



CYBERSECURITY EVENT 2018



Content

The market

For the investor

Investment Case

Growing Cybersecurity Need

Why now? *A combination of conditions have created the perfect cyber storm and opportunity for investing*

Increasing geo-political tensions & complete lack of governance & law enforcement models

Legacy security providers are unable to detect / prevent

Speed of innovation driving vulnerabilities everywhere (mobile, social, cloud, satellite, IoT, industrial, physical, & consumer)

Expansive vulnerabilities enable exponential growth in attacker groups & types

Levels of danger expand from hacktivism to crime to espionage to terrorism to warfare

Threats are growing in risk as new threats emerge to target information everywhere

Increased network connectivity

Trends to keep in mind

Automation (inevitable) will be more widely adopted as skills shortage is exacerbated; emphasis on efficacy of big data analytics

The cybersecurity industry is far from maturity, many new companies with new approaches and technologies are constantly emerging, leading to highly fragmented sectors

Consolidation will accelerate across highly fragmented & competitive sectors including endpoint & authentication

AI vs AI – we will see a rise in AI-based attacks with cybercriminals leveraging machine learning for attacks

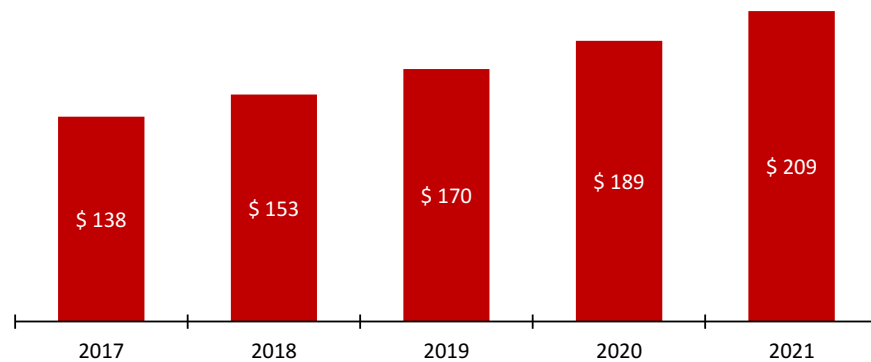
Attack surface will continue to increase as a result of evolving enterprise infrastructure (reduced visibility) – driven by migration to the cloud & IoT

Enterprises are transforming their security strategy, moving away from prevention-only approaches to focus more on detection and response

Sectors: *Cloud infrastructure security, Threat intelligence, Risk & compliance (Risk assessment & Visibility), Data security (Data encryption), Social media & Digital risk management, IAM (Authentication), Application security (Security testing), Detection & Response, Continuous security assessment, Network & Infrastructure security*

Size and Growth

Cybersecurity Growth Path (\$B)

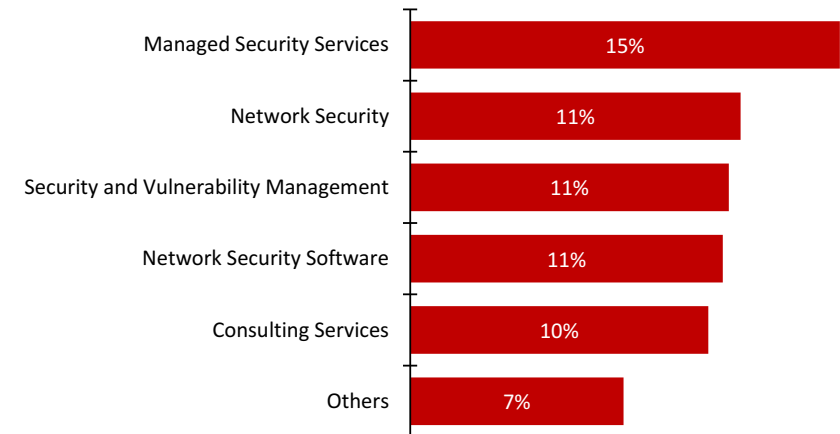


CAGR: 11%

Cybersecurity spending estimated to grow at a rate of 11% a year through 2021, to reach USD 209 billion

Vulnerabilities exposed by the speed of innovation, geo-political tensions, the shift to cloud computing, lack of knowledge/preparedness, expansion of attack surfaces (mobile, IoT, Social Media) are just a few heavy-hitting factors driving the demand

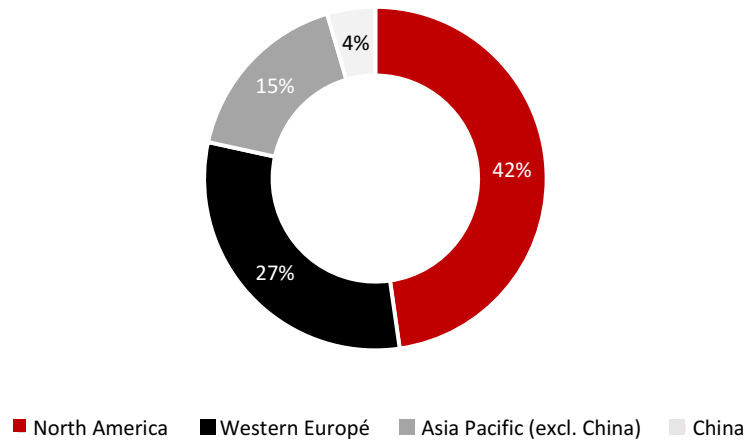
Top Technology Category Based on 4 Year CAGR (2017-2021)



A Managed Security Service Provider (MSSP) provides outsourced monitoring and management of security devices and systems. Aims to reduce the number of operational security personnel an enterprise needs to hire, train and retain to maintain an acceptable security posture.

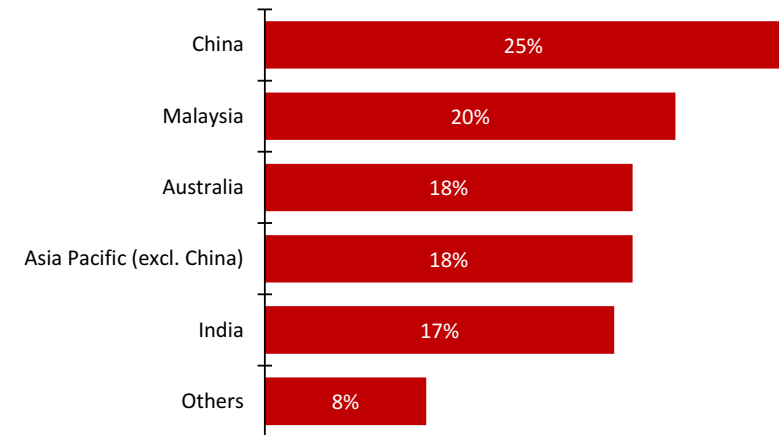
Size and Growth

Cybersecurity Market Per Region (2017)



North America the biggest market, China far behind as of today (2017)

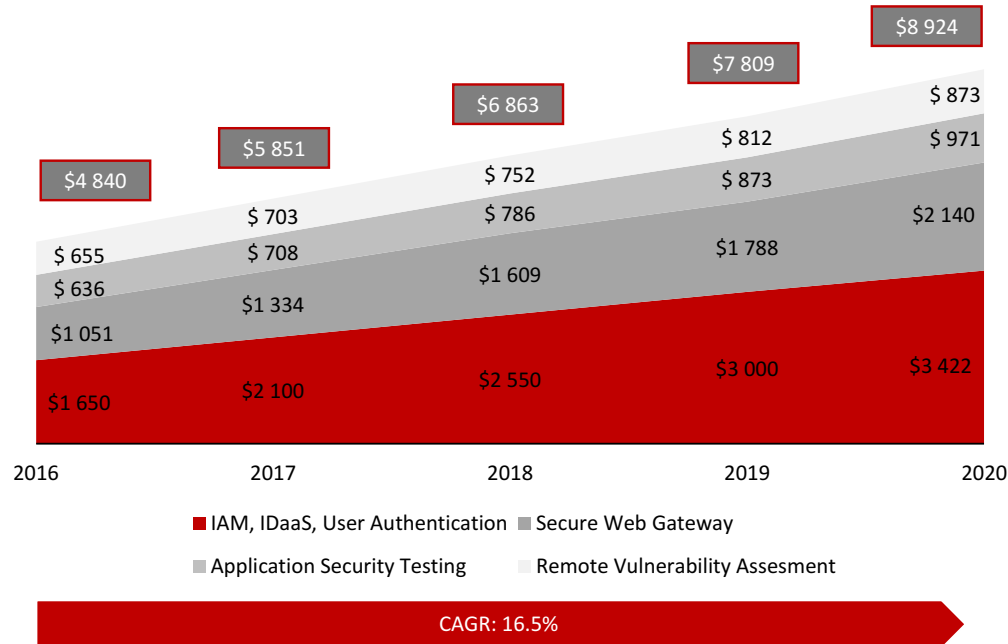
Top Country Based on 4 Year CAGR (2017-2021)



China the fastest growing region, expected CAGR of 25% through 2021

Cloud Security

Worldwide Cloud-Based Security Services Forecast by Segment (Millions of Dollars)



Global Cloud Security market will be worth \$9B In 2020*

Drivers of Cloud Security:

1. Most companies dont have the know how (on-premise)
2. Increased migration to cloud based services
3. Cost effective solutions
4. Faster time to deployment

The migration to the cloud spawns a new breed of Cloud Infrastructure Security vendors (provides visibility across workloads, applications, processes, containers, machines, and/or users). Among others are *Lacework, RedLock, Evident.io, Armor, Cavirin, Threat Stack and CloudPassage*

Top Cloud Providers:



Source: Gartner, Redeye Research.
*The four presented segments do not add up to the total numbers as smaller segments are not included in the figure.

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2017 in review

\$5.1B
Financing Volume

















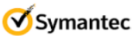













326
Financing Transactions

\$20.6B
M&A Volume

178
M&A Transactions

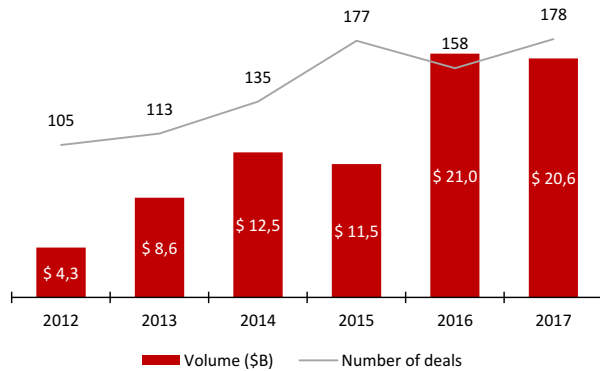
7.0x
Median EV/CY 2018e
Rev*

25.3%
Nasdaq CTA
Cybersecurity Index,
YTD Return*

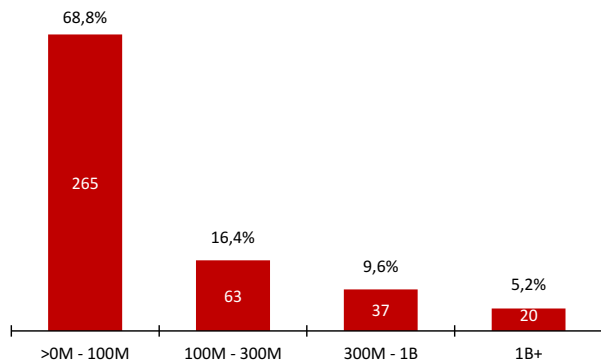
Notable Financing Transactions			Notable M&A Transactions		
Date	Company	Amount (\$M)	Target	Acquirer	Amount (\$M)
2017-12-01	 Bitdefender	211	 gemalto	 THALES	6 885
2017-10-25	 SKYBOX SECURITY	150	 ixia	 KEYSIGHT TECHNOLOGIES	1 603
2017-06-07	 illumio	125	 Barracuda	 THOMA BRAVO	1 405
2017-08-04	 BlueteamGlobal	125	 Gigamon	 ELLIOTT	1 329
2017-06-21	 cybereason	100	 LANDESK	 HEAT software	1 150
2017-06-06	 netskope	100	 Symantec	 digicert	950
2017-05-25	 TANIUM	100	 VERACODE	 ca technologies	614
2017-05-17	 CROWDSTRIKE	100	 BLACKDUCK	 SYNOPSYS	548
2017-04-05	 ARMOR	89	 ARGUS CYBER SECURITY	 Continental	400
2017-09-05	 FORGEROCK	88	 BLUECAT	 MDP	325

M&A Activity

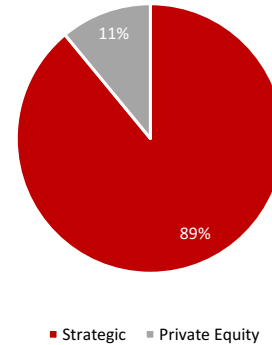
M&A Activity



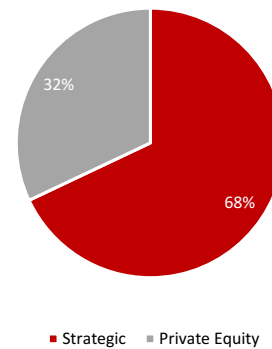
M&A By Deal Size



M&A Activity By Type of Buyer 2007



M&A Activity By Type of Buyer 2017



Private Equity activity has increased significantly in cybersecurity. The highly fragmented cybersecurity market lends itself to the PE platform / roll-up playbook

M&A exits in cybersecurity are typically below \$100M (68.8% of the time)

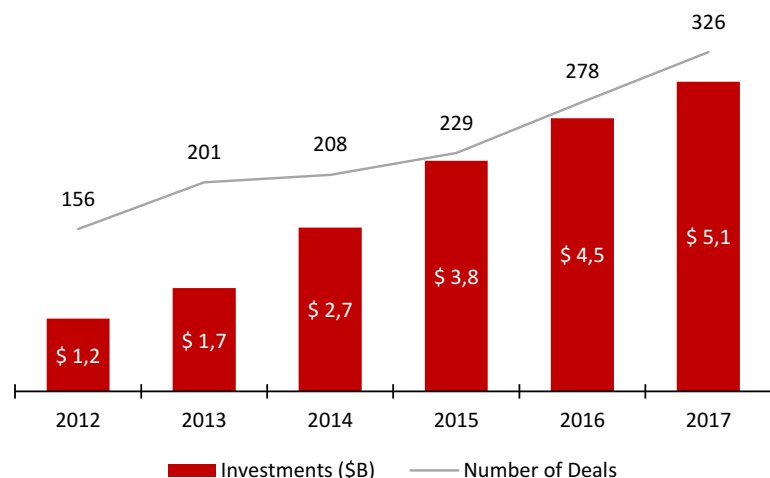
62% of transactions between >0.0x - <5x EV/LTM Rev. Valuations for M&A cybersecurity targets vary for many reasons – growth, market, customer validation, technology team etc

129
2018 YTD* M&A transactions

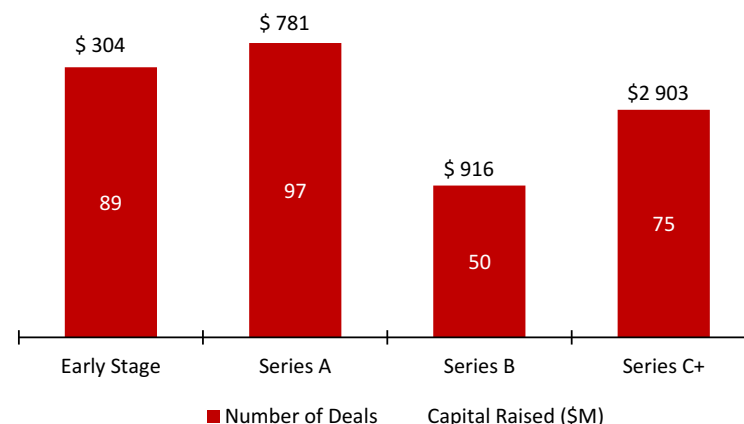
\$8.7B
2018 YTD* M&A volume

Funding Activity

Annual Investments Deals and Dollars (\$B) (2012-2017)



of Deals and Capital Raised By Stage (2017)



2017 reached record levels yet again, with \$5.1B raised across 326 transactions

Notable Swedish startups:



7 Unicorns: Tanium (\$5B), CrowdStrike (\$3B), CloudFlare (\$1B), Lookout (\$1B), Illumio (\$1B), Cylance (\$1B), Tongdun Technology (\$1B)

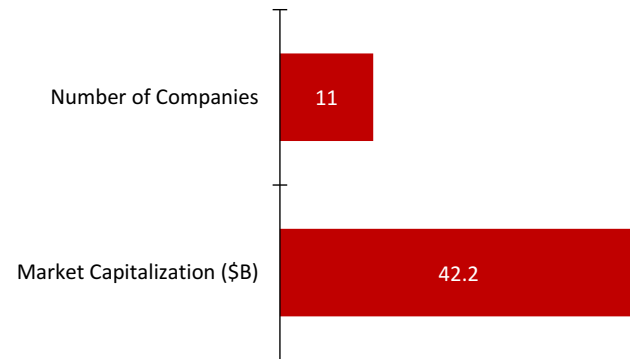
Early stage deals showed the highest growth rate y/y, both in terms of numbers of deals (27.1%) and capital raised (79.9%). Thus cybersecurity remains an ever-growing industry with continuous potential for newcomers

270
2018 YTD* number of deals

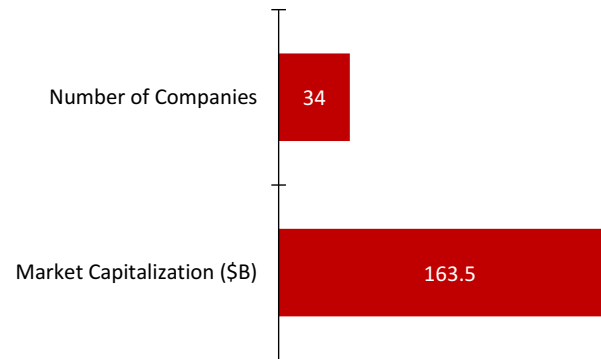
\$3.6B
2018 YTD* financing volume

Public Markets

Public Company Stats (2010)



Public Company Stats (2018 YTD)



Public markets are thriving

~287% growth in market cap

~210% growth in number of public companies

Strong IPO pipeline

Public Cyber Companies (2010)

Ahnlab	Verisign
Gemalto	Check Point
Fortinet	F-Secure
NCC Group	McAfee
Trend Micro	Symantec
VDSI	

Public Cyber Companies (2018)

Ahnlab	Okta	Proofpoint
Gemalto	Tenable	Rapid7
Fortinet	FireEye	CyberArk
NCC Group	Palo Alto	Imperva
Trend Micro	Sophos	Mimecast
Verisign	Varonis	SailPoint
Check Point	NQ Mobile/Link Motion	Secureworks
F-Secure	Bluedon	MobileIron
McAfee	ForeScout	KeyW
Symantec	Qualys	Zcaler
OneSpan/VDSI	Splunk	
Avast	Carbon Black	

2017 IPOs



2018 IPOs (YTD)



Pipeline



Public Markets



Benchmark	3m	6m	YTD	12m
HACK	7.2	16.9	25.3	32.9
NASDAQ	6.1	14.3	15.8	25.5
S&P500	7.5	12.8	9.2	16.9

HACK (ETFMG Prime Cyber Security ETF) has outgrow the other indices, up 25.3% YTD

HACK top ten holdings: Cisco, Tenable, Sailpoint, Symantec, Splunk, Science Applications, Juniper, Proofpoint, Akamai, Sophos. Accounts for 38.4% of total net assets

Public Markets

Company	Price Performance	Enterprise Value (\$M)	EV/Revenue		EV/EBITDA		P/E		Revenue growth		EBITDA-margin	
	LTM		CY18e	CY19e	CY18e	CY19e	CY18e	CY19e	CY18e	CY19e	CY18e	CY19e
High Growth (>20% CAGR)												
Palo Alto Networks	67%	20 157	7.3	6.1	27.3	21.7	45.9	37.6	22.0	18.5	26.7	28.3
Splunk	71%	16 133	9.5	7.7	65.4	46.1	NM	74.4	33.8	23.2	14.5	16.7
Okta	138%	7 208	19.3	14.6	NM	NM	NM	NM	43.7	32.3	neg	neg
Proofpoint	18%	5 404	7.6	6.0	52.6	38.0	NM	61.6	37.4	27.6	14.6	15.8
Zscaler	167%	4 694	18.4	14.2	NM	NM	NM	NM	35.3	29.6	neg	2.2
Tenable	62%	3 762	10.8	8.5	NM	NM	NM	NM	38.9	26.8	neg	neg
SailPoint	150%	2 897	12.3	10.0	NM	NM	NM	NM	26.6	23.1	9.9	10.5
Mimecast	51%	2 370	7.1	5.9	52.3	36.0	NM	NM	26.8	21.5	13.6	16.3
Rapid7	116%	1 613	6.8	5.6	NM	NM	NM	NM	18.9	19.6	neg	3.2
ForeScout	57%	1 470	5.2	4.3	NM	NM	NM	NM	28	20.3	neg	neg
Carbon Black	22%	1 402	7.4	6.1	NM	NM	NM	NM	27.8	22.7	neg	neg
		Average (x)	10.1	8.1	50.0	35.6	45.9	58.8	30.8	24.0	15.6	13.6
		Median (x)	9.5	7.7	52.3	36.0	45.9	61.6	30.8	23.2	14.5	15.8
Low Growth (<20% CAGR)												
Symantec	-34%	16 188	3.4	3.3	7.8	7.3	14.3	12.5	-2.4	4.7	43.6	44.7
Check Point Software	7%	14 466	7.6	7.3	14.1	13.7	20.9	19.3	2.5	4.0	53.9	53.6
Fortinet	132%	13 324	7.5	6.5	30.6	25.4	52.3	45.1	19.3	14.3	24.4	25.7
Trend Micro	30%	7 594	5.3	4.9	16.3	14.9	34.2	30.6	9.9	8.0	32.5	32.9
Avast	15%	4 892	5.5	5.1	10.1	9.7	11.7	12.1	25.8	6.3	54.1	52.9
Sophos	-9%	3 241	4.5	3.9	25.4	19.6	55.6	47.4	14.1	13.9	17.5	19.9
FireEye	-1%	3 086	3.7	3.5	30.6	25.8	NM	NM	10.1	7.3	12.2	13.5
Qualys	70%	3 035	10.9	9.2	29.2	24.6	58.8	49.8	20.8	18.5	37.3	37.4
CyberArk	74%	2 252	7.0	5.9	29.3	24.2	49.6	42.4	23.5	18.8	23.8	24.3
Imperva	8%	1 239	3.5	3.2	27.3	21.8	NM	51.6	9.1	11.5	13.0	14.5
Secureworks	11%	1 022	2.0	1.8	NM	NM	NM	NM	10.8	9.4	neg	1.9
OneSpan (former VDSI)	65%	643	3.1	2.8	52.7	29.9	53.6	34.3	7.1	12.4	5.9	9.2
F-Secure	-24%	498	2.2	1.9	35.3	17.9	NM	40.5	19.4	17.5	6.1	10.3
MobileIron	50%	441	2.3	2.1	NM	NM	NM	NM	9.9	9.8	neg	neg
		Average (x)	4.9	4.4	25.7	19.6	39.0	35.1	12.9	11.2	27.0	26.2
		Median (x)	4.1	3.7	28.2	20.7	49.6	40.5	10.5	10.7	24.1	24.3

Valuations for cybersecurity continues to increase. Median EV/CY18e at 7.0x, up from 4.4x at the end of 2017*

“High Growth” continues to soar

2018 IPOs has performed well**:

- Zscaler (167%)
- Carbon Black (22%)
- Avast (15%)
- Tenable (62%)

Nordic companies:

- F-Secure (FI)
- Clavister (SW)
- Verisec (SW)
- Eyeonid (SW)
- Nixu (FI)
- Techstep (NO)
- Napatech (DK)
- Advenica (SW)
- Cyber 1 (Cognosec) (SW)

Authors



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Greger has a background from the IT/telecom industry, both from large companies (Ericsson and Telia) as well as from entrepreneurial companies (Metricom and Redeye) in Sweden and Silicon Valley. He also spent 15+ years in investment banking (Nordea and Redeye). At Redeye, Greger advise growth companies within the technology sector on financing, equity storytelling and getting the right shareholders/investors. He is also a computer programmer and holds a double degree in M.Sc.EE and M.Sc.Econ.

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Havan Hanna gained a Master's degree in Business and Economics at Stockholm University. He also studied Computer Science at the KTH Royal Institute of Technology. Havan works as an equity analyst at Redeye today covering companies in the tech sector with a focus on the telecom and software industry.

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Cybersecurity Event 3 oktober 2018



Next Generation Investment Banking

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Our strengths are our award-winning research department, experienced advisers, a unique investor network, and the powerful distribution channel redeye.se.

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14.00	Redeye Cybersecurity report	Havan Hanna Tech-analytiker Redeye
14.20	AI-lärande molnplattform	Baffin Bay Networks Ordförande Stefan Lindeberg
14.30	Krypteringsnycklar från Sverige till Silicon Valley	Yubico CFO Mattias Danielsson
14.40	Hackers och Bug Bountys	Detectify CMO Carl Svantesson
14.50	Paneldebatt	Baffin Bay Networks Yubico Detectify
15.20	Paus	
15.30	Nordens största IT-säkerhetsbolag F-Secure (in English)	F-Secure VD Samu Konttinen
15.45	Ekosystem för säker e-legitimation	Verisec VD Johan Henrikson
16.00	Cloud-säkerhet i telekomnäten	Clavister VD John Vestberg
16.15	Paneldebatt	F-Secure Verisec Clavister