



**Eric McAlpine**  
*Managing Partner*  
[eric@momentumcyber.com](mailto:eric@momentumcyber.com)

**David DeWalt**  
*Chairman*  
[david@momentumcyber.com](mailto:david@momentumcyber.com)

**Michael Tedesco**  
*Managing Partner*  
[michael@momentumcyber.com](mailto:michael@momentumcyber.com)

**Ken Gonzalez**  
*Partner*  
[ken@momentumcyber.com](mailto:ken@momentumcyber.com)

**Keith Skirbe**  
*Director*  
[keith@momentumcyber.com](mailto:keith@momentumcyber.com)

**Dino Boukouris**  
*Director*  
[dino@momentumcyber.com](mailto:dino@momentumcyber.com)

**Jeremy Isagon, CFA**  
*Associate*  
[jeremy@momentumcyber.com](mailto:jeremy@momentumcyber.com)

**Tim Van Tuyle**  
*Associate*  
[tim@momentumcyber.com](mailto:tim@momentumcyber.com)

**Jay Keswani**  
*Analyst*  
[jay@momentumcyber.com](mailto:jay@momentumcyber.com)



CYBERSECURITY ALMANAC | 2019

# Cybersecurity Almanac | Client vs Public Edition

Momentum Offers Readers A Condensed Public Edition & Client Edition Of The Cybersecurity Almanac.

Content	No. Of Pages	Client Edition 800 Pages	Public Edition 103 Pages
		Included	Included
Foreword By Dave DeWalt	6	✓	✓ *
Executive Summary Including Dashboard & CYBERscape	9	✓	✓
Cybersecurity Industry Perspectives	33	✓	✓
Public Company Trading Analysis	13	✓	✓
M&A Activity In Cybersecurity	8	✓	✓ *
Cybersecurity M&A Sector Highlights	11	✓	
Momentum's Proprietary Cybersecurity M&A Database 2016 – 2018	42	✓	
Financing Activity In Cybersecurity	5	✓	✓ *
Cybersecurity Financing Sector Highlights	11	✓	
Momentum's Proprietary Cybersecurity Financing Database 2016 – 2018	32	✓	
Investor Spotlight	7	✓	✓
Top 25 In-Depth Cybersecurity Buyer Profiles	126	✓	
Deep Dive Into 24 Sectors Across The Cybersecurity Landscape	26	✓	
440+ M&A, Financing, & IPO Transaction Profiles	449	✓	
Strategic Update Calls With Momentum Team	-	✓	

For Access To The Client Edition, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com)

\* Public edition includes summary of content only.

# The Cybersecurity Almanac | 2019

Momentum Cyber Is Pleased To Release Its Second Annual Cybersecurity Almanac.

<b>Intended Audience</b>	<ul style="list-style-type: none"><li>▪ CEOs</li><li>▪ Board of Directors</li><li>▪ Venture Capitalists</li><li>▪ Private Equity</li><li>▪ Corporate Development</li><li>▪ M&amp;A Professionals</li><li>▪ Hedge Funds</li><li>▪ Public Investors</li><li>▪ CISOs</li><li>▪ Security Teams</li><li>▪ Governments &amp; Defense</li><li>▪ Regulators</li></ul>
<b>Purpose</b>	<ul style="list-style-type: none"><li>▪ We are dedicated to consistently providing valuable insights on the fast growing and rapidly evolving Cybersecurity landscape</li><li>▪ We publish the Almanac with the sole purpose of sharing the document with the growing Cybersecurity ecosystem to create awareness around key industry trends and strategic activity</li></ul>
<b>Background</b>	<ul style="list-style-type: none"><li>▪ The 2019 Almanac takes a deep dive into the year that was and puts focus to key topics on the year ahead</li><li>▪ This year's edition is our most in-depth industry review ever, as we present a detailed view on key industry trends, private and public market activity, major news and events, and all things "Cyber". Some key highlights include:<ul style="list-style-type: none"><li>- Highlighted key M&amp;A and financing transactions as well as IPOs and public market performance</li><li>- The latest version of our often referenced CYBERscape to accurately capture the continuously evolving industry taxonomies</li><li>- An examination of the past decade of Cybersecurity transactions (M&amp;A and VC / PE) to provide valuable insights and identify key trends</li><li>- Spotlighted our favorite content in 2018, sharing our own original content, as well as others'</li><li>- Focused on key regulatory changes as well as industry sectors that are center stage with higher than average strategic activity</li><li>- Spotlighted leading, Cyber-focused investors that increasingly play an integral role in the industry's most innovative startups</li></ul></li></ul>
<b>Methodology</b>	<ul style="list-style-type: none"><li>▪ We maintain the leading proprietary M&amp;A and Financing Transaction Database – unrivaled in its accuracy, quality, and scale ("CYBERcloud")</li><li>▪ We complement CYBERcloud with data from various industry leading databases and research publishers, primarily from North America and around the world, representing over a million data points and decades of institutional industry knowledge and experience</li></ul>

# The Authors

World-Class Advisors & Operators In Cybersecurity.

## Authors



**Eric McAlpine**  
Founder & Managing Partner  
Momentum Cyber



**Dave DeWalt**  
Founder & Chairman  
Momentum Cyber



**Michael Tedesco**  
Founder & Managing Partner  
Momentum Cyber



**Ken Gonzalez**  
Partner  
Momentum Cyber



**Keith Skirbe**  
Founder & Director  
Momentum Cyber



**Dino Boukouris**  
Founder & Director  
Momentum Cyber



**Jeremy Isagon**  
Associate  
Momentum Cyber



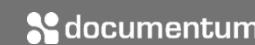
**Tim Van Tuyle**  
Associate  
Momentum Cyber



**Jay Keswani**  
Analyst  
Momentum Cyber

## Backgrounds

### As Advisors



### As Operators

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A Comprehensive Review Of The Cybersecurity Strategic Landscape In 2018.

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I.	<a href="#">About Momentum Cyber</a>	11	7
II.	<a href="#">Executive Summary</a> <ul style="list-style-type: none"><li>▪ <a href="#">Key Cybersecurity Trends &amp; Predictions</a></li><li>▪ <a href="#">A Snapshot Of 2018</a></li><li>▪ <a href="#">The Cybersecurity Dashboard</a></li><li>▪ <a href="#">CYBERscape (v2.7)</a></li></ul>	27	23
III.	<a href="#">Cybersecurity Industry Perspectives</a>	36	30
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**2019**

# FOREWORD

CYBERSECURITY ALMANAC | 2019

# Foreword

By Dave DeWalt | CEO, NightDragon Security & Chairman, Momentum Cyber

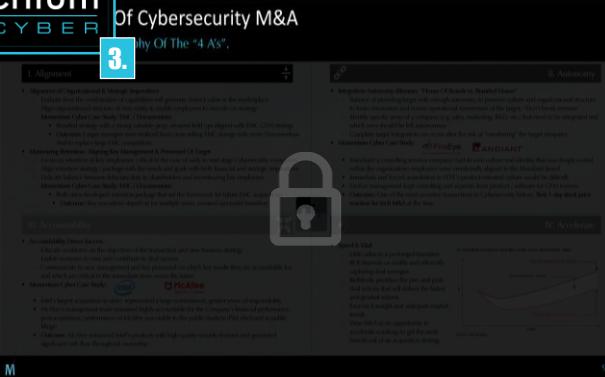
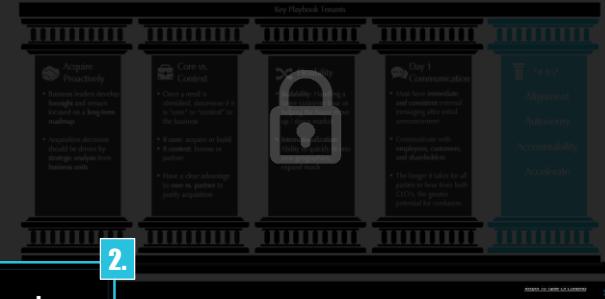
Cybersecurity is a \$100 billion global market with more than 3,000 vendors, making it difficult for companies to rise above the competitive noise and create great businesses, while investors rarely have the full view of this dynamic market to make informed decisions on when to invest and when to exit. Together, the combined capabilities and visibility of NightDragon Security and Momentum Cyber ensure that companies have expert advice to maximize shareholder value at all stages of their corporate lifecycle -- either by organic growth, partnerships, mergers and acquisition or IPO.

Dave DeWalt  
Founder & Chairman  
Momentum Cyber



## Momentum Cyber's Proprietary Cybersecurity M&A "Playbook"

A Framework For Key Considerations For A Successful M&A Strategy In Cybersecurity.





# ABOUT MOMENTUM CYBER

CYBERSECURITY ALMANAC | 2019

# Momentum Cyber

M&A & Strategic Advisory For Cybersecurity.



Momentum Cyber is the premier trusted advisor to the Cybersecurity industry providing bespoke high-impact advice combined with tailored senior-level access. The firm was founded by world-class advisors and operators and caters to the unique needs of both earlier stage Founders, CEOs, & Boards as well as the complexity of later stage & public companies throughout their lifecycle – Incubation to Exit.

## The Leadership Team



**Dave DeWalt**  
Founder & Chairman  
*30+ Years in Tech, 17 Years as CEO  
>\$20B in Value Creation*



**Michael Tedesco**  
Founder & Managing Partner  
*25+ Years M&A and Board Advisory Across Enterprise IT, Board Member, & Investor*



**Eric McAlpine**  
Founder & Managing Partner  
*20+ Years Cybersecurity Board/CEO Advisor, Founder & Engineer*



**Ken Gonzalez**  
Partner  
*20+ Years Cybersecurity Strategy, M&A, & Investing*



**Dino Boukouris**  
Founding Member & Director



**Keith Skirbe**  
Founding Member & Director

250+ Deals

\$250+ Billion

Empathy

Objectivity

Action

Tenacity

Innovation

Long Term Loyalty

Sense of Humor

# About The Firm

Our Principals Are World-Class Advisors & Operators.

Momentum Cyber provides world-class M&A and strategic advice combined with unparalleled senior-level access to the Cybersecurity ecosystem. We advise on a broad range of strategic activities, including mergers and acquisitions, board & special situations, corporate strategy & development, corporate finance, and operational excellence. We are a mission driven firm with a passion for Cybersecurity.



**250+** **\$250B+**

Over A Century Of Experience  
In Cybersecurity As World-  
Class Advisors & Operators



**46** **\$16B**

Cyber Exit Savvy – Deep  
Expertise Selling to Strategic  
& Financial Buyers

**\$379M** **\$95M**

Average & Median  
Cybersecurity M&A  
Deal Value



Unparalleled Access Across the  
Cybersecurity Ecosystem with  
Executives, Board Members,  
Investors, & CISOs

**\$20B+**

Value Creation To  
Shareholders As CEO,  
Board, & Investor



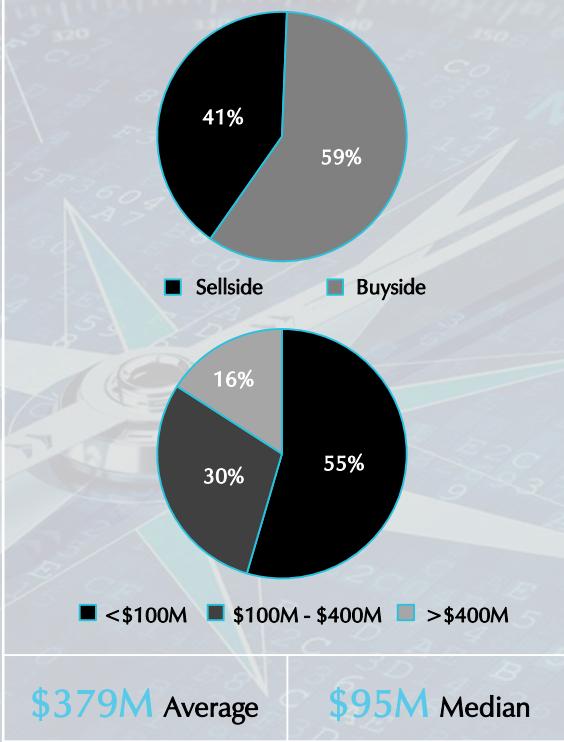
Unrivalled Thought Leadership  
In Cybersecurity Through  
Insightful Research, Transaction  
Advisory, & Building Companies

# Balanced & Highly Experienced Advisors

A Bespoke High-Impact Advisory Boutique With Unique Senior-Level Access.

## Advice.

- Mergers & Acquisitions
  - Sellside
  - Buyside
  - Divestitures
  - Joint Ventures
- Board & Special Situation Advisory
- Corporate Strategy & Development
- Partnerships & Business Development
- Corporate Finance



## Access.

Executives

Board Members

Investors

Entrepreneurs

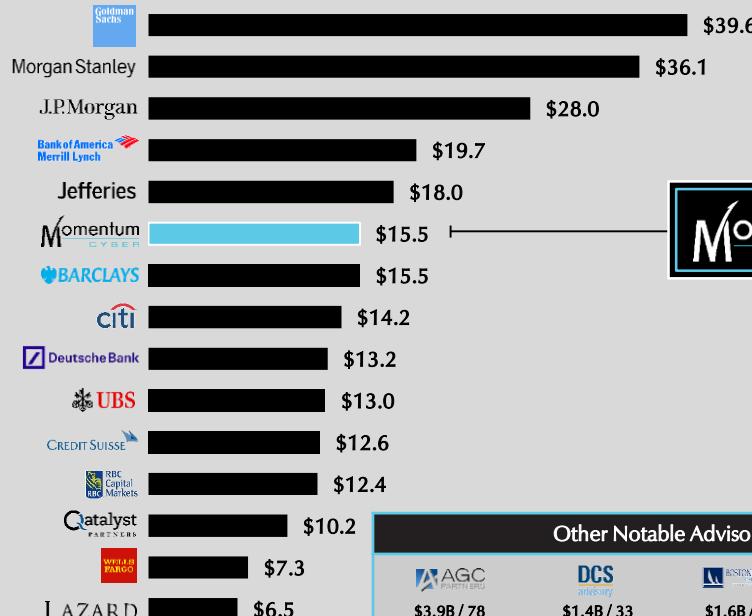
Policy Influencers

Chief Security Officers

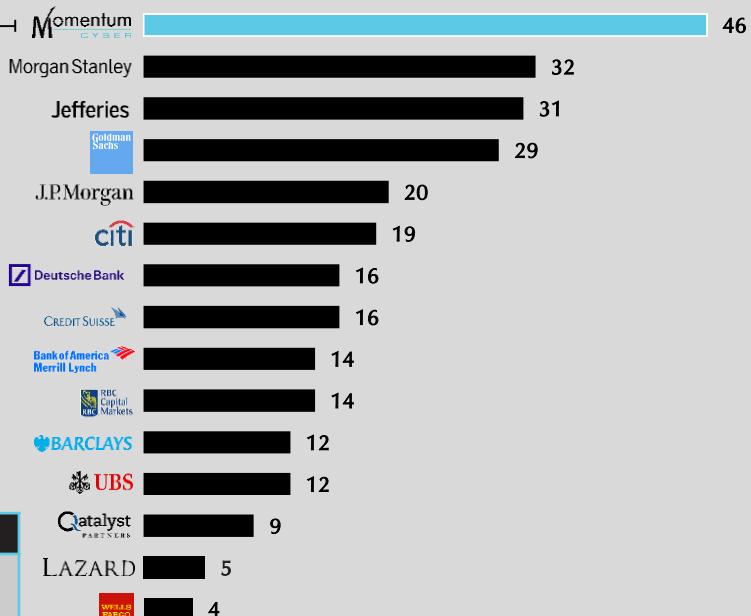
# Momentum Cyber's Team Has A Prolific M&A Track Record

The Top 15 Cybersecurity Advisors | 2002 – Present.

The Top 15 By Total Value (\$B)



The Top 15 Re-Sorted By # of Deals



Other Notable Advisors (1)

AGC	DCS	ENRON MERRILL LYNCH	William Blair
\$3.9B / 78	\$1.4B / 33	\$1.6B / 17	\$4.5B / 14
MOORELAND	PAGEMILL	EVERCORE	CENTERVIEW PARTNERS
\$0.7B / 13	\$0.2B / 13	\$4.1B / 12	\$4.2B / 6

Note: Only Includes Buy-side and Sell-side M&A Statistics (e.g., excludes fairness of opinions). All Advisers listed have advised on more than 1 Cyber Transaction.

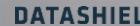
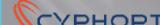
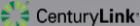
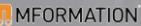
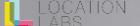
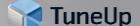
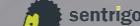
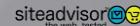
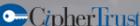
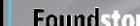
No Advisor used on \$6.8B of disclosed deal value & no Advisor used in 93 disclosed deals.

(1) Did not make 'Top 15' due to deal value, but generally active advisors in Cybersecurity.

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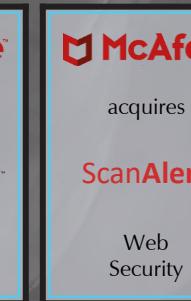
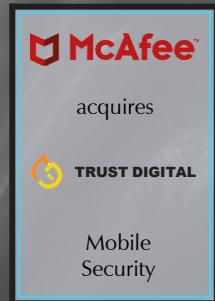
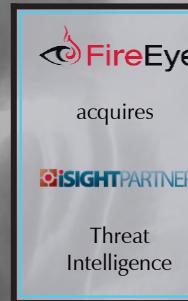
# Tremendous Advisory Track Record In Cybersecurity

Unrivalled Deal Experience And Comprehensive Coverage Across The Cybersecurity Landscape.

 <b>INTERSET</b> acquired by  <b>MICRO FOCUS</b> Security Analytics	 <b>ADT</b> strategic investment in  <b>SAM</b> IoT Security	 <b>ADT</b> acquired  <b>Secure Designs, Inc.</b> Managed Security Service Provider	 <b>ICE BRG</b> acquired by  <b>Gigamon</b> Network Security	 <b>BN</b> <b>BRADFORD NETWORKS</b> acquired by  <b>FORTINET</b> Network Security	 <b>WEBLIFE</b> acquired by  <b>proofpoint.</b> Web Security	 <b>ADT</b> acquired  <b>DATASHIELD</b> Managed Detection & Response	 <b>ZOA</b> <b>ALLIANCE</b> acquired Undisclosed Consumer Security Company  <b>JUNIPER</b> Security Analytics	 <b>CYPHORT</b> acquired by  <b>JUNIPER</b> Security Analytics
 <b>iSHERIFF</b> acquired by  <b>mimecast</b> Cloud Security	 <b>ElasticBox</b> acquired by  <b>CenturyLink</b> Secure Cloud Orchestration	 <b>CLEARLAKE CAPITAL</b> acquired  <b>MFORMATION</b> MDM	 <b>AVG</b> acquired  <b>LOCATION LABS</b> Mobile Security	 <b>AVG</b> acquired  <b>TuneUp</b> Endpoint Security	 <b>McAfee</b> acquired  <b>sentrigo</b> Data Security	 <b>McAfee</b> acquired  <b>siteadvisor</b> the web. tested. Web Security	 <b>McAfee</b> acquired  <b>CITADEL</b> Vulnerability Management	 <b>nitrosecurity</b> acquired by  <b>McAfee</b> SIEM
 <b>secure</b> acquired by  <b>McAfee</b> Network / Web Security	 <b>secure</b> acquired  <b>CYBERCARD</b> Network Security	 <b>secure</b> acquired  <b>CipherTrust</b> Email Security	 <b>VECTOR CAPITAL</b> acquired  <b>SafeNet</b> Data Security	 <b>MessageLabs</b> acquired by  <b>Symantec</b> Email Security	 <b>Symantec</b> acquired  <b>riptech</b> Managed Security Service Provider	 <b>Symantec</b> acquired  <b>Recourse Technologies</b> Intrusion Detection	 <b>McAfee</b> acquired  <b>Foundstone</b> Vulnerability Management	 <b>Andover Controls</b> Controlling Tomorrow's World acquired by  <b>Schneider Electric</b> Industrial IoT Security

# M&A In Cybersecurity | A Unique CEO & Board Perspective

Dave DeWalt's Tremendous M&A Track Record As CEO, Chairman, & Investor For Three Decades.



Note: Deals with disclosed deal values greater than \$25 Million.

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# Micro Focus Acquires Interset

Momentum Cyber Served As Exclusive Financial Advisor To Interset.



## Transaction Overview

- On February 15<sup>th</sup>, 2019, Micro Focus acquired Interset Software, Inc. ("Interset")
- "Security is at the heart of every organization, and perhaps never more so than as they implement their digital transformation initiatives and leverage emerging technologies to better predict and take action on credible threats. Micro Focus recognized that an even more advanced analytics ecosystem was needed to assist in this journey, and we identified Interset as a critical addition to our strategy." – John Delk, Senior Vice President & General Manager of Security, Risk & Governance, Micro Focus
- The combination of the Interset technology with Micro Focus' broad security portfolio is a powerful combination that will produce a level of protection that will be unmatched in the market. Our 'Data In, Intelligence Out' methodology will deliver an even-more complete set of benefits for our combined customers – allowing them to leverage near real-time information to address both immediate- and long-term threats." – Mark Smialowicz, Chief Executive Officer, Interset

## Transaction Significance

- Interset's predictive analytics technology adds depth to Micro Focus' Security, Risk & Governance portfolio, and aligns with the Company's strategy to help customers quickly and accurately validate and assess risk as they digitally transform their businesses
- The Company's technology will accelerate Micro Focus' delivery of a more-robust UEBA offering, and help drive deeper data insights across security and operations that are necessary to execute on the Company's SecOps Analytics vision
- Interset will supplement Micro Focus' Big Data analytics software, Vertica, and add additional value to Micro Focus ArcSight – the world's leading real-time correlation engine – to deliver a highly differentiated Cybersecurity solution
- Key Attributes of the Interset technology includes:
  - Extensible Analytics:** The technology eliminates the need for expensive product consultations and customization
  - Principled Math:** Utilizes a growing library of 350+ proven machine-learning and advanced-analytics models, applying them to both events and entities, to yield a highly accurate means of detecting, connecting, and quantifying high-risk behaviors
  - Scalable Big Data:** The flexible, open platform combines an advanced-analytics engine with open-source, big-data technology and can be deployed in the Vertica, Hortonworks or Cloudera infrastructures, scaling to meet the needs of the largest, most-sophisticated environments

## Transaction Significance

- Momentum Cyber acted as exclusive Financial Advisor to Interset
- This transaction demonstrates Momentum Cyber's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity

## Notable Strategic Activity

esentire	acquires	VERSIVE
Date:	10/23/18	
HQ:	Seattle, WA	
Founded:	2012	
exabeam	\$50M Series D	
Date:	08/14/18	
HQ:	San Mateo, CA	
Founded:	2013	
Investors:	Aspectsoft, Cisco, Aspectsoft, NORWEST	
FORCEPOINT	acquires	REDOWL
Date:	08/28/17	
HQ:	Baltimore, MD	
Founded:	2011	
EV:	\$60M	
palosalto	acquires	LIGHTCYBER
Date:	02/28/17	
HQ:	Israel	
Founded:	2011	
EV:	\$105M	

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# SAM Seamless Network Raises Strategic Investment

Momentum Cyber Advised ADT & NightDragon On The Investment & Will Maintain An Ongoing Advisory Role To SAM.



The slide features the SAM Seamless Network logo at the top right. Below it, four logos are displayed: ADT (blue octagon), NIGHTDRAGON SECURITY (blue and white stylized dragon), Intel Capital (Intel logo with 'Capital' text), and Blumberg Capital (Blumberg logo with 'CAPITAL' text). A large black rectangular box contains the text: "have made a strategic investment in SAM SEAMLESS NETWORK". Below this, a smaller box contains the text: "Momentum Cyber advised ADT and NightDragon on the investment and will maintain an ongoing advisory role to SAM and its investors as it deploys the capital". At the bottom left, the Momentum Cyber logo is shown, followed by the date "November 14<sup>th</sup>, 2018".

- ### Transaction Overview
- On November 14<sup>th</sup>, 2018, SAM Seamless Network ("SAM") announced a \$12M Series A financing round led by Intel Capital ("Intel") with participation from NightDragon Security ("NightDragon"), The ADT Corporation ("ADT"), & Blumberg Capital. Dave DeWalt has also been named Chairman of the Board
  - "Now more than ever before, home security goes beyond the physical premise. The secure home of the future must include Cybersecurity. We're invested in working with new technology providers to continue to meet the needs of today's customer, and SAM's technology provides advanced enterprise-grade security capabilities that help keep homes and their devices secure." - **Jay Darler, Senior Vice President, Emerging Markets, ADT**
  - "As the world continues to be more connected, every home, small business, place to congregate and mode of transportation becomes a target for attack. SAM is solving this problem with next-generation, enterprise grade security for WiFi routers. Their technology is making cyber attack prevention both simpler, stronger, and more comprehensive than ever before." - **Dave DeWalt, Founder, NightDragon Security**
  - "We were impressed with SAM's technology and level of security for the home network, which is a critical part of building out the future of 5G. Unlike existing solutions, which necessitate buying a new gateway or replacing it with a secure gateway, SAM's solution provides end-users security, without them needing to do anything. And for telecommunications companies and ISPs, its AI and machine learning capabilities monitor behavior on the network to detect unusual activity and prevent attacks." - **Dave Flanagan, VP, Intel Corp. & Group Managing Director, Intel Capital**

### Strategic Rationale

- SAM plans to utilize this new influx of capital to expand its machine learning research and to continue its growth in the US and European markets to meet its customers' increasing security needs
- Intel is leveraging SAM to further enrich its security offerings, while ADT continues to explore the possibilities of utilizing SAM's seamless security to enhance its Digital Security offerings for residential customers across North America

### Momentum Cyber's Role

- Momentum Cyber advised ADT and NightDragon on the investment and will maintain an ongoing advisory role to SAM and its investors as it deploys the capital

Notable IoT Strategic Activity	
<b>CUJO</b>	Series B
Date:	05/15/18
HQ:	El Segundo, CA
Founded:	2015
Investors:	Charter
<b>MINIM</b>	\$3M Seed
Date:	04/30/18
HQ:	Manchester, NH
Founded:	2017
Investors:	FLYBRIDGE COLLECTIVE FOUNDER COLLECTIVE
<b>allot</b> acquires <b>Netonomy</b>	
Date:	01/16/18
HQ:	Tel Aviv, Israel
Founded:	2017

# ADT Acquires Secure Designs Inc.

Momentum Cyber Acted As ADT's Exclusive Strategic Cybersecurity Advisor.



has acquired



Secure Designs, Inc.

Momentum Cyber acted as ADT's strategic Cybersecurity advisor

Momentum  
CYBER

August 2<sup>nd</sup>, 2018

## Transaction Overview

- On August 2<sup>nd</sup>, 2018, The ADT Corporation ("ADT") announced it has acquired Secure Designs Inc. ("SDI")
- "ADT and SDI are the perfect match; two companies dedicated to providing business owners with peace-of-mind knowing their greatest investment is monitored and more secure. Cybercrime is a real threat to the livelihood of small businesses across the country. It is imperative that we provide our customers with a complete suite of solutions to help ensure every point of entry, whether physical or digital, is protected." - Michael Keen, Vice President, ADT Cybersecurity
- "Together with ADT, we'll now be able to extend our reach to give new and existing small business customers the network security that is needed to operate in today's world." - Larry Cecchini, SDI Owner & now Vice President / General Manager, ADT Cybersecurity Small Business

## Transaction Significance

- With SDI's resources and technology, ADT will now be able to provide real-time insights to Internet risks and behaviors, coupled with bundled solutions to improve small business performance. Best of all, solutions are customizable to suit the needs of a historically underserved customer segment
- ADT Cybersecurity services for small business will now include customization, installation, monitoring, and management of enterprise-grade firewalls. This multi-layered security approach provides active perimeter defense, vulnerability scanning and secure remote access to help eliminate data loss

## Momentum Cyber's Role

- Momentum Cyber acted as ADT's exclusive strategic Cybersecurity advisor
- This transaction demonstrates Momentum Cyber's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity

## Notable MSSP Strategic Activity

Acquirer	Acquires	Target
ADT	acquires	DATASHIELD
Date:		11/14/2017
HQ:		Scottsdale, AZ
Founded:		2009
Booz   Allen   Hamilton	acquires	morphick'
Date:		10/20/2017
HQ:		Cincinnati, OH
Founded:		2015
WARBURG PINCUS	acquires	esentire
Date:		08/21/2017
HQ:		Cambridge, Ontario
Founded:		2011
EV		~\$150M

# Gigamon Acquires ICEBRG

Momentum Cyber Acted As Exclusive Financial Advisor To ICEBRG.



- ### Transaction Overview
- On July 23<sup>rd</sup>, 2018, Gigamon, Inc. ("Gigamon") acquired ICEBRG, Inc. ("ICEBRG")
  - "The market is primed for a new approach to enterprise security that reduces risk, lowers cost, and increases leverage for SOC teams. Building on our success supporting Mobile Service Providers with a visibility solution, we see a similar opportunity to disrupt the security market with the addition of ICEBRG to the Gigamon Platform. This combination provides a compelling new way to enable Security Operations professionals to regain the upper-hand." – **Paul Hooper, Chief Executive Officer, Gigamon**
  - "The combination of the high-quality network data from the GigaSECURE® Security Delivery Platform and the ICEBRG cloud-based platform will power the next generation of security capabilities. Together, our expertise in networking and security will help SOC teams focus on defending against the most severe threats in their environments." – **William Peteroy, Chief Executive Officer, ICEBRG**
- ### Transaction Significance
- Represents Gigamon's first acquisition since inception and marks the start of a new M&A strategy, which includes moving deeper into security
  - The combination of network traffic visibility from Gigamon's platform and the next-generation approach that ICEBRG employs for the detection and triage of threats, will allow enterprises to reduce risk and keep pace with the rapidly evolving threat landscape
  - "The acquisition of ICEBRG brings Gigamon the cloud-based data management capability essential for delivering advanced network security as a service. The Gigamon-ICEBRG combination offers security teams a better way to prioritize and respond to the most urgent threats, potentially changing how we view security in the SOC of the future." – **Eric Ogden, Senior Research Analyst, 451 Research**

- ### Momentum Cyber's Role
- Momentum Cyber acted as exclusive Financial Advisor to ICEBRG
  - This transaction demonstrates Momentum Cyber's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity

Notable Strategic Activity	
THOMA BRAVO	acquires ::LogRhythm
Date:	05/31/18
HQ:	Boulder, CO
Founded:	2003
IronNet Cybersecurity	\$78M Series B
Date:	05/03/18
HQ:	Fulton, MD
Founded:	2014
Investors:	FORGEPOINT CAPITAL KPCB CLOUD VENTURES GS CAPITAL
VECTRA	\$36M Series D
Date:	02/21/18
HQ:	San Jose, CA
Founded:	2010
Investors:	Accel PARTNERS DAG VENTURES khosla venture wipro
DARKTRACE	\$75M Series D
Date:	07/11/17
HQ:	Cambridge, United Kingdom
Founded:	2013
Investors:	INSIGHT KKR ZINC ENERGY ELEVEN

# Fortinet Acquires Bradford Networks

Momentum Cyber Acted As Exclusive Financial Advisor To Bradford Networks.



has been acquired by



Momentum Cyber acted as exclusive financial advisor to Bradford Networks



June 4<sup>th</sup>, 2018

## Transaction Overview

- On June 4<sup>th</sup>, 2018, Fortinet, Inc. ("Fortinet") announced it acquired Bradford Networks Inc. ("Bradford Networks")
- "... The integration of Bradford Networks' technology with Fortinet's security fabric enables large enterprises with the continuous visibility, micro-segmentation and access control technology they need to contain threats and block untrusted devices from accessing the network." – **Ken Xie, Founder & CEO, Fortinet**
- "Bradford Networks' technology is already integrated with Fortinet's Security Fabric including FortiGate, FortiSIEM, FortiSwitch and FortiAP products to minimize the risk and impact of cyber threats in even the toughest security environments such as critical infrastructure - power, oil and gas and manufacturing." – **Rob Scott, CEO, Bradford Networks**

## Transaction Significance

- Bradford Networks will further enhance the Fortinet Security Fabric by converging access control and IoT security solutions to provide large enterprise with broader visibility and security for their complex networks including:
  - Complete, continuous, agentless visibility of endpoints, users, trusted and untrusted devices and applications accessing the network including IoT and headless devices
  - Enhanced IoT security through device micro segmentation, dynamic classification of headless devices by type, profile, as well as automatic policy assignment to enable granular isolation of unsecure devices
  - Accurate event triage and threat containment in seconds through automated workflow integrations that prevent lateral movement
  - Easy, cost-effective deployment due to highly scalable architecture that eliminates deployment at every location of a multi-site installation

## Momentum Cyber's Role

- Momentum Cyber acted as exclusive Financial Advisor to Bradford Networks
- This transaction demonstrates Momentum Cyber's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity

## Notable Network / IoT Activity



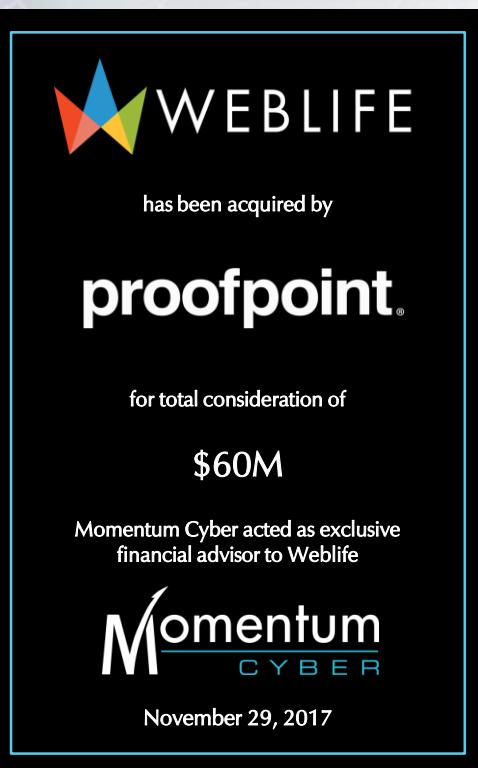
IPO Date:	October 27, 2017
Amount Raised (\$M):	\$116.2
Current Stock Price:	\$25.99
Stock Performance Since IPO%:	18%
Market Cap (\$M):	\$1,114.0
Enterprise Value (\$M):	\$921.1
EV / 2018E Revenue:	3.2x

## armis : \$30M Series B

Date:	April 9, 2018
HQ:	Palo Alto, California
Founded:	2015
CEO:	Yevgeny Dibrov
Investors:	BainCapital REDT SEQUOIA TENACIALCAPITAL

# Proofpoint Acquires Weblife

Momentum Cyber Acted As Exclusive Financial Advisor To Weblife.



### Transaction Overview

- On November 29, 2017, Proofpoint, Inc ("Proofpoint") announced it acquired Weblife Balance Inc. ("Weblife") for a total consideration of \$60M, representing a 17.1x multiple of invested capital
- "In an era of constant connectivity and eroding boundaries between a professional and personal digital life, it is critical to have email protection that is both broad and deep. The acquisition of Weblife gives us greater ability to help protect our customers from today's rapidly evolving cyberattacks, as cybercriminals look for new ways to abuse email channels. We are thrilled to welcome Weblife's employees to the Proofpoint team." – **Gary Steele, CEO, Proofpoint**
- "Organizations are having to confront the reality that employees will check their personal webmail from the corporate network, and will also use their corporate devices to check their webmail at home after work, on the road, and everywhere in between. By combining Proofpoint's advanced threat detection capabilities with our unique browser isolation solution, enterprises can now secure both corporate and personal email from advanced threats and compliance risks." – **David Melnick, CEO, Weblife**

### Transaction Significance

- By combining Weblife's web-isolation technology with Proofpoint's industry leading threat detection and intelligence, companies can now secure both corporate and personal email from advanced threats and compliance risks
  - Unique combination of web-isolation and advanced threat detection delivers comprehensive protection from both malware and credential stealing phishing links
- The integrated solution will become part of Proofpoint's Targeted Attack Protection advanced threat solution suite, and will be available in the first half of 2018

### Momentum's Role

- Momentum Cyber acted as exclusive Financial Advisor to Weblife
- This transaction demonstrates Momentum's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity

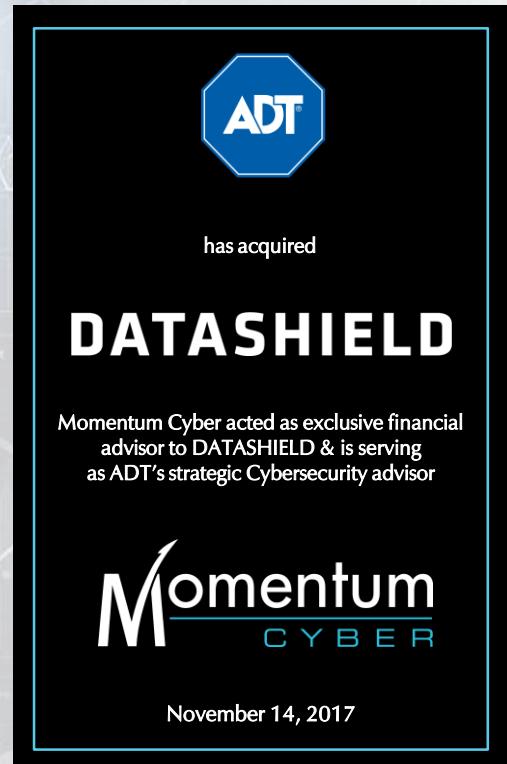
### Other Notable Web Isolation Transactions

Symantec acquired fireglass	Date: 07/06/17 HQ: Tel Aviv, Israel Founded: 2014 CEO: Guy Guzner
	\$225 Million
aurionpro acquired SPIKES SECURITY	Date: 05/09/16 HQ: Los Gatos California Founded: 2012 CEO: Branden Spikes

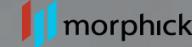
Other Primary Competitors		
Company	Headquarters	Amount Raised
AUTHENTIC8	Mountain View, California	\$14.2M
Light Point Security	Baltimore, Maryland	Undisclosed
Menlo Security	Menlo Park, California	\$35.5M

# ADT Acquires DATASHIELD

Momentum Cyber Acted As Exclusive Financial Advisor To DATASHIELD & Strategic Cybersecurity Advisor To ADT.



Transaction Overview	
<ul style="list-style-type: none"><li>On November 14, 2017, The ADT Corporation ("ADT") announced it has acquired DATASHIELD, LLC ("DATASHIELD")</li><li>DATASHIELD was founded in 2009 and is the premier Managed Detection &amp; Response (MDR) provider offering the next-generation of managed security services for Mid-Market and Enterprise businesses<ul style="list-style-type: none"><li>DATASHIELD is the only MDR Provider to provide full packet capture and inspection beyond headers and metadata behind the firewall</li><li>DATASHIELD's SHIELDVision™ is a unified platform for organizing, managing and collecting cyber intelligence in real-time as well as automating security analyst workflows to close the gap between cyberattack and breach detection time and remediation for customers</li></ul></li></ul>	
Transaction Significance	
<ul style="list-style-type: none"><li>ADT launches "ADT Cybersecurity" with the newly combined entity utilizing DATASHIELD's cutting-edge SHIELDVision™ platform and deep security industry expertise to create an unmatched real-time Cyber detection and response solution</li><li>MDR is a Top 10 Cybersecurity technology for 2017 according to Gartner</li><li>Data breaches are on the rise and increasingly more damaging to companies and individuals – MDR reduces time to detection from months to minutes</li></ul>	
Momentum's Role	
<ul style="list-style-type: none"><li>Momentum Cyber acted as exclusive Financial Advisor to DATASHIELD and is serving as ADT's Strategic Cybersecurity Advisor</li><li>Momentum Cyber identified MDR as a strategic category to leverage ADT's security footprint and sourced DATASHIELD as a proprietary target</li><li>This transaction demonstrates Momentum's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity</li></ul>	

Other Notable MSSP Transactions	
Booz   Allen   Hamilton acquired 	Date: 10/20/17 HQ: Cincinnati, Ohio Founded: 2015 CEO: Brian Minick Undisclosed
WARBURG PINCUS acquired a majority stake in 	Date: 08/21/17 HQ: Cambridge, Ontario Founded: 2011 CEO: J.Paul Haynes ~\$150 Million
IEQT has acquired 	Date: 04/28/17 HQ: Zurich, Switzerland Founded: 1990 CEO: Martin Bosshardt Undisclosed

# Juniper Networks Acquires Cyphort

Momentum Cyber Acted As Exclusive Financial Advisor To Cyphort.



Transaction Overview			
<ul style="list-style-type: none"><li>On August 31, 2017, Cyphort, Inc. ("Cyphort") announced it had entered into a definitive agreement to be acquired by Juniper Networks ("Juniper")</li><li>The acquisition is subject to customary closing conditions and expected to close by the end of September</li><li>Headquartered in Santa Clara, CA, Cyphort was founded in 2011 and provides a Security Analytics and Mitigation Platform for Advanced Threat Defense<ul style="list-style-type: none"><li>Cyphort is the only comprehensive Advanced Threat Protection platform, for on-prem and cloud across Web, Email, Lateral Spread, File &amp; CASB upload</li><li>Cyphort's machine learning and behavioral analytics target the SIEM "gap" by combining detection and analytics on raw data and ingested 3rd party sources</li><li>Investors included Sapphire Ventures, Foundation Capital, Matrix Partners, Trinity Ventures, Zouk Capital and Dell Technologies Capital</li></ul></li></ul>			

Transaction Significance			
<ul style="list-style-type: none"><li>Acquisition strengthens Juniper's leadership position in the next-gen firewall market and is a critical addition to Juniper's Software-Defined Secure Network vision</li><li>Cyphort will integrate into Juniper's Sky ATP platform to provide customers with improved performance, an increased range of supported file types and additional threat detection capabilities</li><li>Cyphort marks Juniper's return to Cybersecurity M&amp;A after an over 4 year absence</li></ul>			

Momentum's Role			
<ul style="list-style-type: none"><li>Momentum Cyber served as exclusive Financial Advisor to Cyphort</li><li>This transaction demonstrates Momentum's continued success in advising innovative, next-generation Cybersecurity companies and further establishes the firm's leadership position as the 'go to' advisor exclusively focused on Cybersecurity</li></ul>			

Recent Cybersecurity AI-Driven & Analytics M&A			
Date	Target	Acquirer	TV (\$M)
08/31/17	CYPHORT	JUNIPER NETWORKS	NA*
08/28/17	RED OWL	FORCEPOINT	\$60M
06/08/17	HEXADITE	Microsoft	\$100M
02/28/17	LIGHTCYBER	paloalto	\$105M
02/08/17	INVINCEA	SOPHOS	\$120M
02/01/17	NIARA	ARUBA a Hewlett Packard Enterprise company	\$40M

\* Transaction Values were not disclosed at the time of announcement.

# CYBERcloud | Momentum's Proprietary Cybersecurity Industry Data Platform

## Unparalleled Proprietary Access & Insights Provides A Significant Competitive Advantage For Our Clients.

1,000s Of Hours Dedicated To Building A Robust Cyber Data Platform | Deep Relationships, Strategic Market / Industry Insights, & Proprietary Content

### I. Established Network Via PREDATOR Contact List



**7,500+**

Executives &  
Board Of Directors



**1,700+**

Investors  
(VC / PE)



**650+**

Leading  
CISOs



**300+**

Channel &  
Service Providers



**380+**

Media &  
Influencers



NSA / CIA  
Contacts



Strong Israel  
Network

### V. Proprietary Industry Content



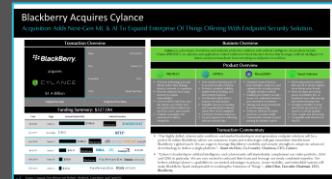
Frequent Releases Of Content To  
Highly Engaged Subscriber Base



Monthly, Quarterly,  
Mid-Year, & Annual Reports



**CYBERScape**  
(720+ Companies)



Detailed Transaction Profiles  
(480+ Profiles)

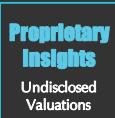


Bespoke Industry &  
Sub-Sector Coverage (45+ Sectors)



Channel Reports /  
Whitepapers

### II. Transaction Database | 3,000+ Cybersecurity Transactions



### III. 3rd Party Data Sources



### IV. Key Cybersecurity Partners





II.

## EXECUTIVE SUMMARY

# Key Cybersecurity Trends & Predictions

## Trends & Predictions – Looking Back And Ahead.

Key Trends   2018		Key Predictions   2019	
	Another Record Year for Cybersecurity, Highlighted By All-Time Highs In Financing Volume & M&A Activity		Hybrid Cloud Computing Utilization Will Continue Its Rise & Drive Demand For Cloud Agnostic Solutions To Address Security, Data Protection, & Compliance
	Over 1,000 Organizations In The US Alone Suffered From A Data Breach For The Third Straight Year, With Inadvertent Data Exposure As A Particularly Prevalent Cause Of Breach		Connected IoT Devices Will Continue To Be Targeted Given Their Low Level Of Security And Exponential Growth; There Will Be More Significant IoT, OT, & ICS Security Incidents
	5 Cybersecurity IPOs Leading Up To Market Peak In September, But Q4 Saw A Sharp Decline		Zero Trust Offerings Will Continue To Gain Widespread Acceptance As The Enterprise Standard Security Model, Representing The Convergence Of Network Security & IAM
	Companies Invested Heavily Preparing For GDPR's Institution In May 2018 (88% Spent More Than \$1 Million), Increasing Demand For Data-Centric Security / Privacy Solutions		Third Party & Software Supply Chain Will Continue To Emerge As Critical New Threat Vectors Posing Some Of The Biggest Cybersecurity Threats
	Cloud Infrastructure Security Was A Focal Point For Investors & Buyers As The Lift And Shift To Hybrid Cloud Infrastructure Rapidly Accelerated		A Volatile Stock Market And Expanding Buyer Universe Will Make Later Stage Companies View M&A As An Even More Attractive Alternative To An IPO, Further Increasing M&A Deal Volume
	Private Equity Continued Its 'Love Affair' With Cybersecurity Across Both Platform & Bolt-On Acquisitions, Including 5 Of The Top 10 M&A Deals		Security Services Providers Will Continue To Increase Market Share As More Organizations Elect To Use Managed Solutions To Alleviate Vendor Fatigue And The Growing Cybersecurity Skills Shortage

# Looking Back...Momentum Cyber's Snapshot of 2018

Another Record Setting Year For Cybersecurity With Strategic Deal Activity At An All-Time High.



**183** M&A Deals (All-Time High)  
**103%** Increase In Deals From 2010  
**30** Deals  $\geq \$100M$

**44** Completed Deals  
Private Equity ❤️'s Cybersecurity



**800M+** Users  
Large US Data Breaches Remain A Significant Issue

starwood 500M myfitnesspal 150M Quora 100M facebook 50M

**\$6.2B**  
Projected Cyber Insurance Market Size In 2020 Driven Partially By  
  
Heightened Regulation Ushers Increased Demand In Growing International Markets Such As  


**\$15.5B** Total M&A Volume  
**\$6.2B** Total VC Investments

Capital Raises	> \$100M
AnchorFree	\$295M
TANiUM	\$200M
CROWDSTRIKE	\$200M
TANiUM	\$175M
netskope	\$169M
SYNCFYD	\$100M
EMERITUS	\$100M
VENAFI	\$115M
EzeCastle	\$100M
AVAST	\$120M

2018 Median Cybersecurity Multiples  
**5.7X (2%↑)**  
EV / Rev  
Trading Comps  
**6.8X (55%↑)**  
EV / Rev  
M&A Comps

**5** IPOs  
Record Year For Cybersecurity IPOs

Cloud Infrastructure Assets in High Demand  
Spends A Total Of **\$473M** on  
RedLock & evident.io

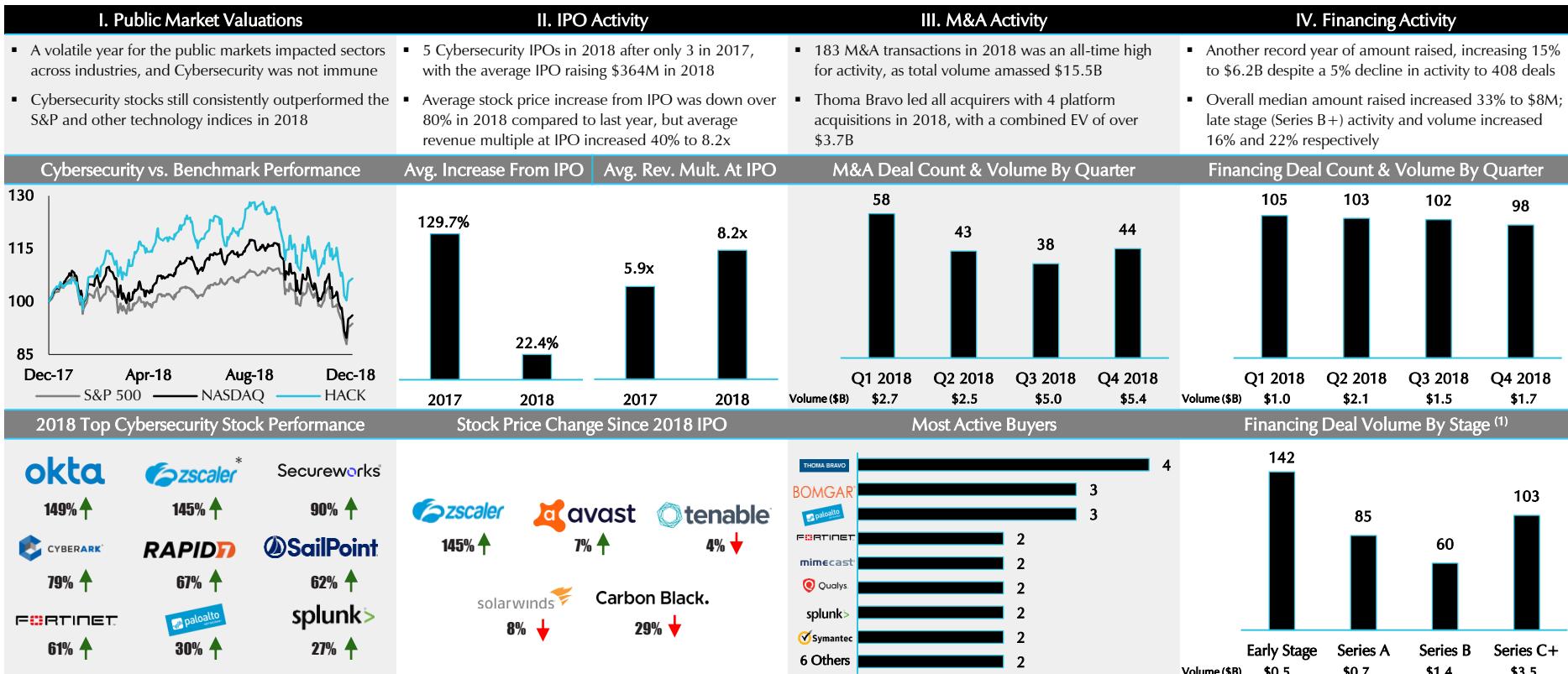
**32** IAM M&A Transactions  
Avecto, BeyondTrust, BOMGAR, Duo, InfoArmor, Lieberman Software, ThreatMetrix, Centrify, Duo Security, Proofpoint, Cisco, Duo, Wombat Security Technologies, Evident.io, RedLock, Secoo, Symantec, Splunk, Appthority, Phantom, Javelin, VictorOps, RiskSense, SafeBreach, Venafi, Verodin, XM Cyber, Zeguro

**\$6.0B**  
Transaction Volume Led By Tech Vendors

**51** Risk & Compliance Capital Raises  
FOUR18, ALIGN, BITSIGHT, Coalition, Cobalt, CORAX, cyberGRX, kennard, Panorays, Psys, PREVAILION, riskrecon, Dome9, by Check Point, Other Leading Cloud Security Vendors Aporeto, CAVIRIN, CloudConformity, CloudPassage, LACEWORK

# Cybersecurity Market Year In Review | 2018

Cybersecurity Remained One Of The Most Active Sectors Of Technology Across The Public & Private Markets.



Source: Momentum Cyber Proprietary M&A & Financing Transaction Database.

\* Since IPO

(1) Excludes grants and straight debt / loan financings. Follow-on financings (e.g., A, A1) in same year combined to represent one deal for that stage.

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# The Cybersecurity Dashboard

**\$6.2 Billion**  
2018 Financing Volume

**408**  
2018 Financing Transactions

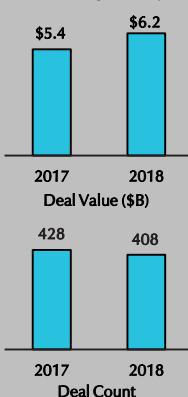
**\$15.5 Billion**  
2018 M&A Volume

**183**  
2018 M&A Transactions

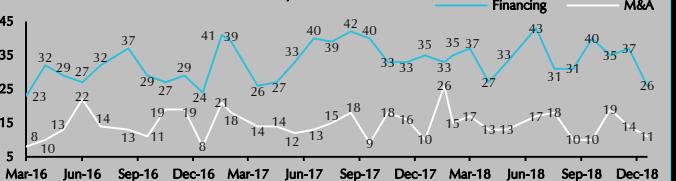
## Notable Financing Transactions 2018

Date	Company	Amt. (\$M)
09/08/18	AnchorFree	\$295.0
10/03/18	TANLUM	200.0
06/19/18	CROWDSTRIKE	200.0
05/15/18	TANLUM	175.0
06/19/18	netskope	168.7
06/19/18	CYLANCE	120.0
06/04/18	EzeCastle	115.0
05/31/18	SIGNIFYD	100.0
11/29/18	VENAFI	100.0
12/20/18	SPACEBELT	100.0

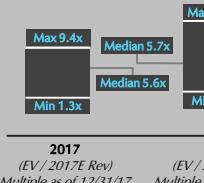
## Financing Activity



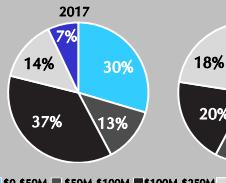
## Monthly Deal Count Pulse



## Public Comps



## Cyber M&A Volume Distribution



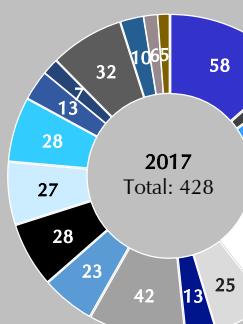
## M&A Activity



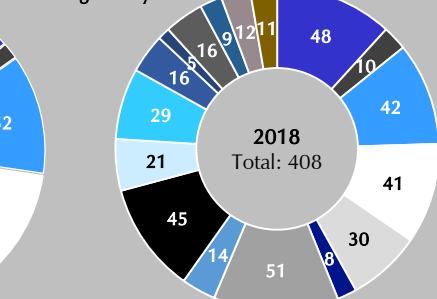
## Notable M&A Transactions 2018

Target	Acquirer	EV (\$M)
Duo	CISCO	\$2,350.0
IMPERVA	THOMA BRAVO	1,814.7
CYLANCE	BlackBerry	1,400.0
VERACODE	THOMA BRAVO	950.0
ThreatMetrix	LexisNexis RISK SOLUTIONS	830.0
BOMGAR	HPE	800.0
BeyondTrust	BOMGAR	750.0
ALLEN VAULT	AT&T	600.0
InfoArmor	Allstate	525.0
LogRhythm	THOMA BRAVO	525.0

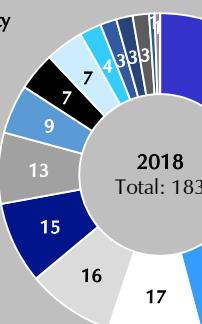
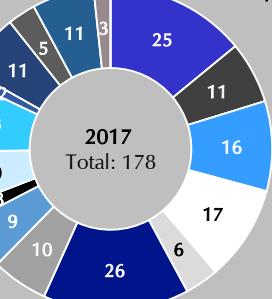
- Identity & Access Management
- Security Consulting & Services
- SecOps / IR / Threat Intel
- Network & Infrastructure Security
- Application Security
- MSSP
- Risk & Compliance
- Data Security
- Cloud Security
- IoT
- Web Security
- Mobile Security
- Fraud & Transaction Security
- Messaging Security
- Digital Risk Management
- Blockchain



## Financing Activity

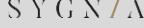
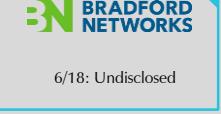
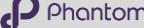


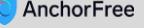
## M&A Activity

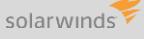


# A Summary Of Strategic Activity | 2018

Many Prominent Cyber Platforms Were In The News In 2018 For Either Being Acquired Or Raising Capital.

Selected Acquisition Activity			
(Date (M/YY): Implied Enterprise Value)			
 CYLANCE	 SECURITY MATTERS	 VERACODE	 Dome9 SECURITY
11/18: \$1,400M	11/18: \$113M	11/18: \$950M	10/18: \$175M
 IMPERVA	 SYGNUM	 RedLock	 BeyondTrust
10/18: \$1,815M	10/18: \$250M	10/18: \$173M	9/18: \$750M
 DUO	 Secure Designs, Inc. 8/18: Undisclosed (ADT was Momentum client)	 ICE B R G 7/18: Undisclosed	 ALIEN VAULT 7/18: \$600M
 Centrify	 BRADFORD NETWORKS 6/18: Undisclosed	 LogRhythm	 Iovation 5/18: \$525M
 BOMGAR	 evident.io 3/18: \$300M	 Phantom	 ThreatMetrix 3/18: \$350M
4/18: \$800M		3/18: \$350M	1/18: \$830M

Selected Financing Activity		
(Date (M/YY): \$ Raised / Funding Stage)		
 pindrop	 VENAFI	 SAM SEAMLESS NETWORK 11/18: \$12M / A (ADT was Momentum client)
12/18: \$90M / D	11/18: \$100M / G	
 netskope	 TANIUM	 Sonatype
11/18: \$169M / F	10/18: \$200M / Later Stage VC	9/18: \$80M / E
 Sysdig	 AnchorFree	 A-LIGN
9/18: \$69M / D	9/18: \$295M / Later Stage VC	7/18: \$55M / PE
 CROWDSTRIKE	 CLAROTY	 SIGNIFYD
6/18: \$200M / E	6/18: \$60M / B	5/18: \$100M / D
 IronNet Cybersecurity	 SAVIYNT	 BetterCloud
5/18: \$78M / B	4/18: \$40M / A	4/18: \$60M / E

Public Equity		
(Date (M/YY): \$ Raised)		
	Market Cap: \$4,287M 10/18: IPO: \$375M 02/16: Take Private: \$4.6B 05/09: IPO: \$151M	
	Market Cap: \$2,065M 7/18: IPO: \$288M Pre-IPO Funding: \$301M (6 Rounds)	
	Market Cap: \$3,442M 5/18: IPO: \$811M Pre-IPO Funding: \$100M (1 Round)	
	Market Cap: \$911M 5/18: IPO: \$152M Pre-IPO Funding: \$277M (11 Rounds)	
	Market Cap: \$4,793M 3/18: IPO: \$192M Pre-IPO Funding: \$183M (4 Rounds)	

Source: Momentum Cyber Proprietary M&A & Financing Transaction Database. Market data updated as of December 31<sup>st</sup>, 2018.

Note: Denotes Momentum client.

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III.

## CYBERSECURITY INDUSTRY PERSPECTIVES

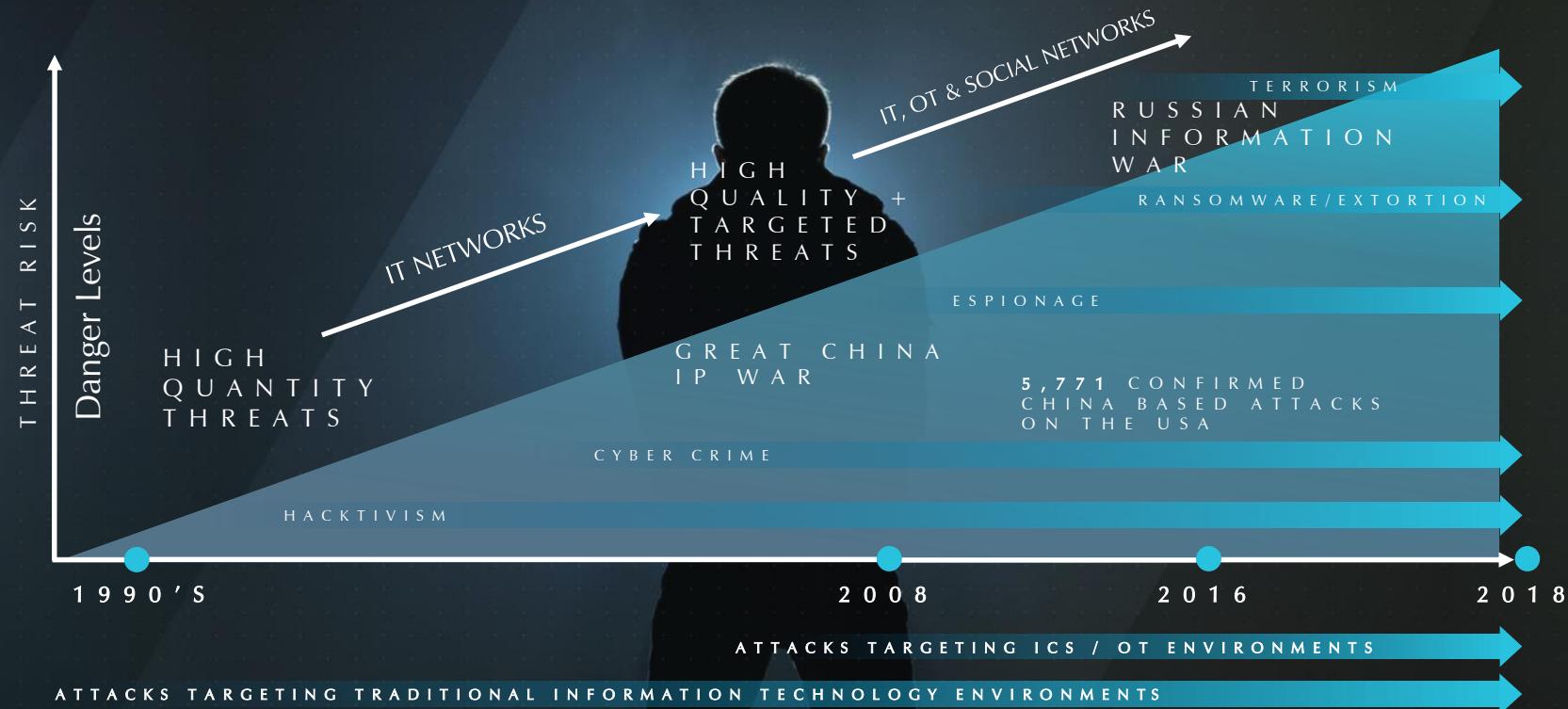
# The Perfect Cybersecurity Storm

A Combination Of Conditions Have Created The Perfect Cyber Storm & Opportunity For Innovation.



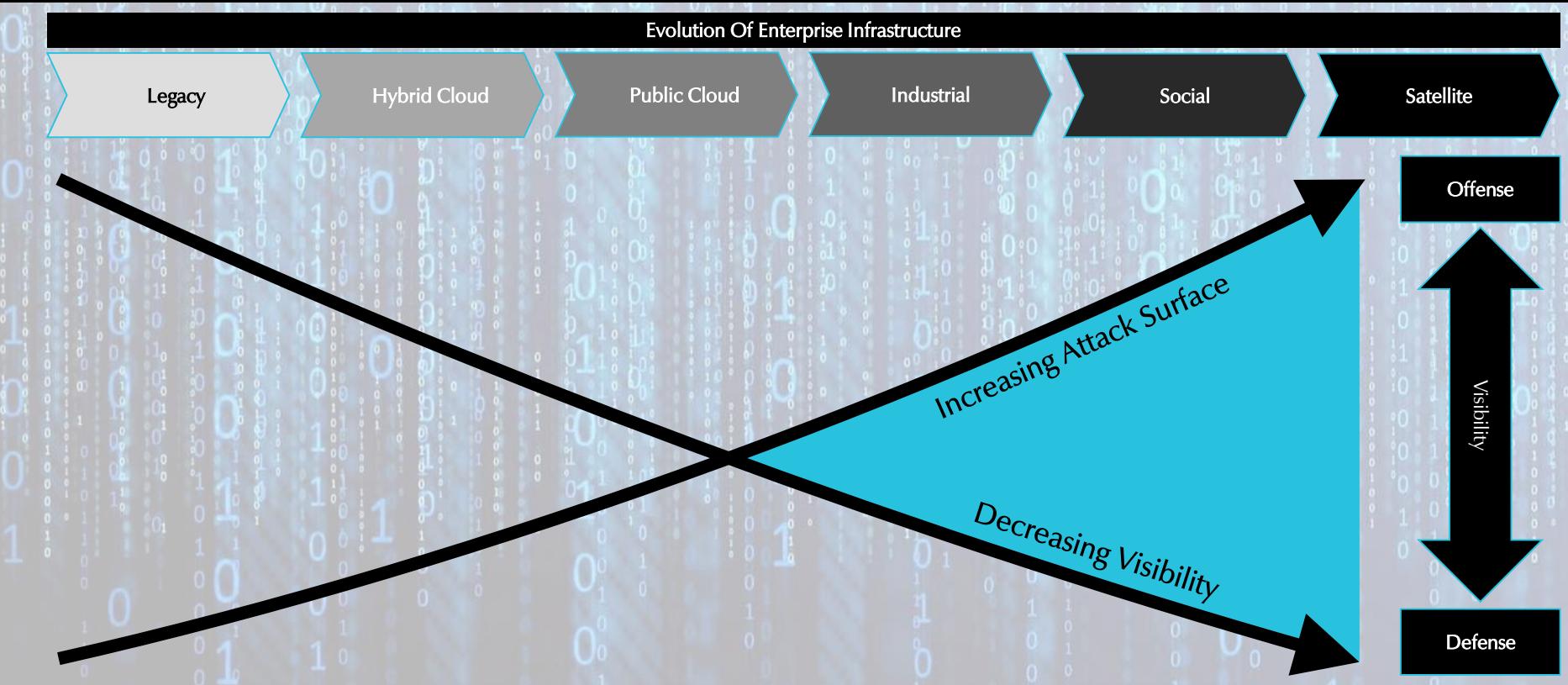
# The Evolution Of The Threat

Threats Are Growing In Risk As New Threats Emerge To Target Information Everywhere.



# Need For Visibility To Decrease Offense & Defense Cybersecurity Gap

Evolving Enterprise Infrastructure Has Greatly Reduced Visibility, Increasing The Attack Surface Over Time.



# Biggest Gaps, Biggest Innovation Opportunities

Industries Are Transitioning Away From Physical And More Toward Cyber.

## DRONES & DOMES



## INDUSTRIAL ICS & IoT DEVICES



## SOCIAL & SATELLITE NETWORKS



## CONSUMER ID & CLOUD IAAS



PHYSICAL

CYBER

# A Race For The Future ASOC Reference Architecture

Vendors Across The Landscape Are Investing In & Modernizing Their Platforms To Create A Unified Platform To Empower The SOC.

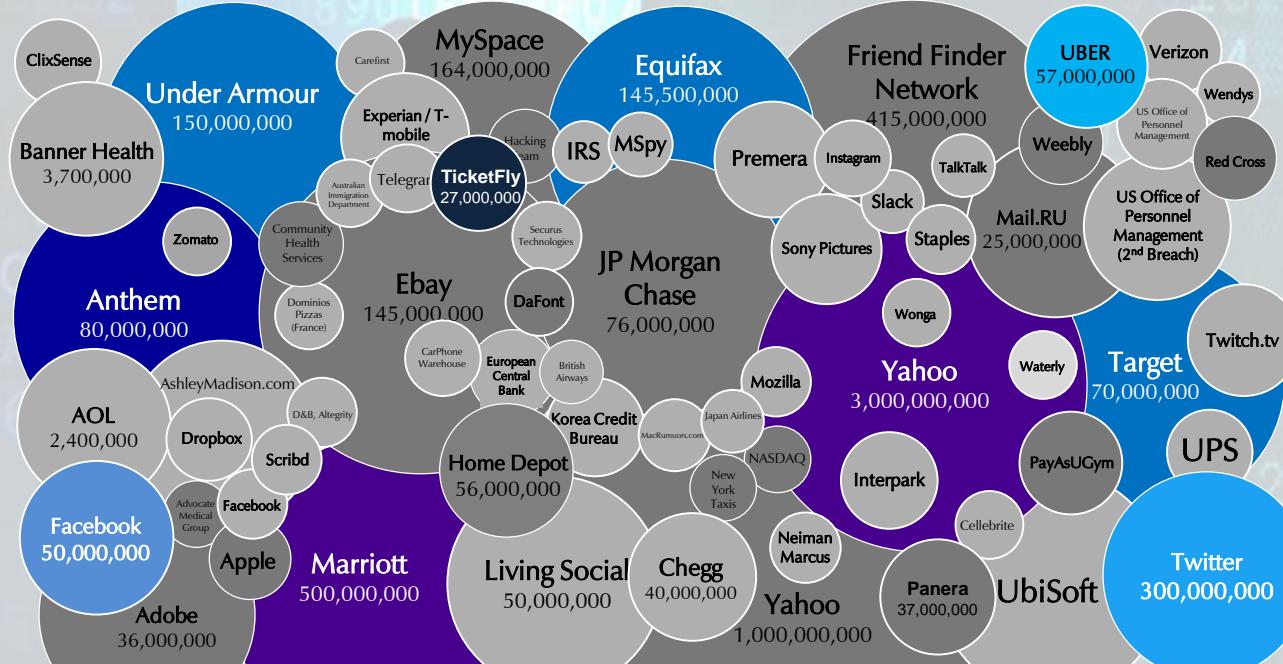
The Modernization Of Security Operation Technology   SIEM + SOAR + IR + Case Management + Analytics						Key Players & Strategic Activity		
						Platform	Selected Strategic Moves	
<b>ASOC</b>   Key Benefits								
<input checked="" type="checkbox"/> Fully Autonomous Platform That Addresses The Widening Skills Gap, Reduces Fatigue, & Improves ROI	<input checked="" type="checkbox"/> Full Enterprise Visibility: Identifies And Mitigates Advanced Threats Missed By Single (Siloed) Tools					<b>splunk&gt;</b>	Phantom 02/27/18   \$350.0M   SOAR	<b>Caspida</b> 07/09/15   \$190.0M   Analytics
<input checked="" type="checkbox"/> Faster Problem Triage: Reduction In Mean Time To Resolution (MTTR) & Alert Volume	<input checked="" type="checkbox"/> Advanced UEBA / Forensics Capabilities					<b>MICRO FOCUS</b> (ArcSight)	OEM   Analytics	<b>SECURONIX</b>
<input checked="" type="checkbox"/> Advanced Correlation & Analysis Across Multiple Customer Sources	<input checked="" type="checkbox"/> Automated Data Enrichment & Contextualization					<b>FireEye</b>	INNOTAS 02/01/16   \$28.2M   IR	<b>RANDIANT</b> 01/02/14   \$1.0B   IR
<b>ASOC   Advanced Security Operations Center</b>						<b>McAfee</b>	INTERSET OEM   Analytics	<b>Resilient</b> 02/29/16   \$145.0M   IR
Threat Monitoring	Advanced Incident Analysis	Automated Threat Intelligence	Knowledge Management	Reporting	Incident Response	<b>IBM Q-Radar</b>	Adds UEBA Application 07/29/18   Analytics	
						<b>AT&amp;T</b>	CV 07/10/18   \$600.0M   SIEM	
						<b>FORTINET</b>	ZoneFox 10/23/18   \$18.0M   Analytics	<b>acelion</b> 06/07/16   \$32.0M   SIEM
						<b>RSA</b>	<b>FORTSCALE</b> 04/05/18   N/A   Analytics	<b>DEMISTO</b> OEM   SOAR
						<b>Microsoft</b>	<b>HEXADITE</b> 06/08/17   \$100.0M   SOAR	
						<b>RAPID7</b>	<b>DIMAND</b> 07/18/17   \$14.7M   IR	
						<b>sumologic</b>	Total Amt. Raised \$235.5M	
						<b>exabeam</b>	Adds Case Management Module 09/12/18   Case Management	Total Amt. Raised \$118.0M
<b>ASOC   Advanced Security Operations Center</b>						Other Major Platform Vendors		
SIEM	SOAR	Incident Response	Case Management	Analytics		<b>bmc</b>	<b>Check Point</b>	<b>Forcepoint</b>
						<b>palantir</b>	<b>servicenow</b>	<b>cisco</b>
								<b>ivanti</b>
								<b>LogRhythm</b>
								<b>vmware</b>
<b>SOC   Security Operations Center</b>						Selected Key Vendors (Total Amount Raised)		
Empowered Autonomy	Meaningful Metrics	Knowledge Management	Countermeasure Capabilities			<b>J A S K</b>	\$39.3M	<b>D3 SECURITY</b>
Provide Oversight to Operationalize Cyber Kill Chain Solutions	Measure Effectiveness & Effort	Improve Depth of Analysis & Collaboration Across Sites	Increased Effectiveness of Countermeasures Through Knowledge Management				\$19.0M	<b>INTERSET</b>
						<b>DEMISTO</b>	\$69.0M	<b>Trustwave</b>
Activity Monitoring	Incident Analysis	Reporting	Incident Response					<b>Siemplify</b>

Source: Momentum Cyber Proprietary M&A & Financing Transaction Database.

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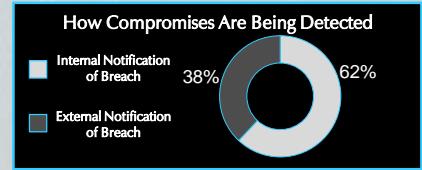
# Lack Of Visibility Increases Risk & Severity Of Breaches...

After A Record Year For Hackers In 2017, Data Breaches Still Remain An Alarming Concern Through 2018.



Median Time of Compromise to Discovery		
All Mandiant Investigations	External Notification	Internal Discovery
101 days	186 days	58 days

Source: 2018 Mandiant M-Trends Report



More than... **140 Countries** have some level of cyber weapon development program

Source: fortune.com

average cost of a **data breach** **\$3.62 Million**  
decreased 10% over the past year

Source: 2017 Study Ponemon institute

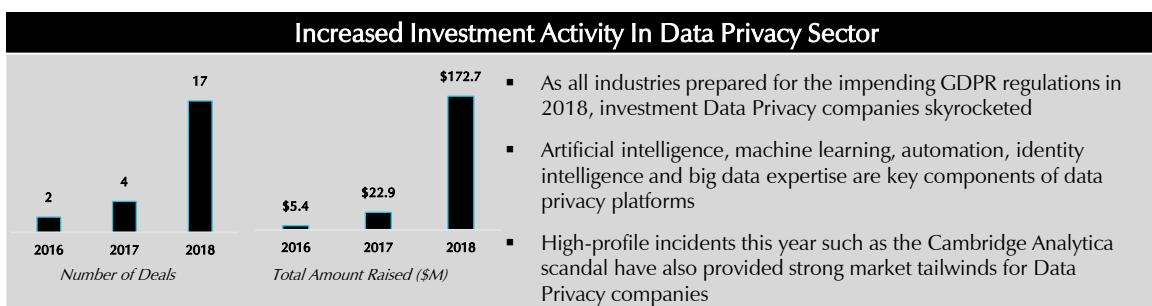
Year	2015	2016	2017	2018
# of U.S. Breaches	780	1,093 (40%) ↑	1,632 (49%) ↑	1,244 (23%) ↓

# GDPR Impact On The Data Privacy Industry

The Institution of GDPR On May 25th, 2018 Is Driving Organizations To Invest In Data Privacy Solutions.

What is GDPR?	
	<ul style="list-style-type: none"><li>GDPR is a regulation designed to enhance the protection of individuals residing in the EU as well as address the export of "personal data" outside the EU</li><li>It applies to all organizations that do business in the EU and any organization outside the EU handling EU citizens' personal data</li><li>It broadens the definition of "personal data" and includes identifiers such as genetic, mental, cultural, economic, social identity and online (IP addresses, cookies)</li></ul>

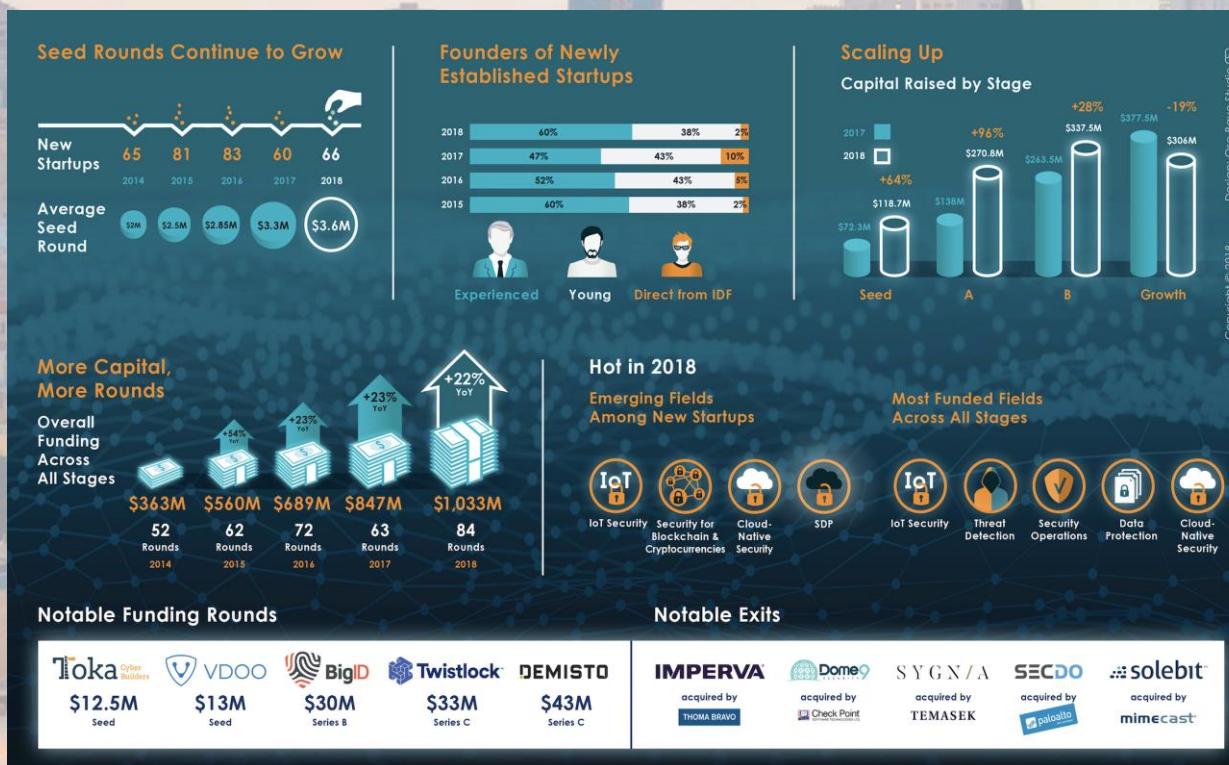
GDPR Requirements				
25 May 2018: GDPR goes into effect	Penalties: 4% of revenue or €20M (whichever is greater)	Users may request a copy of personal data in a portable format	Demonstrate enforcement of customer consent for personal data collection	Controllers must comply with breach notification windows
Satisfy customer data portability support and enable right-to-be-forgotten and erased from records	Implement adequate technical and organizational measures to protect persons' data and systems	Privacy risk impact assessments will be required where privacy risks are high	Appointment of data protection officer (DPO) will be mandatory for companies processing high volumes of personal data	



Representative Companies With GDPR Solutions				
Company	Founded	HQ	Amount Raised (\$M)	CEO
FAIRWARNING	2005	Clearwater, FL	\$61.1	Pat Marschall
BigID	2015	Tel-Aviv, Israel	\$46.2	Dimitri Sirota
PROTENUS	2014	Baltimore, MD	\$19.0	Nick Culbertson
wirewheel	2016	Arlington, VA	\$13.1	Justin Antonipillai
INTEGRIS SOFTWARE INC.	2016	Seattle, WA	\$13.0	Kristina Bergman
trunomi	2013	London, UK	\$11.8	Stuart Lacey
evident	2015	Atlanta, GA	\$9.0	David Thomas
minereye	2014	Ganei AM, Israel	\$6.1	Yaniv Avidan
PRIFENDER	2015	Bellevue, WA	\$5.0	Nimrod Luria

# The State of Israel's Cybersecurity Market

Israel's Cybersecurity Industry Continues Its Tremendous Growth.



Yoav Leitersdorf  
Managing Partner



Ofer Schreiber  
Partner



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“Early stage companies raised more money than ever before to tackle emerging security threats like protecting the proliferating number of internet-connected devices and enabling blockchain technologies to thrive in more secure environments.”

“

In 2018, the total amount of funding for Israeli Cybersecurity companies across all stages grew 22 percent year-over-year to \$1.03B. This closely matched the funding trends of 2016 and 2017 that each saw 23 percent year-over-year growth in funding amount. At the same time, 2018 saw 66 new companies founded, an increase of 10 percent over 2017, which represented a rebound after a dip last year (60 new companies in 2017 vs. 83 in 2016).

“

The top emerging fields among new startups in 2018 included new verticals within IoT security, security for blockchain and cryptocurrencies, cloud-native security and SDP (Software Defined Perimeter). These nascent verticals drew considerably more attention than more “traditional” cyber sectors such as network security, email security and endpoint protection.

“

In 2018, investors became more domain-focused and preferred emerging fields.

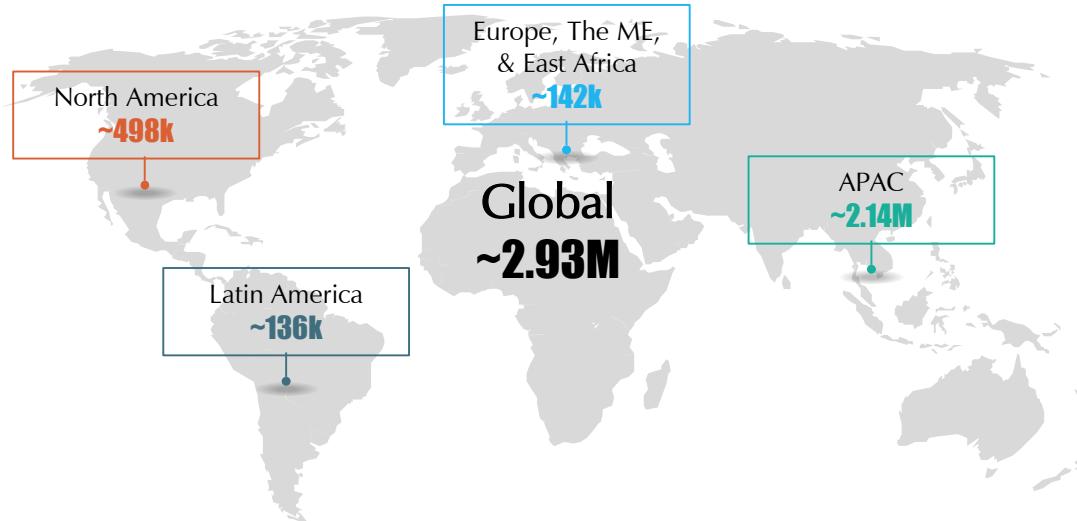
With traditional cybersecurity consolidating, emerging greenfields signal much stronger potential. Furthermore, growth continued both in cybersecurity startups as well as their fundraising across all stages, indicating rising confidence in the Israeli Cybersecurity market...For 2018, as has been the case for many years past, the state of the cyber nation is strong—and 2019 appears to promise more of the same.

“

# Cybersecurity Labor Market Landscape

Large Demand For Cybersecurity Expertise While Global Cybersecurity Talent Shortage Persists Due To A Multitude Of Factors.

Global Workforce Shortage By Region



Top Needed Cybersecurity Areas Of Expertise

Security Awareness	Risk Assessment & Analysis	Security Administration	Network Monitoring
Incident Investigation & Response	Intrusion Detection	Cloud Security	Security Engineering

Top Challenges Preventing Key Cybersecurity Initiatives



- Low Security Awareness Among End Users



- Not Enough Skilled Cybersecurity Professionals Available



- Inadequate Funding



- Too Much Data To Analyze



- Lack Of Management Support / Awareness

Top Career Progression Challenges In Cybersecurity



- Unclear Career Paths



- Lack Of Knowledge By Organizations About Skills



- Cost Of Cybersecurity Certifications



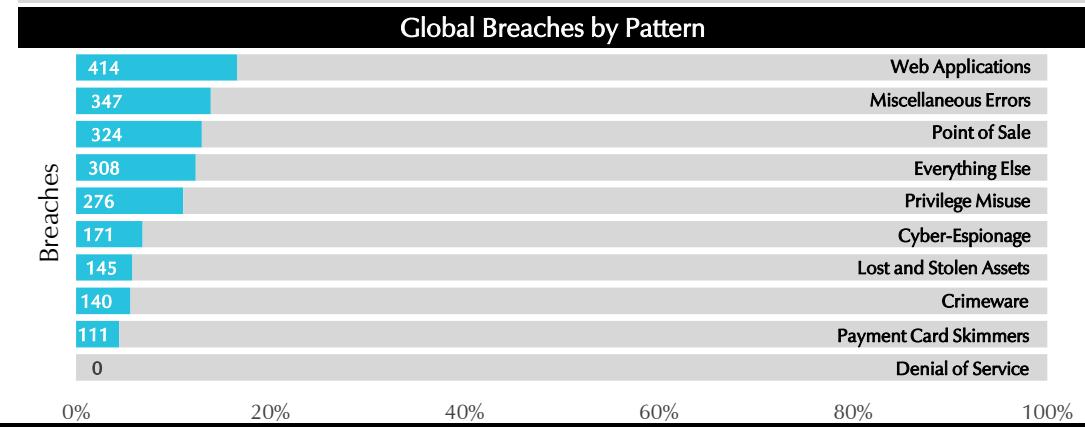
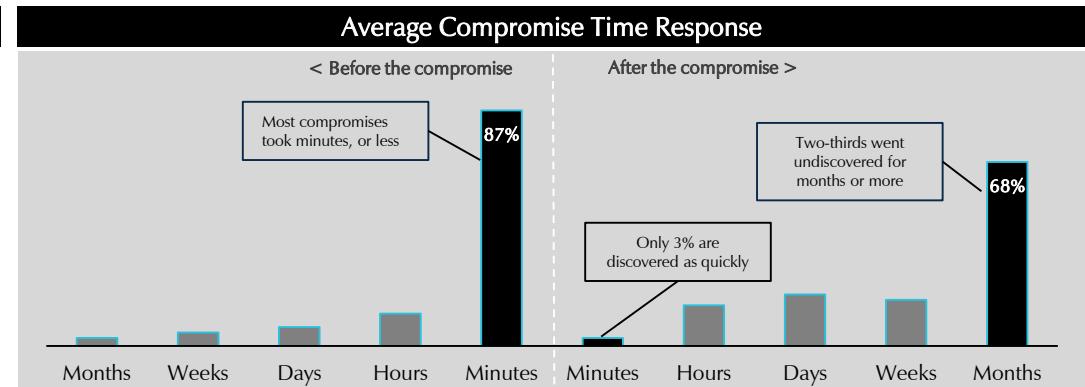
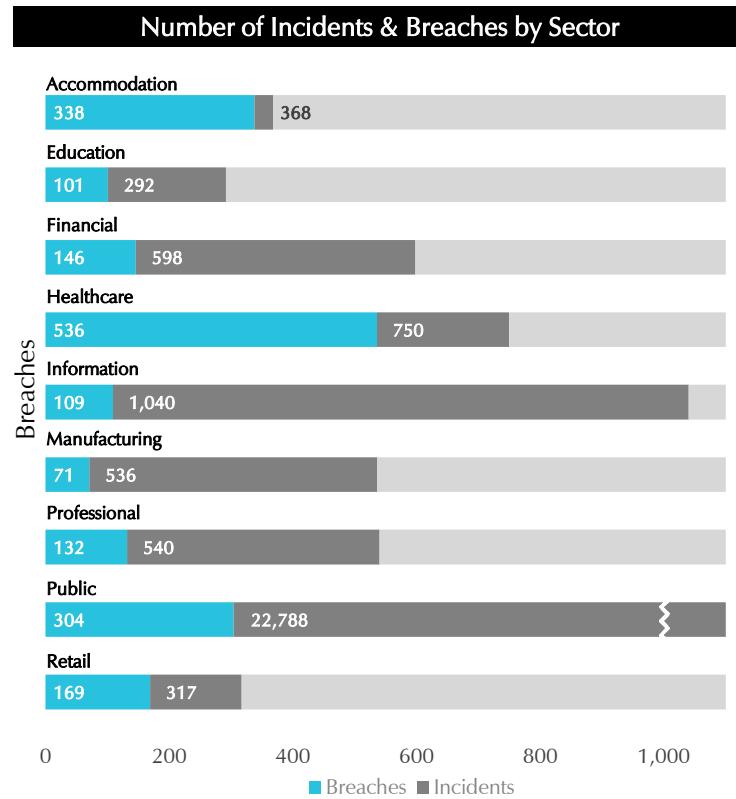
- Cost Of Formal Education



- Not Enough Job Experience

# Verizon 2018 Global Data Breach Investigations Report

Data Breaches Are Prevalent Across Industries, While Detection Of Threats Continue To Significantly Lag From Time Of Breach.



# California Consumer Privacy Act (CCPA) vs. GDPR

With A Compliance Deadline Of January 2020, California Organizations Should Be Aware Of The Broad New Privacy Requirements.

CCPA Overview	Representative Data Security Vendors
<p>In June 2018, California's state legislature unanimously passed a new data privacy bill that will institute stringent regulations that are entirely new to the United States. This bill sets a significant precedent in the US, following GDPR's activation in May 2018, and during a time when data privacy continues to be a hot-button topic in the media and with lawmakers. The bill will become operative on January 1, 2020, and affects organizations that serve or employ California residents.</p>	   

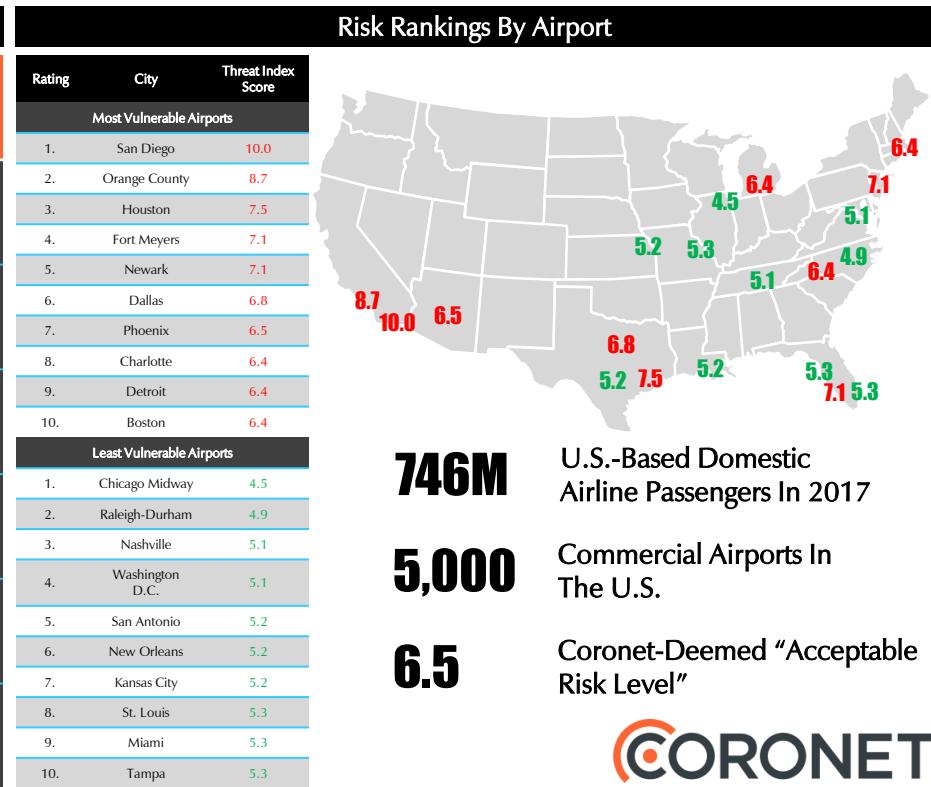
## CCPA Comparison to GDPR

	General Data Protection Regulations (GDPR)	California Consumer Privacy Act (CCPA)	CCPA Comparison
Scope	EU personal data processed	California resident's personal data collected	Narrower
Right To Access	Right to access all EU personal data processed	Right to access California personal data collected in last 12 months, delineated between sold and transferred	Narrower
Right To Portability	Must export and import certain EU personal data in a user-friendly format	All access requests must be exported in user-friendly format, but there is no import requirement	Narrower
Right To Correction	Right to correct errors in EU personal data processed	No included in CCPA	Absent
Right To Stop Processing	Right to withdraw consent or otherwise stop processing EU personal data	Right to opt-out of selling personal data only; must include opt-out link on website	Narrower
Right To Stop Automated Decision-making	Right to require human to make decisions that have a legal effect	No included in CCPA	Absent
Right To Stop Third-Party Transfer	Right to withdraw consent for data transfers involving second purposes of special categories of data	Right to opt-out of selling personal data to third parties	Narrower
Right To Erasure	Right to erase EU personal data, under certain conditions	Right to erase personal data collected, under certain conditions	Similar
Right To Equal Services And Price	At most, implicitly required	Explicitly required	Broader
Private Right Of Action Damages	No floor or ceiling	Floor of \$100 and ceiling at \$750 per customer per incident	Narrower
Regulator Enforcement Penalties	Ceiling of 4% of global annual revenues	No ceiling – \$7,500 per intentional violation, \$2,500 per negligent violation	Broader

# U.S. Airport Networks Putting Devices & Cloud Apps At Severe Risk

Wi-Fi Vulnerability At Airports Poses A Severe Threat To Devices & Cloud Applications.

Summary		
A study published by Coronet ranked the top 45 busiest airports in the U.S. by their current cyber risk landscape, with a threat index score of 10 being the most vulnerable airport		
	<ul style="list-style-type: none"><li>Airport security risks were evaluated by analyzing device and network vulnerabilities and how insecure or deceptive networks can exploit endpoint devices</li></ul>	
	<ul style="list-style-type: none"><li>Study found that the majority of U.S. airports have focused more on providing a low-cost Wi-Fi solution to maximize traveler experience, in lieu of prioritizing Wi-Fi security</li></ul>	
	<ul style="list-style-type: none"><li>Free airport Wi-Fi networks are often left unencrypted, unsecured, or improperly configured</li></ul>	
	<ul style="list-style-type: none"><li>Business travelers unintentionally share information from cloud-based applications with hackers, providing an entry point to their broader organization</li></ul>	
	<ul style="list-style-type: none"><li>Key Reinstallation Attacks (KRACK), Captive Portals, Evil Twins, ARP Poisoning, VPN Gaps, Honeypots and Compromised Routers are examples of airport network vulnerabilities</li></ul>	
	<ul style="list-style-type: none"><li>CASB and Application Security vendors provide an additional level of protection against these security threats, while considering an airport's risk probability is also important to minimize risk</li></ul>	



# OPTIV + Momentum CYBER | Whitepaper Summary

Momentum And Optiv Published A Joint Whitepaper To Highlight Ways Organizations Can Improve Their Technical And Operational Efficiency.

## 'E' Is For Efficiency: Five Trends To Relieve The Cybersecurity Skills Shortage

### Whitepaper Overview

This report is advantageous for any organization that has experienced inefficiencies with their complex cybersecurity infrastructure, and demonstrates Optiv's thought leadership as an expert in helping companies build end-to-end cybersecurity solutions. Optiv helps clients plan, build and run successful cyber security programs that achieve business objectives through our depth and breadth of cyber security offerings, extensive capabilities and proven expertise in cyber security strategy, managed security services, incident response, risk and compliance, security consulting, training and support, integration and architecture services, and security technology. Optiv maintains premium partnerships with more than 350 of the leading security technology manufacturers.

Challenges			Key Stats					
Technical Efficiencies			Operational Efficiencies					
Efficiency	Commentary	Representative Vendors	Efficiency	Commentary	Representative Vendors			
1 Machine Learning	<ul style="list-style-type: none"> <li><b>Expanding Attack Surface:</b> Security risks to organizations are becoming increasingly complex with the addition of cloud, mobile, social media, IoT, and big data</li> <li><b>Disparate Solutions:</b> Organizations are unable to sufficiently configure, tune, or monitor each disconnected security solution</li> <li><b>Cybersecurity Skills Talent Shortage:</b> Triage events and hiring more staff are not an option</li> </ul>	     	75	Average # Of Security Tools Per Enterprise Environment	1.8M	Forecasted Security Staffing Shortages In The US By 2022	96%	Reduction In Triage Alert Time W/ Automation, Orchestration Tools
2 Platform Consolidation	<ul style="list-style-type: none"> <li>Consolidating the functionality of the security infrastructure into a single platform</li> <li>Working with expert solution architects can help organizations ensure they are maximizing the efficiencies of these integrated platforms</li> </ul>	      	3 Security Integration	APIs allow data to flow between applications, extending native capabilities	DEMISTO	IBM	  	
			4 Automation and Orchestration	Automation and Orchestration tools augment threat prioritization, capability amplification, labor reduction, and consistent workflow	  		  	
			5 Continuous Security Validation	Vital for security infrastructures that are constantly changing, and used to identify ill-advised or poorly planned changes	  		 	

# Optiv | Momentum

## Cyber White Paper:

# ‘E’ Is For Efficiency



A large, dark, grayscale image of an open book is visible in the background, showing text on both pages.

E'

A large, white, stylized letter 'E' is centered within a thin, light gray circle. This circle is itself centered within a larger, slightly darker, concentric circle.

is for  
ef·fi·cien·cy

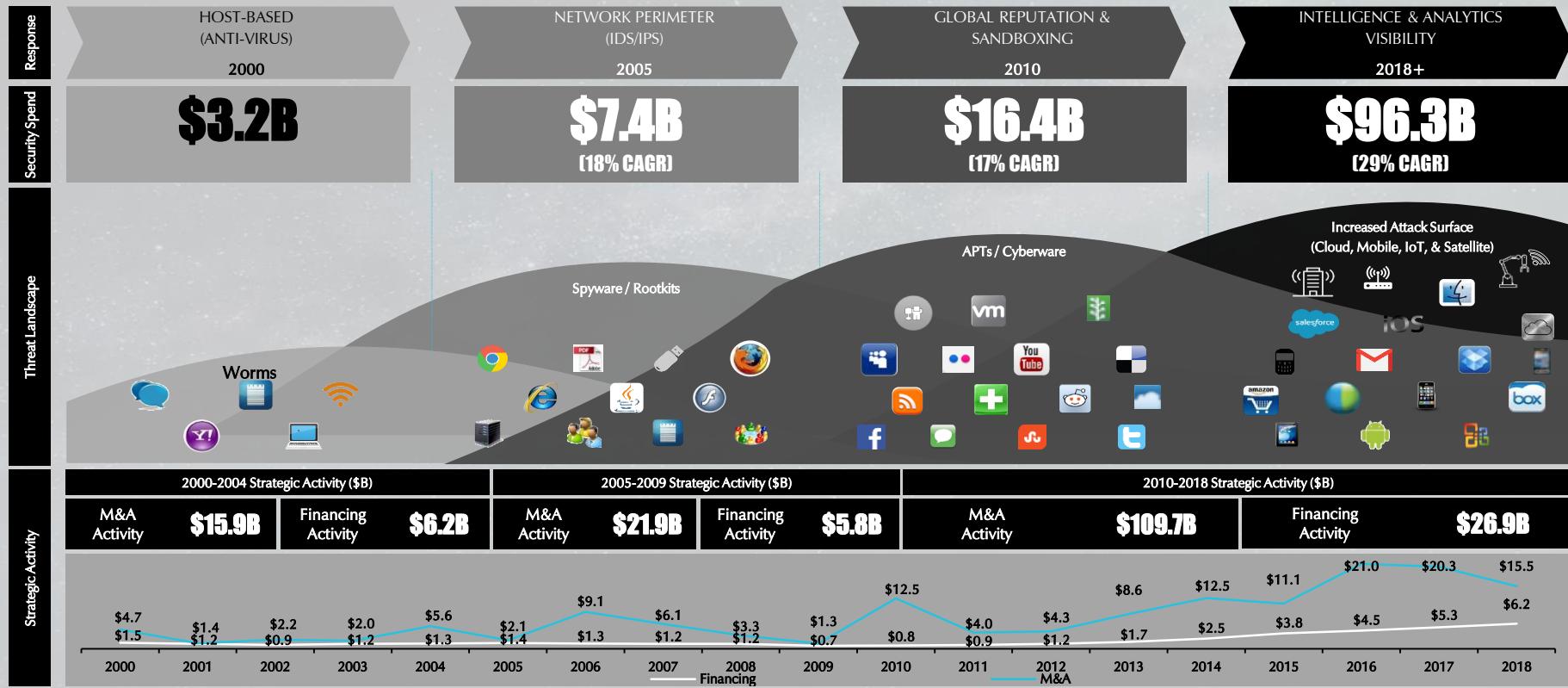
# In·tro·duc·tion

Efficiency has become the most sought after outcome for security operations teams. The ideal state is a self-learning environment with automated analysis, triage, and remediation. Full attainment of this ideal will likely forever remain out of reach, however incremental improvements in operational efficiencies are well in reach. Nevertheless, unknowingly, many security operations teams seeking improvements move in an opposing direction, negating the efficiencies they were aiming to gain.

Organizations have too many tools, few of which are integrated, generating too many alerts for understaffed teams to triage. Strategies like this may have worked in the past to achieve incremental improvements in the efficacy of the security program, but they are not guaranteed to continue working in the future.

Add to this the fact that cloud, mobile, social media, IoT and big data have profoundly expanded the attack surface in the latest cyber super cycle, and it's no surprise organizations continue to increase the number of tools in their security infrastructure. Also no surprise is the amount of cybersecurity spending growing at over a 29% CAGR (Momentum Cyber) yet organizations are barely keeping up with the increasing threat landscape.

# Cybersecurity Spending Is Growing At Over A 29% CAGR Yet Organizations Are Barely Keeping Up With The Increasing Threat Landscape.

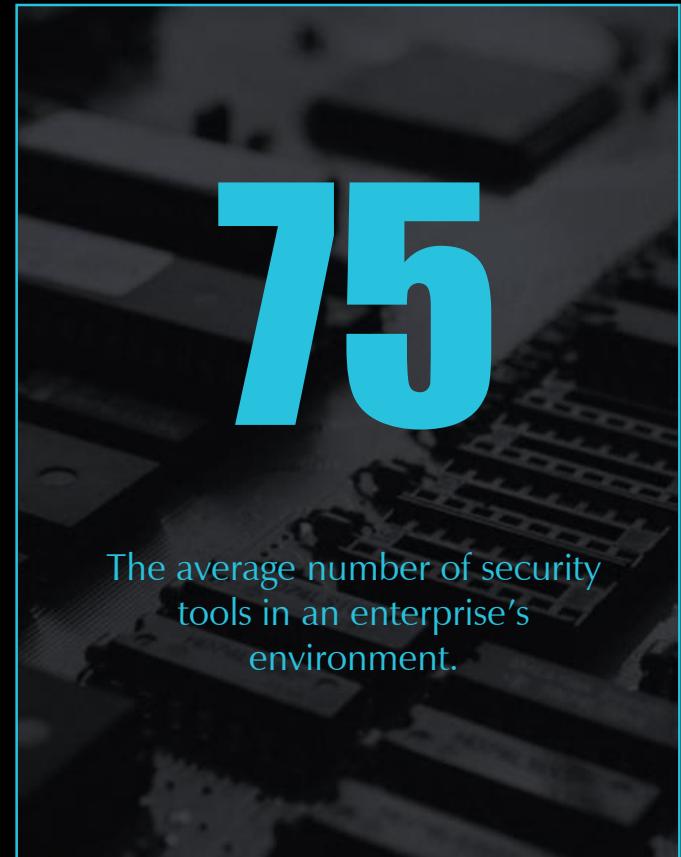


*Source: Momentum Cyber Proprietary M&A & Financing Transaction Database.*

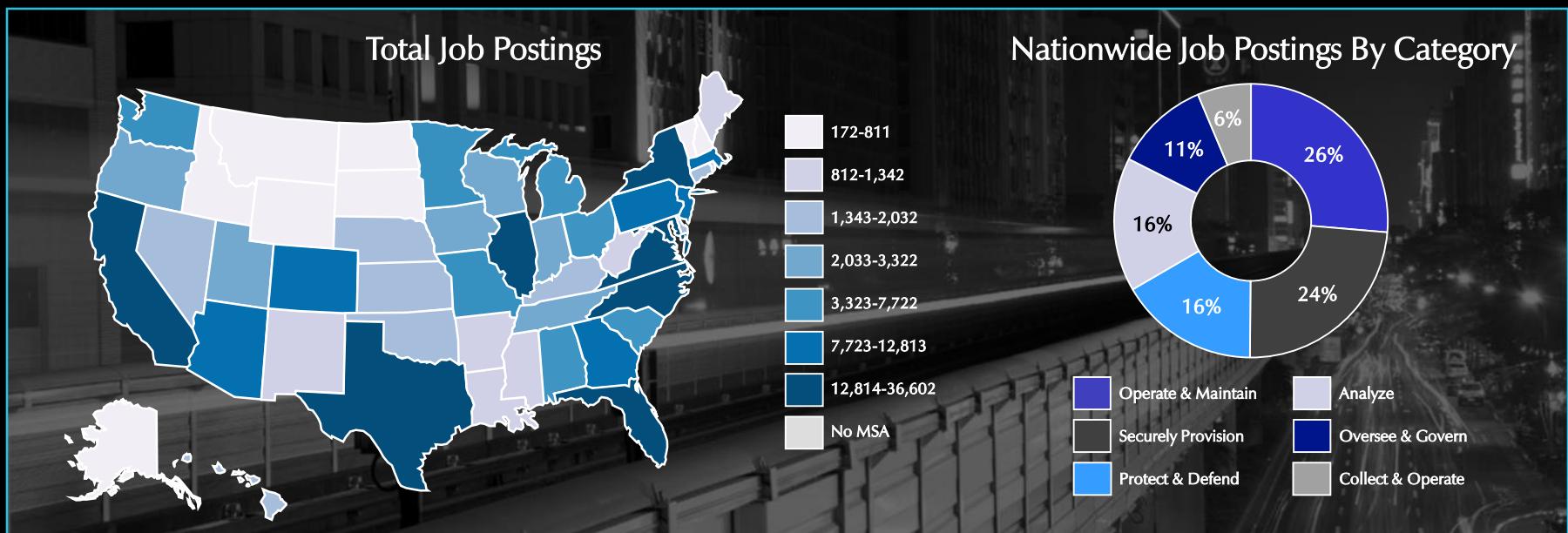
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Optiv regularly observes client security operations built from a patchwork of multiple-dozens of different tools. Organizations don't have enough resources to configure, tune, and monitor the toolsets that comprise their security infrastructure. CSO Online states the average enterprise is running 75 security tools in their environment. Meanwhile, all of these diverse toolsets create data and alerts without context of the environment as a whole.

The strategy of adding new tools to solve each new problem cannot continue. Take for example the universal movement to add SIEMs to the security stack. SIEMs were one of the first tools to attempt to ingest, aggregate, and normalize all of the logs being created in an environment. SIEMs have proven to be essential technology for the initial aggregation of data, however, there are limitations on the degree that organizations have been able to operationalize the technology for triaging true positive security events.



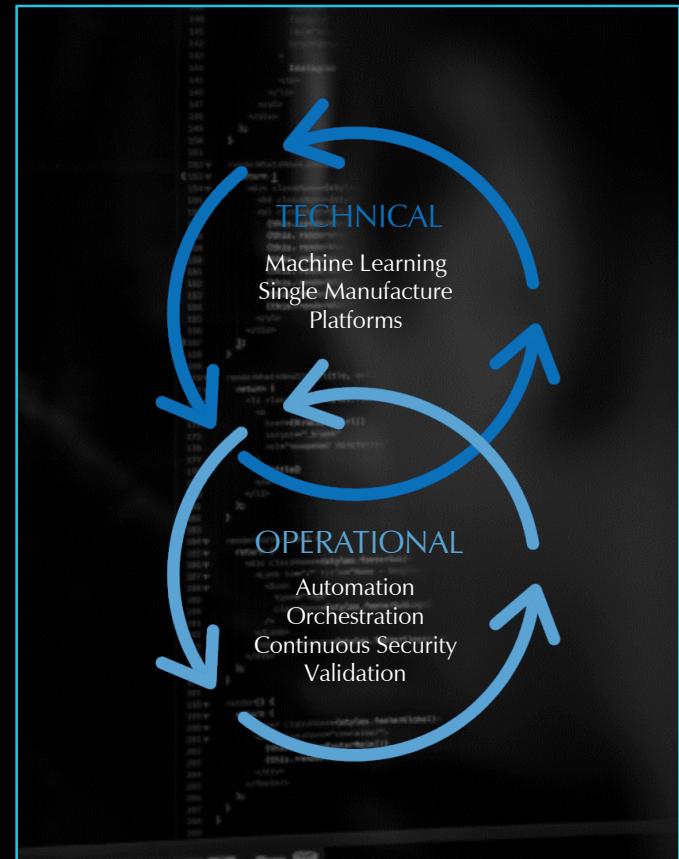
Triaging events involves several repetitive low value tasks that grow exponentially with each new alert. Human error and oversight increases as the backlog of alerts pending triage grows. Even with a SIEM in place, triage will still involve manually logging into multiple systems to gather additional information. Adding more staff won't help, even if you can find skilled resources to hire. According to recent studies, there is a **Cybersecurity talent gap** that exists across the entire country, where security staffing shortages are currently at approximately 747K (Momentum Cyber 2018 Almanac) and projected to hit 1.8 million by 2022 (Global Information Security Workforce Study).



How does an enterprise get out of this cycle of adding disparate tools and a growing backlog of alerts? To overcome these problems security operations teams must focus on technical and operational efficiencies. Efficiencies can be gained in different ways and to varying degrees based on the approach taken.

Technical efficiencies can be gained by keeping the existing solutions in the environment up to date and utilizing the new feature sets that manufacturers have introduced, namely including **machine learning**. Where possible, gains can also be made by embracing **single-manufacturer platforms**, however this is difficult for most organizations that purchased based on best-of-breed capabilities.

Operational efficiencies can be gained through integration, which allows for **automation** and **orchestration**. Once these gains have been realized, to maintain operational efficiencies, organizations should embrace continuous security validation.



# Machine Learning

**Machine Learning (ML) and other Artificial Intelligence (AI) approaches have become a “table stakes” feature in Cybersecurity toolsets.**

Applying machine learning within the cyber security problem space is no longer a niche solution confined to a single use case. ML capabilities are being implemented in every security tool category. ML/AI technologies can recognize patterns and outliers that humans cannot efficiently analyze. Complementing the deluge of security alerts, ML operates best at scale. Security tools and analysts make thousands of decisions daily. ML accelerates the decision-making process. The efficiencies gained by accelerating the decision-making process is the outcome CISOs are seeking.

## OPTIV RECOMMENDS:



Focus on utilizing ML technologies across the security environment. Enabling ML features can accelerate the decisions made during prevention, detection and response more effectively than adding resources or new toolsets. **Focus on the where ML can save time and improve performance and less on deciphering mathematical algorithms and the learning processes that drive the models.**

According to Gartner, by 2018, **25% of security products used for detection will have some form of machine learning built into them.\*** This forecast was made in 2016, and we would argue that perhaps Gartner will be proven conservative based on what we are seeing in the market. Security technology firms are scrambling to advance native ML/AI capabilities or acquire companies toward that objective. While the universe of independent ML/AI players in security is shrinking for this reason, Optiv sales for a representative group of ML/AI specialists increased more than 100% in 2017. \*Gartner: The Fast-Evolving State of Security Analytics, 2016, April 2016, Refreshed August 2017.

# A Single Platform

**In many cases, Cybersecurity manufacturers are trying to build in efficiencies by bringing all the capabilities of the security infrastructure into a single platform.**

In this scenario, they help organizations advance toward efficiency by attempting to consolidate functionality into their eco-system of products. Companies like McAfee, Symantec and Cisco have been doing this for years. Palo Alto Networks, Qualys and VMWare have been aggressively acquiring and building new features, creating their own platforms. This trend is also evident in the endpoint security space. Crowdstrike and Cylance are expanding their product offerings from their original single use technologies into platform technologies. The degree that an enterprise will be able to take advantage of platforms to gain efficiencies will vary based on prior purchasing behavior. An enterprise that pursued vendor consolidation and selected a platform provider has the ability to utilize integrations available within the eco-system. Those that used best-of-breed selection criteria will have to pursue third-party integration solutions.

## OPTIV RECOMMENDS:



To realize the efficiencies of an interconnected platform, organizations should ensure they are fully utilizing the integration capabilities that the platform enables. Software and or policy updates are usually required to access the connectivity features of each point product. Working with an expert solution architect will provide a jump start for organizations seeking to take advantage of these advanced feature sets.

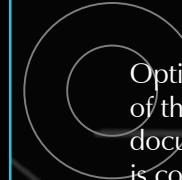
# Security Tech. Integration

**It is inherently inefficient to review alerts and gather data from several systems for every new alert.**

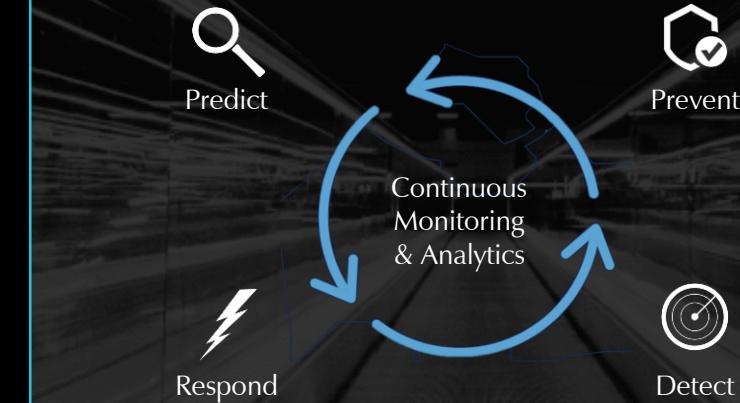
Yet, this activity is commonplace. Even with the assistance of SIEMs aggregating and enriching data with threat intelligence, effective triage still requires an abundance of manual information gathering. Often this requires logging into and reviewing data in several consoles. As an alternative to manually extracting data, most cyber security technologies have Application Programming Interfaces (APIs). Solution providers claim that security practitioners can just tap into the API, where data can be pushed or pulled, to achieve outcomes that extend the system's native capabilities. While the potential of creating an integrated solution exists, it can be difficult to achieve.

Imagine a truly integrated security stack, where for example endpoint technologies could give data to network technologies and vice versa, to take action. Aggregated threat intelligence could automatically provide enforcement and containment capabilities in real time by providing policy updates based on collected artifacts with no humans involved. Commonplace scenarios, such as an infected endpoint that is beaconing to a known command-and-control host, could kick off network and host firewall containment actions. Automated remediation could even be realized by instantly kicking off a reimaging task.

## OPTIV RECOMMENDS:



Optiv has found that while most tools have APIs, many of the APIs are limited, some do not have adequate documentation or simply do not work in a manner that is congruent with the goals of the integration. Buyers should increase the weight of the importance of API functionality when performing product selection.



The rise of cloud and API centric ecosystems drive adaptive architecture.

# Automation & Orchestration

**Security Automation and Orchestration (SAO) tools create efficiencies in the movement of data between toolsets.**

SAO tools are rapidly being included into traditional SIEM/analytics feature sets. The benefits of implementing these tools can include threat prioritization, capability amplification, labor reduction, and consistent workflow.

The major incumbents in the SAO sector include IBM (Resilient), Splunk (Phantom), and Microsoft (Hexadite) while some of the top private contenders include Demisto, D3 Security, Siemplify, and Syncurity.

Driven by the aforementioned benefits, SAO is a rapidly growing component of security services and technology portfolio. Optiv is seeing investments in this area growing in triple-digits percentage growth.

## SECURITY OPERATIONS & INCIDENT RESPONSE

The cyber talent shortage and increasing cyber threat landscape will accelerate the move toward Orchestration and Automation of SOC activities.



Organizations with a security team larger than five people will leverage SAO tools for orchestration and automation reasons, up from less than 1% today.

The SAO market size is expected to grow more than double by 2021 to \$1.7B



## Security Tech. Integration

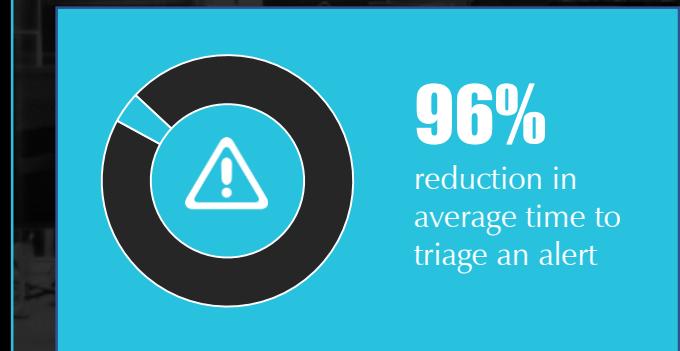
One Optiv client observed substantial improvements in security operations effectiveness over 3 months. **Optiv research found a 96% reduction in the average time to triage an alert after implementing automated workflows.** With automated alert processing, and the seamless integration of additional decision analysis (including external threat intelligence), false positives were reduced to a minimum. Alert prioritization further improved SOC analyst productivity. Not surprisingly, the average time to detect critical alerts drastically improved by approximately with an order of magnitude. More accurate, higher fidelity alert generation created a decision advantage.

These observations are further supported by independent analysis from Ponemon which confirms the benefits of cyber automation. Ponemon calculates these tools can reduce by 80% the hours spent evaluating intelligence, sifting through false positives, and remediating infected devices. (Source: Ponemon Reducing Cybersecurity Costs & Risk through Automation Technologies (November 2017)).

Lastly, not only are security operators highly valuing the use of these technologies, but investors are also seeing handsome returns for their SAO portfolio companies. **Most notably and recently, Phantom Cyber exited for \$350M to Splunk, which followed Hexadite's \$100M exit to Microsoft.**

## OPTIV RECOMMENDS:

While SAO tools represent a powerful capability, creating the individual playbooks and responses can take enormous amounts of development time using trial and error methods. It is highly recommended that organizations use a partner that has experience, having built and tested these integrations across a wide selection of diverse environments.

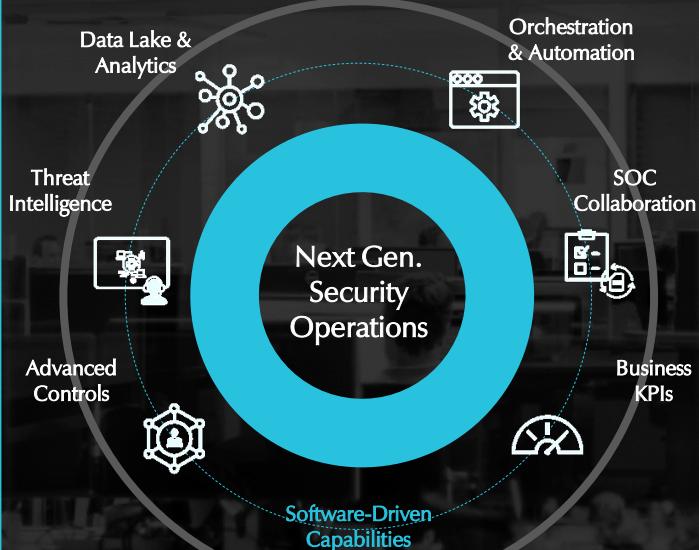


## Security Tech. Integration

Security Automation and Orchestration (SAO) increase efficiency, analyst capabilities and quality in the following areas:

- ✓ Threat Prioritization- Contextualized prioritization of threats
- ✓ Capability Amplification (CA)
- ✓ 3D (Data Driven Decisions)
- ✓ Consistency- Containment, machine driven methodology and speed
- ✓ Complex and unique detection capabilities
- ✓ Integration of tools
- ✓ Broken access
- ✓ Workbench- Efficient, unified user interface and case management
- ✓ Labor Reduction > Improved KPIs

## AUTOMATION &amp; ORCHESTRATION

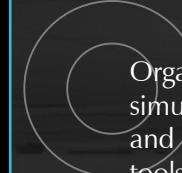


# Continuous Security Validation

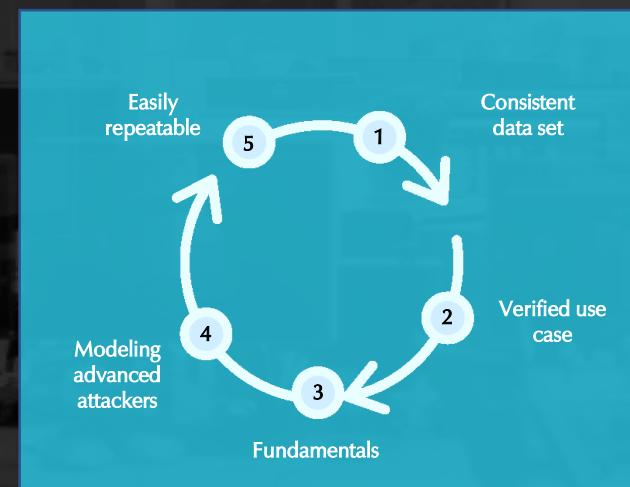
Even after operational baselines have been achieved, most organizations will still be impacted by drift over time.

Changes to infrastructure and security controls are almost a daily occurrence. Unfortunately, regression testing and configuration management against those changes is infrequent. When regression testing is performed, it proves to be very difficult, manual and time consuming. Over time, ill-advised or poorly planned changes to the security infrastructure without validating the controls, have been the causes of some of the largest breaches. Continuous Security Validation (CSV) tools are a more efficient alternative to manual regression testing. **The major incumbents in the Attack Simulation and Continuous Security Validation sectors include Rapid7 (Metasploit), Verodin, and Qualys while some of the next generation privately funded contenders include Attack IQ, RiskSense, SafeBreach, XM Cyber, and Cronus Cyber.**

## OPTIV RECOMMENDS:



Organizations can gain efficiencies by running attack simulations that validate the controls in place before and after changes are made in the environment. CSV tools can also be used when new security technologies are deployed in the environment to validate that the technology is properly configured.



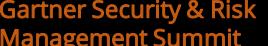
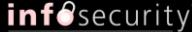
# Conferences

# & Events | 2019



# Major Industry Conferences | 2019

Momentum Cyber Will Be Attending & Speaking At A Number of Cybersecurity Conferences Worldwide.

 <p><b>CYBERTECH TLV</b> THE EVENT FOR THE CYBER INDUSTRY January 28-30, 2019 Tel Aviv, Israel Tel Aviv Convention Center</p>	<ul style="list-style-type: none"><li><b>Cybertech</b> is the most significant conference and exhibition of cyber technologies outside of the United States, bringing together global corporates, SMBs, start-ups, investors, experts, and clients</li></ul>	 <p><b>Gartner Security &amp; Risk Management Summit</b> June 17-20, 2019 National Harbor, MD Gaylord Convention Center</p>	<ul style="list-style-type: none"><li><b>Gartner Security &amp; Risk Management Summit</b> provides attendees with proven practices and strategies needed to maintain cost-effective security and risk programs to support digital businesses</li></ul>
 <p><b>RSA® Conference</b> March 4-8, 2019 San Francisco, CA Moscone Center</p>	<ul style="list-style-type: none"><li><b>RSA Conference</b> provides an opportunity to learn about new approaches to info security, discover the latest technology and interact with top security leaders and pioneers</li></ul>	 <p><b>TEAM8 rethink cyber</b> June 19-23, 2019 Tel Aviv, Israel</p>	<ul style="list-style-type: none"><li><b>Team8's Rethink Cyber CIO &amp; CISO Summit</b> provides opportunities for exclusive meetings with security pioneers, sessions led by Team8's Research Labs, CISO-to-CISO discussions, and start-up-led workshops</li></ul>
 <p><b>GLOBAL CYBER INNOVATION SUMMIT</b> May 1-2, 2019 Baltimore Maryland Sagamore Pendry Hotel</p>	<ul style="list-style-type: none"><li><b>Global Cyber Innovation Summit</b> is an inaugural event that is intended to match the top-tier level of policy and business discussion found at the annual World Economic Forum held in Davos</li></ul>	 <p><b>Cyber Week</b> June 23-27, 2019 Tel Aviv, Israel Tel Aviv University</p>	<ul style="list-style-type: none"><li><b>Cyber Week</b> brings together international cybersecurity experts and enthusiasts, Cyber Week provides the opportunity to gain insight into the latest global developments in cybersecurity</li></ul>
 <p><b>CYBER INVESTING SUMMIT™</b> May 16, 2019 New York, NY Convene – Financial District</p>	<ul style="list-style-type: none"><li><b>Cyber Investing Summit</b> is an all-day conference focusing on the financial opportunities, trends, challenges, and investment strategies available in the high growth cyber security industry</li></ul>	 <p><b>black hat</b> August 3-8, 2019 Las Vegas, NV Mandalay Bay</p>	<ul style="list-style-type: none"><li><b>Black Hat</b> is the world's leading information security event, providing attendees with the very latest in research, development and trends, including four days of technical training followed by a two-day conference</li></ul>
 <p><b>infosecurity</b> EUROPE June 4-6, 2019 London, UK Olympia London</p>	<ul style="list-style-type: none"><li><b>Infosecurity Europe</b> is the region's number one information security event featuring over 400 exhibitors showcasing the most relevant information security solutions and products to 19,500+ information security professionals</li></ul>	 <p><b>SINET Showcase</b> November 6 &amp; 7, 2019 Washington DC National Press Club</p>	<ul style="list-style-type: none"><li><b>SINET Showcase</b> provides a platform to identify and highlight "best-of-class" security companies that are addressing the most pressing needs and requirements in Cybersecurity</li></ul>

# RSAC Innovator & Entrepreneur Seminar

Seminar Is Designed To Help Those Interested In Learning More About What It Takes To Become An Entrepreneur.



Dave DeWalt  
Founder, Chairman  
Momentum CYBER  
NIGHT DRAGON

Dave DeWalt (Founder & Chairman of Momentum Cyber) will be giving the opening remarks at the RSAC Innovation & Entrepreneur Seminar on March 4<sup>th</sup>, 2019, kicking-off the opening day of the RSAC and followed by an impressive group of security experts and investors that will dive into topics that highlight unique aspects of the entrepreneur's journey.



This half-day info-rich seminar will explore how to start a company from stealth to exit, find funding and financing in today's competitive marketplace, provide an inside view of what makes a CISO take a shot on a startup, give tips and insights from brand makers and marketing gurus on how to rise above the noise. Each segment includes an opportunity for audience members to ask questions of the panelists and a networking break to meet with fellow entrepreneurs and speakers.

Time (PT)	Topic	Speaker		
9:00 AM – 9:10 AM	Opening Remarks	 Dave DeWalt <b>Momentum CYBER</b> NIGHT DRAGON		
9:15 AM – 9:55 AM	How to Start a Company; Fireside Chat	 Chris Wysopal <b>VERACODE</b>	 Kristina Bergman <b>INTEGRIS SOFTWARE</b>	
10:00 AM – 10:40 AM	How to Get the CISO's Attention - WSJ PRO Interviews 2 Leading CISOs	 Rob Sloan THE WALL STREET JOURNAL	 Geoff Belknap <b>slack</b>	 Tim McKnight <b>SAP</b>
10:55 AM – 11:35 AM	How to Rise Above the Noise - Industry Expert Interviews 2 Successful Startup Marketing Executives	 Mark Kraynak <b>Aspect VENTURES</b>	 CP Morey <b>phantom</b> <b>splunk</b>	 Choo Kim-Isgitt <b>TRUSTAR</b>
11:40 AM – 12:20 PM	How to Find the Money - CrunchBase Interviews 2 Leading Venture Capitalists	 Gene Teare <b>crunchbase</b>	 Sarah Guo <b>greylock</b> <b>partners</b> .	 Ariel Tseitlin <b>SCALE</b> Launches in 2019

# RSA Drinks & Hors d'Oeuvres

Hosted By **Momentum CYBER**, **YL VENTURES**, & **TEN ELEVEN**.

Zero Zero | 826 Folsom St, San Francisco, CA 94107  
Tuesday, March 5, 2019 | 5:00 pm - 8:00 pm

Please contact [dino@momentumcyber.com](mailto:dino@momentumcyber.com) to RSVP

We Are Pleased To Be Hosting A Private Reception For Our Partners And Friends During RSA Conference 2019, Bringing Together Industry Experts, Executive Leaders And Venture Investors Under One Roof!

Hosted By:



David DeWalt  
Chairman



Michael Tedesco  
Managing Partner



Keith Skirbe  
Director

Eric McAlpine  
Managing Partner



Ken Gonzalez  
Partner



Dino Boukouris  
Director



Yoav Leitersdorf  
Managing Partner



Ofer Schreiber  
Partner



Alex Doll  
Managing General Partner



Mark Hatfield  
General Partner



# TEAM8's RSA ReThink Trust Event Exclusively For CISOs & CIOs

Bringing Together The World-Leading CIOs & CISOs To Explore New Approaches For How Security Can Enable Business Progress.

NASDAQ Entrepreneurial Center | San Francisco, CA  
March 5, 2019 | 4:30 PM – 10:00 PM

Exclusively For CISOs & CIOs  
Please contact [dino@momentumcyber.com](mailto:dino@momentumcyber.com) to RSVP



## Trust used to be a one-dimensional concept. The rules of the game have changed.

Today trust is multi-dimensional and depending on the context, different models apply. Rethink Trust will explore the evolving loss of trust in the modern business world. Where can trust be reconstructed, redefined and where must it be transcended?

### Agenda

Cocktail Reception | 4:30PM - 5:00PM

Keynotes | 5:00PM - 7:00PM

Networking Dinner | 7:00PM - 10:00PM

### Event Highlights

#### Models Of Trust

If you can't trust your own environment, how do you manage your IP? If cloud implies relinquishing trust on your applications, how do you justify it? If you can't trust the other side with your data, how do you take leverage AI and ML? It is time to take on a more dynamic approach to trust.

#### The Most Fundamental "Truth Of All" – People

In so many cases we have seen the race to leverage data outpace the sensitivity around privacy. How does a once trusted brand — whose product experience has earned it a place in customer's everyday lives, regain their trust after a breach?

#### Trust In Supply Chain

Recent headlines around "the big hack - how china used a tiny chip to infiltrate US companies..." have left us all with a confused perception of what, if anything, can be trusted and given the increased sophistication and audacity of attackers, it is critical to rethink the security strategy for what happens if your supply chain is attacked.

#### Mythbusting Cyber

A (brutally) honest panel - where are we over-spending? What is being neglected? Why does technology investment not always lead to improved security? By bringing these unique perspectives to the forefront, we will offer an extremely relevant perspective in how to keep focused in an increasingly complex environment. The audience may be integrated to join this "mythbusting" discussion to create a great interactive dynamic.

### Partners



McKinsey&Company

Momentum  
CYBER

Nasdaq

SINET

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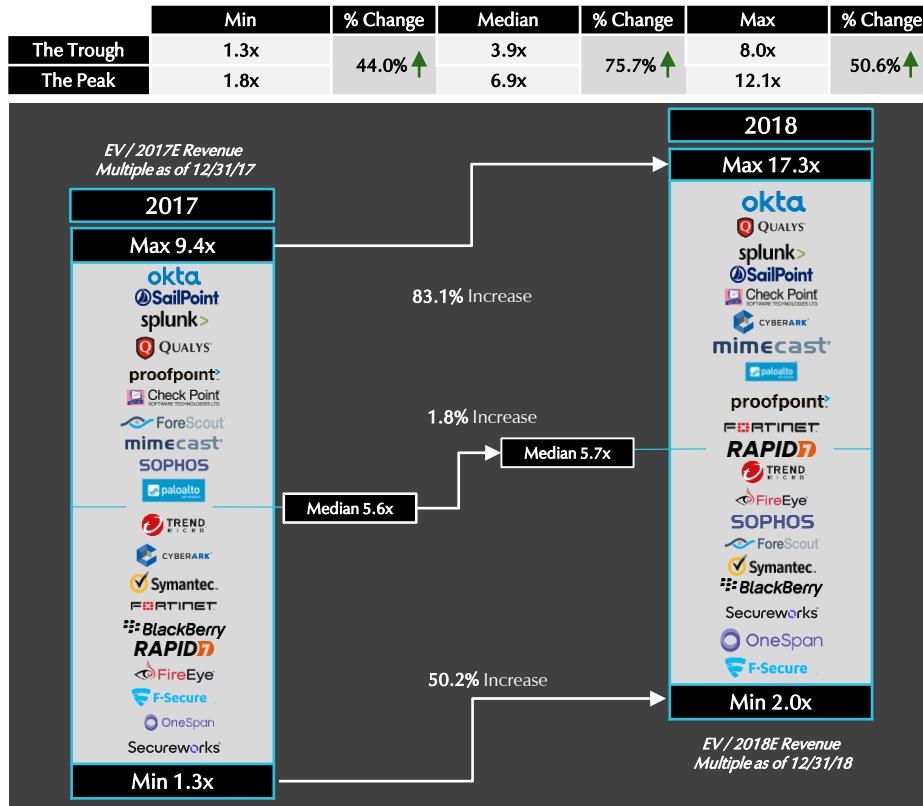
**IV.**

## PUBLIC COMPANY TRADING ANALYSIS

CYBERSECURITY ALMANAC | 2019

# Cybersecurity Multiples Remain Strong

Recent Correction Of Public Market Valuations Slowed Momentum Of Large Gains From 2018 Trough To Sept Peak.



Company	EV / 2017E Revenue	EV / 2018E Revenue	% Change
okta	9.4x	17.3x	83.1% ↑
Secureworks	1.3x	2.4x	82.6% ↑
CYBERARK	4.5x	6.9x	53.0% ↑
RAPID7	3.7x	5.7x	52.6% ↑
FORTINET	4.3x	5.8x	36.2% ↑
QUALYS	8.5x	9.4x	10.7% ↑
FireEye	3.3x	3.6x	9.1% ↑
palosalt	6.3x	6.4x	1.5% ↑
mimecast	6.5x	6.4x	1.3% ↓
OneSpan	2.1x	2.1x	2.0% ↓
splunk>	8.6x	8.3x	3.7% ↓
SailPoint	8.9x	8.2x	7.6% ↓
Check Point SOFTWARE TECHNOLOGIES LTD.	8.3x	7.5x	10.0% ↓
TREND MICRO	5.0x	4.2x	16.8% ↓
proofpoint	8.4x	6.2x	26.4% ↓
Symantec	4.4x	3.1x	29.4% ↓
F-Secure	3.1x	2.0x	35.2% ↓
BlackBerry	4.1x	2.6x	36.1% ↓
SOPHOS	6.3x	3.5x	44.3% ↓
ForeScout	6.7x	3.2x	52.4% ↓

Note: The Trough shows EV / 2018E Revenue Multiple as of 02/08/18. The Peak shows EV / 2018E Revenue Multiple as of 09/14/2018.  
Excludes figures for Zscaler, Carbon Black, Avast, Tenable, & SolarWinds given all five companies completed IPOs in 2018.

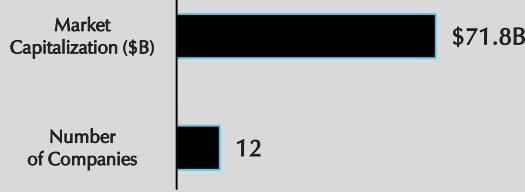
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# Significant Growth in Public Cyber Companies | 2010 - 2018

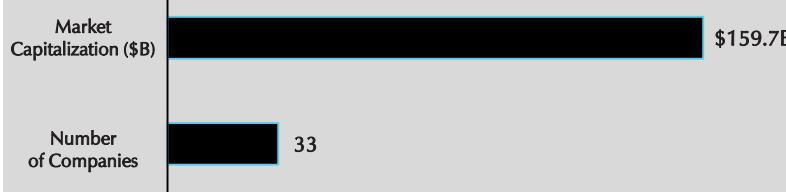
Aggregate Market Capitalization For Cybersecurity Has Grown Considerably Over The Last Decade.

## Explosive Growth In Public Cybersecurity Companies

### Public Company Stats | 2010



### Public Company Stats | 2018



**123% ↑**

Growth in Market Capitalization

**175% ↑**

Growth in Number of Public Cybersecurity Companies

### Public Cyber Companies | 2010



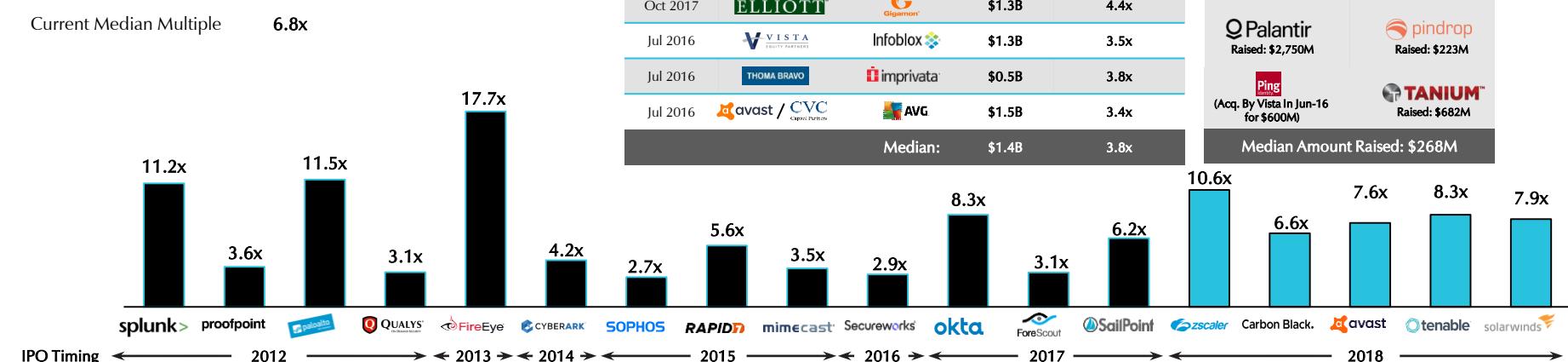
### Public Cyber Companies | 2018



# Cybersecurity IPO Insights: Five Cybersecurity IPOs In 2018

2018 Represented A Historic Year For Cybersecurity IPOs.

Implied Multiple At IPO (Multiple: EV / LTM Revenue)	
Median Multiple At IPO	6.2x
Current Median Multiple	6.8x



Stock Performance (since IPO)	517%	545%	348%	523%	19%	363%	68%	95%	236%	21%	275%	18%	96%	145%	29%	7%	4%	8%
EV / LTM Rev (Current)	9.1x	6.6x	6.7x	9.8x	3.7x	7.3x	3.5x	5.9x	6.8x	2.5x	18.7x	3.3x	8.3x	21.0x	3.8x	6.4x	7.3x	7.7x
Total Raised (From IPO)	\$230M	\$82M	\$260M	\$91M	\$304M	\$86M	\$554M	\$103M	\$78M	\$112M	\$187M	\$116M	\$240M	\$192M	\$152M	\$765M	\$251M	\$375M

Source: Capital IQ. Stock performance and valuation multiples as of December 31, 2018.

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# The IPO Pipeline | 2019

The Current Backlog Of Well-Funded Companies Positions 2019 As A Potential Banner Year For Cybersecurity IPOs.

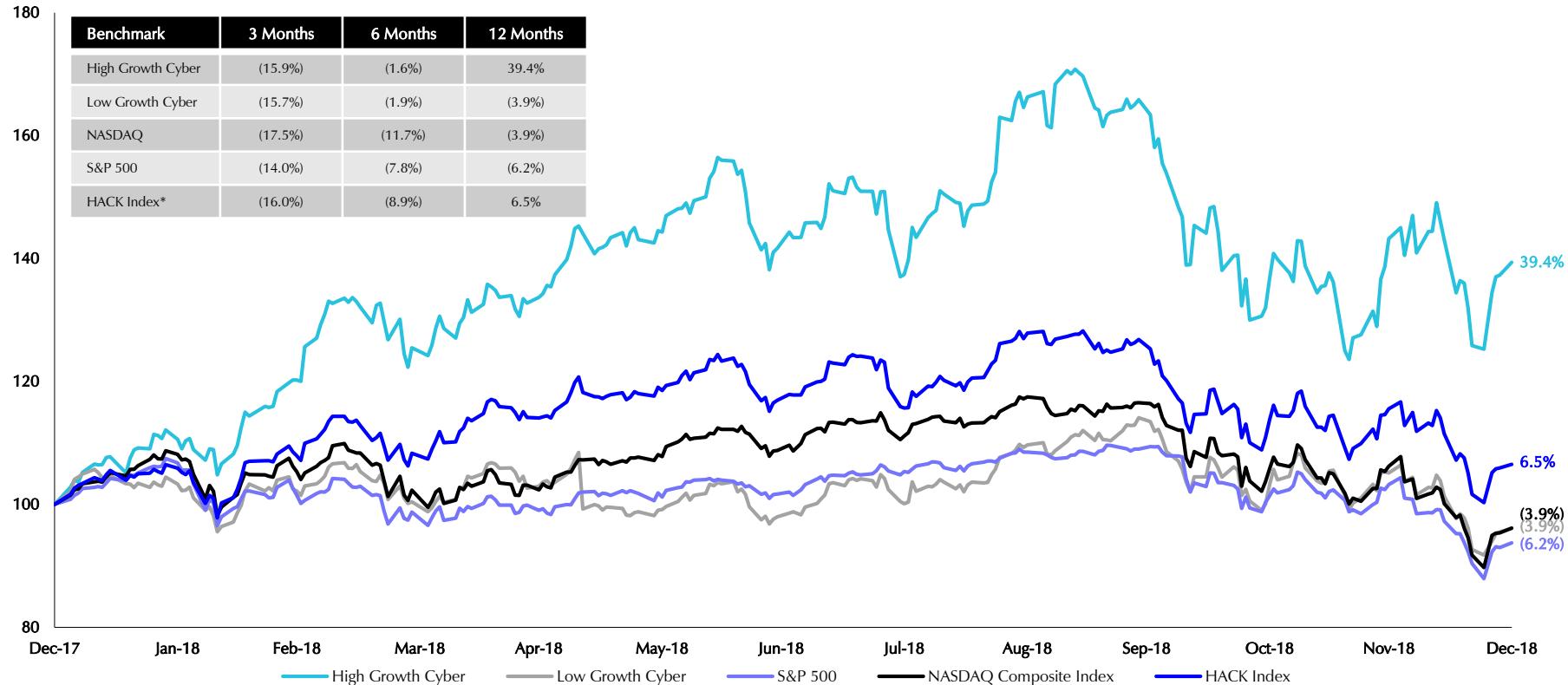
Announced Intention To IPO							
Company	Sector	Founded	Location	CEO	Select Investors	Raised To Date	Select Public Competitors
 CROWDSTRIKE	Endpoint Security	2011	Sunnyvale, CA	George Kurtz	Accel  	\$481M	 
 Palantir	Sec Ops & Incident Response	2004	Palo Alto, CA	Alex Karp	  	\$2,750M	 
 Ping Identity	Identity & Access Management	2001	Denver, CO	Andre Durand		Acq. By Vista In Jun-16 for \$600M	 
2019 IPO Watchlist							
Company	Sector	Founded	Location	CEO	Select Investors	Raised To Date	Select Public Competitors
 CLOUDFLARE	Network & Infrastructure Security	2009	San Francisco, CA	Matthew Prince	capitalG  	\$252M	 
 DARKTRACE	Sec Ops & Incident Response	2013	Cambridge, UK	Nicole Eagen	KKR  	\$234M	 
 illumio	Cloud Security	2013	Sunnyvale, CA	Andrew Rubin	Accel  	\$268M	 
 pindrop	Identity & Access Management	2011	Atlanta, GA	Vijay Balasubramanyan	ANDREESSEN HOROWITZ  	\$223M	 
 TANIUM™	Endpoint Security	2007	Emeryville, CA	Orion Hindawi	ANDREESSEN HOROWITZ  	\$682M	 

Source: Momentum Cyber Proprietary M&A & Financing Transaction Database.

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# Cybersecurity vs. The Benchmarks

Public Cybersecurity Stocks Reached Their Peak In September Before Experiencing A Dip In Q4, But Have Rebounded.



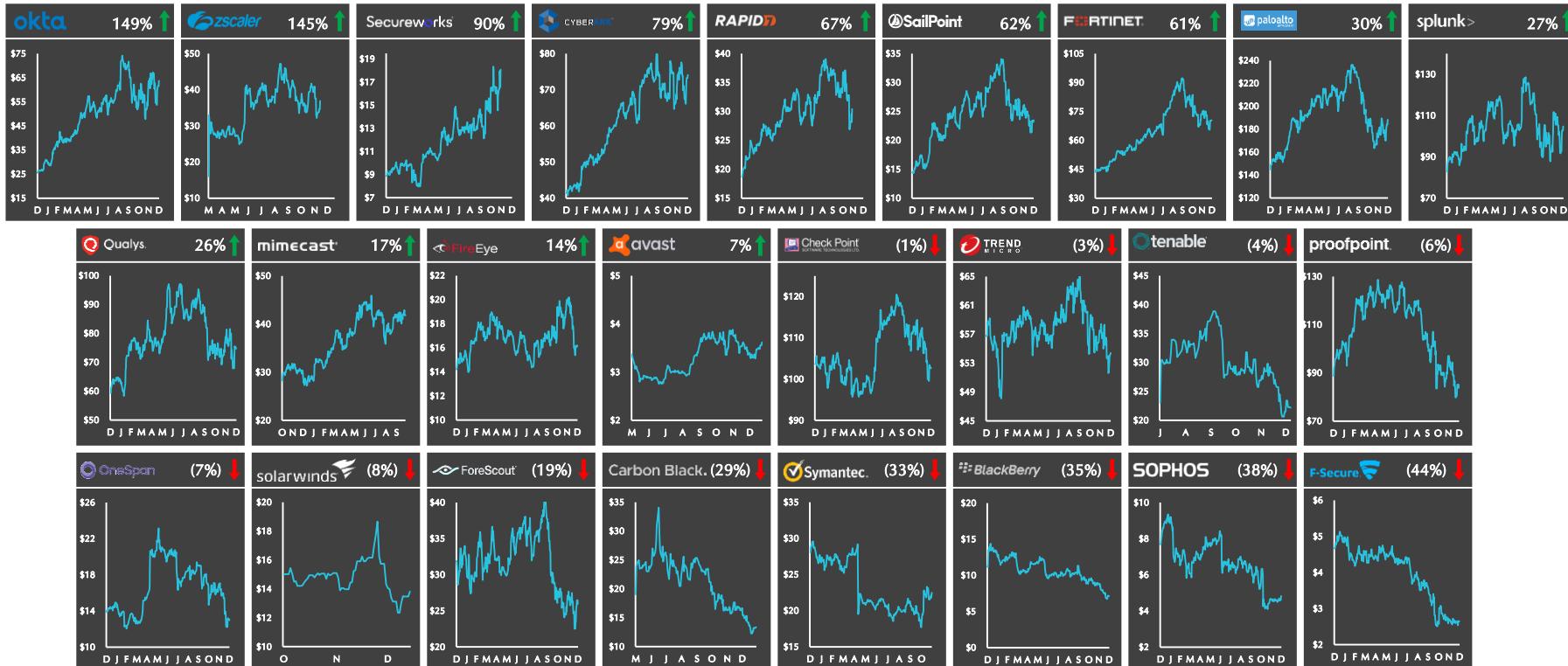
Source: Capital IQ, Public Market Data as of December 31<sup>st</sup>, 2018.

Note: \*PureFunds ISE Cybersecurity ETF.

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# Public Cybersecurity Companies Stock Performance

## Company Stock Performance.



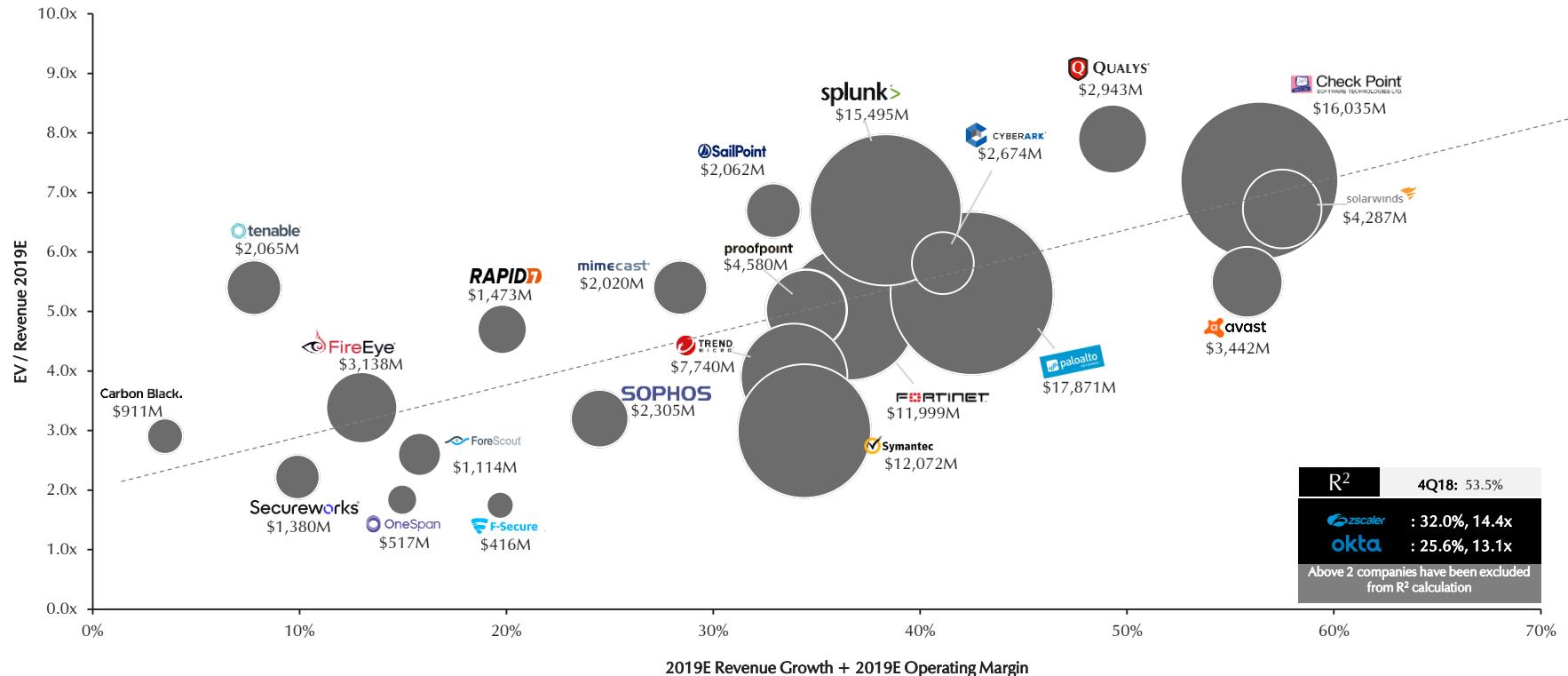
Source: Capital IQ. Public Market Data as of December 31<sup>st</sup>, 2018.

Note: Charts pertaining to Zscaler (March 2018), Carbon Black (May 2018), Avast (May 2018), Tenable (July 2018), & SolarWinds (October 2018) reflect monthly stock prices from their respective IPO dates & prices.

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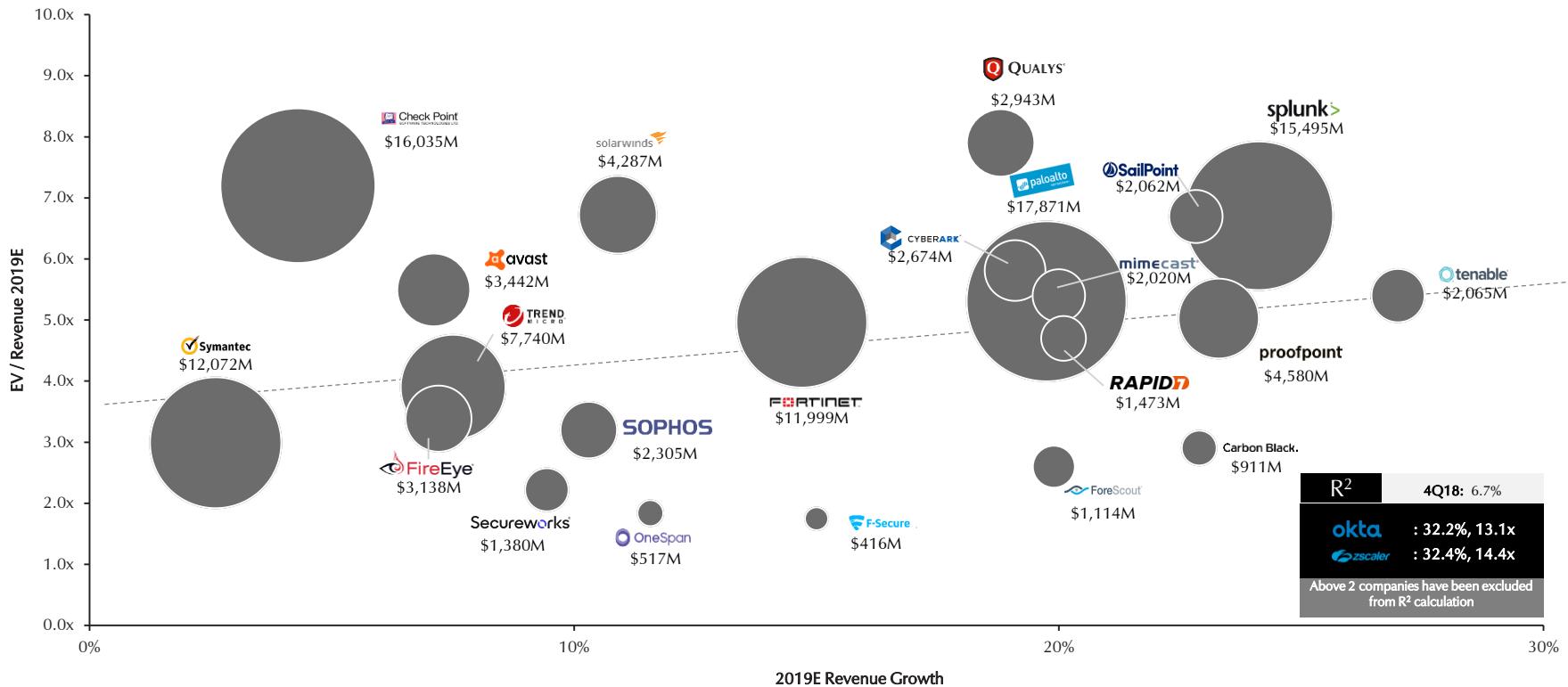
# The Correlation Of Value To Growth & Profitability Remains Strong...

Public Markets Today Value A Balance Of Growth & Profitability – Back To Basics.



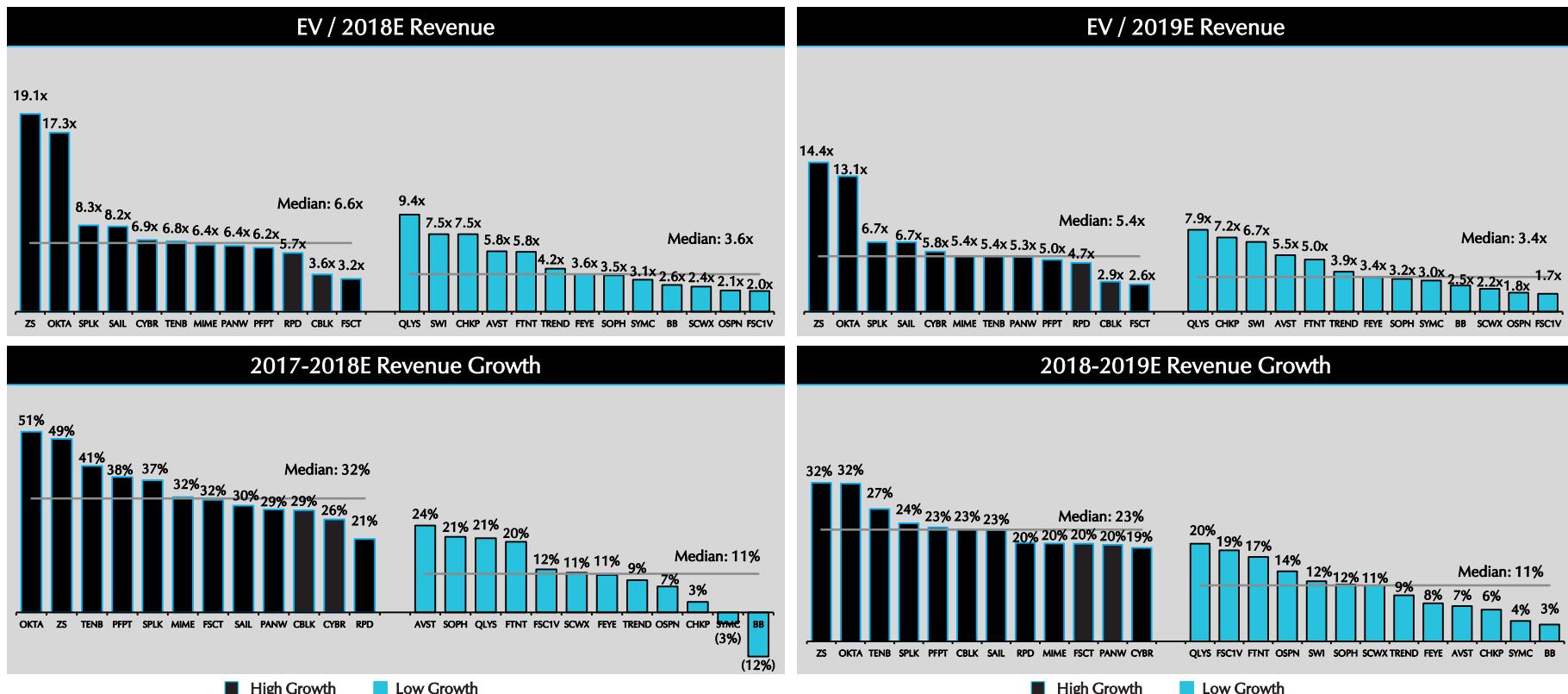
# ...While The Correlation To Growth Alone Is Not Valued As Highly

Public Markets Today Value A Balance Of Growth & Profitability – Back To Basics.



# Trading Multiples: High Growth & Low Growth

Valuation Multiples For High Growth & Low Growth Cybersecurity Companies.



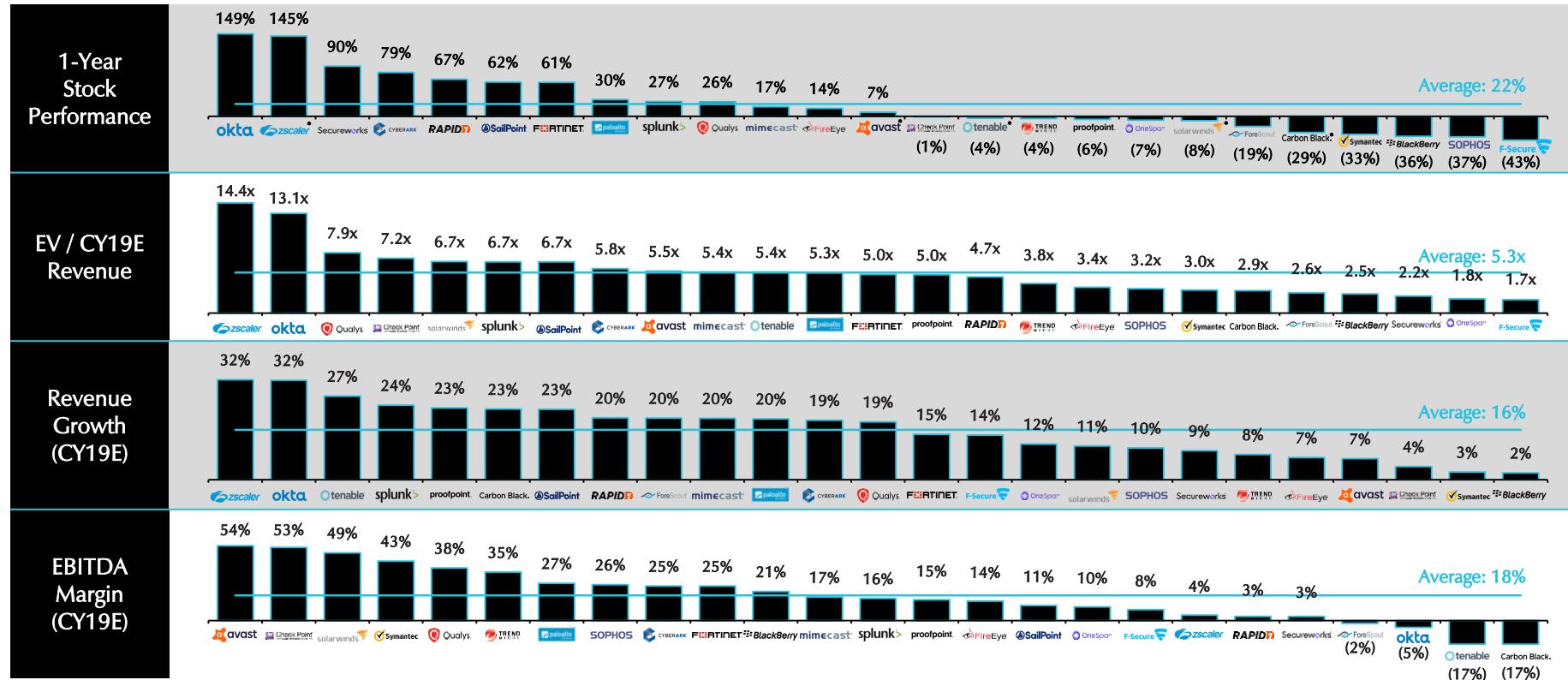
Source: Capital IQ, Public Market data as of December 31<sup>st</sup>, 2018.

Note: High Growth represented by companies with >20% revenue CAGR; Low Growth represented by companies with <20% revenue CAGR.

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# Security Benchmarking Analysis

Ranking Based On Metrics That Are Principal Valuation Factors.



Source: Capital IQ. Public Market data as of December 31<sup>st</sup>, 2018.

\* Denotes stock price performance since IPO in 2018

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# Public Company Trading Analysis

## High Growth & Low Growth Cybersecurity.

	Stock Price	LTM Price Performance	Market Cap (\$M)	Enterprise Value (\$M)	Revenue Growth			EV / Revenue			EV / EBITDA			P / E			
					LTM	2017-2018E	2018E-2019E	LTM	CY 2018E	CY 2019E	LTM	CY 2018E	CY 2019E	LTM	CY 2018E	CY 2019E	
<b>High Growth Cybersecurity (&gt;20% CAGR)</b>																	
 <b>splunk&gt;</b>	\$188.35	30.0%	\$17,871	\$16,291	29.9%	28.9%	19.7%	6.7x	6.4x	5.3x	25.5x	23.8x	19.9x	43.8x	40.5x	33.5x	
 <b>okta</b>	\$104.85	26.6%	15,495	14,504	38.6%	37.1%	24.1%	9.1x	8.3x	6.7x	NM	NM	41.4x	NM	89.7x	64.8x	
 <b>zscaler*</b>	\$63.80	149.1%	7,046	6,768	58.4%	50.7%	32.2%	18.7x	17.3x	13.1x	NM	NM	NM	NM	NM	NM	
 <b>proofpoint.</b>	\$39.21	145.1%	4,793	4,479	53.9%	48.7%	32.4%	21.0x	19.1x	14.4x	NM	NM	NM	NM	NM	NM	
 <b>CYBERARK</b>	\$83.81	(5.6%)	4,580	4,390	39.3%	38.0%	23.3%	6.6x	6.2x	5.0x	43.3x	41.1x	33.7x	67.0x	64.0x	50.6x	
 <b>tenable*</b>	\$74.14	79.1%	2,674	2,287	28.0%	26.1%	19.1%	7.3x	6.9x	5.8x	29.2x	25.8x	22.9x	47.2x	42.1x	38.1x	
 <b>@SailPoint*</b>	\$22.19	(3.5%)	2,065	1,801	45.0%	41.1%	27.0%	7.3x	6.8x	5.4x	NM	NM	NM	NM	NM	NM	
 <b>mimecast*</b>	\$23.49	62.0%	2,062	1,989	46.6%	29.9%	22.8%	8.3x	8.2x	6.7x	NM	NM	NM	69.1x	91.0x	89.0x	
 <b>RAPID7</b>	\$33.63	17.3%	2,020	2,053	35.7%	32.3%	20.0%	6.8x	6.4x	5.4x	NM	47.5x	31.4x	NM	NM	86.3x	
 <b>ForeScout</b>	\$31.16	67.0%	1,473	1,374	23.8%	20.6%	20.1%	5.9x	5.7x	4.7x	NM	NM	NM	NM	NM	NM	
 <b>Carbon Black.*</b>	\$25.99	(18.5%)	1,114	921	32.2%	31.6%	19.9%	3.3x	3.2x	2.6x	NM	NM	NM	NM	NM	NM	
Carbon Black.*	\$13.42	(29.4%)	911	748	30.5%	28.7%	22.9%	3.8x	3.6x	2.9x	NM	NM	NM	NM	NM	NM	
					Mean	38.5%	34.5%	23.6%	8.7x	8.2x	6.5x	32.7x	34.6x	29.9x	56.8x	65.5x	60.4x
					Median	37.2%	32.0%	22.8%	7.0x	6.6x	5.4x	29.2x	33.4x	31.4x	57.1x	64.0x	57.7x
<b>Low Growth Cybersecurity (&lt;20% CAGR)</b>																	
 <b>Check Point SOFTWARE INC.</b>	\$102.65	(0.9%)	\$16,035	\$14,265	3.4%	2.9%	4.3%	7.5x	7.5x	7.2x	13.7x	13.9x	13.5x	18.2x	18.1x	16.9x	
 <b>Symantec</b>	\$18.90	(32.7%)	12,072	14,675	NM	(3.1%)	2.6%	3.1x	3.1x	3.0x	6.4x	6.8x	6.9x	11.0x	11.7x	11.3x	
 <b>Fortinet</b>	\$70.43	61.2%	11,999	10,365	18.7%	19.8%	14.7%	6.1x	5.8x	5.0x	25.6x	23.3x	19.8x	45.4x	40.1x	35.2x	
 <b>TREND</b>	\$55.17	(2.8%)	7,740	6,231	7.8%	9.1%	7.5%	4.2x	4.2x	3.9x	13.0x	12.1x	11.0x	32.7x	29.2x	26.1x	
 <b>solarwinds</b>	\$13.83	(7.8%)	4,287	6,244	18.5%	14.6%	10.9%	7.7x	7.5x	6.7x	29.2x	15.5x	12.7x	NM	24.3x	17.4x	
 <b>BlackBerry</b>	\$7.24	(35.3%)	3,960	2,320	(10.5%)	(12.4%)	2.3%	2.6x	2.6x	2.5x	16.2x	18.6x	12.2x	NM	42.6x	38.1x	
 <b>avast*</b>	\$3.61	7.1%	3,442	4,747	NA	24.4%	7.1%	6.4x	5.8x	5.5x	14.2x	10.7x	10.1x	27.8x	12.7x	11.7x	
 <b>FireEye</b>	\$16.21	14.2%	3,138	3,001	7.5%	10.6%	7.2%	3.7x	3.6x	3.4x	28.2x	26.1x	24.5x	NM	NM	88.0x	
 <b>Qualys</b>	\$74.74	25.9%	2,943	2,617	21.6%	20.8%	18.8%	9.8x	9.4x	7.9x	24.4x	23.4x	20.8x	47.9x	45.6x	40.0x	
 <b>SOPHOS</b>	\$4.81	(37.5%)	2,305	2,433	21.7%	21.2%	10.3%	3.5x	3.5x	3.2x	29.0x	27.7x	12.2x	73.3x	53.5x	40.1x	
 <b>Secureworks</b>	\$16.89	90.4%	1,380	1,265	9.2%	11.1%	9.4%	2.5x	2.4x	2.2x	NM	NM	NM	NM	NM	NM	
 <b>OneSpan</b>	\$12.95	(6.8%)	517	425	8.4%	7.3%	11.6%	2.1x	2.1x	1.8x	22.6x	25.0x	18.6x	33.2x	39.7x	32.2x	
 <b>F-Secure</b>	\$2.64	(43.5%)	416	433	6.2%	12.1%	15.0%	2.1x	2.0x	1.7x	20.8x	30.6x	18.9x	37.0x	66.0x	29.3x	
					Mean	10.2%	10.5%	9.4%	4.7x	4.6x	4.2x	20.3x	19.5x	15.1x	36.3x	34.9x	32.2x
					Median	8.4%	11.1%	9.4%	3.7x	3.6x	3.4x	21.7x	20.9x	13.1x	33.2x	39.7x	30.8x

Source: Capital IQ. Market data updated as of December 31<sup>st</sup>, 2018.

Note: NM – Not Meaningful, NA – Not Available. \*Price performance from IPO price. Symantec LTM Revenue Growth Not Meaningful (NM) due to acquisition spree in 2016; Avast LTM Revenue Growth Not Meaningful (NM) due to AVG acquisition in 2016.

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# Public Company Trading Analysis: Operating Metrics

## High Growth & Low Growth Cybersecurity.

Company	Revenue (\$M)			Revenue Growth (%)			EBITDA (\$M)			EBITDA Margin (%)		
	LTM	2018E	2019E	LTM	17-18E	18E-19E	LTM	2018E	2019E	LTM	2018E	2019E
<b>High Growth Cybersecurity (&gt; 20% CAGR)</b>												
 <b>splunk</b>	\$2,424	\$2,563	\$3,069	29.9%	28.9%	19.7%	\$638	\$685	\$819	26.3%	26.7%	26.7%
 <b>okta</b>	1,602	1,742	2,163	38.6%	37.1%	24.1%	184	246	350	11.5%	14.1%	16.2%
 <b>zscaler</b>	362	392	518	58.4%	50.7%	32.2%	(40)	(40)	(25)	(11.1%)	(10.2%)	(4.8%)
 <b>proofpoint</b>	214	235	311	53.9%	48.7%	32.4%	4	5	14	2.0%	2.0%	4.5%
 <b>CYBERARK</b>	664	711	877	39.3%	38.0%	23.3%	101	107	130	15.3%	15.0%	14.9%
 <b>Tenable</b>	315	330	393	28.0%	26.1%	19.1%	78	89	100	24.9%	26.8%	25.5%
 <b>QualiPoint</b>	246	265	336	45.0%	41.1%	27.0%	(43)	(46)	(58)	(17.4%)	(17.3%)	(17.1%)
 <b>mimecast</b>	238	242	297	46.6%	29.9%	22.8%	37	32	34	15.4%	13.2%	11.4%
 <b>RAPID7</b>	301	319	383	35.7%	32.3%	20.0%	36	43	65	12.0%	13.5%	17.1%
 <b>ForeScout</b>	233	242	291	23.8%	20.6%	20.1%	(19)	(15)	8	(8.2%)	(6.3%)	2.7%
 <b>Carbon Black</b>	279	291	349	32.2%	31.6%	19.9%	(14)	(19)	(8)	(5.0%)	(6.6%)	(2.3%)
Carbon Black.	198	208	256	30.5%	28.7%	22.9%	(50)	(50)	(42)	(24.7%)	(23.9%)	(16.6%)
<b>Low Growth Cybersecurity (&lt; 20% CAGR)</b>												
 <b>Check Point</b>	\$1,897	\$1,909	\$1,991	3.4%	2.9%	4.3%	\$1,044	\$1,026	\$1,059	55.0%	53.7%	53.2%
 <b>Symantec</b>	4,750	4,761	4,883	NM	(3.1%)	2.6%	2,282	2,144	2,121	48.0%	45.0%	43.4%
 <b>FORTINET</b>	1,711	1,791	2,054	18.7%	19.8%	14.7%	404	445	523	23.6%	24.9%	25.4%
 <b>TREND MICRO</b>	1,478	1,496	1,608	7.8%	9.1%	7.5%	480	514	563	32.5%	34.4%	35.0%
 <b>solarwinds</b>	810	834	925	18.5%	14.6%	10.9%	214	403	492	26.4%	48.3%	53.1%
 <b>BlackBerry</b>	882	898	918	(10.5%)	(12.4%)	2.3%	143	125	190	16.2%	13.9%	20.7%
 <b>avast</b>	748	812	870	NA	24.4%	7.1%	334	445	468	44.7%	54.8%	53.8%
 <b>FireEye</b>	816	830	890	7.5%	10.6%	7.2%	106	115	123	13.0%	13.8%	13.8%
 <b>Qualys</b>	268	279	331	21.6%	20.8%	18.8%	107	112	126	40.0%	40.0%	37.9%
 <b>SOPHOS</b>	693	692	764	21.7%	21.2%	10.3%	84	88	200	12.1%	12.7%	26.2%
 <b>Secureworks</b>	509	521	570	9.2%	11.1%	9.4%	(4)	12	20	(0.9%)	2.3%	3.5%
 <b>OneSpan</b>	202	207	231	8.4%	7.3%	11.6%	19	17	23	9.3%	8.2%	9.9%
 <b>F-Secure</b>	211	218	251	6.2%	12.1%	15.0%	21	14	23	9.9%	6.5%	9.2%

Source: Capital IQ. Market data updated as of December 31<sup>st</sup>, 2018.

Note: NM – Not Meaningful, NA – Not Available. Symantec LTM Revenue Growth Not Meaningful (NM) due to acquisition spree in 2016; Avast LTM Revenue Growth Not Meaningful (NM) due to AVG acquisition in 2016..

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# M&A ACTIVITY IN CYBERSECURITY

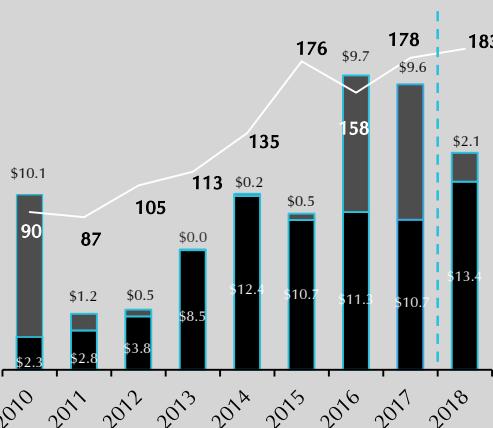
CYBERSECURITY ALMANAC | 2019

# Cybersecurity M&A Activity | 2010-2018

Cybersecurity M&A Totaled \$110B Across 1,225 Deals Since 2010.

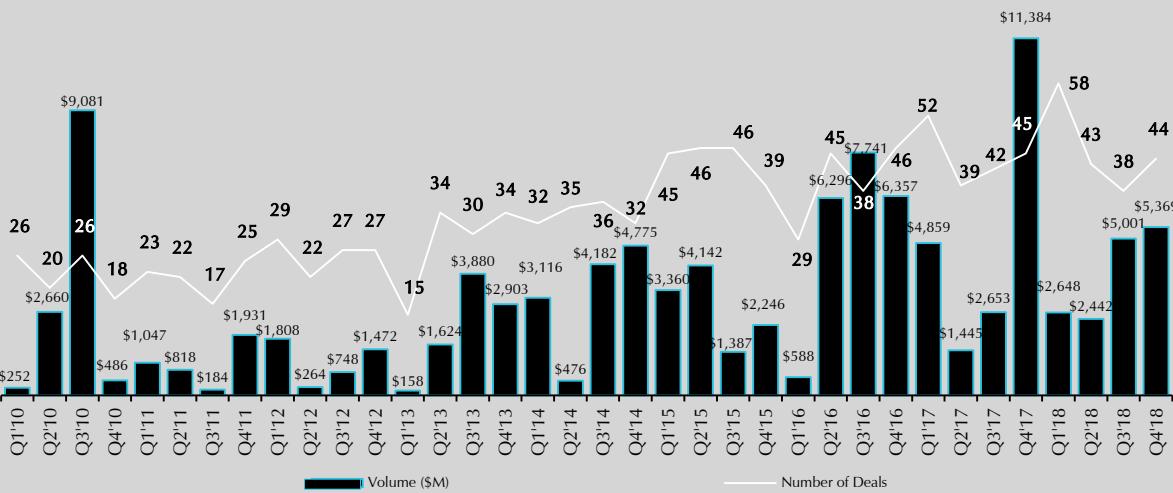
Annual M&A Deals And Volume

(\$B) (2010 – 2018)



Quarterly M&A Deals And Volume

(\$M) (Q1 2010 – Q4 2018)

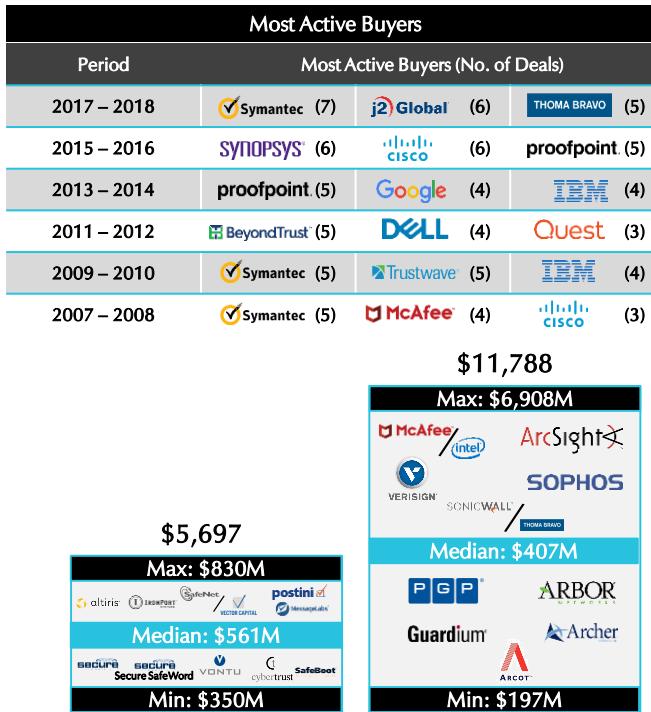


- Cybersecurity M&A deal volume of **183** transactions sets new record; previous high of **178** set in 2017
- 96%** of deals in 2018 involved targets that were private companies or assets
- Over the last eight quarters financial and strategic buyers have completed **\$36.0B** in M&A transactions
- Q4'18 M&A activity has remained relatively constant over the two prior years, with **44** M&A transactions, but M&A transaction volume was down compared to the two prior years at **\$5.4B**
- Thoma Bravo / Imperva, BlackBerry / Cylance, and Thoma Bravo / Veracode accounted for **78%** of total Q4'18 disclosed deal value, with a total of **\$4.2B**

For Additional Analysis & Insights On M&A Activity, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

# Top 10 M&A Deals By Volume By Period | 2007 – 2018

The Top Echelon Of M&A Deals Has Increased Massively In Transaction Volume Over The Past Decade.



2007 - 2008

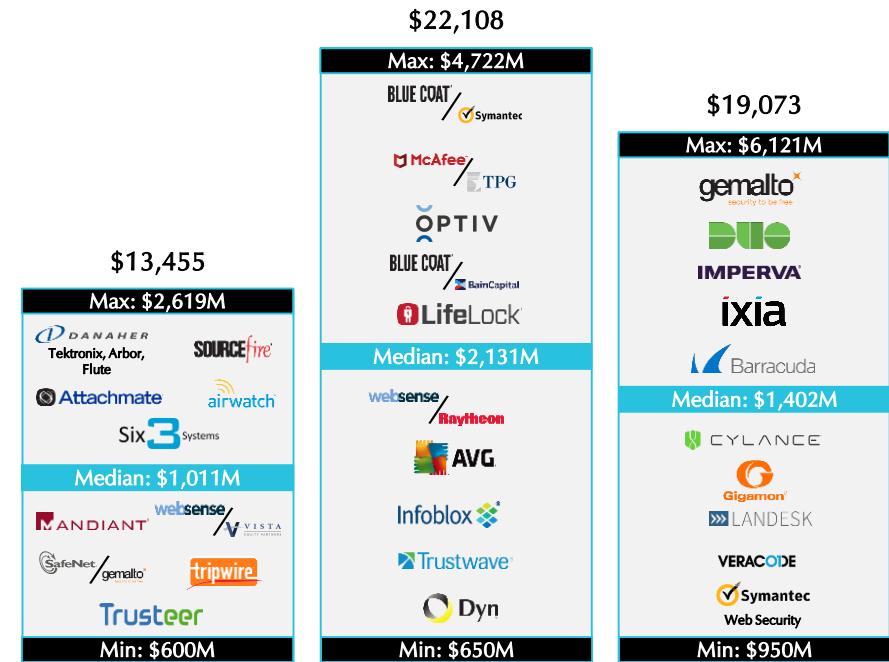
2009 - 2010

2011 - 2012

2013 - 2014

2015 - 2016

2017 - 2018



# M&A Transactions With Disclosed Values



# Notable Cybersecurity M&A Transactions | 2016 – 2018

Cybersecurity M&A Transactions With Disclosed Transaction Values.

## The Buyers



For Additional Information on Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

	Enterprise Value (\$M)	LTM Revenue (\$M)	EV / LTM Revenue
Mean	\$303.2	\$146.1	9.6x
Median	\$52.0	\$35.8	5.0x

# Notable Cybersecurity M&A Transactions | 2016 – 2018

Cybersecurity M&A Transactions With Disclosed Transaction Values.

## The Sellers



For Additional Information on Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

	Enterprise Value (\$M)	LTM Revenue (\$M)	EV / LTM Revenue
Mean	\$303.2	\$146.1	9.6x
Median	\$52.0	\$35.8	5.0x

# M&A Transactions With Non-Disclosed Values



# Notable Cybersecurity M&A Transactions | 2016 – 2018

## Cybersecurity M&A Transactions With Non-Disclosed Transaction Values.

The Buyers



For Additional Information on Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

# Notable Cybersecurity M&A Transactions | 2016 – 2018

## Cybersecurity M&A Transactions With Non-Disclosed Transaction Values.

The Sellers



For Additional Information on Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

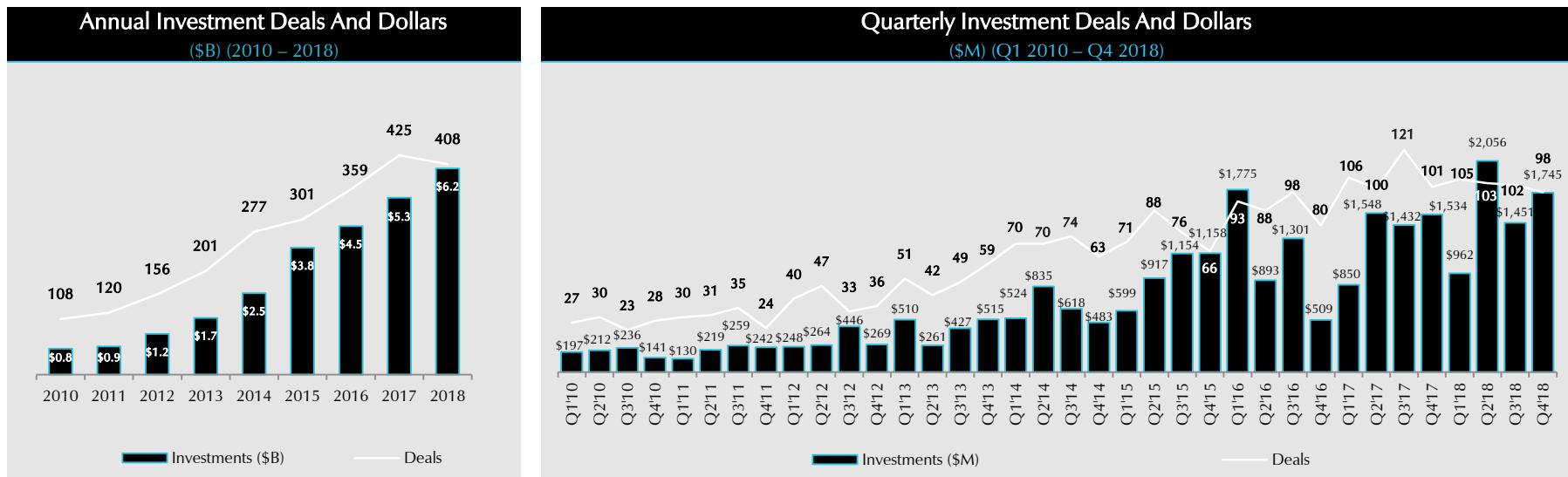
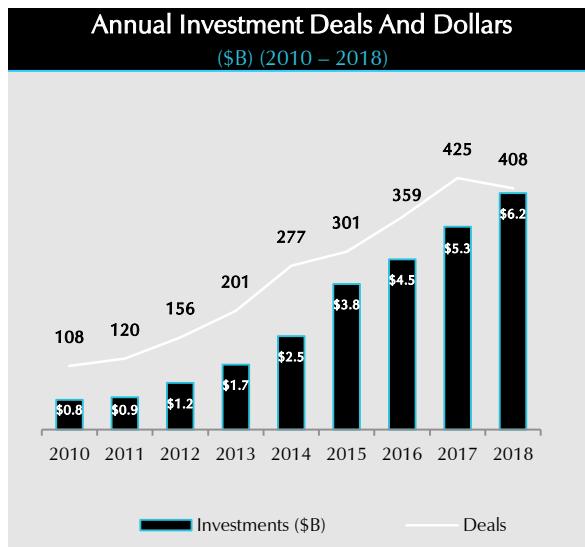
VI.

## FINANCING ACTIVITY IN CYBERSECURITY

CYBERSECURITY ALMANAC | 2019

# Cybersecurity Financing Activity | 2010 – 2018

Cybersecurity Startups Have Raised \$26.9 Billion Across 2,358 Deals Since 2010.

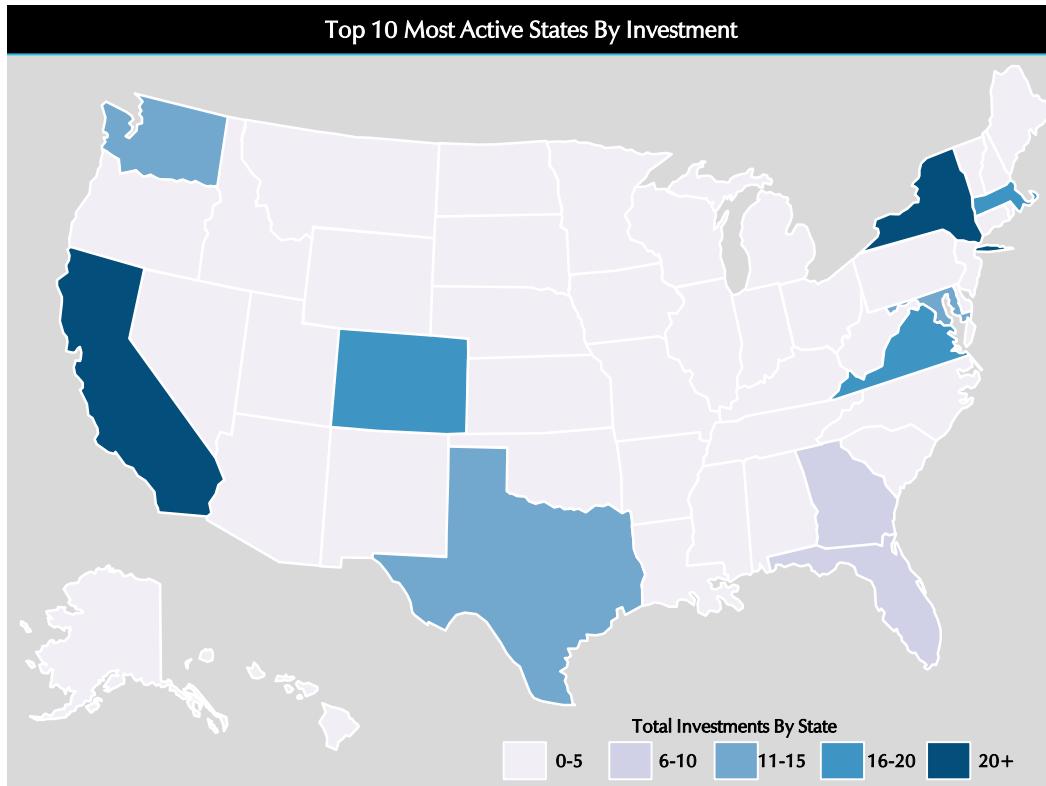


- **\$6.2B** was raised across **408** transactions in 2018
- 2018 outpaced 2017 by **\$850M** in funding volume while 2017 still holds the record by number of deals funded
- Over the last eight quarters investors have poured **\$11.6B** into Cybersecurity
- There was once again over **\$1B** invested in Q4 2018 (**\$1.7B**), making it 6 of the past 7 quarters with over **\$1B** invested; **\$504M** raised in December (26 deals), **\$557M** raised in November (37 deals), and **\$683M** raised in October (35 deals)
- 2018 had the **2** of the **3** largest funding quarters over the past 8 years by funding volume

For Additional Analysis & Insights On Financing Activity, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

# U.S. Cybersecurity Funding By State

Investments Are Still Concentrated In Traditional Hubs, But New Hubs Are Continuing To Attract Investment.



Funding Ranking Detail – 267 Total Investments In USA In 2018				
Ranking	State	# of Investments	Total \$ Invested (\$M)	
1.	California	99	\$2,693	
2.	New York	21	407	
3.	Massachusetts	18	362	
4.	Virginia	18	127	
5.	Colorado	16	93	
6.	Maryland	15	265	
7.	Texas	13	94	
8.	Washington	10	93	
9.	Florida	9	138	
10.	Georgia	6	132	
Total			225	\$4,404

# Financing Transactions



# Notable Cybersecurity Financing Activity | 2016 – 2018

Minority Investments >\$10M.

\$10M - \$25M



\$25M - \$50M



\$50M - \$100M



\$100M+



For Additional Information On Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).

Total Amount Raised (\$M)

\$13,860.4

Median Amount Raised (\$M)

\$20.0

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# Notable Cybersecurity Financing Activity | 2016 – 2018

Minority Investments >\$10M.

\$10M - \$25M



\$25M - \$50M



\$50M+



\$100M+



For Additional Information On Backup Supporting Transaction Data, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).



Source: Momentum Cyber Proprietary M&A & Financing Transaction Database.  
Note: Represents total size of funding rounds participated by each lead investor.

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VII.

## INVESTOR SPOTLIGHT

RETURN  
ON  
INVESTMENT

ROI

CYBERSECURITY ALMANAC | 2019

# NightDragon Security

Senior Level Access & Strategic Advice Gained From Deep Operational And Executive Experience.



## NightDragon Overview

NightDragon Security invests and advises Cybersecurity companies across the corporate lifecycle, from early stage, to growth, buyouts and special situations. NightDragon is unique in providing deep operational expertise gained by its founders from years of executive experience



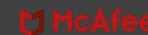
- Veteran CEO, advisor, and investor who has led companies, from startups to the Fortune 500, on a transformational journey of success
- Focused on Technology and Cybersecurity, Dave has created more than \$20 Billion of shareholder value during his 15 plus years as President & CEO for Documentum, McAfee, and FireEye

### Dave DeWalt



- Senior operating executive at technology companies for over 20 years
- Led strategy and corporate business development functions for Siebel Systems (Oracle), McAfee, Avast, and FireEye
- Completed over 40 acquisitions, 23 in Cybersecurity
- Created, managed, and grown numerous strategic go-to-market partnerships from technology integration, to OEM, to resell, to two-tier distribution

### Ken Gonzalez



## Why NightDragon?



- **Governance:** Unparalleled strategic guidance, insights, and governance



- **Visibility:** High profile brand in the Cybersecurity ecosystem provides unique visibility and exposure



- **Executive Access:** Strong, senior level access to executives at leading Telcos, MSSPs, and resellers provides the horsepower needed to accelerate go-to-market relationships



- **GTM Acceleration:** Access to expert deal makers constructs powerful go-to-market relationships from OEMs, to technology alliances, to all flavors of strategic partnerships



- **Fundraising:** Deep relationships with capital providers to accelerate later stages of growth



- **Value Maximization:** Having led dozens of M&A / IPOs as operators & advisors, can help drive an optimal exit with sound advise based on decades of executive experience

## Current Cybersecurity Portfolio



# AllegisCyber

An Integrated Cybersecurity Investment Platform Spanning Seed To Early-Growth Cybersecurity Companies.



## Allegis Cyber Overview

### Description

AllegisCyber has pioneered an integrated Cybersecurity investment platform spanning seed to early-growth cybersecurity companies. It's the first venture firm focused exclusively on Cybersecurity and data science and has been investing in Cybersecurity for more than 15 years in the U.S and select international markets. The AllegisCyber team is replete with venture capital and start-up entrepreneurial veterans.

### Leadership



**Bob Ackerman**  
Managing Director  
& Founder



**Pete Bodine**  
Managing Director



**Dave DeWalt**  
Managing Director



**Spencer Tall**  
Managing Director

### Founded

1996

### Offices

Palo Alto, CA; San Francisco, CA; Fulton, MD

### Latest Fund Size

Cyber Innovation Partners Fund: \$100M (2016)

### Focus

Seed & Early Stage

## The AllegisCyber Advantage



**DATATRIBE + ALLEGISCYBER**

Shared Intelligence, Proprietary Deal Flow, Human Capital And A Powerful Investor Network

- DataTribe co-founds and creates three to four startups annually
- DataTribe startups focus solely on leveraging advanced technologies that have been pioneered, developed, deployed and validated by cutting-edge government labs in response to advanced application requirements
- Working closely with the DataTribe, the AllegisCyber team leverages its domain expertise, customer, entrepreneur and investor networks to catalyze the start-up process.

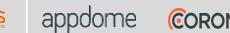
## Current Cybersecurity Portfolio



# Highly Specialized Cybersecurity Focused Investors

Deep Domain Expertise With Decades Of Successful Cybersecurity Operating & Investing Experience.

## Selected VCs

VC											
HQ	Palm Beach, FL	New York, NY	Jerusalem, Israel	Boston, MA & Silicon Valley, CA	New York, NY; Tel Aviv, Israel	Tel Aviv, Israel Mill Valley, CA					
Select Partners	Jay Leek, Alex Weiss, Peter Kuper, & Patrick Heim	Richard Seewald, JR Smith, Karthik Subramanian, & Karel Obluk	Yoav Tzruya & Gadi Porat	Alex Doll & Mark Hatfield	Nadav Zafrir, Liran Grinberg, & Israel Grimberg	Yoav Leitersdorf & Ofer Schreiber					
Latest Fund Size	\$245M	\$125M	\$220M	\$200M	\$85M	\$75M					
Typical Investment Size	--	\$5M – \$25M	\$1M – \$50M	--	--	\$2 – \$4M					
Focus	Early, Growth, & Late Stage	Early & Growth Stage	Early, Growth, & Late Stage	Early & Growth Stage	Incubation & Early Stage	Seed Stage					
Overview	<ul style="list-style-type: none"> <li>Invests in transformative companies providing Cybersecurity, industrial security and critical infrastructure security through its two funds</li> </ul>	<ul style="list-style-type: none"> <li>Focused on investing in Cybersecurity, Enterprise Software, &amp; consumer / enterprise crossover companies globally</li> </ul>	<ul style="list-style-type: none"> <li>Leverages its own center of excellence to identify, nurture and build the next wave of Cybersecurity and big data companies to emerge out of Israel</li> </ul>	<ul style="list-style-type: none"> <li>Specialized venture capital firm exclusively dedicated to helping cybersecurity companies thrive</li> <li>Invests through joint investment alliance with KKR</li> </ul>	<ul style="list-style-type: none"> <li>Builds companies developing transformative technologies, rooted in Cybersecurity and data science, through research, recruiting, and go-to-market capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Invests in early-stage Israeli companies focused on Cybersecurity, Enterprise Software, &amp; Autonomous Vehicles</li> </ul>					
Select Investments	   	  	  	  	  	  	  	 	  	  	 

Source: Firm Press Releases, Company Websites, & Momentum Cyber Proprietary M&A & Financing Transaction Database.

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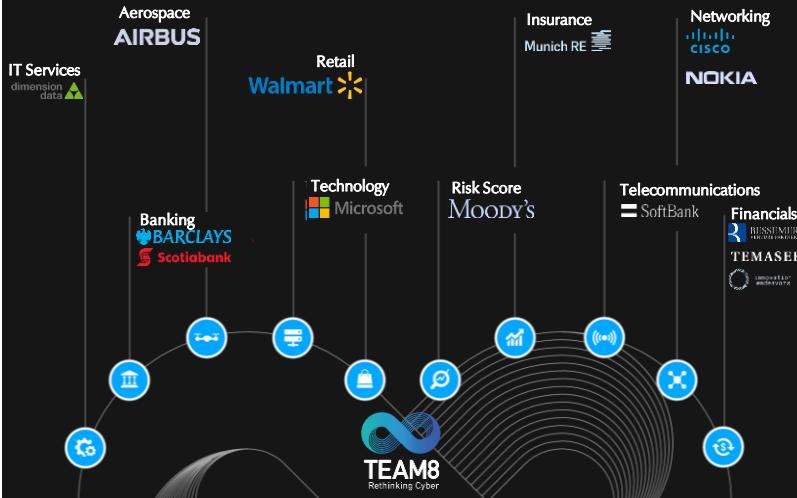
# Team8 Forms International Coalition To Raise \$85M Fund

Cross-Industry Coalition Will Accelerate Digital Transformation Initiatives Currently Inhibited By Security Challenges.

## Team8 Forms International Coalition To Raise \$85M Fund

- \$85 million in capital committed to develop progressive, technology-based companies that empower organizations to thrive in the face of growing cyber threats
- The coalition aims to build technology companies to create secure and agile environments that empower enterprises to realize the true benefits of digital transformation and leverage data to create real business impact

The Team8 International Coalition



## About The Coalition

The coalition formed with this unprecedented approach after respective member organizations concluded that the formidable threat posed by cyber crime inhibits enterprises' ability to maximize digital transformation opportunities due to inherent risks. Rather than simply viewing Cybersecurity as a necessity, the Coalition will unlock its value through rethinking enterprise infrastructure, enabling new growth opportunities through infrastructure for networks, the Cloud, data and computing.

The Coalition's "**Thrive by Security**" approach focuses on three areas:



Cyber as a catalyst for growth instead of as a defense mechanism



Infrastructure that is resilient by design rather than requiring additional layers of security



Data Science as a prime enabler of business growth if utmost security is built-in to the infrastructure

- Chief Information, Technology, Data and Security Officers from each of the member organizations will work together with Team8's research, recruiting and business development teams to identify problems, ideate on disruptive solutions, validate technology, hire talent and plan go-to-market approaches
- The committed \$85 million will be invested at seed-level into each of the solutions, resulting in independently operating companies with shared ownership by the investors

## Select Testimonials



Nadav Zafir  
Co-Founder & CEO

"The synergy and insight from each industry leader combined with our unrivalled cyber and data expertise at Team8 will enable companies to adopt new data-driven methods of working, ensuring they can retain their competitive advantage and thrive, in spite of cyber threats."



Eric Schmidt  
Founder & Partner

"We are proud to partner with Team8 as it expands beyond cyber to solve imminent threats around data sharing, collaboration and machine learning"



Michael Zerbs  
Group Head & CTO

"Participating in Team8's new security partnership is an important part of Scotiabank's ongoing work to build advanced, resilient security into our digital transformation"



Matthew Gyde  
Group Executive - Security  
dimension data

"Investing in Team8 will ultimately shape the future of enterprise security / Cybersecurity and the capabilities that align to future and current client needs"



Marcus Weldon  
CTO

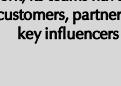
"The pace of Team8's agile company-building model and pre-market validation of their forward-thinking solutions is unrivaled and our continued partnership will enable us to stay a step ahead in this new era of connectivity"

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# About Team8

Israel's Leading Cybersecurity Think Tank And Company Creation Platform.



Company Overview						Platform Overview													
Description	<p><b>Team8</b> is a leading think tank and company creation platform specializing in cyber resilience and data analytics. Leveraging the expertise of former leaders from Israel's elite military intelligence Unit 8200, Team8 is supported by an in-house team of top researchers, engineers and analysts. Team8 combines its in-depth understanding of the attacker perspective, data science AI to develop disruptive technologies and category-leading companies that enable businesses to reap the benefits of digital transformation in an agile and secure manner.</p>					 <p>The Team8 innovation process combines a research team with intimate knowledge of Cybersecurity, access to the best cyber talent, and a global network that gives Team8 companies access to customers, partners and key influencers. The result is a cyber innovation platform uniquely engineered to create category-leading Cybersecurity companies that scale quickly and tackle the biggest problems in Cybersecurity today.</p>													
Leadership	 <p><b>Nadav Zafir</b> Co-Founder &amp; CEO</p>	 <p><b>Yuval Shachar</b> Executive Chairman</p>	 <p><b>Liran Grinberg</b> Co-Founder &amp; CMO</p>	 <p><b>Israel Grinberg</b> Co-Founder &amp; CIO</p>	 <p><b>Lluís Pedragosa</b> CFO</p>	 <p><b>Assaf Mischari</b> Head of Research</p>	 <p>Research team consists of cyber experts with over 50 years of collective experience in cyber warfare and deep ties to Unit 8200</p>	 <p>Team Building</p>	 <p>Deep ties to Unit 8200 provide access to the best cyber talent &amp; actively help Team8's teams recruit diverse teams from Israel's best and brightest</p>	 <p>Go-To-Market</p>	 <p>Through Team8's global network, its teams have access to customers, partners and key influencers</p>								
Founded	2014																		
HQ	New York, New York; Tel Aviv, Israel																		
Amt. Raised	Over \$260M																		
The Team8 Portfolio																			
Company	Founded	Raised	CEO	Description															
S Y G N I A	2015	\$4.3M	Shachar Levy	Syngia is a cyber technology and services company, providing high-end consulting and incident response support for organizations worldwide															
CLAROTY	2014	\$93.0M	Amir Zilberman	Claroty's mission is to secure and optimize the industrial control networks that run the world															
DUALITY TECHNOLOGIES	2016	\$4.0M	Alon Kaufman	Duality enables secure analysis and AI on data while it is encrypted, deriving insights from sensitive data without ever exposing the data itself															
HYSOLATE	2016	\$36.0M	Tal Zamir	Hysolate is re-architecting endpoints so a breach no longer matters. It enables companies to perform seamless isolation between different environments without compromising the user experience															
illusive	2014	\$33.0M	Ofer Israeli	Illusive Networks is pioneering deception-based Cybersecurity technology that neutralizes targeted attacks and Advanced Persistent Threats (APT) by creating a deceptive layer across the entire network															
portshift	2018	Not Disclosed	Ran Ilany	Portshift introduces a paradigm shift for application security departing from IPs, ports, protocols, labels and traditional firewalls while enabling DevOps to operate freely															
The Team8 Process																			
			1	<b>Exploration</b>   Team8 and its research team work with exceptional entrepreneurs to identify truly big problems in Cybersecurity															
			2	<b>Ideation</b>   Team8's research team and exceptional entrepreneurs develop truly innovative solutions. The solution has to have the potential to be the foundation of a category-leading company and is not merely iterative before it can move to the next stage															
			3	<b>Validation</b>   Team8 leverages its network and work with market leaders, design partners and potential customers to test its solutions and confirm marketability and scalability. It is during the validation stage that it accelerates recruiting efforts and form the foundations of the team that will be responsible for driving the company forward															
			4	<b>Execution</b>   This innovation process ensures that Team8 builds category-leading Cybersecurity companies that scale quickly and tackle the biggest problems in Cybersecurity today. At launch, Team8 becomes a co-founder of the company & finances the company's Series A round															
A Unique Global Cyber Syndicate																			
Team8 Collaborates & Is Backed By Prominent Investors & Technology Leaders																			
																			

Source: Firm Press Releases, Company Websites, & Momentum Cyber Proprietary M&A & Financing Transaction Database.  
Note: ▲ denotes the Company has been acquired.

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# Corporate VCs Focused On Cybersecurity

Leading Global Technology Companies Remain Actively Involved In Investing Cybersecurity.

## Select Corporate VCs

VC								
HQ	Mountain View, CA	Santa Clara, CA	Seattle, WA	Singapore				
Select Cyber Partners	Karim Faris	Dave Flanagan	Rashmi Gopinath, Mony Hassid	Jeff Karras				
Investment Philosophy	<ul style="list-style-type: none"> <li>Cybersecurity, Life Science, Healthcare, AI, Robotics, Transportation, and Agriculture</li> <li>Consumer and Enterprise market focus</li> </ul>	<ul style="list-style-type: none"> <li>Hardware, software, and services across sectors including Security, AI, Big Data, and IoT</li> <li>Stage agnostic</li> </ul>	<ul style="list-style-type: none"> <li>Series A – C; \$2M – \$10M check size</li> <li>North America, Israel, Europe, &amp; India</li> <li>Enterprise Cloud Infrastructure, Cybersecurity, AI / ML, DevOps, Drones, Quantum, etc.</li> </ul>	<ul style="list-style-type: none"> <li>\$100K – \$20M check size</li> <li>Seed to Early Stage Growth</li> <li>Global mandate</li> </ul>				
Other Notes	<ul style="list-style-type: none"> <li>Helps companies interface with Google, providing unique access to the world's best technology and talent</li> <li>Invested in more than 300 companies</li> </ul>	<p><b>Intel Capital Technology Day:</b> Portfolio companies present their products and solutions to corporate business decision makers in customized face-to-face meeting formats designed to meet specific customer requirements.</p>	<ul style="list-style-type: none"> <li>Every portfolio company receives licenses to MS technologies—including Azure and Office</li> <li>Proactively connects teams with Microsoft customers, partners, and, internal resources</li> </ul>	<ul style="list-style-type: none"> <li>Focuses on technologies and solutions that lead to quantum changes in network capabilities, next-generation devices, digital content services, and enablers to enhance customer experience</li> </ul>				
Representative Cyber Investments	  	  	  	  	  	  	  	  



VIII.



# BUYER SPOTLIGHT



# In-Depth Buyer Profiles

Detailed Profiles On A Select 25 Of The Top Cybersecurity Public Company Buyers.

## Top 25 Cybersecurity Public Company Buyers

Company	# of Cyber Acquisitions since 2014	Disclosed Deal Value Since 2014 (\$M)	Market Cap (\$M)	Company	# of Cyber Acquisitions since 2014	Disclosed Deal Value Since 2014 (\$M)	Market Cap (\$M)
Symantec	11	\$7,548	\$12,072	FORTINET	3	\$50	\$11,999
proofpoint.	10	\$568	\$4,580	okta	3	NA	\$7,046
�aloito	7	\$910	\$17,871	avast	3	\$1,463	\$3,442
solarwinds	7	\$41	\$4,287	mimecast	3	\$119	\$2,020
BlackBerry	6	\$1,932	\$3,960	TREND MICRO	2	\$300	\$7,740
SOPHOS	6	\$266	\$2,305	Carbon Black.	2	\$85	\$911
splunk>	5	\$689	\$15,495	OneSpan	2	\$57	\$517
FireEye	5	\$1,376	\$3,138	zscaler	1	NA	\$4,793
CYBERARK	5	\$95	\$2,674	Tenable	1	NA	\$2,065
F-Secure	5	\$154	\$416	SailPoint	1	\$16	\$2,062
Qualys.	4	\$26	\$2,943	ForeScout	1	\$113	\$1,114
RAPID7	4	\$107	\$1,473	Secureworks	-	NA	\$1,380
Check Point SOFTWARE TECHNOLOGIES LTD.	3	\$335	\$16,035				

For Detailed Buyer Profiles, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com).



# SECTORS IN FOCUS

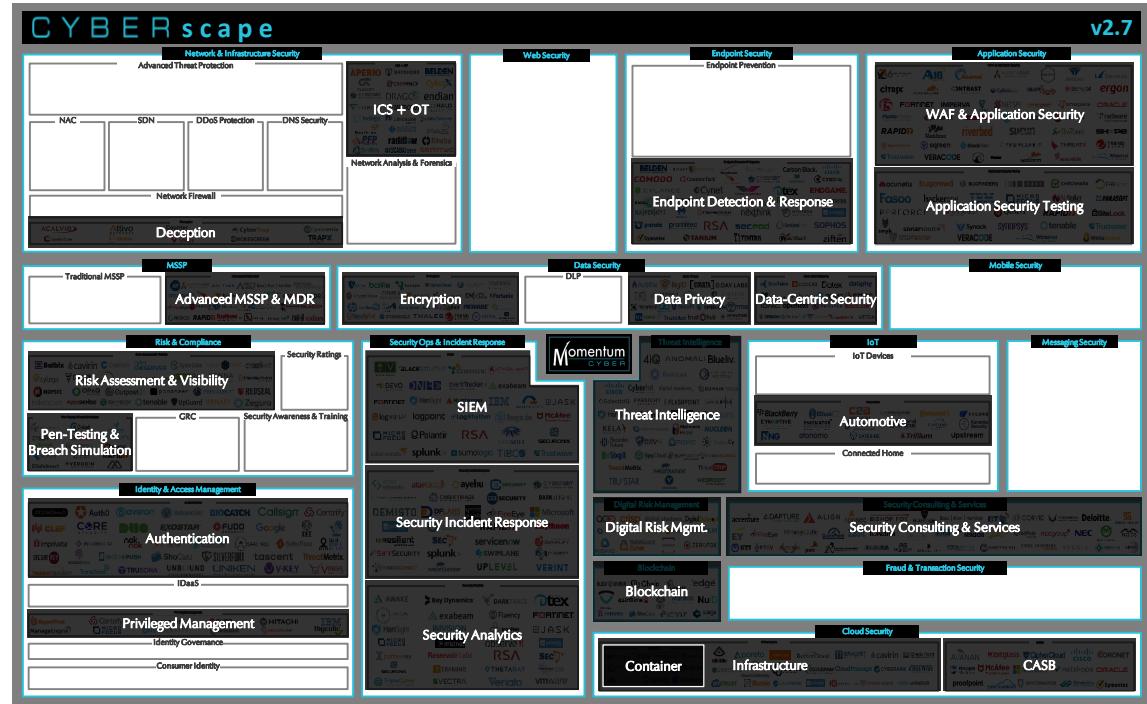


CYBERSECURITY ALMANAC | 2019

# Sectors In Focus

A Deep Dive Into 24 Sectors Across The Cybersecurity Landscape.

Cybersecurity Sector	Cybersecurity Sub-Sector
Security Consulting & Services	-
MSSP	MDR
IoT	Automotive
Blockchain	-
Cloud Security	Infrastructure
Data Security	Data Privacy
Data Security	Data-Centric Security
Cloud Security	CASB
Network & Infrastructure Security	Deception
Security Operations & Incident Response	Security Analytics
Identity & Access Management	Privileged Management
Endpoint Security	Endpoint Detection & Response
Threat Intelligence	-
Security Operations & Incident Response	SIEM
Risk & Compliance	Risk Assessment & Visibility
Data Security	Encryption
Risk & Compliance	Pen Testing & Breach Simulation
Security Operations & Incident Response	Security Incident Response
Digital Risk Management	-
Application Security	WAF & Application
Cloud Security	Container
Identity & Access Management	Authentication
Application Security	Application Security Testing
Network & Infrastructure Security	ICS+OT



For Additional Information On Sectors In Focus, Please Contact Momentum Cyber At [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com)

# About Momentum Cyber

The Leading & Only Investment Bank Focused Exclusively On Cybersecurity.

### Momentum Cyber

- Momentum Cyber is the premier trusted advisor to the Cybersecurity industry, providing bespoke high-impact advice combined with tailored senior-level access
- The firms founders are highly experienced in all aspects of Cybersecurity M&A, having executed from every angle, as an Advisor, Acquirer, and Acquiree
- This unique experience has resulted in a 360-degree view and deep-rooted expertise of knowing exactly what it takes to orchestrate a successful transaction for all parties

#### Firm Leadership

World Class Operators & Advisors

Dave DeWalt Founder & Chairman	Michael Tedesco Founder & Managing Partner	Eric McAlpine Founder & Managing Partner	Ken Gonzalez Partner	Keith Skirbe Founding Member & Director	Dino Boukouris Founding Member & Director

**250+ Deals**      **\$250+ Billion**

### About Us

**46**      **\$16B**

Cybersecurity Transactions & Total Deal Value Executed By Team Members Since 2002

**250+**      **\$250B+**

Total M&A Transactions & Deal Value As A Team Since 1994

**\$379M**      **\$95M**

Average & Median Cybersecurity M&A Deal Value

**\$20B+**

Value Creation To Shareholders As CEO, Board, & Investor

Cyber Exit Savvy – Deep Expertise Selling to Strategic & Financial Buyers

Unparalleled Access Across the Cybersecurity Ecosystem with Executives, Board Members, Investors, & CISOs

**2015**

Year Founded After Highly Successful Wall Street & Cybersecurity Executive Careers

**100+**

Combined Years In Cybersecurity As World-Class Operators & Advisors

Unrivalled Thought Leadership Through Insightful Research, Market Reviews, & Speaker Engagements

 acquired by  Security Analytics	 acquired by  Network Security	 acquired by  Network Security	 acquired by  Web Security	 acquired  Threat Intelligence	 acquired  Mobile Security	 acquired  Incident Response	 acquired by  Diversified Security	 acquired by  Email Security
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**ADVICE**



**ACCESS**

**MOMENTUM CYBERSECURITY GROUP, LLC**  
101 2nd Street, Suite 1275, San Francisco, California 94105

For Inquiries Or Information On The Cybersecurity Almanac Please Contact Momentum Cyber at: [almanac@momentumcyber.com](mailto:almanac@momentumcyber.com)