

# RSA®Conference2018

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## FIVE STEPS TO DEFEND AGAINST SOCIAL MEDIA WEAPONIZATION

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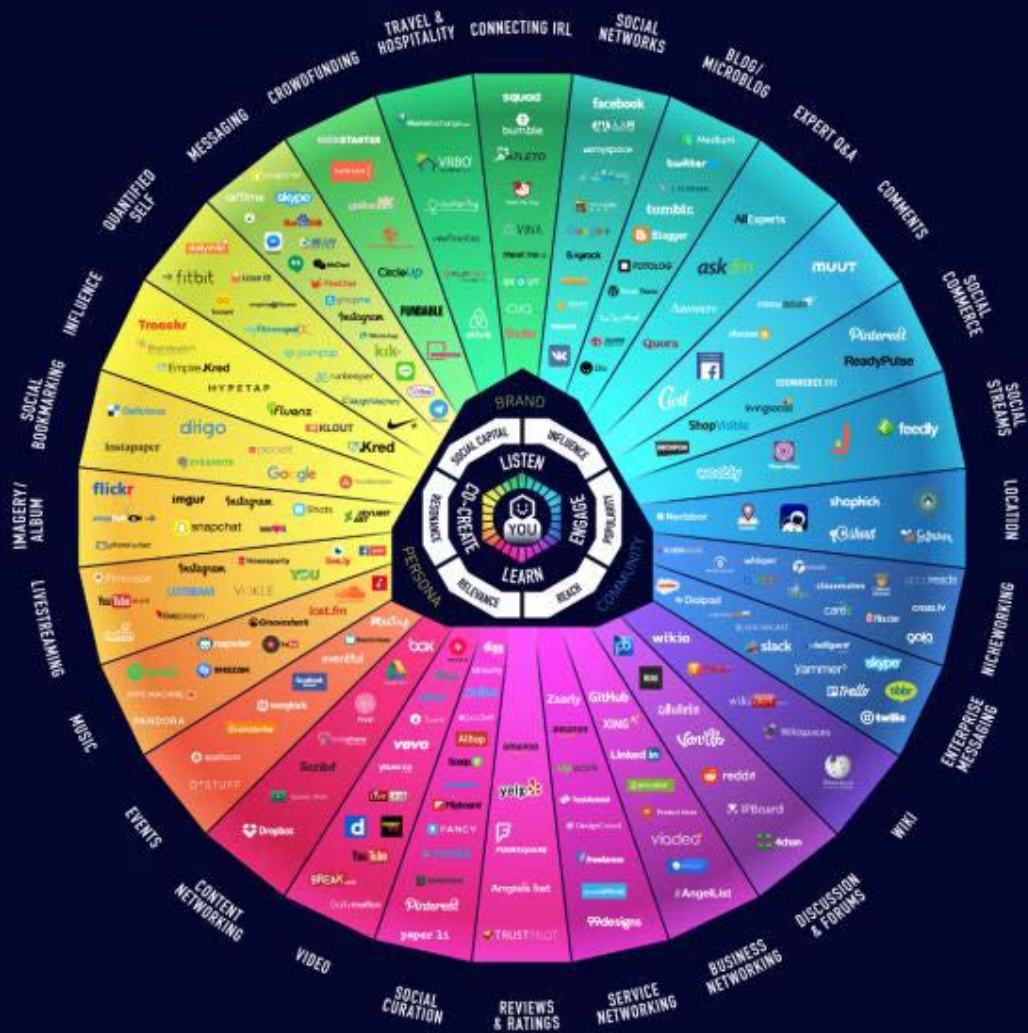
# Social media weaponization



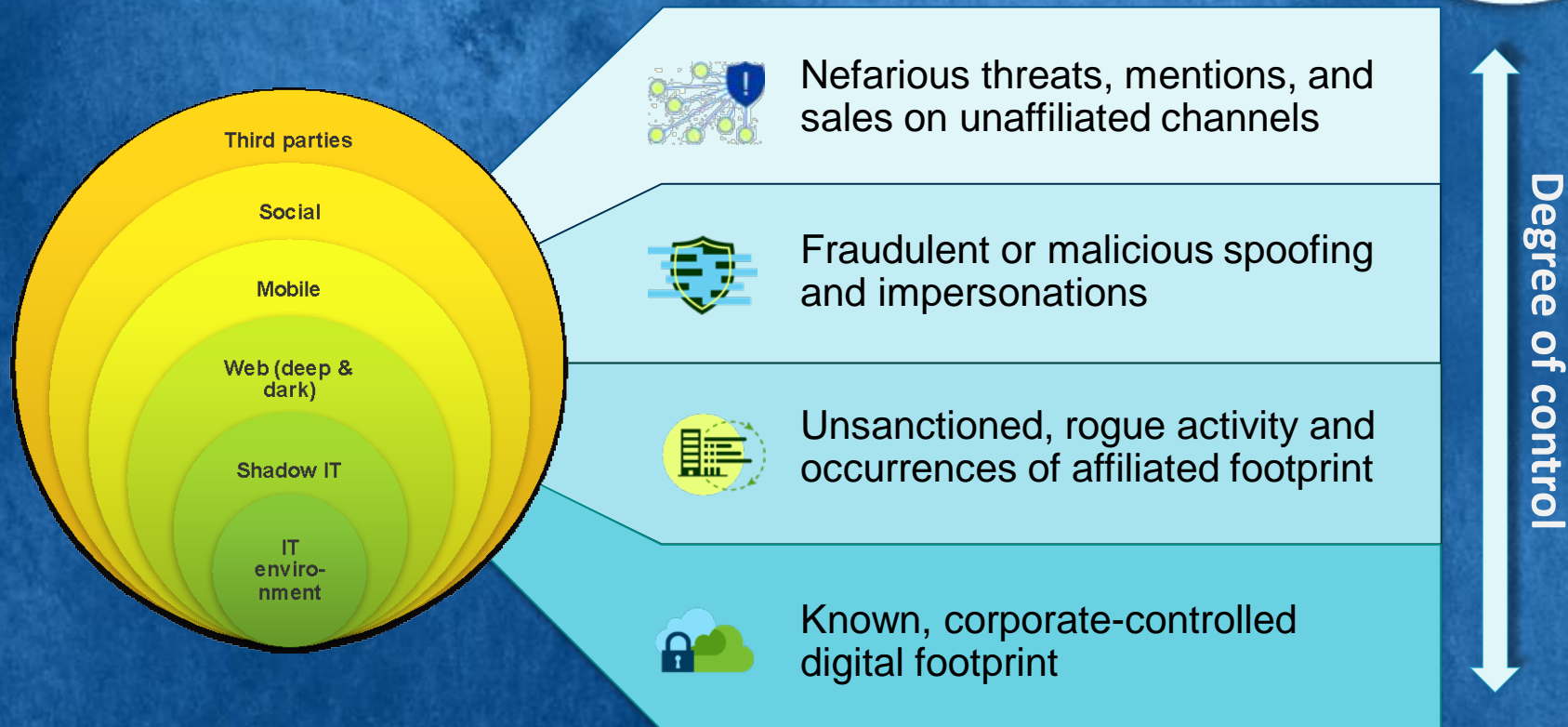
The ORGANIZATION sought, in part, to conduct what it called “information warfare” against the United States of America” through fictitious U.S. personas on social media platforms and other Internet-based media.

By in or around May 2014, the ORGANIZATION’s strategy included interfering with the 2016 U.S. presidential election, with the stated goal of “spread[ing] distrust towards the candidates and the political system in general.”





# Less and less control of your attack surface



# So many ways to make mistakes – and attackers only need one

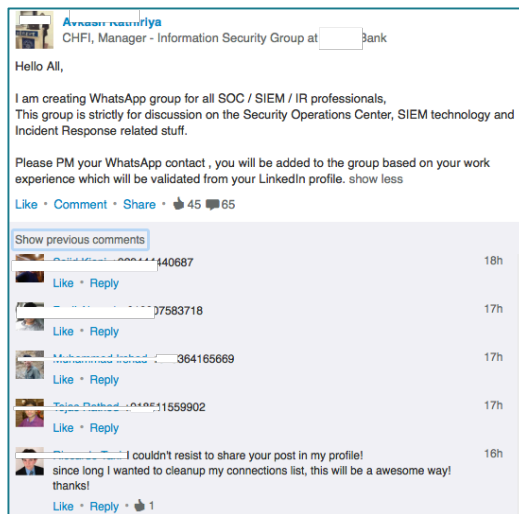


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## Employees post PII



## SOC analysts leak contact info



## VIPs & execs risk physical safety





# Tactics can be sophisticated



1. The HAMMERTOSS backdoor generates and looks for a different Twitter handle each day. It uses an algorithm to generate the daily handle, such as "234Bob234", before attempting to visit the corresponding Twitter page.

If the threat group has not registered that day's handle, HAMMERTOSS will wait until the next day and look for a different handle.



1



2

2. HAMMERTOSS visits the associated Twitter account and looks for a tweet with a URL and a hashtag that indicates the location and minimum size of an image file.



3

3. HAMMERTOSS visits the URL and obtains an image.



4

4. The image looks normal, but actually contains hidden and encrypted data using steganography.

HAMMERTOSS decrypts the hidden data to obtain commands.

5

5. HAMMERTOSS processes the decrypted commands, which may instruct the malware to conduct reconnaissance, execute commands via PowerShell, or upload data to a cloud storage service.

# They're effective too



421,451 likes

4w

britneyspears Such a great shoot with @david\_roemer

view all 6,742 comments

pacheco8380 Flakita hermosa 🥰🥰🥰

\_\_\_\_lerka24\_\_\_\_ 🥰🥰🥰

gabbyhyman @ndebiasio

olya\_1296 Bay)Красотка)

victoriamiller\_official 🥰🥰🥰

andreehelena @azumpano she looks like old Brit!!! 🥰

asmith2155 #2hot make loved to her, uupss #Hot #X

meela\_universe Still hot!

lilyabraun 🥰🥰🥰

limonnn.c Saatlerce sikkemek isterdim

thenotoriouscma Iconic @cheriemadelein

shylasvsyoga @carlos\_misan\_tropo

Log in to like or comment.

...



Fake accounts are easy to come by



INSTAGRAM

VKONTAKTE

ПЕЧАТЬ  
С ТЕЛЕФОНА

СДЕЛАТЬ  
СЕЛФИ

ЮТИТЬ  
ЛАЙКИ



Легко получить  
деньги: от 50 до 100  
000 в день рублей



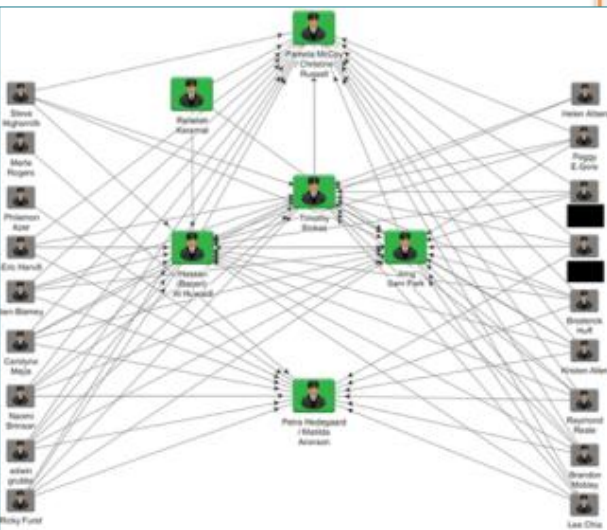
8 800 52 50 50  
Тех. поддержка



Но принимает  
монеты  
и не дает сдачи







## Timothy Stokes

Recruitment Consultant at Teledyne Technologies Incorporated

Newbury Park, California | Electrical/Electronic Manufacturing

Current Teledyne Technologies Incorporated

Previous ExxonMobil

Education University of California, San Diego

500+ connections

Hundreds of connections enhance the account's credibility.

Photos of real people, along with common names and plausible job experience and office locations, make the accounts appear legitimate.

### Summary

I assist in selecting the best-qualified candidates during open hiring. I am involved with screening applications, interviewing candidates and checking references. Our contracts involve the recruitment and secondment of skilled engineers, technicians and managers to client facilities on a domestic or international basis to support major engineering, construction, installation and ongoing operations activities. Teledyne Technologies Inc. owns a globally focused operation, active in over 40 locations, driven by a professional and talented team of people, dedicated to achieving excellence.

Job summaries are well-written and often copied or mimicked from other real profiles.

### Experience

#### Recruitment Consultant

Teledyne Technologies Incorporated

March 2012 – Present (3 years 5 months) | Thousand Oaks

- Remarkable experience in Recruitment Consultancy
- Project based recruitment, candidate screening & referral networking for both local and emerging
- Ability to identify and successfully qualify candidates
- Familiarity with payroll procedures and taxation issues relevant to contractors
- Good understanding of Consultants contracts and terms and conditions
- Amazing ability to manage independently

Fake accounts frequently pose as recruiters on LinkedIn to entice more users to connect.

# Fake accounts and why you should care

FB'S MONTHLY AVERAGE USERS (MAUs) AND FAKE ACCOUNTS



2015

2016

2017

Avg monthly active users

1,517

1,754

2,036

Avg ann revenue, per user

\$11.69

\$15.98

\$20.21

Avg monthly "false" accts

**106m (7%)**

**123m (7%)**

**285m (14%)**

Duplicate

76m (5%)

105m (6%)

204m (10%)

Undesirable

30m (2%)

18m (1%)

81m (4%)

Wasted marketing spend  
(in \$US millions)

**\$1,241**

**\$1,962**

**\$5,761**

# A far bigger problem than ANY social network will admit



- Estimates on rolling basis (i.e., inclusive of security efforts).
- Does NOT discuss false accounts as they pertain to:
  - Instagram, WhatsApp, or Oculus.
- Calculations based on what social networks are ***aware of***:
  - Twitter states approx. 5% of its MAUs are spam accounts.
  - LinkedIn claimed it didn't have an accurate way to count fake accts!
  - Possible that far more go undetected.

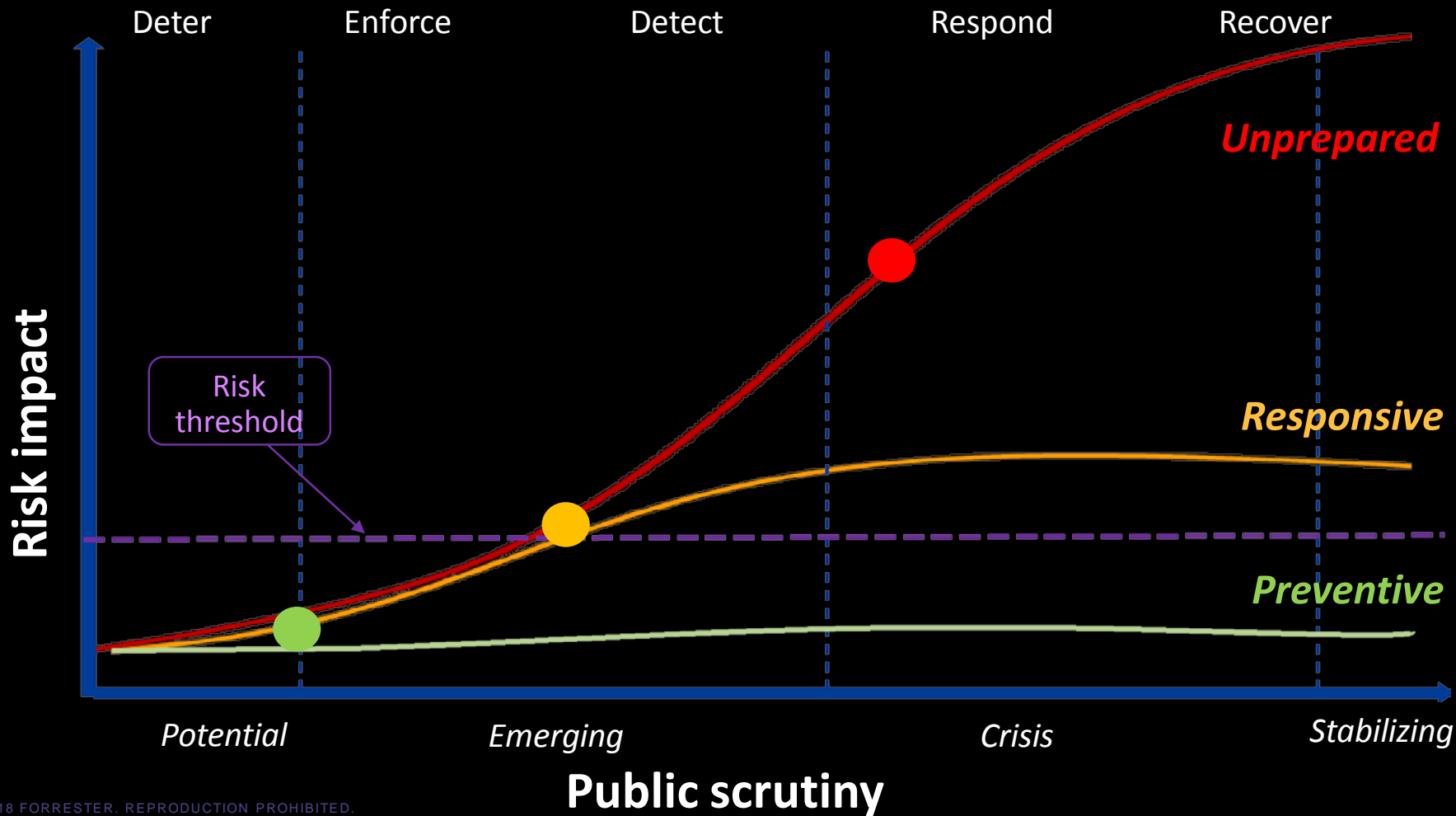


Existing mitigation methods  
are inefficient (at best).



You need active visibility to protect your externally-facing digital footprint.



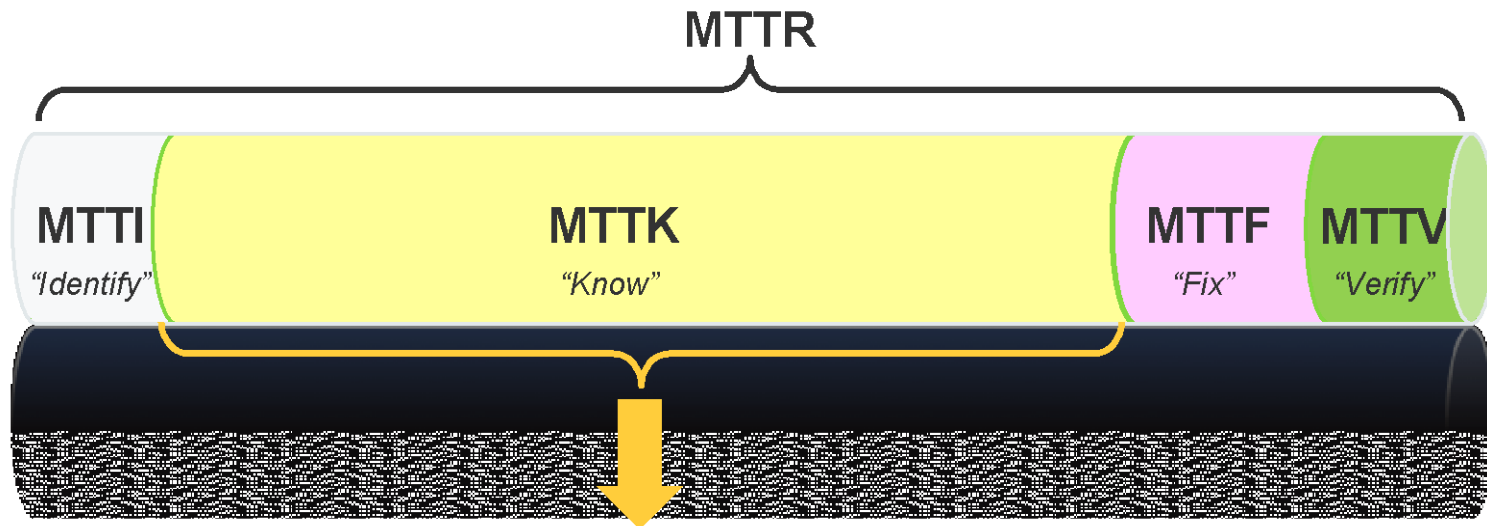






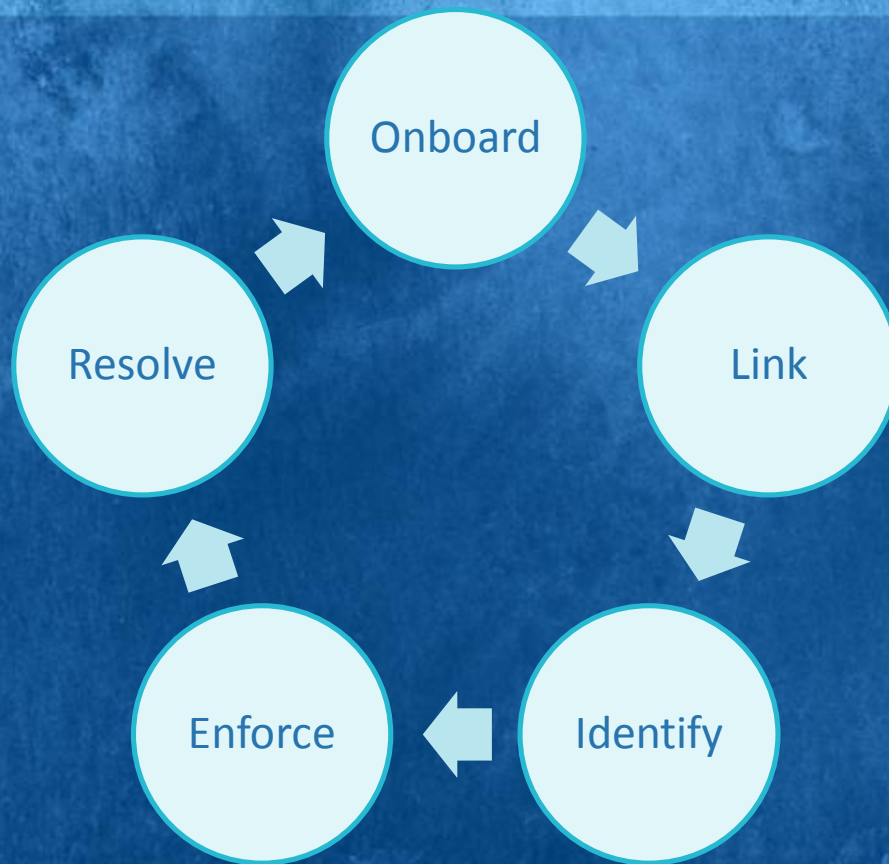
Turn digital risk insight into risk action.

# “Mean time to remediation” is a crucial KPI



*Best opportunity to  
realize efficiencies*

# Five core actions of digital risk protection





# Simplify further to three key steps



## Map

***Onboard*** business attributes, actors and assets to chart digital footprint.

***Link*** digital assets to business attributes, actors, and IP.

## Monitor

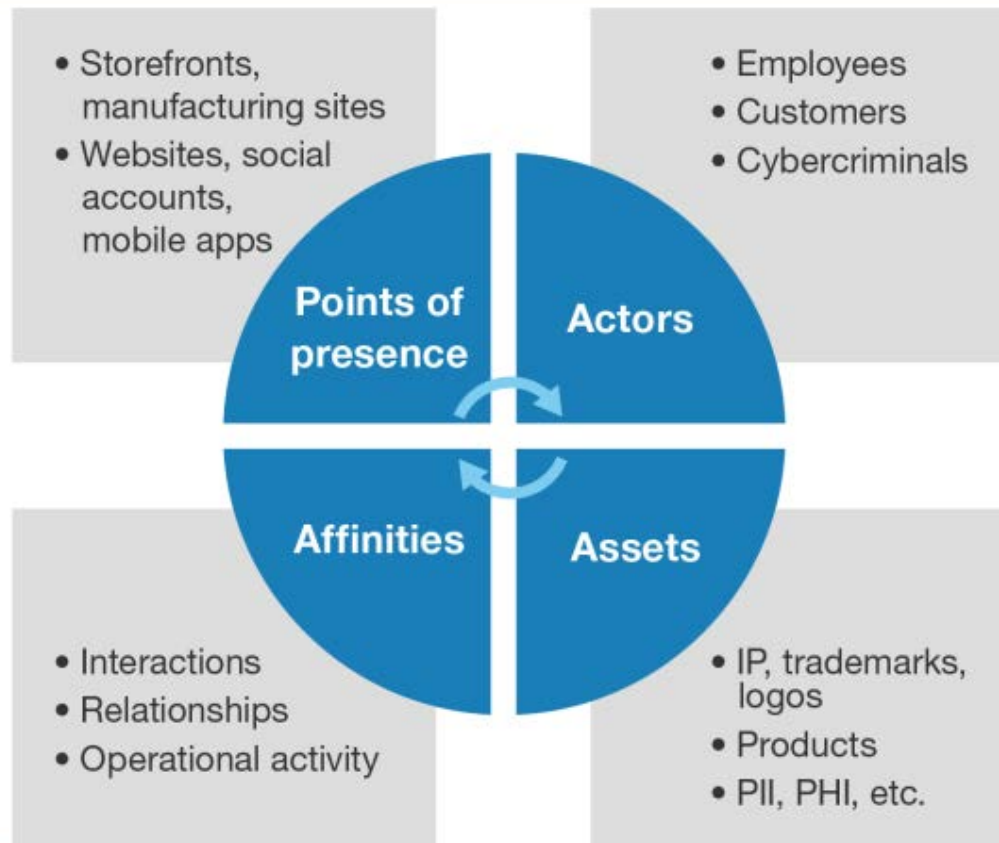
***Identify*** and analyze risk events based on *business relevance* and *risk severity*, including indicators of attack, compromise, and abuse.

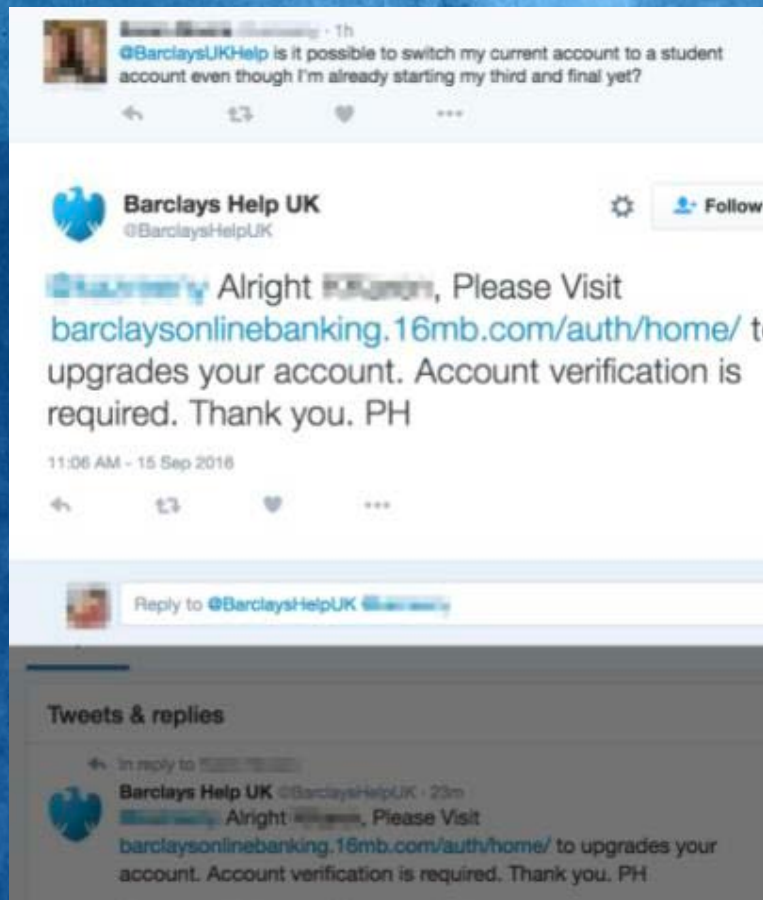
## Mitigate

***Enforce*** controls via technical integration w/ digital assets & infrastructure.

***Resolve*** events via takedown requests, patching, IP blacklisting, cease and desists, law enforcement coordination, and other response options.

# Map business context for better risk scoring





Actively monitor your  
digital assets at risk.





Prepare your digital  
extortion decision tree  
to mitigate impact.

# Address capability gaps



Channel type	Map	Monitor	Mitigate
Social	<input type="checkbox"/>	●	<input type="checkbox"/>
Mobile	<input type="checkbox"/>	<input type="checkbox"/>	○
Web	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dark web	<input type="checkbox"/>	<input type="checkbox"/>	○
Less mature ○ > More mature ●			

Digital distortion is just beginning.





## Final recommendations



1. Start small, tackle 1-3 use-cases at first.
2. Recalculate your digital risk exposure to strengthen your ROI.
3. Prioritize action – onboarding, takedowns, response, etc.

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## THANK YOU

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