

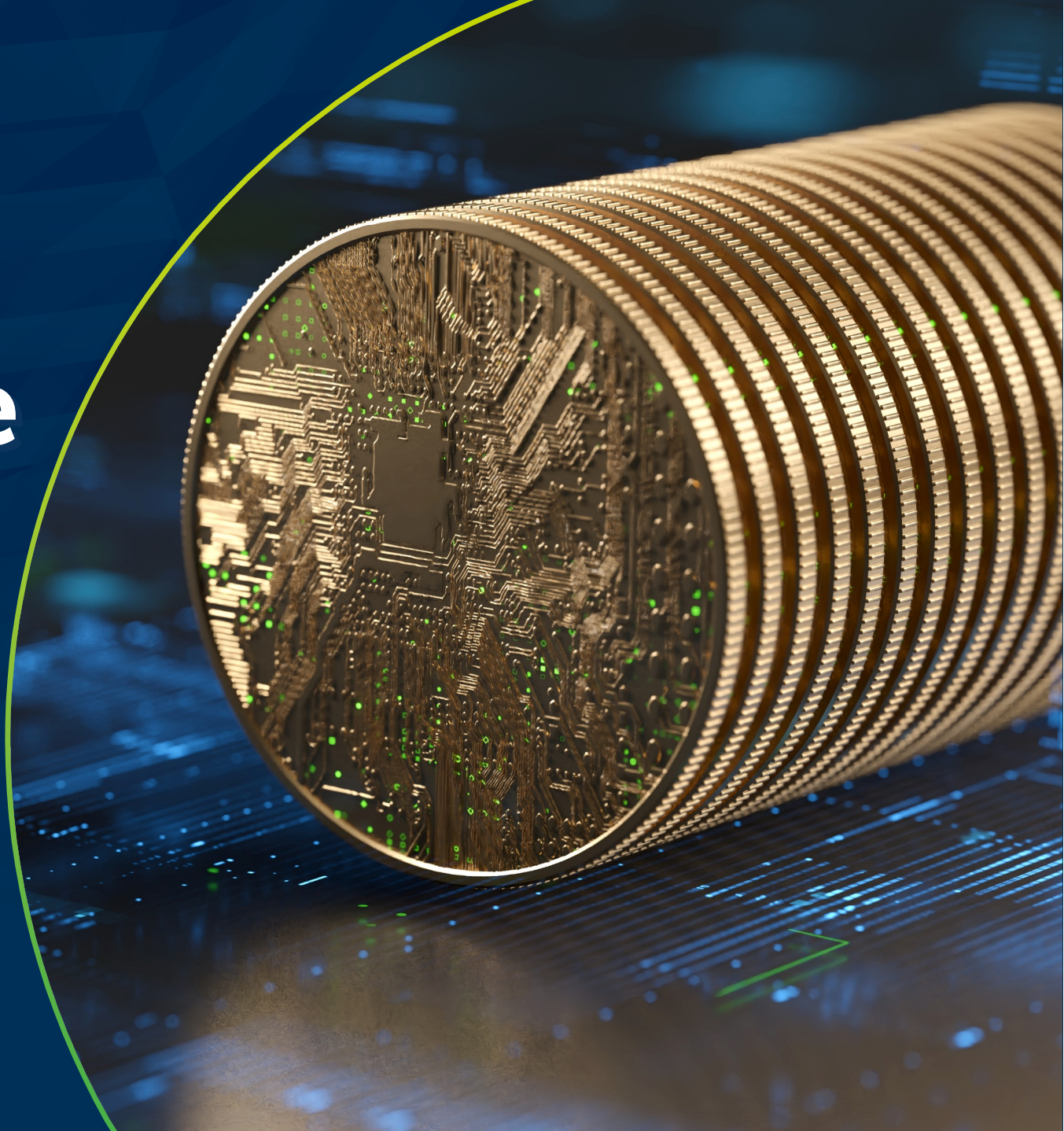
KROLL

Global Software Sector Update

Industry Insights

SPRING 2024

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Executive Summary

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Deal Volume in Line with 2023—However, Deal Value Significantly Up due to Large Ticket Deals



Deal Flow Picked Up in Q1 2024 Yet Remained Third Weakest of Last Ten Quarters



Public SaaS Company Multiples Stayed Level in Q1 2024, Holding Gains Made in Q4 2023

Key Market Updates

The first quarter of 2024 saw strategic buyers step up their level of deal activity, with some notably large transactions, such as Synopsys's \$31.9 billion acquisition of Ansys and HPE's \$12.8 billion acquisition of Juniper Networks, helping drive quarterly deal value in Q1 2024 to more than double the level of Q1 2023 (+121%). However, the number of deals continued to decline, with just 519 deals compared with 623 in the same period of 2023 (-17%), as PE buyers continue to be less active, hamstrung by a combination of still sluggish deal flow and continued tight credit markets. Two of the most active sponsors, Thoma Bravo and Vista, printed just a single new platform deal between them in Q1, for example. This is also reflected in the median multiple on PE acquisitions, which dropped to 3.9x EV/LTM revenues for the trailing twelve months, compared with the jump to 5.2x for strategic deals during the same period. This brought the median multiple on strategic deals back to a premium over PE deals for the first time since 2020.

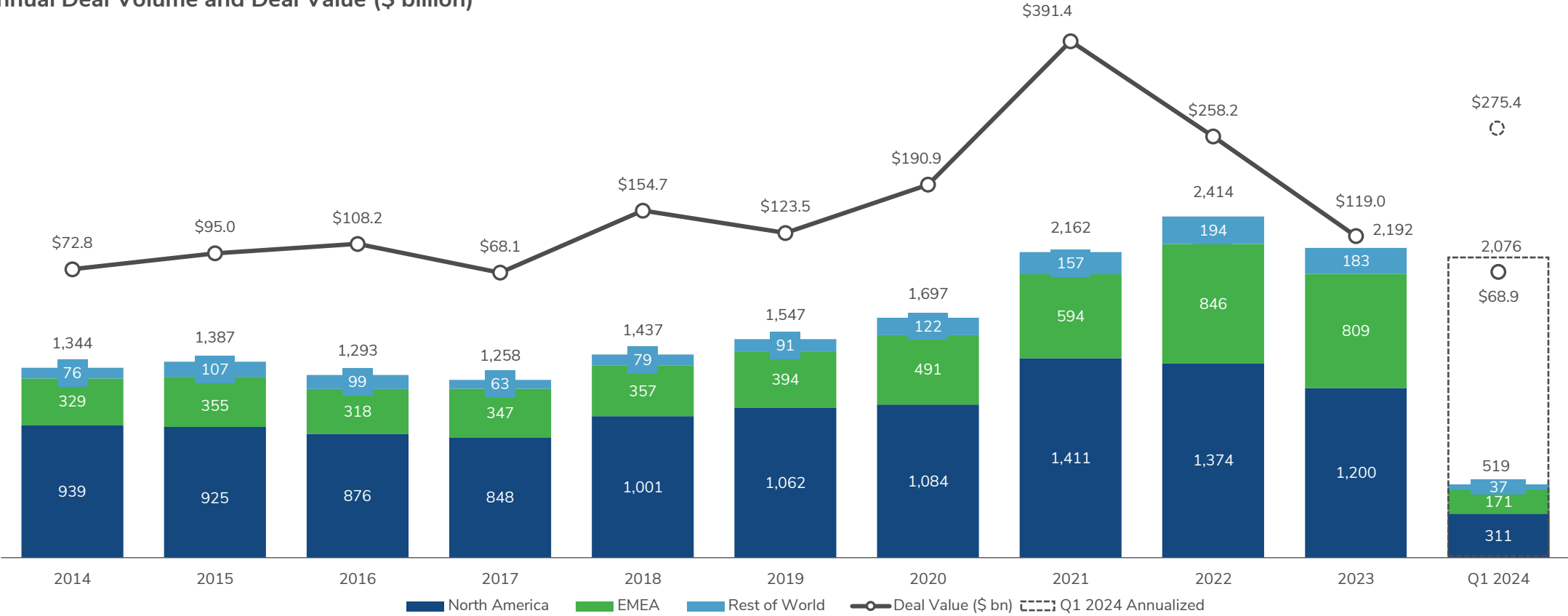
In the public markets, following a notable bounce in Q4 2023, multiples for publicly traded Software-as-a-Service (SaaS) stocks held broadly level in Q1 2024, closing the quarter at 8.3x EV/NTM revenues for the upper quartile and 3.0x for the lower quartile. There was some distinct outperformance in stocks most heavily exposed to the AI investment wave, with engineering software stocks jumping to the highest median multiple of 9.7x EV/NTM revenues, compared to 8.4x 12 months ago. The engineering software sector also saw some of the most highly priced M&A deals, with the Ansys acquisition by Synopsys, BETA CAE acquisition by Cadence Design Systems, and Jama Software acquisition by Francisco Partners all trading at double-digit revenue multiples. Other sectors performing well and benefiting from the AI theme, with median multiples up over 20% year-on-year, include Business Intelligence and Analytics as well as Cybersecurity. By contrast the Human Capital Management sector showed the opposite trend, with median multiple down 19% year-on-year to 6.4x EV/NTM revenues.

With a more solid public equity market supported by strong inflows into tech stocks, we are finally seeing a welcome return of new issues in the form of IPOs. Successful listings in the quarter included Astera Labs and Reddit, and there is a busy pipeline of filings for the remainder of the year. The market continues to be heavily driven by expectations on timing for the first of the expected cuts to the Fed Funds Rate, with unwelcome signs toward the end of the quarter of inflation being more persistent than previously thought. As we head toward the summer, there is a general sense of a continued improvement in market conditions leading to a more active deal cadence in the second half of 2024.

Q1 Deal Value More than Doubled (+121%) Year-on-Year due to Large Ticket Deals

However, Number of Deals in Q1 Were Down 17% Year-on-Year

Annual Deal Volume and Deal Value (\$ billion)



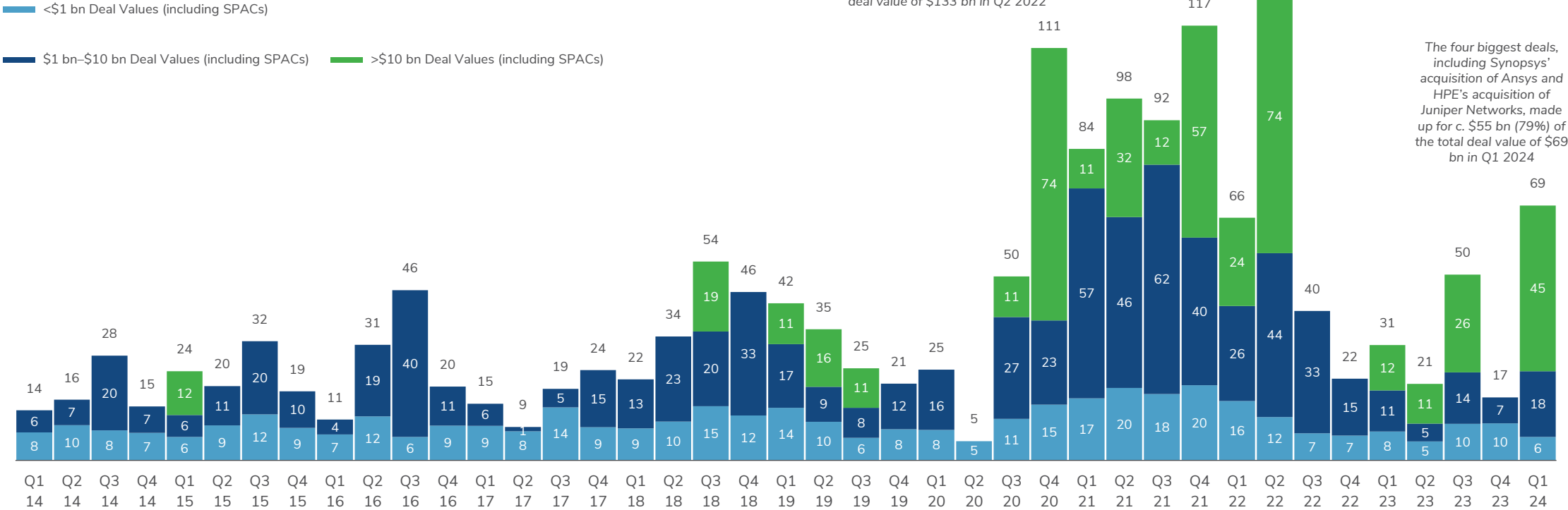
Source: 451 Research as of March 31, 2024

Mega and Large Ticket Deals Are Back in Q1 2024, While Smaller Deals Are Still Significantly Below Long-Term Median

Deal Value for Deals <\$1 bn 33% Below Long-Term Median of c. \$9.4 bn

Quarterly Deal Values (\$ bn) (Q1 2014 to Q1 2024)¹

Top number in each bar indicates total deal value in quarter



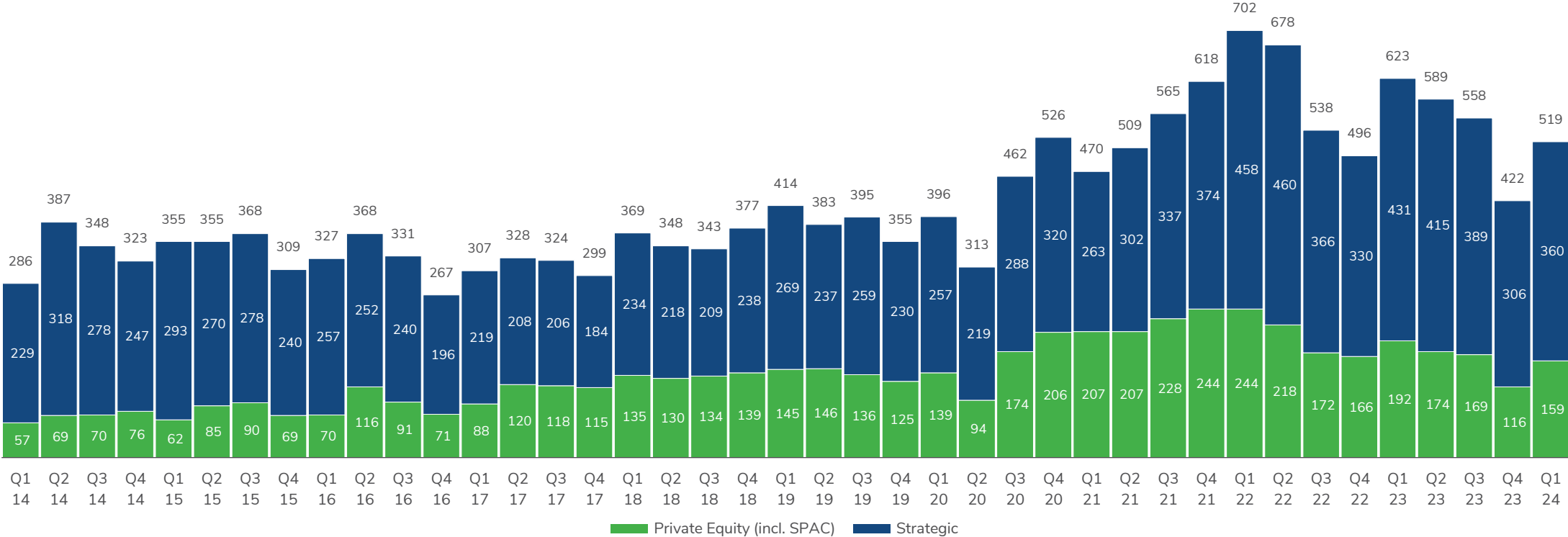
¹Between January 1, 2014, and March 31, 2024; SPAC = Special Purpose Acquisition Company
Source: 451 Research as of March 31, 2024

Deal Count Picked Up in Q1 2024 Yet Remained Third Weakest of Last Ten Quarters

PE Deals Accounted for 31% of Deals in Q1 2024 Compared to an Average of 37% During 2022 and 2023

Quarterly Deal Volume (Q1 2014 to Q1 2024)¹

Top number in each bar indicates total deal volumes in quarter



¹Between January 1, 2014, and March 31, 2024; Private Equity includes acquisitions made by PE-backed platforms
Source: 451 Research as of March 31, 2024

Top Six Software Acquisitions over Q1 2024 by Deal Value

January 2024

Ansys

acquired by

SYNOPSYS

\$31.9 bn **16.2x**

Ansys provides CAD simulation, analysis and testing SaaS for businesses globally. Their software provides features for structural design optimization, virtual prototyping, systems modeling, and materials information management.

The megatrends of AI, silicon proliferation and software-defined systems are requiring more compute performance and efficiency in the face of growing, systemic complexity. Bringing together Synopsys' EDA solutions with Ansys' simulation and analysis capabilities will enable the combined entity to deliver a holistic, powerful and seamlessly integrated silicon-to-systems approach to innovation to help maximize the capabilities of technology R&D teams across a broad range of industries.

February 2024

BROADCOM
EUC Division

acquired by

KKR

\$4.0 bn **N/A**

Broadcom's end-user computing division provides desktop and application virtualization software for businesses globally. Their software provides features for unified endpoint management, application management, and digital workspace management.

Originally a division of VMware, prior to Broadcom's acquisition, the EUC Division provides a leading suite of digital workspace solutions that allows organizations to securely deliver and manage applications, desktops and data across any device or platform. In addition to expanding R&D and pursuing new strategic partnerships, KKR plans to support EUC Division's focus on customer relationships through significant investments across go-to-market functions.

January 2024

JUNIPER
NETWORKS

acquired by

Hewlett Packard
Enterprise

\$12.8 bn **2.3x**

Juniper Networks provides AI-based, cloud-native networking management software, systems, and related APIs. Their software provides features for network automation, threat detection, analytics, cloud-native test and service assurance, license management, and security management.

Despite the prominence of AI in its acquisition announcement, HPE's purchase is more about expanding its reach into data centers than juicing its AI offerings. Juniper should prove to be a valuable asset for HPE as it struggles to maintain volume and margins in its classic server business. Although graphics processing unit availability is commonly identified as the primary bottleneck to generative AI, high-performance networking is the most cited requirement for enhancing AI performance in 451 Research's surveys in each of the last two years.

January 2024

Procare
SOLUTIONS

acquired by

Roper
TECHNOLOGIES

\$1.8 bn **N/A**

Procare Software provides childcare management SaaS, desktop software, mobile applications, and related integrated systems for businesses in the education sector globally. Their software provides features for classrooms, ratio compliance, finance, staff, leads, childcare tuition payment processing, and scheduling management and parent portals to monitor child activity.

Procare is a business with clear niche market leadership, mission critical solutions, strong organic revenue growth, a high recurring and reoccurring revenue mix, strong customer retention, and high cash conversion. This acquisition fits into Roper's strategy, which focuses on identifying high-quality, market-leading technology businesses that will enhance Roper's long-term cash flow compounding.

February 2024

Altium

acquired by

RENESAS

\$5.9 bn **20.2x**

Altium provides PCB software that enables and connects PCB designers, part suppliers, and manufacturers to develop and manufacture electronic products faster and more efficiently.

As technology advances, the design and integration of electronic systems are becoming increasingly complex. Renesas and Altium share a common vision to develop an integrated and open electronics system design and life cycle management platform that unifies these steps at a system level. Joining Renesas will also enable integration with third-party vendors across the ecosystem, allowing them to execute all electronic design steps seamlessly on the cloud. This integration brings significantly faster innovation and lowers barriers to entry for system designers.

February 2024

everbridge

acquired by

THOMABRAVO

\$1.5 bn **3.8x**























Everbridge provides critical event management software, related APIs, and mobile applications for businesses globally. Their software provides features for emergency response incident notification, incident management, dashboard, risk monitoring, physical security, notifications, crisis management, and risk intelligence.

Joining Thoma Bravo will mark a pivotal moment for Everbridge and their mission to empower organizations worldwide with the tools to successfully navigate critical events. Thoma Bravo's comprehensive experience in risk, compliance, and safety sectors and their commitment to fostering innovation will enable the company to better help customers keep people safe and their organizations running.











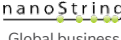











CAD = Computer-Aided Design; EDA = Electronic Design Automation; API = Application Programming Interface; EUC = End-User Computing; PCB = Printed Circuit Board; LTM = Last Twelve Months
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 Source: 451 Research, Mergermarket, Press Releases as of March 31, 2024

Other Notable Software Deals during Q1 2024

Strategic Deals (Q1 2024)

Date	Target	Acquirer	Deal Value and Multiple ¹	Target Abstract
Mar-24	 BETA	 cadence	\$1,240 mn 13.8x	Simulation and analysis software
Jan-24	 Specialty Networks	 CardinalHealth	\$1,200 mn N/A	Health management software
Mar-24	 one One Network Enterprises	 BlueYonder fulfill your potential	\$839 mn N/A	Digital supply chain network management software
Jan-24	 PAGERO	 THOMSON REUTERS	\$783 mn 11.4x	E-invoicing and indirect tax automation software
Mar-24	 CWT	 GLOBAL BUSINESS TRAVEL	\$570 mn N/A	Business travel and meetings management software
Jan-24	 Habu	 /LiveRamp	\$200 mn N/A	Data clean room and collaboration software
Mar-24	 TASK.	 PAR	\$191 mn 3.9x	POS terminal management software
Mar-24	 Stuzo	 PAR	\$189 mn N/A	Open commerce software and managed services
Feb-24	 ScienceIO	 veradigm	\$140 mn N/A	Health care AI foundation models software
Mar-24	 OCR GLOBAL TRADE MANAGEMENT	 DESCARTES	\$90 mn N/A	Global trade management software
Jan-24	 eloomi	 CERIDIAN	N/A	Learning and development software

PE Deals² (Q1 2024)

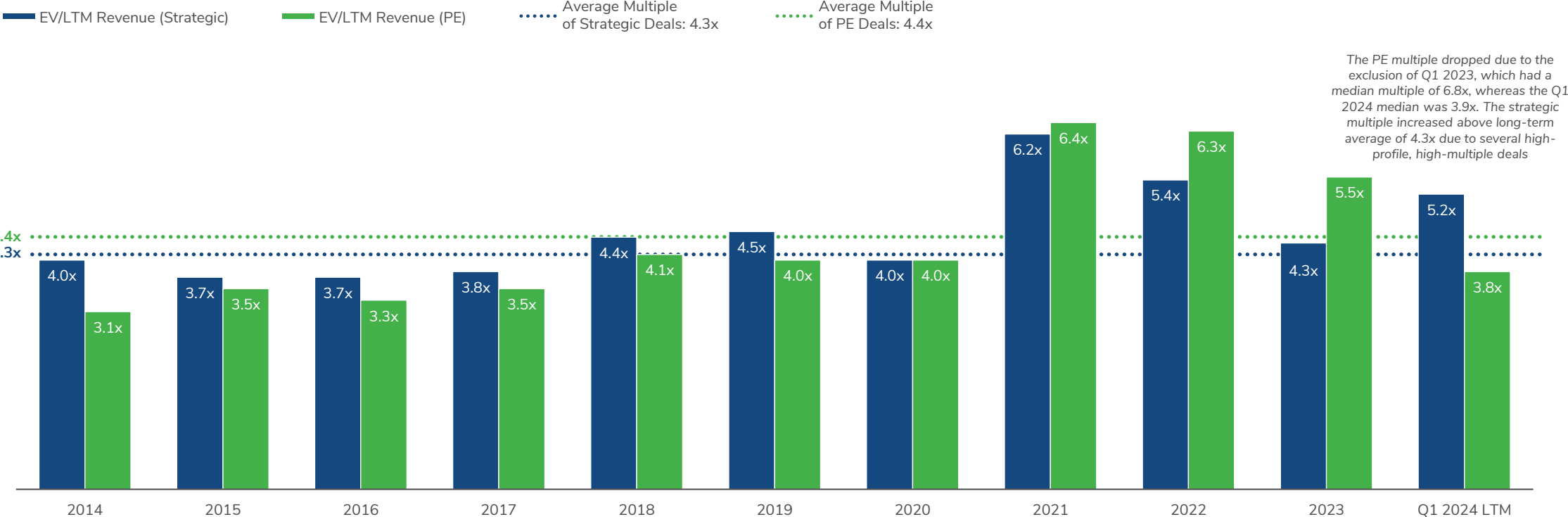
Date	Target	Acquirer	Deal Value and Multiple ¹	Target Abstract
Feb-24	 everbridge	 THOMABRAVO	\$1,446 mn 3.8x	Critical event management SaaS
Mar-24	 jama software	 FP FRANCISCO PARTNERS	\$1,200 mn 13.3x	Products requirements management and traceability software
Mar-24	 alight Payroll and professional services business	 H.I.G. CAPITAL	\$1,050 mn N/A	HCM and payroll software
Mar-24	 Fortrea Endpoint clinical and patient access business	 Arsenal Capital Partners	\$295 mn N/A	Interactive response and patient access software
Jan-24	 SAYARI	 TPG	\$228 mn N/A	Supply chain risk intelligence software
Mar-24	 nanoString Global business operations	 PATIENT SQUARE	\$220 mn N/A	Scientific and clinical research software
Mar-24	 mdf commerce	 KKR	\$189 mn 2.0x	E-commerce, supply chain and payment software
Feb-24	 ANSARADA	 Datasite CAPVEST	\$146 mn 4.0x	Virtual data rooms and dealmaking software
Feb-24	 ZEROFOX	 HAVELI	\$142 mn 1.6x	External threat intelligence and protection software
Jan-24	 visitgroup	 PSG	\$109 mn N/A	Hospitality and travel management software
Mar-24	 tis	 MARLIN EQUITY PARTNERS	N/A	Enterprise payment optimization SaaS

CRS = Cloud Reservation System; PMS = Property Management System; POS = Point of Sale; RMS = Revenue Management System; CRM = Customer Relationship Management; HCM = Human Capital Management; ¹Deal Multiple = Enterprise Value/LTM Revenue, unless otherwise specified; ²PE deals include acquisitions made by PE-backed strategics, whose owners are indicated below the gray line, and exclude deals involving SPAC vehicles; All trademarks, trade names or logos referenced herein are the property of their respective owners
Source: 451 Research as of March 31, 2024

Strategic Deal Multiples Rebounded in Q1 2024 Whereas PEs Continued Downward Trend

However, Premium Assets Still Command Double-Digit Multiples from PE and Strategic Buyers

Annual Median Deal Multiples

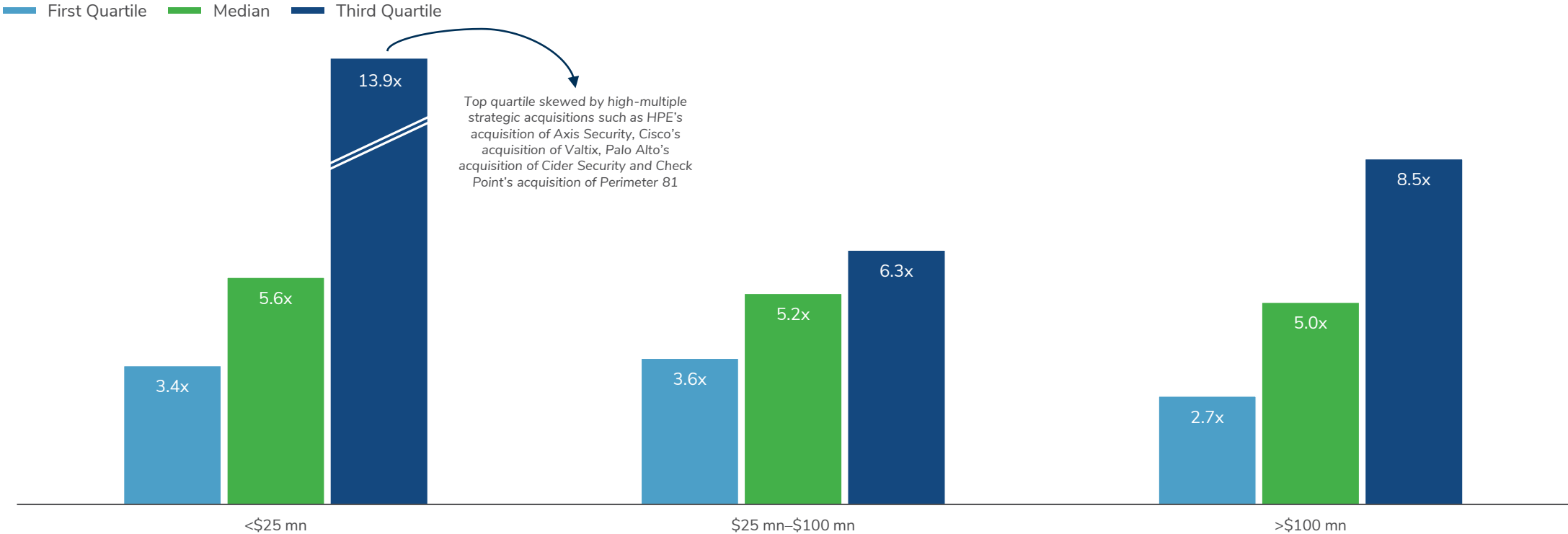


EV = Enterprise Value or Market Capitalization + Total Debt – Cash
 PE deals include acquisitions made by PE-backed strategics
 Source: 451 Research as of March 31, 2024

SaaS Deal Multiples by Quartile and Target Revenue

Third-Quartile Multiples Command Average Premiums of 21%–148% 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 March 31, 2022, and March 31, 2024; (iii) disclosed EV/LTM revenue multiple; and (iv) excluding outliers and SPAC transactions
 Source: 451 Research and Mergermarket as of March 31, 2024

Kroll's Technology Investment Banking Practice Tracked Universe of Public Software Companies



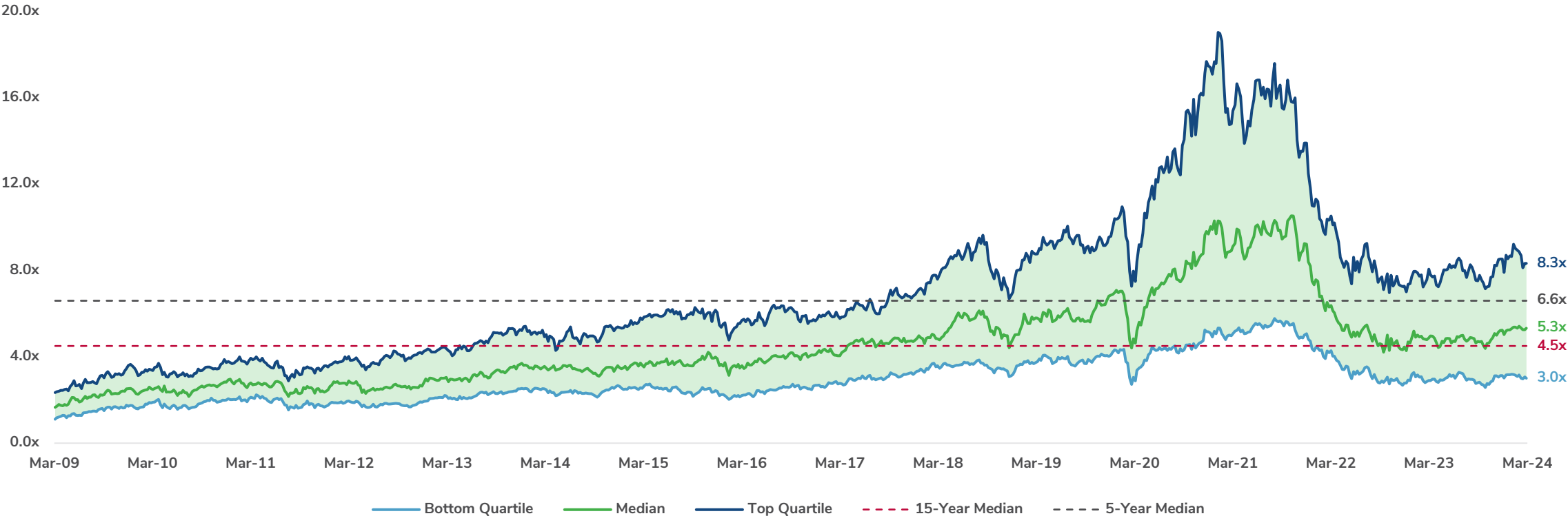
BI = Business Intelligence; ERP = Enterprise Resource Planning; HCM = Human Capital Management; SCM = Supply Chain Management
 Source: S&P Global Market Intelligence as of March 31, 2024, including the most actively traded software companies for respective covered sectors and excluding most microcap companies
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SaaS Companies' EV/NTM Multiples Have Stabilized and Recovered from the 15-Year Median Floor

Median Multiple Trading at 5.3x EV/NTM Revenue Versus Long-Term Average of 4.5x

Performance of Our Technology Investment Banking Practice SaaS Index over the Past 15 Years

EV/NTM Revenue



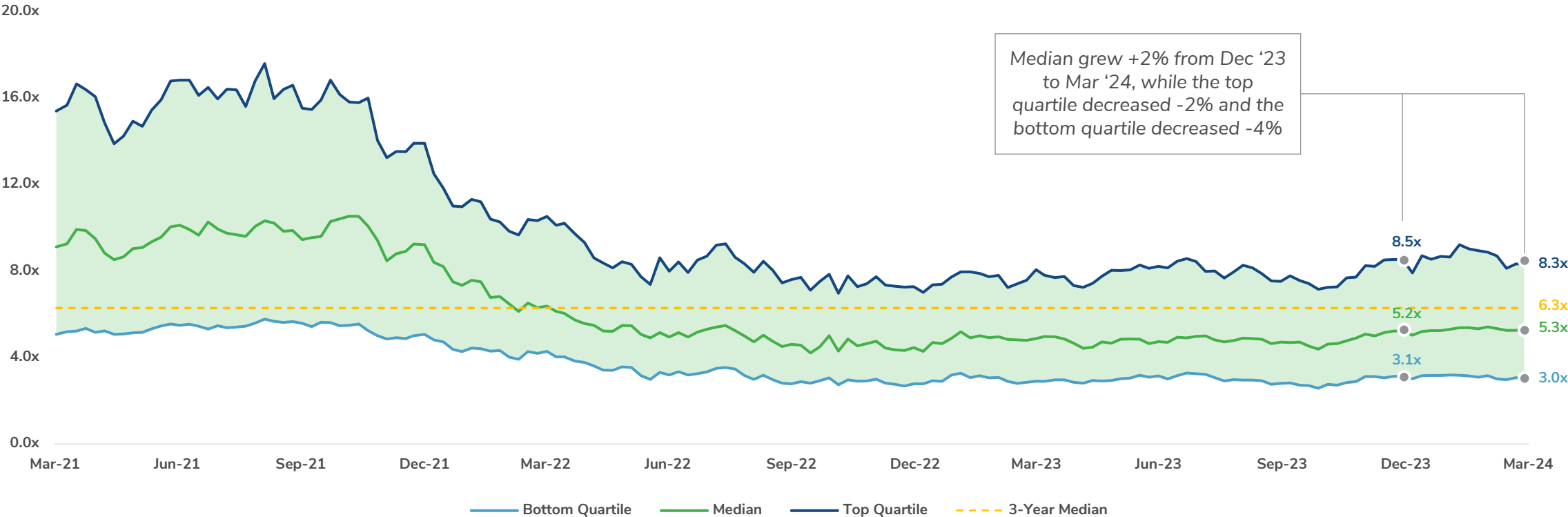
Our Technology Investment Banking Practice SaaS Index includes 212 companies that offer SaaS solutions; NTM = Next Twelve Months
 Source: Capital IQ as of March 31, 2024

EV/NTM Revenue Multiples Stayed Level in Q1 2024, Holding Gains Made in Q4 2023

Median Grew +2% in Q1 While the Top and Bottom Quartiles Saw Slight Declines

Performance of Our Technology Investment Banking Practice SaaS Index over the Past Three Years

EV/NTM Revenue

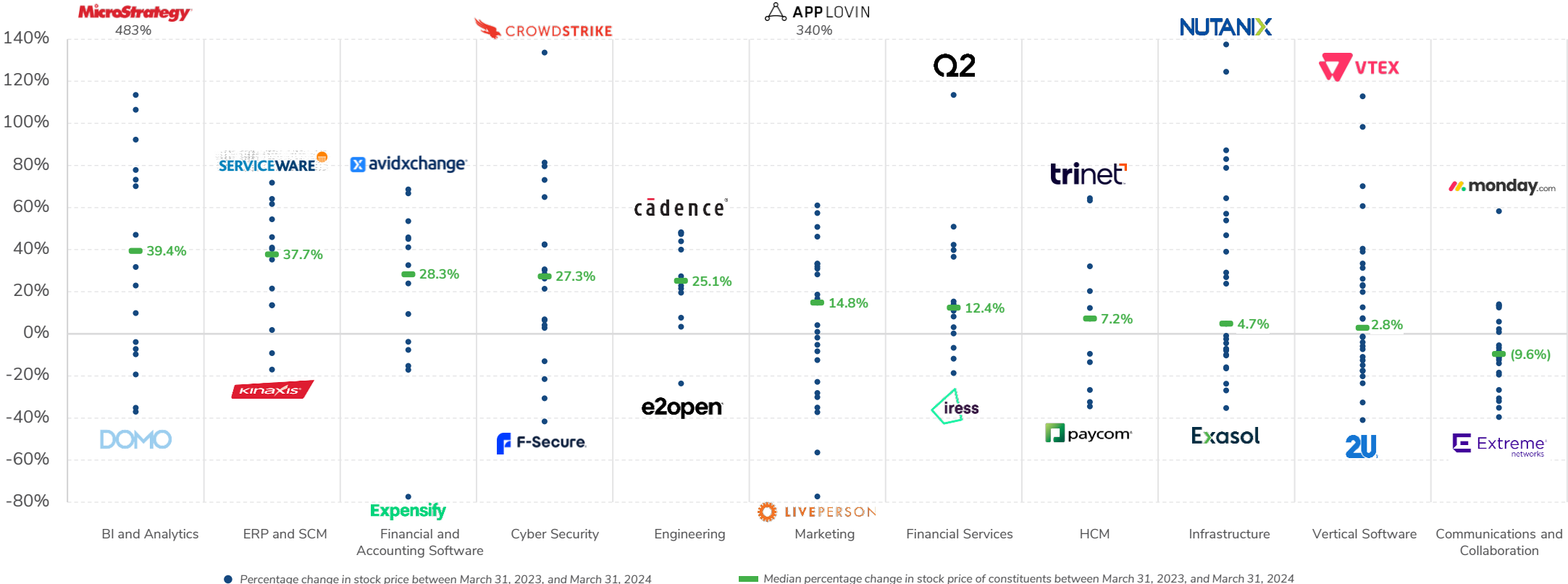


Our Technology Investment Banking Practice SaaS Index includes 212 companies that offer SaaS solutions
Source: Capital IQ as of March 31, 2024

Last 12 Months Performance of Stock Prices

Considerable Differences between High- and Low-Performing Stocks: Outperformance Is Being Rewarded

Performance of Our Technology Investment Banking Practice’s Tracked Software Universe between March 31, 2023, and March 31, 2024

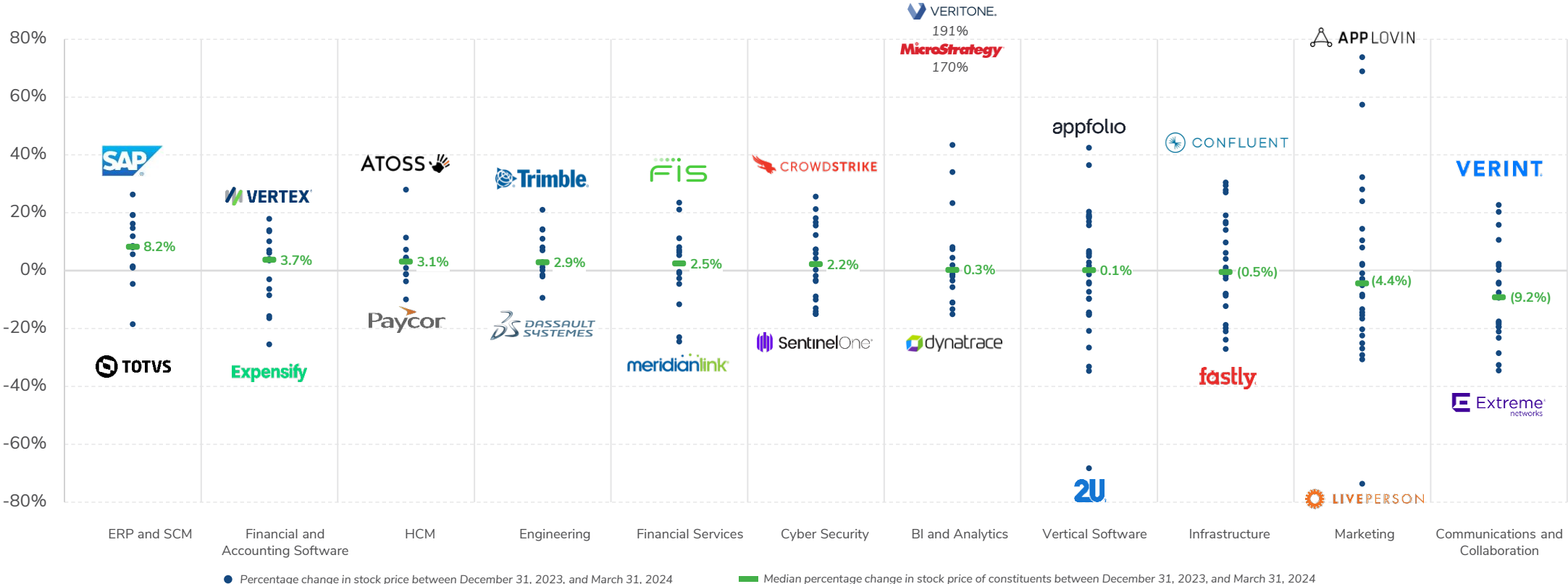


Does not include companies listed after March 31, 2023; Buckets ordered by median percentage change in stock price between March 31, 2023, and March 31, 2024; All trademarks, trade names, or logos referenced herein are the property of their respective owners
 Source: Capital IQ as of March 31, 2024

Quarterly Performance of Stock Prices

Modest Growth Across Most Software Sectors in the Last Quarter

Performance of Our Technology Investment Banking Practice’s Tracked Software Universe between December 31, 2023, and March 31, 2024

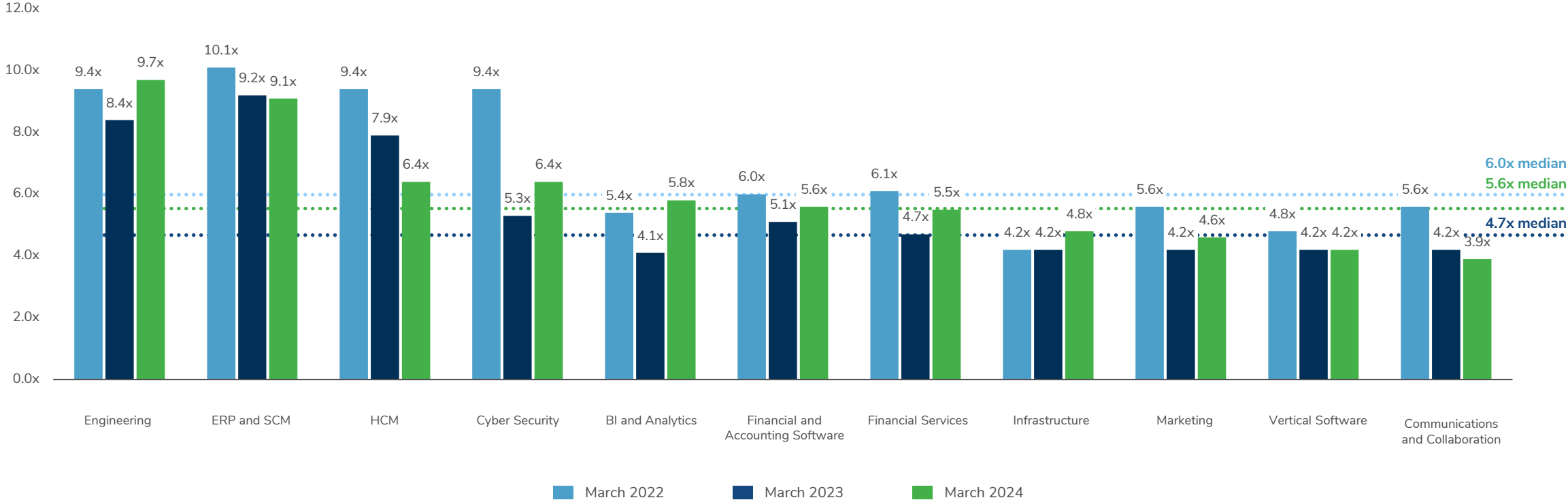


Does not include companies listed after December 31, 2023; Buckets ordered by median percentage change in stock price between December 31, 2023, and March 31, 2024; All trademarks, trade names, or logos referenced herein are the property of their respective owners
 Source: Capital IQ as of March 31, 2024

Multiples Across Subsectors Starting to Recover after Significant Decline from 2022 Levels

March 2024 Median Multiple of 5.6x Nearing March 2022 Multiple of 6.0x

EV/Forward Revenue Multiples, March 2022 vs. March 2023 vs. March 2024



Buckets ordered by March 2024 revenue multiples
 Source: Capital IQ as of March 31, 2024


Select Recent Kroll Technology Investment Banking Transactions




has received investment from



February 2024



has been acquired by




January 2024




has been acquired by




November 2023




has been acquired by



May 2023



has been acquired by



March 2023



has been acquired by



December 2022



has been acquired by



September 2022



has received majority investment from



July 2022



has been acquired by



July 2022






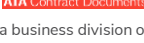

















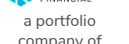

























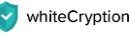


























has been acquired by



July 2022

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Key Subsectors for Our Technology Investment Banking Practice

 <p>Vertical Software</p>	 <p>has been acquired by</p> 	 <p>a business division of</p>  <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>Data & Analytics</p>	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 
 <p>Fintech & Payments</p>	 <p>has been acquired by</p> 	 <p>a portfolio company of</p>  <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has received funding from</p> 	 <p>Marketing & AdTech</p>	 <p>has been acquired by</p> 	 <p>has received investment from</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 
 <p>Retail & Commerce</p>	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>Cybersecurity & Risk</p>	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 
 <p>Consumer Tech</p>	 <p>has been acquired by</p>  <p>a subsidiary of</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>Office of the CFO</p>	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 	 <p>has been acquired by</p> 

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Distinguished Enterprise Software Franchise

Our Technology Investment Banking Practice (formerly Pagemill Partners) has completed more than 300 transactions, the majority of which are in enterprise software:

- Industry leaders leverage 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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