



SECURITY MARKET FLASH REPORT

*North America's Most Active Information
Security M&A Advisory Firm*

JULY 2019

AGC's Information Security Team
Maria Lewis Kussmaul, Co-Founder, Partner
Eric Davis, Partner
Russ Workman, Partner
Ben Howe, Co-Founder, CEO



The AGC Partners Security Team

Boston

Maria Lewis Kussmaul
Co-Founder, Partner

Russ Workman
Partner

Eric Davis
Partner

Ben Howe
CEO, Co-Founder, Partner

Silicon Valley

Greg Roth
Partner

London

Sean Tucker
Partner

Maria Lewis Kussmaul
Co-Founding Partner



- Maria is a co-founder of AGC Partners and is a Partner in the Investment Banking Group leading the firm's IT Security practice
- In over 30 years as a sell-side equity analyst, venture capitalist and investment banker, Maria has advised on 100s of telecom equipment, networking, internet and security transactions
- Maria's early Wall Street career spanned three firms – Smith Barney, Shearson Lehman and Cowen & Co., culminating as global head of Cowen's Data Networks & Internet investment banking activities
- Previously, she was named to the Institutional Investor All-American Research Team for 13 consecutive years
- Maria holds a B.A. in Economics from Rutgers University, an M.B.A. from The Wharton School of Business and a Chartered Financial Analyst designation

Russ Workman
Partner



- Russ is a Partner in the Investment Banking Group at AGC Partners focused on IT Security and Defense Technologies
- Before joining AGC, Russ spent time in the technology banking group at Jefferies & Co. and has advised on more than 50 completed strategic advisory and capital raising assignments
- Before banking, Russ was a US Air Force Officer managing the acquisition of intelligence and information warfare systems for the Intelligence Community, and performed cyber vulnerability assessments of Air Force electronic systems
- Russ holds an M.B.A. in Finance and Accounting from the Wharton School of Business, an M.S. in Operations Research from Northeastern University, and a B.S. in Operations Research from the US Air Force Academy

Eric Davis
Partner



- Eric is a Partner in the Investment Banking Group at AGC Partners. He has over 20 years of experience in the financial services industry focusing on acquisition financing, capital raising, and early-stage equity investing
- Prior to joining AGC as a Principal, Eric was a Vice President in Citigroup's TMT and Infrastructure & Energy Finance groups
- He also previously worked as a Vice President of Project Finance and Investments at eleQtra, Inc., an emerging markets infrastructure development and investment fund
- Eric holds a M.A.L.D. with a concentration in International Business from the Fletcher School at Tufts University and a B.A. in Political Science from Middlebury College

Ben Howe
Co-Founder, CEO



- Ben is a co-founder and the CEO of AGC Partners
- In over 30 years as an investment banker, Ben has completed more than 350 transactions
- Prior to AGC, he served as Head of Technology Investment Banking for the East Coast and Europe at Montgomery Securities, and as Managing Director, Head of M&A and Executive Committee Member at SG Cowen Securities
- Ben started his investment banking career in New York City with First Boston and Smith Barney
- He serves as Chairman of Excel Academy, which has four charter schools in East Boston, and served on the board of Portsmouth Abbey and the advisory board of Trinity College
- Ben holds a B.A. in Economics from Trinity College and an M.S. in Accounting from The Stern School of Business at NYU

Zero Trust: Defeating the Enemy Within

Until recently, security models have been firewall-centric with the main focus on erecting a perimeter around the corporate network. The assumption was that anyone inside the perimeter was to be trusted, and those on the outside were not. However, this model has increasingly come under attack for two primary reasons. First and foremost, the perimeter itself is proving to be less effective. The total number of data breaches increased 424% in 2018, a clear indication that intruders are finding it easier to penetrate. Second, the model is losing relevance, owing to the migration of data to the cloud and the proliferation of Bring Your Own Device (BYOD) workplace policies. As a result, the perimeter has become more of an imaginary line and less of a clean demarcation of where the enterprise—its apps, its users, its devices—begins and ends.

These changes call for a new paradigm wherein the concept of trust in a security context is dramatically altered. In a Zero Trust framework, all users are treated equally regardless of whether they sit inside or outside of the corporate firewall. If anything, it is slightly inverted with more emphasis placed on the threats from within given that they are more recent. What matters is who you are, not where you are. Put simply, identity becomes the new perimeter. To accomplish this, it necessitates the convergence of network security and Identity Access Management (IAM), something that many industry insiders believe is long overdue.

Zero Trust is set to fundamentally change the way security is done in the coming years. It is creating new variations across virtually all segments of the security landscape, including Cloud Access Security Brokers (CASBs), IAM, Multi-Factor Authentication (MFA), and endpoint security. Not surprisingly, there has been a flurry of deal activity with \$3.2B in aggregate M&A deal value over the last twelve months at iconic valuations, Proofpoint's recently announced \$120M buyout of Meta Networks at more than 100x revenue being the most notable example (see page 7).

Cisco has so far made the biggest splash with its \$2.4B acquisition of Duo Security this time last year. While Duo is mainly associated with Zero Trust in an MFA context, this acquisition helped Cisco address other offerings including identification-as-a-service (IDaaS), micro-segmentation, and CASB. All signs point to other big name security vendors lining up to do deals. Palo Alto Networks and Symantec, identified by industry analysts as leaders in the Zero Trust space, are likely to explore bolt-on deals to solidify their positions. Symantec's \$170M acquisition of Luminate Security's secure access cloud technology earlier this year is the first such example. Palo Alto has pursued more of a stealth strategy. While not positioning these as Zero Trust products, the direction is clear. The company has spent more than \$750M in M&A shoring up its capabilities in cloud (Evident.io, RedLock), user analytics (LightCyber) and endpoint security (Cyvera) to create an end-to-end platform that works better in a Zero Trust environment.

As Zero Trust has many moving parts, our expectation is that security vendors will continue to take baby steps towards implementing their framework over many years. This will involve leveraging existing investments to provide a foundation, punctuated by strategic acquisitions like those we have observed in the last year. Those vendors whose current offerings address the broadest cross-section of Zero Trust without substantial upgrades are in the best position, while those staying too tethered to the legacy firewall/VPN model will need to buy and build aggressively.

Security Market Flash Report – 2Q19 in Review

- 32 M&A deals were announced this quarter, of which 12 had disclosed values for a total of \$2.7B (median size of \$110M). This compares to 43 M&A deals in 2Q18 (\$72M median size).
- The acquisitions of Recorded Future by Insight Venture Partners for \$780M, SecureLink by Orange for \$577M, and Twistlock by Palo Alto Networks for \$410M were the top M&A deals of the quarter with disclosed values.
- 81 financing transactions were completed with \$2.4B in total capital raised (median amount raised of \$16M). This compares to 69 financings and \$1.7B in capital raised for the same period, 2018 (\$12M median).
- KnowBe4's \$300M Series D, Druva's \$130M Series G, and SentinelOne's \$120M Series D were the top financing deals of the quarter.
- 35% of all financing deals were Early Stage (Seed to Series A). The median raise for these early rounds was \$9M.
- The most active sectors this quarter were Threat and Ecosystem Intel (17), Identity & Access Management (14), and Cloud (9).
- AGC advised on three security deals in the quarter, including the announced sale of Distil Networks to Imperva, a portfolio company of Thoma Bravo, and Swimlane's announced Series B financing.
- Also during the quarter, the previously announced sale of WhiteHat Security to NTT Security closed after being reviewed and cleared by CIFIUS. AGC was the exclusive advisor to WhiteHat.

M&A Transactions

Transaction Count

92

1H'18

76

1H'19

Private Placements

Transaction Count

131

1H'18

164

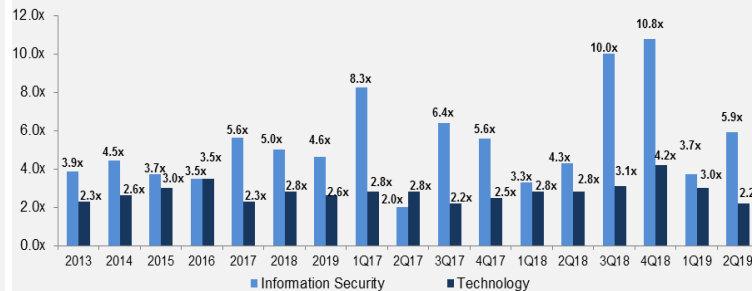
1H'19

Pulse of the Security Market – Key Metrics

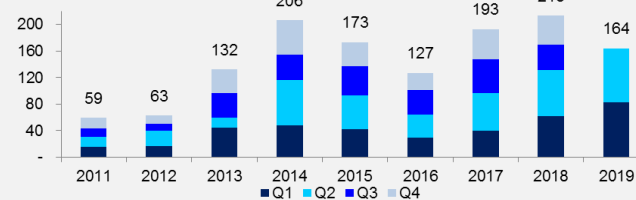
Notable Late Stage Financings

Date	Target	Amount
Jun 2019	KnowBe4 Human error. Conquered.	\$300M
Sep 2018	AnchorFree	\$295M
Jan 2019	rubrik	\$261M
Jun 2018	CROWDSTRIKE	\$200M
Oct 2018	TANiUM	\$200M
Nov 2018	netskope	\$169M
Mar 2019	CLOUDFLARE	\$150M
Jun 2019	druva	\$130M
Jun 2017	illumio	\$125M

Median Valuations – M&A



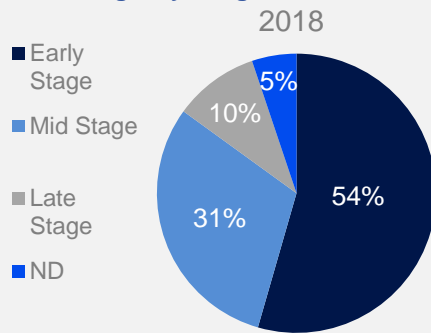
Historical Volume Financings



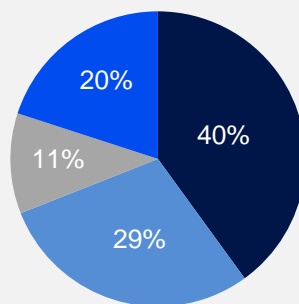
Notable M&A by Valuation Tranche

	Target	EV	EV/Rev
Iconic Exit	DEMISTO	\$560M	46.7x
	DUO	\$2,350M	18.8x
	Twistlock	\$410M	27.3x
Market Value Exit	imperva	\$2,100M	6.1x
	VERACODE	\$950M	4.3x
	Centrify	\$500M	3.3x
Consolidation	WEBROOT	\$619M	2.9x
	BRADFORD NETWORKS	\$17M	1.7x
	Vaultive	\$19M	ND

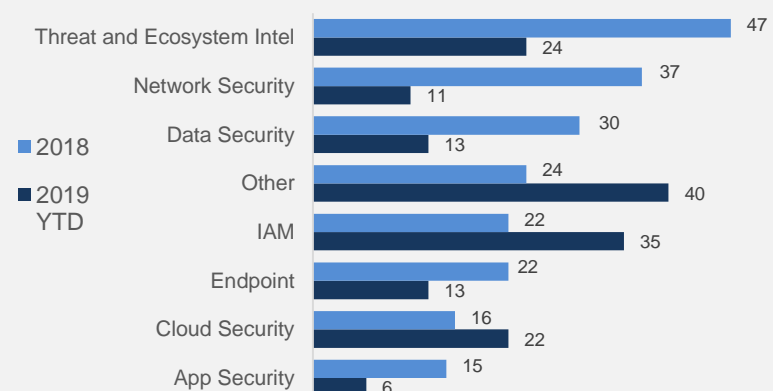
Financings By Stage



2019 YTD
























Financing Activity Sector Count

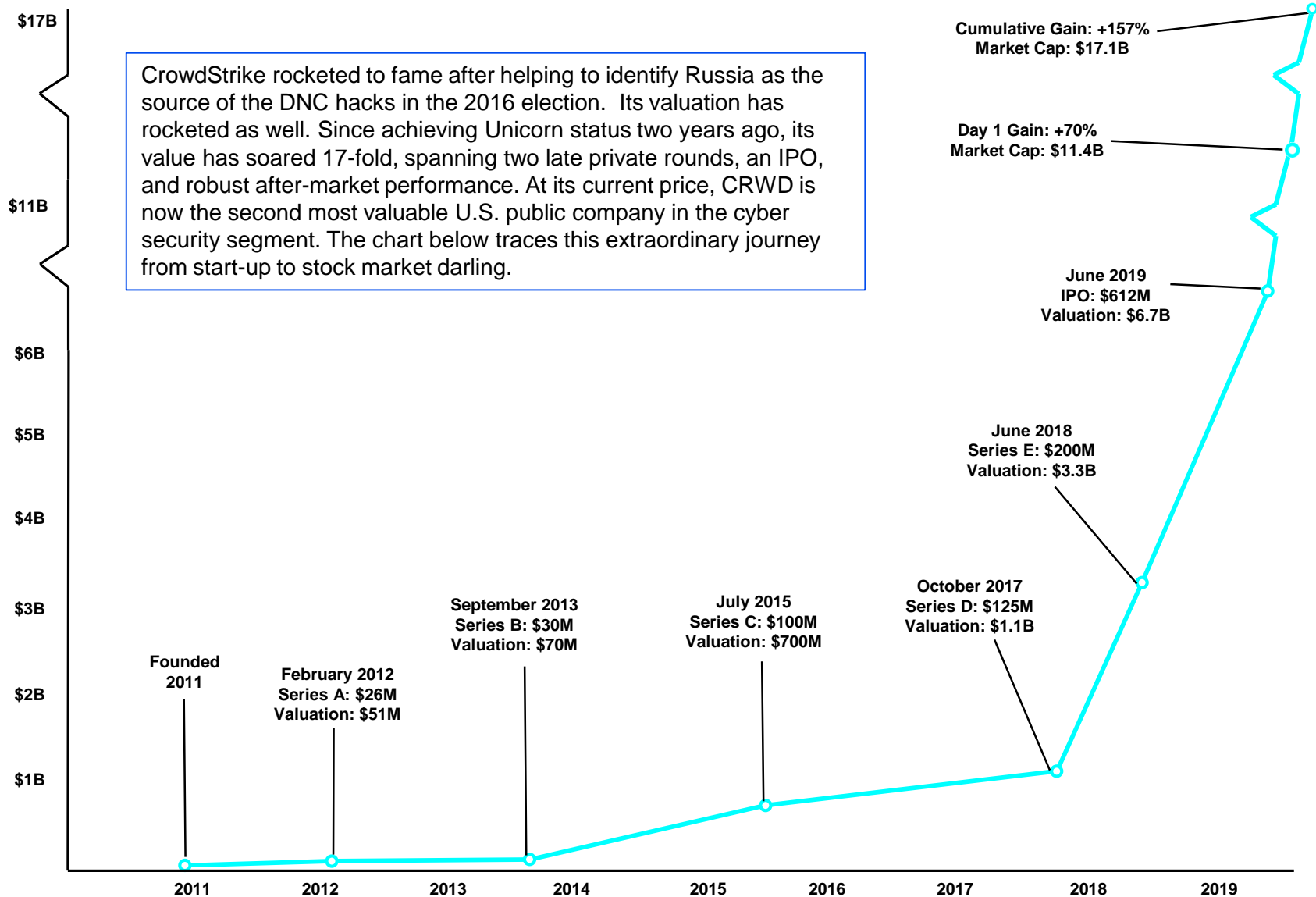


Key Themes in 2019

- 1 The Cyber Disruptors of Tomorrow**
 - Cloud computing giants are building platforms that leverage internal data sets to disrupt the cybersecurity market.
 - Google and Microsoft both announced their own cloud-native SIEM tools at the conference, as they hope to push the pace of hybrid and multi-cloud adoption.
- 2 Renewed Focus on MSSPs**
 - Increased budgets for 3rd party MSSPs have prompted cloud providers, hardware / software vendors, VARs, & other non-traditional security service providers to increase their services offerings, leaving enterprises with more choices and increased confusion; Managed Detection and Response (MDR) also continues to gain traction.
- 3 Endpoint Gets a True Up**
 - If anything, the cloud intensifies the need for endpoint security. New cloud projects will revisit and take stock of legacy protection strategies.
 - Browser Isolation and Content Disarm & Reconstruction were among those that garnered stronger interest this year.
- 4 User Identity Merges with User Privacy**
 - Due in large part to GDPR, user identity, data privacy and consent are no longer separate concepts in a security context.
 - The EU is too large to exist as a carve-out. Enterprises will overlay the same principles, whether required or not, to maintain a uniform regulatory approach.
- 5 NSA to the Rescue**
 - DDoS was not the big headline it was in 2018 post the record-setting memcached attacks, but the NSA filled the void.
 - Ghidra, a previously classified project, was released to a packed crowd. The toolkit allows reverse-engineering of malware to better understand hacker code.
- 6 Cyber Situational Awareness**
 - Enterprises are at war with intruders. Just as in real war, situational awareness cuts through the fog of excess data and allows visualization of the battlefield in real time.
 - The \$250M buyout of Verodin by FireEye (~25x revs) fills a gap in measuring the effectiveness of security controls, and goes to show that visibility is in high demand.

7 Zero Trust: Market Leaders Driving Gateway Convergence to Secure the Cloud		
Company	Zero Trust Offering	Select Strategic Partnerships
	Integrated Cyber Defense (ICD): Powered by shared intelligence and automation across endpoints, networks, applications, and clouds	      
	PAN-OS 8.1: Provides simplified application security and streamlined SSL decryption	      
	Cisco Trusted Access: A complementary security approach with a dynamic platform that is both Trust-Centric and Threat-Centric	      

CrowdStrike's Road to a \$17B Valuation



Featured Transaction: CrowdStrike's IPO Raises \$612M in Proceeds

Date	Amount Raised	Trailing 12 Months		Forward 12 Months		Market Cap	Top Holders (Pre-IPO)
		Revenue	EV/Revenue	Revenue	EV/Revenue		
6/12/2019	\$612M	\$299M	60.7x	\$434M	41.8x	\$17.1B	Accel, CapitalG, Warburg Pincus



CROWDSTRIKE

Company Description:

CrowdStrike is a cybersecurity firm pioneering next-generation endpoint protection, delivered as a single integrated cloud-based solution. CrowdStrike's Falcon platform stops breaches by detecting all attack types, even malware-free intrusions, providing five-second visibility across all current and past endpoint activity while reducing cost and complexity for customers.

Core Sector:

Endpoint Protection

Core Products:

- Falcon Platform
- Threat Graph

Headquarters:

Sunnyvale, CA

Deal Significance:

This is the largest of the three security IPOs so far in 2019. CrowdStrike is the first endpoint security vendor to go public since Carbon Black in May 2018. It is also the largest ever VC-backed cyber security exit by a U.S based company.

Market Reception:

"CrowdStrike's fervent reception, which lent a market capitalization of \$12.6 billion, has made it the second most valuable U.S.-based cybersecurity company on the public markets today; only \$19.5 billion Palo Alto Networks, which has been inking acquisition deals left and right to keep up with the times, tops it. Besieged by data breaches, investors are clamoring to place bets on digital defense. A number of well-performing cybersecurity IPOs over the past year or so — Carbon Black, Tenable, Zscaler — has made that clear." – Fortune

"CrowdStrike closed its first trading day with a share price of \$58. The company is worth about as much as 37-year-old security software provider Symantec despite having about 5% as much revenue." – CNBC

"CrowdStrike has joined the growing herd of loss-making tech unicorns hitting the public markets this year. The stock debuted to a pop of nearly 80%. With more than \$480 million in VC funding to date, CrowdStrike's biggest backers include Warburg Pincus and Accel. The two firms collectively hold more than 50% of the company's Class B shares, which carry 10x the regular voting power. Warburg and Accel first backed CrowdStrike in 2012 and 2013, respectively. – Pitchbook

"The over 100% revenue growth at a ~\$400M run rate is significantly faster and larger than the competition and is benefiting from two significant trends. The first is the shift to the cloud where more companies are looking to cloud-based solutions to satisfy their technology requirements. Most look to Salesforce.com as the innovator of this trend and it is now moving to cybersecurity ... CrowdStrike is leading that charge. Separately, companies are finally comfortable turning off legacy antivirus solutions as they no longer have to be concerned about maintaining those ineffective technologies just to satisfy PCI compliance. Full year (revenue) guidance was 6.5% higher than our previous estimates. Raising our December 2020 price target to \$104." – Wall Street Research

Featured Transaction: Proofpoint Acquires Meta Networks for \$120M

Date	Value	Trailing 12 Months		Forward 12 Months		Total Invested Capital	Top Holders (Pre-Sale)
		Revenue	EV/Revenue	Revenue	EV/Revenue		
5/6/2019	\$120M	\$1M	120x	ND	ND	\$10M	BRM Capital, Vertex Ventures



Meta Networks

Company Description:

Meta Networks, is a technology leader in Zero Trust Network Access (ZTNA). With Meta Networks' Network-as-a-Service (NaaS), enterprises can rapidly connect people, applications, clouds, data centers and offices, and secure them with a software-defined perimeter.

Core Sectors:

Identity & Access Management, Network Access Control

Core Products:

- Secure Remote Access
- Always-On VPN Alternative
- Cloud-Delivered Network Security

Headquarters:

Tel Aviv, Israel

Deal Significance:

This is the second largest Zero Trust transaction of 2019, and the highest EV/Revenue multiple of any Security deal this year. It was the latest security transaction involving the highly acquisitive Proofpoint, that has made 15 acquisitions since 2013.

Deal Rationale:

"By combining Meta Networks' innovative zero trust network access technology with our people-centric security capabilities, Proofpoint will make it far simpler for enterprises to precisely control employee and contractor access to on-premises, cloud, and consumer applications." – Proofpoint

"The highly customizable nature of Meta Networks' approach to zero trust network access fits in well with Proofpoint's CASB solution focusing on granular user level control to allow employees to utilize the business applications they need without compromising security." – Wall Street Research

"With this acquisition, Proofpoint will strengthen its cloud-based architecture and people-centric security platform, enabling customers to better protect their people and the applications and data they access beyond the traditional perimeter." – 451 Research

"Proofpoint intends to integrate Meta Networks' ZTNA technology with its Cloud Access Security Broker (CASB) and web isolation product lines to offer customers a comprehensive cloud access and security platform. The acquisition of Meta Networks will add approximately 20 technical contributors to Proofpoint's growing presence and team in Israel." – GlobeNewswire

proofpoint.

Acquirer Description:

Proofpoint is a leading cybersecurity company that protects organizations' greatest assets and biggest risks: their people. With an integrated suite of cloud-based solutions, Proofpoint helps companies around the world stop targeted threats, safeguard their data, and make their users more resilient against cyber attacks.

Core Sectors:

Anti-Malware, Anti-spam, Security-as-a-service

Market Cap:

\$6.97B (NasdaqGM:PFPT)

Key Stat:

FY18 Revenue: \$717M (+38%)

Headquarters:

Sunnyvale, CA

Featured Transaction: SentinelOne Raises \$120M

Date	Amount Raised	Round	Valuation	Total Employees		Total Invested Capital	Lead Investor
				Current	1 Yr Change		
6/12/2019	\$612M	Series D	\$600M	361	15%	\$230M	Insight Partners, Samsung Ventures



Company Description:

SentinelOne is shaping the future of endpoint security with a uniquely integrated platform that combines behavioral-based detection, advanced mitigation, and forensics to stop threats in real-time. Specializing in attacks that utilize sophisticated evasion techniques, SentinelOne is the only vendor who offers complete protection against malware, exploit and insider-based attacks.

Core Sector:

Endpoint Protection

Core Products:

- Threat Hunting
- CryptoMiner Detection

Headquarters:

Mountain View, CA

Deal Significance:

This is the third largest private placement in the quarter and one of seven super rounds of \$100M or more in the security sector in 2019 alone.

Deal Rationale:

"Endpoint security is at a fascinating point of maturity, highlighting a massive market opportunity for SentinelOne's technology and team...Attack methods grow more advanced by the day and customers demand innovative, autonomous technology to stay one step ahead. We recognize SentinelOne's strong leadership team and vision to be unique in the market, as evidenced through the company's explosive growth and highly differentiated business model from its peer cybersecurity companies." – **Insight Venture Partners**

"As an investor, SentinelOne's combination of best-in-class EPP and EDR functionality is a magnet for engagement, but it's the company's ability to foresee the future of the endpoint market that attracted us as a technology partner. Extending tech stacks beyond EPP and EDR to include IoT is the clear next step, and we look forward to collaborating with SentinelOne on its groundbreaking work in this area." – **Samsung Venture Investment Corporation**

"[SentinelOne] has raised \$120 million in a Series D round - money that it will be using to continue expanding its current business as well as forge into new areas such as building more tools to automatically detect and patch software running on those endpoints, to keep them as secure as possible." – **TechCrunch**

"The additional funding will be used to support growth of its autonomous AI security platform that protects endpoint, cloud, and IoT devices deployed throughout the enterprise." – **SecurityWeek**



Investor Description:

Insight Partners is an established investor in growth-stage technology, software and Internet businesses. It has over \$20B in assets under management.

Investment Focus:

Technology, Software, Internet businesses



The venture arm of Samsung is focused on promoting small and medium sized companies engaging in the development of new technologies. Their current fund is approximately \$2B in size.

Investment Focus:

Software, Internet, Telecommunication

Not All Exits Are Created Equal

(\$ in Millions)

Iconic Exit

- Category-leading, high-value exits which garner sensational attention upon disclosure
- A particular subset of security buyers pay this kind of price, selectively

Market Value Exit

- Could be a public buyer, investor backed private, or PE acquirer
- More numerous, often publicized























Consolidation

- Purchased as a feature for a larger platform or as an acqui-hire
- Often raised money at high valuation, competed in noisy, crowded security subsectors, and achieved minimal revenue traction

Date	Target	Acquirer	EV	LTM Rev	EV/LTM Rev
May 2019	Meta Networks	proofpoint.	\$120	\$1	120.0x
May 2019	Recorded Future	INSIGHT PARTNERS	780	65	12.0x
May 2019	Twistlock	paloalto	410	15	27.3x
Feb 2019	DEMISTO	paloalto	560	12	46.7x
Aug 2018	Duo	cisco	2,350	125	18.8x
Feb 2018	Phantom	splunk>	350	8	43.8x
Feb 2019	WEBROOT	CARBONITE	\$619	\$215	2.9x
Nov 2018	VERACODE	THOMABRAVO	950	220	4.3x
Oct 2018	imperva	THOMABRAVO	2,100	344	6.1x
Sep 2018	BeyondTrust	BOMGAR	750	110	6.8x
Jul 2018	Centrify	THOMABRAVO	500	150	3.3x
May 2019	Appscale	zscaler	\$13	ND	ND
Jun 2018	BRADFORD NETWORKS	FORTINET	17	\$10	1.7x
May 2018	BRACKET FORTINA	vmware	ND	ND	ND
Mar 2018	8 SECURITY	vmware	15	3	4.6x
Mar 2018	Vaultive	CYBERARK	19	ND	ND





















Notable Late Stage Funding and Supercharged Early Rounds

(\$ in Millions)

Date	Target	Lead Investor (s)	Check	Round	Valuation	
Jun 2019	 KnowBe4	KKR  TENEELEVEN ELEPHANT	\$300	D	\$1,000	Late Stage Funding
Sep 2018	 AnchorFree	 WndrCo	295	D	ND	
Jan 2019	 rubrik	 BainCapital VENTURES	261	E	3,300	
Oct 2018	 TANIUM™	WELLINGTON MANAGEMENT®  Adage	200	PE	6,500	
Jun 2018	 CROWDSTRIKE	IVP  GENERAL ATLANTIC ACCEL PARTNERS	200	E	3,000	
Nov 2018	 netskope	ACCEL PARTNERS  Lightspeed	169	F	1,000	
Date	Target	Lead Investor (s)	Check	Round	Valuation	
May 2019	 BlueVoyant	 fiserv.	\$83	B	\$430	Super-Charged Early Rounds
Jul 2018	 EXIGER	CARRICK 	80	A	ND	
May 2018	 IronNet Cybersecurity	 KLEINER PERKINS  FORGEPOINT CAPITAL	78	B	ND	
Jun 2018	 CLAROTY	TEMASEK	60	B	ND	
Jan 2019	 TESSIAN	SEQUOIA  ACCEL PARTNERS	42	B	ND	

Many of the Recent Top Information Security M&A Deals are PE-Led

(\$ in Millions)

Date	Target	Acquirer	EV	LTM Rev	EV / LTM Rev
Feb 2018	 CSRA	GENERAL DYNAMICS	\$9,600	\$5,064	1.9x
May 2018	 bmc	KKR 	8,400	2,200	3.8x
Dec 2017	 gemalto <small>security to be free</small>	THALES	6,614	3,567	1.9x
Sep 2016	 McAfee	 TPG 	4,200	ND	ND
Dec 2016	 OPTIV	KKR 	2,418	943	2.6x
Aug 2018	 DUO	 CISCO	2,350	125	18.8x
Nov 2016	 LifeLock	 Symantec	2,300	650	3.5x
Oct 2018	IMPERVA	 THOMABRAVO 	2,100	344	6.1x
Nov. 2017	 Barracuda	 THOMABRAVO 	1,474	367	4.0x
Nov 2018	 CYLANCE	 BlackBerry	1,400	130	10.8x

Private Equity Platform Plays

Fueled by the leadership opportunity, growing spend rates, and confidence in their ability to identify attractive platform-enhancing tuck-ins, PE firms look to build the next-generation of winners



Resolution1 combined with Fidelis provides one of the most compelling offerings in the TDR and incident-response automation spaces for a comprehensive advanced threat defense solution



Ping Identity's acquisitions of UnboundID and Elastic Beam have extended the platform's leadership by adding multi-factor authentication, single sign-on, secure access, and machine learning analytics capabilities, creating a leading solution in the Identity market



The WatchGuard Technologies platform is a global leader in network security, providing best-in-class Unified Threat Management, Next Generation Firewall, secure Wi-Fi, and network intelligence products and services



The StackPath platform provides an integrated response to a fragmented problem that has been created by too many individual, bolt-on security solutions through a frictionless and scalable security platform



The acquisition of the Veris Group by Coalfire offers an established global leader in cyber risk advisory, compliance assessments and technical testing an increased technical knowledge base to deliver deeper insights to customers



Through the acquisition of FortyCloud, Immediate Insight, and Lumeta, Firemon is taking the path to establishing a comprehensive portfolio around its firewall management expertise



Bomgar's platform offers a comprehensive solution for enabling privileged and remote access, while defending organizations from constant and evolving threats



With the acquisition of Imperva and Veracode, Thoma Bravo is well-positioned to be the pre-eminent cybersecurity services provider within the enterprise Application Security market



The acquisitions of Rogue Wave and Perfecto provide Perforce's software portfolio with additional capabilities for enterprise DevOps teams to achieve continuous testing at scale across web, mobile and IoT applications



Given McAfee's leading global market position, loyal customer base, and trusted technology, TPG saw this as an opportunity to invest in a highly-strategic platform that is growing consistently and addressing significant and evolving market demand

Security Buyer Universe

Enterprise / Network / Endpoint



Telecommunications



Data Security / Encryption



Virtualization / Systems Mgmt



Government / Defense



IAM / Authentication



Threat Intel. / Risk Mgmt. / Vuln.



Consulting / Outsourced Services



Critical Infrastructure



Financial Services / Anti-Fraud



Financial Technology



Application Security



Tech Titans



Internet / Cloud Security



Data Center / Cloud Services



MSSPs






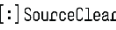
































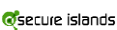





































Telecommunications Equipment



DISCLAIMER: This is only a representative list and may not include all relevant companies. If your company is not on the list and would like to be added for future publications, kindly shoot us a note at rworkman@agcpartners.com.

Security M&A Activity: Broad Tech Acquirers

2019		 								
2018					 					
2017									 	 
2016	 		 						 	 
2015		    		 	 	 			    	  
2014	 	 				 	    			
2013	 	 								
										

Security M&A Activity: Pure Play Security Acquirers

2019	Meta Networks		» VERODIN	AVID Secure DarkBytes ROOK SECURITY	PURESEC DEMISTO Twistlock		luminate		
2018	wombat security technologies		X15		RedLock SECDO evident.io	Vaultive	apthority JAVELIN	FORTSCALE	TunnelBear
2017	WEBLIFE CLOUDMARK	IMMUNIO		invincea	LIGHTCYBER	conjur	SurfEasy OUTLIER Skycure fireglass		skyhigh
2016	FIRELAYERS Return Path		csG INVOTAS SIGHTPARTNERS	BARRICADE			LifeLock BLUE COAT		
2015	SOCIALWARE MARBLE security EMERGING THREATS	hp TippingPoint		SurfRight Reflexion	CIRROSECURE	VIEWFINITY CYBERTINEL	NARUS BLACKBAT		
2014	NEXIGATE NETCITADEL		IMPULSE MANDIANT	mojave networks Cyberoam	CVVERA MORTA		NitroDesk simplified.		
2013	cardinal.org armorize ABACA MAIL DISTILLER Pure filtered email	Broadweb	ensighta				Passport Bank	PASSBAN Aveksa	STONESOFT validEDGE
	proofpoint	TREND MICRO	FIREEYE	SOPHOS	paloalto NETWORKS	CYBERARK	Symantec	RSA	McAfee

Public Valuation Metrics

PUBLIC SECURITY COMPANY METRICS

(\$ in millions)

(\$ in millions)	Enterprise Value ^(a) (b)	Market Data				Operating Data ^(c)							
Company		EV / Revenue		EV / EBITDA		Revenue		EBITDA		Revenue Growth		LQ Gross	LQ Adj.
		TTM	2019E	TTM	2019E	TTM	2019E	TTM	2019E	18A/17A	19E/18A	Margin	Op. Margin ^(d)
Security IPOs since 4Q'11													
Splunk	\$20,330	10.6x	9.0x	NM	53.1x	\$1,916	\$2,265	(\$218)	\$383	38%	26%	77%	(34%)
Palo Alto Networks	20,314	7.4x	6.4x	NM	24.9x	2,752	3,166	146	816	30%	22%	72%	(2%)
CrowdStrike	19,423	65.0x	44.7x	NM	NM	299	434	(113)	(85)	110%	74%	70%	(27%)
Okta	15,928	36.1x	29.1x	NM	NM	441	548	(139)	(50)	56%	37%	72%	(39%)
Zscaler	10,732	39.3x	31.0x	NM	NM	273	346	(15)	33	57%	42%	81%	(9%)
Proofpoint	7,191	9.0x	8.2x	NM	49.5x	800	880	(28)	145	38%	23%	73%	(14%)
Cyber-Ark Software	5,079	13.8x	12.1x	74.9x	45.0x	367	419	68	113	31%	22%	86%	14%
Qualys	3,325	11.5x	10.3x	38.7x	26.6x	289	322	86	125	21%	16%	76%	19%
FireEye	3,286	3.9x	3.7x	NM	26.7x	842	895	(105)	123	7%	8%	66%	(28%)
Mimecast	3,107	9.1x	7.8x	NM	48.0x	340	399	31	65	33%	24%	73%	1%
Rapid7	3,089	11.8x	9.8x	NM	NM	263	315	(33)	11	21%	29%	73%	(13%)
Sophos	2,779	3.9x	4.1x	35.0x	23.4x	711	685	80	119	16%	(2%)	80%	11%
Tenable	2,711	9.4x	7.8x	NM	NM	289	346	(74)	(48)	42%	29%	84%	(28%)
Varonis	2,047	7.5x	7.5x	NM	NM	273	274	(31)	(8)	25%	1%	85%	(39%)
SailPoint	1,897	7.3x	6.8x	98.1x	87.7x	261	279	19	22	34%	12%	75%	(11%)
ForeScout	1,666	5.3x	4.5x	NM	NM	314	371	(68)	(6)	33%	25%	75%	(45%)
Carbon Black	1,220	5.5x	5.0x	NM	NM	220	243	(70)	(37)	30%	16%	78%	(35%)
SecureWorks	910	1.7x	1.7x	NM	NM	525	540	(4)	3	11%	4%	53%	(11%)
Tufin	737	8.2x	6.9x	NM	NM	90	107	(5)	(12)	32%	26%	82%	(19%)
MobileIron	678	3.4x	3.2x	NM	NM	198	211	(39)	4	7%	9%	79%	(34%)
Broad Solution Providers													
Symantec	\$16,445	3.5x	3.4x	16.4x	8.0x	\$4,731	\$4,798	\$1,000	\$2,064	0%	1%	77%	12%
Check Point Software	15,510	7.9x	7.8x	17.0x	15.3x	1,956	1,994	912	1,011	3%	4%	90%	44%
Trend Micro	4,611	3.5x	3.0x	10.3x	9.0x	1,321	1,555	449	511	11%	6%	81%	24%
Enabling / Policy Enforcement													
Verisign	\$26,207	21.4x	21.3x	31.3x	29.9x	\$1,226	\$1,233	\$838	\$875	4%	2%	86%	66%
Zix	744	9.0x	4.4x	NM	21.3x	83	168	7	35	7%	138%	62%	(21%)
VASCO Data Security	532	2.4x	2.3x	NM	23.5x	221	234	3	23	10%	10%	68%	(4%)
Absolute Software	203	2.1x	2.0x	16.9x	10.2x	98	101	12	20	4%	5%	88%	14%
Defensive Solutions													
Fortinet	\$12,814	6.8x	6.1x	41.7x	23.6x	\$1,875	\$2,089	\$307	\$543	20%	16%	76%	11%
F5 Networks	8,262	3.7x	3.7x	12.2x	10.0x	2,215	2,258	678	823	4%	3%	84%	25%
Radware	894	3.7x	3.5x	37.0x	26.3x	241	254	24	34	11%	8%	82%	7%
MEDIAN	\$3,196	7.4x	6.6x	33.1x	24.9x	\$327	\$409	\$5	\$34	21%	16%	77%	(10%)

Notes

(a) Based on closing stock prices on July 29, 2019

(b) Calculated as Equity Value plus total debt, minority interest (at book value unless otherwise noted) and preferred stock, less cash & equivalents
































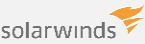














(c) Projections represent Wall Street & Yahoo Finance estimates

(d) Adjusted operating margin excludes extraordinary and non-recurring items

Security Sector Stock Performance



Security IPO and Take Private Activity

	2012	2013	2014	2015	2016	2017	2018	2019
Security IPOs	     	 	  	  		  	     	 
Security Take-Private M&A's		 	 	 	     	     	 	

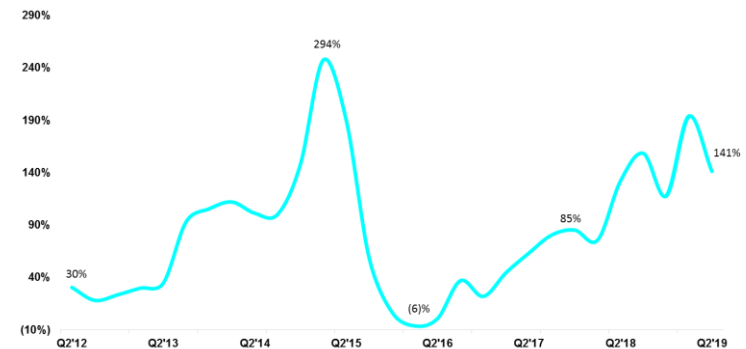
Momentum of Security IPO Market

Security IPO Performance

(\$ in millions)

Company	Amount Offered	Total Shares Offered (% Total)	Aftermarket Performance
CrowdStrike	\$612	87%	157%
FireEye	304	13%	(21%)
Tenable	250	12%	36%
Splunk	213	15%	723%
Palo Alto Networks	197	9%	436%
Zscaler	192	10%	442%
Okta	187	12%	706%
SailPoint	172	27%	84%
Carbon Black	152	12%	(2%)
Sophos	125	35%	56%
ForeScout	116	17%	80%
SecureWorks	112	10%	(11%)
Tufin	108	24%	63%
Varonis	106	21%	221%
Rapid7	103	18%	304%
MobileIron	100	15%	(24%)
CyberArk Software	86	18%	805%
Mimecast	83	15%	383%
Qualys	80	25%	640%
Proofpoint	67	21%	878%
Median	\$121	16%	189%

Median Aftermarket Performance Since 2012



SECURITY IPOs SINCE 4Q'11

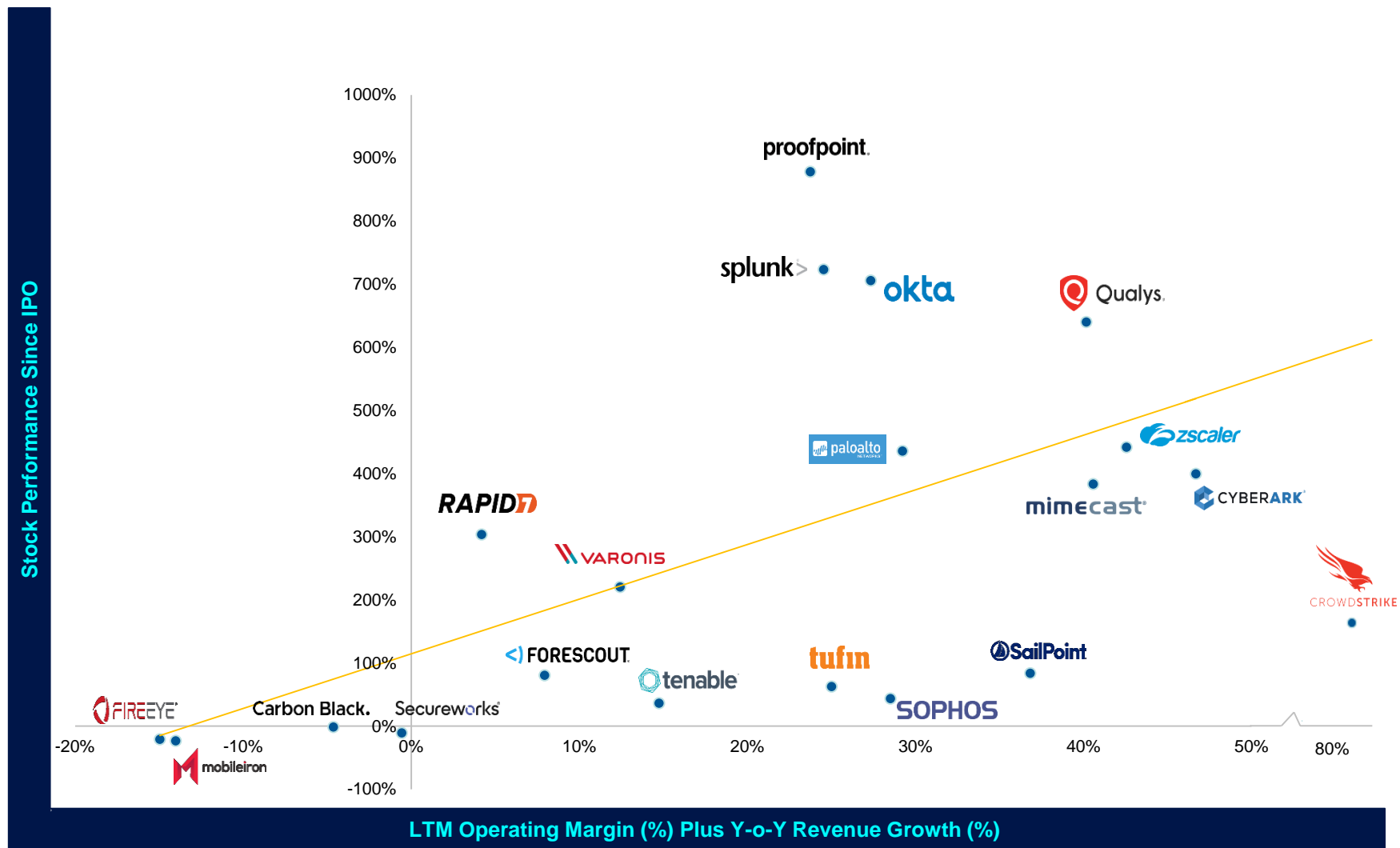
(\$ in millions)

Company	Enterprise Value ^(a) (b)	Market Data				Operating Data ^(c)							
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MobileIron	678	3.4x	3.2x	NM	NM	198	211	(39)	4	7%	9%	79%	(34%)
MEDIAN	\$3,098	8.6x	7.6x	56.8x	45.0x	\$306	\$385	(\$30)	\$16	31%	22%	76%	(16%)

Notes

- (a) Based on closing stock prices on July 29, 2019
 (b) Calculated as Equity Value plus total debt, minority interest (at book value unless otherwise noted) and preferred stock, less cash & equivalents
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 (d) Adjusted operating margin excludes extraordinary and non-recurring items

Growth and Profitability Drive Stock Performance





About AGC Partners

Note: This document is intended to serve as an informative article only in order to further discussion, analysis and independent verification. This document is based upon sources believed to be reliable, however, we do not guarantee the sources' accuracy. Unless otherwise indicated, AGC does not believe that the information contained herein is sufficient to serve as the basis of an investment decision. There can be no assurance that these statements, estimates or forecasts will be attained and actual results may be materially different. This is not a solicitation of an offer of any kind. To learn more about the company/companies that is/are the subject of this commentary, contact one of persons named herein who can give you additional information.

AGC's Security Transactions: 31 Deals Since 2016

2019



2018



2017



2016



AGC's Market Leading Security Practice: 109 Deals Since Inception



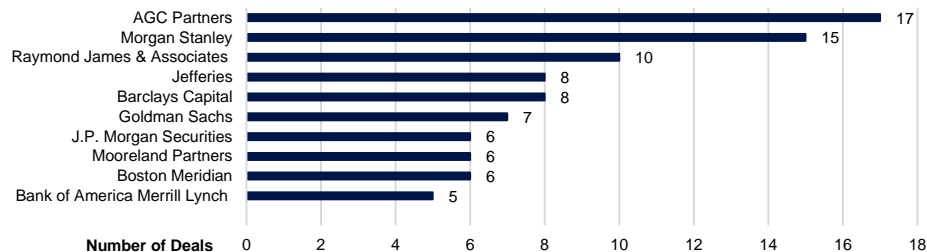
AGC's Market Leading Security Practice: 109 Deals Since Inception



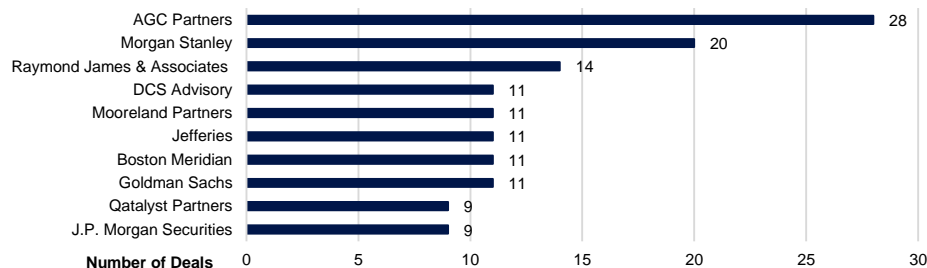
AGC Ranked Top Tech Boutique: 376 Deals Done Since Inception

Top Security Bank over the Last Decade

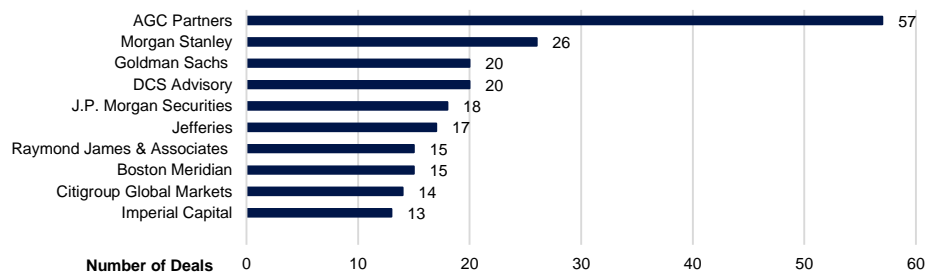
2016 - 2018



2013 - 2018



2008 - 2018

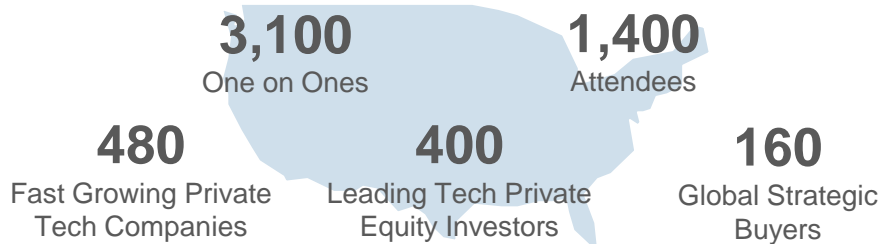


Source: 451 Research. M&A transactions only; sell-side advisory roles only.

AGC's Strong Track Record with the Largest Acquirers

Buyer	AGC Transactions / Relationship
Raytheon	Sold Foreground Security to Raytheon
ca technologies	Sold Xceedium and Mobile System 7 to CA Technologies
Akamai	Sold Prolexic to Akamai
CISCO	Sold CXO and ExtendMedia to Cisco
DELL	Sold Boomi and SilverBack Technologies to Dell
RSA EMC	Sold Asankya, Configuresoft, Authentica and Bus-Tech to EMC; Advised RSA on Cyota and Passmark acquisitions
Google	Sold reCAPTCHA to Google
FIREEYE	Sold nPulse to FireEye Sold iSIGHT Partners to FireEye
Twitter	Sold Dasient to Twitter
IBM	Sold Bow Street and Ounce Labs to IBM
NTT	Sold Solutionary to NTT
ORACLE	Sold LogFire, Empirix and Secerno to Oracle
intel	Sold Neocleus to Intel
McAfee	Sold Internetsafety.com to McAfee
Symantec	Sold WholeSecurity and BindView to Symantec
TREND MICRO	Sold Third Brigade to Trend Micro
vmware	Sold TriCipher to VMware

AGC Partners 15th Annual West Coast Information Security Conference



Keynote Speakers

RSA **sonrai SECURITY** **Bank of America** **threat stack**

Industry Panel Topics & Participants

Threat Intelligence FLASHPOINT FIREEYE Recorded Future INTSIGHTS digital shadows	Machine Identities & IOT KEYFACTOR Bastille intel Karamba Security VENAFI	Cloud Security Check Point <small>SOFTWARE TECHNOLOGIES LTD.</small> threat stack Protego LACEWORK Caveonix <small>DETECT PREDICT ACT</small>	Next Gen SIEM & SOC IBM Carbon Black. JASK DEVO <small>Data. Evolved.</small> red canary	Battle of the Brands Securosis amazon CISCO okta splunk tenable
Cyber Security Capital Markets USVP paloalto NETWORKS THOMABRAVO Accel	Zero Trust zscaler onelogin idaptive EDGEWISE BANYAN	Digital Transformation sonrai SECURITY snyk SecureSky panda GuidePoint SECURITY	IT/OT Convergence CyberX <small>Trusted. Industrial. Cybersecurity.</small> ForeScout CLAROTY BAYSHORE Indegy	

Security Market Experts – Thought Piece Leadership

Utilizing in-depth domain expertise, AGC Partners regularly publishes sector “Thought Pieces” covering key trends in information security and other tech sectors

2014 - 2019 Published Security Thought Pieces

- Industrial Analytics and ICS Cybersecurity
- Cyber Risk Insurance
- Security Orchestration & Automation
- Connected Car Security
- Next-Gen Security Endpoint Security
- Critical Infrastructure Cyber Security Market Overview

