

M³AAWG is a Trusted Environment



What happens in M³AAWG stays in M³AAWG

- What occurs here cannot be shared outside the membership without the written permission of the Executive Director, unless we state the specific session is open to the press and social media.
- See the M³AAWG Meeting Policy at www.m3aawg.org/MeetingPolicy

Treat Everyone with Respect

- Treat all attendees respectfully in and out of sessions. No less will be tolerated.
- See the M³AAWG Conduct Policy at <https://www.m3aawg.org/conduct-policy>

You agreed to these policies when you registered for the meeting.
For questions, please contact Amy Cadagin at amy@m3aawg.org

Contribute to a Productive Meeting

- Mute your Zoom session; be courteous to those listening to the presentations

This slide is for Moderators' slide deck template only
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Reminders for Our Worldwide Friends

*All meeting content is confidential: No photos, no video, no recording.
Reach out to room monitor staff with questions.*



L'ensemble du contenu de la réunion est confidentiel : les photos, vidéos et enregistrements sont interdits.
Pour toute question, demandez conseil au personnel.



Todo el contenido de la reunión es confidencial: No está permitido sacar fotografías ni grabar vídeo o audio.
Consulte con el personal si tiene alguna pregunta.



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Eric George

Manager, Solution Engineering PhishLabs

Eric George is the Manager of Solution Engineering for PhishLabs. He has been at PhishLabs seven years, where he initially started as a SOC analyst and advanced to a manager role, where he built considerable security knowledge. Currently, Eric serves as the Manager of Solution Engineering, where he supports sales and business development efforts. In addition to his work at PhishLabs he is also a CISSP and serves as a technical Mobile Chair for M3AAWG.

Digital Risk Protection

Evolving Your Cyber Threat Intel Program Into Action

INTRODUCTION TO PHISHLABS

DIGITAL RISK PROTECTION



Domain Monitoring



Social Media Protection



Data Leakage Detection



Account Takeover Prevention



Brand Protection



Executive Protection

2008

PhishLabs
Founded

5

of the
World's Largest
Companies

10

of the
Most Valuable
Global Brands

10

of the 13
Largest Financials
in North America

DIGITAL RISK PROTECTION (DRP)

“Due to the large amount of diverse use cases, DRPS would be beneficial to any organization in any industry around the world that prioritizes business resiliency as a primary approach to reducing impact to their digital assets.”

Gartner Hype Cycle for Security Operations, 2020 June 2020, Pete Shoard



Gartner Hype Cycle for Security Operations, 2020

June 2020, Pete Shoard



Gartner Emerging Technologies Report: Critical Insights into Digital Risk Protection Services

July 2020, Ruggero Contu and Elizabeth Kim



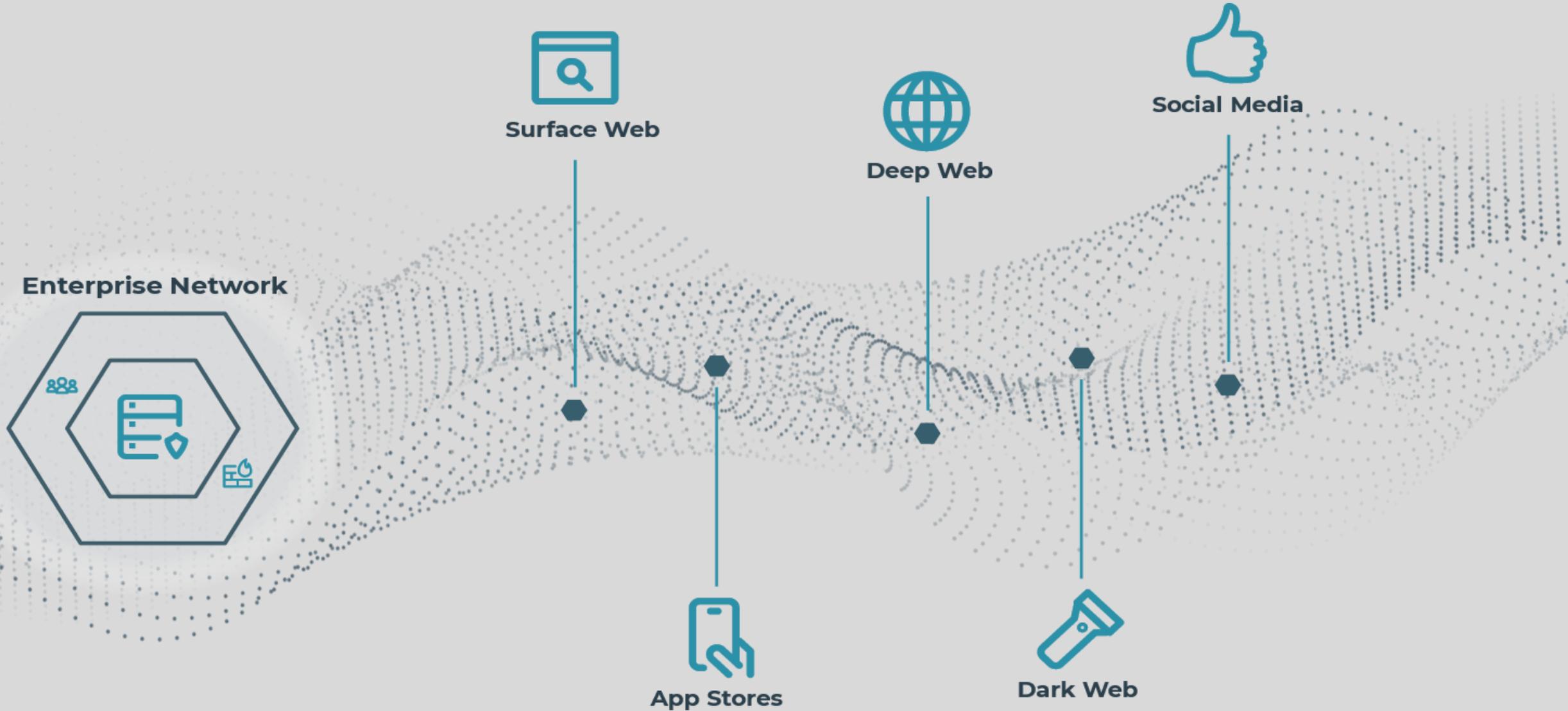
Forrester New Wave: Digital Risk Protection, Q3 2018

WHAT IS DIGITAL RISK PROTECTION (DRP)?



DRP is an operational process that combines intelligence, detection, and response to mitigate attacks across the external digital risk landscape.

WHAT IS DIGITAL RISK PROTECTION



TRADITIONAL THREAT INTELLIGENCE AND DRP

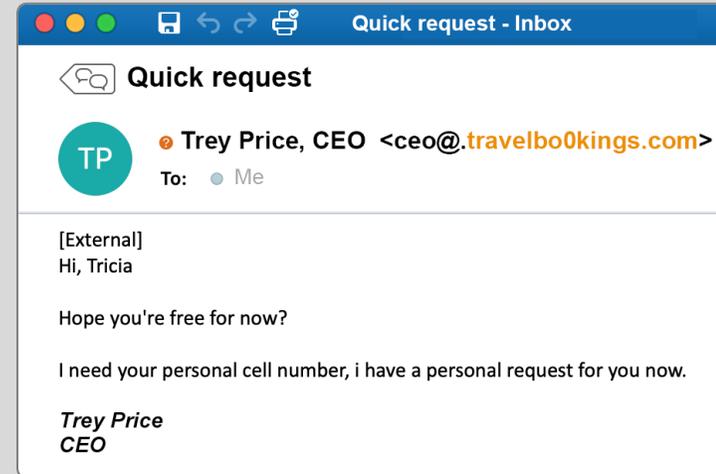




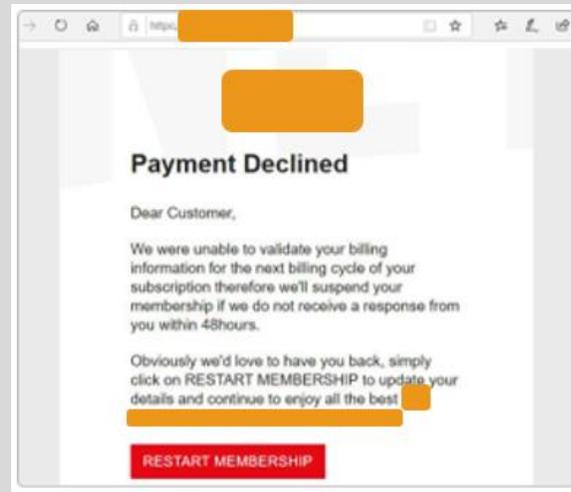
DOMAIN MONITORING

Threat examples:

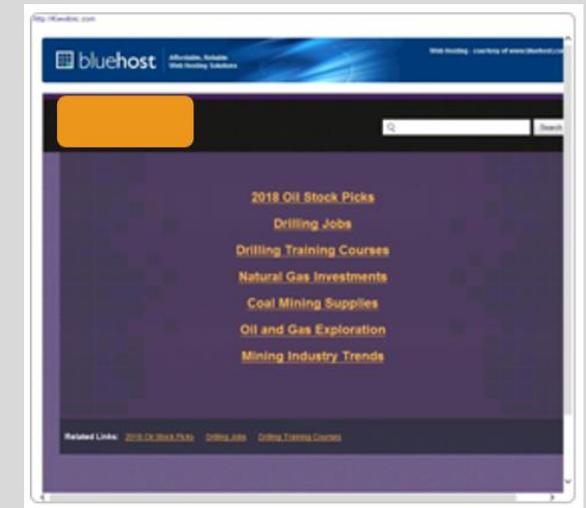
- Business Email Compromise (BEC)
- Credential theft phishing sites
- Domain Redirects
- Claims of false association
- Traffic diversion



Business Email Compromise (BEC)



PHISHING SITE: [https://verification-\[brand\].com](https://verification-[brand].com)

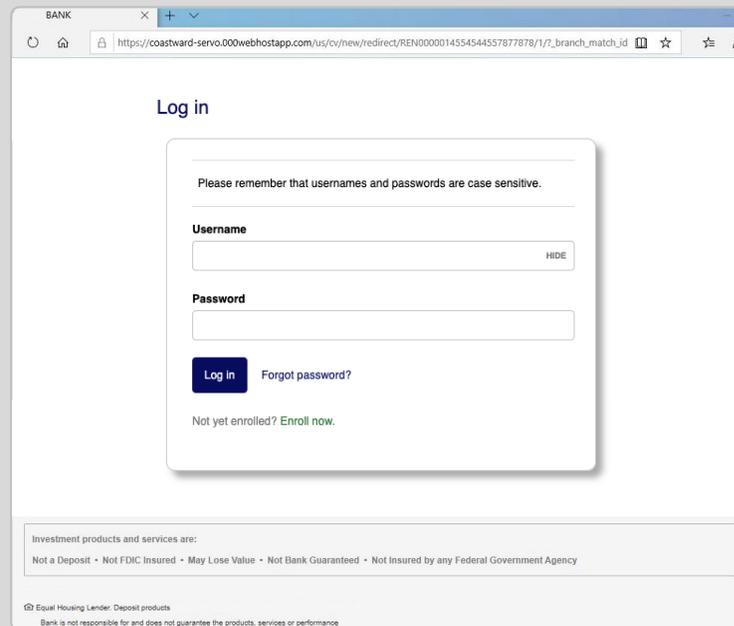


MONETIZED LINKS: [http://\[brand\]inc.com](http://[brand]inc.com)

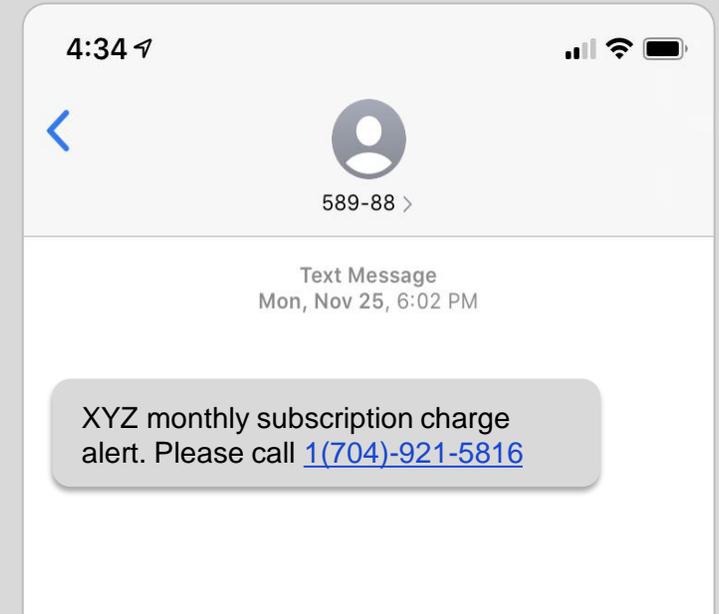
ACCOUNT TAKEOVER PREVENTION

Threat examples:

- Credential theft phishing sites
- Vishing/SMiShing
- Crimeware



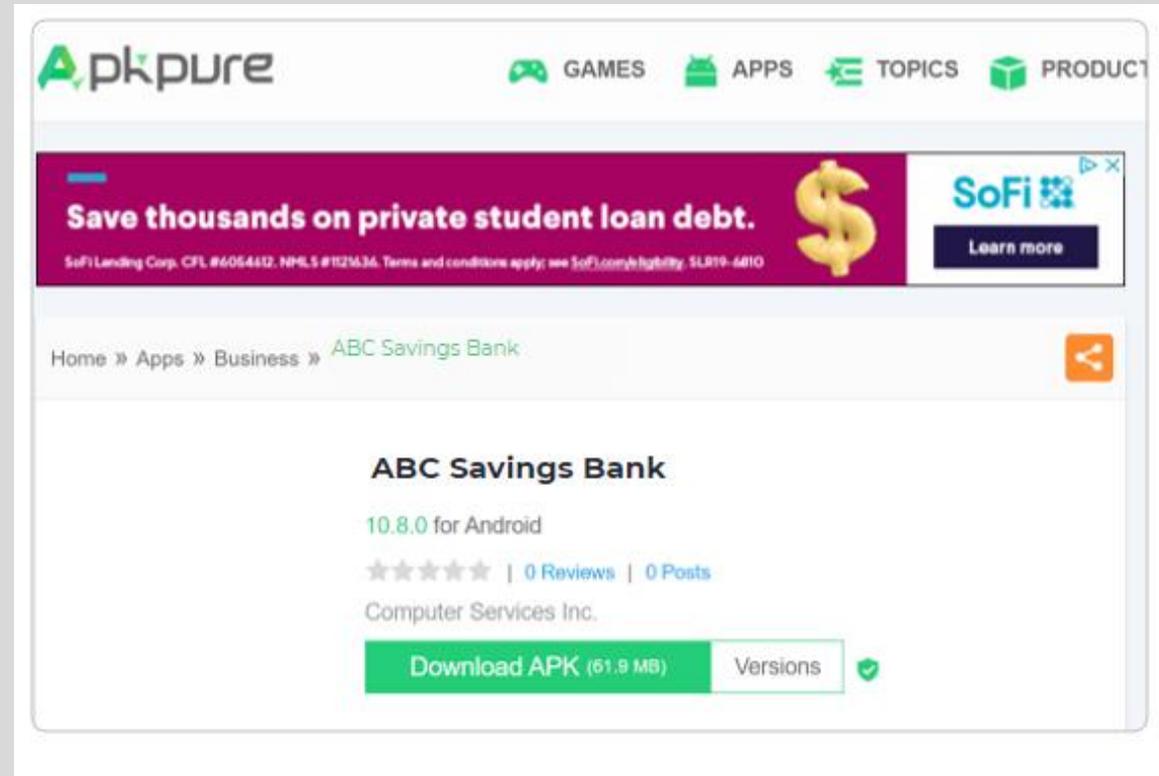
A screenshot of a phishing login page for a bank. The browser address bar shows a URL: https://coastward-servo.000webhostapp.com/us/cv/new/redirect/REN0000014554544557877878/1/1/?branch_match_id. The page title is "BANK". The main heading is "Log in". Below the heading is a warning: "Please remember that usernames and passwords are case sensitive." There are two input fields: "Username" and "Password". The "Username" field has a "HIDE" button. Below the "Password" field is a "Log in" button and a "Forgot password?" link. At the bottom, there is a link: "Not yet enrolled? Enroll now." At the very bottom, there is a disclaimer: "Investment products and services are: Not a Deposit • Not FDIC Insured • May Lose Value • Not Bank Guaranteed • Not Insured by any Federal Government Agency". Below that, it says "Equal Housing Lender. Deposit products. Bank is not responsible for and does not guarantee the products, services or performance."



BRAND PROTECTION

Threat examples:

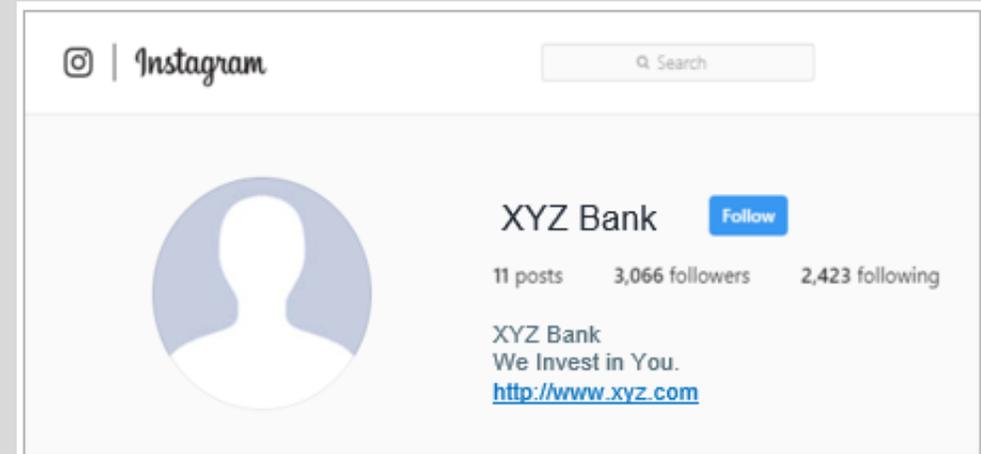
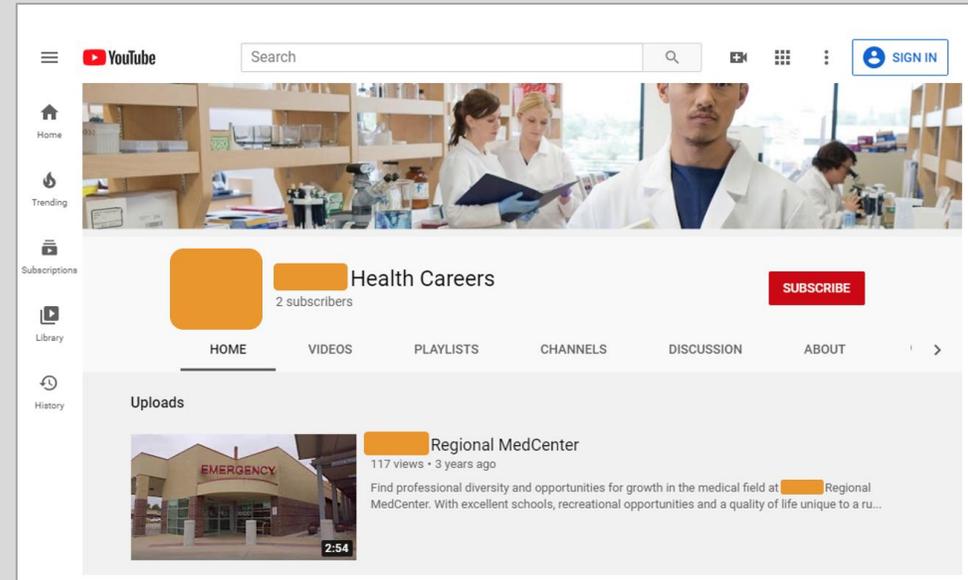
- Brand impersonation
- Rogue mobile apps
- Trademark infringement
- Traffic redirection schemes



SOCIAL MEDIA PROTECTION

Threat Examples:

- Targeted Cyber threats (Malware, Phishing)
- PII leaks used to scam or for harm
- Brand and VIP Impersonation
- Physical threats (location/event)
- Unauthorized associations (Partners/Sponsors)
- Employment scams



DATA LEAK DETECTION

Common types of leaked data:

- PII, PHI (Regulated data)
- Employee credentials
- Credit card numbers
- Intellectual Property (IP)
 - Source code
 - Business plans

Business Continuity Management / Disaster Recovery , Fraud Management & Cybercrime , Fraud Risk Management

More Ransomware Gangs Threaten Victims With Data Leaking

22% of Ransomware Incidents Now Involve Data Exfiltration, Investigators Find

Mathew J. Schwartz (@euroinfosec) · August 25, 2020



ars TECHNICA SUBSCRIBE 🔍 ☰ SIGN IN ▾

INSIDE [redacted]

More than 20GB of [redacted] source code and proprietary data dumped online

[redacted] leak includes docs [redacted] provided under NDA as recently as May.

DAN GOODIN AND JIM SALTER · 8/6/2020, 7:59 PM



CYBER SECURITY NEWS · 2 MIN READ

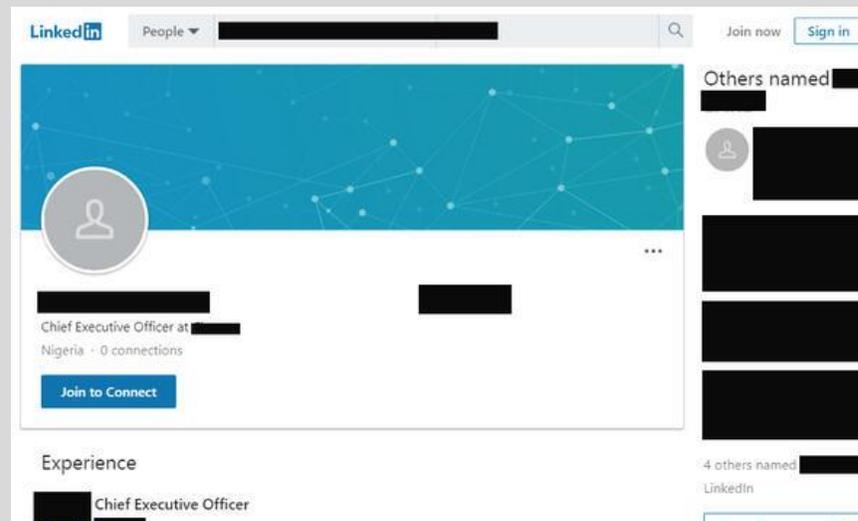
[redacted] and Other Major Companies Affected by Massive Source Code Leak

ALICIA HOPE · AUGUST 6, 2020

EXECUTIVE PROTECTION

Threat Examples:

- VIP Impersonation
- Physical Threats
- Whaling



WHERE DO I GO FROM HERE?

Use Case			
Domain Monitoring			
Account Takeover			
Brand Protection			
Social Media Protection			
Data Leak Detection			
Executive Protection			

WHERE DO I GO FROM HERE?

Use Case	Priority Level		
Domain Monitoring	High		
Account Takeover	High		
Brand Protection	High		
Social Media Protection	High		
Data Leak Detection	Medium		
Executive Protection	Medium		

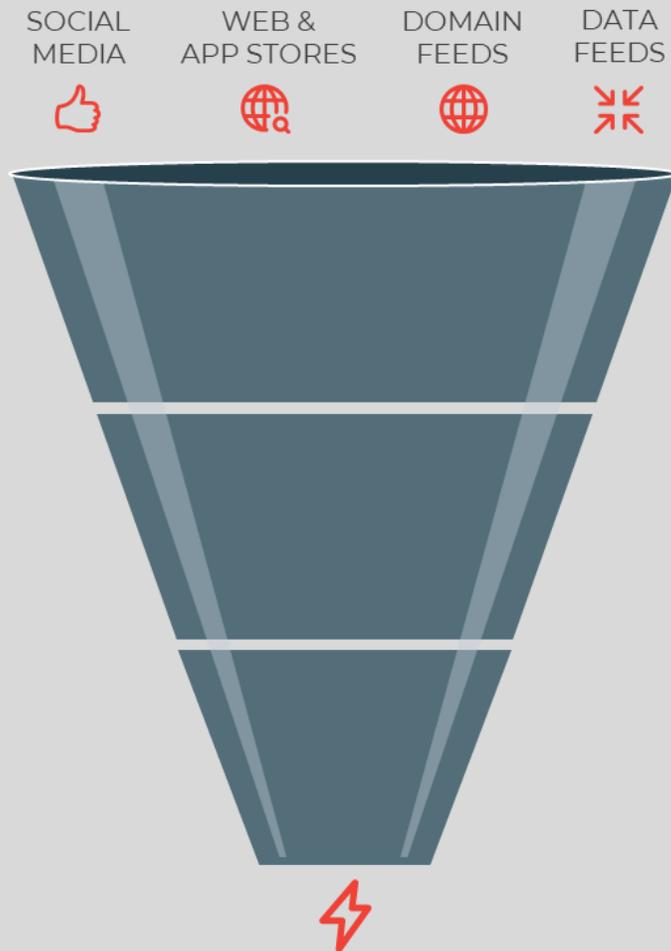
WHERE DO I GO FROM HERE?

Use Case	Priority Level	Stakeholders	
Domain Monitoring	High	Security, IT, HR	
Account Takeover	High	Security, Legal, Marketing	
Brand Protection	High	Security, Legal, Marketing/Brand	
Social Media Protection	High	Security, HR, IT, Marketing, Risk	
Data Leak Detection	Medium	Legal, IT, Security Risk & Compliance	
Executive Protection	Medium	Security, IT, Legal, Marketing	

WHERE DO I GO FROM HERE?

Use Case	Priority Level	Stakeholders	Current State
Domain Monitoring	High	Security, IT, HR	Outsourced
Account Takeover	High	Security, Legal, Marketing	Monitoring
Brand Protection	High	Security, Legal, Marketing/Brand	No current capability
Social Media Protection	High	Security, HR, IT, Marketing, Risk	Outsourced
Data Leak Detection	Medium	Legal, IT, Security Risk & Compliance	Legal: Cease and Desist
Executive Protection	Medium	Security, IT, Legal, Marketing	No current capability

HOW TO BUILD AN EFFECTIVE DRP PROGRAM



COLLECTION



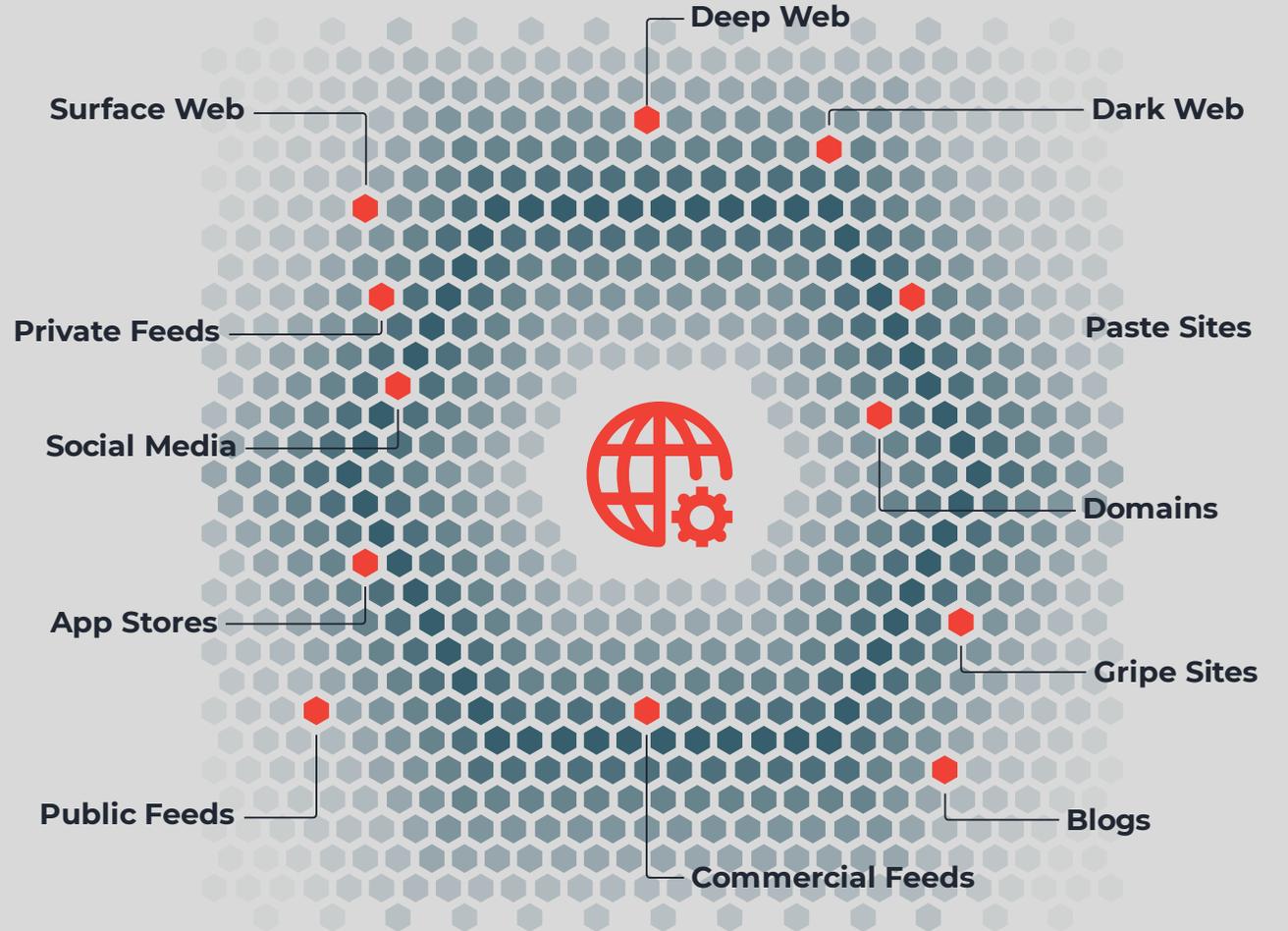
CURATION



MITIGATION

STEP 1: COLLECTION

- What do I need to collect for my use cases?
- How can I source the data? Where will I store it?
- Will I use both free and paid sources?
- Evaluating data quality: Are the sources broad enough? Timely enough?
- How will I measure value from sources?



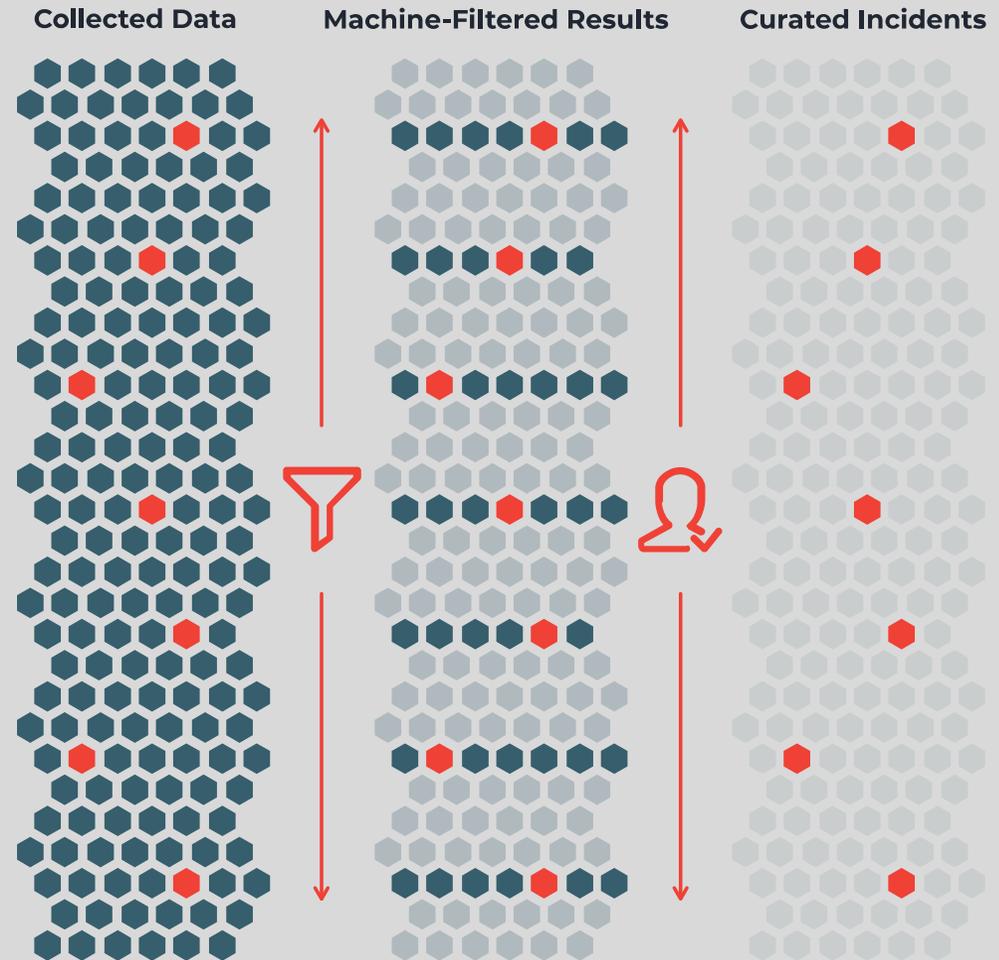
COLLECTION CHALLENGES

- Fidelity of data sources can vary dramatically
- Open source or commercial data feeds aren't available or sufficient for many uses (need direct collection)
- Hidden content, countering evasion techniques.
- Lack of consistent data structures needed to organize/analyze at scale
- High value data sources require relationships and investments (zone files for ccTLDs, SMS spam)



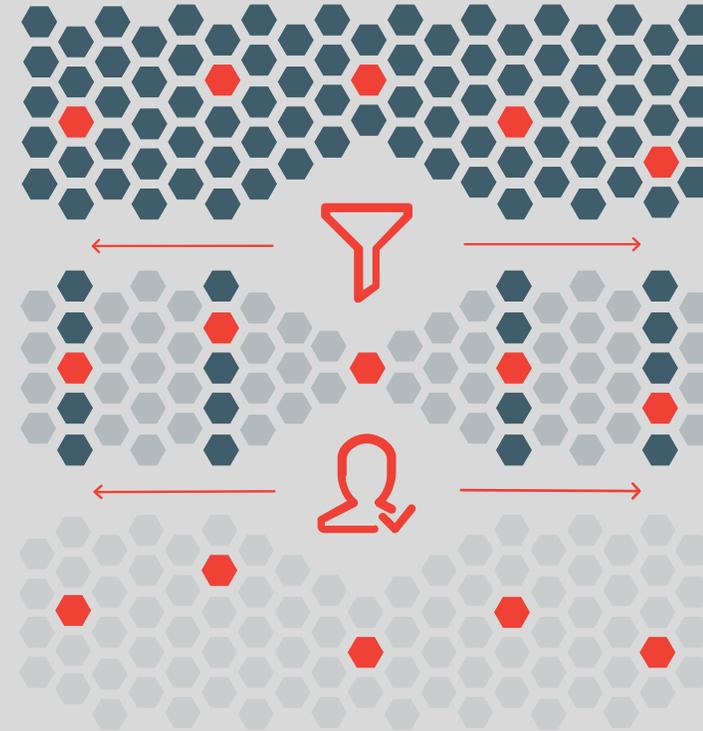
STEP 2: CURATION

- How is intelligence disseminated, and how will I get access to it?
- Where does automation end and human analysis begin?
- Will my analysts need to review all threats for false positives?
- Determine appropriate coverage: 24 x 7 x 365 vs. business hours, ad hoc



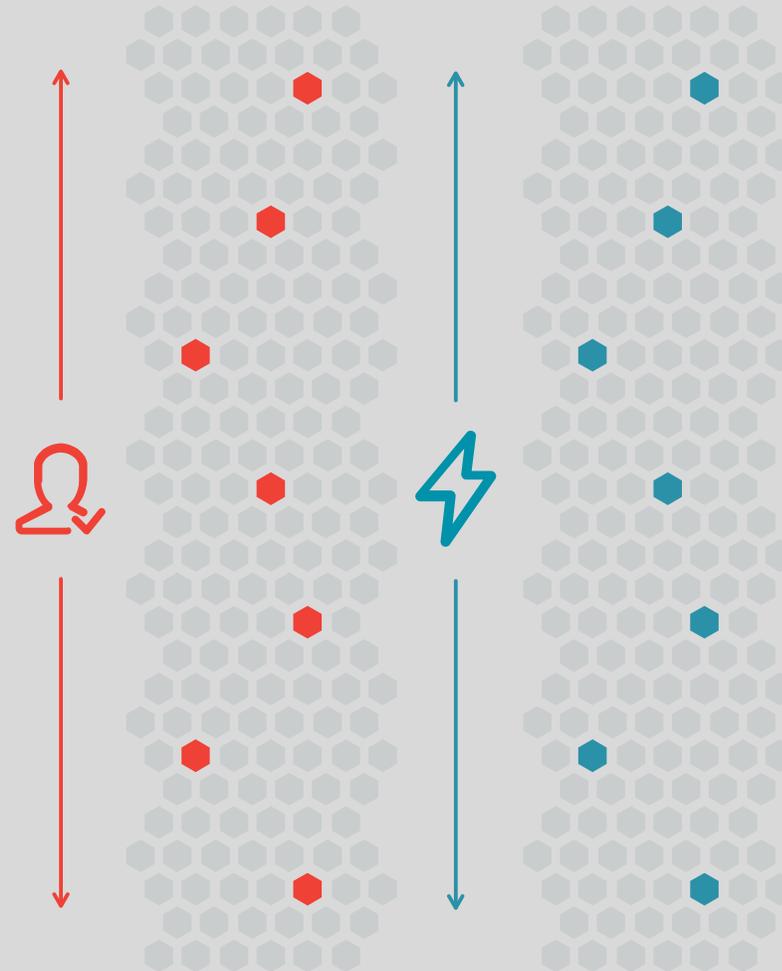
CURATION CHALLENGES

- Measuring your fidelity and adding a feedback loop to fine tune your process
- Managing false positives and false negatives
- Managing automated versus human processes
- Can't review everything; determining the cut line using risk scoring



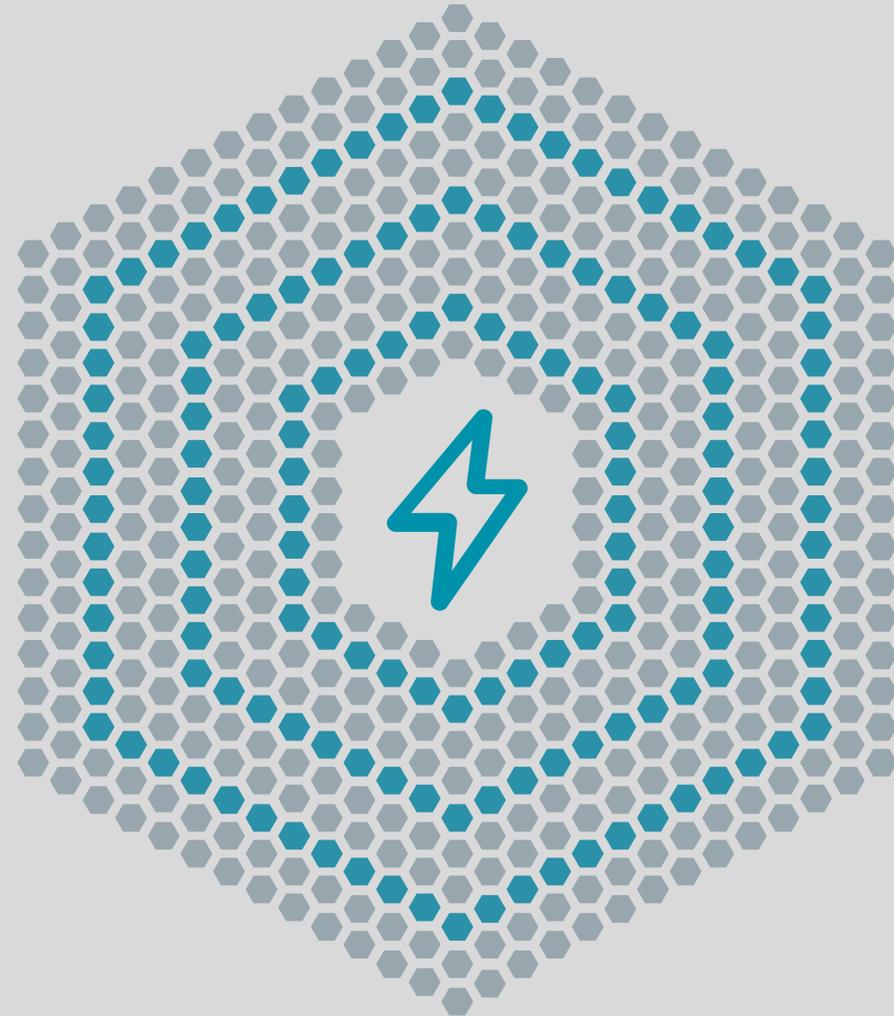
STEP 3: MITIGATION

- How to block? How to take down?
- Will legal handle certain types of threats? Manage DMCA takedowns or send C&D letters?
- Do we need a take down team?
- 24 x 7 x 365 required?



MITIGATION CHALLENGES

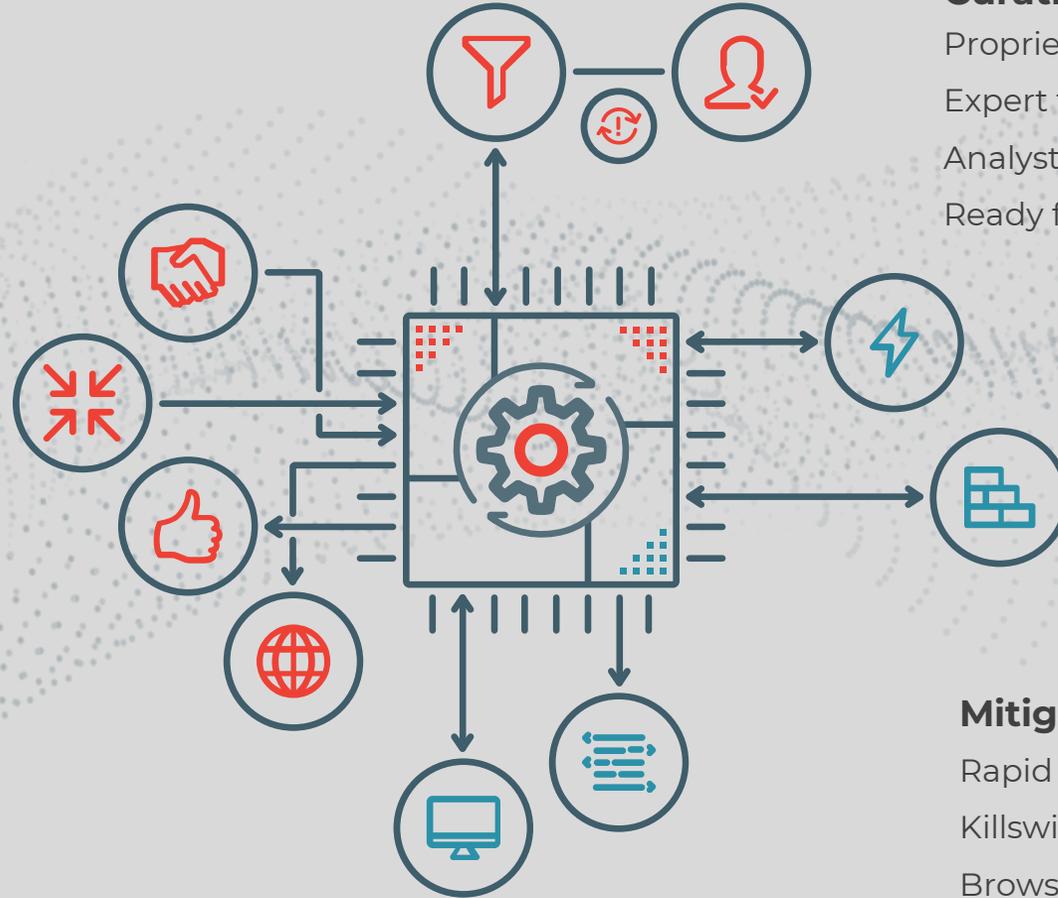
- No plan in place ahead of threat detected
- Technical mitigation doesn't cover all scenarios
- Mitigating quickly enough to be effective
- Takedown requires building relationships, persistence, knowledge of laws & regulations; navigating language, and time zones
- No uniform global standard for takedowns. Every service provider requires a different process
- Providing evidence can be difficult



DRP BEST PRACTICES

Collection

Advanced crawling, anti-evasion
Continuous monitoring
Open, deep, dark web, social
Public, private, client feeds



Curation

Proprietary algorithms
Expert threat assessment
Analyst-platform feedback loop
Ready for action

Mitigation

Rapid and complete
Killswitches, fastlanes, takedown network
Browser-blocking and API integrations
Intuitive web app and reporting APIs

DRP TAKEAWAYS



- DRP is an emerging security function.
- It has many use cases that deliver value.
- It has immediate, stop the bleeding impact.
- DRP program best practices:
 - Collect data from a broad set of reliable sources.
 - Detect threats using both automated and human data analysis.
 - Have a playbook and relationships in place to mitigate threats.

FREE RESOURCES AND LINKS



Gartner Digital Risk Protection Emerging Technologies Report

<https://info.phishlabs.com/gartner-digital-risk-protection-emerging-technologies>

FREE RESOURCES:

Phishing Data:

<http://data.phishtank.com/data/online-valid.csv>

<https://openphish.com/feed.txt>

Social Media Searches:

<https://boardreader.com/>

<https://www.social-searcher.com/>

Data Leaks / Compromised Creds:

<https://igotphished.abuse.ch/>

Look-alike Domain Name Detection:

<https://dnstwist.it/>

<https://github.com/elceef/dnstwist>

Dark Web Searches:

<https://reconponydonugup.onion/>

<http://haystakvxad7wbk5.onion/>

App Stores Lists:

<https://www.businessofapps.com/guide/app-stores-list/>

CONTACT ERIC

For additional questions, please email:

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