CYBERSECURITY

Quarterly Report





INSIDE THIS ISSUE

- Cyber M&A and investment activity, while materially down in Q1 2023, displays green shoots in terms of a rise in public strategic buyer activity, and the breadth of buyer and investor sector interest – particularly in cloud security, MSSP / MDR, cyber services, identity & access management and risk & compliance
- Public cyber vendor valuations have been recovering YTD alongside NASDAQ, while takeprivates continue (e.g., Sumo Logic), signaling that valuations may have bottomed and are on the upswing
- While profitability is becoming more important to sector valuations, the widening innovation gap will drive acquirers and investors to continue rewarding creativity and technology adoption as long-term value drivers
- Secular spending demand remains stronger than ever as cybercrime grows at a record pace, breach costs skyrocket, new cyber threats manifest and government enforcement increases
- Cyber landscape evolution points to a structurally buoyant M&A and investment market, which should manifest later this year as strategics reengage, becoming more active acquirers to drive growth and fight off encroachment from a broadening array of competitors

Q1 2023 Cybersecurity Deal Activity: Down but with Promising Green Shoots

OVERVIEW

- Consecutive quarterly sector mergers and acquisitions (M&A) deal activity rose in Q1 2023 to 44 cybersecurity transactions, from 41 in Q4 2022. However, year-overyear Q1 declined from 68 deals, while M&A volume fell significantly to \$2.6 billion in the quarter vs. a record \$8.1 billion the year before
- Declines in transaction activity partly reflected valuation volatility, making deals harder to do. Overall, Q1 saw a 23% lower median disclosed M&A enterprise value (EV) / revenue multiple through quarter end in Q1 2023 of 5.4x versus 7.0x through quarter end in Q1 2022
- Q12023 cyber venture / growth investing fared modestly despite market uncertainty, finishing the quarter with total funding of \$3.0 billion across 225 companies, down from \$4 billion in funding across 257 companies in Q4 2022. In comparison, Q1 2022, still benefitting from the record-breaking deal activity seen in late 2021, saw \$6.6 billion in funding across 427 companies
- On a positive note, Q1 M&A and investment reflected broad interest across subsectors, particularly in cloud security, managed security service provider (MSSP) / managed detection and response (MDR), cyber services, identity and access management and risk and compliance. Further, we are seeing rising inbound Latin America cyber acquisitions
- Another bright spot is a pick-up in acquisitions led by public vendors. Due to stock price underperformance in 2022, almost 80% of sector acquisitions were consummated by private equity (PE) and private strategic buyers. However, partly thanks to a 16% rise in the NASDAQ, and 12% rise in the public cybersecurity shares index in 2023 year-to-date (YTD), public acquirers accounted for almost half of cyber M&A volumes in Q1. Given this trend and continuing solid levels of private buyer activity, we foresee a material rise in transaction activity later this year. Our optimism is further explained on page five

NOTABLE Q12023 CYBERSECURITY M&A TRANSACTIONS

Announced	Acquirer	Target, Subsector	Deal Value/ Multiple of LTM Revenues	Announced	Acquirer	Target, Subsector	Deal Value/ Multiple of LTM Revenues
Mar-23	cisco	Lightspin Cloud Security	ND / ND	Feb-23	Ezscaler	CANONIC Application Security	ND / ND
Mar-23	RAPID ₁₀	MINERVA Threat Prevention & Response	\$38 million / 12.3x	Feb-23	waveriet	Fidus Security Consulting & Services	ND / ND
Mar-23	(hp)	axis Zero Trust Network Access	\$500 million / ND	Feb-23	RADIANT LOGIC	BRAINWAVE GRC Identity & Access Management	ND / ND
Mar-23	SUMMAEQUITY	LOGPOINT SIEM and SOAR*	\$150 million / 6.0x	Feb-23	almond	▲ AMOSSYS Security Consulting & Services	ND / ND
Feb-23	CIPHER TECHS	CyberMaxx. MDR/MSSP*	ND / ND	Jan-23	IRON BOW	GUARDSIGHT SecOps & IR*	ND / ND
Feb-23	DNV	cybersecurity. Security Services	\$105 million / ND	Jan-23	FREALDEFENSE	SUPERATION SECURITY	ND / ND
Feb-23	OTREND	ANLYZ® SecOps & IR*	ND / ND	Jan-23	abacus groupilc	Security Consulting & Services	ND / ND
Feb-23	illiilli CISCO	V/\LTIX Cloud Security	\$125 million / 25.0x	Jan-23	♦ SailPoint.	SecZetta* Identity & Access Management	ND / ND
Feb-23	accenture	Part of Accenture Security Consulting & Services	ND / ND	Jan-23	₩ NETSPI°	OVISIUM Risk & Compliance	ND / ND
Feb-23	FIP	sumo logic	\$1.7 billion / 5.7x	Jan-23	CERBERUS	Security Consulting	ND / ND

^{*} Key to abbreviations: Security Information and Event Management (SIEM); Security Orchestration, Automation and Response (SOAR); Managed Detection and Response (MDR), Managed Security Services Provider (MSSP), Security Operations (SecOps), Incident Response (IR)
Sources: 451 Research / S&P Capital IQ, Crunchbase, Pitchbook, public sources and Lincoln estimates



Q1 2023 Cybersecurity Investment Activity Shows Robustness Despite Tech Slowdown

NOTABLE Q1 2023 CYBERSECURITY GROWTH INVESTMENTS

Announced	Company	Subsector	\$ Raised in Round	Announced	Company	Subsector	\$ Raised in Round
Mar-23	Spera	Identity Security Posture Management	\$42 million	Feb-23	de sc⊜pe	Identity & Access Management	\$53 million
Mar-23	DATADOME	Fraud Detection	\$42 million	Feb-23	oligo	Application Security	\$28 million
Mar-23	⊗ MITIGA	Incident Response	\$45 million	Feb-23	SKYBOX SECURITY	Network Security Policy Management	\$50 million
Mar-23	britive	Cloud Security	\$21 million	Jan-23	STRATA Identity Orchestration	Identity & Access Management	\$26 million
Feb-23	WIZ ⁺	Cloud Security	\$300 million	Jan-23	snyk	Application Security	\$25 million
Feb-23	CyberSmart	Risk & Compliance	\$16 million	Jan-23	CYGN∜S	Security Operations	\$55 million
Feb-23	• deepwatch	MDR / MSSP	\$180 million	Jan-23	НАСКТНЕВОХ	Cyber Training	\$55 million

Sources: 451 Research / S&P Capital IQ, Crunchbase, Pitchbook, public sources and Lincoln estimates

Public Cyber Valuations Show Signs of Strength in Q1 2023

- Over the last 12 months ended Q1 2023, the Cyber Public Index of 24 vendors declined by 27%, versus NASDAQ's 14% drop. The greater relative decline is largely attributable we believe to the sector trading on average materially above overall technology, media and telecom trading multiples
- However, since the beginning of 2023 through April 21, the Cyber Public Index has risen by 12%, in line with the NASDAQ's rise of 16%. Additionally, cyber publics with 2023E revenue growth of greater than 20% have seen their valuations rise by 22% since the beginning of the year, potentially signaling that valuations have bottomed and are on the upswing. Furthermore, over the same time period, cyber publics with 2023E EBITDA margin of greater than 25% have seen their valuations rise by 10%





Cybersecurity Public Valuation Drivers Have Shifted

PREFERENCES HAVE MOVED FROM PURE GROWTH TO A MORE BALANCED FOCUS ON PROFITABILITY

- The importance of Rule of 40 has become more pronounced, as cyber investors increasingly prefer companies that not only have a strong growth story, but profitability and positive cash flow generation
- The shift away from growth at all costs has been driven by rising interest rates and somewhat tightening access to capital. Consequently, profitable growth is more highly correlated than growth-only with revenue valuation multiples
- At the end of Q1 2023, Rule of 40 had a 68% correlation with public cyber vendor 2023E EV / revenue multiples. In comparison, 2023E revenue growth had a 51% correlation with 2023E revenue multiples. Until mid-2022, growth-based valuation correlations were materially higher than those based on Rule of 40 in fact, EBITDA often had a negative correlation to valuation
- The below table shows current Rule of 40 statistics and revenue-based trading multiples for the public cyber vendor universe. Additionally, latest quarterly revenue and earnings per share (EPS) results versus street estimates are shown. Notably, 80% of vendors beat revenue estimates and 96% met or beat EPS estimates

CYBER PUBLIC PERFORMANCE

VeriSign, Inc. Qualys, Inc. CrowdStrike Holdings, Inc. Zscaler, Inc. Cloudflare, Inc. Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	6.2%	Margin 71.9%	Rule of 40 ⁽¹⁾	Reveue (\$ in millions)	EPS	CY 2023E ⁽²⁾
Qualys, Inc. CrowdStrike Holdings, Inc. Zscaler, Inc. Cloudflare, Inc. Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.		71.9%				
CrowdStrike Holdings, Inc. Zscaler, Inc. Cloudflare, Inc. Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	12.00/		78.1%	beat by 3.1	N/A	15.6x
Zscaler, Inc. Cloudflare, Inc. Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	13.8%	41.7%	55.4%	beat by .72	beat by .11	7.6x
Cloudflare, Inc. Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	34.4%	20.4%	54.8%	beat by 10.5	beat by .04	9.8x
Palo Alto Networks, Inc. Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	33.9%	18.2%	52.1%	beat by 22.8	beat by .08	7.9x
Fortinet, Inc. Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	36.9%	14.2%	51.1%	beat by .63	beat by .02	15.5x
Check Point Software Technologies Ltd. F5, Inc. Darktrace plc Akamai Technologies, Inc.	24.0%	26.6%	50.6%	beat by 5.6	beat by .28	7.7x
F5, Inc. Darktrace plc Akamai Technologies, Inc.	22.1%	28.1%	50.2%	miss by -12.3	beat by .05	9.5x
Darktrace plc Akamai Technologies, Inc.	4.5%	43.5%	48.0%	beat by 2.3	beat by .09	5.9x
Akamai Technologies, Inc.	10.7%	34.1%	44.8%	miss by35	beat by .14	3.0x
	26.5%	17.4%	43.9%	beat by 129.6	N/A	3.7x
Abaabata Catharana Cananatian	3.9%	39.7%	43.6%	beat by 23.0	beat by .11	2.6x
Absolute Software Corporation	11.0%	23.8%	34.8%	miss by -2.2	miss by23	2.6x
Tenable Holdings, Inc.	18.4%	12.7%	31.1%	beat by 3.3	beat by .05	6.4x
Trend Micro Incorporated	7.6%	23.1%	30.7%	beat by 5.3	N/A	2.8x
SentinelOne, Inc.	51.6%	(22.5%)	29.1%	beat by 1.4	beat by .03	7.4x
Juniper Networks, Inc.	8.2%	20.4%	28.6%	miss by -35.7	met expectations	1.8x
A10 Networks, Inc.	0.1%	27.7%	27.9%	beat by 1.5	beat by .03	3.3x
Okta, Inc.	18.2%	7.6%	25.8%	beat by 20.8	beat by .21	5.5x
CyberArk Software Ltd.	22.3%	2.5%	24.9%	miss by -4.9	beat by .04	7.3x
Rapid7, Inc.	13.9%	10.4%	24.3%	beat by 4.9	beat by .17	4.7x
Varonis Systems, Inc.	11.3%	9.6%	21.0%	beat by 1.9	beat by.04	4.3x
Radware Ltd.	3.0%	13.9%	16.9%	beat by .66	met expectations	2.2x
OneSpan Inc.	9.7%	1.8%	11.6%	beat by 3.4	beat by .10	2.5x
SecureWorks Corp.		1.070	11.570	beat by 5.4	Deal by .10	2.5

Note: (1)The Rule of 40 is calculated as annual revenue growth plus annual EBITDA margin; (2) Multiples as of 03/31/2023



Notable Q1 2023 Trends and Market Takeaways

SECULAR SPENDING DEMAND DRIVERS ARE STRONGER THAN EVER

Cybercrime Continues Running Amok: Q1 2023 saw no let-up in attacks, mostly leveraging established vectors. Notable Q1 breaches include:

- Ransomware attack announced April 2023 that impacted 300 Taco Bell, KFC and Pizza Hut (Yum Brands) restaurants. Ransomware incidents, according to GuidePoint, rose 25% over Q4 2022
- SMS phishing at Activision in February 2023 resulted in a breach of employee data and sensitive game information.
 Vade Secure found that Q1 2023 phishing attacks doubled quarter-over-quarter
- Application programming interface (API) attack on T-Mobile in January 2023 resulted in the theft of data impacting 37 million customers. Salt Labs found a 400% increase in unique API attackers in the six months ended Q12023
- Insider breach at Twitter in March 2023 leads to posting of source code on GitHub. Gurucul recently found that 74% of organizations believe they are vulnerable to insider attacks

Newer Threats are Manifesting: Technology advancement and expanded cyber vulnerabilities go hand-in-hand, and 2023 will be no exception. Critical risk areas in 2023 include:

- Vehicle hacking, a timely concern as self-driving technologies go mainstream, and as connectivity (via microphones, Bluetooth, wi-fi) rapidly rises
- Information technology (IT) / operational technology (OT) product and service supply and distribution chains become more complex and interconnected, making finding and mitigating risks harder, while creating a more attractive hacking target
- Artificial intelligence (AI)-powered attacks on the horizon.
 Al offers the promise of far better cyber defense. At the same time, Al already is being used to power phishing, malware coding and vulnerability targeting
- Software as a Service defense has become a major issue, as cloud app usage raises specters of API compromise, misconfiguration, access management, compliance and data privacy breaches
- Non-malware intrusions dominate. CrowdStrike found that 71% of detections are malware-free, resulting from both insider mistakes and malfeasance. Examples include credentials exposure and compliance gaps. In today's cyber, human factors matter more than ever
- Nation-state warfare enters the boardroom. Spurred by Russia's invasion of Ukraine and an offensive cyber alliance with Iran and China, nation-state attacks have jumped over the past year, and now routinely target enterprises

Breach Costs Continue Rising: Expanding vulnerabilities combined with more aggressive government intervention mean heightened dangers for organizations that fail to protect stakeholders:

- Multiplier effect of rising breach cost times frequency. Ponemon Research estimates all-in average costs-perbreach in the U.S. of \$9.4 million in 2022, continuing a steady annual ascent. At the same time, breach frequency continues its relentless rise. Check Point cited a 38% increase in global attacks in 2022, and 2023 will be no different
- Governments get serious about security. In the U.S., expansive SEC breach reporting requirements are expected to be finalized this year. Also in 2023, Colorado, Connecticut, Utah and Virginia will begin enforcing California-style GDPR statutes. In the EU, new regulations will require companies to implement specific security measures and report significant security incidents to regulators. In 2022, data protection supervisory authorities across Europe issued €1.6 billion in fines, a 50% jump according to DLA Piper

PUBLIC CYBER VENDORS ARE RAPIDLY TRANSITIONING TO EBITDA PROFITABILITY AT THE EXPENSE OF GROWTH

Median Revenue Growth Rate of Public Cyber Vendor Index



Median EBITDA Margin of Public Cyber Vendor Index



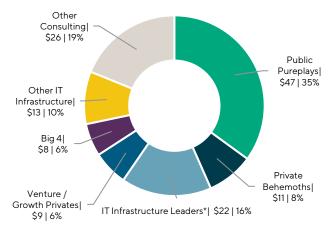
- While cyber investors focused almost exclusively on growth prior to the market headwinds beginning 2022, the current climate sees the focus shift rapidly to growth plus profitability
- Only six of 24 vendors in the public cyber universe expect to grow at a higher rate in 2023 than in 2022. In contrast, 23 of 24 vendors expect to be more profitable (higher EBITDA margin) in 2023 versus 2022



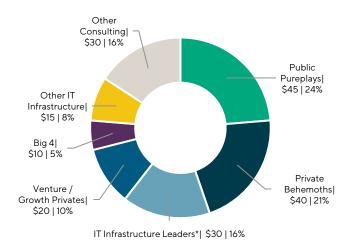
Notable Q1 2023 Trends and Market Takeaways (continued)

CYBER VENDOR REVENUES ARE SHIFTING SIGNIFICANTLY TOWARD PRIVATE VENDORS (\$B)

2020 Cybersecurity Product & Services Spend



2023E Cybersecurity Product & Services Spend



Source: Gartner, other public research; Note: (*) Cisco, Google, IBM, Microsoft

- Overall cybersecurity product and services spend has grown an estimated 11% annually from \$135 to \$190 billion since 2020, based on Gartner research
- Since 2020, revenues derived by public cyber vendors declined from approximately one-third of total to onequarter, reflecting the impact of more than 20 take privates, and growth among private vendors
- Consequently, during this time, large PE-backed private cyber vendor share of cyber spend almost tripled to more than one-fifth of total spending, reflecting heavy financial sponsor investment in late stage cyber
- Also since 2020, venture / growth stage private cyber vendors have almost doubled share of total spend to 10% of the total, reflecting average revenue growth that is triple the overall cyber market

CYBER LANDSCAPE EVOLUTION POINTS TO STRUCTURALLY BUOYANT M&A AND INVESTMENT MARKETS AHEAD

Vendor Landscape Creating More Acquirers: Commentators claiming too many security companies exist to sustain a healthy ecosystem cite the existence of numerous smaller, venture-backed providers. This overlooks rapid expansion in the number of larger vendors – those generating more than \$100 million in annual revenues – which we estimate grew 75% over the past three years. More large vendors means more acquirers competing for smaller, faster-growing targets needed to maintain growth and relevance. Add the competitive impact of proliferating PE buyers, and mega vendors such as Microsoft and Google, and the result is a structurally favorable M&A environment for growthy targets. While macro conditions such as cost of capital bend M&A volumes and valuations, the trend line is decidedly up.

More than Ever, Vendors Need to Acquire: Previously noted (page 5) cyber secular spend drivers are reinforced by the velocity of technology progress and subsector consolidation – notably in cloud, identity and access management, threat exposure management, detection and response and risk and compliance. These developments threaten to render vendors falling behind the innovation curve quickly obsolete. Acquisition of critical innovators and early-adopter customers represents the safest way for larger vendors to ensure future growth prospects.

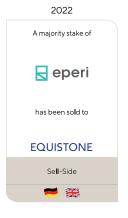
Cybersecurity Remains a Technology Outperformer for Investors: While cyber stocks moved in sympathy with the NASDAQ during the downturn, and more recently as the market rises, the sector continues to trade at a premium, and materially outpaces overall technology revenue growth. The 20-plus cyber publics taken private since 2021 by financial sponsors suggest an oversold market. The overall rise in average private vendor revenues despite continuing expansion in the number of funded companies suggests that, while competitive, the vendor environment is not overcrowded. In fact, investment in growth-stage cyber vendors is dwarfed by the increase in estimated cybercrime damages (to exceed \$10 trillion annually by 2025 versus \$7 trillion in 2022, according to research in the Cybersecurity Almanac), and the industry's total addressable market (\$1.5 to \$2.0 trillion according to McKinsey research). Notably, venture-backed vendors dominate the fastest growing, least penetrated cyber subsectors - these are blue rather than red oceans - and eagerly eyed by acquirers. All things considered, these factors point to a rebound in sector activity volumes and values in the guarters ahead.



Select Lincoln Cybersecurity M&A & Financing Transactions







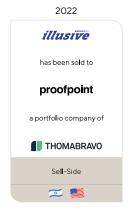










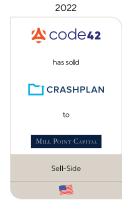
















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