

Cyber Claims & Loss Update



**LITIGATION
CONFERENCES**

Speakers

John Mullen (Moderator), *Mullen Coughlin*

Mark Greisiger, *NetDiligence*

Chris Novak, *Verizon*

Brendan Kelley, *Chubb*

Brian Robb, *CNA*

Rich Sheridan, *Axis Insurance*



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Cyber Claims Study

highlights
6th annual

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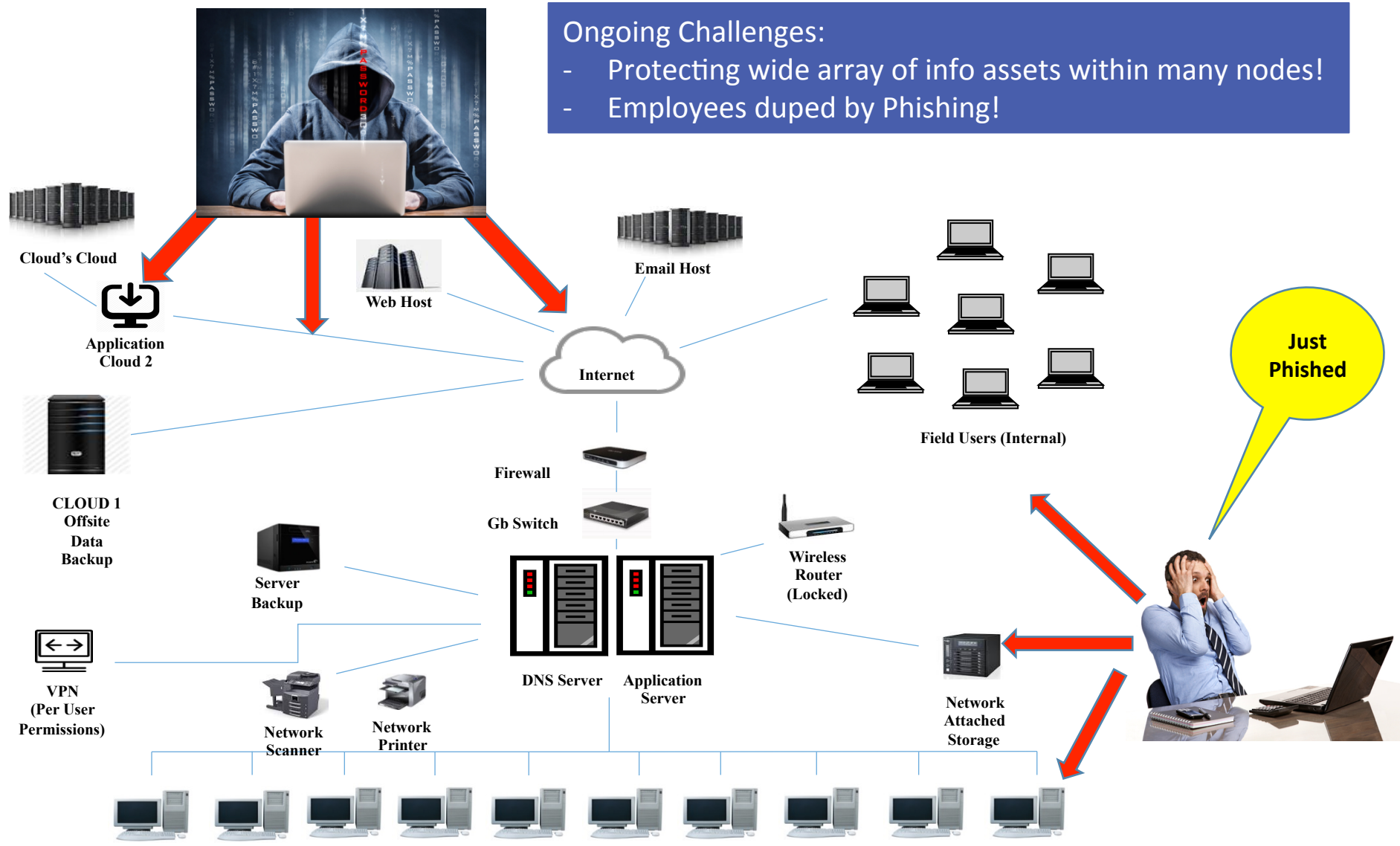


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Ongoing Challenges:

- Protecting wide array of info assets within many nodes!
- Employees duped by Phishing!



NetDiligence® 2016 Cyber Claims Study

HIGHLIGHTS OF FINDINGS

- Sample size = 176 claims

Detailed partner report now inside your eRiskHub®

- Per Breach Costs

- **Average breach cost:** \$665K

*Comment: more representative of 'main street' than Wall St,
SMEs = 87% of claims.*

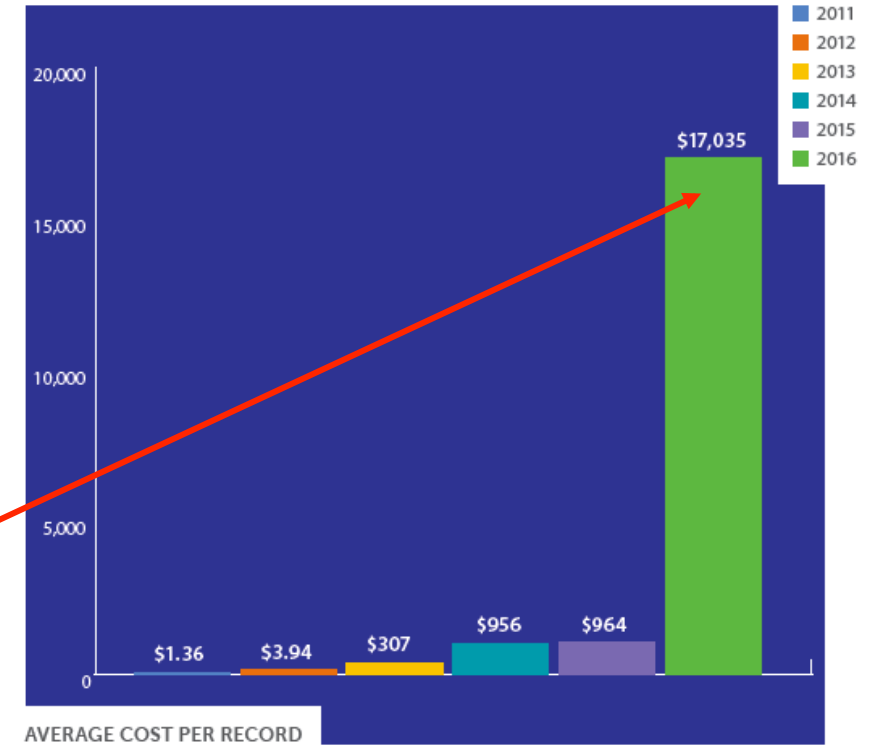
- Large Co: \$6M (up from last year)
- Healthcare: \$717K

- Per Record Costs

- **Average per-record cost:** \$17K* (median cost: \$40)

**Spiked avg due to 3 big 'outlier' claims; one was over a \$1M per record!*

- **Cost Range:** \$0.03-\$1.6M (pennies to million+)



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HIGHLIGHTS OF FINDINGS

- Crisis Services Costs

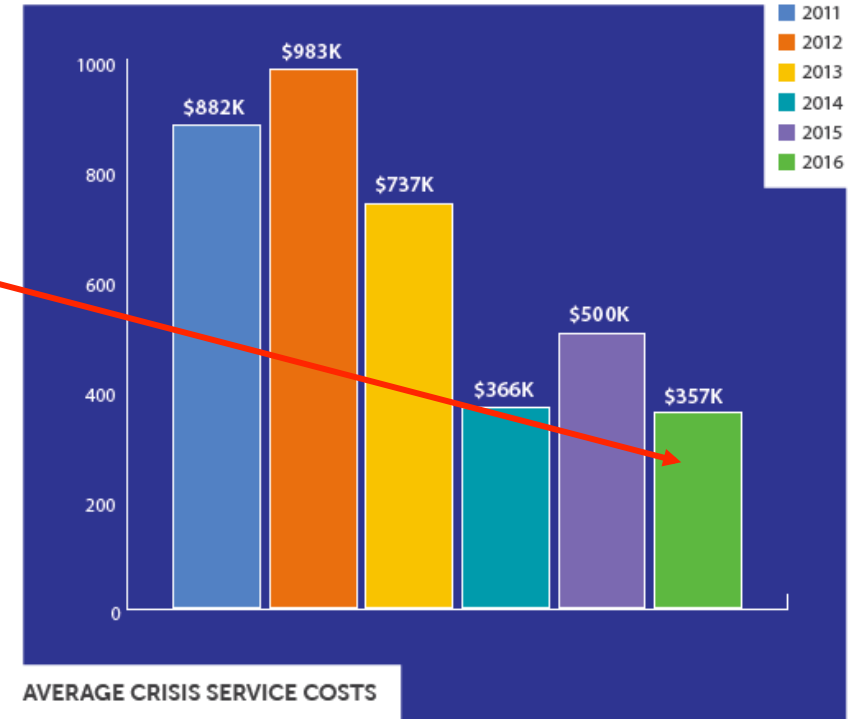
(forensics, legal counsel, notification & credit monitoring)

- **Average cost :** **\$357K** *(Median: \$43K)*
- *Breach Coach*® lawyers helping control crisis costs

- Legal Costs

(defense & settlement)

- **Average cost of defense:** **\$130K** *(Median: \$16K)*
- **Average cost of settlement:** **\$815K** *(Median: \$250K)*



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————— HIGHLIGHTS OF FINDINGS —————

- **Phishing (N=8)**
 - All occurred at organizations < **\$2B Revenue**
 - **Professional Services** most affected (3 of 8 incidents)
 - **Average # of records lost:** 510
 - **Average breach cost:** **\$123K** (*Median: \$62K*)

- **Ransomware (N=6)**
 - All occurred at organizations < **\$300M Revenue**
 - Cause of loss was primarily **Malware/Virus** (83%)
 - **Average breach cost:** **\$32K** (*Median: \$26K*)

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HIGHLIGHTS OF FINDINGS

Percentile Tables

(aka actuary eye candy)

Available exclusively for
eRiskHub® licensors and
their clients

TOTAL DATA BREACH COSTS

(N=172)

Quartiles			
First	Min	290	
	1.0%	642	
	2.5%	1,202	
	5.0%	1,843	
	10.0%	5,822	
Second	20.0%	11,056	
	25.0%	13,374	
	30.0%	19,240	
Third	40.0%	37,243	
	50.0%	59,978	Median
	60.0%	91,979	
	70.0%	146,201	
Fourth	75.0%	213,414	
	80.0%	309,410	
	Average	664,787	
	90.0%	1,606,275	
	95.0%	3,428,682	
	97.5%	6,976,000	
	99.0%	10,432,390	
	Max	15,000,000	
Standard Deviation		2,026,915	
Coefficient of Variance		3.05	

TOTAL CLAIMS PAYOUTS COSTS

(N=161)

Quartiles			
First	Min	1,000	
	1.0%	1,114	
	2.5%	1,280	
	5.0%	2,130	
	10.0%	4,483	
Second	20.0%	9,343	
	25.0%	11,640	
	30.0%	13,455	
Third	40.0%	27,790	
	50.0%	48,830	Median
	60.0%	70,000	
	70.0%	114,788	
Fourth	75.0%	178,000	
	80.0%	230,033	
	Average	494,912	
	90.0%	981,695	
	95.0%	2,500,000	
	97.5%	5,500,000	
	99.0%	7,859,400	
	Max	10,000,000	
Standard Deviation		1,465,669	
Coefficient of Variance		2.96	



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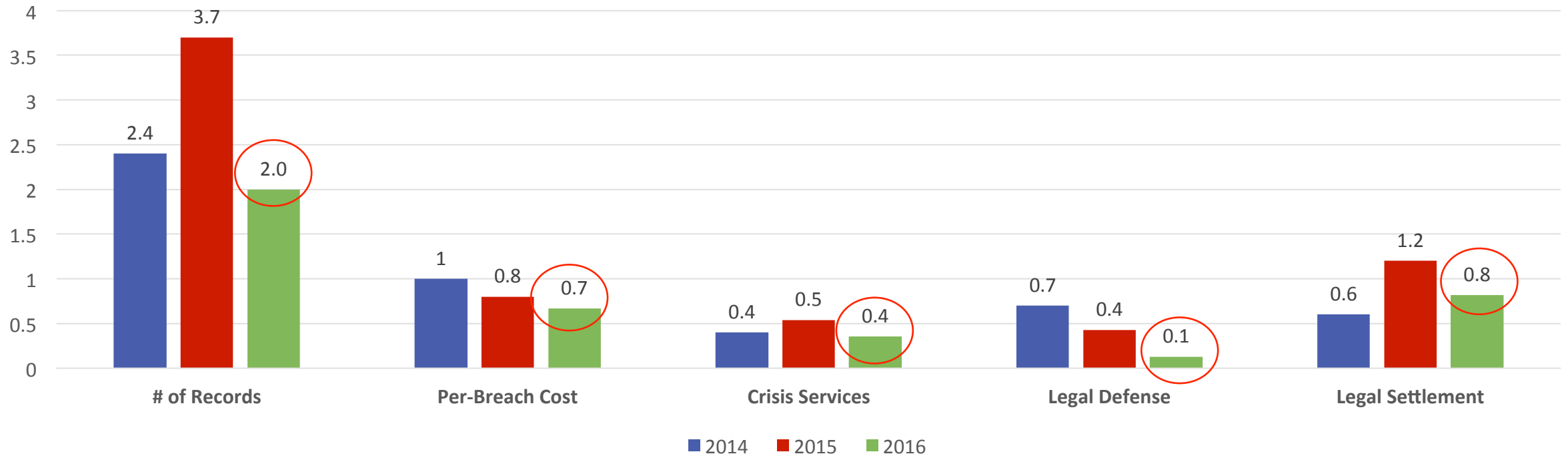
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HIGHLIGHTS OF FINDINGS

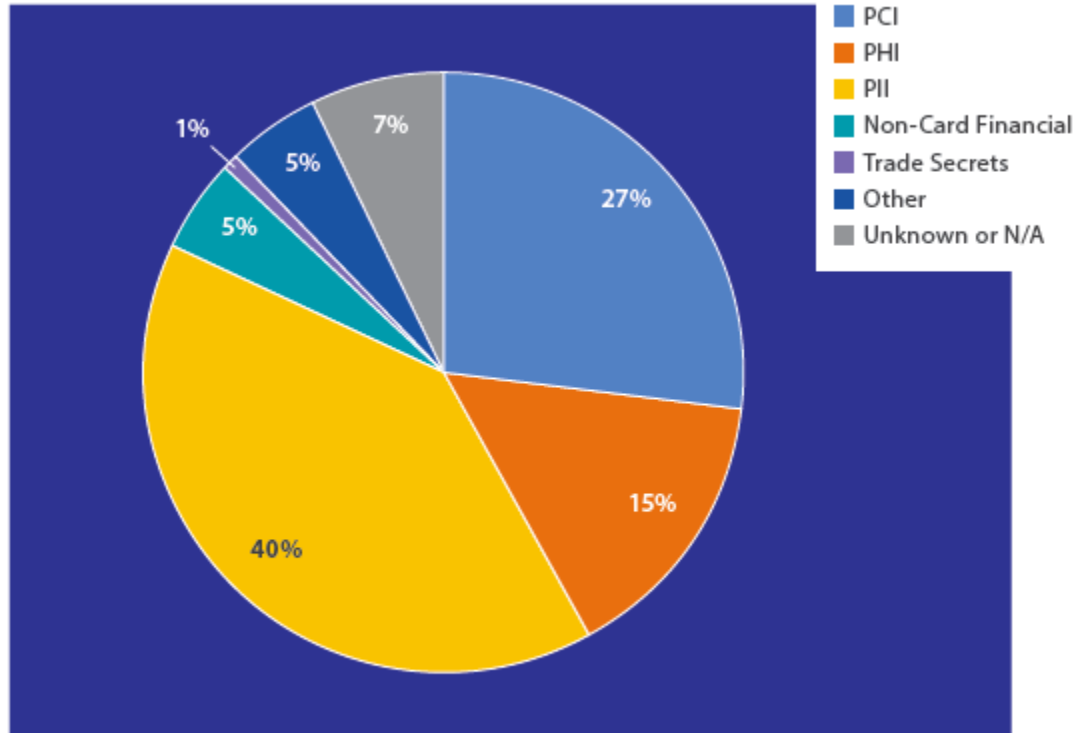
COMPARING 2016 TO PRIOR YEARS

Average # of Records Exposed & Cost by Type (in millions)

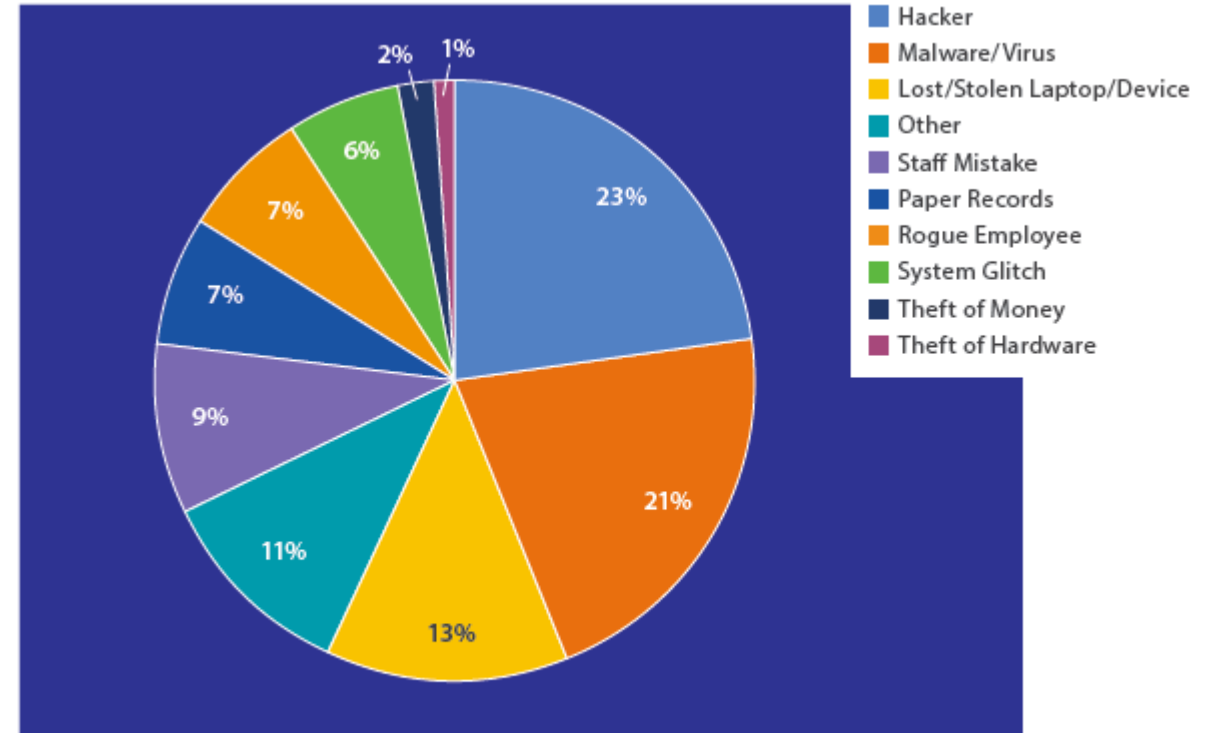


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HIGHLIGHTS OF FINDINGS



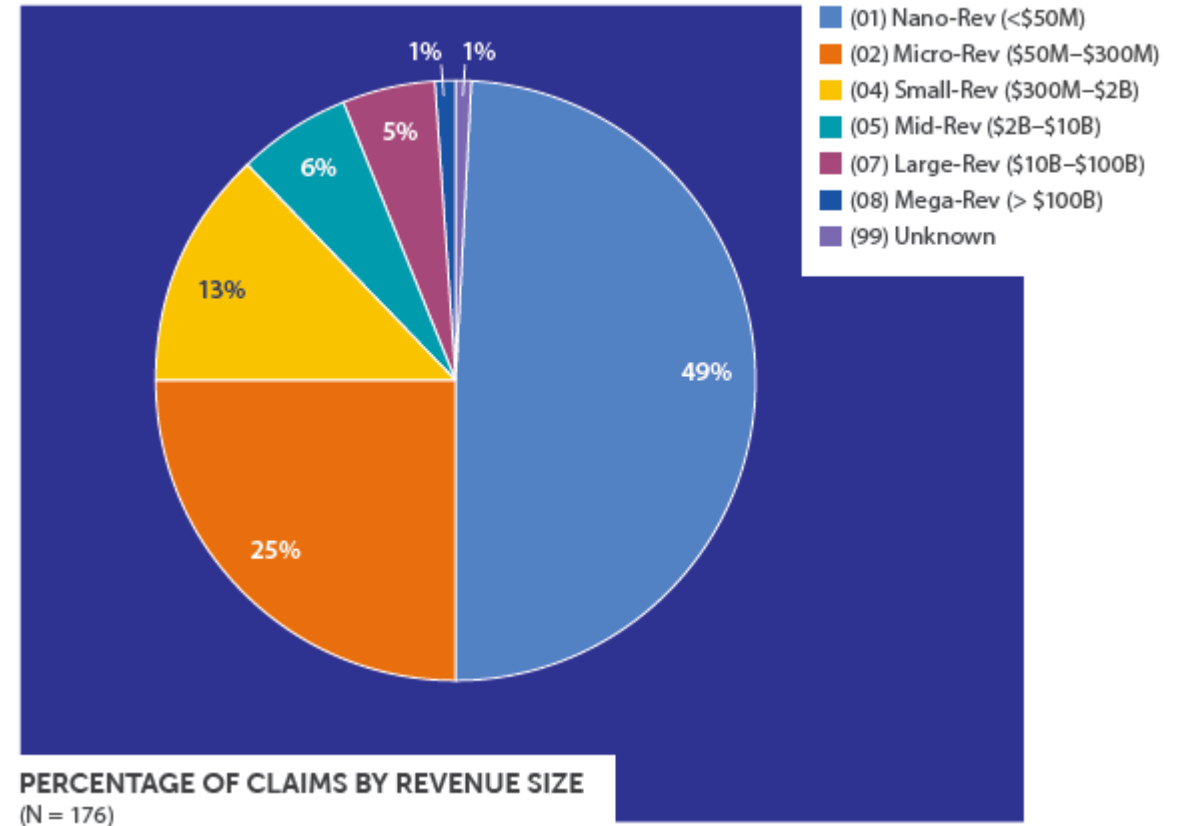
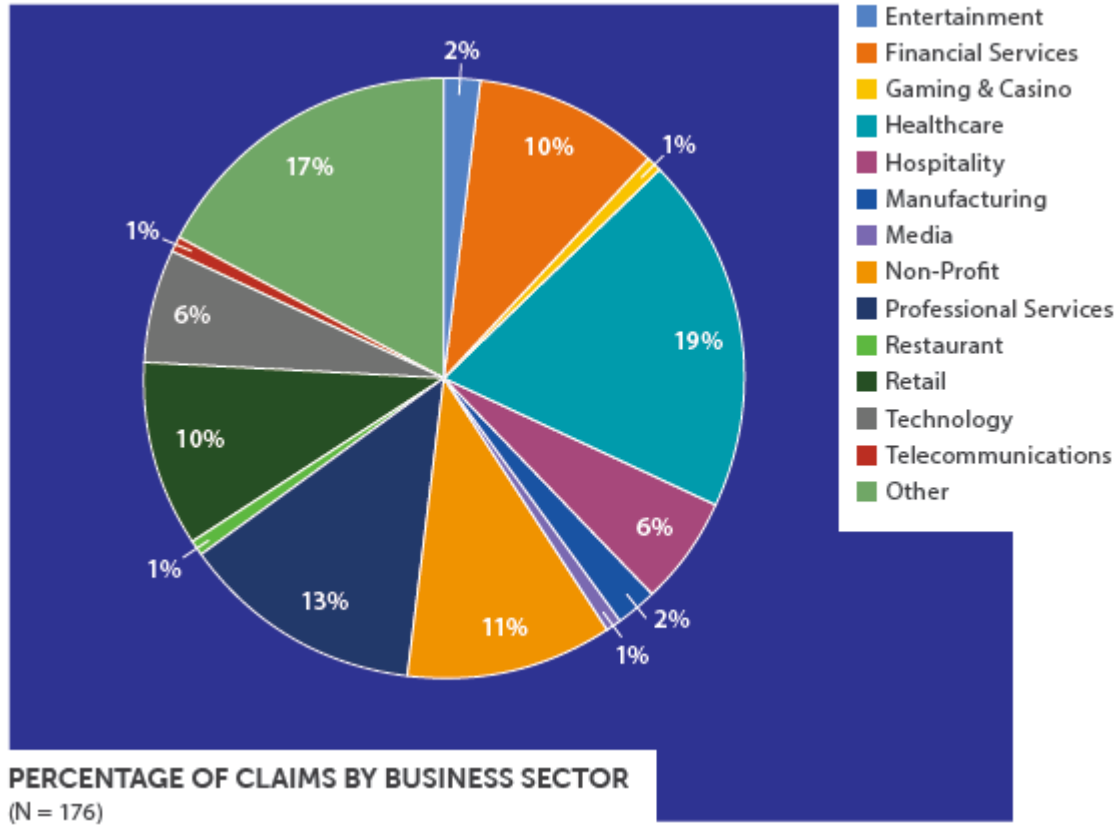
PERCENTAGE OF CLAIMS BY DATA TYPE
(N = 176)



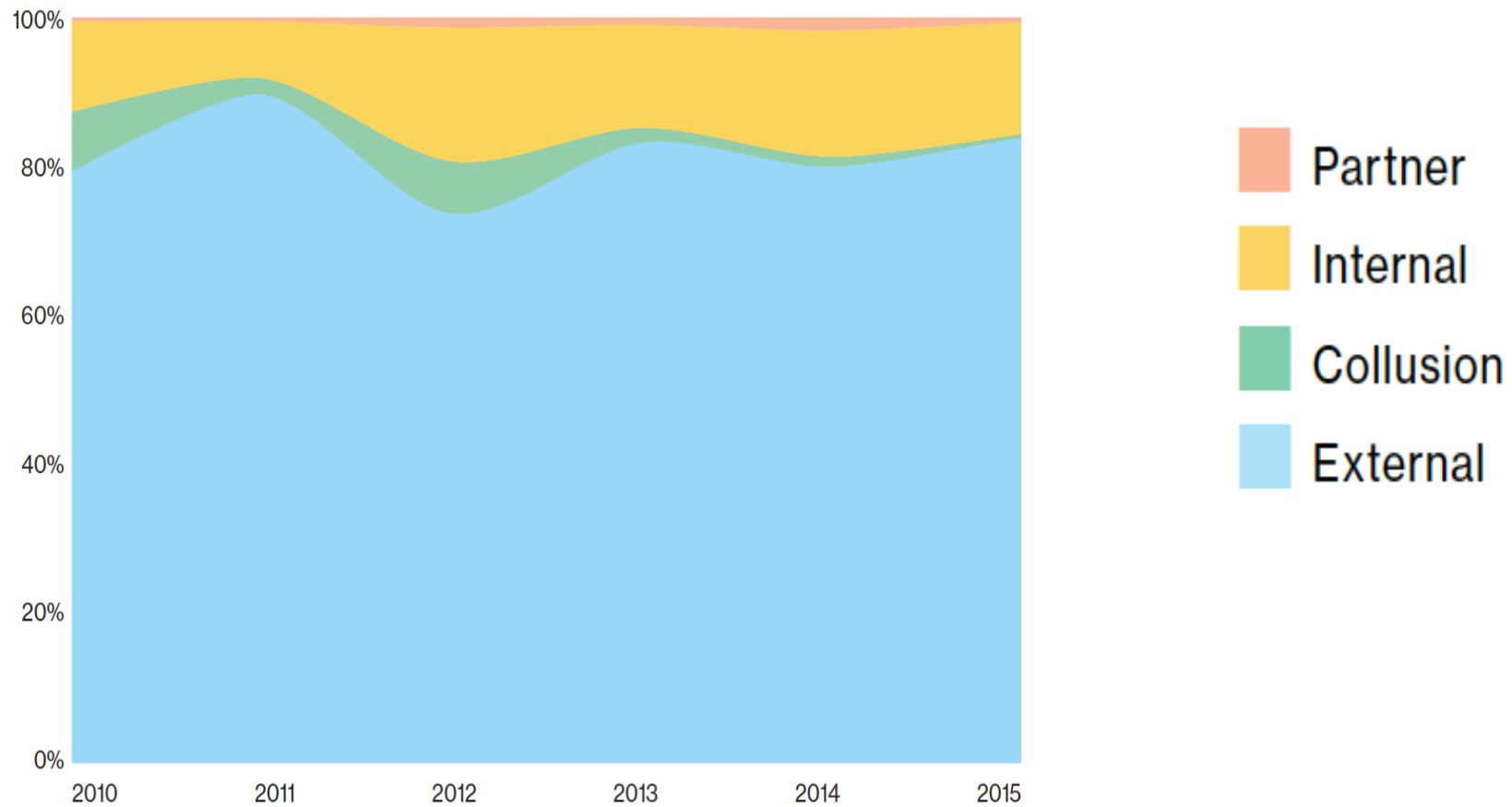
PERCENTAGE OF CLAIMS BY CAUSE OF LOSS
(N = 176)

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HIGHLIGHTS OF FINDINGS



Who are the Threat Actors?



Victim Demographics

70%

of attacks show a secondary victim

75%

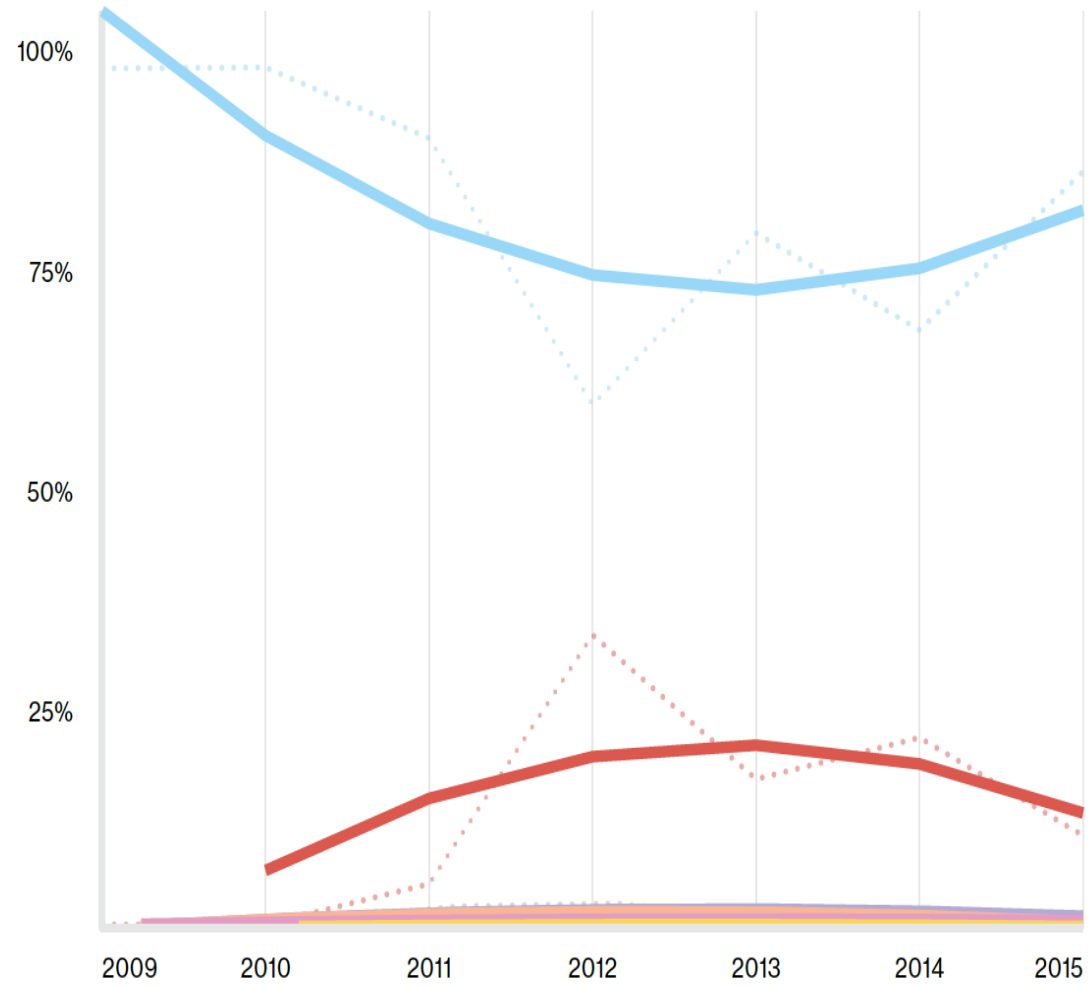
spread from victim 0...1 within one day

No locale, industry or organization is bulletproof when it comes to the compromise of data.

Industry	Total	Small	Large	Unknown
Accommodation (72)	362	140	79	143
Administrative (56)	44	6	3	35
Agriculture (11)	4	1	0	3
Construction (23)	9	0	4	5
Educational (61)	254	16	29	209
Entertainment (71)	2,707	18	1	2,688
Finance (52)	1,368	29	131	1,208
Healthcare (62)	166	21	25	120
Information (51)	1,028	18	38	972
Management (55)	1	0	1	0
Manufacturing (31-33)	171	7	61	103
Mining (21)	11	1	7	3
Other Services (81)	17	5	3	9
Professional (54)	916	24	9	883
Public (92)	47,237	6	46,973	258
Real Estate (53)	11	3	4	4
Retail (44-45)	159	102	20	37
Trade (42)	15	3	7	5
Transportation (48-49)	31	1	6	24
Utilities (22)	24	0	3	21
Unknown	9,453	113	1	9,339
Total	64,199	521	47,408	16,270

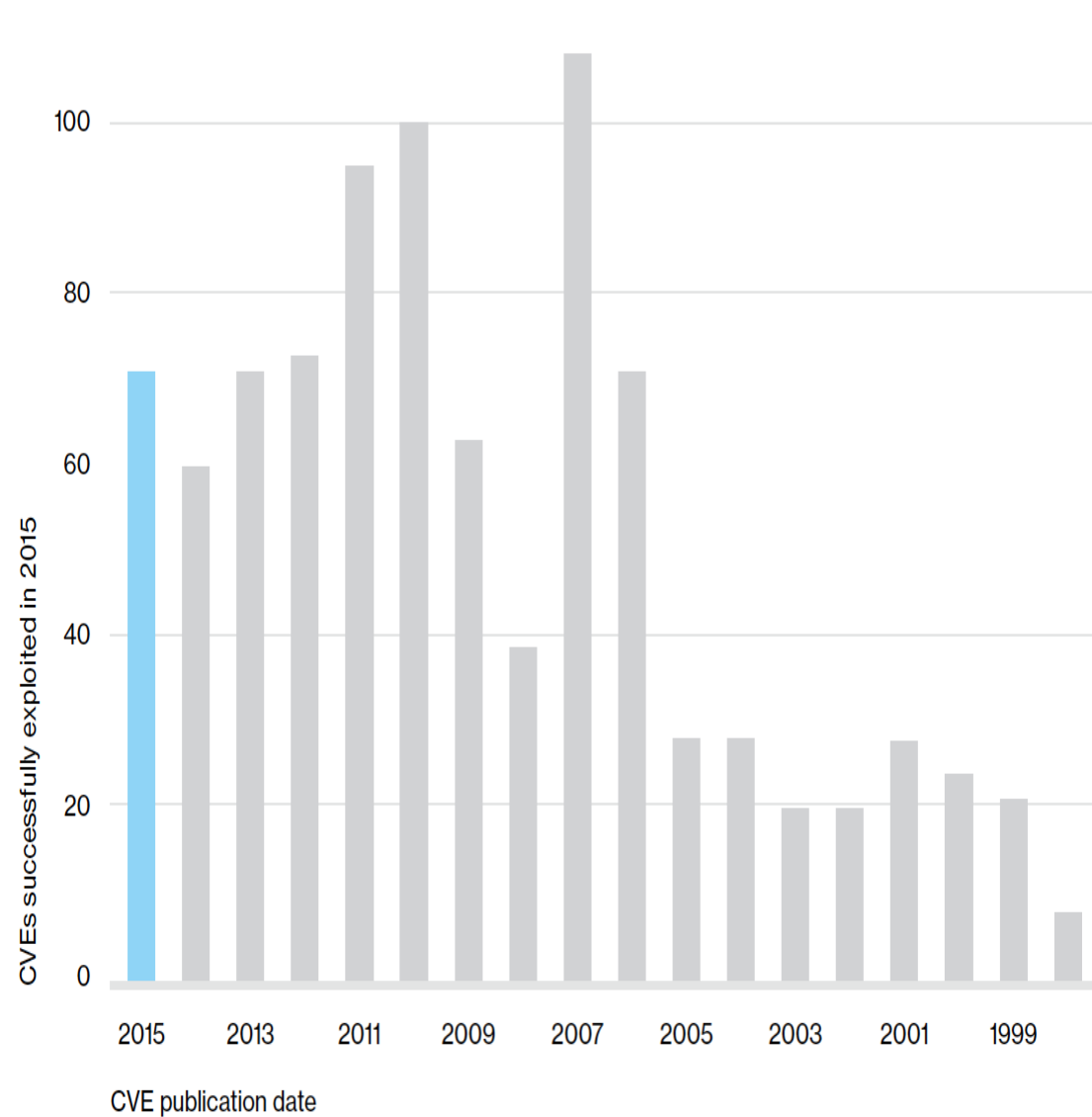
Attacker Motivation

- Financial
- Espionage
- Fun
- Ideology
- Grudge
- Everything Else



Common Vulnerabilities Dominate

Majority of attacks leveraging vulnerabilities more than a year old!



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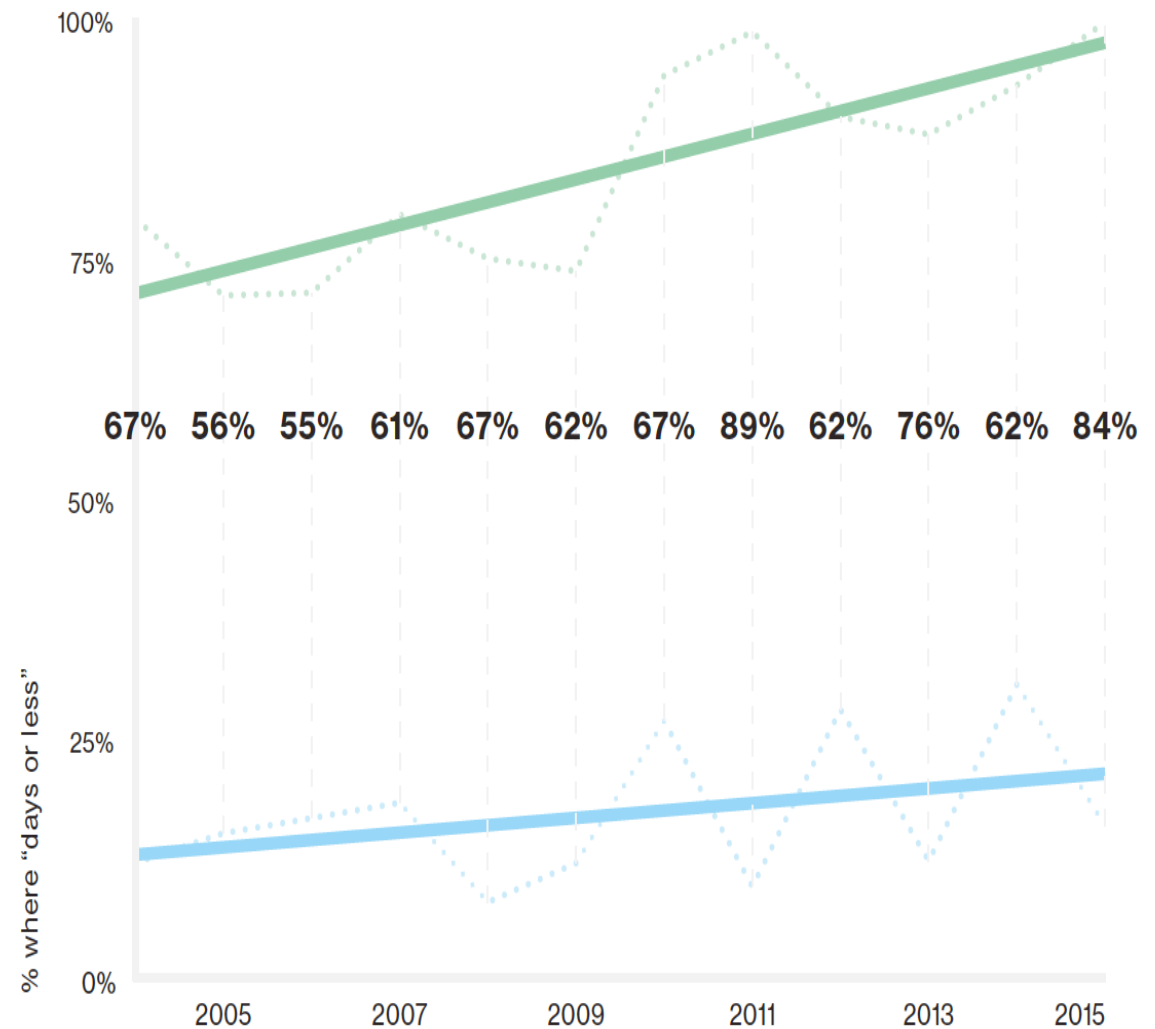
verizon^v

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The Detection Deficit

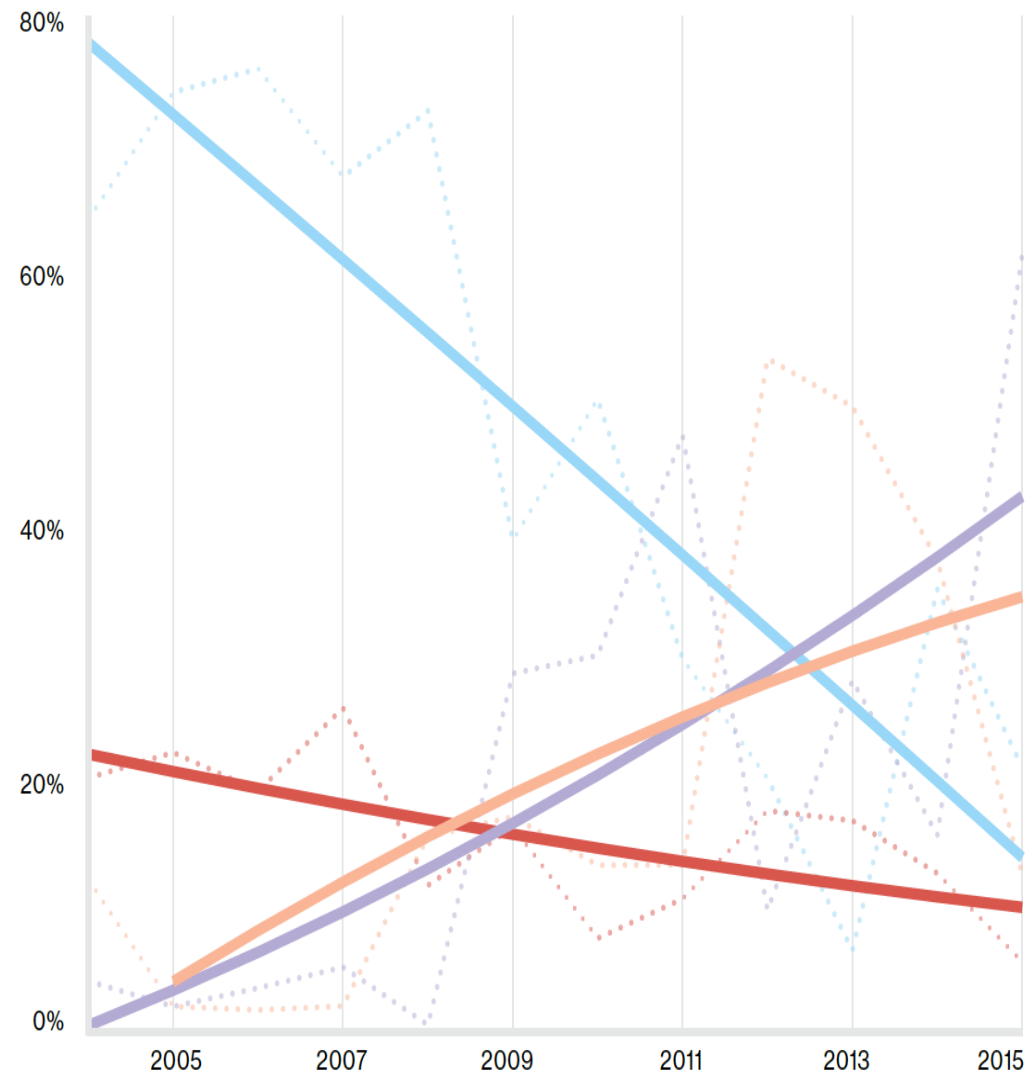
■ Time to Compromise
■ Time to Discover

The time to compromise is almost always days or less, if not minutes or less.



Breach Discovery Methods

- Law Enforcement
- Third Party
- Fraud Detection
- Internal



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A lot of it...

AMAZON CARDING 2015



pwoah7foa6au2pul.onion/listing.php?id=45075 All
 SAMPLE Today I am about to write a trick on
 past Amazon was easy to card for Gift Code
 However today the amazon security has bee
 end of the world Here is the trick how to get it

Vendor
 (47)



[MS] [Sticky] ★ USA ★ Pa
 [verified] [not limited] [credi
 Item # 122956 - Accounts & B

Views: 10086 / Bids: Fixed price
 Quantity left: Unlimited (215)



[FE 100%] [Sticky] USA DU
 Item # 78573 - Dumps / Dum

Views: 16681 / Bids: Fixed price
 Quantity left: Unlimited



[MS] [Sticky] GOLDENDUM
 Item # 24668 - Dumps / Dum

Views: 17842 / Bids: Fixed price
 Quantity left: Unlimited



[Bulk] [Sticky] FRESH CCV, CCN ONLY US GOOD AND QUALITY...MAKE SURE BALAN
 Item # 82584 - CW & Cards / CW & Cards - akaninw (871)

Views: 10596 / Bids: Fixed price
 Quantity left: Unlimited (124 automatic items)



[FE 100%] ★ Courvoisier ★ SALE ★ British Airways Accounts - DOB INCLUDED! ★ All Amounts ★
 Item # 4974 - CW & Cards / CW & Cards - Courvoisier (19755)

Views: 29737 / Bids: Fixed price
 Quantity left: Unlimited



[MS] ★ Courvoisier ★ [UK GUIDE] - How to get accounts for FREE petrol + diesel ★
 Item # 40188 - Accounts & Bank Drops / Accounts & Bank Drops - Courvoisier (19755)

Views: 14548 / Bids: Fixed price
 Quantity left: Unlimited



\$\$\$ How to bypass Paypal error (return to m
 GIFT (just ask me after buying) \$\$\$
 Item # 54250 - Accounts & Bank Drops / Account

Views: 1461 / Bids: Fixed price
 Quantity left: Unlimited (667 automatic items)

BROWSE CATEGORIES

<input checked="" type="checkbox"/>	Fraud	17297
<input type="checkbox"/>	Accounts & Bank Drops	9520
<input type="checkbox"/>	CW & Cards	2794
<input type="checkbox"/>	Dumps	798
<input type="checkbox"/>	Other	2467
<input type="checkbox"/>	Personal Information & Scans	1718

AlphaBay Market

9733 Bloomingdales Gift Balance 100 200 9733
 Ichudifyeqm4ldjj.onion...uct?offer=715111.598034 Dream
 I bring you freshly hacked Bloomingdales logins with active gift balances of 100 200 available These accounts are extremely easy to cash because the funds re already available inside the account Account details will be in the format shown below 9733 Username 9733 Password 9733 Gift Balance 9733 Name 9733 Address 9733 Credits Cards Used 9733 Country 9733 Last Order Thanks
 Vendor robert88 Price \$2.398E-5 Location Worldwide

USA Amazon Logins 100 Active Gift Balance
 Ichudifyeqm4ldjj.onion...duct?offer=46391.223907 Dream
 I bring you freshly hacked USA Amazon logins with active gift balances of 100 available Account details will be in the format shown below 9733 Username 9733 Password 9733 Gift Balance 9733 Name 9733 Address 9733 Credits Cards Used 9733 Country 9733 Last Order Any questions please ask Thanks
 Vendor robert88 Price \$0.03600769 Location Worldwide

9733 Groupon Logins Gift Balances 100 500
 Ichudifyeqm4ldjj.onion...uct?offer=646058.571279 Dream
 I bring you freshly hacked Groupon logins with active gift balances of 100 500 available These accounts are extremely easy to cash because the funds re already available inside the account Account details will be in the format shown below 9733 Username 9733 Password 9733 Gift Balance 9733 Name 9733 Address 9733 Credits Cards Used 9733 Country 9733 Last Order Thanks

What does the future hold?

- Breaches beyond loss / theft of sensitive data...
 - Internet of Things (IoT) -- Estimated ~50B devices by 2020
 - Industrial Control Systems (Phys. disruption & destruction)
 - Medical Devices
 - Pirates?

BuzzFeedNEWS

How Pirates And Hackers Worked Together To Steal Millions Of Dollars In Diamonds

Late on a Friday afternoon in early 2015, Chris Novak got a strange call. As the director of Verizon's investigative response team, he was accustomed to desperate corporations dialing into the group's 24-7 hotline to stanch the bleeding caused by cybersecurity crises — credit card fraud, financial fraud, intellectual property theft. "We operate an emergency room for IT and data breach emergencies," Novak said.

But the company on the other end of the line, a major Middle Eastern shipping



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eRiskHub®

BreachCoach®

BreachPlan
Connect

QuietAudit®

Thank you!

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