

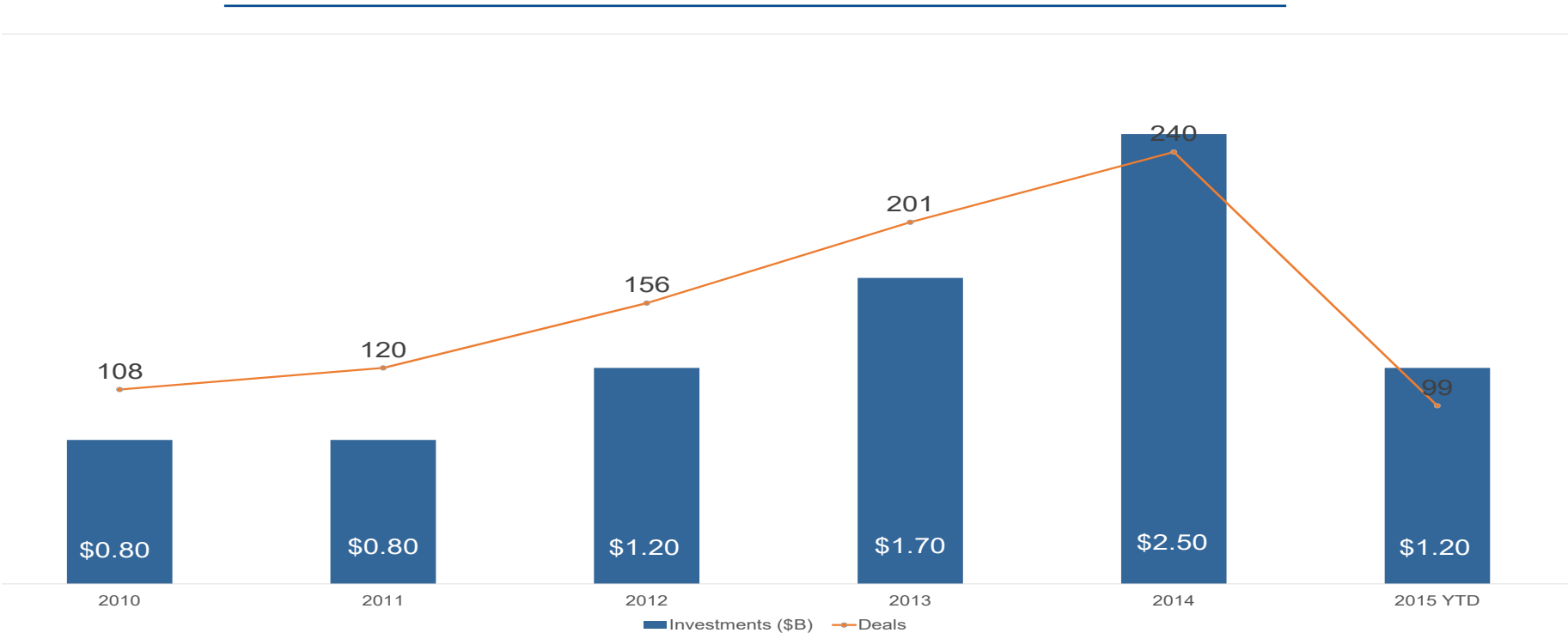
Cybersecurity Report

Financing, trends, and companies analysis
September 2015

Cybersecurity Deals And Dollars by Year

In 2014, cybersecurity startups took in \$2.5B dollars in funding across 224 investments, up from less than \$1B across 108 deals in 2010. In Q1'15 and Q2'15, deal flow has slowed down a bit, with 99 deals in the two quarters compared to 240 for all of 2014. 2015 funding is roughly on pace to equal the amount in 2014, with \$1.2B in cybersecurity financing in the year's first half.

GLOBAL CYBERSECURITY FINANCING HISTORY Investment Deals and Dollars, 2010 - Q2 2015

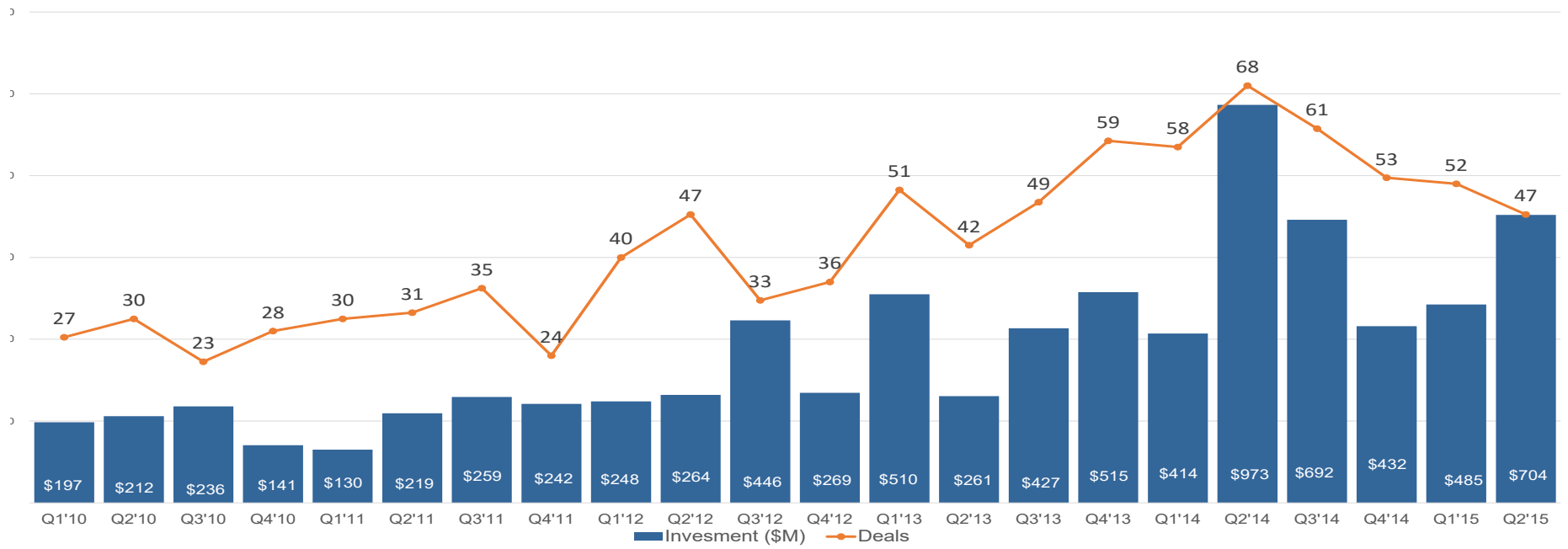


Cybersecurity Deals And Dollars by Quarter

The strongest quarters for investment so far have been Q2'14, Q3'14, and Q2'15. Notable deals during those periods include a \$90M growth equity round from Andreessen Horowitz raised by Emeryville, California-based Tanium in Q2'14, and a \$150M Series F round raised by Lookout in Q3'14 (at a \$1B valuation), with investors including Khosla Ventures, Morgan Stanley, Goldman Sachs, and Andreessen Horowitz. In Q2'15, Accel Partners led a \$100M Series C round that valued Illumio at \$1B.

CYBERSECURITY FINANCING HISTORY

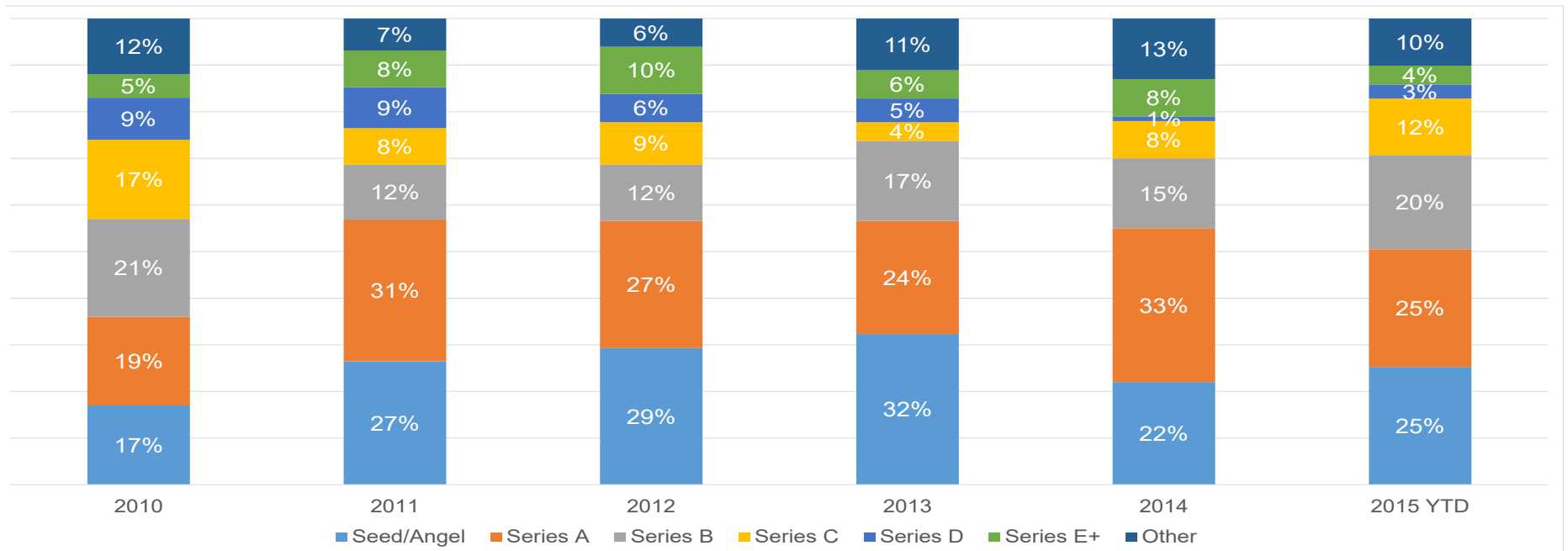
Investment Deals and Dollars, Q1'10 - Q2'15



Cybersecurity Deals By Round

Early-stage deals (Series A and Seed/Angel) have accounted for around 55% of the deal flow since 2011. Mid-stage deals (Series B and C) have accounted for around 32% of deals in 2015, slightly up from ~20% in 2011, 2012, 2013, and 2014. Late-stage deals (Series D and E+) have been a smaller percentage of deals in 2015 year-to-date than in previous year, at only 7%. Late-stage deal share had been steadily declining, dropping to 10% in 2014 from 17% in 2011.

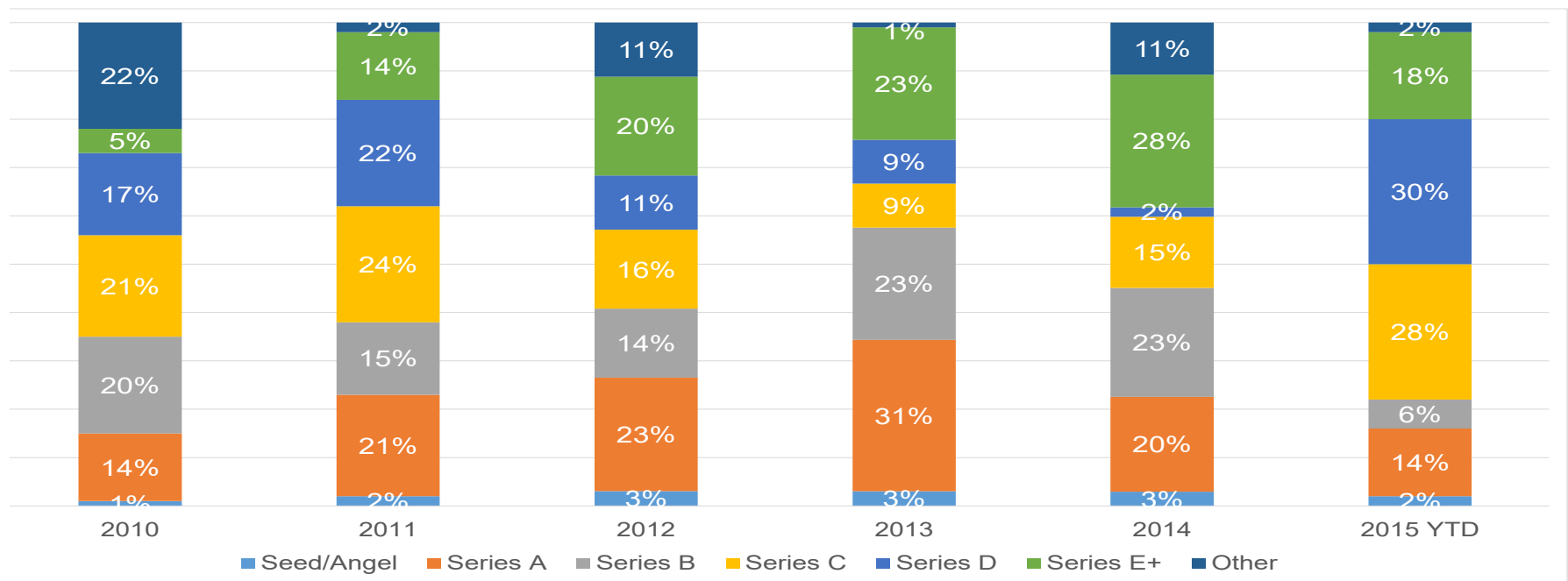
CYBERSECURITY FINANCING DEAL SHARE By Stage, 2010 - Q2 2015



Cybersecurity Dollars By Round

Early-stage dollar share has been pretty variable, fluctuating from 14% in 2010 to 33% in 2013. However, mid-stage funding occupied an uncharacteristically large share of funding dollars in 2015 year-to-date, at 58%. Late-stage funding was weak in the first two quarters of 2015, at only 20%.

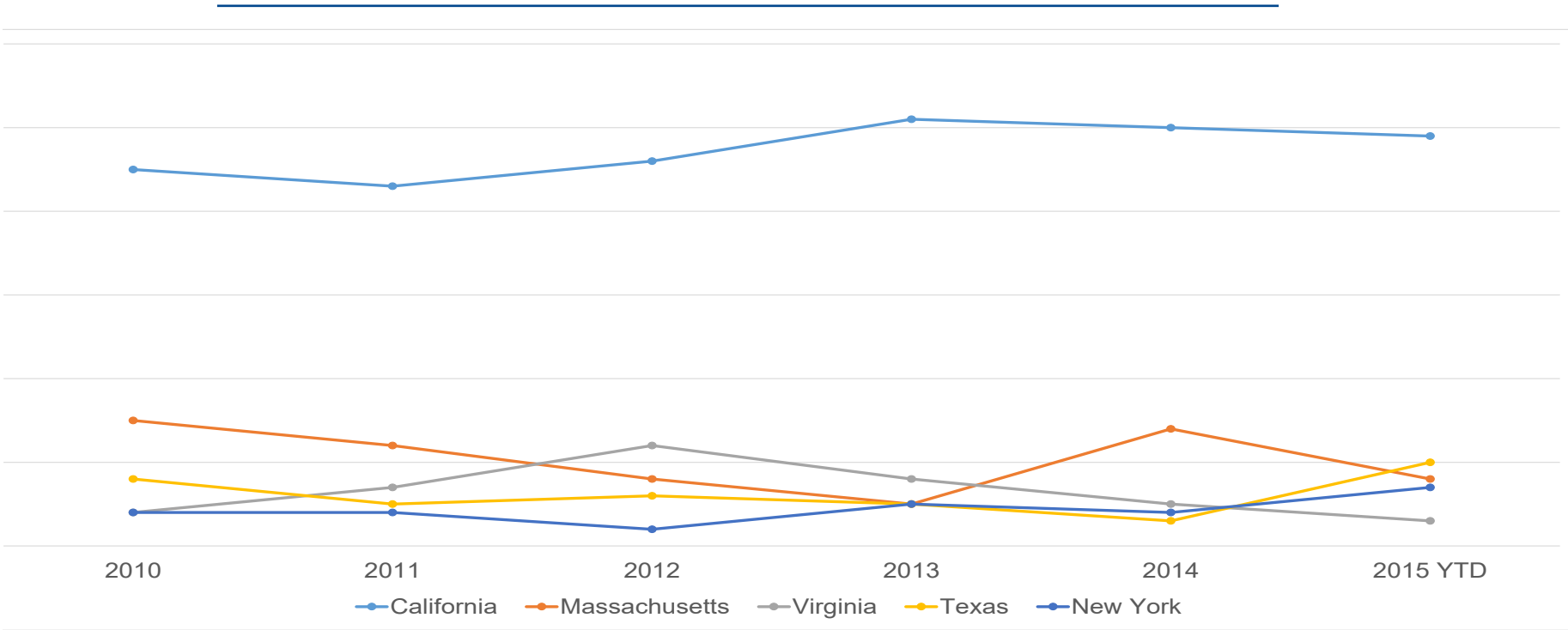
CYBERSECURITY FINANCING DOLLAR SHARE By Stage, 2010 - Q2 2015



Cybersecurity Funding In The US

In the last five years, more than 80% of the dollar funding for private cybersecurity startups went to US-based companies. California, Massachusetts, Virginia, Texas, and New York were the top 5 states for deal share.

CYBERSECURITY FUNDINGS FOR TOP 5 STATES IN THE US By Deal Share, 2010 - Q2 2015



Cybersecurity Deals Outside The US

Israel topped the list for countries outside the US with the most cybersecurity deals (over 50). In a distant second and third place are Canada and the UK, with significant recent deals including a \$55M Growth Equity round from Spectrum Equity Investors for Canada-based Verafin in Q2'14, and a Q2'14 \$8M Series B round for the UK's CertiVox from investors including NTT DoCoMo Ventures.

TOP COUNTRIES OUTSIDE U.S. FOR CYBERSECURITY DEALS 2010-Q2'15

RANK	COUNTRY
1	Israel
2	Canada
3	United Kingdom
4	Germany
5	China



Cybersecurity VC Board Members

Below is a list of 11 of the most prominent cybersecurity VC investors based on board participation (observer/director). The investors come from a range of highly active firms in the space including Kleiner Perkins, Intel Capital, Trident Capital, and Andreessen Horowitz – where both GP Scott Weiss and board partner John Jack frequently take board seats.

WHO'S WHO IN CYBERSECURITY? A Look at Prominent VC Board Members

INVESTOR	FIRM	SELECT CYBERSECURITY BOARD SEATS
Ted Schlein	KPCB	Alien Vault, Ionic Security, Synack
Maria Cirino	.406 Ventures	Bit9, Veracode, Threat Stack
Alberto Yépez	Trident Capital	Mocana, HyTrust, Alien Vault
David Cowan	Bessemer Venture Partners	Endgame, Defense.net, Virtru
Gaurav Garg	Wing	Shape Security, Palerra, FireEye, Dtex Systems
Ray Rothrock	Venrock (Partner Emeritus)	CTERA, Shape Security, Appthority
Steven Krausz	U.S. Venture Partners	Appthority, Imperva, Trusteer
Promod Haque	Norwest Venture Partners (NVP)	Dtex Systems, Palerra, FireEye
Steve Herrod	General Venture Partners	Menlo Security, ThreatStream, Illumio
Sean Cunningham	Intel Capital	Alien Vault, Bromium, Perspecsys
Scott Weiss John Jack	Andreessen Horowitz	Pindrop Security, CipherCloud, Bluebox, Illumio, Alien Vault



Most Active Investors

The most active cybersecurity investor in the last 5 years has been Intel Capital. Intel was followed by Kleiner Perkins and Andreessen Horowitz. All of the top 6 investors had investments in 10 or more cybersecurity startups. Notable companies in the portfolios of the top 10 investor firms include Tanium, Good Technology, and Lookout. Only 2 of the 10 most active investors in cybersecurity were corporate venture funds: Google Ventures and Intel Capital (the latter was the top investor).

MOST ACTIVE CYBERSECURITY INVESTORS

2010 - Q2'15

RANK	INVESTOR
1	Intel Capital
2	Kleiner Perkins Caufield & Byers
2	Andreessen Horowitz
2	Accel Partners
3	Bessemer Venture Partners
4	Google Ventures
5	Norwest Venture Partners
5	New Enterprise Associates
5	Sequoia Capital
5	Lightspeed Venture Partners



Most Well-Funded Startups

As of Q2'15, the most well-funded cybersecurity startup was Good Technology, a Sunnyvale, California-based provider of secure enterprise software, which has raised more than a half-billion dollars in venture funding (later acquired by BlackBerry). Next came Lookout, a smartphone-security company with almost \$300M in funding from investors including Khosla Ventures, Accel Partners, and Index Ventures. Rounding out the top 3 was OpenPeak, a Florida-based provider of enterprise mobile device management software, which has raised more than \$200M in funding from investors including RRE Ventures, AT&T, and Blackstone.

MOST WELL-FUNDED CYBERSECURITY STARTUPS 2010 - Q2'15

RANK	COMPANY
1	Good Technology (Visto)
2	Lookout
3	OpenPeak
4	Good Technology
5	Tanium
6	Okta
7	Illumio
8	Alarm.com
9	Ping Identity
10	Bit9













Top 10 Startup Leaders in the Cybersecurity Industry

CB Insights' Company Mosaic score tracks the health of private companies

The 10 cybersecurity startups listed tend to fall into a few broad categories: corporate application protection, identity management, and cloud defense. Many offer products that span all three sub-categories. The list is for illustration purposes and is not meant to be comprehensive.

Top Cybersecurity Companies by CBI Mosaic Score

Company	Company Mosaic Score	Recent Headlines / Highlights
 VERACODE	900	Veracode Introduces IAST for Enhanced Risk Reduction in DevOps and Agile Environments
	890	Array, Duo Security Partner on Security Platform
 Centrify	870	Centrify enhancements speed up, cut costs of Office 365 deployment
 CIPHERCLOUD™ Building Trust in the Cloud	830	CIPHERCLOUD UNVEILS NEXT GENERATION TOKENIZATION FOR CLOUD DATA PROTECTION
 ALIEN VAULT LABS	830	AlienVault Announces New Certification Program
 Lookout	830	Lookout Debuts Enterprise Mobile-Threat-Protection Platform
 feedzai	820	Feedzai and Azul Systems deploy fraud detection solution
 elasticsearch	810	Elastic stretches into Australia
 CloudLock	800	CloudLock Co-Founder and CEO Gil Zimmermann Named EY Entrepreneur Of The Year® 2015 in New England
 ClearDATA SECURE • HEALTHCARE • CLOUD	790	ClearDATA Gets \$25M in Funding to Support Healthcare Cloud Growth Trend

Exit Trends Within The Cybersecurity Industry

Palo Alto Networks topped the list of cybersecurity exits with a valuation at the time of exit of \$2.8B, followed by NQ Mobile and FireEye which both also exited for over \$2 billion (valuation at time of IPO). Airwatch was the largest cybersecurity acquisition, bought by VMWare for over \$1.5B. The aggregate exit value of the top 10 cybersecurity exits was nearly \$16B.

LARGEST CYBERSECURITY EXITS

Since 2010

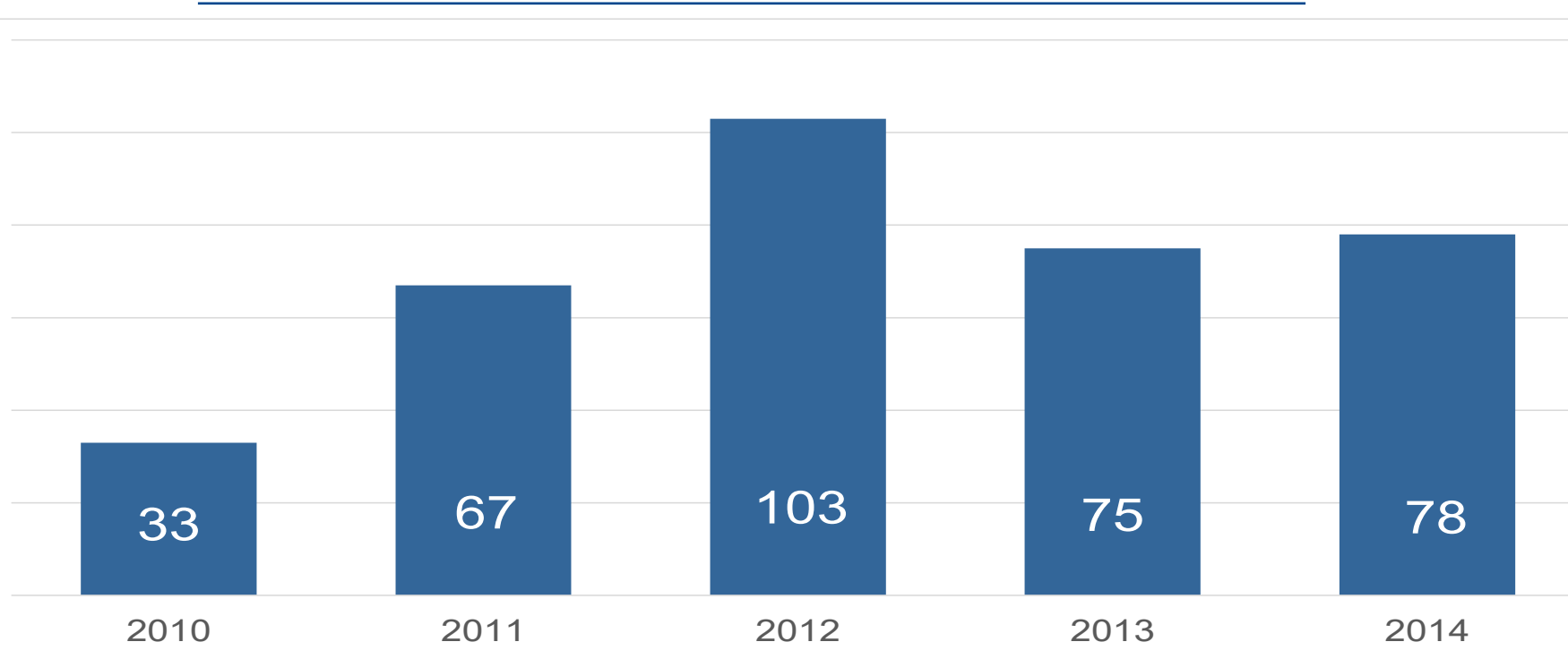
RANK	COMPANY	EXIT TYPE
1	Palo Alto Networks	IPO
2	NQ Mobile	IPO
3	FireEye	IPO
4	AirWatch	Acquired by VMWare
5	SonicWall	Acquired by Dell
6	MANDIANT	Acquired by FireEye
7	Trusteer	Acquired by IBM
8	Barracuda Networks	IPO
9	SafeNet	Acquired by Gemalto
10	AVG Technologies	IPO



Exit Trends Within Cybersecurity Industry

Exit activity in the cybersecurity space reached a high of over 100 exits in 2012 but decreased 27% year-over-year in 2013 and remained at those levels in 2014.

NUMBER OF CYBERSECURITY EXITS 2010-2014



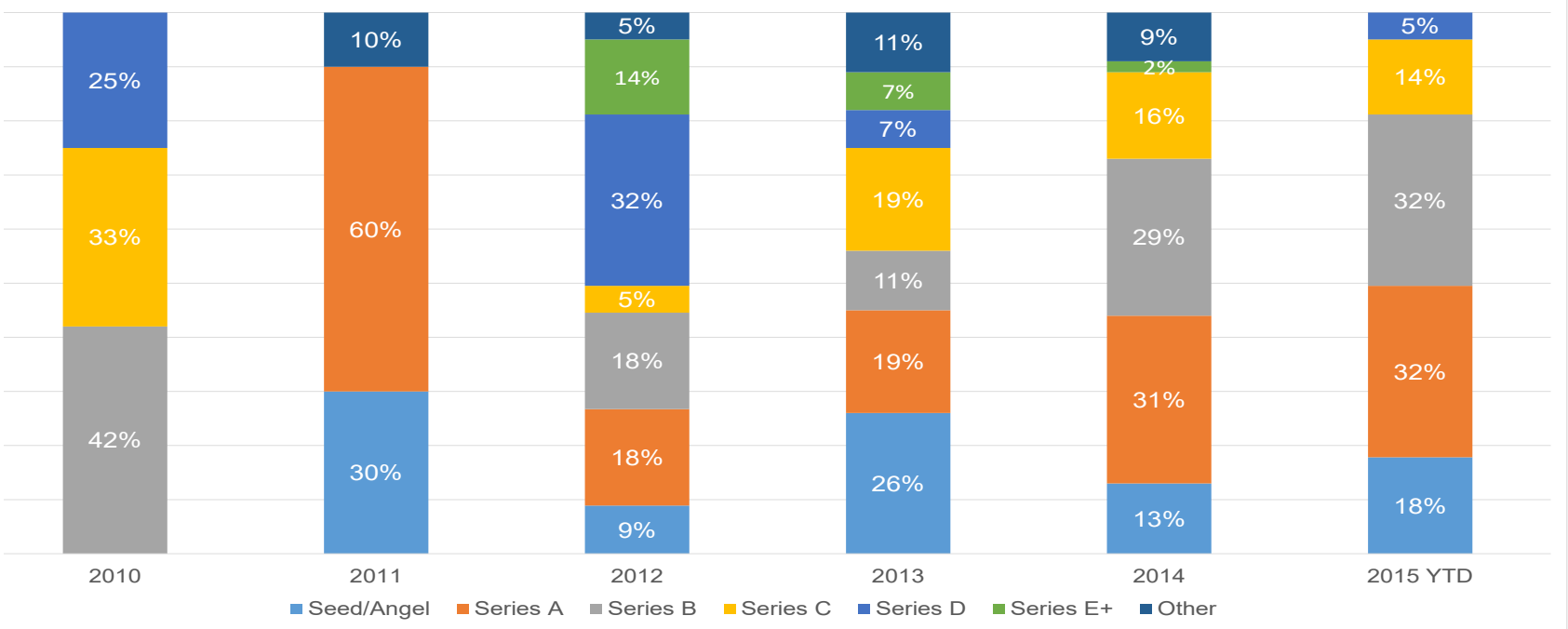
An aerial photograph of a city skyline, likely New York City, with a large river in the foreground. The image is overlaid with a semi-transparent blue filter. The text "Corporate Investments In Cybersecurity" is centered in white.

Corporate Investments In Cybersecurity

Cybersecurity Corporate Financing Deals By Round

The relatively small number of corporate deals each year mean that the data is easily skewed toward one investment stage or another. It is noticeable that late-stage deals have been virtually nonexistent in 2014 and 2015 year-to-date.

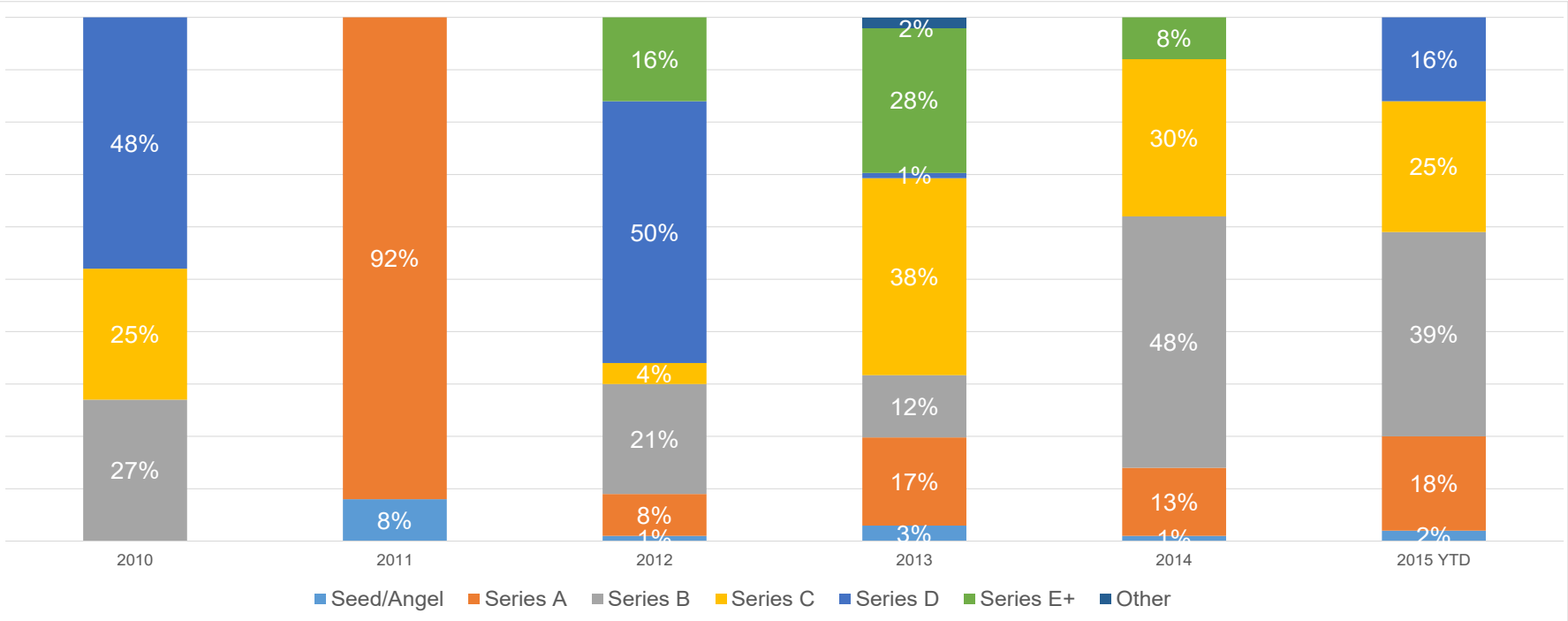
CYBERSECURITY CORPORATE FINANCING DEAL SHARE By Stage, 2010 - Q2 2015



Cybersecurity Corporate Financing Dollars By Round

Similarly, dollar share by investment stage has varied quite a bit as well. As might be expected, despite high deal share, early-stage rounds account for a relatively small dollar share.

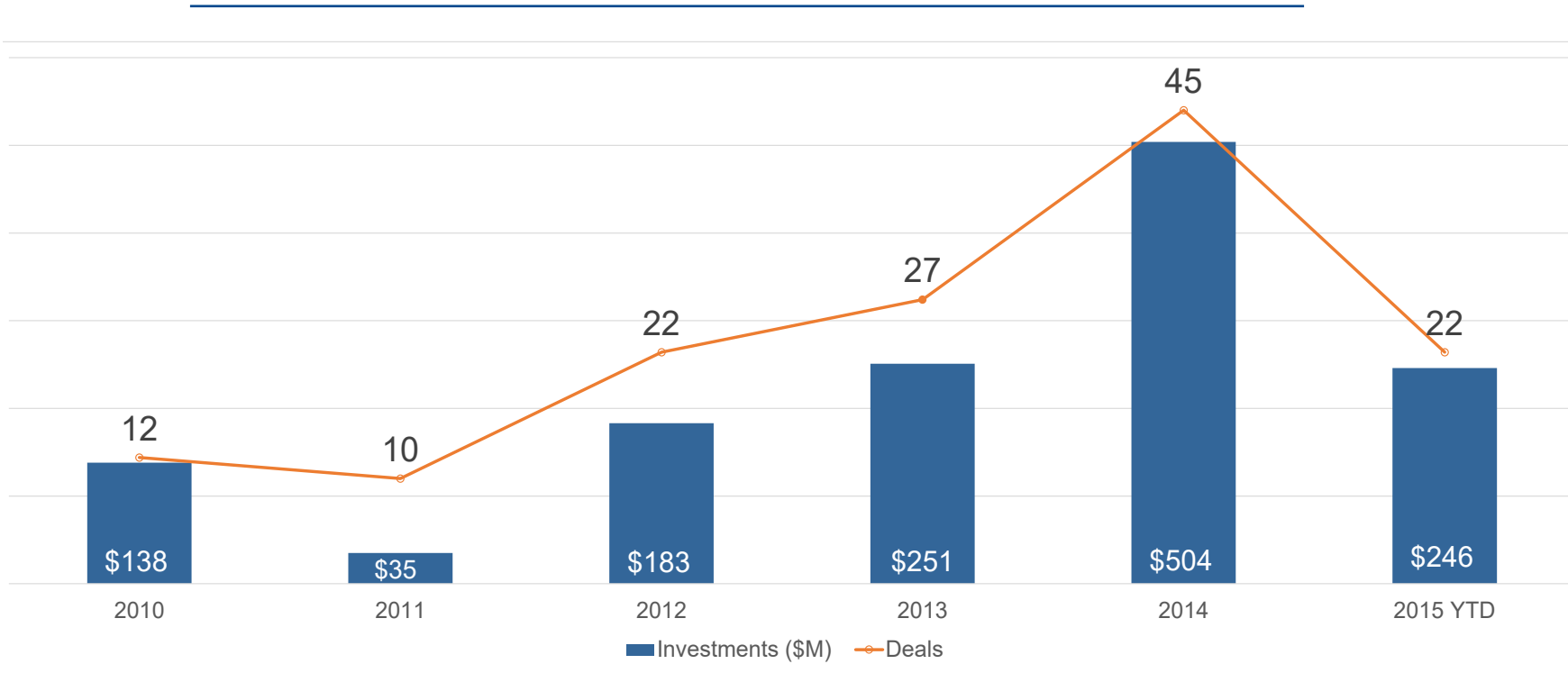
CYBERSECURITY CORPORATE FINANCING DOLLAR SHARE
By Stage, 2010 - Q2 2015



Corporates like Intel, Qualcomm, And Google Continue to Invest in Cybersecurity

In 2014, corporates participated in over 40 deals worth \$502M, including a number of multi-million deals to CipherCloud, Centrify, and Skyhigh Networks. Both funding and dollars appear to be maintaining pace in Q1'15, and may not exceed 2014 numbers.

CYBERSECURITY CORPORATE FINANCING HISTORY 2010 - Q2'15



Most Active Corporate Investors

Intel Capital topped both our corporate investor and overall investor rankings. Google Ventures, next on the corporate investor list, was also one of the top 10 overall investors. Qualcomm Ventures is the third-ranked corporate player in cybersecurity financing. Notable recent deals involving Intel and Google include Intel's participation in a \$25M Series C funding for Vectra Networks in Q3'14 and Google Ventures' involvement in a \$9M Series A round for Checkr in Q4'14.

MOST ACTIVE CORPORATE CYBERSECURITY INVESTORS 2010 - Q2'15

RANK	INVESTOR
1	Intel Capital
2	Google Ventures
3	Qualcomm Ventures
3	Juniper Networks
4	Salesforce Ventures
4	In-Q-Tel
4	Samsung Ventures
4	NTT DoCoMo Ventures
4	Citi Ventures
4	T-Venture

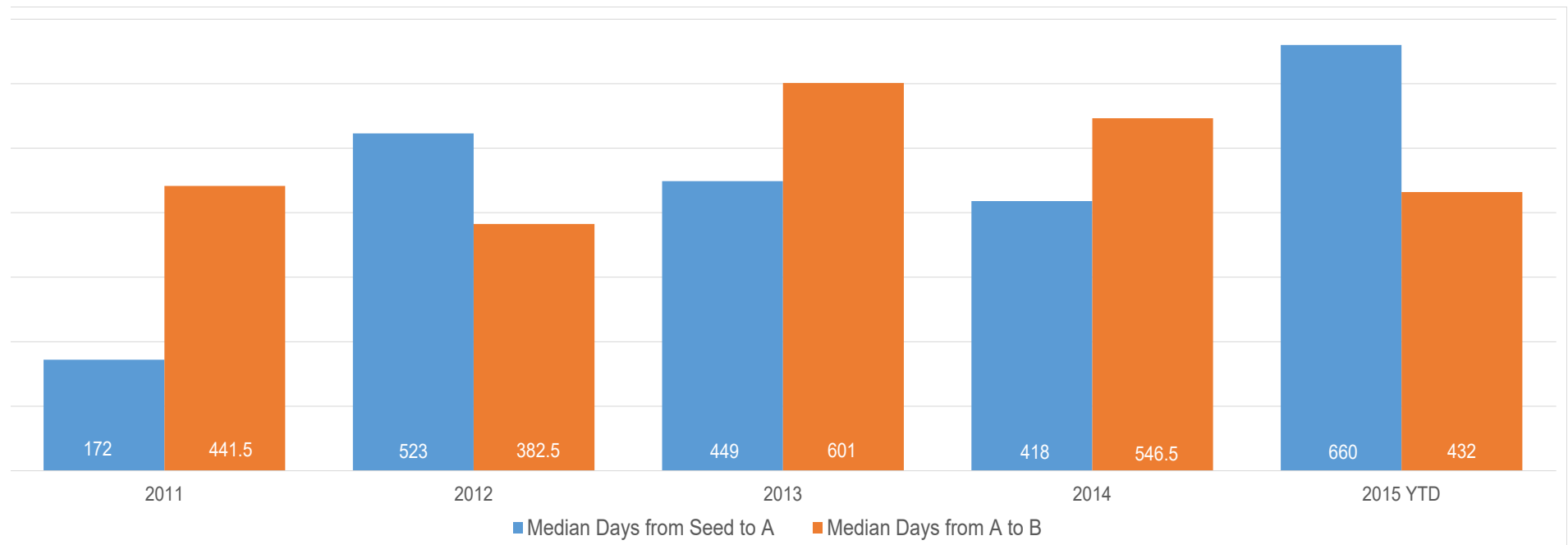


Movement Between Financing Rounds

In 2014, the median time was 418 days to go from Seed to Series A, and 546.5 days from Series A to B. That's compared to 449 days to get to Series A, and 601 days to move to Series B, in 2013. But in 2015 early-stage cybersecurity companies seem to have slowed down considerably, at least when it comes to moving from Seed to Series A. Cybersecurity startups that raised their Series A rounds in the first half of 2015 did so a median of 660 days after they received their last Seed round, about 240 days longer than in 2014, and almost four times as long as they took in 2011.

MEDIUM TIME BETWEEN EARLY STAGE ROUNDS FOR CYBERSECURITY STARTUPS

Number of Days, 2011 - Q2 2015



Fastest Series A-Raising Cybersecurity Companies

Heading up our list is U.S.-based BioCatch, which makes software to help prevent fraud. Biocatch raised its Series A round of \$10M less than two months after its final Seed funding. The Series A investors included Blumberg Capital as well as four return backers, including Centillion. Following BioCatch in raising speed was Florida-based Review Trackers, which raised a \$2M Series A round a little less than 3 months after its last Seed funding from gener8tor. None of the 5 fastest Series A raisers were among the companies raising the 5 largest Series A rounds

FASTEST SERIES A RAISING CYBERSECURITY COMPANIES 2010 - Q2'15

RANK	COMPANY	INDUSTRY	COUNTRY	SERIES A AMOUNT (\$M)	SELECT INVESTORS
1	BioCatch	Internet Software & Services	United States	\$10	Centillion; David Assia; JANVEST Technologies; OurCrowd.com
2	Review Trackers	Internet Software & Services	United States	\$2	gener8tor
3	Checkr	Internet Software & Services	United States	\$9	Y Combinator
4	enSilo	Internet Software & Services	Israel	\$10	Carmel Ventures
5	NowSecure	Mobile Software & Services	United States	\$13	Jump Capital



Fastest Series B-Raising Cybersecurity Companies

Topping the list was Wickr, a San Francisco-based company that specializes in mobile-messaging security. Wickr raised a \$30M Series B round less than 4 months after their last Series A round, from backers including Juniper Networks and Alsop-Louie Partners. Following Wickr in raising speed was Elastica, which raised a \$39M Series B round — from investors including Third Point and Mayfield Fund — a little more than 4 months after its last Series A funding. Interestingly, none of the 5 fastest Series B raisers had any of the 5 largest Series B rounds.

FASTEST SERIES B RAISING CYBERSECURITY COMPANIES 2010 - Q2'15

RANK	COMPANY	INDUSTRY	COUNTRY	SERIES B AMOUNT (\$M)	SELECT INVESTORS
1	Wickr	Mobile Software & Services	United States	\$30	Alsop-Louie Partners; Juniper Networks; Knight Foundation
2	Elastica	Internet Software & Services	United States	\$39	Mayfield Fund
3	Luminal	Internet Software & Services	United States	\$10	Core Capital Partners; Inflection Point Ventures
4	ThetaRay	Security Software	Israel	\$10	Poalim Capital Markets
5	Vidder	Internet Software & Services	United States	\$12	ONSET Ventures; Voyager Capital



The Periodic Table of Cybersecurity

Cybersecurity companies have been helping businesses defend against an increasing number of threats using increasingly powerful techniques. In 2014, cybersecurity startups took in \$2.5B dollars in funding across 224 investments. The table is meant so serve as a compact view of the entire cybersecurity landscape.

The Periodic Table of Cybersecurity

A breakdown of companies in the cybersecurity sector.

Ds Duo Security	Il Illumio
Lo Lookout	NI NSS Labs
Cd ClearDATA	RI Rubicon Labs
Co CoreOS	Vm Verimatrix
Zi Zimmerium	Ia Invincea
Ps Pindrop Security	Sk Synack
Bg BitGo	Ahc AHC
Ct CounterTack	Op OpenPeak
Vn Vectra Networks	Db DB Networks

Symbol → **Vc**
Firm Name → Veracode

- Corporate(Specialized)
- Corporate(Full Platform)
- Personal Protection
- Recent Exits
- Fraud Protection
- Cloud Protection
- Top Investors

Kx KruX Digital	LI Lastline	SI SensorLogic	Vt Vericept	Sw SEWORKS	Nmw NetMation Wireless	Av AlienVault	Csn Cybereason	Zf ZeroFOX	Ss Shape Security	Pft Safe Technology	Cmk Cloudmark
Fs ForeScout	Ca CyberFlow Analyt	Tr ThetaRay	Atn AirTight Network	Stk Stakhanovets	Cs CrowdStrike	Gt Good Technology	Bl Bitglass	Py PerspecSys	Sxs Skybox Security	Zm ZenMate	McN Mocana
Sy Skycure	Es eSentire	Wp Workspace	Ii Intrinsic-ID	Nm Namogoo	Vc Veracode	Lr LogRhythm	Th ThreatStream	Vrk Vorstack	Bu Blueliv	Wr Wickr	Fsp FinSphere
Ap Apperian	Fo FortiScale Security	Sd Simplified	Cn Consenty Networks	Imn Immuno	Cf Centrify	Ios Ionic Security	Bm Bromium	Rsn RedSeal Network	Bs BlackStratus	Trl Truloo	Ckr Checkr
Pt Prelerf	Vi Vidder	Fj Finjan Software	Vk V-Key	Cx Checkmarx	On OpenDNS	Adl Adaloom	Van vArmour Network	Vfi Venafi	Cc Canary Connect	Ult Unikey Technologies	Cde Confide

Fz FeedZai	Tmx ThreatMetrix	Cvx Certivox
Evy EyeVerify	Fpg Flashpoint Global Partners	Tko TokenOne
Ayh Are You a Human?	Ts TeleSign	Cic CipherCloud
Nnl Nok Nok Labs	Io Iovation	Ela Elastic
Ccl Cuculus	Tp TrailPerception	Cdk CloudLock
Ws White Sky	Img IdentityMind Global	Shn Skyhigh Networks
Ses Shine Security	Dd Delta ID	Hyt HyTrust

Ic Intel Capital	Kpc Kleiner Perkins Caufield & Byers	Ah Andreessen Horowitz	Aps Accel Partners	Bsv Bessemer Venture Partners	Gv Google Ventures	Nvp Norwest Venture Partners	Nea New Enterprise Associates	Sqc Sequoia Capital	Lsp Lightspeed Venture Partners
Pan Palo Alto Networks	Nqm NQ Mobile	Fe FireEye	Aw AirWatch	Iss Internet Security Systems	Md MANDIANT	Bn Barracuda Networks	Tsr Trusteer	Avt AVG Technologies	Mi MobileIron

created by



To receive updates to the Periodic Table, visit:

www.cbinsights.com/blog/periodic-table-payments



Navigating The Periodic Table of Cybersecurity

The top part of the table lists top cybersecurity startups while the bottom two rows list prominent investors and recently exited companies.

We broke cybersecurity startups into several subcategories:

- **Specialized corporate information protection:** Companies like Lookout and Illumio offer specialized protection focused on certain types of threats or aimed at safeguarding certain types of devices, e.g. network “endpoints,” such as PCs, smartphones, and tablets.
- **Corporate full-platform protection:** Companies like Veracode and AlienVault offer cybersecurity platforms intended to meet all corporate security needs at once. These companies often target small- and medium-sized enterprises.
- **Personal protection:** Companies like Psafe Technologia and Wickr offer consumers products to help them protect their devices and information.
- **Fraud protection:** Companies like FeedZai and EyeVerify protect against identity theft and fraud.
- **Cloud protection:** Companies like Ciphercloud and Elastica are offering cybersecurity solutions specifically focused on secure access to cloud-based applications from anywhere. This is becoming increasingly important with the use of cloud-housed services and applications (Salesforce and Microsoft Office 365, for example).



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category/industry/cybersecurity-industry/](https://www.cbinsights.com/blog/category/industry/cybersecurity-industry/)