



Industry Insights

Global Software Sector Update

Late Spring 2022

Executive Summary

Following six consecutive quarters of accelerating activity, with the number of deals and deal volumes reaching record levels in Q4 2021, Q1 2022 was a mixed quarter. Deal activity (number of deals) continued to accelerate and hit a quarterly record of 709 deals, but total deal value dropped significantly relative to 2021. Underlying this was continued robust activity in mid-market (<\$1bn) software M&A from both PE and strategic acquirers, but a sharp fall of around 50% (from \$98bn to \$47bn) in deal volume from large cap deals (>\$1bn values). SPAC deal activity was also down significantly relative to 2021. The robust mid-market activity in Q1 2022 highlights the continued confidence in software as a growth sector and continued appetite from software-focused PE buyers.

Macro head-winds, including persistent inflation, have however resulted in tightening of monetary policy, causing major turbulence across credit markets and high-beta assets. Publicly traded, high-growth SaaS stocks with limited or negative near-term profitability have been particularly hit as future cashflows are more heavily discounted, bringing mean valuations back to or in some cases below pre-pandemic levels. Meanwhile, the strength of demand and competition for premium software assets in the mid-market is reflected in the Q1 M&A deal multiples which are largely in line with 2021 levels (6.3x for PE deals and 7.6x for strategic deals).

As we continue to experience volatility in the public markets through Q2, we would expect to see a continued slow down in large cap deals but sustained levels of mid-market deal activity. With regard to valuations, while an impact on private company valuations had not been seen in Q1, we would expect the trends in public company and transaction multiples to converge through the remainder of 2022. This is due to a derivative impact from the decline in public market multiples, PE acquirers becoming more disciplined on valuations, and strategic buyers engaging more selectively.

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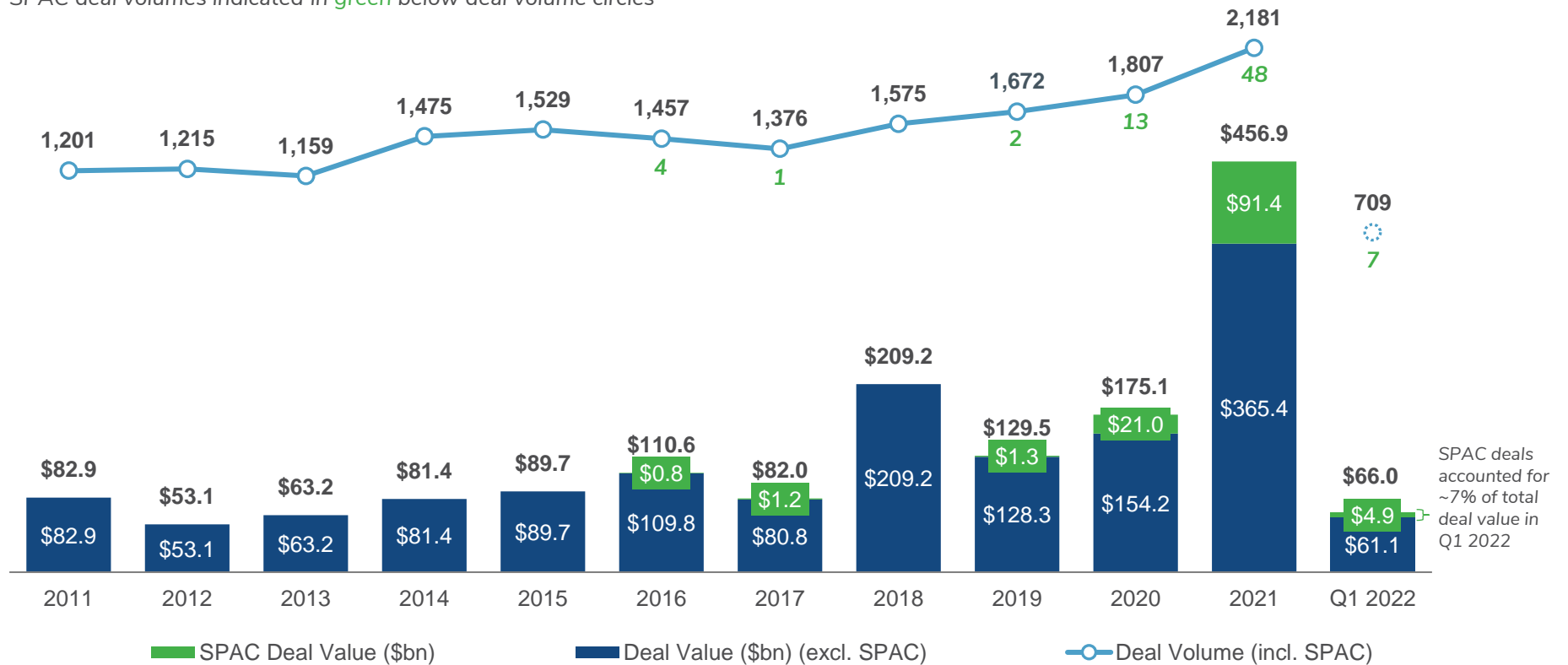
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Significant Decrease in Deal Value Despite Record Deal Volume

SPAC Deals Accounted For Less than 10% of Deal Value

Annual Deal Volume and Deal Value

SPAC deal volumes indicated in green below deal volume circles



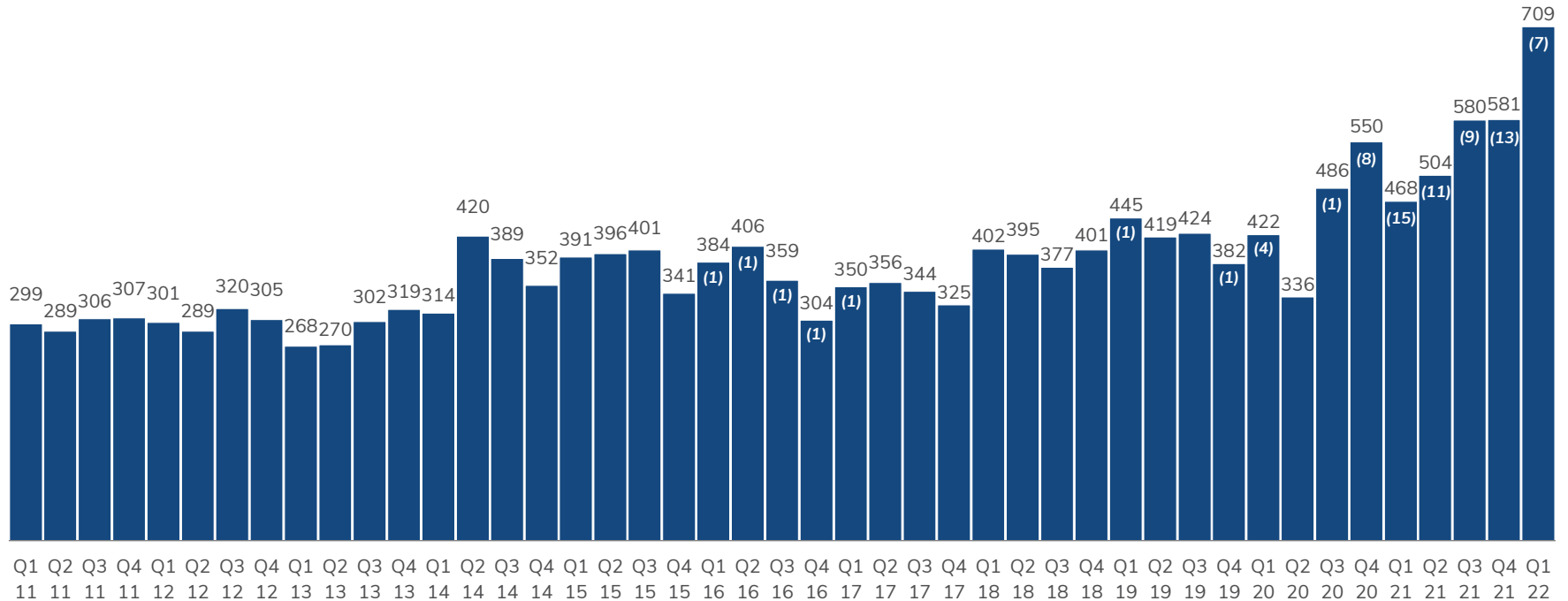
Source: 451 Research as of March 31, 2022

Quarterly Deal Activity Remained Above Historical Average

Q1 2022 Recorded the Largest Deal Volume by Quarter Since Q1 2011

Quarterly Deal Volume (Q1 2011 to Q1 2022)¹

Top number in each bar indicates total deal volumes in quarter (incl. SPAC deals)
 SPAC deal volumes indicated in brackets

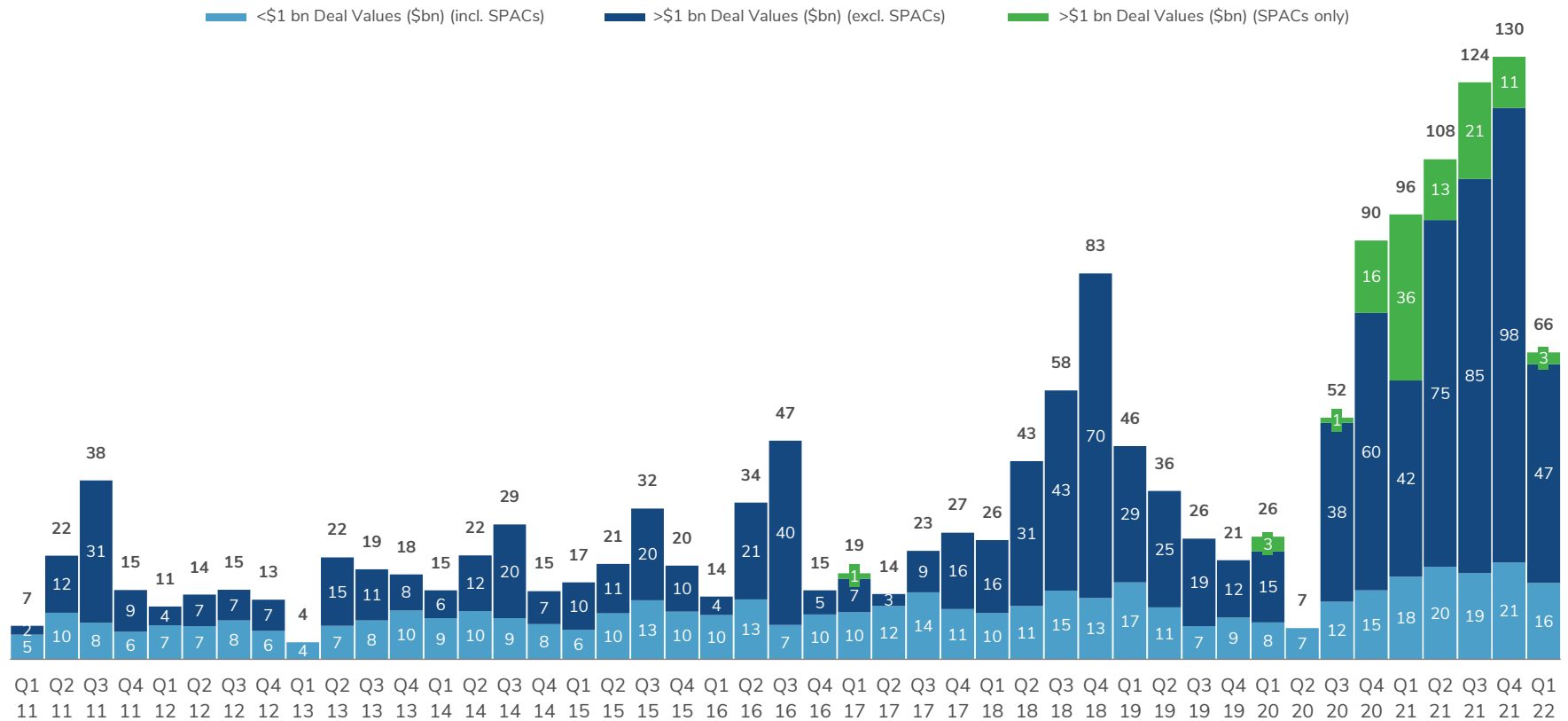


¹Between January 01, 2011 and March 31, 2022
 Source: 451 Research as of March 31, 2022

Deal Values Almost Halved Compared to Previous Quarters

Significant decrease in \$1bn + and SPAC deals

Quarterly Deal Values (\$bn) (Q1 2011 to Q1 2022)¹

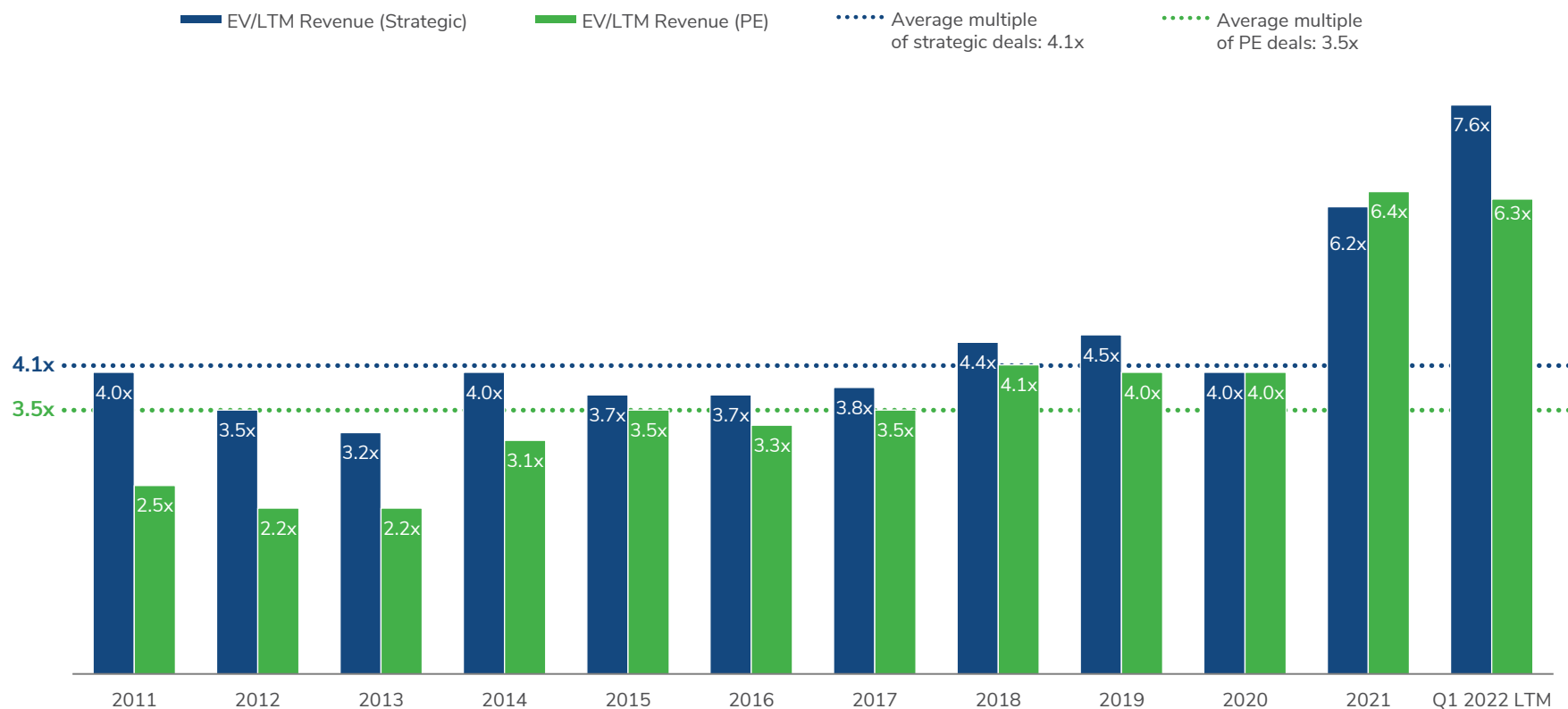


¹Between January 01, 2011 and March 31, 2022
Source: 451 Research as of March 31, 2022

Software Multiples Remain Above Long-Term Levels

Strategics Demonstrated Significant Premium Valuation in Last 12 Months

Annual Median Deal Multiples

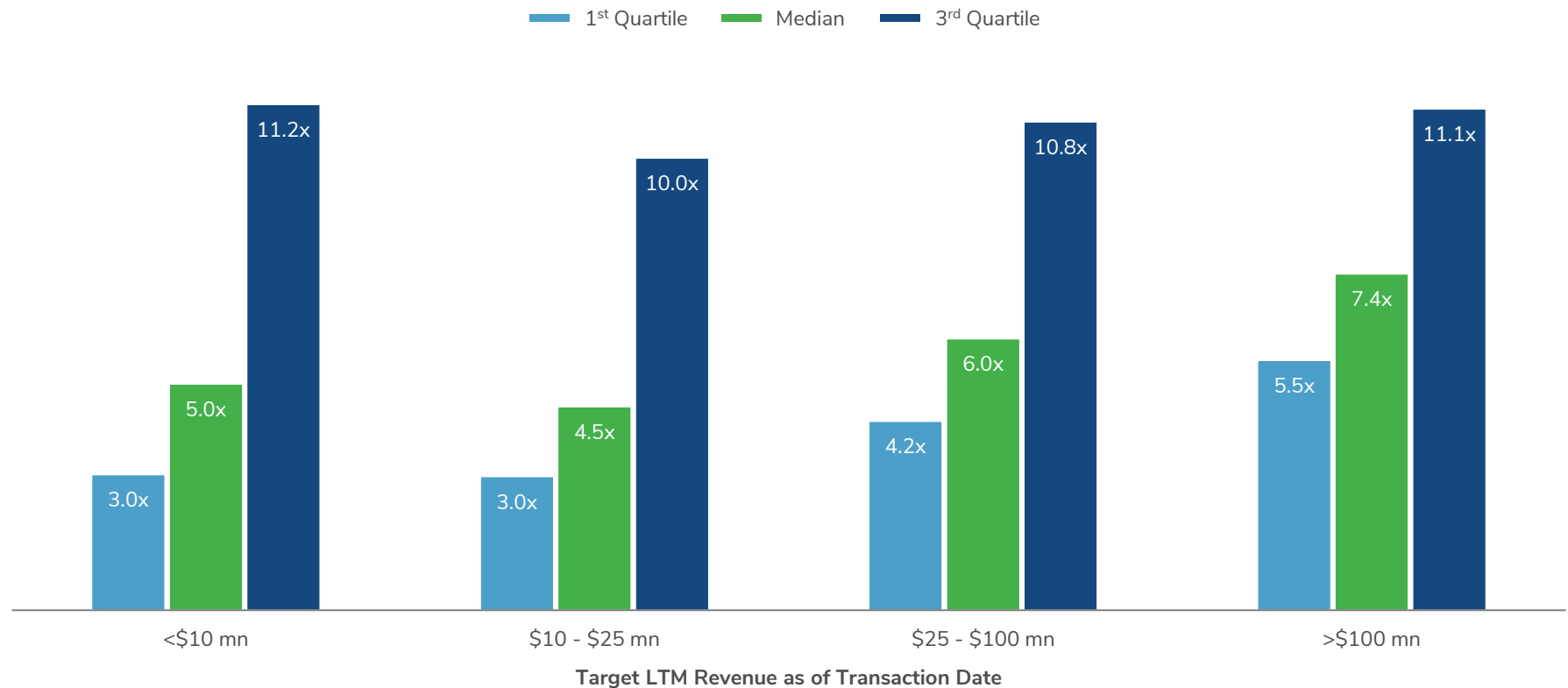


EV = Enterprise Value or Market Capitalization + Total Debt – Cash, LTM = Last 12 Months, YTD = Year to Date
 PE deals include acquisitions made by PE-backed strategics.
 Source: 451 Research as of March 31, 2022

SaaS Deal Multiples by Quartile and Target Revenue

Third Quartile Multiples Command Average Premiums of 49% – 125% vs. Median

Deal Multiples Quartiles by Target LTM Revenue



Transactions selected are based on the following parameters: (i) target company with SaaS business model; (ii) transaction announced between January 1, 2018 and March 31, 2022; (iii) disclosed EV/LTM revenue multiple; and (iv) excluding outliers and SPAC transactions.
Source: 451 Research and Mergermarket as of March 31, 2022

Top Six Software Acquisitions over Q1 2022 by Deal Value

January 2022

citrix

acquired by

VISTA ELLIOTT

\$16.5 bn **5.2x**

Citrix provides application, desktop and server virtualization software and SaaS for businesses globally. Also provides related gateways, networking hardware, web conferencing and remote access software.

Vista intends to combine Citrix and TIBCO, one of Vista's portfolio companies. The combination brings together Citrix's secure digital workspace and application delivery suite with TIBCO's real-time intelligent data and analytics capabilities, to empower customers and users with a secure application and information access and insights they need to accelerate digital transformation and navigate the hybrid workplace.

March 2022

Anaplan

acquired by

THOMABRAVO

\$10.4 bn **17.6x**

Anaplan provides cloud-native business finance, sales, supply chain, human resource and marketing planning and performance management SaaS and related support and training services to businesses globally.

Anaplan's best-in-class innovative platform, time to value, and brand reputation will be priorities for Thoma Bravo. The intention is to attract and retain customers, employees, and partners to continue leading the large and expanding Connected Planning segment.

March 2022

MANDIANT

acquired by

Google

\$5.3 bn **11.6x**

Mandiant provides cybersecurity SaaS and managed services to enterprises, governments and law enforcement agencies globally. Software provides features for SOC capabilities-based automation, cyber threat intelligence, security validation and alert investigation and cyber attack surface management.

The acquisition will complement Google Cloud's existing strengths in security. Together with Mandiant, Google Cloud will deliver an end-to-end security operations suite with even greater capabilities, as well as advisory services, helping customers address critical security challenges and stay protected at every stage of the security life-cycle.

January 2022

WINDRVR

acquired by

APTIV

\$4.3 bn **N/A**

Wind River provides AI-based device software optimization (DSO) SaaS, operating systems (OS) software, and middleware for businesses globally. Software provides features for digital transformation of critical infrastructure and deployment of IoT systems. Wind River also provides safety certification, life-cycle management, education, customer support, and managed services.

The acquisition allows Aptiv to execute against the large software-defined mobility opportunity and expand into multiple high-value industries with Wind River's world-class team and leading intelligent systems software platform.

January 2022

cloudmed.

acquired by

R1

\$4.1 bn **N/A**

Cloudmed provides AI-based automated diagnosis-related group (DRG) validation, revenue-cycle management, and data-driven insights SaaS and auditing services to support revenue assurance for businesses in the healthcare industry in the U.S.

The transaction accelerates R1's strategy to build the most scalable, flexible, and integrated platform for the revenue cycle and consumer engagement in healthcare. The combined solutions of R1 and Cloudmed, including enhanced automation capabilities, will further transform the patient experience and drive continued improvement in their customers' financial results.

January 2022

vocera

acquired by

stryker

\$3.2 bn **14.2x**

Vocera provides mobile collaboration and clinical communications software and systems for hospitals, schools, retailers and the hospitality industry. Vocera also provides electronic health records (EHR) management and integration and alarm management software.

Vocera brings a highly complementary and innovative portfolio to Stryker's Medical division that will address the increasing need for hospitals to connect caregivers and disparate data-generating medical devices, which will help drive efficiencies and improve safety and outcomes.

SOC = Security Operations Centre; Source: 451 Research as of March 31, 2022
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Other Notable Software Deals During Q1 2022

Strategic Deals (Q1 2022)

Date	Target	Acquirer	Deal Value and Multiple ²	Target Abstract
Feb-22	etq ¹	HEXAGON	\$1,200 mn N/A	Food quality & safety management SaaS
Feb-22	technisys	SoFi	\$957 mn N/A	Digital & core banking management SaaS
Jan-22	EVERFI	blackbaud ¹	\$754 mn N/A	Social impact education courses management SaaS
Mar-22	Allscripts ¹	HARRIS	\$670 mn N/A	EHR management SaaS & software assets
Feb-22	Finxact	fiserv.	\$650 mn N/A	Core banking SaaS
Mar-22	Attivo NETWORKS	SentinelOne ¹	\$617 mn 17.6x	Identity threat detection & response SaaS
Jan-22	BlackBerry IP assets	Catapult IP	\$600 mn N/A	IP assets
Feb-22	StreamSets	software.com	\$591 mn 16.9x	Data integration management SaaS
Mar-22	credorax	Shift4 PAYMENTS	\$525 mn N/A	Payments SaaS & services
Feb-22	Verisk Financial Services	TransUnion	\$515 mn N/A	Financial data analytics SaaS
Feb-22	wurl	APPROVIN	\$430 mn N/A	Online video & CTV advertising SaaS

PE Deals¹ (Q1 2022)

Date	Target	Acquirer ¹	Deal Value and Multiple ²	Target Abstract
Feb-22	HMH	VERITAS CAPITAL	\$2,721 mn 2.3x	Educational software & textbooks publisher
Feb-22	PharmaIntelligence	WARBURG PINCUS	\$2,572 mn N/A	Clinical trial intelligence SaaS
Mar-22	FORTERRO	Partners Group	\$1,093 mn N/A	ERP & CRM SaaS
Feb-22	Alcumus ¹	Apax	\$813 mn N/A	Risk & compliance management SaaS
Jan-22	Verisk 3E business	NMC NEW MOUNTAIN CAPITAL LLC	\$630 mn N/A	Risk compliance SaaS & services
Mar-22	ZIMPERIUM MOBILE THREAT DEFENSE	LIBERTY	\$525 mn N/A	Mobile device security SaaS
Feb-22	tripwire	helpsystems TAJ ASSOCIATES	\$350 mn 3.3x	Security management software & SaaS
Feb-22	SOC Telemed ¹	PATIENT SQUARE CAPITAL	\$340 mn 4.2x	Telemedicine SaaS & services
Jan-22	CONDUENT Midas Health assets	symplr CLEARBANK CAPITAL	\$340 mn N/A	Midas Health Analytics Solutions assets
Jan-22	Castlight	vera WHOLE HEALTH	\$314 mn 2.2x	Enterprise healthcare management SaaS
Jan-22	BIGTIME	VISTA	\$100 mn N/A	Time tracking & project management SaaS

EHR = Electronic Health Records; CTV = Connected Television; ERP = Enterprise Resource Planning; CRM = Customer Relationship Management; ¹ PE deals include acquisitions made by PE-backed strategics, whose owners are indicated below the gray line; excludes deals involving SPAC vehicles; ² Deal Multiple = Enterprise Value/LTM Revenue, unless otherwise specified

Source: 451 Research as of March 31, 2022

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Our Technology M&A Practice (formerly Pagemill Partners) Tracked Software Universe

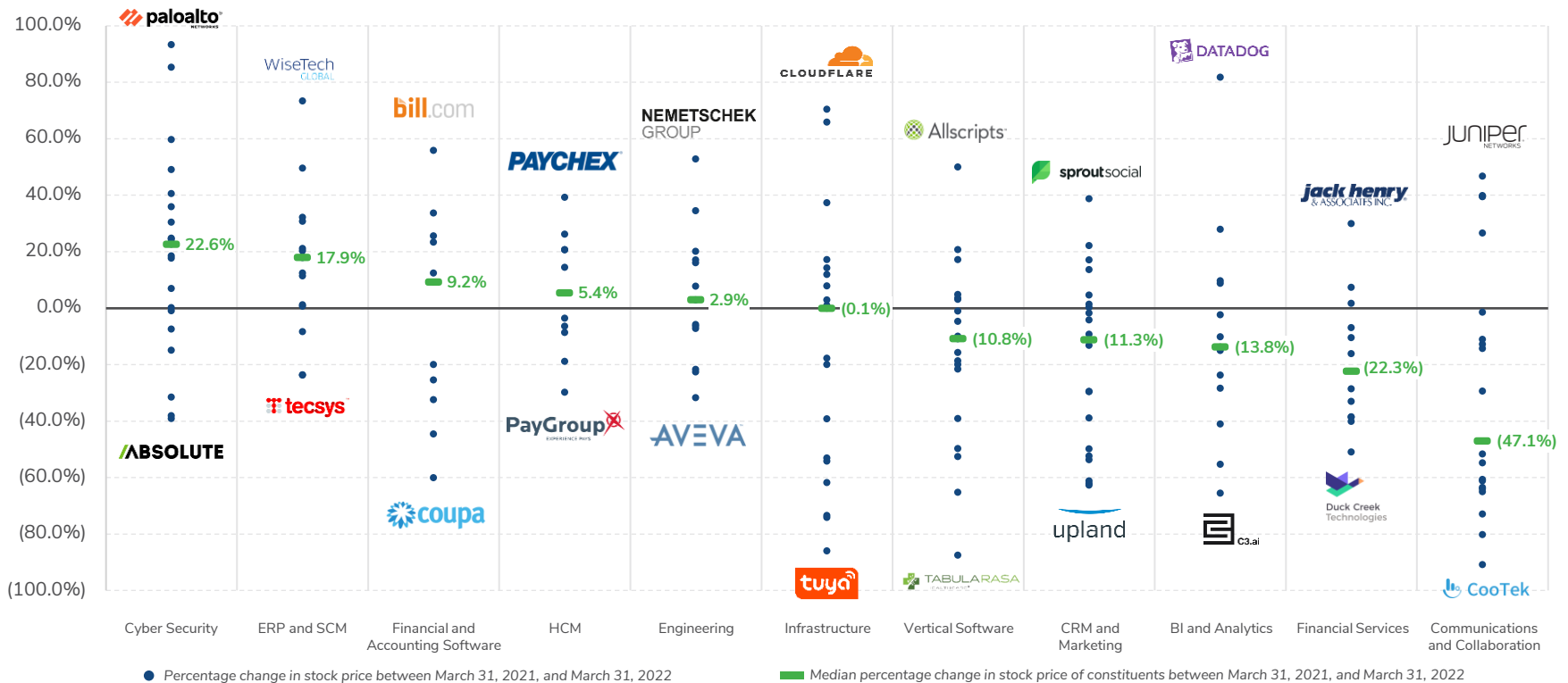


BI = Business Intelligence; ERP = Enterprise Resource Planning; SCM = Supply Chain Management; HCM = Human Capital Management
 Source: S&P Global Market Intelligence as of March 31, 2022 and it includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.
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LTM Performance of Stock Prices

Significant Differences Between High and Low Performers Within the Past 12 Months

Performance of our Technology M&A Practice tracked Software Universe between March 31, 2021 and March 31, 2022



BI = Business Intelligence; CRM = Customer Relationship Management; ERP = Enterprise Resource Planning; SCM = Supply Chain Management; HCM = Human Capital Management

Does not include companies listed post March 31, 2021

Buckets ordered by median percentage change in stock price between March 31, 2021 and March 31, 2022

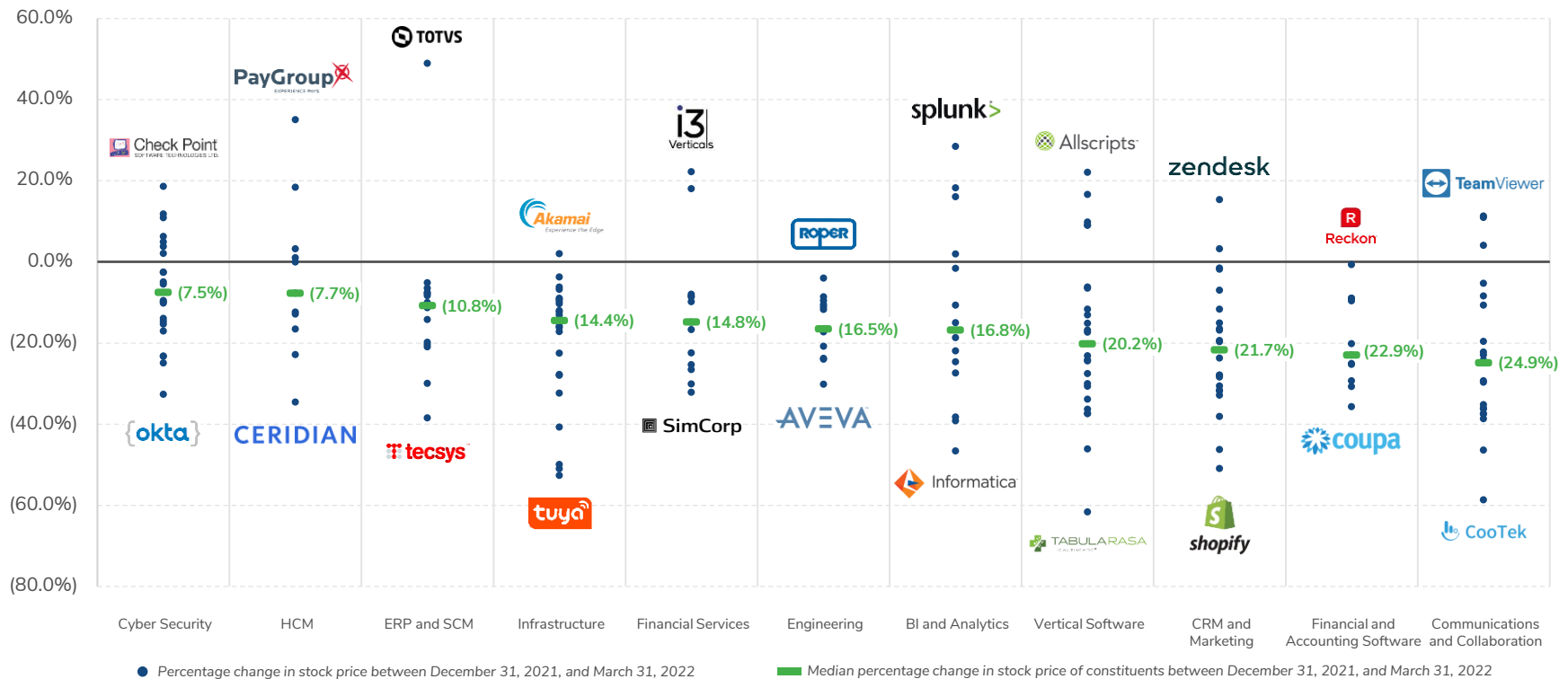
Source: Capital IQ as of March 31, 2022

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Quarterly Performance of Stock Prices

Most Software Sectors Demonstrated Significant Losses in the Quarter

Performance of our Technology M&A Practice tracked Software Universe between December 31, 2021 and March 31, 2022



BI = Business Intelligence; CRM = Customer Relationship Management; ERP = Enterprise Resource Planning; SCM = Supply Chain Management; HCM = Human Capital Management

Does not include companies listed post December 31, 2021

Buckets ordered by median percentage change in stock price between December 31, 2021 and March 31, 2022

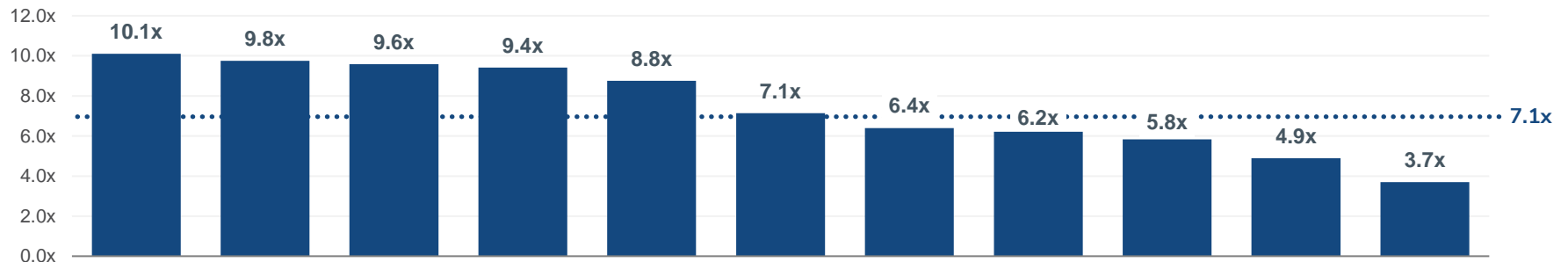
Source: Capital IQ as of March 31, 2022

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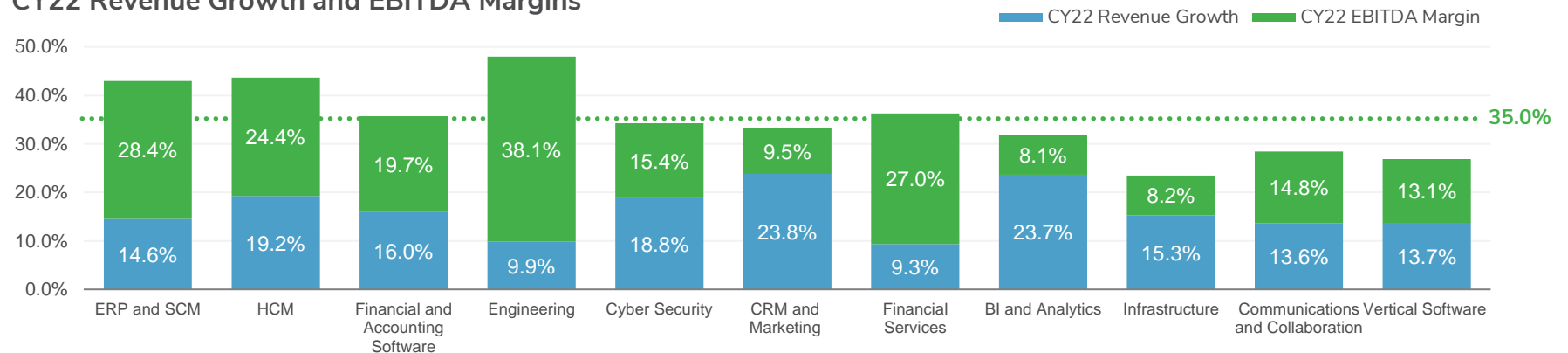
Public Software Market Multiples

Sector Multiples Range from 10.1x to 3.7x, with a Median of 7.1x CY 2022 Revenues

CY22 EV/Revenue Multiples



CY22 Revenue Growth and EBITDA Margins



BI = Business Intelligence; CRM = Customer Relationship Management; ERP = Enterprise Resource Planning; HCM = Human Capital Management; SCM = Supply Chain Management
 Buckets ordered by CY22 Revenue Multiples
 Source: Capital IQ as of March 31, 2022

SaaS Companies Trading Significantly Below Covid Highs

Recent Index Decline Most Considerable for Top-Quartile Constituents

Performance of our Technology M&A Practice SaaS Index Over the Last 15 Years

EV/NTM Revenue

30.0x

25.0x

20.0x

15.0x

10.0x

5.0x

0.0x

Mar-07 Mar-08 Mar-09 Mar-10 Mar-11 Mar-12 Mar-13 Mar-14 Mar-15 Mar-16 Mar-17 Mar-18 Mar-19 Mar-20 Mar-21 Mar-22

12.8x

10.0x

8.7x

6.4x

5.4x

— Bottom Quartile — Median — Top Quartile - - - 15-Year Median - - - - 5-Year Median












GFC = Global Financial Crisis

Our Technology M&A Practice SaaS Index includes DDOG, DOMO, DT, NEWR, PD, SPLK, TEAM, BOX, ASAN, DOCU, DBX, EVBG, FIVN, RNG, SMAR, TWLO, ZM, ADBE, BIGC, ECOM, HUBS, LPSN, MDLA, CRM, SHOP, MNTV, YEXT, ZEN, ZI, CRWD, MNDT, MIME, OKTA, PING, QLYS, SCWX, TENB, ZIXI, ZS, KXS, NOW, SPSC, ZUO, PLAN, AVLR, BILL, BL, COUP, WK, BNFT, DCBO, PAYC, PCTY, WDAY, APPN, NET, ESTC, FSLY, FROG, MDB, NTNX, SNOW, WIX, TWOU, APPF, BLKB, HSTM, QTWO, U, VEEV, S, PCOR.

Source: Capital IQ as of March 31, 2022

Slowdown in IPO Activity during Q1 2022 after Busy 2021 .o

Most Companies Trade Below First-Day Closing Price

Company	Date of Listing	Gross Proceeds (\$)	Offering Share Price (\$)	Market Cap at Listing ¹ (\$)	First-Day "Pop" ²	Latest Market Cap	Change in Share Price Since Listing
 HashiCorp	8-Dec	1,224.0	80.00	14,312	6% Median: 31%	9,908	-33% Median: -32%
 braze	16-Nov	520.0	65.00	5,867	44%	3,866	-36%
 Informatica	26-Oct	841.0	29.00	7,941	0%	5,523	-32%
 OVHcloud	14-Oct	386.3	21.43	4,041	-8%	4,933	9%
 GitLab	13-Oct	800.8	77.00	11,012	35%	7,998	-29%
 CLEARWATER ANALYTICS	23-Sep	540.0	18.00	3,186	41%	3,747	17%
 EngageSmart	23-Sep	378.3	26.00	4,185	31%	3,456	-18%
 toast	21-Sep	869.6	40.00	19,964	56%	11,060	-46%
 freshworks	21-Sep	1,026.0	36.00	10,132	32%	5,065	-50%
 riskified	28-Jul	367.5	21.00	3,310	24%	993	-71%
 Paycor	20-Jul	425.5	23.00	3,940	13%	5,091	27%

¹Market Capitalization at Listing = Market Capitalization on First-Day Post-IPO/First-Day Pop, ²First-Day "Pop" = Closing First-Day Share Price/Offering Share Price
 Source: Capital IQ as of March 31, 2022
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Slowdown in IPO Activity during Q1 2022 after Busy 2021

Most Companies Trade Below First Closing Price

Company	Date of Listing	Gross Proceeds (\$)	Offering Share Price (\$)	Market Cap at Listing ¹ (\$)	First-Day "Pop" ²	Latest Market Cap	Change in Share Price Since Listing
 SentinelOne	29-Jun	1,225.0	35.00	8,973	 21% Median: 31%	10,340	 11% Median: -32%
PROCORE	30-Sep	634.5	67.00	8,585	 31%	7,769	-13% 
 UiPath	30-Sep	1,337.9	56.00	29,073	 23%	11,340	-61% 
 DigitalOcean	23-Mar	775.5	47.00	4,949	-10% 	6,225	 23%
 tuya	17-Mar	915.4	21.00	11,755	 19%	1,672	-86% 
 olo	16-Mar	450.0	25.00	3,550	 39%	2,107	-47% 
ON24	3-Feb	428.0	50.00	2,224	 42%	628	-74% 
qualtrics ^{XM}	28-Jan	1,550.9	30.00	15,084	 52%	16,596	-5% 
 C3.ai	8-Dec	651.0	42.00	4,026	 120%	2,415	-46% 
 McAfee	21-Oct	740.0	20.00	3,309	-7% 	Taken private at \$26 per share ³	
 Palantir	30-Sep	Direct Listing ⁴	7.25	11,961	 31%	27,874	 89%


¹Market Capitalization at Listing = Market Capitalization on First-Day Post-IPO/First-Day Pop, ²First-Day "Pop" = Closing First-Day Share Price/Offering Share Price;

³Taken private by investor group led by Advent International Corporation Mar-22 ⁴Direct listing prices as determined by listing exchange, New York Stock Exchange for both


Source: Capital IQ as of March 31, 2022


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Selected Recent Technology M&A Practice (formerly Pagemill Partners) Transactions

Buy-Side Advisors 

360Learning has acquired Loop

 360Learning



On January 10, 2022, 360Learning SA (“360Learning”), the global collaborative learning SaaS leader, acquired Loop Online Limited (“Loop”), one of the UK’s leading learning management systems.

With the acquisition, 360Learning and Loop will enter into a new era of collaborative learning, focusing further on learning and development. In addition, the unified vision and roadmap will bring the value of Loop’s data-driven automation to the 360Learning platform, enhancing the learning experience for every learner worldwide.

Sell-Side Advisors 


Brightpearl has been acquired by Sage







On December 20, 2021, Brightpearl Limited (“Brightpearl”), the cloud-native multichannel retail management system for retailers and wholesalers, was acquired by Sage plc (“Sage”), a market leader in cloud business management solutions.

The consideration for the 83% of Brightpearl that Sage does not already own is \$299m. The acquisition will accelerate Sage’s strategy for growth, including scaling Sage Intacct, broadening the value proposition for mid-sized businesses and expanding Sage’s digital network.

Sell-Side Advisors 

whiteCryption has been acquired by Zimperium, a portfolio company of Warburg Pincus and SoftBank





On July 2, 2021, whiteCryption, a leading provider of cyber security software and a pioneer in mobile application shielding and cryptographic key protection, was acquired by Zimperium, the global leader in mobile security.

whiteCryption’s security software protects mobile and desktop applications, firmware and embedded applications, and is available for all popular platforms such as Android, iOS, Windows and macOS. It has a core focus on providing app-shielding products for banks, financial institutions, medical device companies, automakers and media companies.

Flags indicate location of target/bidder

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Public Trading Data for Software Companies .ooooo

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue		Revenue Growth ¹	EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
BI and Analytics													
Alteryx, Inc.	\$71.53	\$49.67	\$90.57	(21.0%)	\$4,838.1	\$5,041.0	\$536.1	\$715.7	20%	(\$114.4)	(21.3%)	7.0x	5.9x
C3.ai, Inc.	22.70	16.59	76.85	(70.5%)	2,414.6	1,421.7	232.7	311.1	29%	(158.6)	(68.2%)	4.6x	3.5x
Datadog, Inc.	151.47	69.73	199.68	(24.1%)	47,547.9	46,801.2	1,028.8	1,531.7	37%	(0.0)	(0.0%)	30.6x	22.3x
Domo, Inc.	50.57	36.07	98.35	(48.6%)	1,668.5	1,709.1	258.0	317.0	21%	(88.1)	(34.2%)	5.4x	4.5x
Dynatrace, Inc.	47.10	37.66	80.13	(41.2%)	13,458.6	13,417.9	873.4	1,087.0	25%	125.0	14.3%	12.3x	9.8x
Expert.ai S.p.A.	1.58	1.46	3.80	(58.5%)	82.6	79.0	42.1	45.8	49%	(21.2)	(50.3%)	1.7x	1.2x
Informatica Inc.	19.74	16.20	40.13	(50.8%)	5,523.2	6,973.5	1,444.1	1,597.9	13%	257.4	17.8%	4.4x	3.9x
MicroStrategy Incorporated	486.32	307.19	891.38	(45.4%)	5,488.3	7,665.9	510.8	529.2	7%	57.5	11.2%	14.5x	13.5x
New Relic, Inc.	66.88	51.52	129.70	(48.4%)	4,425.7	4,227.5	752.4	882.5	18%	(178.0)	(23.7%)	4.8x	4.0x
PagerDuty, Inc.	34.19	24.02	50.33	(32.1%)	2,976.5	2,740.8	281.4	362.9	26%	(93.4)	(33.2%)	7.6x	6.0x
Palantir Technologies Inc.	13.73	9.74	29.29	(53.1%)	27,873.5	25,608.8	1,541.9	2,005.7	29%	(396.1)	(25.7%)	12.8x	9.9x
Splunk Inc.	148.61	105.45	176.66	(15.9%)	23,881.6	25,573.9	2,673.7	3,279.1	22%	(992.5)	(37.1%)	7.8x	6.4x
Teradata Corporation	49.29	37.35	59.38	(17.0%)	5,156.7	5,148.7	1,917.0	1,931.9	5%	383.0	20.0%	2.7x	2.5x
Veritone, Inc.	18.28	13.06	37.14	(50.8%)	640.9	587.6	115.3	186.5	24%	(36.8)	(32.0%)	3.2x	2.5x
Average												8.5x	6.9x
Median												6.2x	5.2x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization

Source: S&P Global Market Intelligence and Capital IQ as of March 31, 2022. It includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

Public Trading Data for Software Companies

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue			EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022	Revenue Growth ¹	LTM	EBITDA Margin ²	CY 2022	CY 2023
Communications and Collaboration													
Bx8, Inc.	\$12.59	\$10.01	\$35.25	(64.3%)	\$1,489.8	\$1,773.0	\$601.5	\$755.5	11%	(\$132.0)	(21.9%)	2.3x	2.1x
Agora, Inc.	9.94	6.30	61.41	(83.8%)	1,151.8	403.9	168.0	177.2	30%	(70.5)	(42.0%)	2.3x	1.7x
Asana, Inc.	39.97	26.00	145.79	(72.6%)	7,560.7	7,504.2	378.4	530.7	34%	(257.5)	(68.0%)	14.1x	10.6x
Atlassian Corporation Plc	293.83	207.83	483.13	(39.2%)	74,482.0	74,772.1	2,430.8	2,947.7	27%	73.5	3.0%	25.4x	19.9x
Avaya Holdings Corp.	12.67	11.42	31.72	(60.1%)	1,076.0	3,861.0	2,943.0	3,036.3	4%	406.0	13.8%	1.3x	1.2x
Box, Inc.	29.06	20.36	29.67	(2.0%)	4,167.9	4,711.8	874.3	993.5	13%	48.9	5.6%	4.7x	4.2x
CooTek (Cayman) Inc.	0.25	0.19	2.89	(91.2%)	16.9	17.8	272.1	291.9	26%	(4.9)	(1.8%)	NM	NM
DocuSign, Inc.	107.12	71.00	314.76	(66.0%)	21,302.1	21,381.5	2,107.2	2,477.0	18%	14.8	0.7%	8.6x	7.3x
Dropbox, Inc.	23.25	19.90	33.00	(29.5%)	8,873.5	9,524.1	2,157.9	2,327.2	8%	458.3	21.2%	4.1x	3.8x
Everbridge, Inc.	43.64	27.81	167.40	(73.9%)	1,720.6	1,920.0	368.4	428.6	16%	(49.5)	(13.4%)	4.5x	3.9x
Extreme Networks, Inc.	12.21	8.66	16.61	(26.5%)	1,577.7	1,765.0	1,080.1	1,184.4	6%	118.1	10.9%	1.5x	1.4x
Five9, Inc.	110.40	80.52	211.68	(47.8%)	7,634.1	7,842.4	609.6	756.8	24%	(4.0)	(0.7%)	10.4x	8.3x
Jamf Holding Corp.	34.81	27.77	49.27	(29.3%)	4,162.7	4,372.9	366.4	470.0	23%	(11.7)	(3.2%)	9.3x	7.6x
Juniper Networks, Inc.	37.16	24.93	38.14	(2.6%)	11,986.6	12,612.2	4,735.4	5,102.6	5%	676.7	14.3%	2.5x	2.4x
ON24, Inc.	13.15	11.20	50.00	(73.7%)	628.3	249.7	203.6	202.2	12%	(19.0)	(9.3%)	1.2x	1.1x
Open Text Corporation	42.40	40.59	55.25	(23.3%)	11,435.7	14,418.4	3,435.6	3,647.9	2%	1,010.1	29.4%	4.0x	3.9x
RingCentral, Inc.	117.21	98.91	337.34	(65.3%)	11,069.6	12,450.8	1,594.8	2,010.8	24%	(176.5)	(11.1%)	6.2x	5.0x
Smartsheet Inc.	54.78	41.65	85.65	(36.0%)	7,047.1	6,674.2	550.8	752.8	32%	(143.9)	(26.1%)	8.9x	6.7x
TeamViewer AG	14.96	11.90	45.75	(67.3%)	2,853.6	3,216.8	569.9	639.6	16%	170.3	29.9%	5.0x	4.3x
Twilio Inc.	164.81	123.05	412.68	(60.1%)	29,916.9	25,846.0	2,841.8	3,839.6	30%	(657.2)	(23.1%)	6.7x	5.2x
Zoom Video Communications, Inc.	117.23	94.51	406.48	(71.2%)	35,066.3	29,752.8	4,099.9	4,545.4	14%	1,178.7	28.7%	6.5x	5.7x
Average												7.0x	5.7x
Median												4.9x	4.3x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization

Source: S&P Global Market Intelligence and Capital IQ as of March 31, 2022. It includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

Public Trading Data for Software Companies ○○○○○○○○

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue			EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022	Revenue Growth ¹	LTM	EBITDA Margin ²	CY 2022	CY 2023
CRM and Marketing													
Adobe Inc.	\$455.62	\$407.94	\$699.54	(34.9%)	\$215,280.5	\$215,244.5	\$16,142.0	\$17,856.8	15%	\$6,521.0	40.4%	12.1x	10.5x
Aimia Inc.	4.04	3.16	5.15	(21.6%)	367.1	462.2	10.0	13.6	47%	(9.2)	(92.9%)	33.9x	23.1x
BigCommerce Holdings, Inc.	21.91	17.27	72.20	(69.7%)	1,587.8	1,536.3	219.9	278.8	22%	(47.8)	(21.7%)	5.5x	4.5x
Braze, Inc.	41.47	30.76	98.78	(58.0%)	3,866.4	3,355.5	238.0	340.2	36%	(76.6)	(32.2%)	9.9x	7.2x
Brightcove Inc.	7.80	6.69	22.74	(65.7%)	321.9	301.6	211.1	210.2	6%	10.6	5.0%	1.4x	1.4x
Cardlytics, Inc.	54.98	42.11	145.00	(62.1%)	1,855.2	1,819.0	267.1	348.4	29%	(66.2)	(24.8%)	5.2x	4.1x
ChannelAdvisor Corporation	16.57	15.60	29.42	(43.7%)	504.6	409.3	167.7	183.0	11%	22.9	13.6%	2.2x	2.0x
Freshworks Inc.	17.92	15.60	53.36	(66.4%)	5,065.0	3,741.5	371.0	491.0	31%	(192.6)	(51.9%)	7.6x	5.8x
HubSpot, Inc.	474.94	378.88	866.00	(45.2%)	22,592.6	22,107.6	1,300.7	1,726.8	27%	(32.6)	(2.5%)	12.8x	10.1x
LivePerson, Inc.	24.42	16.00	68.82	(64.5%)	1,772.2	1,837.2	469.6	554.0	18%	(43.2)	(9.2%)	3.3x	2.8x
NICE Ltd.	219.09	204.83	310.95	(29.5%)	13,829.0	13,310.5	1,921.2	2,148.4	13%	449.8	23.4%	6.2x	5.5x
Pegasystems Inc.	80.65	71.61	143.66	(43.9%)	6,583.6	6,906.4	1,211.7	1,464.3	19%	(66.1)	(5.5%)	4.7x	3.9x
Qualtrics International Inc.	28.55	22.72	49.03	(41.8%)	16,595.6	15,863.2	1,075.7	1,405.8	23%	(995.4)	(92.5%)	11.3x	9.2x
Salesforce, Inc.	212.32	184.44	311.75	(31.9%)	210,196.8	214,029.8	26,492.0	32,085.0	18%	3,064.0	11.6%	6.7x	5.7x
Shopify Inc.	675.96	510.02	1,762.92	(61.7%)	85,138.3	78,522.2	4,611.9	6,050.2	32%	363.5	7.9%	13.0x	9.8x
Sprout Social, Inc.	80.12	48.79	145.42	(44.9%)	4,343.8	4,190.5	187.9	249.1	31%	(24.1)	(12.8%)	16.8x	12.9x
TechTarget, Inc.	81.28	63.76	111.44	(27.1%)	2,412.5	2,512.1	263.4	312.6	14%	55.3	21.0%	8.0x	7.0x
Upland Software, Inc.	17.61	15.08	53.00	(66.8%)	548.2	896.1	302.0	318.8	4%	39.5	13.1%	2.8x	2.7x
Verint Systems Inc.	51.70	41.46	54.74	(5.6%)	3,345.5	3,891.1	874.5	944.1	10%	117.6	13.4%	4.1x	3.7x
Yext, Inc.	6.89	4.26	15.48	(55.5%)	903.9	775.3	390.6	410.5	10%	(76.9)	(19.7%)	1.9x	1.7x
Zendesk, Inc.	120.29	87.90	155.62	(22.7%)	14,659.5	14,287.5	1,338.6	1,693.6	25%	(136.1)	(10.2%)	8.4x	6.7x
ZoomInfo Technologies Inc.	59.74	37.86	79.17	(24.5%)	24,098.7	25,076.6	747.2	1,018.7	30%	187.4	25.1%	24.6x	18.9x
Average												8.8x	6.8x
Median												7.1x	5.7x

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Public Trading Data for Software Companies ○○○○○○○○○○

\$ in USD millions (except for share price)

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	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
Cyber Security													
Absolute Software Corporation	\$8.45	\$7.34	\$15.41	(45.2%)	\$426.8	\$648.1	\$155.2	\$212.9	15%	\$7.9	5.1%	3.0x	2.7x
Avast Plc	7.44	5.63	8.53	(12.7%)	7,739.4	8,136.9	941.1	997.8	7%	437.8	46.5%	8.2x	7.6x
Check Point Software	138.26	107.85	149.62	(7.6%)	18,360.7	14,603.7	2,166.8	2,291.7	5%	929.7	42.9%	6.4x	6.1x
CrowdStrike Holdings, Inc.	227.08	150.02	298.48	(23.9%)	52,402.8	51,192.7	1,451.6	2,153.8	34%	(79.9)	(5.5%)	23.8x	17.7x
CyberArk Software Ltd.	168.75	113.34	201.68	(16.3%)	6,764.4	6,074.6	502.9	590.2	21%	(64.1)	(12.7%)	10.3x	8.5x
F5, Inc.	208.95	174.34	249.00	(16.1%)	11,547.0	11,386.8	2,665.9	2,807.2	10%	565.9	21.2%	4.1x	3.7x
Fortinet, Inc.	341.74	185.47	371.77	(8.1%)	54,957.1	53,477.3	3,342.2	4,294.4	20%	730.2	21.8%	12.5x	10.4x
F-Secure Oyj	5.07	4.33	6.28	(19.2%)	884.9	857.6	268.7	284.0	8%	24.6	9.2%	3.0x	2.8x
NortonLifeLock Inc.	26.52	20.69	30.92	(14.2%)	15,441.9	17,604.9	2,752.0	2,925.7	8%	1,312.0	47.7%	6.0x	5.6x
Okta, Inc.	150.96	135.46	287.44	(47.5%)	23,654.8	23,182.1	1,300.2	1,788.1	34%	(608.4)	(46.8%)	13.0x	9.7x
Palo Alto Networks, Inc.	622.51	322.23	635.89	(2.1%)	61,307.5	61,923.5	4,857.5	5,992.1	21%	(66.6)	(1.4%)	10.3x	8.5x
Qualys, Inc.	142.41	92.00	145.50	(2.1%)	5,558.2	5,090.2	411.2	483.7	17%	152.3	37.0%	10.5x	9.0x
Radware Ltd.	31.97	25.00	42.19	(24.2%)	1,470.6	1,111.9	286.5	311.7	9%	28.4	9.9%	3.6x	3.3x
Rapid7, Inc.	111.24	72.96	145.00	(23.3%)	6,460.7	7,149.8	535.4	686.6	22%	(78.8)	(14.7%)	10.4x	8.5x
SecureWorks Corp.	13.25	10.05	26.89	(50.7%)	1,119.3	921.4	535.2	483.4	4%	(11.9)	(2.2%)	1.9x	1.8x
SentinelOne, Inc.	38.74	29.30	78.53	(50.7%)	10,340.1	8,699.5	204.8	369.9	63%	(260.0)	(127.0%)	23.5x	14.4x
Sumo Logic, Inc.	11.67	8.86	23.48	(50.3%)	1,331.5	982.0	242.1	290.6	19%	(113.0)	(46.7%)	3.4x	2.8x
Tenable Holdings, Inc.	57.79	35.53	58.94	(2.0%)	6,344.2	6,256.7	541.1	667.8	20%	(18.7)	(3.5%)	9.4x	7.8x
Trend Micro Incorporated	58.96	41.75	60.94	(3.2%)	8,225.2	6,117.0	1,653.3	1,691.5	7%	560.5	33.9%	3.6x	3.4x
Tufin Software Technologies Ltd.	8.93	7.50	13.50	(33.9%)	338.6	273.8	110.9	125.4	12%	(34.4)	(31.0%)	2.2x	1.9x
Varonis Systems, Inc.	47.54	32.11	73.46	(35.3%)	5,111.2	4,606.1	390.1	488.9	22%	(87.8)	(22.5%)	9.4x	7.7x
Zscaler, Inc.	241.28	157.03	376.11	(35.8%)	34,041.1	33,409.5	859.6	1,225.0	31%	(241.7)	(28.1%)	27.3x	20.8x
Average												8.9x	7.4x
Median												8.8x	7.7x

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	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
Engineering													
Altair Engineering Inc.	\$64.40	\$56.71	\$82.96	(22.4%)	\$5,129.5	\$4,945.3	\$532.2	\$576.6	9%	\$43.0	8.1%	8.6x	7.9x
ANSYS, Inc.	317.65	258.00	413.89	(23.3%)	27,643.8	27,856.6	1,906.7	2,090.1	9%	626.2	32.8%	13.3x	12.2x
Autodesk, Inc.	214.35	186.29	344.39	(37.8%)	46,580.0	47,830.5	4,386.4	5,078.1	15%	826.1	18.8%	9.4x	8.2x
AVEVA Group plc	32.21	29.76	55.76	(42.2%)	9,706.6	10,542.1	1,307.9	1,650.0	4%	249.0	19.0%	6.4x	6.1x
Bentley Systems, Incorporated	44.18	34.45	71.92	(38.6%)	13,663.9	14,823.4	965.0	1,126.8	11%	167.6	17.4%	13.2x	11.9x
Cadence Design Systems, Inc.	164.46	118.11	192.70	(14.7%)	45,781.7	45,166.8	2,988.2	3,358.5	10%	920.3	30.8%	13.4x	12.2x
Dassault Systèmes SE	49.67	39.94	63.12	(21.3%)	65,584.6	67,256.5	5,527.2	5,974.9	10%	1,429.5	25.9%	11.3x	10.2x
Hexagon AB (publ)	14.21	11.85	16.30	(12.8%)	38,324.9	41,076.0	4,937.0	5,484.4	8%	1,647.8	33.4%	7.5x	6.9x
Nemetschek SE	97.53	60.70	129.03	(24.4%)	11,265.2	11,324.5	775.0	865.8	10%	209.9	27.1%	13.1x	11.9x
PTC Inc.	107.72	100.60	153.73	(29.9%)	12,598.1	13,860.7	1,835.8	1,983.7	14%	458.2	25.0%	7.0x	6.1x
Roper Technologies, Inc.	472.23	403.55	505.00	(6.5%)	49,868.8	57,671.4	5,777.8	6,177.8	6%	2,213.8	38.3%	9.3x	8.8x
Synopsys, Inc.	333.27	225.02	377.60	(11.7%)	51,023.2	50,335.2	4,504.1	4,803.7	16%	1,141.7	25.3%	10.5x	9.1x
Trimble Inc.	72.14	62.32	96.49	(25.2%)	18,122.7	19,246.6	3,659.1	4,020.1	8%	773.2	21.1%	4.8x	4.4x
Average												9.8x	8.9x
Median												9.4x	8.8x
ERP and SCM													
American Software, Inc.	\$20.84	\$18.41	\$33.27	(37.4%)	\$699.3	\$585.7	\$121.5	\$129.3	10%	\$10.5	8.7%	4.5x	4.1x
Kinaxis Inc.	131.06	104.83	184.21	(28.9%)	3,601.2	3,421.1	250.7	337.3	15%	13.0	5.2%	10.1x	8.8x
Manhattan Associates, Inc.	138.71	115.88	188.52	(26.4%)	8,760.2	8,526.5	663.6	710.3	12%	142.2	21.4%	12.0x	10.7x
Microsoft Corporation	308.31	238.05	349.67	(11.8%)	2,311,358.9	2,266,363.9	184,903.0	212,501.5	13%	90,830.0	49.1%	10.7x	9.4x
Oracle Corporation	82.73	70.23	106.34	(22.2%)	220,736.6	276,245.6	41,827.0	43,323.8	7%	18,399.0	44.0%	6.4x	6.0x
SAP SE	112.33	104.95	144.12	(22.1%)	131,822.5	137,048.0	31,663.8	33,008.2	7%	7,357.0	23.2%	4.2x	3.9x
ServiceNow, Inc.	556.89	448.27	707.60	(21.3%)	111,378.0	110,288.0	5,896.0	7,411.5	25%	729.0	12.4%	14.9x	11.9x
Serviceware SE	13.94	12.28	22.33	(37.6%)	146.4	118.6	91.6	100.0	11%	(0.3)	(0.4%)	1.2x	1.1x
SPS Commerce, Inc.	131.20	91.05	174.42	(24.8%)	4,723.9	4,487.1	385.3	444.3	15%	80.0	20.8%	10.1x	8.8x
Technology One Limited	8.61	6.38	10.20	(15.6%)	2,793.3	2,708.9	225.5	262.7	13%	74.2	32.9%	10.3x	9.1x
Tecsys Inc.	25.60	23.29	48.91	(47.7%)	372.8	357.0	106.2	120.2	13%	6.3	5.9%	3.0x	2.6x
The Descartes Systems Group Inc	73.31	54.96	92.35	(20.6%)	6,213.8	6,007.9	424.7	478.6	11%	174.1	41.0%	12.6x	11.3x
TOTVS S.A.	7.65	5.04	8.68	(11.8%)	4,654.6	4,491.9	584.9	835.7	16%	119.5	20.4%	5.4x	4.6x
WiseTech Global Limited	38.32	18.87	45.31	(15.4%)	12,430.7	12,173.7	399.8	511.9	19%	150.2	37.6%	23.8x	19.9x
Zuora, Inc.	14.98	12.32	23.25	(35.6%)	1,918.5	1,761.9	346.7	403.4	16%	(79.2)	(22.9%)	4.4x	3.8x
Average												9.2x	8.0x
Median												10.1x	8.8x

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	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
Financial and Accounting Software													
Avalara, Inc.	\$99.51	\$74.28	\$191.67	(48.1%)	\$8,705.8	\$8,206.3	\$699.0	\$856.3	22%	(\$69.1)	(9.9%)	9.6x	7.9x
Basware Oyj	23.83	22.33	45.66	(47.8%)	343.5	402.2	174.2	179.3	10%	11.1	6.4%	2.2x	2.0x
Bill.com Holdings, Inc.	226.79	128.00	348.50	(34.9%)	23,491.8	22,568.6	412.8	704.9	34%	(186.9)	(45.3%)	32.0x	23.9x
BlackLine, Inc.	73.22	65.15	135.00	(45.8%)	4,341.4	4,305.0	425.7	522.9	21%	(21.7)	(5.1%)	8.2x	6.8x
Coupa Software Incorporated	101.63	64.79	283.38	(64.1%)	7,629.0	8,571.4	725.3	841.4	22%	(107.2)	(14.8%)	10.2x	8.3x
Intuit Inc.	480.84	385.66	716.86	(32.9%)	135,987.6	141,810.6	11,414.0	13,221.6	14%	3,130.0	27.4%	10.7x	9.4x
Reckon Limited	0.67	0.56	0.90	(25.1%)	76.1	91.9	51.8	54.6	3%	20.6	39.8%	1.7x	1.6x
The Sage Group plc	9.22	8.04	11.33	(18.7%)	9,382.6	9,725.7	2,492.4	2,499.9	11%	653.5	26.2%	3.9x	3.5x
Wolters Kluwer N.V.	107.29	81.98	116.92	(8.2%)	27,512.1	29,879.3	5,425.9	5,605.9	4%	1,618.3	29.8%	5.3x	5.1x
Workiva Inc.	118.00	83.65	173.24	(31.9%)	6,131.0	5,938.3	443.3	532.8	20%	(22.5)	(5.1%)	11.1x	9.3x
Xero Limited	77.09	67.63	117.53	(34.4%)	11,480.9	11,466.1	653.3	892.8	23%	25.2	3.9%	12.8x	10.5x
Average												9.8x	8.0x
Median												9.6x	7.9x
Financial Services													
Broadridge Financial Solutions	\$155.71	\$137.58	\$185.40	(16.0%)	\$18,182.7	\$22,346.7	\$5,373.9	\$5,814.1	4%	\$1,116.9	20.8%	3.8x	3.7x
Clearwater Analytics Holdings	21.00	14.51	27.68	(24.1%)	3,746.9	3,611.2	252.0	302.9	20%	32.0	12.7%	11.9x	9.9x
Duck Creek Technologies, Inc.	22.12	18.60	50.90	(56.5%)	2,930.8	2,605.3	288.6	313.7	14%	18.7	6.5%	8.3x	7.3x
EVO Payments, Inc.	23.09	20.07	30.46	(24.2%)	1,095.7	2,333.1	496.6	555.9	12%	154.8	31.2%	4.2x	3.7x
FIS	100.42	85.00	155.96	(35.6%)	61,215.1	80,267.1	13,877.0	14,851.8	8%	3,939.0	28.4%	5.4x	5.0x
Guidewire Software, Inc.	94.62	81.38	130.95	(27.7%)	7,905.3	7,556.3	764.0	826.1	12%	(123.0)	(16.1%)	9.1x	8.1x
i3 Verticals, Inc.	27.86	17.80	34.51	(19.3%)	614.9	975.2	253.4	307.6	10%	32.2	12.7%	3.2x	2.9x
Jack Henry & Associates, Inc.	197.05	147.50	199.45	(1.2%)	14,350.2	14,617.8	1,866.0	1,999.5	7%	500.0	26.8%	7.3x	6.9x
nCino, Inc.	40.98	37.65	79.43	(48.4%)	4,506.3	4,470.1	273.9	331.7	26%	(51.3)	(18.7%)	13.5x	10.7x
Q2 Holdings, Inc.	61.65	51.45	108.89	(43.4%)	3,509.6	3,703.9	498.7	578.6	19%	(42.9)	(8.6%)	6.4x	5.4x
SimCorp A/S	74.17	71.72	132.37	(44.0%)	2,916.4	2,908.6	564.4	610.5	7%	154.4	27.4%	4.8x	4.4x
SS&C Technologies Holdings, Inc.	75.02	68.15	84.85	(11.6%)	19,235.0	24,962.9	5,051.0	5,291.9	4%	1,871.8	37.1%	4.7x	4.5x
Temenos AG	96.65	78.12	167.23	(42.2%)	6,918.8	7,724.4	967.0	1,057.2	11%	269.3	27.8%	7.3x	6.6x
Average												6.9x	6.1x
Median												6.4x	5.4x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization
 Source: S&P Global Market Intelligence and Capital IQ as of March 31, 2022. It includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

Public Trading Data for Software Companies ○○○○○○●○○

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue		Revenue Growth ¹	EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
HCM													
Automatic Data Processing, Inc.	\$227.54	\$184.85	\$248.96	(8.6%)	\$95,577.1	\$97,262.7	\$15,696.6	\$16,790.2	7%	\$4,094.0	26.1%	5.8x	5.4x
Benefitfocus, Inc.	12.62	9.25	15.20	(17.0%)	423.0	624.5	263.1	255.2	4%	19.4	7.4%	2.4x	2.4x
Ceridian HCM Holding Inc.	68.36	58.58	130.37	(47.6%)	10,395.2	11,204.4	1,024.2	1,206.5	18%	11.1	1.1%	9.3x	7.9x
Docebo Inc.	51.76	39.34	94.16	(45.0%)	1,700.7	1,486.5	104.2	147.6	35%	(11.9)	(11.4%)	10.1x	7.5x
Paychex, Inc.	136.47	92.74	140.67	(3.0%)	49,268.0	48,800.1	4,496.6	4,726.7	7%	1,989.9	44.3%	10.3x	9.7x
Paycom Software, Inc.	346.38	283.91	558.97	(38.0%)	20,856.8	20,638.8	1,055.5	1,315.3	23%	284.3	26.9%	15.7x	12.8x
Paycor HCM, Inc.	29.11	22.76	39.71	(26.7%)	5,091.4	4,980.3	383.7	443.4	18%	(3.8)	(1.0%)	11.2x	9.5x
PayGroup Limited	0.00	0.26	0.48	(29.9%)	39.5	27.6	15.1	22.8	NA	(1.4)	(9.0%)	1.2x	NM
Paylocity Holding Corporation	205.77	154.26	314.50	(34.6%)	11,340.1	11,334.3	731.2	916.9	22%	88.5	12.1%	12.4x	10.1x
TriNet Group, Inc.	98.36	69.43	109.40	(10.1%)	6,123.1	5,923.1	4,540.0	1,173.2	8%	511.0	11.3%	NM	4.7x
Workday, Inc.	239.46	205.90	307.81	(22.2%)	60,104.5	58,563.1	5,138.8	6,202.4	20%	227.3	4.4%	9.4x	7.9x
Average												8.8x	7.8x
Median												9.8x	7.9x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization
Source: S&P Global Market Intelligence and Capital IQ as of March 31, 2022. It includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

Public Trading Data for Software Companies ○○○○○○○○●●

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue			EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022	Revenue Growth ¹	LTM	EBITDA Margin ²	CY 2022	CY 2023
Infrastructure													
Akamai Technologies, Inc.	\$119.39	\$96.86	\$121.80	(2.0%)	\$19,210.0	\$19,902.7	\$3,461.2	\$3,815.3	9%	\$1,193.7	34.5%	5.2x	4.8x
Appian Corporation	60.82	46.85	149.82	(59.4%)	4,393.2	4,294.2	369.3	445.3	19%	(78.2)	(21.2%)	9.6x	8.1x
Cisco Systems, Inc.	55.76	50.10	64.29	(13.3%)	231,636.4	223,130.4	51,549.0	54,414.0	5%	15,990.0	31.0%	4.1x	3.9x
Cloudflare, Inc.	119.70	64.84	221.64	(46.0%)	38,791.9	38,263.3	656.4	932.4	34%	(81.5)	(12.4%)	41.0x	30.6x
Commvault Systems, Inc.	66.35	59.01	84.22	(21.2%)	2,956.5	2,740.6	755.0	806.3	7%	54.3	7.2%	3.4x	3.2x
DigitalOcean Holdings, Inc.	57.85	35.35	133.40	(56.6%)	6,225.4	5,974.7	428.6	566.0	31%	64.2	15.0%	10.6x	8.0x
Elastic N.V.	88.95	66.39	189.84	(53.1%)	8,314.1	8,037.3	800.6	1,013.9	25%	(127.2)	(15.9%)	7.9x	6.3x
Exasol AG	6.74	6.44	29.70	(77.3%)	160.8	109.0	34.0	38.5	36%	(29.7)	(87.2%)	2.8x	2.1x
Fastly, Inc.	17.38	13.01	75.15	(76.9%)	2,090.8	2,086.0	354.3	406.7	18%	(171.0)	(48.3%)	5.1x	4.4x
HashiCorp, Inc.	54.00	31.36	102.95	(47.5%)	9,907.9	8,570.7	320.8	420.0	30%	(276.1)	(86.1%)	20.4x	15.7x
JFrog Ltd.	26.95	21.06	54.05	(50.1%)	2,624.5	2,230.7	206.7	273.4	27%	(54.8)	(26.5%)	8.2x	6.4x
MongoDB, Inc.	443.59	238.01	590.00	(24.8%)	29,971.8	29,382.8	873.8	1,180.9	30%	(271.7)	(31.1%)	24.9x	19.1x
NetApp, Inc.	83.00	72.04	96.82	(14.3%)	18,470.5	17,214.5	6,193.0	6,644.6	7%	1,363.0	22.0%	2.6x	2.4x
Nutanix, Inc.	26.82	21.99	44.50	(39.7%)	5,915.6	6,016.2	1,526.8	1,768.4	19%	(475.8)	(31.2%)	3.4x	2.9x
OVH Groupe S.A.	25.92	19.78	31.33	(17.3%)	4,932.9	5,720.1	782.9	889.2	17%	261.3	33.4%	6.4x	5.5x
Rackspace Technology, Inc.	11.16	7.28	26.43	(57.8%)	2,365.6	6,199.7	3,009.5	3,263.1	9%	642.0	21.3%	1.9x	1.7x
Snowflake Inc.	229.13	164.29	405.00	(43.4%)	72,084.3	67,182.3	1,219.3	2,033.1	56%	(693.5)	(56.9%)	33.0x	21.2x
Software Aktiengesellschaft	34.68	31.04	48.88	(29.0%)	2,565.7	2,236.3	948.3	1,006.6	9%	170.7	18.0%	2.2x	2.0x
SolarWinds Corporation	13.31	10.76	37.38	(64.4%)	2,135.8	3,383.3	718.6	741.8	5%	94.2	13.1%	4.6x	4.3x
Tuya Inc.	2.96	1.75	26.65	(88.9%)	1,671.7	627.4	302.1	372.6	36%	(181.9)	(60.2%)	1.7x	1.2x
UiPath Inc.	21.59	20.53	90.00	(76.0%)	11,339.7	9,504.9	892.3	1,089.5	29%	(486.2)	(54.5%)	8.7x	6.8x
VeriSign, Inc.	222.46	198.53	257.03	(13.4%)	24,507.8	25,096.2	1,327.6	1,436.4	11%	914.7	68.9%	17.5x	15.8x
Average												10.7x	8.4x
Median												5.8x	5.1x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization
 Source: S&P Global Market Intelligence and Capital IQ as of March 31, 2022. It includes the most actively traded software companies for respective covered sectors, excluding most microcap companies.

Public Trading Data for Software Companies ○○○○○○○○○

\$ in USD millions (except for share price)

Company Name	Share Price	52-Week		% of 52-Week High	Market Cap	Enterprise Value	Revenue		Revenue Growth ¹	EBITDA		EV/Revenue	
	31/03/2022	Low	High				LTM	CY2022		LTM	Margin ²	CY 2022	CY 2023
Vertical Software													
2U, Inc.	\$13.28	\$8.63	\$46.52	(71.5%)	\$1,013.9	\$1,746.2	\$945.7	\$1,070.1	13%	(\$33.6)	(3.6%)	1.6x	1.4x
Allscripts Healthcare Solutions, Inc.	22.52	13.05	22.95	(1.9%)	2,617.0	2,863.1	1,503.0	602.4	7%	138.9	9.2%	NM	4.4x
Amdocs Limited	82.21	68.33	83.98	(2.1%)	10,140.9	10,193.7	4,306.9	4,609.2	8%	826.6	19.2%	2.2x	2.0x
AppFolio, Inc.	113.21	103.63	150.78	(24.9%)	3,944.2	3,879.4	359.4	452.0	20%	(6.2)	(1.7%)	8.6x	7.2x
AssetMark Financial Holdings, Inc.	22.25	20.67	29.54	(24.7%)	1,636.8	1,693.1	530.3	459.6	18%	65.8	12.4%	3.7x	3.1x
Black Knight, Inc.	57.99	52.00	84.27	(31.2%)	8,931.2	12,489.1	1,475.2	1,602.4	8%	516.3	35.0%	7.8x	7.2x
Blackbaud, Inc.	59.87	53.81	86.96	(31.2%)	3,039.8	4,003.4	927.7	1,080.6	6%	46.0	5.0%	3.7x	3.5x
Boxlight Corporation	1.20	0.95	3.03	(60.4%)	77.2	139.7	185.2	250.1	14%	4.4	2.4%	0.6x	0.5x
CDK Global, Inc.	48.68	38.54	55.15	(11.7%)	5,685.1	7,413.3	1,729.9	1,835.6	6%	567.6	32.8%	4.0x	3.8x
Ebix, Inc.	33.15	24.14	44.42	(25.4%)	1,024.5	1,623.2	994.9	1,091.0	NA	134.2	13.5%	1.5x	NM
EngageSmart, LLC	21.31	16.77	38.83	(45.1%)	3,456.4	3,202.1	216.3	282.9	29%	18.0	8.3%	11.3x	8.7x
Envestnet, Inc.	74.44	64.70	85.99	(13.4%)	4,080.8	4,619.7	1,186.5	1,349.5	13%	147.1	12.4%	3.4x	3.0x
FINEOS Corporation Holdings plc	1.81	1.73	3.59	(49.7%)	577.5	528.6	137.8	148.6	11%	(17.2)	(12.4%)	3.6x	3.2x
GitLab Inc.	54.45	30.74	137.00	(60.3%)	7,998.1	7,087.8	252.7	388.8	39%	(127.2)	(50.4%)	18.2x	13.1x
HealthStream, Inc.	19.92	18.51	31.11	(36.0%)	608.7	585.9	256.7	270.4	7%	29.5	11.5%	2.2x	2.0x
Olo Inc.	13.25	11.47	49.00	(73.0%)	2,107.4	1,593.0	149.4	193.9	29%	(24.1)	(16.2%)	8.2x	6.4x
Procore Technologies, Inc.	57.96	48.50	108.75	(46.7%)	7,769.4	7,280.0	514.8	663.0	24%	(259.2)	(50.4%)	11.0x	8.9x
Riskified Ltd.	6.04	5.48	40.48	(85.1%)	992.6	489.3	229.1	255.4	27%	(53.0)	(23.1%)	1.9x	1.5x
Stride, Inc.	36.33	25.55	38.40	(5.4%)	1,507.8	1,784.9	1,599.4	1,683.7	5%	165.9	10.4%	1.1x	1.0x
Tabula Rasa HealthCare, Inc.	5.76	4.25	53.38	(89.2%)	135.6	498.6	331.3	370.4	13%	(35.9)	(10.8%)	1.3x	1.2x
Toast, Inc.	21.73	15.83	69.93	(68.9%)	11,060.1	9,893.1	1,705.0	2,382.2	32%	(213.0)	(12.5%)	4.2x	3.1x
Tyler Technologies, Inc.	444.89	384.38	557.55	(20.2%)	18,432.3	19,459.0	1,592.3	1,851.7	10%	296.8	18.6%	10.5x	9.5x
Unity Software Inc.	99.21	73.12	210.00	(52.8%)	29,177.2	29,259.4	1,110.5	1,490.8	29%	(403.5)	(36.3%)	19.6x	15.2x
Veeva Systems Inc.	212.46	166.48	343.96	(38.2%)	32,795.1	30,473.6	1,850.8	2,164.6	17%	532.9	28.8%	14.1x	12.0x
Average												5.4x	4.7x
Median												3.7x	3.3x

¹Forecasts Revenue Growth between CY 2022 and CY 2023; ² LTM EBITDA Margin; CY = Calendar Year; Market Cap = Market Capitalization; EV = Enterprise Value; EBITDA = Earnings before Interest, Tax, Depreciation and Amortization
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Firm Overview



The Technology M&A Practice of Kroll Corporate Finance (formerly Pagemill Partners) is a leading mid-market practice with 300+ transactions completed over the past 15 years and bankers based in key tech centers internationally, including Palo Alto, Los Angeles, New York, London and Paris

Global advisory-focused firm ranked number five middle-market M&A advisor for the past 10 years, with 350+ corporate finance professionals and nearly 4,000 advisory-focused professionals¹

Significant Transaction Experience

- Over 300 transactions completed
- Strong track record of execution, running bespoke and competitive processes

- Advised on over 85 M&A transactions in 2021
- Over 1,100 transactions for more than 200 private equity firms in 2021
- Over 120 cross-border engagements in 2021

Deep Domain Expertise

- Fluency in key trends in the technology sector
- Thought leaders and strategic advisors to entrepreneurs and the PE community

- Five dedicated industry practices, each with deep sector expertise
- Established technology, industrials, business services, healthcare and consumer practices

Unparalleled Access to Buyers

- Unmatched access to technology-focused financial sponsors and strategics
- Regular dialogue with key players in the ecosystem

- Provides advisory services to over 65% of Fortune 100 companies
- Global relationships across industry sectors and geographies

Unconflicted and Focused Approach

- Singular focus on the technology sector
- Purely focused on M&A advisory services for emerging growth and middle-market clients

- Unconflicted, as the firm does not provide audit services
- Independent advisors to all our clients

¹Refinitiv Data (U.S. deals \$10M < \$170M, including deals without a disclosed value). Full years 2012 through 2021.

Key Sub-Sectors of Focus for our Technology M&A Practice (Formerly Pagemill Partners)

<h3>Vertical Software/SaaS</h3> <ul style="list-style-type: none"> AIA Contract Documents a business division of AIA has been acquired by TRUE WIND ucerna has been acquired by THOMABRAVO Satori Software has been acquired by BCC SOFTWARE exactbid due diligence simplified has been acquired by SPECTRUM EQUITY 	<h3>Data & Analytics</h3> <ul style="list-style-type: none"> AT INTERNET has been acquired by piano PCA Predict has been acquired by GBG DIGITAL MAP PRODUCTS has been acquired by SILVERSMITH CAPITAL PARTNERS SeeControl has been acquired by AUTODESK
<h3>Fintech & Payments</h3> <ul style="list-style-type: none"> instec has been acquired by insurity NUSOURCE FINANCIAL a portfolio company of TB TONKA BAY has been acquired by MOASIC CAPITAL PARTNERS First BILLING has been acquired by paya Paymentus has received funding from AKKR 	<h3>Marketing Tech</h3> <ul style="list-style-type: none"> Thanx has been acquired by RHI GROUP TechValidate has been acquired by SurveyMonkey fmg suite has been acquired by Enterprise Software Investors Chango has been acquired by rubicon PROJECT
<h3>Retail & Commerce Technologies</h3> <ul style="list-style-type: none"> Brightpearl has been acquired by sage ASKUITY has been acquired by THE HOME DEPOT ZIVELO has been acquired by Verifone UNATA has been acquired by instacart 	<h3>Security</h3> <ul style="list-style-type: none"> whiteCryption has been acquired by ZIMPERIUM Prevoty has been acquired by IMPERVA acceleps has been acquired by FORTINET brandprotect. has been acquired by LLRpartners
<h3>Consumer Technologies</h3> <ul style="list-style-type: none"> Wellness NETWORKS has been acquired by WebMD a subsidiary of Internet Brands Growtopia has been acquired by UBISOFT PuzzleSocial has been acquired by zynga eventful has been acquired by CBS CORPORATION 	<h3>Networking Technologies</h3> <ul style="list-style-type: none"> TALARI Networks. has been acquired by ORACLE FLUIDMESH NETWORKS has been acquired by CISCO sensity has been acquired by verizon GNS3 has been acquired by solarwinds

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Distinguished Enterprise Software Franchise

- Our Technology M&A Practice (formerly Pagemill Partners) has completed over 300 transactions, the majority of which are in enterprise software
 - Industry leaders leveraging both SaaS and perpetual models, including companies with hybrid delivery models
 - Underlying technology architecture, reliance on third-party technologies and strategic partnerships, product roadmaps and vertical go-to-market strategies are all important attributes that we have demonstrated experience in articulating and positioning



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For more information, please contact:

North America Technology M&A Leadership Team



Karan Kapoor
Managing Director
Los Angeles/Palo Alto
+1 424 249 1676
Karan.Kapoor@Kroll.com



Samir Hussein
Managing Director
New York
+1 212 277 0131
Samir.Hussein@Kroll.com



Scott Munro
Vice Chairman
Palo Alto/Toronto
+1 650 354 4040
Scott.Munro@Kroll.com



Bob Bartell, CFA
President of Corporate
Finance, Chicago
+1 312 697 4654
Bob.Bartell@Kroll.com



Nicholas Collins
Managing Director
Palo Alto
+1 650 354 4020
Nicholas.Collins@Kroll.com



Daniel Taranovsky
Director
Toronto
+1 416 593 3419
Daniel.Taranovsky@Kroll.com



Rory O'Sullivan
Managing Director
London
+44 (0)20 7089 4810
Rory.OSullivan@Kroll.com



Mihail Ivanov
Director
London
+44 (0)20 7089 0899
Mihail.Ivanov@Kroll.com



Efraim Chalamish
Senior Advisor
Israel
+1 212 871 0422
Efraim.Chalamish@Kroll.com



Nicolas Depardieu
Managing Director
Paris
+33 1 40 06 40 46
Nicolas.Depardieu@Kroll.com



Philipp Bose, CFA
Director
Munich
+49 89 38 88 84 280
Philipp.Bose@Kroll.com



Silicon Valley
1950 University Circle
Suite 400
Silicon Valley, CA 94303 USA
+1 650 798 5500 Main



Los Angeles
10100 Santa Monica Blvd
Suite 1100
Los Angeles CA 90067 USA
+1 424 249 1650 Main



New York
55 East, 52nd Street,
Floor 31
New York, NY 10055 USA
+1 424 249 1650 Main



London
Level 14, The Shard
32 London Bridge Street
London SE1 9SG, UK
+44 20 7089 4700 Main



Paris
4 Square Edouard VII
75009 Paris,
France
+33 1 40 06 41 01 Main



Munich
Leopoldstrasse 8
80802 Munich
Germany
+49 89 388 884 0 Main



Toronto
333 Bay St. 4th Floor
Toronto, ON
M5H2R2, Canada
+1 416 364 9700 Main

About Kroll

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