

# CISO's Guide To Shutting Down Attacks Using The Dark Web

October 25, 2019

## Agenda

The Dark Web: What's At Stake

- Gain Visibility, Take Control
- Live Dark Web Tour
- Key Recommendations



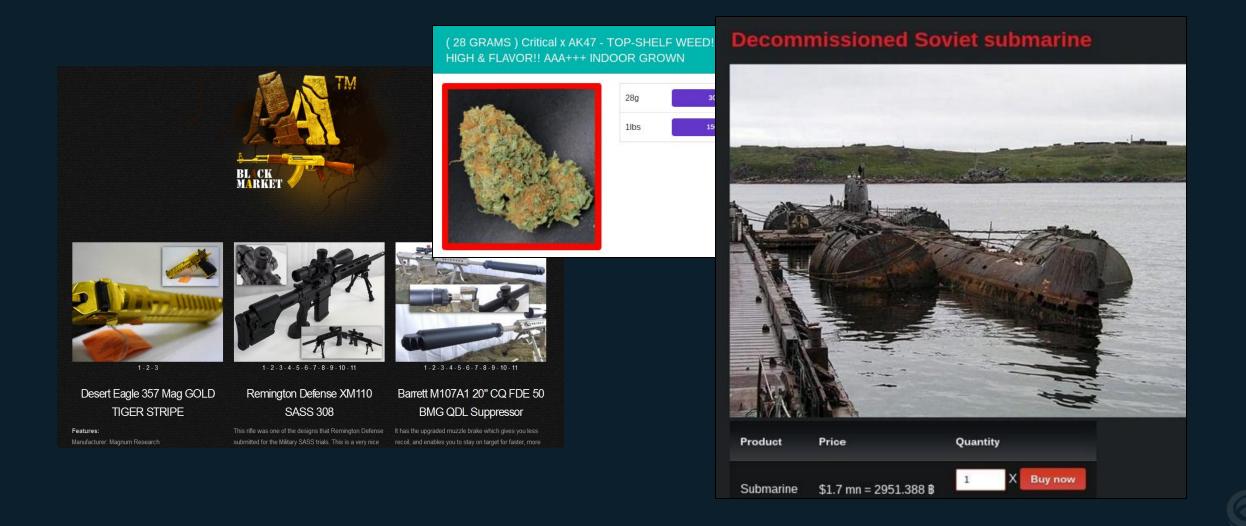
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## What Do We Know About The Dark Web?



## The Clear, Deep, and Dark Web

### Clear Web

- Search engines
- Media, blogs, etc.

#### Dark Web-

- Anonymous, closed sources, Telegram groups, invite-only (sometimes)
- Tor, P2P, hacker forums, criminal marketplaces, C2s, etc.



### Deep Web

- Unindexed by search engines
- Webmail, online banking, corporate intranets, walled gardens, etc.

## How Tor Works

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Cybercrime forum

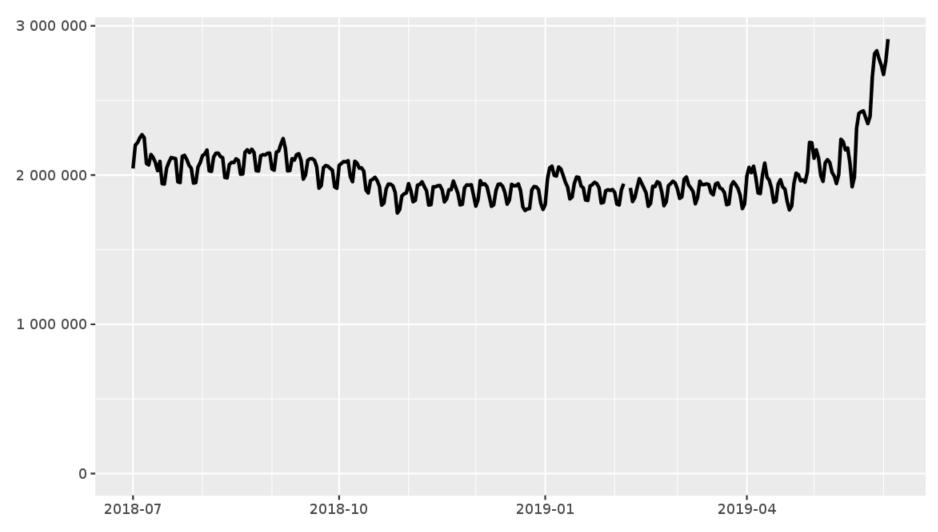
Black market

User's TOR client picks a random path to destination server.

RED links are encrypted BLUE links are in the clear.

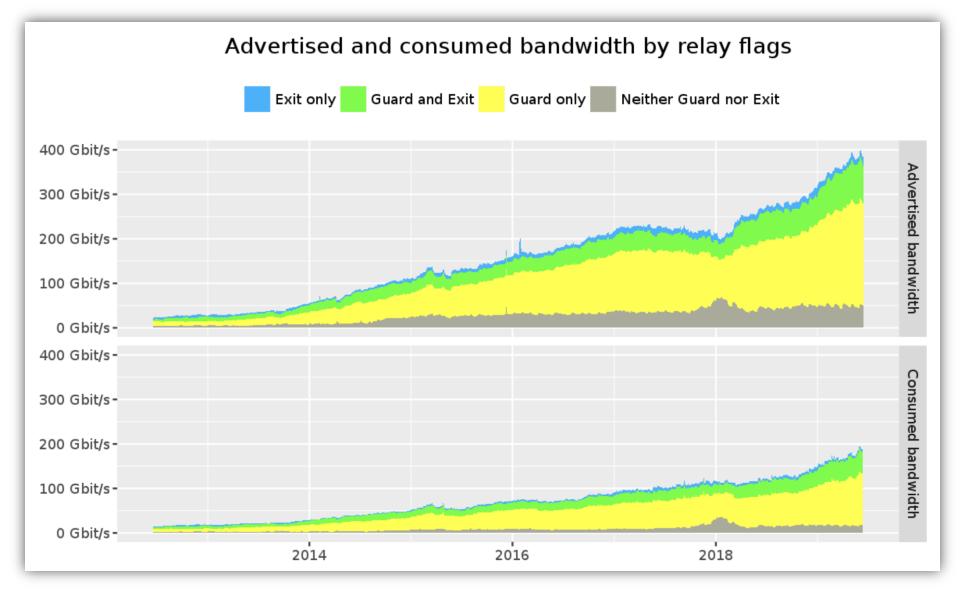
## Tor Usage Statistics

#### Directly connecting users

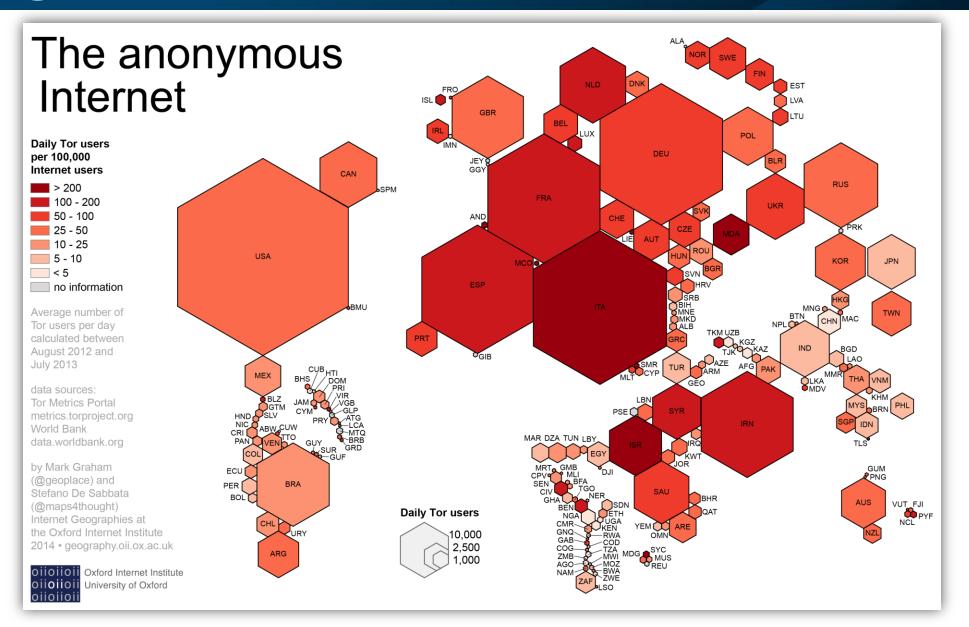


The Tor Project - https://metrics.torproject.org/

## Tor Usage Statistics



## Tor Usage Statistics



## The User Experience Can Match Legitimate Sites

SN/DOB Lo	ookup			Home	/ Lookup / M SSN/DOB Se
SEARCH OPTI	ONS				
	John	Hopkins	)[ NY	Full name + State •	Start search
	L SSN/DOB Price: \$				
SEARCH RESU	лтя				
Show 10	<ul> <li>entries</li> </ul>			Search:	
SSN *	DOB	0 Name	Address		Action
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HIDDEN	19410600 19410600	JOHN P HOPKINS JOHN HOPKINS JOHN PATRICK HOPKINS	553 Edison Ave Bronx, NY 1 548 Edison Ave Bronx, NY 1 Tanzman Rd Parksville, NY 657 Tanzman Rd Parksville,	10465 12768	Buy record
HEDGEN	19601200 19351000	JOHN J HOPKINS JOHN JAMES HOPKINS JOHN HOPKINS	52 E 20th St # O New York, 11 Little Harbor Rd Mount S 355 Staples St Farmingdale, 41 Sheldon Pl Commack, N 453 E 14th St Apt 10F New 16 Oak Ct Selden, NY 1178 PO Box 655 New York, NY 1 451 E 14th St New York, NY 302 Ravenswood Rd Hamps	Sinal, NY 11766 , NY 11735 Y 11725 York, NY 10009 4 10009 Y 10009 stead, NC 28443	Buy record

## Even Farmers Turn To The Dark Web





John Deere Service Advisor keygen Price: \$99.00

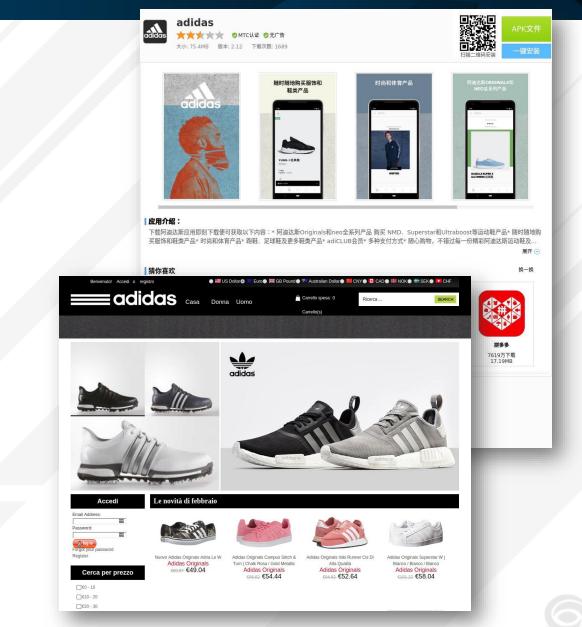
## Threats are mounting

278%

297%

171%

149%



Products for sale on black markets

Phishing websites

Compromised employee credentials

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Stolen credit cards for sale on dark web

## Agenda

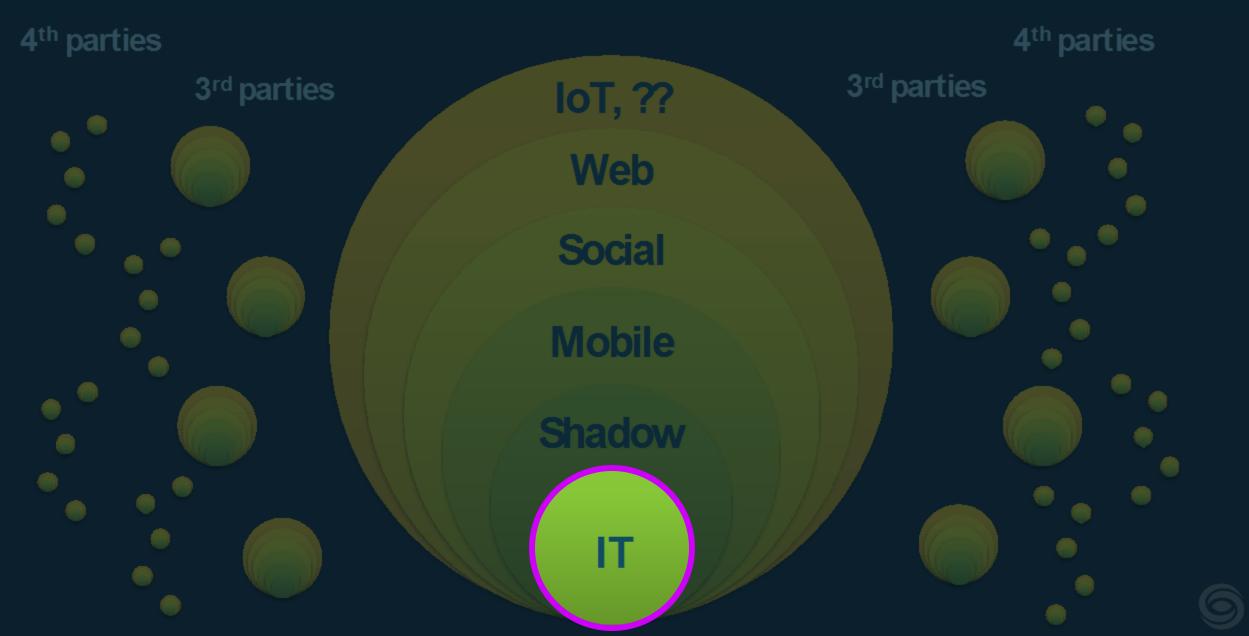
The Dark Web: What's At Stake

### Gain Visibility, Take Control

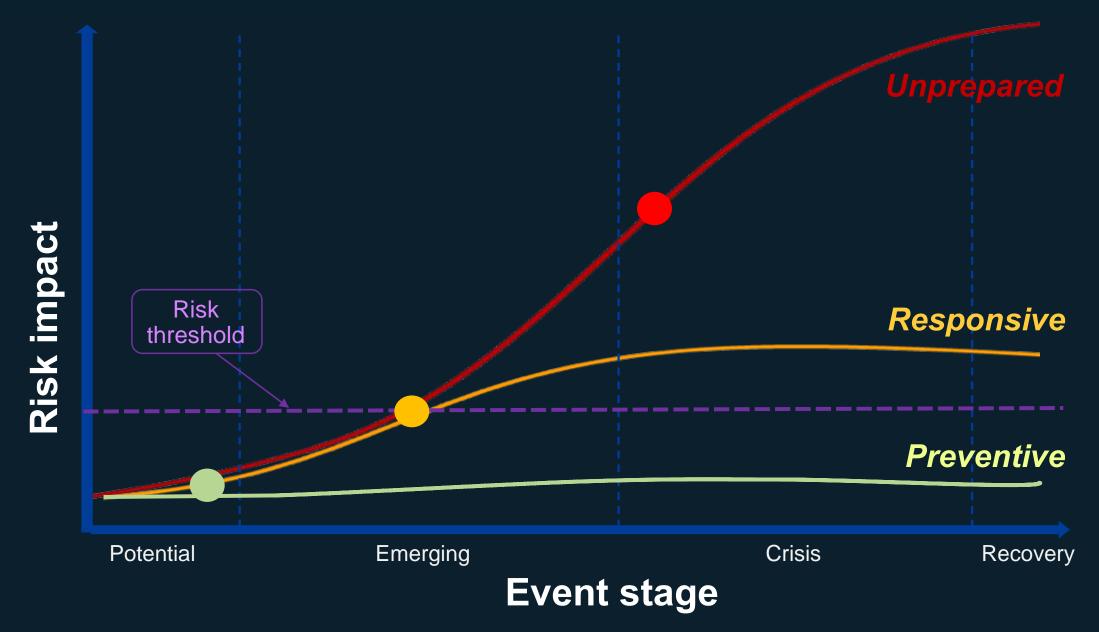
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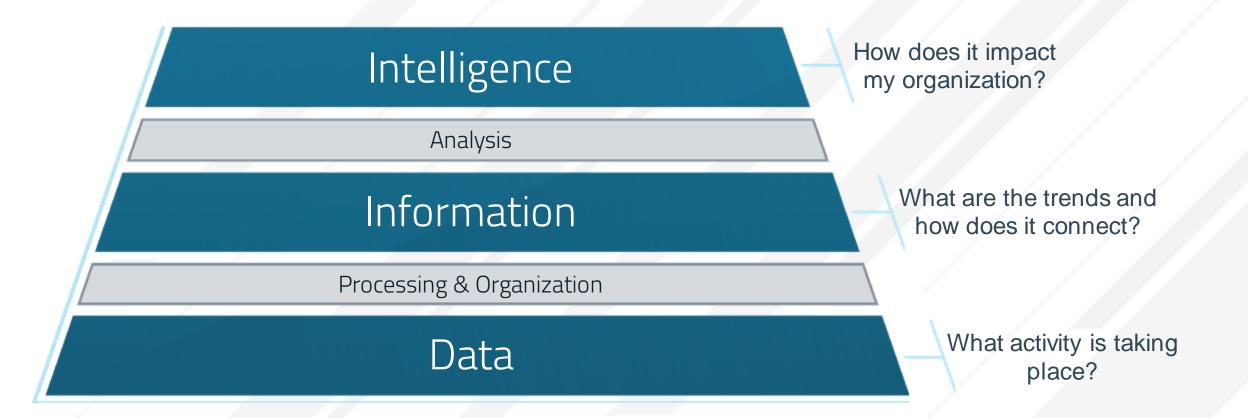
## Lack Of *Visibility*, Lack Of *Control*



## Reduce The "Mean-time-to-Remediate"



### Turning External Data Into External "Intelligence"



## What you'll uncover: Compromised Credentials

Username	Email	Password
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currys on all	N\A	N\A	N\A	N\A	N\A	N\A	N\A	N\A	-	L0quer0	1.5
currys on all	N\A	N\A	N\A	N\A	N\A	N\A	N\A	N\A	-	L0quer0	1.5
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curryn en sk	N\A	N\A	N\A	N\A	N\A	N\A	N\A	N\A	-	L0quer0	1.5

\*\*\*\*\*\*\*\*BankLogins Prices: Bank Logins Prices USA, UK, CA, AU, EU...other countries

* Bank USA: () . Balance 3000\$ = 150\$ . Balance 5000\$ = 250\$ . Balance 8000\$ = 400\$ . Balance 12000\$ = 600\$ . Balance 15000\$ = 800\$
* Bank UK: ( . Balance 5000 GBP = 200\$ . Balance 10000 GBP = 500\$ . Balance 16000 GBP = 700\$ . Balance 20000 GBP = 1000\$
+ Bank To Bank Transfer To Any USA Bank + Bank To Bank Transfer To Any UK Bank + Bank To Bank Transfer To Any Euro Country Bank + Amount To Pay For That Depend On Amount You Want To Transfer + With Account Bank Login : Username + Password Number + I always check the balance and login details before selling
- You can contact me for more and many Bank Logins you need.
- Have all details for login and I can transfer balance to your account
Bank To Bank Transfer To Any Usa Bank
Bank To Bank Transfer To Any Uk Bank
Bank To Bank Transfer To Any Euro Country Bank
Amount To Pay For That Depend On Amount You Want To Transfer

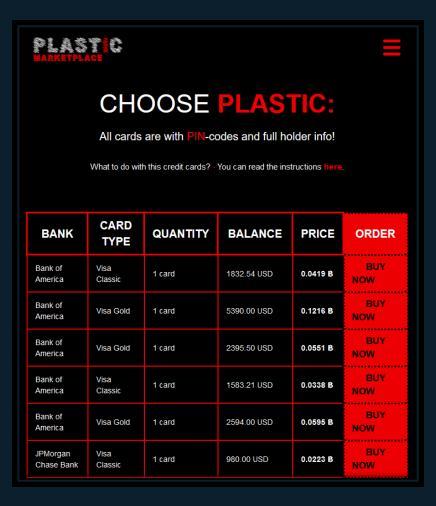
#### Employee credentials

#### Customer logins

#### Bank accounts

## What you'll uncover: Stolen credit & gift cards

	MONSTER Carder's GigaPack -TI 2016- + FREE Gift by SoftkingUS USD 7.99 10.0193 In stock				
	Vendor	SoftKingUS [+11 0] 20+			
	Class	Digital			
	Delivery	-J Instant Delivery	Cuestion	Report	
	Also available:				
o Details <sup>★</sup> Feedback					
Description					
Want to cashout REAL MONEY?					
Want to be a successful carder? Want relevant resources and guides to make a killing with carding?					
Here you will find everything you will ever need to do all of that !!!					
CHECK ALL POSTAGE OPTIONS FOR PACKS OPTION IIII The most complete colection from the most famous carders the dark		an III			
Now YOU can have all you NEED to make REAL MONEY !!!					



## What You'll Uncover: Insider Threats

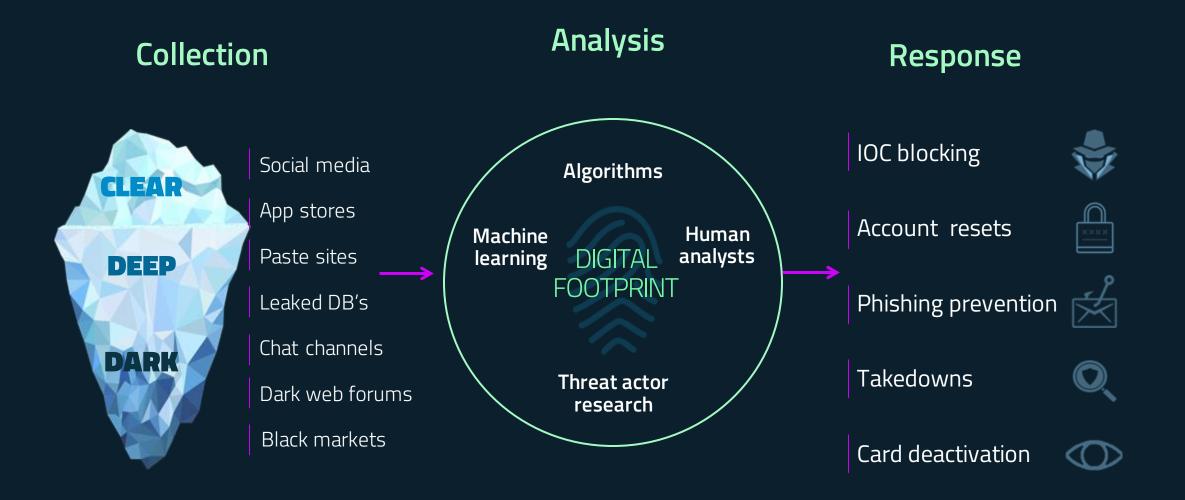
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byte	Hi 😪 🗸 🖉 Sign Out i want french bank log (BNP P/	
Group: User Posts: 5 Registration: 05/06/2017	you can contact me on jabber	
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Group: User Posts: 5 Registration: 05/06/2017 User No: 79 096 Activity: <u>other</u>	contact me pm and jabber. thank you	
Reputation: <u>none</u> (0%)	Posts: 40 Number: 22444	
профиль)пм)	WARDEA BBEPX	

## WHAT ARE YOU LOOKING AT?

# Tailor threat intelligence to <u>your</u> <u>business</u>.



## Automate Your External Threat Defenses



6

## The Emergence Of Phishing Kits

- **3)** Malware-as-A-Service & Phishing Kits

2)



Website cloned



Credential-stealing script run from login page

4)



Credentials collected in bulk



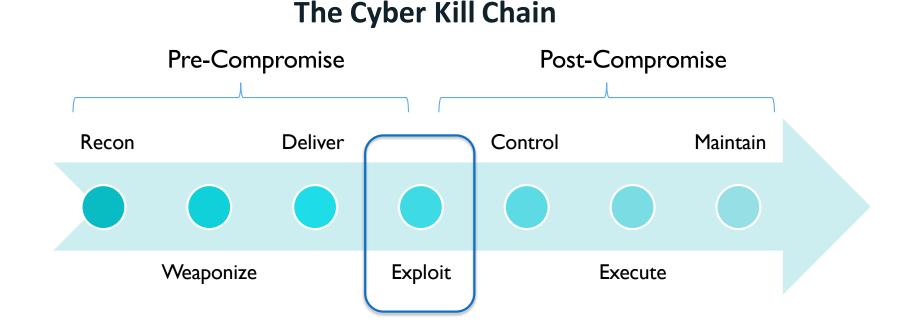
3

Zip file uploaded and unpacked for reuse 5)

New phishing campaign w/ spoofed website

## Shutdown Phishing Early In Attack Chain, Pre-Exploit

- Monitor suspicious domains *before* they're activated.
- Automate the takedown process.



## What External Exposures Are Threats To You?

- 1) Data leakage: strategic IP, customer & employee data, etc.
- 2) Malware-as-a-service, software exploits, phishing kits
- 3) Stolen and counterfeit products, gift cards, credit cards
- 4) Brand attacks: rogue apps, social media weaponization
- 5) Doxxing and digital extortion, Exec/VIP targeting

- 6) Compromised credentials, account takeover
- 7) Phishing attacks and domain squatting
- 8) Insider threats hiring and coordination
- 9) Third-party and IT vendor risk

## Embed Internal & External Remediation

#### Execute takedown processes

- Social networks
- Mobile app stores
- Registrars, domain hosting providers
- Streamline card deactivations, password resets, reprovisioning
- Automate credential validation checks and protocols
- Integrate endpoint, gateway, and perimeter defenses
- Prepare digital extortion decision trees, run scenario analyses

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## Embedding ETI Into Your Security Program

- What immediate challenges do we want to solve?
- Where are our assets & exposures? What do attackers see?
- What can we integrate or automate to improve our remediation? Internally and externally?
- How can we leverage threat intelligence in the long-term?
- What are expected outcomes in 6 months, 1 year, 3 years?

1) External threat intel improves SecOps – but only if it's actionable and contextualized to your organization.

2) Define use-cases upfront; start with one or two.

3) Neutralize threats on their territory; mitigate risk preexploit.



# Thank You!

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