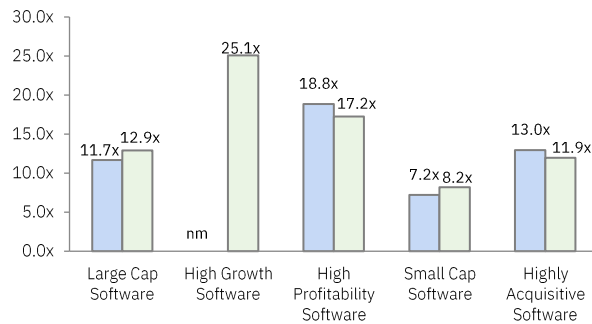
LTM Relative Performance of Shea & Company Software Indices



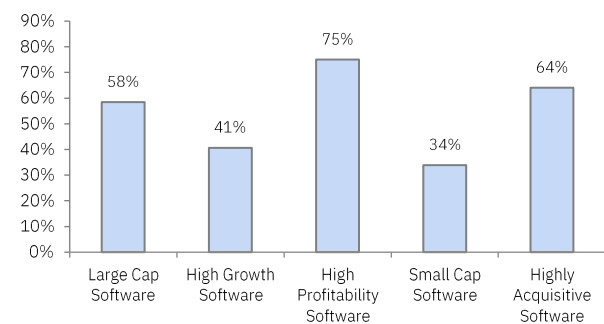
Median EV / Revenue



Median EV / EBITDA



Median % of 52 Week High



Note: EV / EBITDA multiples in excess of 50x or less than 0x and EV / Revenue in excess of 30x or less than 0x are considered not meaningful

Sources: Company releases, Wall Street research

[a] Large Cap Software includes: MSFT, ORCL, CSCO, INTC, IBM, SAP, HPE, MCRO

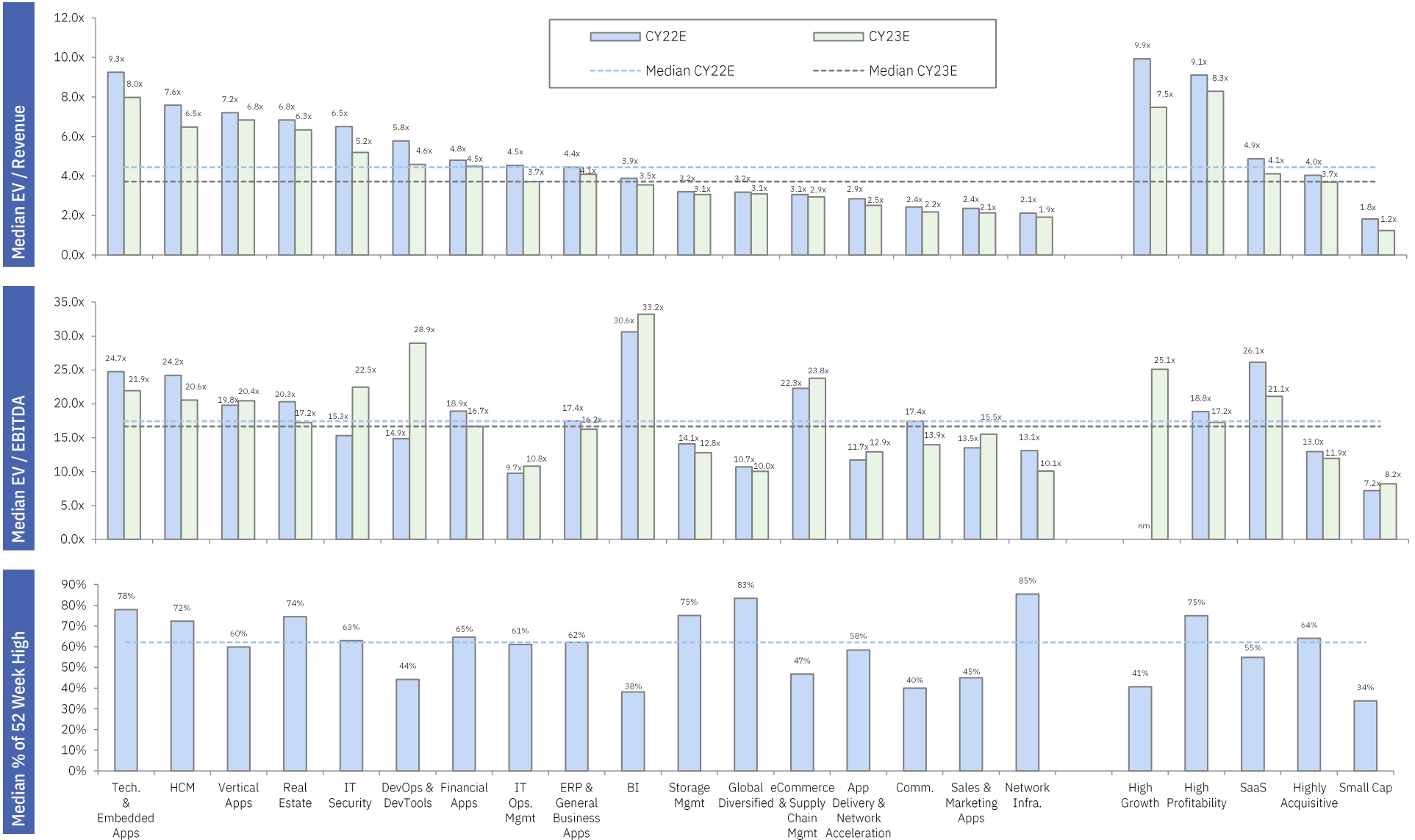
[b] High Growth Software includes: ASPS, S, SNOW, GLBE, FOUR, DDOG, BILL, NET, CFLT, CRWD, MNDY, DCBO, ZS

[c] High Profitability Software includes: RMV, VRSN, MSCI, NLOK, AZPN, PRGS, MSFT, BKI, ADBE, ORCL, FICO, TEMN, CHKP, ANSS, FIS, DSGX, PAYX, AKAM, FISV, CDNS, SWI, ZI, TNE, QLYS, PAYC, ROP

[d] Small Cap Software includes: VERI, DHX, ASPS, BLZE, ASUR, SNCR

[e] Highly Acquisitive Software includes: MSFT, GOOGL, CSCO, ORCL, ADBE, CRM, INTC, INTU, IBM, SAP, DSY, OTEX

Price Performance and Valuation Metrics by Segment



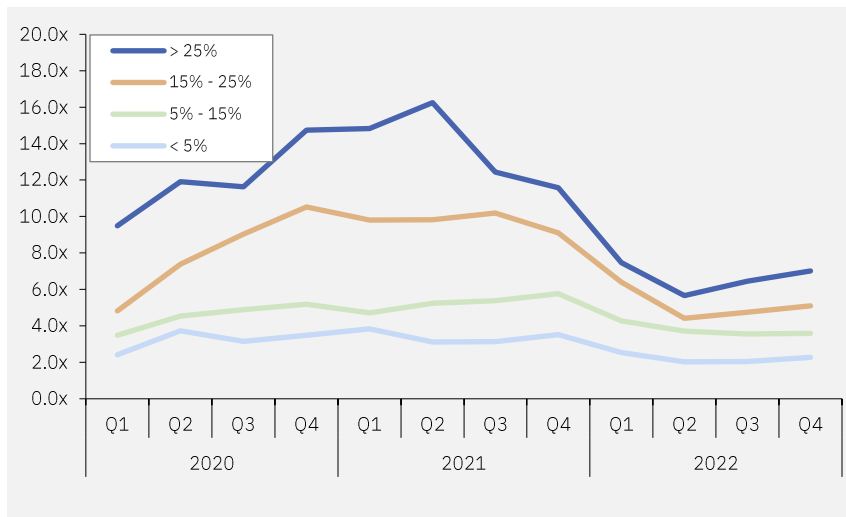
Note: EV / EBITDA multiples in excess of 50x or less than 0x and EV / Revenue multiples in excess of 30x or less than 0x are considered not meaningful
Sources: Company releases, Wall Street research

Equity Trading Multiples by Growth Tranche

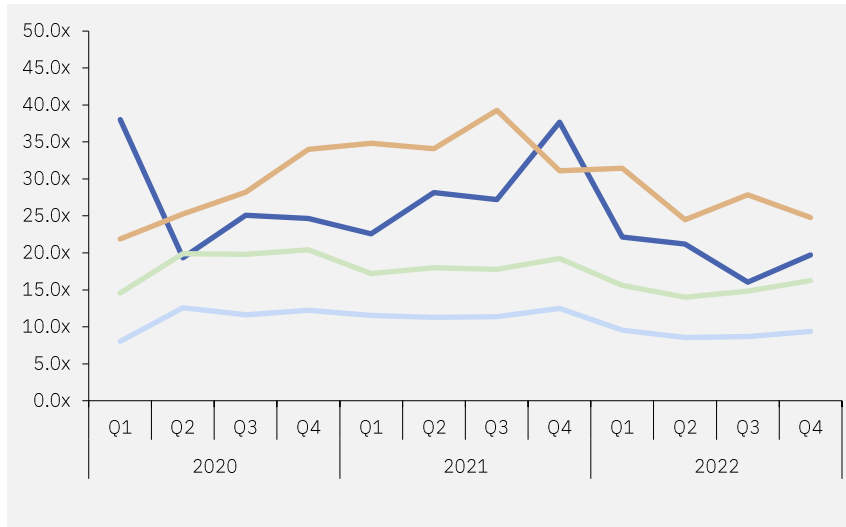
Market Valuations of Publicly Traded Software Companies by Growth Tranche

Revenue Growth	Date	EV / Revenue				EV / EBITDA			
		Current Year		Forward Year		Current Year		Forward Year	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median
< 5%	Q4 2022	2.8 x	2.3 x	2.8 x	2.3 x	11.3 x	9.7 x	11.4 x	9.4 x
	Q3 2022	2.7	2.0	2.6	2.0	9.5	8.3	10.8	8.7
	Q2 2022	2.9	2.1	2.8	2.0	9.2	8.8	11.0	8.6
	Q1 2022	2.9	2.7	2.8	2.5	9.9	10.2	9.4	9.6
	Q4 2021	3.9	3.7	3.8	3.5	13.0	12.5	13.9	12.5
	Q3 2021	4.1	3.1	4.0	3.1	11.6	11.7	11.3	11.4
	Q2 2021	4.4	3.3	4.3	3.1	13.0	11.7	12.4	11.3
	Q1 2021	3.9	3.9	3.8	3.8	14.0	11.5	13.0	11.5
	Q4 2020	4.4	3.5	4.3	3.5	14.7	12.6	14.7	12.2
	Q3 2020	3.6	3.2	3.5	3.1	11.9	11.4	11.9	11.6
Q2 2020	4.3	3.8	4.1	3.7	14.2	12.9	14.0	12.6	
Q1 2020	2.8	2.4	2.7	2.4	10.2	8.9	8.9	8.0	
5% - 15%	Q4 2022	5.1 x	4.0 x	4.7 x	3.6 x	19.7 x	18.0 x	18.4 x	16.3 x
	Q3 2022	4.8	4.0	4.4	3.6	17.8	16.1	15.5	14.8
	Q2 2022	5.0	4.1	4.5	3.7	16.5	16.0	14.5	14.0
	Q1 2022	6.4	4.8	5.8	4.3	20.0	17.2	17.9	15.6
	Q4 2021	8.2	6.2	7.4	5.8	23.5	21.7	21.7	19.2
	Q3 2021	7.5	5.8	6.8	5.4	21.3	19.6	20.0	17.8
	Q2 2021	7.3	5.8	6.6	5.2	22.7	21.0	20.0	18.0
	Q1 2021	6.6	5.2	6.0	4.7	21.8	19.8	19.6	17.2
	Q4 2020	7.2	5.6	6.6	5.2	23.4	22.3	21.8	20.4
	Q3 2020	6.5	5.3	5.9	4.9	23.1	22.0	20.4	19.8
Q2 2020	6.3	5.0	5.7	4.5	22.7	22.3	20.3	19.9	
Q1 2020	4.6	3.8	4.2	3.5	17.8	17.0	16.2	14.6	
15% - 25%	Q4 2022	6.2 x	6.1 x	5.2 x	5.1 x	30.0 x	28.3 x	26.7 x	24.8 x
	Q3 2022	6.1	5.7	5.1	4.8	29.6	32.5	27.4	27.8
	Q2 2022	5.8	5.2	4.9	4.4	27.2	27.9	23.4	24.5
	Q1 2022	7.6	7.8	6.3	6.4	30.9	29.2	28.4	31.4
	Q4 2021	10.9	11.0	9.0	9.1	32.6	31.6	31.4	31.1
	Q3 2021	13.0	12.4	10.8	10.2	35.4	42.8	33.0	39.3
	Q2 2021	13.8	11.7	11.4	9.8	34.8	33.7	32.4	34.1
	Q1 2021	12.9	11.8	10.7	9.8	33.0	32.6	34.3	34.8
	Q4 2020	12.2	11.7	11.3	10.5	33.3	32.7	35.3	34.0
	Q3 2020	10.2	9.2	9.6	9.0	34.7	36.0	31.0	28.2
Q2 2020	9.5	8.2	8.6	7.4	31.1	30.0	28.3	25.3	
Q1 2020	7.1	5.7	5.9	4.8	27.0	25.7	23.1	21.9	
> 25%	Q4 2022	8.9 x	9.0 x	6.7 x	7.0 x	25.5 x	24.5 x	24.2 x	19.7 x
	Q3 2022	9.0	8.6	6.7	6.5	31.0	29.0	19.1	16.1
	Q2 2022	7.9	7.4	5.9	5.7	24.9	28.2	24.0	21.2
	Q1 2022	11.1	9.3	9.2	7.5	29.3	30.9	23.9	22.1
	Q4 2021	13.9	13.4	12.9	11.6	39.7	47.6	35.4	37.7
	Q3 2021	15.0	15.0	13.8	12.4	30.1	31.2	28.0	27.2
	Q2 2021	15.4	16.9	16.1	16.2	33.6	32.8	29.3	28.2
	Q1 2021	16.9	17.3	15.0	14.8	30.2	30.2	25.4	22.6
	Q4 2020	11.0	10.9	12.1	14.7	38.9	39.1	23.0	24.7
	Q3 2020	12.5	14.8	11.4	11.6	33.4	33.1	29.0	25.1
Q2 2020	10.1	11.4	11.8	11.9	35.8	35.8	25.1	19.3	
Q1 2020	11.7	12.1	9.3	9.5	42.8	42.8	36.8	38.0	

Forward Year Median EV / Revenue by Growth Tranche

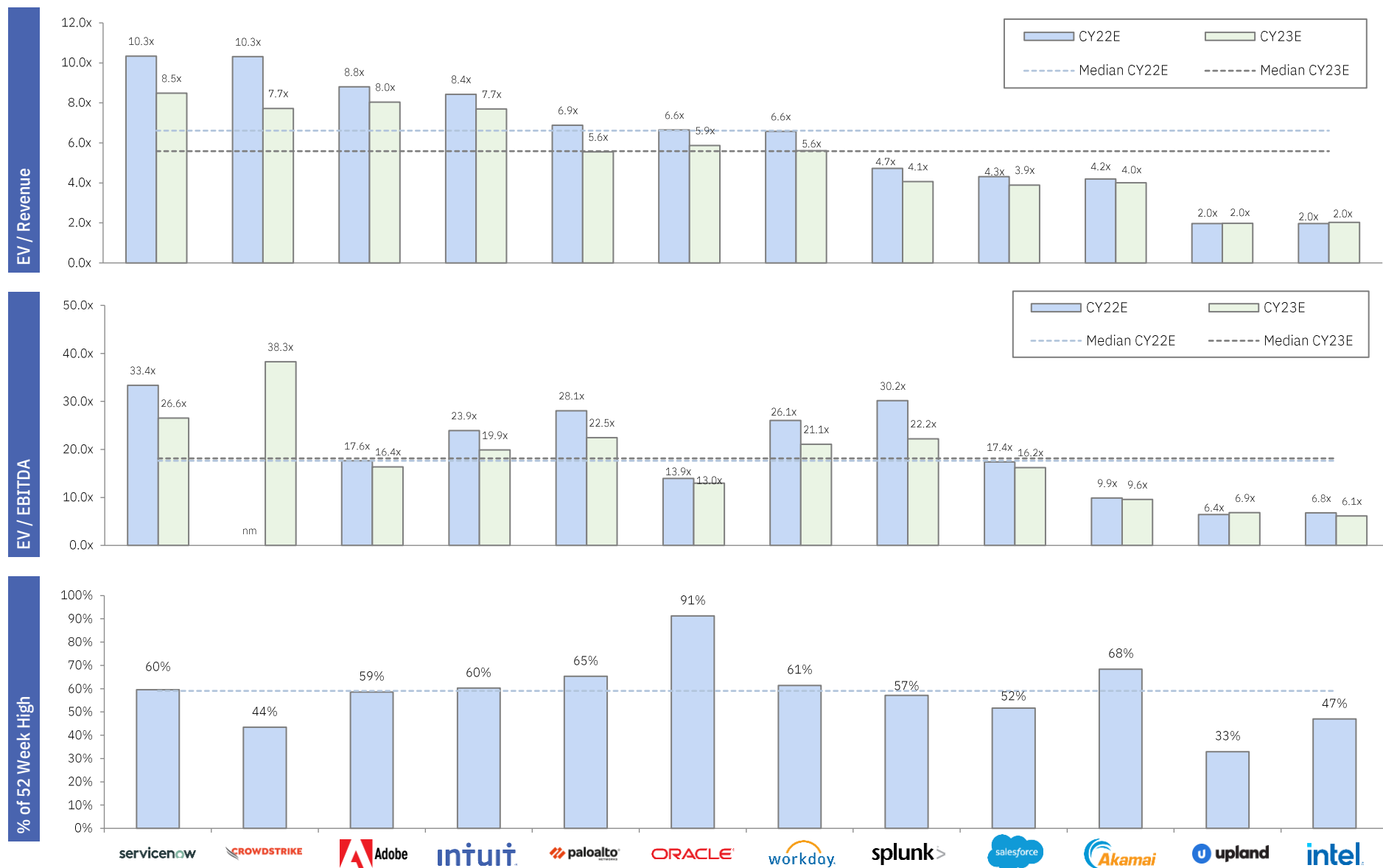


Forward Year Median EV / EBITDA by Growth Tranche



Note: EV / EBITDA multiples in excess of 50x or less than 0x and EV / Revenue multiples in excess of 30x or less than 0x are considered not meaningful
Sources: Company releases, Wall Street research

Price Performance and Valuation Metrics of Selected Software Vendors



Note: EV / EBITDA multiples in excess of 50x or less than 0x and EV / Revenue in excess of 30x or less than 0x are considered not meaningful
 Sources: Company releases, Wall Street research

Equity Trading Multiples by Segment

(\$ millions)

Company	Share Price (12/30/22)	Market Value	Enterprise Value	Revenue [a]			EV / Revenue [b]		EBITDA [a]			EV / EBITDA [c]		P / E Multiple [c]		
				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Global Diversified																
Microsoft	\$ 239.82	\$ 1,788,218	\$ 1,758,110	\$ 204,534	\$ 225,265	10%	8.6x	7.8x	\$ 97,666	48%	\$ 109,779	49%	18.0x	16.0x	26.3x	23.4x
Oracle	81.74	220,392	304,431	45,815	51,815	13%	6.6x	5.9x	21,835	48%	23,473	45%	13.9x	13.0x	16.8x	15.8x
Cisco Systems	47.64	195,710	185,828	52,980	55,460	5%	3.5x	3.4x	19,062	36%	20,186	36%	9.7x	9.2x	13.9x	12.9x
IBM	140.89	127,382	171,710	60,214	60,500	0%	2.9x	2.8x	14,763	25%	15,718	26%	11.6x	10.9x	15.6x	14.7x
SAP	103.01	119,992	124,095	33,016	35,427	7%	3.8x	3.5x	10,378	31%	11,436	32%	12.0x	10.9x	21.8x	17.5x
Intel	26.43	109,077	124,856	63,530	61,742	(3%)	2.0x	2.0x	18,448	29%	20,390	33%	6.8x	6.1x	13.5x	13.4x
HP Enterprise	15.96	20,458	30,925	28,945	29,044	0%	1.1x	1.1x	5,310	18%	5,409	19%	5.8x	5.7x	7.9x	7.9x
Micro Focus	6.38	2,062	5,586	2,553	2,462	(4%)	1.1x	2.3x	915	36%	909	37%	6.1x	6.1x	5.4x	5.7x
Mean	\$ 322,911	\$ 338,193	\$ 61,449	\$ 65,214	4%	3.8x	3.6x	\$ 23,547	34%	\$ 25,912	35%	10.5x	9.7x	15.1x	13.9x	
Median	123,687	148,283	49,398	53,638	3%	3.2x	3.1x	16,605	34%	17,952	35%	10.7x	10.0x	14.8x	14.0x	
Application Delivery & Network Acceleration																
Akamai Technologies	\$ 84.30	\$ 13,256	\$ 15,056	\$ 3,592	\$ 3,752	4%	4.2x	4.0x	\$ 1,524	42%	\$ 1,574	42%	9.9x	9.6x	16.0x	15.0x
F5 Networks	143.51	8,663	8,444	2,708	3,024	12%	3.1x	2.8x	846	31%	1,047	35%	10.0x	8.1x	14.9x	11.7x
A10 Networks	16.63	1,221	1,116	279	308	10%	4.0x	3.6x	72	26%	81	26%	15.5x	13.8x	24.0x	20.2x
Fastly	8.19	990	1,107	428	493	15%	2.6x	2.2x	(40)	(9%)	(16)	(3%)	nm	nm	nm	nm
Radware	19.75	886	564	293	300	3%	1.9x	1.9x	42	14%	44	15%	13.4x	12.9x	29.0x	22.9x
Edgio	1.13	250	317	364	450	24%	0.9x	0.7x	(9)	(2%)	20	4%	nm	15.6x	nm	nm
Mean	\$ 4,211	\$ 4,434	\$ 1,277	\$ 1,388	11%	2.8x	2.5x	\$ 406	17%	\$ 458	20%	12.2x	12.0x	21.0x	17.5x	
Median	1,106	1,112	396	472	11%	2.9x	2.5x	57	20%	62	20%	11.7x	12.9x	20.0x	17.6x	
Business Intelligence																
Snowflake	\$ 143.54	\$ 46,162	\$ 41,543	\$ 2,051	\$ 3,026	48%	20.3x	13.7x	\$ 122	6%	\$ 236	8%	nm	nm	nm	nm
Palantir	6.42	13,355	11,131	1,902	2,305	21%	5.9x	4.8x	407	21%	514	22%	27.3x	21.6x	nm	38.6x
UiPath	12.71	7,027	5,408	1,028	1,217	18%	5.3x	4.4x	41	4%	96	8%	nm	nm	nm	nm
Informatica	16.29	4,611	5,867	1,511	1,653	9%	3.9x	3.5x	357	24%	403	24%	16.5x	14.6x	21.3x	19.5x
Alteryx	50.67	3,501	4,084	833	973	17%	4.9x	4.2x	33	4%	55	6%	nm	nm	nm	nm
MicroStrategy	141.57	1,602	3,988	499	508	2%	8.0x	7.8x	93	19%	88	17%	42.8x	45.4x	nm	40.8x
C3.ai	11.19	1,234	407	264	303	15%	1.5x	1.3x	(72)	(27%)	(80)	(26%)	nm	nm	nm	nm
UserTesting	0.00	1,103	953	192	230	19%	5.0x	4.2x	(38)	(20%)	(39)	(17%)	nm	nm	nm	nm
Sumo Logic	8.10	972	633	298	349	17%	2.1x	1.8x	(32)	(11%)	(31)	(9%)	nm	nm	nm	nm
WalkMe	11.18	945	651	244	290	19%	2.7x	2.2x	(49)	(20%)	(30)	(10%)	nm	nm	nm	nm
Domo	14.24	492	548	306	337	10%	1.8x	1.6x	(2)	(1%)	10	3%	nm	nm	nm	nm
eGain	9.03	289	220	97	108	11%	2.3x	2.0x	7	7%	n/a	n/a	33.9x	n/a	45.9x	37.6x
Veritone	5.30	192	196	151	164	9%	1.3x	1.2x	(13)	(9%)	4	3%	nm	44.8x	nm	nm
Mean	\$ 6,268	\$ 5,818	\$ 721	\$ 882	17%	5.0x	4.1x	\$ 66	(0%)	\$ 102	2%	30.1x	31.6x	33.6x	34.1x	
Median	1,234	953	306	349	17%	3.9x	3.5x	7	4%	32	4%	30.6x	33.2x	33.6x	38.1x	

- Global Diversified
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- Communications
- DevOps and Software Development Tools
- eCommerce & Supply Chain Management
- ERP & General Business Applications
- Financial Applications
- Human Capital Management
- IT Operations Management
- IT Security
- Network Infrastructure
- Real Estate
- Sales & Marketing Applications
- Storage Management
- Technical & Embedded Apps
- Vertical Applications
- Software-as-a-Service
- Small Cap
- Highly Acquisitive
- High Growth
- High Profitability

Sources: Company releases, Wall Street research

[a] Wall Street consensus estimates

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Equity Trading Multiples by Segment continued

(\$ millions)

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Communications																
Motorola Solutions	\$ 257.71	\$ 43,090	\$ 48,674	\$ 8,942	\$ 9,540	7%	5.4x	5.1x	\$ 2,595	29%	\$ 2,866	30%	18.8x	17.0x	25.3x	23.0x
Zoom	67.74	19,802	14,737	4,376	4,632	6%	3.4x	3.2x	1,571	36%	1,465	32%	9.4x	10.1x	17.1x	18.7x
Amdocs	90.90	10,982	11,034	4,650	4,954	7%	2.4x	2.2x	984	21%	1,063	21%	11.2x	10.4x	16.8x	15.0x
Twilio	48.96	9,025	6,070	3,802	4,442	17%	1.6x	1.4x	232	6%	370	8%	26.2x	16.4x	nm	nm
Five9	67.86	4,784	4,996	775	901	16%	6.4x	5.5x	134	17%	162	18%	37.2x	30.8x	49.6x	43.3x
RingCentral	35.40	3,399	4,970	1,991	2,338	17%	2.5x	2.1x	309	16%	433	19%	16.1x	11.5x	17.9x	12.6x
Verint Systems	36.28	2,390	3,020	902	949	5%	3.3x	3.2x	239	26%	269	28%	12.7x	11.2x	14.5x	13.4x
Everbridge	29.58	1,181	1,520	431	458	6%	3.5x	3.3x	41	9%	84	18%	37.2x	18.1x	50.3x	22.5x
Bandwidth	22.95	581	921	563	616	9%	1.6x	1.5x	33	6%	38	6%	27.7x	24.5x	61.5x	43.1x
Weave Communications	4.58	300	256	141	164	16%	1.8x	1.6x	(29)	(21%)	(20)	(12%)	nm	nm	nm	nm
Kaltura	1.72	229	195	168	177	5%	1.2x	1.1x	(30)	(18%)	(10)	(6%)	nm	nm	nm	nm
Synchronoss Technologies	0.62	53	282	256	258	1%	1.1x	1.1x	51	20%	53	21%	5.5x	5.3x	3.1x	4.8x
Mean	\$ 7,985	\$ 8,056	\$ 2,250	\$ 2,452	9%	2.9x	2.6x	\$ 511	12%	\$ 564	15%	20.2x	15.5x	28.5x	21.8x	
Median	2,894	3,995	839	925	7%	2.4x	2.2x	183	16%	216	18%	17.4x	13.9x	17.9x	18.7x	
DevOps and Software Development Tools																
Atlassian	\$ 128.68	\$ 32,880	\$ 32,648	\$ 3,158	\$ 3,857	22%	10.3x	8.5x	\$ 581	18%	\$ 679	18%	nm	48.1x	92.5x	82.2x
Datadog	73.50	23,341	22,411	1,655	2,218	34%	13.5x	10.1x	334	20%	416	19%	nm	nm	81.0x	64.0x
MongoDB	196.84	13,638	13,086	1,260	1,579	25%	10.4x	8.3x	48	4%	73	5%	nm	nm	nm	nm
Dynatrace	38.30	11,025	10,743	1,084	1,271	17%	9.9x	8.4x	279	26%	345	27%	38.5x	31.1x	48.9x	42.3x
GitLab	45.44	6,800	5,924	421	593	41%	14.1x	10.0x	(80)	(19%)	(85)	(14%)	nm	nm	nm	nm
Confluent	22.24	6,370	5,548	580	767	32%	9.6x	7.2x	(177)	(30%)	(146)	(19%)	nm	nm	nm	nm
HashiCorp	27.34	5,139	3,880	464	593	28%	8.4x	6.5x	(146)	(32%)	(147)	(25%)	nm	nm	nm	nm
New Relic	56.45	3,858	3,596	882	1,021	16%	4.1x	3.5x	52	6%	99	10%	nm	36.4x	nm	85.8x
Asana	13.77	2,930	2,643	542	652	20%	4.9x	4.1x	(245)	(45%)	(202)	(31%)	nm	nm	nm	nm
Pegasystems	34.24	2,814	3,220	1,262	1,401	11%	2.6x	2.3x	19	1%	111	8%	nm	28.9x	nm	49.7x
DigitalOcean	25.47	2,453	3,097	574	741	29%	5.4x	4.2x	199	35%	251	34%	15.6x	12.4x	31.1x	21.9x
Applian	32.56	2,362	2,330	465	534	15%	5.0x	4.4x	(77)	(17%)	(72)	(13%)	nm	nm	nm	nm
Progress Software	50.45	2,169	2,591	613	630	3%	4.2x	4.1x	214	35%	220	35%	12.1x	11.8x	12.3x	11.6x
Jfrog	21.33	2,139	1,728	281	359	28%	6.2x	4.8x	11	4%	24	7%	nm	nm	nm	nm
Couchbase	13.26	599	429	151	176	16%	2.8x	2.4x	(43)	(29%)	(43)	(24%)	nm	nm	nm	nm
Axway Software	17.79	372	469	306	315	3%	1.5x	1.5x	33	11%	38	12%	14.2x	12.5x	20.5x	16.4x
Mean	\$ 7,431	\$ 7,146	\$ 856	\$ 1,044	21%	7.1x	5.6x	\$ 63	(1%)	\$ 98	3%	20.1x	25.9x	47.7x	46.8x	
Median	3,394	3,408	577	697	21%	5.8x	4.6x	26	4%	55	7%	14.9x	28.9x	40.0x	46.0x	

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Equity Trading Multiples by Segment continued

(\$ millions)

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eCommerce & Supply Chain Management																
Shopify	\$ 34.71	\$ 44,154	\$ 40,512	\$ 5,509	\$ 6,683	21%	7.4x	6.1x	\$ (52)	(1%)	\$ 57	1%	nm	nm	nm	nm
Manhattan Associates	121.40	7,575	7,402	752	814	8%	9.8x	9.1x	199	26%	216	26%	37.2x	34.3x	49.6x	46.8x
Descartes Systems	69.65	5,915	5,684	485	532	10%	11.7x	10.7x	215	44%	239	45%	26.5x	23.8x	59.0x	49.9x
SPS Commerce	128.43	4,629	4,410	450	524	17%	9.8x	8.4x	130	29%	153	29%	33.8x	28.9x	57.2x	52.1x
Global-e	20.64	3,230	3,058	408	565	38%	7.5x	5.4x	45	11%	65	12%	nm	46.8x	nm	62.1x
EverCommerce	7.44	1,437	1,886	617	693	12%	3.1x	2.7x	117	19%	139	20%	16.1x	13.5x	20.2x	18.1x
Riskified	4.62	782	339	259	306	18%	1.3x	1.1x	(45)	(17%)	(32)	(10%)	nm	nm	nm	nm
VTEX	3.75	714	480	159	198	24%	3.0x	2.4x	(44)	(28%)	(8)	(4%)	nm	nm	nm	nm
BigCommerce	8.74	644	688	280	322	15%	2.5x	2.1x	(49)	(18%)	(18)	(6%)	nm	nm	nm	nm
American Software	14.68	495	389	129	132	3%	3.0x	2.9x	21	17%	22	17%	18.1x	17.4x	35.4x	30.9x
Mean	\$ 6,958	\$ 6,485	\$ 905	\$ 1,077	17%	5.9x	5.1x	\$ 54	8%	\$ 83	13%	26.3x	27.5x	44.3x	43.3x	
Median	2,333	2,472	429	528	16%	5.2x	4.2x	33	14%	61	14%	26.5x	26.3x	49.6x	48.3x	
ERP & General Business Applications																
Salesforce.com	\$ 132.59	\$ 131,397	\$ 134,123	\$ 31,053	\$ 34,468	11%	4.3x	3.9x	\$ 7,715	25%	\$ 8,260	24%	17.4x	16.2x	26.9x	23.3x
Constellation Software	1,561.94	33,100	34,679	6,560	7,656	17%	5.3x	4.5x	1,675	26%	2,010	26%	20.7x	17.2x	32.0x	27.1x
DocuSign	55.42	11,144	11,006	2,497	2,694	8%	4.4x	4.1x	559	22%	611	23%	19.7x	18.0x	28.7x	25.8x
Sage Group	8.98	9,161	10,044	2,391	2,627	10%	4.2x	3.8x	576	24%	627	24%	17.4x	16.0x	27.6x	25.3x
Qualtrics	10.38	6,132	5,675	1,449	1,697	17%	3.9x	3.3x	115	8%	156	9%	49.3x	36.4x	nm	nm
Monday.com	122.00	5,500	4,732	510	663	30%	9.3x	7.1x	(74)	(15%)	(63)	(10%)	nm	nm	nm	nm
Smartsheet	39.36	5,169	4,805	761	963	27%	6.3x	5.0x	(21)	(3%)	7	1%	nm	nm	nm	nm
Workiva	83.97	4,412	4,353	533	621	16%	8.2x	7.0x	(17)	(3%)	7	1%	nm	nm	nm	nm
j2 Global	79.10	3,733	4,116	1,395	1,442	3%	3.0x	2.9x	506	36%	532	37%	8.1x	7.7x	11.7x	11.1x
Clearwater Analytics	18.75	3,550	3,397	301	361	20%	11.3x	9.4x	80	26%	101	28%	42.6x	33.7x	83.4x	64.8x
TechnologyOne	8.93	2,896	2,801	244	291	19%	11.5x	9.6x	99	41%	126	43%	28.2x	22.2x	50.2x	41.6x
AvidXchange	9.94	1,975	1,664	315	374	19%	5.3x	4.4x	(21)	(7%)	(11)	(3%)	nm	nm	nm	nm
Enghouse Systems	26.58	1,468	1,315	315	337	7%	4.2x	3.9x	102	32%	111	33%	12.9x	11.8x	20.9x	22.5x
PROS	24.26	1,100	1,219	274	302	10%	4.4x	4.0x	(23)	(8%)	(17)	(6%)	nm	nm	nm	nm
Docebo	33.06	1,088	875	143	186	30%	6.1x	4.7x	0	0%	13	7%	nm	nm	nm	nm
Rackspace Technology	2.95	623	4,306	3,112	3,052	(2%)	1.4x	1.4x	583	19%	459	15%	7.4x	9.4x	5.5x	34.2x
Upland Software	7.13	227	621	315	314	(0%)	2.0x	2.0x	97	31%	91	29%	6.4x	6.9x	3.9x	5.1x
Mean	\$ 13,098	\$ 13,514	\$ 3,069	\$ 3,415	14%	5.6x	4.8x	\$ 703	15%	\$ 766	17%	20.9x	17.8x	29.1x	28.1x	
Median	3,733	4,306	533	663	16%	4.4x	4.1x	99	22%	111	23%	17.4x	16.2x	27.2x	25.5x	

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(\$ millions)

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Financial Applications																
Intuit	\$ 389.22	\$ 109,342	\$ 114,219	\$ 13,551	\$ 14,833	9%	8.4x	7.7x	\$ 4,775	35%	\$ 5,742	39%	23.9x	19.9x	32.8x	26.7x
Fiserv	101.07	64,182	83,006	16,758	17,946	7%	5.0x	4.6x	7,234	43%	7,785	43%	11.5x	10.7x	15.6x	13.8x
FIS	67.85	40,261	57,432	14,531	15,139	4%	4.0x	3.8x	6,248	43%	6,586	44%	9.2x	8.7x	10.2x	10.0x
MSCI	465.17	37,194	40,999	2,240	2,442	9%	18.3x	16.8x	1,323	59%	1,453	59%	31.0x	28.2x	41.0x	36.9x
Fair Isaac	598.58	14,950	16,729	1,402	1,519	8%	11.9x	11.0x	671	48%	775	51%	24.9x	21.6x	33.6x	29.1x
SS&C Technologies	52.06	13,114	20,232	5,284	5,472	4%	3.8x	3.7x	2,001	38%	2,150	39%	10.1x	9.4x	11.1x	10.4x
Jack Henry	175.56	12,807	13,071	2,007	2,172	8%	6.5x	6.0x	648	32%	701	32%	20.2x	18.6x	36.2x	34.1x
Bill.com	108.96	11,514	10,739	841	1,145	36%	12.8x	9.4x	25	3%	86	7%	nm	nm	nm	nm
Xero	47.76	7,170	7,239	785	1,027	31%	9.2x	7.0x	170	22%	225	22%	42.5x	32.2x	nm	nm
BlackLine	67.27	4,021	4,400	522	611	17%	8.4x	7.2x	57	11%	67	11%	nm	nm	nm	nm
Temenos Group	54.87	3,938	4,786	958	1,013	6%	5.0x	4.7x	377	39%	406	40%	12.7x	11.8x	19.3x	17.8x
Envestnet	61.70	3,414	4,146	1,243	1,311	5%	3.3x	3.2x	219	18%	255	19%	18.9x	16.3x	33.3x	29.1x
Shift4 Payments	55.93	3,167	4,373	2,000	2,730	37%	2.2x	1.6x	277	14%	368	13%	15.8x	11.9x	42.0x	27.2x
SimCorp	68.71	2,698	2,709	584	622	7%	4.6x	4.4x	134	23%	159	26%	20.1x	17.0x	26.2x	23.5x
Vertex	14.51	2,177	2,174	487	546	12%	4.5x	4.0x	75	16%	92	17%	28.8x	23.6x	49.7x	40.2x
Q2 Holdings	26.87	1,545	1,883	569	647	14%	3.3x	2.9x	40	7%	59	9%	46.8x	31.8x	85.0x	46.2x
Model N	40.56	1,515	1,474	225	251	11%	6.5x	5.9x	34	15%	41	17%	43.4x	35.6x	51.6x	42.4x
Asseco Poland	16.58	1,376	2,499	3,925	4,239	8%	0.6x	0.6x	582	15%	605	14%	4.3x	4.1x	12.1x	11.7x
Alkami Technology	14.59	1,335	1,210	204	257	26%	5.9x	4.7x	(18)	(9%)	(5)	(2%)	nm	nm	nm	nm
IRESS	6.49	1,180	1,434	421	439	4%	3.4x	3.3x	93	22%	104	24%	15.4x	13.8x	25.5x	21.9x
Zuora	6.36	849	705	393	432	10%	1.8x	1.6x	(4)	(1%)	22	5%	nm	32.2x	nm	72.3x
Expensify	8.83	725	687	171	196	14%	4.0x	3.5x	42	25%	50	26%	16.4x	13.7x	32.2x	28.2x
Ebix	19.96	617	1,214	1,021	968	(5%)	1.2x	1.3x	158	16%	181	19%	7.7x	6.7x	8.2x	7.9x
Mean	\$ 14,743	\$ 17,277	\$ 3,049	\$ 3,302	12%	5.9x	5.2x	\$ 1,094	23%	\$ 1,213	25%	21.2x	18.4x	31.4x	27.9x	
Median	3,414	4,373	958	1,027	9%	4.6x	4.4x	170	22%	225	22%	18.9x	16.7x	32.5x	27.2x	
Human Capital Management																
Automatic Data Processing	\$ 238.86	\$ 99,086	\$ 101,448	\$ 17,240	\$ 18,355	6%	5.9x	5.5x	\$ 4,538	26%	\$ 5,069	28%	22.4x	20.0x	31.8x	28.1x
Workday	167.33	43,006	40,776	6,203	7,272	17%	6.6x	5.6x	1,565	25%	1,932	27%	26.1x	21.1x	47.3x	35.8x
Paychex	115.56	41,656	41,268	4,802	5,124	7%	8.6x	8.1x	2,097	44%	2,290	45%	19.7x	18.0x	29.2x	26.4x
Paycom Software	310.31	17,957	17,668	1,372	1,686	23%	12.9x	10.5x	561	41%	696	41%	31.5x	25.4x	52.5x	42.1x
Paylocity	194.26	10,815	10,825	988	1,243	26%	11.0x	8.7x	277	28%	377	30%	39.1x	28.7x	52.1x	44.0x
Ceridian HCM	64.15	9,853	10,705	1,235	1,449	17%	8.7x	7.4x	236	19%	297	21%	45.3x	36.0x	95.5x	67.1x
Paycor	24.47	4,303	4,235	479	576	20%	8.8x	7.4x	107	22%	158	27%	39.4x	26.8x	93.5x	71.6x
DHI Group	5.29	238	272	149	173	16%	1.8x	1.6x	31	21%	37	21%	8.9x	7.4x	nm	46.7x
Asure Software	9.34	188	220	90	100	10%	2.4x	2.2x	11	12%	15	15%	20.7x	15.2x	nm	32.4x
Mean	\$ 25,234	\$ 25,269	\$ 3,618	\$ 3,997	16%	7.4x	6.3x	\$ 1,047	26%	\$ 1,208	28%	28.1x	22.1x	57.4x	43.8x	
Median	10,815	10,825	1,235	1,449	17%	8.6x	7.4x	277	25%	377	27%	26.1x	21.1x	52.1x	42.1x	

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Sources: Company releases, Wall Street research

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Equity Trading Multiples by Segment continued

(\$ millions)

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
IT Operations Management																
ServiceNow	\$ 388.27	\$ 78,281	\$ 74,933	\$ 7,247	\$ 8,831	22%	10.3x	8.5x	\$ 2,246	31%	\$ 2,822	32%	33.4x	26.6x	52.9x	42.6x
Splunk	86.09	14,093	16,407	3,475	4,031	16%	4.7x	4.1x	544	16%	738	18%	30.2x	22.2x	46.7x	34.7x
OpenText	29.64	7,903	10,673	3,514	3,650	4%	3.0x	2.9x	1,226	35%	1,337	37%	8.7x	8.0x	9.7x	9.1x
Samsara	12.43	6,450	5,839	637	819	29%	9.2x	7.1x	(79)	(12%)	(76)	(9%)	nm	nm	nm	nm
Elastic	51.50	4,924	4,666	1,027	1,257	22%	4.5x	3.7x	22	2%	112	9%	nm	41.8x	nm	85.5x
Jamf	21.30	2,586	2,752	478	577	21%	5.8x	4.8x	31	6%	n/a	n/a	nm	n/a	nm	84.9x
PagerDuty	26.56	2,390	2,235	369	453	23%	6.1x	4.9x	17	5%	29	6%	nm	nm	nm	nm
Netscout Systems	32.51	2,349	2,241	870	920	6%	2.6x	2.4x	n/a	n/a	208	23%	n/a	10.8x	17.9x	16.3x
SolarWinds	9.36	1,513	2,682	713	736	3%	3.8x	3.6x	275	39%	299	41%	9.7x	9.0x	11.0x	10.0x
Magic Software	16.02	787	821	563	612	9%	1.5x	1.3x	n/a	n/a	n/a	n/a	n/a	n/a	15.6x	13.9x
Comarch	37.45	305	258	430	457	6%	0.6x	0.6x	62	14%	58	13%	4.2x	4.4x	13.3x	12.6x
Mean	\$ 11,053	\$ 11,228	\$ 1,756	\$ 2,031	15%	4.7x	4.0x	\$ 483	15%	\$ 614	19%	17.2x	17.5x	23.9x	34.4x	
Median	2,586	2,752	713	819	16%	4.5x	3.7x	62	14%	208	18%	9.7x	10.8x	15.6x	16.3x	
IT Security																
Palo Alto Networks	\$ 139.54	\$ 42,191	\$ 42,349	\$ 6,149	\$ 7,620	24%	6.9x	5.6x	\$ 1,509	25%	\$ 1,886	25%	28.1x	22.5x	46.5x	38.1x
Fortinet	48.89	38,195	37,466	4,430	5,370	21%	8.5x	7.0x	1,262	28%	1,549	29%	29.7x	24.2x	42.4x	35.3x
CrowdStrike	105.29	24,679	23,005	2,231	2,979	34%	10.3x	7.7x	439	20%	601	20%	nm	38.3x	70.2x	52.7x
Verisign	205.44	21,780	22,589	1,422	1,542	8%	15.9x	14.6x	1,017	72%	1,120	73%	22.2x	20.2x	33.4x	28.7x
Zscaler	111.90	16,137	15,532	1,326	1,740	31%	11.7x	8.9x	196	15%	283	16%	nm	nm	nm	78.6x
Check Point	126.16	15,822	12,275	2,328	2,444	5%	5.3x	5.0x	1,059	45%	1,098	45%	11.6x	11.2x	17.2x	15.5x
Cloudflare	45.21	14,857	14,788	975	1,319	35%	15.2x	11.2x	132	14%	179	14%	nm	nm	nm	nm
NortonLifeLock	21.22	14,263	23,291	3,104	3,904	26%	7.5x	6.0x	1,756	57%	1,903	49%	13.3x	12.2x	nm	nm
Okta	68.33	10,945	10,852	1,836	2,172	18%	5.9x	5.0x	(12)	(1%)	83	4%	nm	nm	nm	nm
Trend Micro	46.56	6,477	4,601	1,689	1,850	10%	2.7x	2.5x	435	26%	467	25%	10.6x	9.9x	26.3x	28.3x
CyberArk	129.65	5,279	4,661	597	729	22%	7.8x	6.4x	(5)	(1%)	20	3%	nm	nm	nm	nm
Tenable	38.15	4,292	4,169	680	818	20%	6.1x	5.1x	83	12%	108	13%	nm	38.6x	nm	73.1x
Qualys	112.23	4,263	3,847	489	567	16%	7.9x	6.8x	217	44%	234	41%	17.7x	16.5x	31.0x	27.8x
SailPoint	1.00	4,125	7,864	12,402	12,302	(1%)	0.6x	0.6x	1,424	11%	1,370	11%	5.5x	5.7x	6.5x	7.8x
SentinelOne	14.59	4,124	3,451	420	652	55%	8.2x	5.3x	(200)	(48%)	(139)	(21%)	nm	nm	nm	nm
Varonis Systems	23.94	2,639	2,165	472	527	12%	4.6x	4.1x	39	8%	52	10%	nm	41.8x	nm	90.6x
Rapid7	33.98	2,013	2,678	680	795	17%	3.9x	3.4x	44	7%	63	8%	nm	42.3x	nm	65.5x
ForgeRock	22.77	1,944	1,652	212	265	25%	7.8x	6.2x	(31)	(15%)	(6)	(2%)	nm	nm	nm	nm
Blackberry	3.26	1,891	1,916	688	673	(2%)	2.8x	2.8x	(46)	(7%)	(67)	(10%)	nm	nm	nm	nm
Secureworks	6.39	541	415	457	436	(5%)	0.9x	1.0x	(62)	(14%)	(76)	(18%)	nm	nm	nm	nm
OneSpan	11.19	444	361	216	229	6%	1.7x	1.6x	2	1%	1	1%	nm	nm	nm	nm
Telos	5.09	342	231	214	186	(13%)	1.1x	1.2x	15	7%	6	3%	15.3x	36.0x	41.3x	nm
WithSecure Oyj	1.47	256	190	144	164	14%	1.3x	1.2x	(25)	(17%)	(9)	(6%)	nm	nm	nm	nm
Mean	\$ 10,326	\$ 10,916	\$ 1,955	\$ 2,233	17%	6.5x	5.4x	\$ 421	14%	\$ 488	15%	17.1x	24.6x	35.0x	45.2x	
Median	4,786	4,631	831	1,068	18%	6.5x	5.2x	107	12%	144	12%	15.3x	22.5x	33.4x	36.7x	

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(\$ millions)

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Network Infrastructure																
Juniper Networks	\$ 31.96	\$ 10,373	\$ 11,127	\$ 5,328	\$ 5,730	8%	2.1x	1.9x	\$ 1,059	20%	\$ 1,164	20%	10.5x	9.6x	16.4x	14.1x
Extreme Networks	18.31	2,405	2,517	1,166	1,325	14%	2.2x	1.9x	161	14%	238	18%	15.7x	10.6x	23.0x	15.1x
	Mean	\$ 6,389	\$ 6,822	\$ 3,247	\$ 3,527	11%	2.1x	1.9x	\$ 610	17%	\$ 701	19%	13.1x	10.1x	19.7x	14.6x
	Median	6,389	6,822	3,247	3,527	11%	2.1x	1.9x	610	17%	701	19%	13.1x	10.1x	19.7x	14.6x
Real Estate Applications																
CoStar	\$ 77.28	\$ 31,429	\$ 27,762	\$ 2,178	\$ 2,500	15%	12.7x	11.1x	\$ 665	31%	\$ 767	31%	41.7x	36.2x	62.0x	52.4x
Bentley Systems	36.96	11,455	13,208	1,095	1,206	10%	12.1x	11.0x	364	33%	414	34%	36.3x	31.9x	44.2x	41.8x
Black Knight	61.75	9,539	12,276	1,569	1,658	6%	7.8x	7.4x	755	48%	815	49%	16.3x	15.1x	25.2x	23.8x
Zillow	31.21	7,593	5,979	6,164	1,858	(70%)	1.0x	3.2x	575	9%	447	24%	10.4x	13.4x	21.5x	27.9x
Nemetschek	50.97	5,887	5,853	857	924	8%	6.8x	6.3x	281	33%	290	31%	20.8x	20.2x	31.0x	30.5x
AppFolio	105.38	3,705	3,623	465	567	22%	7.8x	6.4x	18	4%	33	6%	nm	nm	nm	nm
Altus Group	39.93	1,787	2,038	545	576	6%	3.7x	3.5x	100	18%	105	18%	20.3x	19.4x	27.7x	26.8x
MeridianLink	13.73	1,111	1,425	285	309	9%	5.0x	4.6x	109	38%	115	37%	13.1x	12.4x	41.7x	42.3x
Altisource	9.46	153	341	159	274	72%	2.1x	1.2x	(19)	(12%)	38	14%	nm	8.9x	nm	12.3x
	Mean	\$ 8,073	\$ 8,056	\$ 1,480	\$ 1,097	9%	6.6x	6.1x	\$ 317	23%	\$ 336	27%	22.7x	19.7x	36.2x	32.2x
	Median	5,887	5,853	857	924	9%	6.8x	6.3x	281	31%	290	31%	20.3x	17.2x	31.0x	29.2x
Sales & Marketing Applications																
Adobe	\$ 336.53	\$ 156,453	\$ 154,990	\$ 17,611	\$ 19,269	9%	8.8x	8.0x	\$ 8,795	50%	\$ 9,459	49%	17.6x	16.4x	24.7x	22.0x
Hubspot	289.13	14,045	13,497	1,707	2,063	21%	7.9x	6.5x	211	12%	251	12%	nm	nm	nm	nm
ZoomInfo Technologies	30.11	12,154	13,011	1,097	1,342	22%	11.9x	9.7x	462	42%	577	43%	28.2x	22.5x	35.7x	30.8x
Freshworks	14.71	4,235	3,114	495	601	21%	6.3x	5.2x	(20)	(4%)	(9)	(1%)	nm	nm	nm	nm
AppLovin	10.53	3,914	6,256	2,817	2,848	1%	2.2x	2.2x	1,060	38%	1,101	39%	5.9x	5.7x	nm	32.1x
DoubleVerify	21.96	3,621	3,462	452	559	24%	7.7x	6.2x	139	31%	171	31%	25.0x	20.2x	39.2x	36.6x
Teradata	33.66	3,427	3,549	1,780	1,810	2%	2.0x	2.0x	418	23%	447	25%	8.5x	7.9x	21.0x	17.8x
Sprout Social	56.46	3,096	2,937	254	329	29%	11.6x	8.9x	(2)	(1%)	3	1%	nm	nm	nm	nm
EngageSmart	17.60	2,912	2,652	302	381	26%	8.8x	7.0x	47	16%	61	16%	nm	43.8x	68.1x	69.3x
Sprinklr	8.17	2,133	1,603	616	710	15%	2.6x	2.3x	10	2%	45	6%	nm	36.0x	nm	83.5x
Amplitude	12.08	1,367	1,072	237	299	26%	4.5x	3.6x	(22)	(9%)	(21)	(7%)	nm	nm	nm	nm
Momentive	7.00	1,041	1,082	480	520	8%	2.3x	2.1x	55	11%	86	17%	19.7x	12.6x	50.0x	20.5x
Yext	6.53	797	755	399	416	4%	1.9x	1.8x	13	3%	36	9%	nm	21.0x	nm	50.2x
LivePerson	10.14	764	1,115	519	551	6%	2.1x	2.0x	5	1%	72	13%	nm	15.5x	nm	31.3x
PubMatic	12.81	673	535	259	283	9%	2.1x	1.9x	99	38%	90	32%	5.4x	6.0x	23.6x	32.1x
SimilarWeb	6.43	489	474	193	235	22%	2.5x	2.0x	(60)	(31%)	(33)	(14%)	nm	nm	nm	nm
MediaAlpha	9.95	429	524	449	567	26%	1.2x	0.9x	20	4%	33	6%	26.5x	15.7x	38.1x	23.8x
ON24	8.63	415	83	191	191	0%	0.4x	0.4x	(16)	(8%)	(2)	(1%)	nm	nm	nm	nm
dotdigital	1.00	298	248	79	85	8%	3.2x	2.9x	27	34%	28	33%	9.4x	8.9x	20.1x	20.0x
Cardlytics	5.78	192	290	300	321	7%	1.0x	0.9x	(44)	(15%)	(0)	(0%)	nm	nm	nm	nm
Outbrain	3.62	190	97	985	1,008	2%	0.1x	0.1x	24	2%	26	3%	4.0x	3.8x	nm	nm
Viant	4.02	58	90	197	203	3%	0.5x	0.4x	(9)	(4%)	7	4%	nm	12.7x	nm	nm
	Mean	\$ 9,668	\$ 9,611	\$ 1,428	\$ 1,572	13%	4.2x	3.5x	\$ 510	11%	\$ 565	14%	15.0x	16.6x	35.6x	36.2x
	Median	1,204	1,098	450	535	9%	2.4x	2.1x	22	4%	40	10%	13.5x	15.5x	35.7x	31.3x

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Storage Management																
NetApp	\$ 60.06	\$ 12,947	\$ 12,602	\$ 6,550	\$ 6,583	1%	1.9x	1.9x	\$ 1,653	25%	\$ 1,709	26%	7.6x	7.4x	11.1x	10.7x
Pure Storage	26.76	8,097	7,384	2,754	3,129	14%	2.7x	2.4x	524	19%	566	18%	14.1x	13.0x	21.0x	20.5x
Dropbox	22.38	7,878	8,704	2,320	2,458	6%	3.8x	3.5x	858	37%	895	36%	10.2x	9.7x	14.3x	12.8x
Nutanix	26.05	5,994	6,056	1,687	1,879	11%	3.6x	3.2x	83	5%	228	12%	nm	26.5x	nm	84.5x
Box	31.13	4,449	5,117	991	1,097	11%	5.2x	4.7x	295	30%	331	30%	17.3x	15.5x	26.6x	21.2x
CommVault Systems	62.84	2,798	2,549	796	834	5%	3.2x	3.1x	179	22%	203	24%	14.3x	12.5x	23.4x	21.3x
Backblaze	6.15	201	167	85	100	18%	2.0x	1.7x	(10)	(11%)	(10)	(10%)	nm	nm	nm	nm
Mean	\$ 6,052	\$ 6,083	\$ 2,169	\$ 2,297	9%	3.2x	2.9x	\$ 512	18%	\$ 560	20%	12.7x	14.1x	19.3x	28.5x	
Median	5,994	6,056	1,687	1,879	11%	3.2x	3.1x	295	22%	331	24%	14.1x	12.8x	21.0x	20.9x	
Technical & Embedded Applications																
Synopsys	\$ 319.29	\$ 48,665	\$ 47,800	\$ 5,164	\$ 5,994	16%	9.3x	8.0x	\$ 1,807	35%	\$ 2,177	36%	26.5x	22.0x	35.5x	29.6x
Dassault Systemes	35.80	47,061	47,299	6,032	6,562	9%	7.8x	7.2x	2,293	38%	2,507	38%	20.6x	18.9x	29.7x	27.9x
Cadence Design	160.64	44,066	43,838	3,545	3,873	9%	12.4x	11.3x	1,537	43%	1,726	45%	28.5x	25.4x	38.0x	34.5x
Autodesk	186.87	40,320	41,514	5,000	5,469	9%	8.3x	7.6x	1,834	37%	2,037	37%	22.6x	20.4x	28.4x	25.5x
ANSYS	241.59	21,045	21,296	2,026	2,188	8%	10.5x	9.7x	861	42%	972	44%	24.7x	21.9x	31.4x	28.8x
Parametric Technology	120.04	14,183	15,451	1,938	2,001	3%	8.0x	7.7x	792	41%	815	41%	19.5x	19.0x	25.8x	25.3x
Aspen Technology	205.40	13,257	13,233	951	1,232	30%	13.9x	10.7x	460	48%	603	49%	28.8x	22.0x	28.0x	32.0x
Mean	\$ 32,657	\$ 32,919	\$ 3,522	\$ 3,903	12%	10.0x	8.9x	\$ 1,369	41%	\$ 1,548	41%	24.5x	21.3x	31.0x	29.1x	
Median	40,320	41,514	3,545	3,873	9%	9.3x	8.0x	1,537	41%	1,726	41%	24.7x	21.9x	29.7x	28.8x	
Vertical Applications																
Danaher	\$ 265.42	\$ 193,216	\$ 209,989	\$ 30,806	\$ 30,721	(0%)	6.8x	6.8x	\$ 10,608	34%	\$ 10,551	34%	19.8x	19.9x	25.2x	25.5x
Roper Industries	432.09	45,824	50,589	5,372	5,930	10%	9.4x	8.5x	2,176	41%	2,410	41%	23.2x	21.0x	30.6x	27.0x
Veeva	161.38	25,125	22,164	2,144	2,422	13%	10.3x	9.2x	847	39%	932	38%	26.2x	23.8x	38.6x	35.8x
Tyler Technologies	322.41	13,425	14,336	1,853	2,000	8%	7.7x	7.2x	475	26%	498	25%	30.2x	28.8x	42.4x	41.5x
Procure Technologies	47.18	6,511	6,039	708	871	23%	8.5x	6.9x	(51)	(7%)	(51)	(6%)	nm	nm	nm	nm
Guidewire Software	62.56	5,122	4,913	860	936	9%	5.7x	5.3x	(35)	(4%)	33	4%	nm	nm	nm	nm
Rightmove	6.16	5,073	5,033	398	422	6%	12.6x	11.9x	301	76%	317	75%	16.7x	15.9x	21.5x	20.6x
Blackbaud	58.86	3,055	3,932	1,062	1,116	5%	3.7x	3.5x	254	24%	308	28%	15.5x	12.8x	22.7x	18.6x
nCino	26.44	2,936	2,911	404	484	20%	7.2x	6.0x	(2)	(1%)	53	11%	nm	nm	nm	76.5x
Duck Creek Technologies	12.05	1,601	1,351	306	340	11%	4.4x	4.0x	17	6%	32	9%	nm	42.5x	nm	77.5x
Sapiens	18.48	1,062	1,013	478	512	7%	2.1x	2.0x	93	20%	103	20%	10.8x	9.8x	15.3x	14.2x
Mean	\$ 27,541	\$ 29,297	\$ 4,036	\$ 4,159	10%	7.1x	6.5x	\$ 1,335	23%	\$ 1,380	25%	20.3x	21.8x	28.0x	37.5x	
Median	5,122	5,033	860	936	9%	7.2x	6.8x	254	24%	308	25%	19.8x	20.4x	25.2x	27.0x	

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Equity Trading Multiples by Comparable Subset

(\$ millions)

Company	Share Price (12/30/22)	Market Value	Enterprise Value	Revenue [a]			EV / Revenue [b]		EBITDA [a]			EV / EBITDA [c]		P / E Multiple [c]							
				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E					
Software-as-a-Service																					
Salesforce.com	\$ 132.59	\$ 131,397	\$ 134,123	\$ 31,053	\$ 34,468	11%	4.3x	3.9x	\$ 7,715	25%	\$ 8,260	24%	17.4x	16.2x	26.9x	23.3x					
ServiceNow	388.27	78,281	74,933	7,247	8,831	22%	10.3x	8.5x	2,246	31%	2,822	32%	33.4x	26.6x	52.9x	42.6x					
Shopify	34.71	44,154	40,512	5,509	6,683	21%	7.4x	6.1x	(52)	(1%)	57	1%	nm	nm	nm	nm					
Workday	167.33	43,006	40,776	6,203	7,272	17%	6.6x	5.6x	1,565	25%	1,932	27%	26.1x	21.1x	47.3x	35.8x					
Atlassian	128.68	32,880	32,648	3,158	3,857	22%	10.3x	8.5x	581	18%	679	18%	nm	48.1x	92.5x	82.2x					
Datadog	73.50	23,341	22,411	1,655	2,218	34%	13.5x	10.1x	334	20%	416	19%	nm	nm	81.0x	64.0x					
Paycom Software	310.31	17,957	17,668	1,372	1,686	23%	12.9x	10.5x	561	41%	696	41%	31.5x	25.4x	52.5x	42.1x					
Splunk	86.09	14,093	16,407	3,475	4,031	16%	4.7x	4.1x	544	16%	738	18%	30.2x	22.2x	46.7x	34.7x					
Hubspot	289.13	14,045	13,497	1,707	2,063	21%	7.9x	6.5x	211	12%	251	12%	nm	nm	nm	nm					
Paylocity	194.26	10,815	10,825	988	1,243	26%	11.0x	8.7x	277	28%	377	30%	39.1x	28.7x	52.1x	44.0x					
Twilio	48.96	9,025	6,070	3,802	4,442	17%	1.6x	1.4x	232	6%	370	8%	26.2x	16.4x	nm	nm					
Pure Storage	26.76	8,097	7,384	2,754	3,129	14%	2.7x	2.4x	524	19%	566	18%	14.1x	13.0x	21.0x	20.5x					
Dropbox	22.38	7,878	8,704	2,320	2,458	6%	3.8x	3.5x	858	37%	895	36%	10.2x	9.7x	14.3x	12.8x					
Five9	67.86	4,784	4,996	775	901	16%	6.4x	5.5x	134	17%	162	18%	37.2x	30.8x	49.6x	43.3x					
SPS Commerce	128.43	4,629	4,410	450	524	17%	9.8x	8.4x	130	29%	153	29%	33.8x	28.9x	57.2x	52.1x					
Box	31.13	4,449	5,117	991	1,097	11%	5.2x	4.7x	295	30%	331	30%	17.3x	15.5x	26.6x	21.2x					
Workiva	83.97	4,412	4,353	533	621	16%	8.2x	7.0x	(17)	(3%)	7	1%	nm	nm	nm	nm					
Freshworks	14.71	4,235	3,114	495	601	21%	6.3x	5.2x	(20)	(4%)	(9)	(1%)	nm	nm	nm	nm					
New Relic	56.45	3,858	3,596	882	1,021	16%	4.1x	3.5x	52	6%	99	10%	nm	36.4x	nm	85.8x					
AppFolio	105.38	3,705	3,623	465	567	22%	7.8x	6.4x	18	4%	33	6%	nm	nm	nm	nm					
Envestnet	61.70	3,414	4,146	1,243	1,311	5%	3.3x	3.2x	219	18%	255	19%	18.9x	16.3x	33.3x	29.1x					
Asana	13.77	2,930	2,643	542	652	20%	4.9x	4.1x	(245)	(45%)	(202)	(31%)	nm	nm	nm	nm					
Varonis Systems	23.94	2,639	2,165	472	527	12%	4.6x	4.1x	39	8%	52	10%	nm	41.8x	nm	90.6x					
Q2 Holdings	26.87	1,545	1,883	569	647	14%	3.3x	2.9x	40	7%	59	9%	46.8x	31.8x	85.0x	46.2x					
EverCommerce	7.44	1,437	1,886	617	693	12%	3.1x	2.7x	117	19%	139	20%	16.1x	13.5x	20.2x	18.1x					
Everbridge	29.58	1,181	1,520	431	458	6%	3.5x	3.3x	41	9%	84	18%	37.2x	18.1x	50.3x	22.5x					
Docebo	33.06	1,088	875	143	186	30%	6.1x	4.7x	0	0%	13	7%	nm	nm	nm	nm					
WalkMe	11.18	945	651	244	290	19%	2.7x	2.2x	(49)	(20%)	(30)	(10%)	nm	nm	nm	nm					
Riskified	4.62	782	339	259	306	18%	1.3x	1.1x	(45)	(17%)	(32)	(10%)	nm	nm	nm	nm					
Benefitfocus	10.46	361	581	253	258	2%	2.3x	2.3x	45	18%	44	17%	12.9x	13.1x	nm	40.2x					
Mean	\$	16,045	\$	15,729	\$	2,687	\$	3,101	17%	6.0x	5.0x	\$	545	12%	\$	641	14%	26.4x	23.7x	47.6x	42.6x
Median		4,539		4,703		935		1,059	17%	5.0x	4.4x		132	16%		157	18%	26.2x	21.7x	49.6x	41.2x

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Equity Trading Multiples by Comparable Subset continued

(\$ millions)

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
Small Cap (<\$250m Market Value)																
DHI Group	\$ 5.29	\$ 238	\$ 272	\$ 149	\$ 173	16%	1.8x	1.6x	\$ 31	21%	\$ 37	21%	8.9x	7.4x	nm	46.7x
Kaltura	1.72	229	195	168	177	5%	1.2x	1.1x	(30)	(18%)	(10)	(6%)	nm	nm	nm	nm
Upland Software	7.13	227	621	315	314	(0%)	2.0x	2.0x	97	31%	91	29%	6.4x	6.9x	3.9x	5.1x
Backblaze	6.15	201	167	85	100	18%	2.0x	1.7x	(10)	(11%)	(10)	(10%)	nm	nm	nm	nm
Veritone	5.30	192	196	151	164	9%	1.3x	1.2x	(13)	(9%)	4	3%	nm	44.8x	nm	nm
Cardlytics	5.78	192	290	300	321	7%	1.0x	0.9x	(44)	(15%)	(0)	(0%)	nm	nm	nm	nm
Outbrain	3.62	190	97	985	1,008	2%	0.1x	0.1x	24	2%	26	3%	4.0x	3.8x	nm	nm
Asure Software	9.34	188	220	90	100	10%	2.4x	2.2x	11	12%	15	15%	20.7x	15.2x	nm	32.4x
Altisource	9.46	153	341	159	274	72%	2.1x	1.2x	(19)	(12%)	38	14%	nm	8.9x	nm	12.3x
Viant	4.02	58	90	197	203	3%	0.5x	0.4x	(9)	(4%)	7	4%	nm	12.7x	nm	nm
Synchronoss Technologies	0.62	53	282	256	258	1%	1.1x	1.1x	51	20%	53	21%	5.5x	5.3x	3.1x	4.8x
Mean	\$ 175	\$ 252	\$ 260	\$ 281	13%	1.4x	1.2x	\$ 8	2%	\$ 23	8%	9.1x	13.1x	3.5x	20.2x	
Median	192	220	168	203	7%	1.3x	1.2x	(9)	(4%)	15	4%	6.4x	8.2x	3.5x	12.3x	
Highly Acquisitive																
Microsoft	\$ 239.82	\$ 1,788,218	\$ 1,758,110	\$ 204,534	\$ 225,265	10%	8.6x	7.8x	\$ 97,666	48%	\$ 109,779	49%	18.0x	16.0x	26.3x	23.4x
Google	88.23	1,145,004	1,058,081	283,385	307,959	9%	3.7x	3.4x	109,904	39%	118,953	39%	9.6x	8.9x	18.5x	16.6x
Oracle	81.74	220,392	304,431	45,815	51,815	13%	6.6x	5.9x	21,835	48%	23,473	45%	13.9x	13.0x	16.8x	15.8x
Cisco Systems	47.64	195,710	185,828	52,980	55,460	5%	3.5x	3.4x	19,062	36%	20,186	36%	9.7x	9.2x	13.9x	12.9x
Adobe	336.53	156,453	154,990	17,611	19,269	9%	8.8x	8.0x	8,795	50%	9,459	49%	17.6x	16.4x	24.7x	22.0x
Salesforce.com	132.59	131,397	134,123	31,053	34,468	11%	4.3x	3.9x	7,715	25%	8,260	24%	17.4x	16.2x	26.9x	23.3x
IBM	140.89	127,382	171,710	60,214	60,500	0%	2.9x	2.8x	14,763	25%	15,718	26%	11.6x	10.9x	15.6x	14.7x
SAP	103.01	119,992	124,095	33,016	35,427	7%	3.8x	3.5x	10,378	31%	11,436	32%	12.0x	10.9x	21.8x	17.5x
Intuit	389.22	109,342	114,219	13,551	14,833	9%	8.4x	7.7x	4,775	35%	5,742	39%	23.9x	19.9x	32.8x	26.7x
Intel	26.43	109,077	124,856	63,530	61,742	(3%)	2.0x	2.0x	18,448	29%	20,390	33%	6.8x	6.1x	13.5x	13.4x
Dassault Systemes	35.80	47,061	47,299	6,032	6,562	9%	7.8x	7.2x	2,293	38%	2,507	38%	20.6x	18.9x	29.7x	27.9x
OpenText	29.64	7,903	10,673	3,514	3,650	4%	3.0x	2.9x	1,226	35%	1,337	37%	8.7x	8.0x	9.7x	9.1x
Mean	\$ 346,494	\$ 349,035	\$ 67,936	\$ 73,079	7%	5.3x	4.9x	\$ 26,405	37%	\$ 28,937	37%	14.2x	12.9x	20.9x	18.6x	
Median	129,390	144,556	39,416	43,621	9%	4.0x	3.7x	12,570	36%	13,577	37%	13.0x	11.9x	20.1x	17.0x	

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
High Growth (>=30% CY23E Revenue Growth)																
Altisource	\$ 9.46	\$ 153	\$ 341	\$ 159	\$ 274	72%	2.1x	1.2x	\$ (19)	(12%)	\$ 38	14%	nm	8.9x	nm	12.3x
SentinelOne	14.59	4,124	3,451	420	652	55%	8.2x	5.3x	(200)	(48%)	(139)	(21%)	nm	nm	nm	nm
Snowflake	143.54	46,162	41,543	2,051	3,026	48%	20.3x	13.7x	122	6%	236	8%	nm	nm	nm	nm
GitLab	45.44	6,800	5,924	421	593	41%	14.1x	10.0x	(80)	(19%)	(85)	(14%)	nm	nm	nm	nm
Global-e	20.64	3,230	3,058	408	565	38%	7.5x	5.4x	45	11%	65	12%	nm	46.8x	nm	62.1x
Shift4 Payments	55.93	3,167	4,373	2,000	2,730	37%	2.2x	1.6x	277	14%	368	13%	15.8x	11.9x	42.0x	27.2x
Bill.com	108.96	11,514	10,739	841	1,145	36%	12.8x	9.4x	25	3%	86	7%	nm	nm	nm	nm
Cloudflare	45.21	14,857	14,788	975	1,319	35%	15.2x	11.2x	132	14%	179	14%	nm	nm	nm	nm
Datadog	73.50	23,341	22,411	1,655	2,218	34%	13.5x	10.1x	334	20%	416	19%	nm	nm	81.0x	64.0x
Crowdstrike	105.29	24,679	23,005	2,231	2,979	34%	10.3x	7.7x	439	20%	601	20%	nm	38.3x	70.2x	52.7x
Confluent	22.24	6,370	5,548	580	767	32%	9.6x	7.2x	(177)	(30%)	(146)	(19%)	nm	nm	nm	nm
Xero	47.76	7,170	7,239	785	1,027	31%	9.2x	7.0x	170	22%	225	22%	42.5x	32.2x	nm	nm
Zscaler	111.90	16,137	15,532	1,326	1,740	31%	11.7x	8.9x	196	15%	283	16%	nm	nm	nm	78.6x
Docebo	33.06	1,088	875	143	186	30%	6.1x	4.7x	0	0%	13	7%	nm	nm	nm	nm
Monday.com	122.00	5,500	4,732	510	663	30%	9.3x	7.1x	(74)	(15%)	(63)	(10%)	nm	nm	nm	nm
Mean	\$ 11,620	\$ 10,904	\$ 967	\$ 1,326	39%	10.1x	7.4x	\$ 79	0%	\$ 138	6%	29.2x	27.6x	nm	49.5x	
Median	6,800	5,924	785	1,027	35%	9.6x	7.2x	45	6%	86	12%	29.2x	32.2x	70.2x	57.4x	

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				CY22E	CY23E	y/y	CY22E	CY23E	CY22E	mgn	CY23E	mgn	CY22E	CY23E	CY22E	CY23E
High Profitability (>=40% CY22E EBITDA Margin)																
Rightmove	\$ 6.16	\$ 5,073	\$ 5,033	\$ 398	\$ 422	6%	12.6x	11.9x	\$ 301	76%	\$ 317	75%	16.7x	15.9x	21.5x	20.6x
Verisign	205.44	21,780	22,589	1,422	1,542	8%	15.9x	14.6x	1,017	72%	1,120	73%	22.2x	20.2x	33.4x	28.7x
MSCI	465.17	37,194	40,999	2,240	2,442	9%	18.3x	16.8x	1,323	59%	1,453	59%	31.0x	28.2x	41.0x	36.9x
NortonLifeLock	21.22	14,263	23,291	3,104	3,904	26%	7.5x	6.0x	1,756	57%	1,903	49%	13.3x	12.2x	nm	nm
Adobe	336.53	156,453	154,990	17,611	19,269	9%	8.8x	8.0x	8,795	50%	9,459	49%	17.6x	16.4x	24.7x	22.0x
Aspen Technology	205.40	13,257	13,233	951	1,232	30%	13.9x	10.7x	460	48%	603	49%	28.8x	22.0x	28.0x	32.0x
Black Knight	61.75	9,539	12,276	1,569	1,658	6%	7.8x	7.4x	755	48%	815	49%	16.3x	15.1x	25.2x	23.8x
Fair Isaac	598.58	14,950	16,729	1,402	1,519	8%	11.9x	11.0x	671	48%	775	51%	24.9x	21.6x	33.6x	29.1x
Microsoft	239.82	1,788,218	1,758,110	204,534	225,265	10%	8.6x	7.8x	97,666	48%	109,779	49%	18.0x	16.0x	26.3x	23.4x
Oracle	81.74	220,392	304,431	45,815	51,815	13%	6.6x	5.9x	21,835	48%	23,473	45%	13.9x	13.0x	16.8x	15.8x
Check Point	126.16	15,822	12,275	2,328	2,444	5%	5.3x	5.0x	1,059	45%	1,098	45%	11.6x	11.2x	17.2x	15.5x
Qualys	112.23	4,263	3,847	489	567	16%	7.9x	6.8x	217	44%	234	41%	17.7x	16.5x	31.0x	27.8x
Descartes Systems	69.65	5,915	5,684	485	532	10%	11.7x	10.7x	215	44%	239	45%	26.5x	23.8x	59.0x	49.9x
Paychex	115.56	41,656	41,268	4,802	5,124	7%	8.6x	8.1x	2,097	44%	2,290	45%	19.7x	18.0x	29.2x	26.4x
Cadence Design	160.64	44,066	43,838	3,545	3,873	9%	12.4x	11.3x	1,537	43%	1,726	45%	28.5x	25.4x	38.0x	34.5x
Fiserv	101.07	64,182	83,006	16,758	17,946	7%	5.0x	4.6x	7,234	43%	7,785	43%	11.5x	10.7x	15.6x	13.8x
FIS	67.85	40,261	57,432	14,531	15,139	4%	4.0x	3.8x	6,248	43%	6,586	44%	9.2x	8.7x	10.2x	10.0x
ANSYS	241.59	21,045	21,296	2,026	2,188	8%	10.5x	9.7x	861	42%	972	44%	24.7x	21.9x	31.4x	28.8x
Akamai Technologies	84.30	13,256	15,056	3,592	3,752	4%	4.2x	4.0x	1,524	42%	1,574	42%	9.9x	9.6x	16.0x	15.0x
ZoomInfo Technologies	30.11	12,154	13,011	1,097	1,342	22%	11.9x	9.7x	462	42%	577	43%	28.2x	22.5x	35.7x	30.8x
Paycom Software	310.31	17,957	17,668	1,372	1,686	23%	12.9x	10.5x	561	41%	696	41%	31.5x	25.4x	52.5x	42.1x
TechnologyOne	8.93	2,896	2,801	244	291	19%	11.5x	9.6x	99	41%	126	43%	28.2x	22.2x	50.2x	41.6x
Roper Industries	432.09	45,824	50,589	5,372	5,930	10%	9.4x	8.5x	2,176	41%	2,410	41%	23.2x	21.0x	30.6x	27.0x
Mean	\$ 113,496	\$ 118,237	\$ 14,595	\$ 16,082	12%	9.9x	8.8x	\$ 6,907	48%	\$ 7,652	48%	20.6x	18.1x	30.3x	27.1x	
Median	17,957	21,296	2,240	2,442	9%	9.4x	8.5x	1,059	44%	1,120	45%	19.7x	18.0x	29.9x	27.4x	

- Global Diversified
- Application Delivery & Network Acceleration
- Business Intelligence
- Communications
- DevOps and Software Development Tools
- eCommerce & Supply Chain Management
- ERP & General Business Applications
- Financial Applications
- Human Capital Management
- IT Operations Management
- IT Security
- Network Infrastructure
- Real Estate
- Sales & Marketing Applications
- Storage Management
- Technical & Embedded Apps
- Vertical Applications
- Software-as-a-Service
- Small Cap
- Highly Acquisitive
- High Growth
- High Profitability

Sources: Company releases, Wall Street research

[a] Wall Street consensus estimates

[b] EV / Revenue multiples in excess of 30x or less than 0x are considered not meaningful

[c] EV / EBITDA multiples in excess of 50x or less than 0x and P / E multiples in excess of 100x or less than 0x are considered not meaningful

Agenda

M&A Activity

Public Equity Market Valuations

→ **Equity Financing Activity**

Software IPOs Pricing & Performance Data

Initial Equity Issuances from Q1 2021 – Q4 2022 (\$ millions)

Company	Current Trading Data								Valuation at IPO							
	Share Price	Market	Enterprise	Revenue		EV / Revenue		Performance	Share	Amount	Market	Enterprise	EV / Revenue			
	12/30/22	Value	Value	CY22E	CY23E	CY22E	CY23E	Since IPO					IPO Date	Price	Raised [a]	Value
Samsara	\$ 12.43	\$ 6,450	\$ 5,839	\$ 637	\$ 819	9.2x	7.1x	(46%)	12/14/21	\$ 23.00	\$ 805	\$ 11,508	\$ 11,390	30.1x	27.2x	20.7x
HashiCorp	27.34	5,139	3,880	464	593	8.4x	6.5x	(66%)	12/08/21	80.00	1,224	14,312	14,113	49.3x	45.5x	34.8x
UserTesting	7.51	1,103	953	192	230	5.0x	4.2x	(46%)	11/16/21	14.00	140	1,972	1,926	14.3x	13.4x	10.1x
Weave Communications	4.58	300	256	141	164	1.8x	1.6x	(81%)	11/10/21	24.00	120	1,510	1,495	13.9x	12.9x	9.8x
Backblaze	6.15	201	167	85	100	2.0x	1.7x	(62%)	11/10/21	16.00	100	468	503	7.9x	7.6x	6.0x
Expensify	8.83	725	687	171	196	4.0x	3.5x	(67%)	11/09/21	27.00	263	1,818	1,821	14.2x	12.9x	10.1x
Informatica	16.29	4,611	5,867	1,511	1,653	3.9x	3.5x	(44%)	10/26/21	29.00	841	7,937	10,333	7.3x	7.2x	6.5x
GitLab	45.44	6,800	5,924	421	593	14.1x	10.0x	(41%)	10/13/21	77.00	801	11,012	10,736	54.7x	46.5x	34.1x
AvidXchange	9.94	1,975	1,664	315	374	5.3x	4.4x	(60%)	10/12/21	25.00	660	4,894	4,925	21.2x	20.7x	17.3x
Amplitude	12.08	1,367	1,072	237	299	4.5x	3.6x	(65%)	09/28/21	35.00	1,770	3,618	3,327	25.8x	20.6x	14.6x
Clearwater Analytics	18.75	3,550	3,397	301	361	11.3x	9.4x	4%	09/23/21	18.00	540	3,113	3,496	15.5x	14.3x	11.9x
EngageSmart	17.60	2,912	2,652	302	381	8.8x	7.0x	(32%)	09/22/21	26.00	378	4,185	4,265	23.3x	20.5x	15.8x
Freshworks	14.71	4,235	3,114	495	601	6.3x	5.2x	(59%)	09/21/21	36.00	1,026	10,132	9,891	32.1x	27.0x	20.5x
ForgeRock	22.77	1,944	1,652	212	265	7.8x	6.2x	(9%)	09/15/21	25.00	275	1,984	1,937	12.3x	11.5x	9.6x
Riskified	4.62	782	339	259	306	1.3x	1.1x	(78%)	07/28/21	21.00	368	3,310	3,165	15.4x	14.2x	11.8x
MeridianLink	13.73	1,111	1,425	285	309	5.0x	4.6x	(47%)	07/27/21	26.00	343	2,098	2,684	11.1x	10.5x	9.5x
Outbrain	3.62	190	97	985	1,008	0.1x	0.1x	(82%)	07/22/21	20.00	160	1,077	966	1.1x	1.0x	0.8x
Couchbase	13.26	599	429	151	176	2.8x	2.4x	(45%)	07/21/21	24.00	200	994	965	8.9x	8.1x	6.5x
Kaltura	1.72	229	195	168	177	1.2x	1.1x	(83%)	07/21/21	10.00	150	1,241	1,273	8.8x	7.7x	6.0x
Paycor	24.47	4,303	4,235	479	576	8.8x	7.4x	6%	07/20/21	23.00	426	4,012	4,058	11.5x	10.9x	9.7x
VTEX	3.75	714	480	159	198	3.0x	2.4x	(80%)	07/20/21	19.00	361	3,558	3,532	31.1x	28.6x	22.3x
EverCommerce	7.44	1,437	1,886	617	693	3.1x	2.7x	(56%)	06/30/21	17.00	325	3,508	4,075	10.0x	8.9x	7.5x
SentinelOne	14.59	4,124	3,451	420	652	8.2x	5.3x	(58%)	06/29/21	35.00	1,225	8,973	8,657	77.0x	49.3x	28.7x
Confluent	22.24	6,370	5,548	580	767	9.6x	7.2x	(38%)	06/23/21	36.00	828	9,085	8,853	33.7x	27.6x	20.5x
Sprinklr	8.17	2,133	1,603	616	710	2.6x	2.3x	(49%)	06/22/21	16.00	266	4,007	3,813	9.4x	8.4x	6.9x
WalkMe	11.18	945	651	244	290	2.7x	2.2x	(64%)	06/16/21	31.00	287	2,562	2,450	15.6x	13.2x	10.4x
Monday.com	122.00	5,500	4,732	510	663	9.3x	7.1x	(21%)	06/09/21	155.00	574	6,777	6,664	35.4x	25.5x	17.6x
Procore Technologies	47.18	6,511	6,039	708	871	8.5x	6.9x	(30%)	05/19/21	67.00	634	8,585	8,265	19.6x	16.9x	13.8x
Global-e	20.64	3,230	3,058	408	565	7.5x	5.4x	(17%)	05/11/21	25.00	375	3,556	3,477	21.4x	16.5x	10.4x
SimilarWeb	6.43	489	474	193	235	2.5x	2.0x	(71%)	05/11/21	22.00	176	1,634	1,606	15.7x	12.8x	10.0x
KnowBe4	24.78	4,393	4,064	334	416	12.2x	9.8x	55%	04/21/21	16.00	152	2,657	2,575	13.6x	11.1x	8.9x
UiPath	12.71	7,027	5,408	1,028	1,217	5.3x	4.4x	(77%)	04/20/21	56.00	1,338	29,073	28,632	47.1x	34.9x	26.4x
DoubleVerify	21.96	3,621	3,462	452	559	7.7x	6.2x	(19%)	04/20/21	27.00	360	4,194	4,172	16.0x	13.2x	10.0x
AppLovin	10.53	3,914	6,256	2,817	2,845	2.2x	2.2x	(87%)	04/14/21	80.00	2,000	28,636	30,122	16.8x	11.2x	9.2x
Alkami Technology	14.59	1,335	1,210	204	257	5.9x	4.7x	(51%)	04/14/21	30.00	180	2,494	2,357	19.3x	16.2x	12.8x
DigitalOcean	25.47	2,453	3,097	574	741	5.4x	4.2x	(46%)	03/23/21	47.00	776	4,949	5,109	16.0x	12.8x	10.1x
Viant	4.02	58	90	197	203	0.5x	0.4x	(84%)	02/09/21	25.00	250	1,473	1,487	9.0x	7.9x	6.5x
ON24	8.63	415	83	191	191	0.4x	0.4x	(83%)	02/03/21	50.00	428	1,898	1,865	11.9x	9.1x	7.4x
Qualtrics	10.38	6,132	5,675	1,449	1,697	3.9x	3.3x	(65%)	01/28/21	30.00	1,551	15,102	15,140	19.8x	16.2x	13.6x
Mean	\$ 2,803	\$ 2,593	\$ 500	\$ 588	5.4x	4.4x				\$ 581	\$ 5,998	\$ 6,054	21.0x	17.4x	13.3x	
Median	2,133	1,886	334	416	5.0x	4.2x				375	3,558	3,532	15.7x	13.2x	10.1x	

Note: No Software IPOs took place in 2022

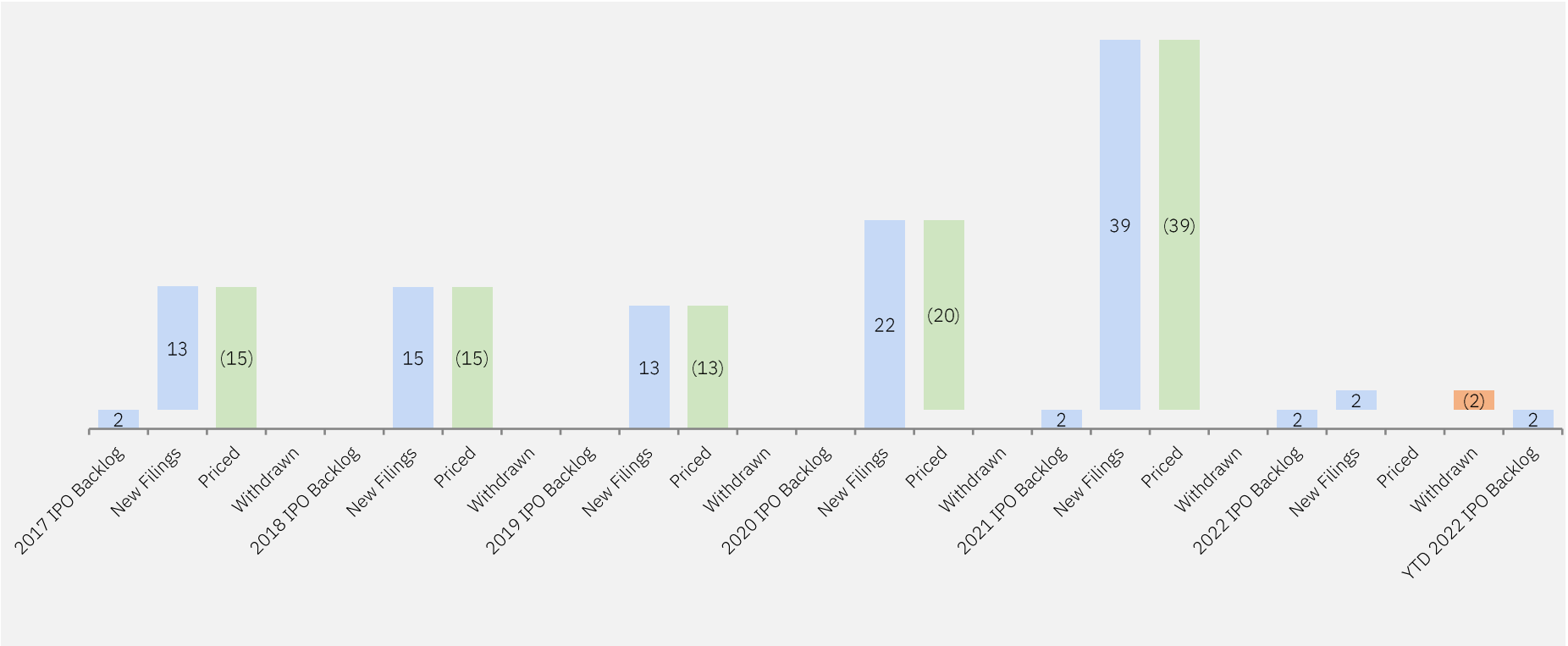
Sources: Company releases, Wall Street research

[a] Primary shares only

Equity Financing Activity

Software IPO Pipeline

Historical IPO Filing Trends



Note: In a typical IPO process, the offering progresses through three key milestones: the initial filing of the S-1 (prospectus; F-1 for foreign companies); an amended version of the S-1 following comments from the SEC (also called the S-1/A); and pricing the offering and issuing shares to the public market

Software Private Capital Raise Activity: Q4 2022

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
12/30/22	Loop Returns	Burch Creative Capital, CRV, FirstMark Capital, Lerer Hippeau, Peterson Partners, Ridge Ventures, Shopify	Exchange-first return platform to drive loyalty for e-commerce businesses	\$115	-
12/30/22	Property Meld	n/a	Property maintenance management solution with automated scheduling and tracking	\$15	-
12/30/22	Remesh	Wilmot Advisors	Customer insights platform to engage and understand a live audience in real time	\$12	-
12/29/22	Edify	Xplorer Capital	Business communication solution connecting businesses with customers and employees	\$29	-
12/27/22	App Orchid	Moneta Ventures	Development application to restructure the way enterprises approach digital transformation	\$6	-
12/27/22	KERV Interactive	n/a	Interactive video platform driving deeper user engagement	\$7	-
12/23/22	NLX	n/a	Automated development platform building and monitoring conversational applications	\$10	-
12/23/22	Terminus	n/a	Account-based marketing platform enabling marketers to target key accounts	\$22	-
12/22/22	Qualytics	Engage VC, GRI Fund, Inner Loop Capital, Knoll Ventures, Palico, SaaS Ventures, Tech Square Ventures	Data quality surveillance platform monitoring and defending against data pipeline corruption	\$5	-
12/22/22	Tredence	Advent International	Data analytics for the telecom, pharma and retail industries	\$175	\$500
12/22/22	Vianova	Baloise Holding, Groupe La Poste, JAXAngels, Ponooc, RATP Capital Innovation	Mobility platform connecting cities and operators with geospatial modeling and smart tracking	\$6	-
12/21/22	Treble	Nauta Capital	Cloud-based API monitoring solution	\$7	-
12/20/22	Nobl9	n/a	Development applications to improve team-wide productivity and business alignment	\$16	-
12/20/22	QuantCube Technology	Five Capital, Moody's, Tawazun Strategic Development Fund	Data analytics solution with real-time predictive insights	\$5	-
12/20/22	Steno	n/a	Remote litigation platform with a full suite of court reporting solutions	\$19	\$105
12/19/22	CyberCube	Forgepoint Capital, Morgan Stanley Tactical Value, MTech Capital, Stone Point Capital	Cyber risk analytics enabling businesses to make informed, effective and efficient decisions	\$50	-
12/19/22	Swyft	FEMSA Ventures, Investisseurs & Partenaires	Automated retail platform increasing sales and enhancing customer experiences	\$14	\$50
12/19/22	VMRay	eCAPITAL entrepreneurial Partners, Gründerfonds Ruhr, NRW.Bank, Tikehau Ace Capital	Threat-analysis and detection solution protecting against digital malware threats	\$36	-
12/16/22	Divergent	Hexagon	End-to-end digital production platform for industrial-scale manufacturing processes	\$100	\$1,360
12/16/22	Micronotes	Experian Ventures	Cloud-based business intelligence platform driving engagement and sales opportunities	\$6	\$22
12/16/22	Willow	n/a	Cross-system communication platform with data-driven insights	\$29	-
12/15/22	Acin	Barclays, BNP Paribas, Citigroup, Fitch Ventures, J.P. Morgan, Notion, Talis Capital	Non-financial risk intelligence data platform	\$22	-
12/15/22	Insala	HEXA Global Ventures	Talent development solution connecting organizations and employees	\$10	-
12/15/22	RegASK	Monograph Capital, SPRIM Ventures	AI-based global markets regulatory compliance solution	\$10	-
12/15/22	Stavvy	Morningside Group	Digital mortgage vendor solution	\$26	-
12/15/22	Sweep	Bessemer Venture Partners, Insight Partners	CRM platform to customize and scale salesforce configuration	\$28	\$80
12/14/22	Cyara	K1 Investment Management	Automated customer experience assurance solution	\$350	-
12/14/22	DataVisor	Brighton Park Capital, Genesis Capital, GSR Ventures, NewView Capital	Fraud and risk detection protecting large consumer-facing enterprises from digital threats	\$40	-
12/14/22	Gladly	GGV Capital, Glynn Capital, Greylock Partners, Northeast Angels Investment Group, Riverwood Capital	Cloud-based communication solution improving customer service	\$55	-
12/14/22	Mews	Battery Ventures, Goldman Sachs Asset Management, Kinnevik, Salesforce Ventures, Thayer Ventures	Property management solution for the hotel industry	\$185	\$865
12/14/22	retrain.ai	.406 Ventures, Hetz Ventures, Radical Ventures, Splunk Ventures, Square Peg Capital	AI-based talent management solution to recruit and retain employees	\$14	\$64
12/14/22	Shabodi	Blumberg Capital, CEAS Investments, Counterview Capital, SineWave Ventures	Application enablement solution building high-performance enterprise applications on 5G	\$10	-
12/14/22	Spotler	CNBB Equity Partners, Mill Reef Capital	Email marketing solution for the e-commerce, retail, education and healthcare sectors	\$31	-
12/13/22	Api.video	Blossom Capital, Financière Saint James, MMC Ventures, Open Ocean	Cloud-based video platform for organizations to share and exchange knowledge	\$12	-
12/13/22	Beamery	Teachers' Venture Growth	Talent engagement platform identifying and engaging candidates	\$50	\$1,000
12/13/22	Dataiku	Battery Ventures, Insight Partners, Tiger Global Management, Wellington Management	Centralized data solution with predictive modeling and machine learning capabilities	\$204	\$3,700
12/13/22	Malwarebytes	Vector Capital	Network security platform helping stop cyberattacks	\$100	-
12/13/22	Sennder	n/a	Digitalized platform for the freight-forwarding process	\$63	\$2,084
12/13/22	TheyDo	20VC, Blossom Capital	Customer experience tools to improve engagement	\$13	-
12/13/22	Vic.ai	Costanoa Ventures, Cowboy Ventures, GGV Capital, ICONIQ Growth	AI-based accounting platform with insights and advisory information	\$52	\$223
12/12/22	Assembly	10X Capital, Acadian Ventures, Alpha Edison, Alumni Ventures, Homebrew, Wonder Ventures	HCM platform enabling recognition and rewarding among employees	\$13	-
12/12/22	MessageGears	Atlanta Ventures, Long Ridge Equity Partners, The Argentum Group	Cloud-based messaging platform using customer data to create conversation	\$62	-
12/12/22	Pindrop	n/a	Phone fraud detection and call center authentication platform	\$5	-
12/12/22	Snyk	Boldstart Ventures, Qatar Investment Authority, Salesforce Ventures, Tiger Global Management	Identification of open-source vulnerabilities through security analysis	\$197	\$7,400
12/12/22	ToolSense	aws Gründerfonds, Matterwave Ventures, PwC IIoT	Asset operations platform for construction and facility management	\$8	-
12/12/22	Zappi	Sumeru Equity Partners	Automated market research platform using collected consumer data	\$167	-
12/09/22	ParkDepot	Armira Partners, HenQ, Surplus Equity Partners	AI-based platform digitizing parking lot management	\$16	-
12/08/22	Pactum	3VC, Atomico, Maersk Growth, Metaplanet Holdings, NordicNinja VC, Project A, Taavet+Sten	AI-based platform automatically offering personalized, commercial negotiations	\$20	\$90
12/07/22	Allain	i5invest, Round2 Capital Partners	LMS and e-learning platform for schools, universities and corporate teams	\$8	-
12/07/22	Axonaut	Bpifrance, Matmut Innovation, The Moon Venture	Business and project management platform for management businesses	\$10	-

Sources: Company releases, Wall Street research

Software Private Capital Raise Activity: Q4 2022 continued

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
12/07/22	Clearsense	Health Catalyst Capital Management	Data platform-as-a-service for empowering data confidence	\$6	-
12/07/22	Drata	Alkeon Capital Management, GGV Capital, ICONIQ Growth, Salesforce Ventures, SentinelOne	Security and compliance automation platform	\$200	\$2,000
12/07/22	Elastic Path	Sageview Capital	API-based enterprise commerce platform for personalized buying experiences	\$30	-
12/07/22	OpenLoop	n/a	Online hiring platform to match healthcare providers with hiring institutions	\$13	-
12/07/22	SurrealDB	FirstMark Capital	Multi-model analysis platform to help users and developers build applications	\$6	-
12/07/22	Vaultree	CircleRock Capital, Elkstone Partners, SentinelOne, Ten Eleven Ventures	Encryption-as-a-service platform for data protection	\$13	-
12/06/22	Chattermill	Beringea, btov Partners, DN Capital, Runa Capital, Silicon Valley Bank, Ventech	Customer experience analytics platform for unified customer feedback	\$25	\$63
12/06/22	Dreamdata	Crowberry Capital, InReach Ventures, PreSeed Ventures, Signals Venture Capital	Go-to-market analytics and revenue attribution platform	\$6	-
12/06/22	Expeto	5G Open Innovation Lab, Lavrock Ventures, Mistral Venture Partners, Sorenson Capital	Private mobile networking platform for enterprise network management	\$12	-
12/06/22	Invent Analytics	CollectiveSpark, European Bank for Reconstruction and Development	Customer analytics platform for retail forecasting and supply chain design	\$8	-
12/06/22	Mapiq	ENERGIIQ, Rinkelberg Capital, TomTom	Cloud-based work management platform integrating facility systems for workplaces	\$18	-
12/06/22	MetalSoft	DNS Capital	Bare metal automation solutions managing data centers and vendors	\$16	-
12/06/22	Osome	AFG Partners, Illuminate Financial Management, Winter Capital	Enterprise management platform automating administrative services	\$25	-
12/06/22	Senhasegura	Graphene Ventures	Access management solutions facilitating information security for organizations	\$13	-
12/06/22	Trendspk	Archangel Ventures, Firemark Ventures, Taronga Ventures	Data inspection platform offering precision reality twins of assets	\$6	-
12/05/22	Apromore	GBTEC Software, Salesforce	Open-source business process analytics platform for data mining	\$10	-
12/05/22	Cinder	J2 Ventures	Intelligence and investigation platform customizing workflows for safety teams	\$13	-
12/05/22	Fringe	Felton Group, Origin Ventures, Revolution/ROTR, Sovereign Capital Management	Fringe benefits marketplace platform for employee administration	\$18	-
12/05/22	Heretto	n/a	Content management system automating content publishing across channels	\$17	\$49
12/02/22	GoSecure	n/a	Integrated endpoint threat platform protecting against cyber risks	\$6	-
12/02/22	Replay.io	n/a	Debugging solution for web developers to inspect their platforms	\$13	\$63
12/02/22	SirionLabs	Brookfield Asset Management	Contract management solution that validates and reconciles invoices	\$75	-
12/02/22	Tilt	n/a	Employee retention platform automating leave workflow management	\$7	\$60
12/01/22	Alitheon	AEI HorizonX, BMW i Ventures, Imagine Ventures	Machine vision solution that traces the lifecycle of goods without labels, markings or packaging	\$14	-
12/01/22	Censinet	MemorialCare Innovation Fund	Third-party risk management platform with real-time insights into individual vendors	\$12	\$38
12/01/22	Certemy	Apis Holdings, Numeta Capital	Automated professional certification platform with performance tracking capabilities	\$10	-
12/01/22	FigBytes	Quantum Energy Partners	Cloud-based solution to track and measure social and environmental sustainability	\$15	-
12/01/22	LegalOn Technologies	n/a	AI-enabled contract review solution for the legal sector	\$126	-
12/01/22	OneRail	Alumni Ventures, Arsenal Growth, Bullpen Capital, Ironspring Ventures, Mana Ventures, Piva Capital	AI-based logistics management platform optimizing the entire delivery supply chain	\$33	\$105
12/01/22	RangeForce	Energy Impact Partners	Cybersecurity training platform that conducts simulated cyberattack exercises	\$19	-
12/01/22	Shield.	Macquarie Group, Mindset Ventures, OurCrowd, UBS Next	Communication compliance platform automating the complete communications lifecycle	\$20	\$102
11/30/22	Flare	50 North Ventures, Fonds de solidarité FTQ, Inovia Capital, Luge Capital, White Star Capital	Dark-net intelligence platform to prevent cyber-crimes	\$9	-
11/30/22	Pangea	Ballistic Ventures, Decibel Partners, GV, Okta Ventures, SYN Ventures	Security APIs portfolio delivering security solutions and APIs for application builders	\$26	\$165
11/30/22	Scw.ai	Birthing of Giants VC, Panoramic Ventures, Sabanci Holding	Digital factory platform providing end-to-end solutions to manufacturers	\$10	\$39
11/30/22	SPHERE	Edison Partners, Forgepoint Capital	End-to-end security intelligence model improving security and enhancing compliance	\$31	\$115
11/30/22	Teampay	Espresso Capital, Fin Capital, Mastercard, PROOF Fund, Trestle Partners	Distributed spend management platform helping organizations manage their expenses	\$47	-
11/29/22	deskbird	FortyOne Group, PortfoLion, Rivus Capital, session vc	On-demand workspace management platform facilitating collaboration and engagement	\$7	-
11/29/22	Frame AI	FirstMark Capital, G20 Ventures, Greycroft, Twilio, ValueStream Ventures	Collaborative messaging platform to improve business conversations	\$8	\$33
11/29/22	Frankieone	Apex Capital, Clearsign Capital, Greycroft, Kraken Ventures, Scalare Partners	Application programming interface platform to manage KYC, anti-money laundering and fraud	\$30	-
11/29/22	Live Data Technologies	n/a	Data aggregation and validation platform	\$5	\$27
11/29/22	zLinq	McCarthy Capital	Communication management platform for employee and client engagement	\$5	-
11/29/22	Zylo	Baird Capital, Coupa Ventures, High Alpha, Spring Lake Equity Partners	Enterprise management platform optimizing cloud-based subscriptions	\$32	-
11/28/22	V7	Amadeus Capital Partners, Radical Ventures, Temasek Life Sciences Accelerator	Perception platform accelerating artificial intelligence development	\$33	-
11/24/22	Acerta	BDC Capital, OMERS Ventures, StandUp Ventures	AI-based automotive analytics platform	\$8	-
11/24/22	Obrizum	Beaubridge, Celered Investments, Guinness Ventures, Juno Capital	Digital learning platform transforming digital learning through analytics	\$12	-
11/23/22	iSpot.tv	n/a	Advertising intelligence platform providing TV advertisement data and analytics	\$45	-
11/23/22	Pinata	Bullpen Capital, M13	Data-driven platform for collaborating and creating elevated consumer experiences	\$13	\$85
11/23/22	Ramani	Flexcap, Son Tech Investment, StartX	Application platform for salespeople to track inventory and record sales	\$32	-
11/23/22	Sapia.ai	Macquarie Group, W23	Conversational interview platform reducing biases in the hiring process	\$11	-
11/22/22	Bitwave	Alumni Ventures, Arca, Blockchain Capital, Hack VC, Hutt Capital, Pulsar Trading, SignalFire	Digital asset finance platform to manage cryptocurrency accounting and compliance	\$15	-

Sources: Company releases, Wall Street research

Software Private Capital Raise Activity: Q4 2022 continued

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
11/22/22	Exotanium	Cambium Capital Management, Celesta Capital, Eastlink Capital, Empire State Development	Cloud resource optimization and management to reduce cloud spend	\$14	\$34
11/22/22	Taktile	Index Ventures, Tiger Global Management	Data & analytics tool to industrialize, scale and maintain machine learning models	\$20	-
11/21/22	Diffblue	AlbionVC, IP Group, Oxford Investment Consultants, Parkwalk Advisors	Automated testing tool to reduce manual coding with autonomous unit test-writing	\$8	-
11/21/22	Habit Analytics	BIG Start Ventures, Bright Pixel Capital, Iberis Capital, SixThirty Ventures	Insurance management to optimize risk assessment and plan selection	\$5	-
11/20/22	Tenovos	Bertelsmann Investments, S4S Ventures	Digital asset management platform to help brands grow and engage their customers	\$10	\$55
11/18/22	AMFG	D&FG Elements, Intel Capital	Additive manufacturing execution system and workflow automation	\$10	-
11/17/22	Circularise	4impact.vc, Asahi Kasei, Brightlands Venture Partners, Caygan Capital, Neste	Supply chain traceability and secure data exchange enabled by blockchain	\$11	-
11/17/22	Eye Security	Bessemer Venture Partners	Insurance equipped cybersecurity platform for European SMEs	\$17	-
11/17/22	Private AI	BDC Capital, Differential Ventures, Shasta Ventures	Fraud detection management platform for developer privacy	\$8	-
11/17/22	Scoop	Activate Capital Partners, Audacious Ventures	Multi platform tool developer to enable businesses to plan flexible work arrangements	\$8	\$25
11/17/22	Symend	BDC Capital, Inovia Capital, Mistral Venture Partners	Behavior engagement platform that leverages consumer behavior to increase retention	\$40	-
11/16/22	ArmorCode	Ballistic Ventures, Sierra Ventures	Cybersecurity platform designed to simplify application security	\$14	\$63
11/16/22	Freshpaint	Intel Capital, Vibe Capital	No code customer data platform for monitoring site engagement	\$15	-
11/15/22	Bruviti	Marcone Appliance Parts	Predictive analytics for improved customer engagement	\$5	-
11/15/22	Buynomics	Dieter von Holtzbrinck Ventures, Insight Partners, La Famiglia, Seedcamp, Tomahawk.VC	Forecasting platform testing and optimizing prices under realistic conditions	\$13	-
11/15/22	CleverTap	n/a	AI-powered marketing engagement and analytics	\$35	-
11/15/22	Contentstack	Georgian, Illuminate Ventures, Insight Partners	Cloud-based content management powering omnichannel content	\$80	-
11/15/22	EngFlow	Andreessen Horowitz, Firstminute Capital, The Fund, Tiger Global Management	Remote execution platform helping developers	\$18	-
11/15/22	GovInvest	Level Equity	Liability and cost visualization platform assisting governments	\$19	-
11/15/22	MadKudu	Alven Capital Partners, Benhamou Global Ventures, Felicis Ventures, HarbourVest Partners, Notables	Marketing operations platform for well-informed data science decisions	\$17	\$77
11/15/22	MotherDuck	Altimeter Capital Management, Amplify Partners, Andreessen Horowitz, Madrona Venture Group	Data analytics platform offering big data solutions and profit maximization	\$48	-
11/15/22	omnicus	Württembergische & Badische Versicherungs	Insurance claim automation platform for understanding handwritten information	\$12	-
11/15/22	Send	Breega, Mercia Asset Management	Commercial insurance platform assisting clients in business management	\$10	-
11/15/22	ShipHero	n/a	Online logistics platform simplifying inventory management and shipping	\$10	-
11/15/22	Valcre	Avenue Growth Partners, Second Century Ventures	Appraisal platform for commercial real estate	\$13	\$63
11/14/22	Beeldi	Citizen Capital, MAIF Avenir, Starquest Capital China	Asset management platform simplifying technical management of a building	\$8	-
11/14/22	Cloudbrink	Highland Capital Partners, The Fabric	Cloud and IoT infrastructure for cloud application distribution	\$25	-
11/14/22	Orfium	Big Pi Ventures	Rights management platform solving royalty collection issues	\$27	\$175
11/14/22	QualSights	n/a	Insights platform generating deeper and more authentic insights from customers	\$8	\$38
11/14/22	Recess	Data Point Capital, Spring Mountain Capital	Experimental marketing platform connecting brands with live events	\$5	-
11/14/22	Red Points	Eight Roads, Iris Capital, Mangrove Capital Partners, Northzone Ventures, Summit Partners	Brand and content protection platform detecting counterfeit goods online	\$20	-
11/13/22	Pelico	83North, ISAI, La Famiglia, Serena Capital	Data management platform helping operationalize teams and achieve outputs	\$19	-
11/11/22	Axiom Cloud	Blue Bear Capital, Frontier Venture Capital, North Bay Angels, Ulu Ventures	Power maintenance platform facilitating sustainable cooling systems management	\$12	-
11/11/22	Recess	Animal Capital, Aperia Ventures, Data Point Capital, Spring Mountain Capital	Experimental marketing platform connecting brands with live events	\$12	-
11/10/22	Coefficient	Battery Ventures, Foundation Capital, S28 Capital	Data analytics platform allowing business teams to work with real-time data	\$18	\$78
11/10/22	DemandJump	n/a	Customer behavior and attribution platform saving time through automation	\$7	-
11/10/22	Mem	OpenAI Startup Fund	Productivity platform to streamline tasks and note-taking workflows	\$24	\$110
11/10/22	MetaCX	Tech Square Ventures	Business outcome management platform for visibility into customer success	\$13	-
11/10/22	Near	Blue Torch Capital, Greater Pacific Capital	Ambient intelligence platform providing data on people, places and products	\$100	-
11/10/22	Ordergroove	Primus Capital	Cloud-based commerce platform for subscription models and retention rates	\$100	-
11/09/22	Equals	Andreessen Horowitz, BoxGroup, Combine, Craft Ventures, Work Life Ventures	Spreadsheet platform with APIs to any database, versioning and collaboration	\$16	\$76
11/09/22	Keka	WestBridge Capital Partners	HR payroll management platform for leave, attendance and bonuses	\$57	-
11/09/22	Trinity Cyber	n/a	Cybersecurity platform to thwart advanced hacking techniques and threats	\$26	-
11/08/22	Greenscreens.ai	Tiger Global Management	AI-based freight platform increasing broker margin contribution	\$5	\$65
11/08/22	Harmonic	Craft Ventures, Floodgate Fund, Pelion Venture Partners, Sozo Ventures	Enterprise platform transforming business activities into actionable insights	\$23	\$243
11/08/22	Tea	n/a	Development toolkit facilitating open-source adoption	\$16	-
11/08/22	Veriti	Amiti Ventures, Insight Partners, Merlin Ventures, NFX	Unified security posture management platform	\$12	\$39
11/07/22	CloseSimple	Plymouth Growth	Real estate-based platform to improve business communication	\$6	\$16
11/07/22	Exotanium	Cambium Capital Management, Celesta Capital, Eastlink Capital	Cloud resource optimization platform to reduce spending on cloud computing	\$12	\$32
11/07/22	MyTraffic	Alven Capital Partners, AXA Venture Partners	Big data platform for the commercial real estate sector	\$30	-

Sources: Company releases, Wall Street research

Software Private Capital Raise Activity: Q4 2022 continued

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
11/07/22	Silverpush	JM Financial, Mirabilis Investment Trust, Seven Hills Capital	Advertising platform offering data-driven technologies to complex client problems	\$12	\$65
11/04/22	Poplar	n/a	Residential real estate platform with instant renter screening and maintenance recommendations	\$12	\$92
11/04/22	Purchasing Platform	n/a	Automated procurement management platform connecting property managers and vendors	\$8	\$50
11/04/22	Strategic Risk Associates	Jam Fintop Capital	Risk intelligence and intuitive performance management platform	\$12	-
11/03/22	Apiiro	General Catalyst, Greylock Partners, Kleiner Perkins	Code risk platform automating visibility and compliance assurance	\$100	-
11/03/22	DataLoop	Alpha Wave Global, Amity Ventures, F2 Venture Capital, NGP Capital, OurCrowd	Enterprise-grade data platform leveraging AI to cover the entire data preparation cycle	\$33	\$111
11/03/22	Gitpod	Crane Venture Partners, General Catalyst, GTMFund, Pebblebed, Speedinvest, Vertex Ventures US	Open-source developer platform for remote development for businesses and engineers	\$25	-
11/03/22	Lodgify	Aldea Ventures, Bonsai Partners, Nauta Capital, Octopus Ventures	Short-term rental solution that synchronizes property information on vacation rental portals	\$30	\$88
11/03/22	Logiwa	BAM Elevate, LaunchCapital, NewRoad Capital Partners, Prologis Ventures, Valor Equity Partners	Supply chain management platform optimizing warehousing and inventory operations	\$26	\$110
11/03/22	Project44	A.P. Moller Holding, Generation Investment Management, Goldman Sachs Asset Management	Logistics management platform digitizing the shipment life cycle	\$80	\$2,700
11/03/22	Returnalyze	Data Point Capital, Dispatch Ventures	Return optimization platform leveraging existing transaction data to offer business insights	\$5	\$18
11/03/22	SparkPlug	Industry Ventures, Lightbank, TenOneTen Ventures	Performance management platform with POS integrations and automated sales reporting	\$8	-
11/02/22	AiDash	Schneider Electric	AI-based remote monitoring platform facilitating satellite-powered operations and maintenance	\$10	-
11/02/22	Alation	Blackstone, Costanoa Ventures, Riverwood Capital, Sanabil Investments, Thoma Bravo	Enterprise collaborative data platform utilizing business data to optimize decision making	\$148	\$1,748
11/02/22	Alethea Group	Ballistic Ventures	Threat detection and mitigation platform for enterprise clients preventing misinformation	\$10	-
11/02/22	Binary Defense	Invictus Growth Partners	Cybersecurity solutions offering managed detection and response and event management	\$36	-
11/02/22	Carta Healthcare	Asset Management Ventures, CU Healthcare Innovation Fund, Mass General Brigham	AI-based patient flow management platform optimizing operational efficiencies in hospitals	\$20	\$80
11/02/22	DGTAL	n/a	Big data analytics platform that optimizes back-office operations	\$6	-
11/02/22	Orum	Corp Capital, Craft Ventures, Tribe Capital, Unusual Ventures	Enterprise sales automation platform leveraging AI to accelerate calling for sales teams	\$22	\$362
11/02/22	Roam	Crew Capital, IVP	Virtual office interface enabling employees to communicate in one cloud environment	\$30	\$95
11/02/22	Teamstarter	Financière Vector, Matters, Odyssey Venture	Employee engagement platform enabling intra-company participatory financing	\$7	-
11/01/22	Cover Genius	Atlas Merchant Capital, Dawn Capital, G Squared, King River Capital	Insurance distribution platform featuring integrated end-to-end insurance capabilities	\$70	-
11/01/22	Fringe	Felton Group, Origin Ventures, Revolution/ROTR, Sovereign Capital Management	Fringe benefits marketplace platform offering personalized benefits to employees	\$17	\$37
11/01/22	Galileo	Battery Ventures, FactoryHQ, FPV Ventures, Walden Catalyst	Data intelligence platform enabling clients to improve efficiencies and mitigate data biases	\$18	\$73
11/01/22	Hourly	CSC UpShot Ventures, Gilot Capital Partners, Vintage Investment Partners	Compensation insurance platform assisting small business owners with full-service payroll	\$32	\$77
11/01/22	MAD	AIRI Capital	AI-based platform offering computer vision modules to facilitate features like object recognition	\$21	\$141
11/01/22	Roots Automation	CRV, Liberty Mutual Strategic Ventures, MissionOG, Permit Ventures, Vestigo Ventures	AI-enabled process automation platform optimizing manual business operations	\$10	\$36
11/01/22	TouchBistro	Francisco Partners	Point-of-sale solution for restaurant owners and managers	\$109	-
11/01/22	Tour24	29th Street Capital, LAB Ventures, Middleburg	Self-guided property tour application streamlining leasing processes	\$11	-
11/01/22	Way	Derive Ventures, MSD Capital, Side Door Ventures, Tiger Global Management	Automated brand activation and marketing platform	\$20	\$100
11/01/22	Xano	Engineering Capital, MHS Capital	No-code development platform for web, mobile and IoT applications	\$5	\$22
10/31/22	Bright Machines	Eclipse Ventures	Automated manufacturing optimization platform with AI and machine learning capabilities	\$132	-
10/31/22	Floreo	Autism Impact Fund, Felton Group, Tenfore Holdings, The Disability Opportunity Fund	Training platform for people with autism and other developmental challenges	\$10	-
10/30/22	newtrul	Besemer Venture Partners, Crowley, Flex Capital, SignalFire	Shipment aggregation platform connecting shippers, brokers and carriers	\$5	-
10/28/22	Kaseya	n/a	IT management and monitoring platform for SMBs	\$178	-
10/27/22	Blusapphire	Baring Private Equity Partners India, Dallas Venture Capital, Merisis Advisors, RPG Ventures	Cybersecurity platform for SMBs in highly regulated industries	\$9	-
10/27/22	Cinchy	Forgepoint Capital, Information Venture Partners, ScaleUP Ventures, Techstars	Data management platform simplifying authorized access to data	\$15	-
10/27/22	CloudPay	Runway Growth Capital, The Olayan Group	End-to-end payroll management platform for multinational organizations	\$50	-
10/27/22	Resilia	Framework Venture Partners, Goldman Sachs Asset Management, Panoramic Ventures	Business technology platform for non-profit organizations	\$35	-
10/27/22	Versa Networks	BlackRock, Silicon Valley Bank	Cloud-integrated network and security platform	\$120	\$875
10/26/22	Decisiv	Morgan Stanley Expansion Capital	Supply relationship management solution for commercial assets	\$15	-
10/26/22	Impact Analytics	The Argentum Group	AI-powered business intelligence and insights platform	\$10	\$86
10/26/22	LatticeFlow	Atlantic Bridge Capital, FPV Ventures, Global Founders Capital, OpenOcean VC	System management platform deploying safe, reliable and trustworthy AI models	\$12	-
10/26/22	SwiftConnect	1414 Ventures, Bridge Investment Group, JLL Spark, Navitas Capital, Nuveen Investments	Property management platform simplifying building access	\$17	-
10/26/22	Toku	Betatron Venture Group, Delivery Hero Ventures, Neptune Invest, OSK Ventures International	Communication solution with SMS application integration and text-to-speech conversion	\$10	-
10/26/22	Trigo	83North, Hetz Ventures, Red Dot Capital Partners, REWE Group, SAP, Temasek Holdings	Automated checkout platform for grocery retail stores	\$100	-
10/26/22	Unito	Besemer Venture Partners, Caisse de dépôt et placement du Québec	Project management platform synchronizing tasks and conversations	\$20	-
10/26/22	Valence Security	Akamai Technologies, Alumni Ventures, M12, Porsche Ventures, YL Ventures	Security platform managing risks associated with third-party integrations	\$25	-
10/26/22	Workerbase	Almaz Capital, Bayern Kapital, Point Nine Capital, Porsche Ventures	Process execution platform with task management and productivity analysis capabilities	\$10	-
10/25/22	PreVeil	Providence Strategic Growth	Encrypted email and file-sharing platform securing data across multiple devices	\$20	\$100

Sources: Company releases, Wall Street research

Software Private Capital Raise Activity: Q4 2022 continued

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
10/25/22	Probelly	Bright Pixel Capital, Caixa Capital, Iberis Capital, Semapa Next, TIIN Capital	Web application security suite for companies building online services	\$8	-
10/25/22	Resonai	Alon Blue Square Israel, Irani Ventures, Meitav Dash Investments, SBI Holdings	Visual search platform transforming commercial buildings into intelligent environments	\$20	-
10/25/22	Shippeo	Battery Ventures, ETF Partners, LFX Venture Partners, NGP Capital, Partech	Supply chain platform for real-time and multimodal transportation visibility	\$40	-
10/25/22	Spyderbat	Benhamou Global Ventures, LiveOak Venture Partners, NTTVC	Cybersecurity solution to integrate and enhance existing workflows	\$10	\$37
10/24/22	Fermyon Technologies	Amplify Partners, Insight Partners	Platform for writing microservices and web applications	\$22	\$87
10/24/22	Merge	Accel, Addition, New Enterprise Associates	Programming and integration tools for HR, payroll, recruiting and accounting platforms	\$55	\$315
10/23/22	Evercam	Calista Direct Investors, Elkstone Partners, Swiss Post Ventures	Construction solution to facilitate speedy completion and improve cost efficiency	\$9	-
10/21/22	Nammu21	Circle Ventures, Citigroup, Galaxy Digital Holdings, Raptor Group	Digitization and analytics platform that deconstructs complex documents in the financial sector	\$16	\$43
10/20/22	Corsa	Roadmap Capital	Network security virtualization platform to scale up network security in high-traffic networks	\$10	-
10/20/22	Skudat	Anthemis Group, BEENEXT Capital Management, Go-Ventures, Mindlance	Tech-enabled talent acquisition platform bridging the gap between talent and opportunities	\$15	-
10/20/22	Tellius	Baird Capital, Grotech Ventures, Sands Capital, Veraz Investments	Decision intelligence platform accelerating data-driven insight and decision-making	\$16	\$66
10/20/22	Voilà!	Azure Capital Partners, Desjardins Capital, IPanache Ventures, Walter Ventures	Scheduling platform driving employee engagement and increasing long-term profit	\$10	-
10/19/22	Shbumi	Guidepost Growth Equity	Strategy execution platform to manage complex and strategic problems	\$30	-
10/19/22	Wiiisdom	Isatis Capital	Business intelligence administration solution creating synergy between IT and Business	\$6	-
10/18/22	Anonos	Ghost Tree Partners	Solution making restricted assets accessible to expand and expedite data-driven initiatives	\$50	-
10/18/22	Bolster	Crosslink Capital, Liberty Global Ventures, Philou Ventures, Thomvest Ventures	AI-based cyber-security technology to detect phishing and fraudulent sites in real time	\$15	\$55
10/18/22	Definitive	n/a	User acquisition platform providing instant insights about project growth	\$15	\$75
10/18/22	Keebo	.406 Ventures, Neotribe Ventures, Pear, True Ventures, Uncorrelated Ventures	Cloud-based data-learning platform boosting the speed of BI dashboards	\$15	\$40
10/18/22	LeadScorz	Acorn Ventures, Keiretsu Forum	Lead management tool suite that validates and scores leads	\$6	\$15
10/18/22	Lumiq	InfoEdge Ventures, Redstart Labs, Season Two Ventures	Self-learning applications and data platforms to build and run analytics	\$5	\$39
10/18/22	Makersite	Hitachi Ventures, Kompas VC, Planet A, TransLink Capital	Data management for product sustainability, cost and compliance	\$18	-
10/18/22	Mobeus	n/a	Digital communication application providing frictionless connectivity	\$12	-
10/18/22	Payflows	Headline, Ribbit Capital	Treasury management platform helping businesses manage finances	\$6	-
10/18/22	Pulpo	Cracks Fund, FEMSA Ventures, Fondo de Fondos, Nazca, Swanlaab Venture Factory	Specialized vehicle management to make decisions and optimize fleet operations	\$8	-
10/18/22	RisingWave Labs	Yunqi Partners	Database systems reducing the complexity and cost of building real-time applications	\$36	-
10/18/22	Ten Thousand Coffees	Five Elms Capital	Social platform allowing organizations to connect to their employees	\$56	-
10/18/22	Virtuous	The Arizona Founders Fund	Fundraising platform assisting nonprofits streamline fundraising processes	\$14	\$154
10/17/22	Billie Genie	n/a	Accounting platform tracking invoices and automating accounts receivables	\$5	-
10/17/22	HYCU	Acrew Capital, Atlassian Ventures, Bain Capital Ventures, Cisco Investments, Okta Ventures	Multi-cloud data management platform offering cloud data backup	\$53	-
10/17/22	Plandek	YFM Equity Partners	Information security and data analytics platform for data security and insights	\$5	\$23
10/15/22	Center	n/a	Expense management platform offering real-time data to organizations	\$64	\$564
10/14/22	Citalid	Albingia, Axeleo Capital, Fiblac, Relyens, Seventure Partners	Cybersecurity platform assessing the risks of being attacked by an algorithm	\$12	\$18
10/14/22	Murison	n/a	Virtual reality training platform reinventing professional learning	\$5	-
10/14/22	ThreatQuotient	n/a	Threat intelligence platform empowering security teams to respond to cyber threats	\$6	-
10/13/22	ARTA	10X Capital, AXA Venture Partners, Coelius Capital, Corazon Capital, Mu Ventures, Pari Passu Partners	Logistics management to automate high-value shipping and fulfillment	\$11	\$36
10/13/22	Carvolution	Armada Investment, Die Mobiliar, Redalpine Partners, Ringier Digital	Car subscription platform to offer an alternative to purchasing and leasing	\$17	\$219
10/13/22	Kadence	Crescent Ridge, Forward VC, Kickstart Seed Fund, Shadow Ventures	Platform providing data-driven insights on how employees use workspaces	\$11	-
10/13/22	Katana	42CAP, Atomico, Lightrock, Northzone Ventures	Inventory platform automating workflows for businesses looking to scale	\$35	-
10/13/22	MobileTrain	BNP Paribas Fortis, Concerta, Force Over Mass Capital, Fortino Partners, LRM	Mobile learning platform enabling efficient learning for employees	\$8	\$31
10/13/22	NorthOne	Battery Ventures, Ferst Capital, Next Play Capital, Redpoint Ventures, Wedbush Partners	Banking platform managing finances and integrating financial tools in one place	\$67	-
10/13/22	SecuriThings	Aleph, Cresson Management, Firsttime, Swisscom Ventures, US Venture Partners	Management platform integrating cloud-connected systems to protect data	\$21	\$80
10/13/22	Shadowbox	Baleon Capital	Cloud-based platform securing browsers and connecting multiple applications	\$6	-
10/13/22	Stratio	Adara Ventures, InfraVia Growth	Data management platform helping businesses digital transformations	\$64	\$169
10/13/22	Vectara	BECO, Feld Ventures, Green Sands, GTM Capital, NKM, Page One Ventures, Sparq	AI-powered text search platform	\$20	-
10/12/22	Assiduous	9Unicorns, Pulsar Capital, StrongHer VC, Venture Catalysts	AI-enabled e-commerce accelerator for direct-to-consumer brands	\$15	-
10/12/22	Bud	Outward Venture Capital, SEI Investments, TDR Capital	Open banking application connecting people, banks and service providers	\$80	-
10/12/22	Diagrid	Amplify Partners, Norwest Venture Partners, Quiet Capital	Enterprise platform to simplify, de-risk and navigate distributed systems	\$20	\$75
10/12/22	Immersive Labs	Citi Ventures, Goldman Sachs Asset Management, Insight Partners, Menlo Ventures, Summit Partners	Human cyber readiness platform to manage human cybersecurity capabilities	\$66	-
10/12/22	Ntropy	ComplyAdvantage, January Ventures, Lakestar, MoonPay, QED Investors, Ramp, Twilio Ventures	Data categorization platform to help companies identify fraud	\$11	\$41
10/12/22	Tehtris	AQUITI Gestion, Jolt Capital, Open CNP, Tikehau Ace Capital	Cybersecurity platform protecting organizations from malware	\$43	-

Sources: Company releases, Wall Street research

Software Private Capital Raise Activity: Q4 2022 continued

(\$ millions)

Announced	Company	Participating Investor(s)	Description	Amount Raised	Post-Valuation
10/12/22	TripActions	Addition, Andreessen Horowitz, Greenoaks Capital, Group 11, Lightspeed Venture Partners	Corporate travel management, expense management and payments platform	\$154	\$9,200
10/12/22	Vanta	Acrew Capital, Craft Ventures, CrowdStrike, Frontline Ventures, LAUNCH Fund, Sequoia Capital	Compliance and security automation platform to keep consumer data safe	\$150	\$1,640
10/11/22	Chronograph	Nasdaq Ventures, Summit Partners, The Carlyle Group	Data management and analytics platform offering portfolio monitoring and diligence	\$20	-
10/11/22	Factorial	Atomico, Creandum, CRV, GIC, Ischyros New York, KFund, Tiger Global Management	HR management for SMBs	\$120	\$1,000
10/11/22	Flueid	Aquiline Capital Partners, Commerce Ventures	Real estate platform streamlining the real estate lifecycle experience	\$20	\$135
10/11/22	ForUsAll	n/a	Cloud-based financial platform advising SMBs on 401(k) plans	\$5	-
10/11/22	Foxglove	Amplify Partners, Eclipse Ventures	Visualization and debugging platform to accelerate robotics development	\$15	\$60
10/11/22	Funnel Leasing	n/a	Real estate marketing solutions to manage inventory and optimize tenant experience	\$16	-
10/11/22	NumberOne AI	B5 Capital, Miramar Digital Ventures	Automated AI and ML platform designed to solve global problems	\$13	-
10/11/22	Quicket Solutions	Glencrest Global, Perfect Balance Investments	Workflow automation platform to streamline payments for the public sector	\$8	\$53
10/11/22	SettleMint	Allusion, Bloccelerate, Fujitsu Ventures, Medici Ventures, Molten Ventures, OTB Ventures	Blockchain solution helping integrate blockchain technologies into applications	\$21	-
10/11/22	Stairwell	Accel, Gradient Ventures, Lux Capital, Section 32, Sequoia Capital	Cybersecurity platform to help security teams detect and respond to cyber attacks	\$45	\$300
10/11/22	Zed	n/a	IDE for high-performance and collaborative developers	\$10	\$40
10/10/22	Connex One	GP Bullhound	Customer engagement platform enabling interactions with an omnichannel engine	\$104	-
10/10/22	Endor Labs	Dell Technologies Capital, Lightspeed Venture Partners, Sierra Ventures	Lifecycle management platform to make engineering a robust process	\$25	-
10/10/22	Meilisearch	CRV, ESOP Trust, Felicis Ventures, Mango Capital, Phoenix Court, Seedcamp	Open-source search engine that integrates with apps, websites and workflow	\$15	-
10/10/22	Stopwatch	n/a	Unified commerce platform offering real-time updates and data analytics	\$12	-
10/10/22	Vozy	Enlaces, Globant Ventures, GoHub Ventures, Plus, Starling Ventures	Voice AI platform transforming the way companies interact with customers	\$5	-
10/09/22	MindProber	Armar Venture Partners, Iberis Capital	Consumer analytics platform for real-time media testing	\$6	\$15
10/08/22	Enable	HarbourVest Partners, Insight Partners, Lightspeed Venture Partners, Norwest Venture Partners	Enterprise collaboration platform to help manage trading agreements	\$94	\$856
10/07/22	Hwy Haul	BluePointe Ventures, Eileases Capital, True Blue Partners	Marketplace connecting shippers with carriers for freight transportation	\$10	\$53
10/07/22	Onebrief	n/a	Visual strategy platform providing mind mapping for the military	\$15	\$55
10/07/22	Proof	n/a	Business impact analytics platform to help marketing teams optimize costs	\$50	-
10/06/22	Altana	Activate Capital Partners, Amadeus Capital Partners, GV, OMERS Ventures, Prologis Ventures	AI platform offering trade data management services	\$100	\$430
10/06/22	Arctic Wolf	Ischyros New York, Ontario Teachers' Pension Plan, Owl Rock Capital, Viking Global Investors	Cybersecurity platform for keeping valuable business data safe	\$401	-
10/06/22	Clearspeed	King Philanthropies	Voice analytics system for accurately recognizing fraud in conversations	\$27	\$144
10/06/22	CrowdSec	Breega, Supernova Invest	Open-source cybersecurity automation platform to analyze IP addresses	\$14	-
10/06/22	Revelio Labs	Alumni Ventures, Barclays, K20 Fund	Workforce analytics platform to standardize public employment records	\$15	-
10/05/22	IriusRisk	360 Capital, Inveready, Paladin Capital	Automated threat modeling platform for the application design and development process	\$29	-
10/05/22	NetSPI	KKR	Cybersecurity penetration testing platform	\$410	-
10/05/22	WorkSpan	Insight Partners, Mayfield	Business partner management platform for marketing and selling to strategic partners	\$30	-
10/05/22	XOR	Verras Capital	Workforce recruitment platform to automate the recruitment process	\$7	\$40
10/04/22	Breezeway	Catalyst Partners, Morningside Group	Online property management platform for short-term rentals	\$15	\$62
10/04/22	Bunny.net	Capital Genetics	Content Delivery Network to help developers build a faster and more reliable internet	\$6	-
10/04/22	Humaans	Frontline Ventures, Next Play Ventures	Human resource management platform to help optimize employee onboarding	\$15	-
10/04/22	Tines	Accel, CrowdStrike, Felicis Ventures	Security automation and response platform to automate repetitive processes	\$82	\$355
10/04/22	WorkFusion	n/a	Intelligent automation platform providing AI-enabled digital workers	\$9	-
10/04/22	Xembly	Ascend Venture Capital, Lightspeed Venture Partners	HCM platform providing an automated chief of staff for all employees	\$15	\$50
10/03/22	Bobsled	Greycroft	No-code data sharing platform connecting any cloud, platform or region	\$17	\$67
10/03/22	Expel	CapitalG, Cisco Investments, Greycroft	SecOps platform providing managed detection and response, phishing and threat hunting	\$171	\$1,077
10/03/22	Polco	BAT VC, Mercury Fund, Royal Street Ventures	Citizen engagement platform to collect community insights for government leaders	\$14	\$48
10/03/22	Securiti	General Catalyst, Mayfield, Owl Rock Capital	Privacy management platform integrating data security, privacy, governance and compliance	\$75	\$600
10/03/22	SingleStore	Goldman Sachs Growth Equity, Prosperity7	Data and analytics platform delivering a distributed SQL database for data-intensive applications	\$146	-
10/01/22	BlackSwan Technologies	Shefa Capital	AI-based big data analytics platform breaking the barriers of data acquisition and monetization	\$69	\$528

Sources: Company releases, Wall Street research

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