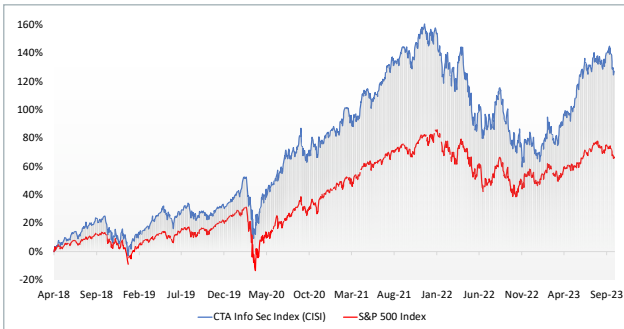


Information Security



Cherry Tree & Associates (CTA) has advised entrepreneurs, CEOs, investors, and Boards of Directors for more than 40 years. Each quarter we highlight Information Security (Info Sec) industry performance, trends, transactions and valuations. We use the CTA Info Sec Index (CISI) to represent the industry. The CISI is comprised of over 100 global, public, Info Sec companies. The graphs below use the CISI companies. Companies without guidance and extreme outliers were excluded when appropriate.

CISI vs. S&P 500



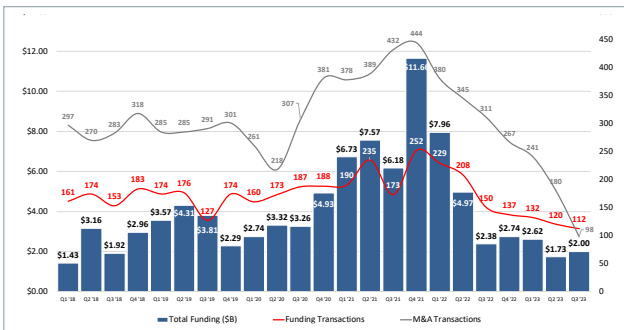
QUARTERLY HIGHLIGHTS:

- The Info Sec industry continued to outperform the broader market.
- M&A transactions continued their dramatic decline.
- Funding transactions continued their slide while funding values rebounded slightly.
- 12 of 14 announced funding transactions were up rounds.
- Valuations are trending higher while growth continues to be valued more than profitability.
- Companies continue to show an aversion to risk while focusing on efficient operations.

The CISI has grown 127% over the past five years and outpaced the S&P 500 by 61%. It hit a recent high in August before pulling back a little in September. Overall, the Info Sec industry has had many tailwinds and has been a very good industry to be in.

Companies continue to innovate especially with Artificial Intelligence (AI) and expand their offerings which in the past has been through acquisitions. While acquisitions are down dramatically since their peak in 2021, companies have focused on organic growth and operational efficiency. It is proving to be a challenging environment for small companies looking to achieve critical mass, secure funding and/or be acquired. They have fewer options and are forced to make difficult decisions. On a very positive note, of the 14 announced funding transactions only two (2) of those were down rounds and the funding values rebounded slightly from last quarter and outpaced Q3 2018 values.

Info Sec M&A and Funding Transactions



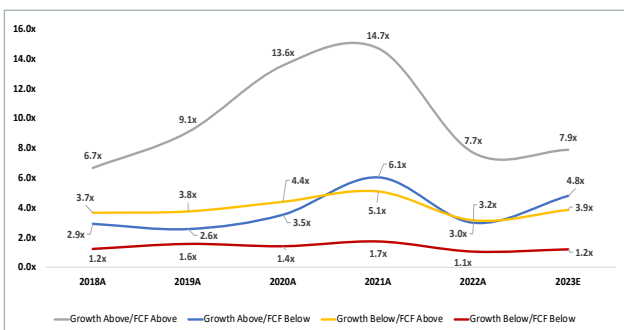
M&A transactions are public and private deals. Funding transactions are private, equity transactions. Both are from global developed countries. Funding values are announced transaction values.

CISI Medians	
Revenue Growth	10.2%
FCF Margin	12.9%
EV/Rev	4.0x

From last quarter, median revenue growth stayed the same at 10.2% while median FCF margins increased to 12.9% from 10.6% and the median EV/Revenue multiple increased to 4.0x from 3.8x. While valuations saw an uptick this quarter, companies with growth above their peers saw the biggest jump in valuations of 1.1x. Companies outperforming their peers in both growth and profitability saw the second biggest jump in valuations of 0.9x. When comparing growth and profitability, companies with higher growth than their peers saw a 63% greater valuation than companies with higher profitability than their peers.

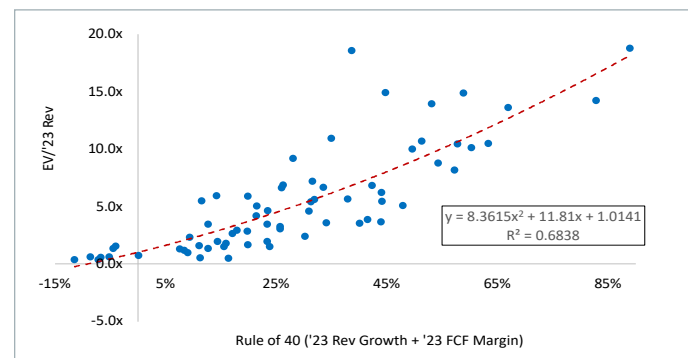
The Rule of 40 valuation scatter plot continues to have a good clustering with an R² value of nearly 70 using a polynomial trendline. If you are interested in how the current market dynamics are impacting your valuation or want to better understand your liquidity and financing options, contact us for an analysis specific to you.

Rule of 40 Median Performance EV/Rev Multiple Trends



EV/Rev multiple trends are the median multiples for the companies grouped together based on their performance against median CISI revenue growth and FCF margins.

Rule of 40 Forward-Looking EV/Rev Multiples



Forward-looking guidance for revenue growth and Free Cash Flow (FCF) margins are added to calculate a company's Rule of 40 (R40) number.



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NOTABLE INFO SEC M&A TRANSACTIONS

Date	Target	Buyer	Status	Value (\$M)	Sector
07/04/23	Raon White Hat Co., Ltd.	Raonsecure Co., Ltd. (KOSDAQ:A042510)	Announced	\$34.8	IDaaS
07/11/23	Cobwebs Technologies	Spire Capital Partners, LLC	Completed	\$200.0	OSINT
07/12/23	CertEurope, S.A.	InfoCert S.p.A.	Announced	\$33.6	Electronic Certificates
07/19/23	SB Cyber Technologies, LLC	CISO Global Inc. (NASDAQCM:CISO)	Completed	NA	EDR
07/25/23	Imperva, Inc.	Thales S.A. (ENXTPA:HO)	Announced	\$3,600.0	Data Security
07/25/23	Inpixon	XTI Aircraft Company	Announced	\$12.3	IOT
08/01/23	ONESECURE Asia Pte Ltd.	Secura Group Limited (Catalist:43B)	Completed	\$1.5	MSSP
08/02/23	Blancco Technology Group plc	Francisco Partners Management, L.P.; Francisco Partners Agility II, L.P.	Announced	\$205.8	Data Erasure
08/02/23	E-Guardian Inc.	CHANGE Holdings, Inc. (TSE:3962)	Completed	\$86.5	MSSP
08/08/23	Laminar Ltd.	Rubrik, Inc.	Announced	NA	Data Security
08/10/23	Perimeter 81 Ltd.	Check Point Software Technologies Ltd. (NASDAQGS:CHKP)	Completed	\$490.0	Network Security
08/15/23	Inline technologies Pte Ltd	Infoline Tec Group Berhad (KLSE:INFOTEC)	Completed	\$1.9	Network Security
08/17/23	SUSE S.A.	Marcel LUX III SARL	Announced	\$623.7	MSSP
08/22/23	Big Bad Wolf Security Llc	Owl Cyber Defense Solutions, LLC	Completed	NA	Security Consulting
08/23/23	Globtec (Japan) Limited	AMIYA Corporation (TSE:4258)	Announced	\$0.6	Security Consulting
08/23/23	Sealing Technologies, Inc.	Parsons Corporation (NYSE:PSN)	Completed	\$200.0	Security Consulting
08/30/23	Osirium Technologies PLC	Sailpoint Technologies Uk Ltd	Announced	\$7.5	SaaS
09/06/23	Advanced Network Products, Inc.	Coretelligent, LLC	Completed	NA	MSSP
09/07/23	Ermetic Ltd.	Tenable Holdings, Inc. (NASDAQGS:TENB)	Completed	\$265.0	SaaS
09/08/23	Biservicus Sistemas De Seguridad Sa	Mitie Group plc (LSE:MTO); Mitie Facilities Services S.A.	Completed	\$3.5	Physical Security
09/11/23	Cirrus Networks Holdings Limited	Atturra Limited (ASX:ATA)	Announced	\$30.4	MSP
09/15/23	AMIYA Corporation	Global Security Experts Inc. (TSE:4417)	Announced	\$2.4	MSSP
09/15/23	MariaDB plc	Runa Capital Advisors Limited; Runa Capital Fund II, L.P.	Announced	\$41.7	Data Security
09/19/23	Bionic Stork Inc.	CrowdStrike Holdings, Inc. (NASDAQGS:CRWD)	Announced	NA	Application Security
09/20/23	CyGlass, Inc.	WatchGuard Technologies, Inc.	Completed	NA	XDR
09/26/23	Evertel Technologies, LLC	Genasys Inc. (NASDAQCM:GNSS)	Completed	\$3.9	Communications
09/29/23	Beyond Binary Pty Ltd	Tesseract Limited	Announced	\$4.5	Purple Team



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Information Security



NOTABLE INFO SEC FUNDING

Date	Company	Value (\$M)	Stage	Round Direction
07/12/23	BigScoots, INC.	\$19.34	Mature	N/A
07/18/23	Aleph Alpha GmbH	\$108.87	Series B	N/A
07/18/23	Hammerspace, Inc.	\$56.70	Series A	N/A
07/18/23	Netcraft Limited	\$100.00	Mature	N/A
07/25/23	A.S. Adaptive Shield	\$10.00	Venture	N/A
07/25/23	Gem Security Inc.	\$23.00	Series A	N/A
07/25/23	Solink Corporation	\$60.00	Series C	N/A
07/26/23	HiddenLayer, Inc.	\$50.00	Series A	Up Round
07/26/23	Trustmi Network Ltd.	\$17.00	Series A	N/A
07/26/23	Vali Cyber, Inc.	\$15.00	Seed	N/A
07/31/23	Cyble Inc.	\$24.00	Series B	Up Round
07/31/23	Plerion PTY LTD	\$10.10	Seed	N/A
08/01/23	Adlumin, Inc.	\$19.00	Series B	Up Round
08/01/23	Horizon3 AI, Inc.	\$40.00	Series C	N/A
08/09/23	Sweet Security Ltd	\$12.00	Seed	N/A
08/10/23	Veza Technologies, Inc.	\$15.00	Venture	N/A
08/11/23	DNSFilter, Inc.	\$15.00	Series A	Up Round
08/16/23	Caden Inc.	\$24.40	Series A	N/A
08/21/23	Genomesio Limited	\$20.00	Growth	N/A
08/21/23	Prins AI Technology, Ltd	\$22.00	Series A	N/A
08/21/23	Stellar Cyber Inc.	\$25.00	Series C	Up Round

Date	Company	Value (\$M)	Stage	Round Direction
08/22/23	Cerby, Inc.	\$17.00	Series A	Up Round
08/22/23	Grip Security Ltd.	\$41.00	Series B	N/A
08/23/23	SpyCloud, Inc.	\$110.00	Series D	Up Round
08/29/23	ZenLeads, Inc.	\$100.00	Series D	Up Round
08/31/23	Conceal	\$65.58	Series B	Down Round
09/05/23	ThetaRay Ltd.	\$57.00	Mature	N/A
09/05/23	Upwind Security, Inc.	\$50.00	Seed	Up Round
09/05/23	Wallarm, Inc.	\$18.04	Series B	Down Round
09/12/23	CertifiD, Inc.	\$20.00	Series B	Up Round
09/12/23	Cleafy Srl	\$10.73	Series A	N/A
09/12/23	SQream Tech.Ltd.	\$45.00	Series C	N/A
09/18/23	Writer, Inc.	\$100.00	Series B	N/A
09/19/23	Alcion, Inc.	\$21.00	Series A	N/A
09/19/23	Cato Networks Ltd.	\$238.00	Series F	N/A
09/19/23	Stoik SAS	\$10.68	Series A	N/A
09/20/23	Legit Security Ltd.	\$40.00	Series B	N/A
09/20/23	MotherDuck Corp.	\$52.50	Series B	Up Round
09/27/23	Lumu Technologies, Inc.	\$24.00	Series B	Up Round
09/28/23	Nexusflow.ai Inc.	\$10.60	Seed	N/A
09/28/23	Nordsec Ltd	\$100.00	Mature	N/A



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CISI INDEX COMPANIES

Company	EV (\$M)	Company	EV (\$M)	Company	EV (\$M)
Accenture plc (NYSE:ACN)	\$188,589	Datadog, Inc. (NasdaqGS:DDOG)	\$28,304	Okta, Inc. (NasdaqGS:OKTA)	\$12,839
Acmos Inc. (TSE:6888)	\$12	Dell Technologies Inc. (NYSE:DELL)	\$69,585	OneSpan Inc. (NasdaqCM:OSPN)	\$354
ADT Inc. (NYSE:ADT)	\$15,047	Digital Arts Inc. (TSE:2326)	\$322	Open Text Corporation (NasdaqGS:OTEX)	\$17,409
Akamai Technologies, Inc. (NasdaqGS:AKAM)	\$18,407	DXC Technology Company (NYSE:DXC)	\$8,509	Oracle Corporation (NYSE:ORCL)	\$367,484
Alarm.com Holdings, Inc. (NASDAQGS:ALRM)	\$2,982	Dynatrace, Inc. (NYSE:DT)	\$13,083	Palo Alto Networks, Inc. (NasdaqGS:PANW)	\$72,288
Allegion plc (NYSE:ALLE)	\$11,033	E-Guardian Inc. (TSE:6050)	\$144	Plurilock Security Inc. (TSXV:PLUR)	\$6
Allot Ltd. (NASDAQGS:ALLT)	\$60	Elastic N.V. (NYSE:ESTC)	\$7,630	Pure Storage, Inc. (NYSE:PSTG)	\$10,167
Alphabet Inc. (NasdaqGS:GOOGL)	\$1,569,867	Eltes Co.,Ltd. (TSE:3967)	\$44	Qualys, Inc. (NasdaqGS:QLYS)	\$5,247
Amazon.com, Inc. (NasdaqGS:AMZN)	\$1,421,908	Exclusive Networks SA (ENXTPA:EXN)	\$1,906	Rackspace Technology, Inc. (NASDAQGS:RXT)	\$4,159
AMIYA Corporation (TSE:4258)	\$54	Extreme Networks, Inc. (NasdaqGS:EXTR)	\$3,166	Radware Ltd. (NasdaqGS:RDWR)	\$369
Arista Networks, Inc. (NYSE:ANET)	\$53,252	F5, Inc. (NasdaqGS:FFIV)	\$9,158	Rapid7, Inc. (NasdaqGM:RPD)	\$3,412
Atos SE (ENXTPA:ATO)	\$4,354	Fastly, Inc. (NYSE:FSLY)	\$2,575	RTX Corporation (NYSE:RTX)	\$137,645
authID Inc. (NasdaqCM:AUID)	\$55	FDM Group (Holdings) plc (LSE:FDM)	\$659	Route1 Inc. (TSXV:ROI)	\$5
AvePoint, Inc. (NasdaqGS:AVPT)	\$1,053	Fortinet, Inc. (NasdaqGS:FTNT)	\$43,834	Science Applications International Corp.(NYSE:SAIC)	\$7,620
Aware, Inc. (NASDAQGM:AWRE)	\$9	F-Secure Oyj (HLS:FSECURE)	\$529	SecureWorks Corp. (NasdaqGS:SCWX)	\$480
BAE Systems plc (LSE:BA.)	\$41,354	Fuva Brain Limited (TSE:3927)	\$14	Securitas AB (publ) (OM:SECU B)	\$8,725
BIO-key International, Inc. (NasdaqCM:BKYI)	\$7	Gen Digital Inc. (NasdaqGS:GEN)	\$20,293	SentinelOne, Inc. (NYSE:S)	\$4,279
Black Box Limited (BSE:500463)	\$425	Global Security Experts Inc. (TSE:4417)	\$218	ServiceNow, Inc. (NYSE:NOW)	\$111,642
BlackBerry Limited (TSX:BB)	\$2,779	HashiCorp, Inc. (NasdaqGS:HCP)	\$3,196	Snowflake Inc. (NYSE:SNOW)	\$45,824
Booz Allen Hamilton Holding Corporation (NYSE:BAH)	\$17,215	HP Inc. (NYSE:HPQ)	\$34,691	SolarWinds Corporation (NYSE:SWI)	\$2,648
BroadBand Security, Inc. (TSE:4398)	\$39	Infosys Limited (NSE:INFY)	\$70,428	Splunk Inc. (NasdaqGS:SPLK)	\$26,269
Broadcom Inc. (NasdaqGS:AVGO)	\$370,096	Insight Enterprises, Inc. (NasdaqGS:NSIT)	\$5,998	T Stamp Inc. (NASDAQCM:IDAI)	\$9
CACI International Inc (NYSE:CACI)	\$9,069	Int. Business Machines Corp.(NYSE:IBM)	\$171,890	Telos Corporation (NasdaqGM:TLS)	\$75
CISO Global Inc. (NasdaqCM:CISO)	\$37	Intrusion Inc. (NasdaqCM:INTZ)	\$20	Tenable Holdings, Inc. (NasdaqGS:TENB)	\$4,955
Check Point Software Technologies Ltd. (NasdaqGS:CHKP)	\$12,098	Jamf Holding Corp. (NasdaqGS:JAMF)	\$2,394	Thales S.A. (ENXTPA:HO)	\$30,426
Cigniti Technologies Limited (BSE:534758)	\$230	Juniper Networks, Inc. (NYSE:JNPR)	\$9,482	Trend Micro Incorporated (TSE:4704)	\$3,372
Cisco Systems, Inc. (NasdaqGS:CSCO)	\$201,107	Kudelski SA (SWX:KUD)	\$372	Varonis Systems, Inc. (NasdaqGS:VRNS)	\$2,908
Cloudflare, Inc. (NYSE:NET)	\$20,944	Kyndryl Holdings, Inc. (NYSE:KD)	\$6,310	VeriSign, Inc. (NasdaqGS:VRSN)	\$21,741
Cognyte Software Ltd. (NASDAQGS:CGNT)	\$291	Leidos Holdings, Inc. (NYSE:LDOS)	\$17,827	VMware, Inc. (NYSE:VMW)	\$76,511
Commvault Systems, Inc. (NASDAQGS:CVLT)	\$2,704	Microsoft Corporation (NasdaqGS:MSFT)	\$2,314,133	WidePoint Corporation (NYSEAM:WYY)	\$12
CrowdStrike Holdings, Inc. (NASDAQGS:CRWD)	\$37,624	N-able, Inc. (NYSE:NABL)	\$2,618	Wipro Limited (BSE:507685)	\$22,518
Cyber Security Cloud, Inc. (TSE:4493)	\$135	NCC Group plc (LSE:NCC)	\$545	ZeroFox Holdings, Inc. (NasdaqGM:ZFOX)	\$272
CyberArk Software Ltd. (NasdaqGS:CYBR)	\$6,069	NetScout Systems, Inc. (NasdaqGS:NTCT)	\$1,789	Zscaler, Inc. (NASDAQGS:ZS)	\$22,016
Cybertrust Japan Co., Ltd. (TSE:4498)	\$96	NSFOCUS Tech. Group Co., (SZSE:300369)	\$1,013		
Darktrace plc (LSE: DARK)	\$2,851	Nubeva Technologies Ltd. (TSXV:NBVA)	\$18		

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SITUATIONAL SERVICES

You want to understand your company's financing and funding options as you grow.

Advisory Services: We help you understand your options along with their probability of success and work with you to develop the best path forward.

You have decided to explore a sale of your company.

Sell-Side: We use a methodical approach to identify potential strategic and financial acquirers with the intent of creating competitive tension, allowing you to select the best choice from potentially several options and avoid the "bird-in-the-hand" scenario.

You want to "take some chips off the table" and step back from the day-to-day operations.

Majority Recapitalization: We find new investors to buy a majority (>50%) stake in the company from the current owners.

You have been approached by a large strategic buyer about being acquired.

Market Check: We analyze the market dynamics, confidentially "test the waters" with other potential buyers, and provide an appropriate valuation range.

You want to sell a slower growing non-core subsidiary and double down on growing your core business.

Divestiture: Our approach is similar to our sell-side process but we only sell part of your business. This allows you to add cash to the Balance Sheet and increase investment in high growth areas.

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Early investors want to exit but you want to continue to run the business.

Minority Recapitalization: We find new investors to buy a minority (<50%) stake in the company from your current investors. This could be part of an acquisition strategy or a way to infuse fresh capital into the balance sheet.

You are looking to raise capital to fund your company's growth.

Capital Raise: We collaborate with you to find growth equity investors who are aligned with your vision.

You are negotiating being acquired and your Board of Directors requires an independent financial expert to provide a written opinion on the appropriateness of the valuation.

Fairness Opinion: We analyze the offer and provide an expert opinion about whether the proposed offer is fair and reasonable.

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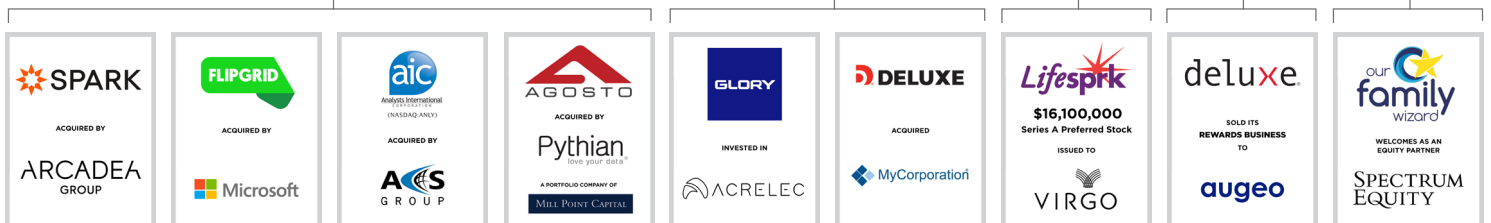
Sell-Side

Buy-Side

Capital Raise

Divestiture

Recapitalization



PROVEN TRANSACTION EXPERIENCE