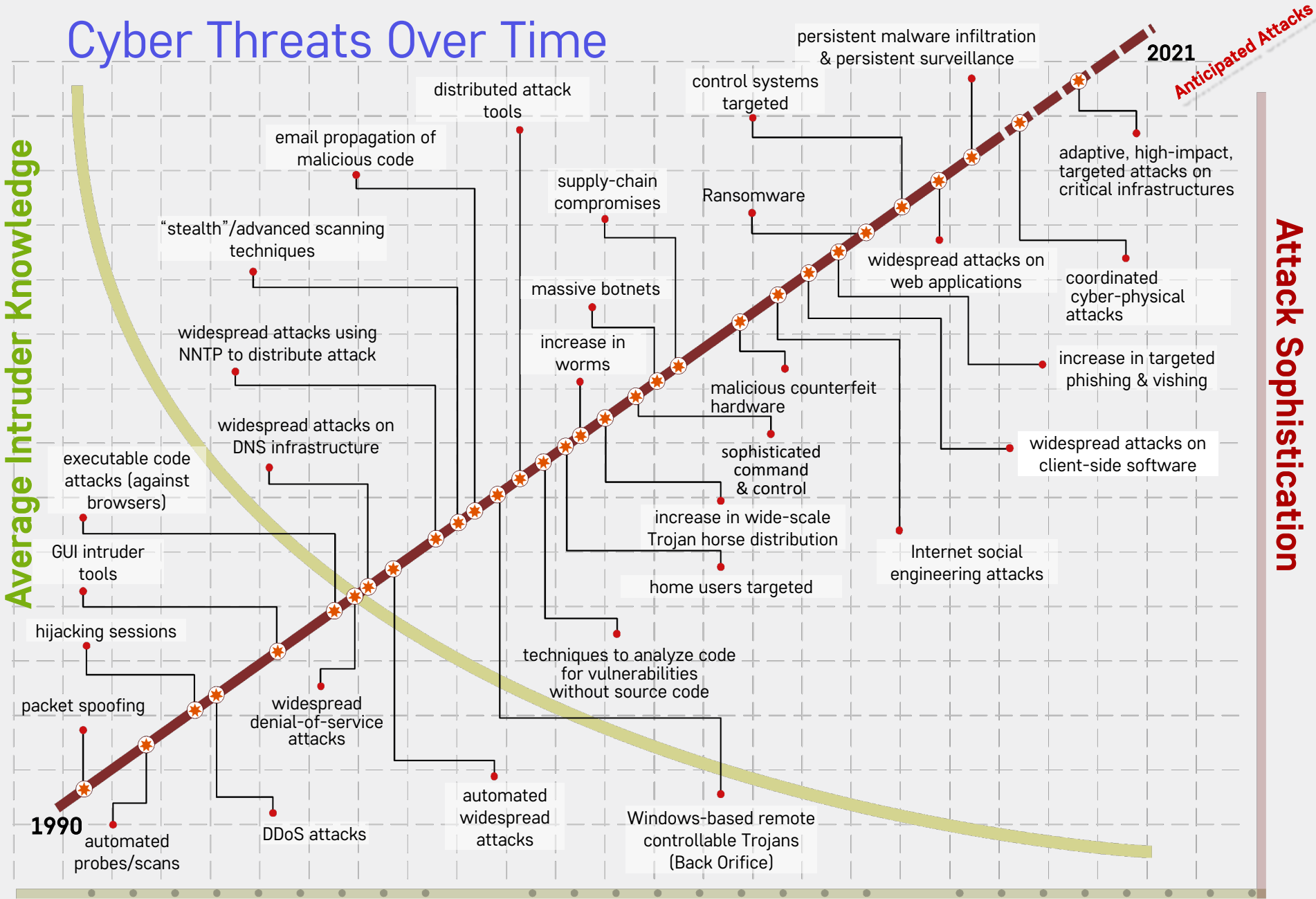
JUNE 2, 2021

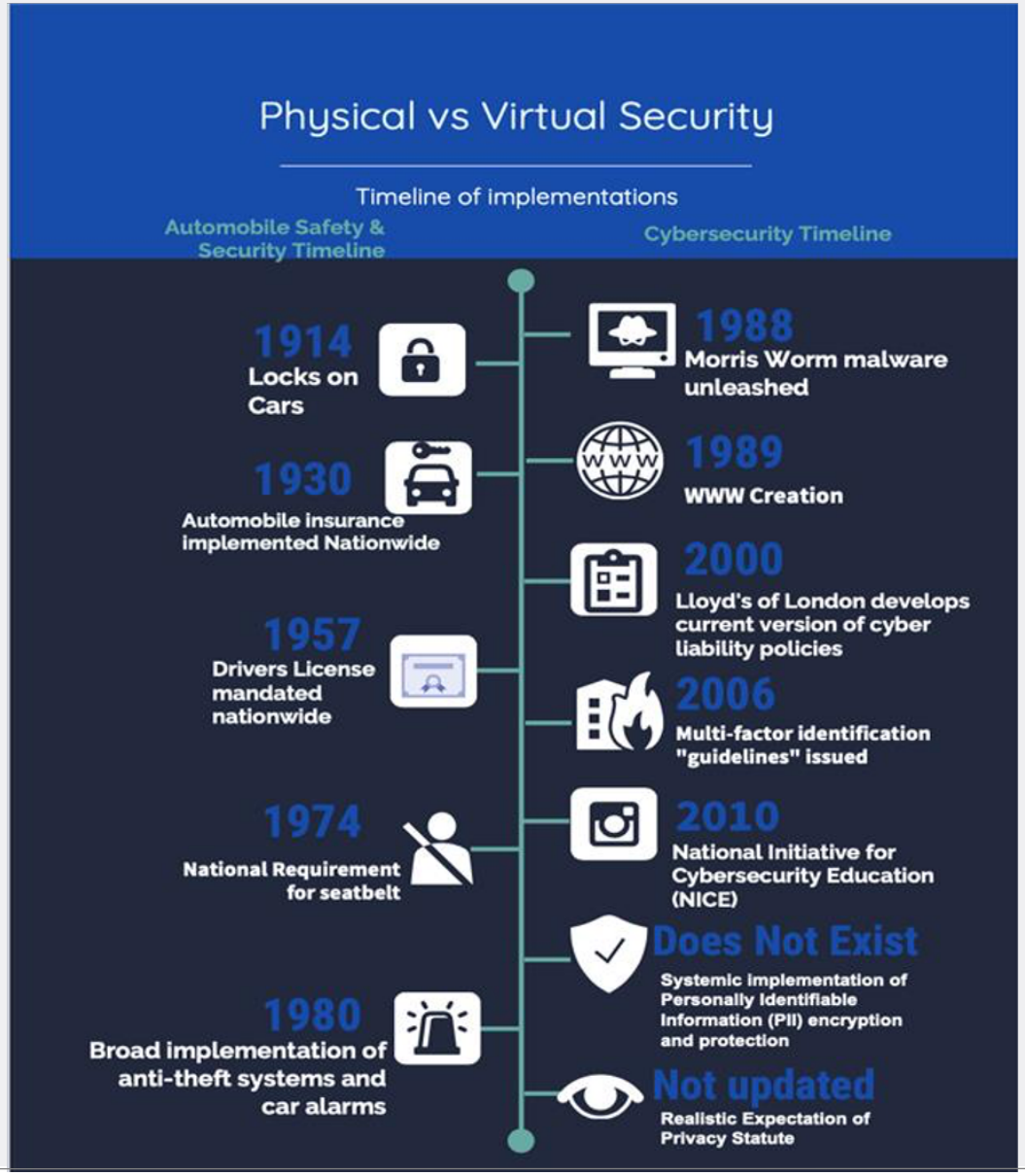
Risk In The Digital Age

Global Impacts from Online Crime & Fraud: Majority Are Not Cyber Resilient

- Crime, Espionage & Fraud - $945 billion globally in 2020
- Estimated to be $5.2 - 10.5 trillion globally by 2025
- Largest Ransom Payment in 2020 = over $15 million
- Average Forensic Investigation Cost = $55,960
- 80% of vendor-caused incidents had notice requirements
- New Lawsuit Trend → Supply-Chain Cases

Cyber Threats Over Time



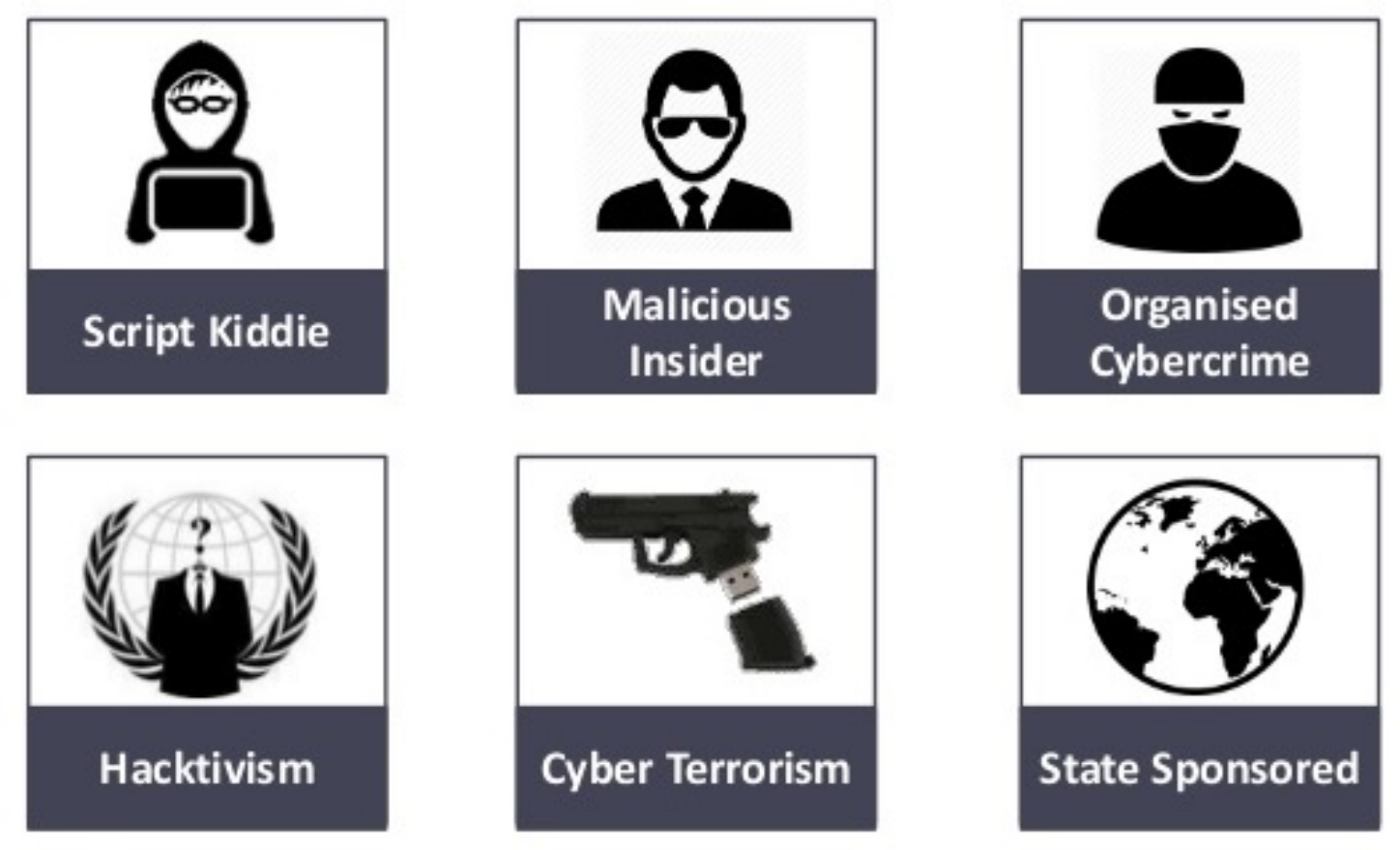

Physical vs Virtual Security
Timeline of implementations
Automobile Safety & Security Timeline
Cybersecurity Timeline
1914
Locks on Cars
1930
Automobile insurance implemented Nationwide
1957
Drivers License mandated nationwide
1974
National Requirement for seatbelt
1980
Broad implementation of anti-theft systems and car alarms
1988
Morris Worm malware unleashed
1989
WWW Creation
2000
Lloyd's of London develops current version of cyber liability policies
2006
Multi-factor identification "guidelines" issued
2010
National Initiative for Cybersecurity Education (NICE)
Does Not Exist
Systemic implementation of Personally Identifiable Information (PII) encryption and protection
Not updated
Realistic Expectation of Privacy Statute

Cyber Criminals Follow the Money: Targeting the Most Vulnerable

- A hacker strikes every 39 seconds
- 86% of breaches were financially motivated
- $17,700 is lost every minute due to a phishing attack
- 65% of criminal groups used spear-phishing (phishing to specific and well-researched targets) as the primary infection vector
- The average cost of a malware attack on a company is $2.6 million
- The financial services industry takes in the highest cost from cybercrime at an average of $18.3 million per company surveyed
- The healthcare industry lost an estimated $25 billion to ransomware attacks in 2019

Cybercrime statistics indicate that every business, no matter the size, is a target

Primary Cyber Bad Actors



Majority are just plain cyber criminals

Intentions, Capabilities, and Opportunity

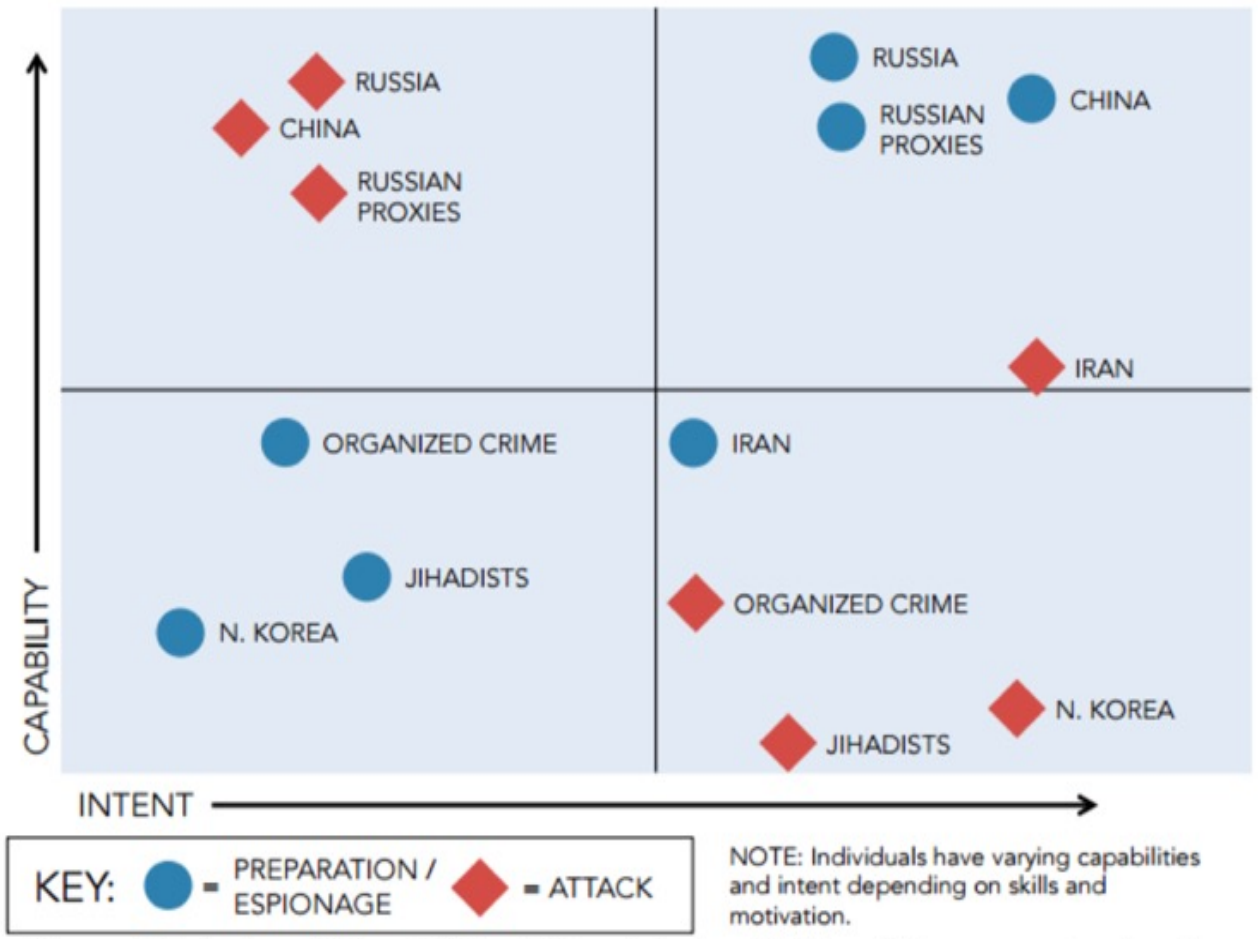


Figure 3. Intents and Capability of Threat Actors.[133] The skill necessary to plan for versus execute a cyber attack differs, even within the same group. High skill is also not always

What is the impact of a cybercrime or fraud event to your Company?

- Businesses and Organizations are at risk daily
- Most do not have in-house cyber risk expertise/CIO/CISO
- Over 70% of cyberattacks target SMBs
- 58% of malware attack victims are categorized as SMBs
- $200K-$2M = median loss of fraudulent schemes

79% of intrusions were crime based in 2020

Do you know where to start?

"Doing The Basics" can prevent or mitigate an event:

1. Reduce your Attack Surface through Workforce Cybersecurity Awareness Training

2. Prevent Your IT Systems from being Compromised by having effective automation of System Patching and Email Security

3. Implement communications Encryption and Application Security

All are available via cost effective and easy to implement SaaS based Solutions

https://www.whitehawk.com/marketplace/products

Establish:
A Cyber Risk Baseline, Response, Action Plan

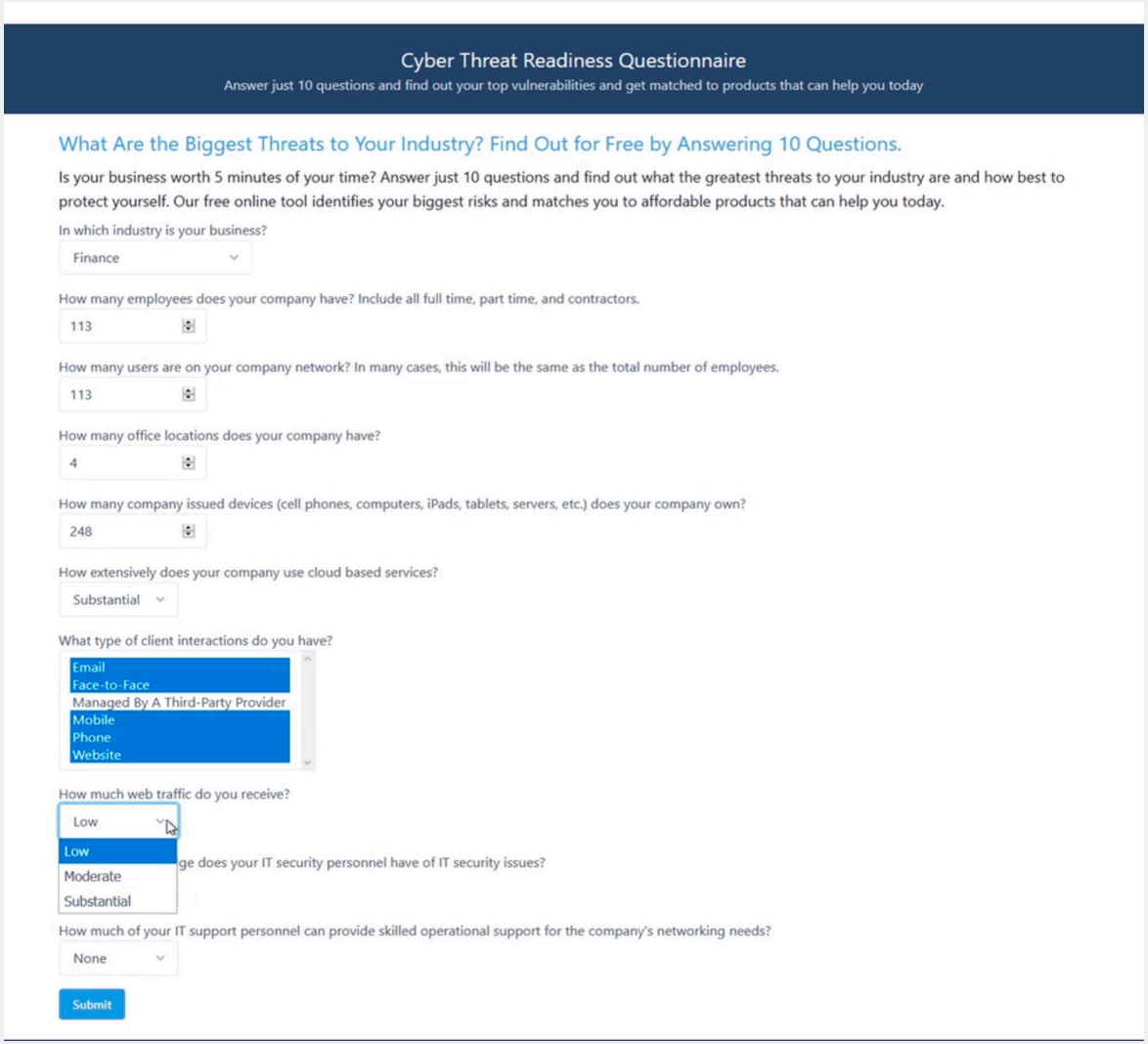
Executive Team/Board/Investors:

- Know the truth about your cyber resilience
- No inside team, managed service provider nor solution vendor is infallible
- Don't assume - get the facts with a “Hacker’s View” of your cyber risks
- Validate where to place your next cyber resilience investment or how to make smart cost cuts
- Conduct cyber due diligence annually or continuously

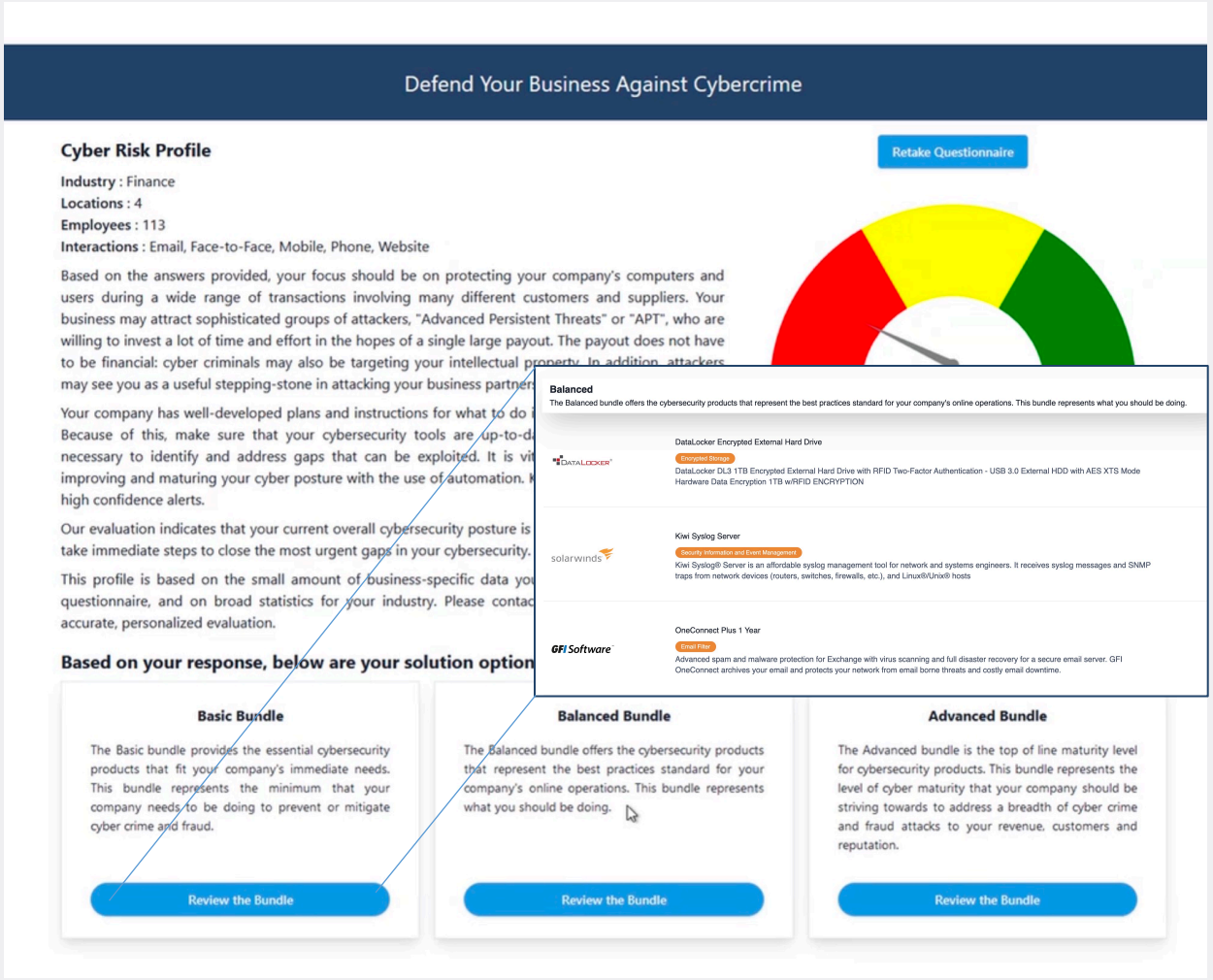
Demonstrate ROI for your security investments & make smart cuts when needed

Cyber Threat Readiness Questionnaire

- Discover your Sector's Threat Landscape from online crime and fraud
- Build a custom risk profile based on your company's digital footprint



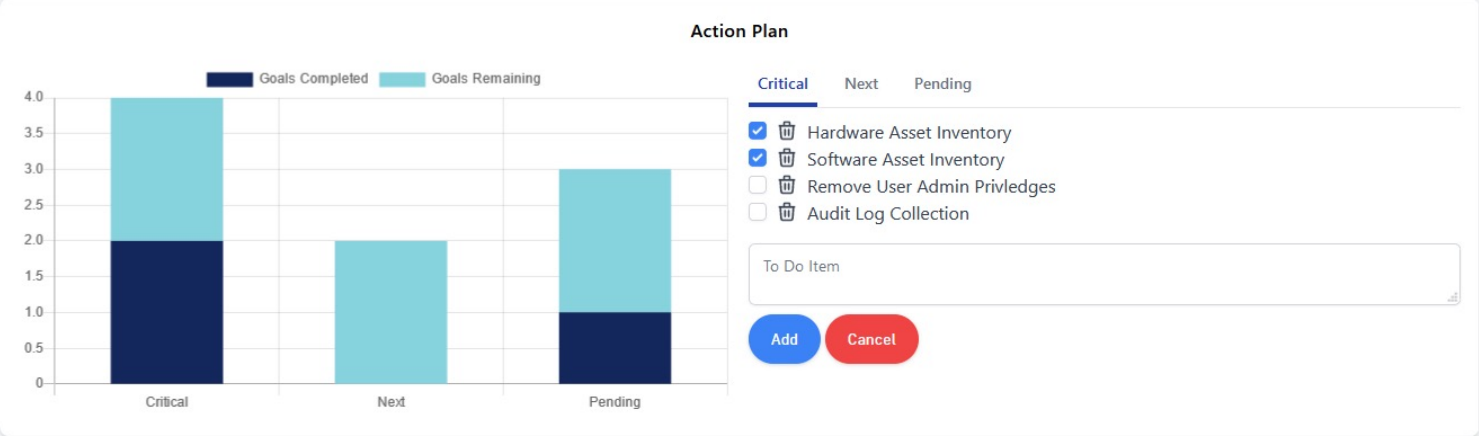
Cyber Risk Profile



Determine the key risks to revenue and reputation, matching commercial solutions to your risk profile

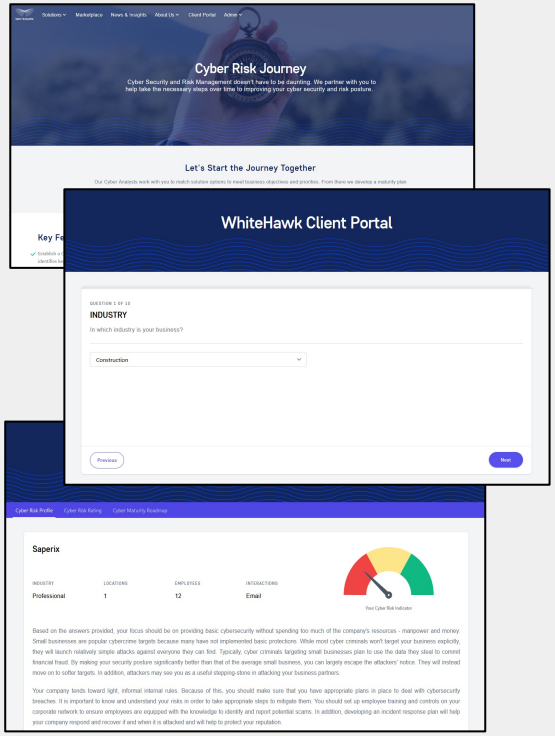
Maturity Roadmap & Action Plan

CIS-20 maturity level assessment, based on information gathered during consultation.

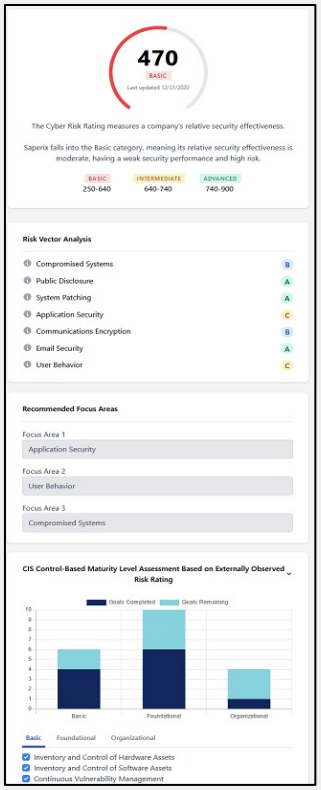


Track progress in real-time and set goals using the action plan to monitor cyber maturity.

Continuous Cyber Risk Monitoring and Prioritization



Data Ingestion



Risk Rating Analysis

Your Mapping to CMMC

See the visual below to better understand where each CIS control maps to these new standards.
This information is based on externally observed data.

CIS Control	#	CMMC Maturity Levels L1	L2	L3	L4/5
Penetration Tests and Red Team Exercises	#20				-
Email and Web Browser Protections	#7			🟡	🔴
Limitation and Control of Network Ports, Protocols, & Services	#9			-	-
Application Software Security	#18			-	-
Inventory and Control of Software Assets	#2		🟢	🟢	🟡
Continuous Vulnerability Management	#3		-	-	-
Controlled Use of Administrative Privileges	#4		🟢	🟢	🟡
Maintenance, Monitoring and Analysis of Audit Logs	#6		-	-	-
Data Recovery Capabilities	#10		-	-	-
Secure Configuration for Network	#11		🟢	🟡	🔴
Implement a Security Awareness and Training Program	#17		-	-	-
Incident Response and Management	#19		-	-	-
Inventory and Control of Hardware Assets	#1	🟢	🟢	🟡	🔴
Secure Configuration for Hardware and Software	#5	🟢	🟢	🟡	🔴
Malware Defenses	#8	🟢	🟢	🟢	🟡
Boundary Defense	#12	🟢	🟢	🟢	🟡
Data Protection	#13	-	-	-	-
Controlled Access Based on the Need to Know	#14	🟢	🟢	🟡	🔴
Wireless Access Control	#15	🟢	🟢	🟡	🔴
Account Monitoring and Control	#16	🟢	🟢	🟡	🟡
		7/8	10/16	4/19	0/20

Symbol	Meaning
🟢	Meets or exceeds all expectations
🟡	Meets some expectations
🔴	Has significant shortfall

Map to Frameworks

Initiate → **Evaluate** → **Inform**

Cyber Risk Consultation, Scorecard, and Action Plan

WHITEHAWK

Cyber Risk Scorecard

On Company: Sample Company

Company	Domain	# IP Addresses	Monitored by
Sample Company	SampleCompany.com	2503	7 Entities

Security Rating			Risk Vector Performance			
610	Advanced:	900 – 740	Compromised Systems:	A	System Patching:	A
	Intermediate:	740 – 640	Communications Encryption:	D	Application Security:	F
	Basic:	640 – 250	User Behavior:	A	Email Security:	A
					Public Disclosure:	A

Prioritized Areas of Focus

WhiteHawk Cyber Analyst has identified top-3 Focus Areas the company should consider

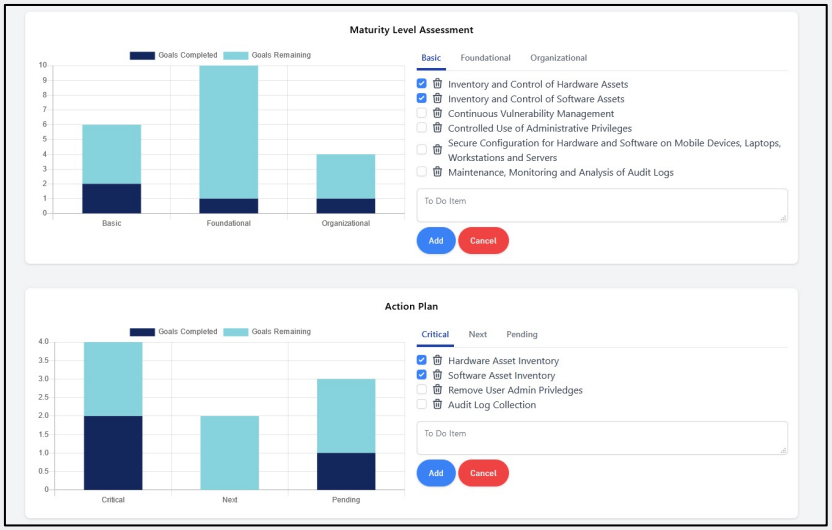
Focus Area 1:	Application Security
Focus Area 2:	Communications Encryption
Focus Area 3:	Compromised Systems

Solution Options

Solution options that address primary business risks identified in the Cyber Risk Scorecard. Alternatives for each are included in the product details section.

Essential Bundle	Balanced Bundle	Premier Bundle
– *AppSec Labs: AppUse Pro* – *Micro Focus Software Inc.: Identity Manager Advanced Edition*	– *Secudrive: Secudrive File Server* – *SolarWinds: Network Performance Monitor* – *BoldonJames: Office Classifier*	– *Check Point: Threat Prevention Security Suite* – *Fortinet: FORTIANALYZER-3900E LOG & ANALYSIS APPL* – *Trusted Internet, LLC: Student Cyber Protector* – *SolarWinds: Web Performance Monitor*

For more solution options, visit www.whitehawk.com/marketplace



WhiteHawk Cyber Risk Scorecard

Maturity Model & Action Plan

Engage → **Monitor**

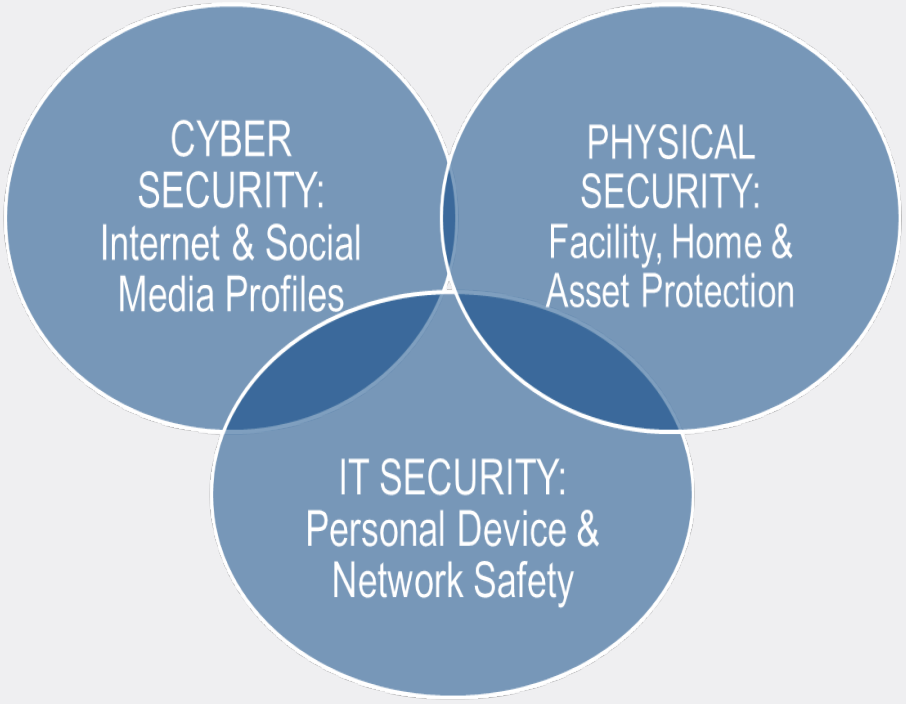
Take Smart Action:
To Mitigate Your Cyber Risks

- Everyone is a target
- Criminals are following the money and social media enables their focused targeting of your business or organization's members
- Knowing your key Cyber Risks is now an imperative
- Know your top 5 Risks & Mitigate them today
- Implement for one year and track your maturity & resilience

Your Personal Approach to Social Media Security

Think 360 Security

It is impossible to separate social media from the larger picture of security – all are mutually inclusive:



A Pragmatic Perspective:

- Have a healthy dose of paranoia
- Always expect that bad guys may want to get at me or my company
- Keep a low profile at home and abroad
- Be private about my movements
- Be aware of my surroundings always
- Take precautionary measures
- Live my life and work to the fullest - but always be aware

Personal Disclosure and PII:

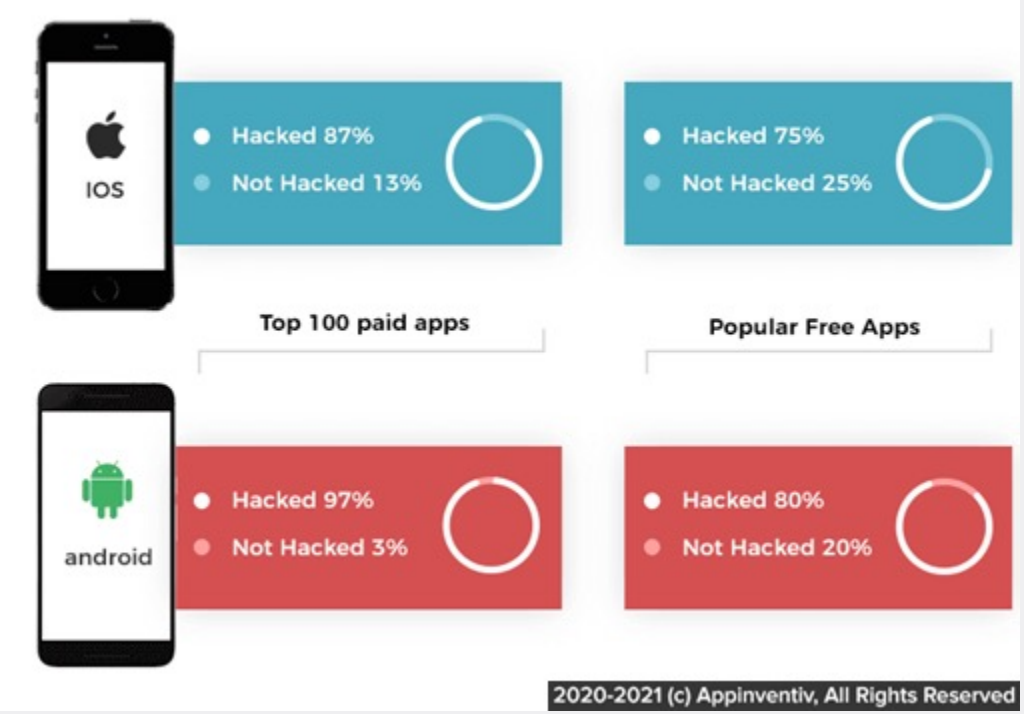
Most social media sites will ask for personal information to be included in your profile or during account registration.

- Do not post DOB, phone numbers, email addresses, home addresses.
- Decide whether you want to use your “true name,” a nickname, or an alias.
- Decide whether you want to use a headshot, other picture, or no photo.
- Choose a password that you do not use for other online activities or to login to your computer/devices.

Phone and Tablet Apps: What are they collecting?

- Location tracking
- Accessing the device's address book or contact list
- Single sign-on via social networks
- Identifying the user or the phone's unique identifier (UDID)
- Number and type of in-app purchases
- Number of times used a browser, dialed a phone #

Percentage of Hacks in Paid vs Free Apps



Social Media: Assistance for Settings

Facebook Help Center for Settings
https://www.facebook.com/help/193677450678703

Consumer Reports – How to Use Facebook Privacy Settings
https://www.consumerreports.org/privacy/facebook-privacy-settings/

Step by Step Instructions
http://facecrooks.com/Internet-Safety-Privacy/how-to-lockdown-your-facebook-account-for-maximum-privacy-and-security.html/

YouTube Video - Facebook Settings
https://www.youtube.com/watch?v=Ui_v5Gb8A54

Cybercrime Support Network (CSN)

fraudsupport.org powered by: cybercrime SUPPORT NETWORK

Report. Recover. Reinforce.

The Cybercrime Support Network was established to give a voice to cybercrime victims and support a coordinated response from federal, state and local law enforcement to manage cybercrime incidents affecting individuals and small businesses.

CSN is piloting US programs to utilize existing referral infrastructure and the website fraudsupport.org to facilitate cybercrime reporting, response and recovery.

Through a partnership between WhiteHawk and CSN, small and midsize businesses (SMBs) that contact CSN in need of cybercrime and fraud response and mitigation services will be provided incident response resources including WhiteHawk.

Cyber Intelligence Sharing

Continuously Working Across Your Business Sector, Government Sector and Community (Models: ISACs & Cyber Threat Alliance)

GLOBAL CYBER ALLIANCE

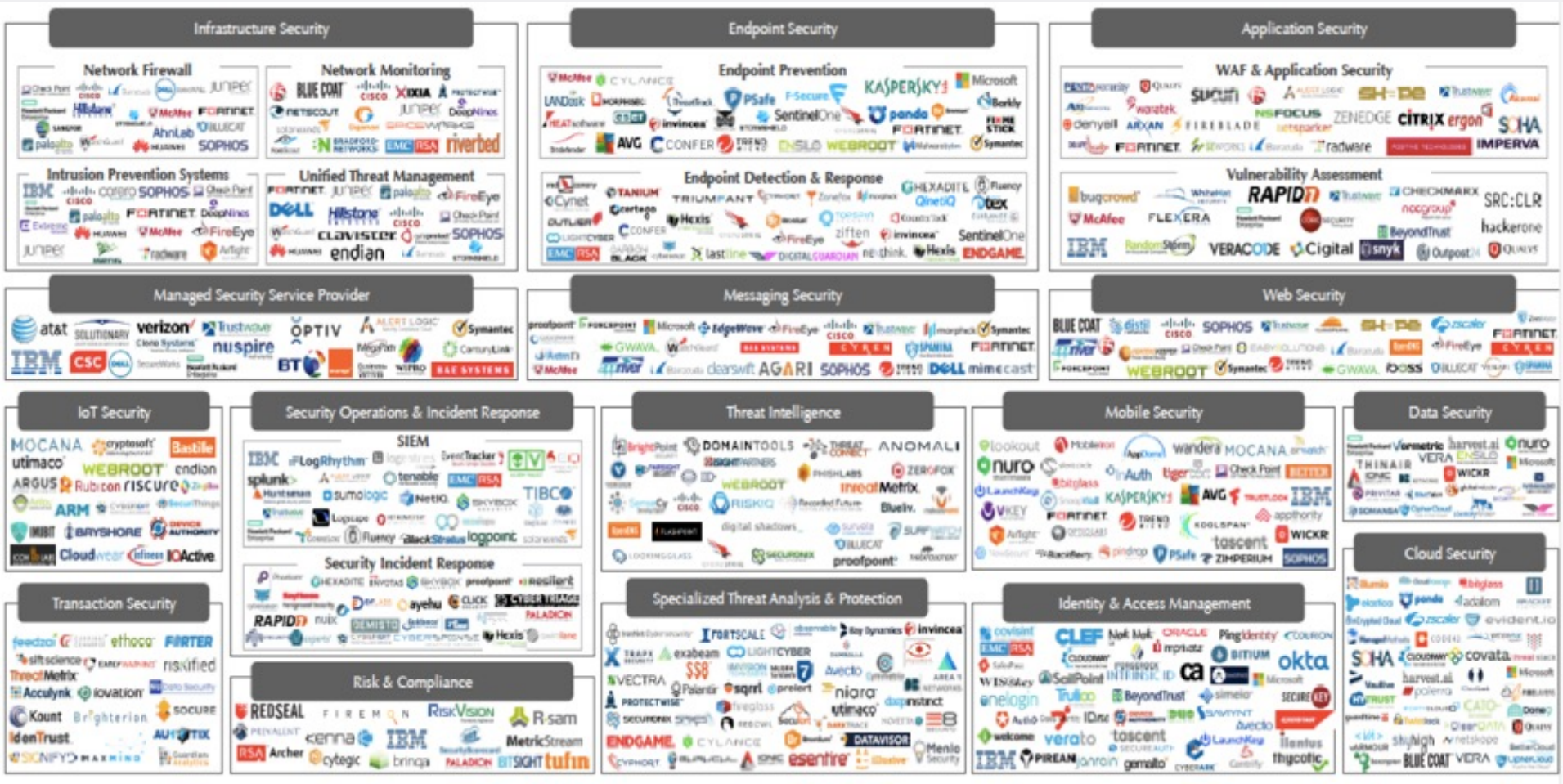
Do Something. Measure It.™

The Global Cyber Alliance (GCA) is an international, cross-sector effort dedicated to reducing cyber risk and improving our connected world.

"Our vision is a secure, trustworthy Internet that enables social and economic progress. Realizing this vision requires tackling a big problem: reducing cyber risk. We approach this challenge by building partnerships and creating a global community that stands stronger together. We tackle projects that will have a global impact, are scalable, measurable, and will reduce risk."

Through the combined efforts of WhiteHawk and GCA, small and midsize businesses (SMBs) that contact GCA in need of cybercrime and fraud response and mitigation services will be provided incident response resources including WhiteHawk.

How Does Anyone Keep Up with Cybersecurity Solutions?



Key Cyber Risks and Solutions

Financial Fraud, Identity Theft and Mobile Security

Financial identity theft is a significant crime, and potentially one of the more damaging types of identity theft. Below are some solutions that address these risks.
EZShield/WH SaaS http://mydefense.ezshield.com/whitehawk
Cleafy https://www.cleafy.com/
Clearforce- https://clearforce.com/

Password Lock Boxes / Password Managers

A password manager can dramatically reduce the risk of credential theft, as a result weak or reused password. There are 2 non-Apple options which can address this risk and provide protection:
Roboform - https://www.roboform.com/
Onelogin - https://www.onelogin.com/

Secure Communications (email, texts, Telcons)

Maintaining secure communications, is an essential part of protecting an organization's reputation, its customers' sensitive information, its compliance with government regulators—and, ultimately, the company's bottom line.
Preveil - https://www.preveil.com/
DekkoSecure- https://www.dekkosecure.com/
Mimecast- https://www.mimecast.com/

Key Cyber Risks and Solutions, cont.

Cyber Event Response, Forensics & Mitigation

Critical that a business can identify and respond to a breadth of cyber events, having a relationship in place.
Malwarebytes - https://www.malwarebytes.com/
Rendition Infosec - https://www.renditioninfosec.com/

For Larger Businesses/Organizations: Response services from CrowdStrike
https://www.crowdstrike.com/

Cybersecurity Awareness Training

90% of all events are the result of employee actions. Two industry leaders are:
KnowBe4 - https://www.knowbe4.com/
Virescit Tactical Systems - https://vtscyber.com/

ISP & MSP Impactful Security Features

These are ISP and MSP features that can strengthen your cyber posture – *but also ask your current MSP about their security features:*
Red Sky Alliance - https://www.wapacklabs.com/redxray
Alienvault, now ATT Cybersecurity - https://www.alienvault.com/

Sontiq/WH Business Suite: Overview

EZShield® Identity Crime Protection™ IdentityForce.

Sontiq is the combination of EZShield and IdentityForce. These two identity security powerhouses coming together allows for strength in data protection. Sontiq aims to provide customers the opportunity to grow and develop their Business in a way that allows them to be protected from risks without having to be restricted in their potential for connection. Visit https://www.whitehawk.com/business-risk-suite to enroll today.

Key Features:

- Company ID Restoration Pro
- Online Identity Vault
- Password Manager
- Personalized Identity Reports
- Security Self-Assessment
- Breach Readiness Toolkit
- Discounted Employee Benefit & Breach Victim Services
- Fully-managed identity restoration
- Live support M-F 8am - 8pm EST
- Mobile Defense Suite - Mobile Attack View, Control and Recovery
- Dark Web Monitoring - Detect fraudsters trading your information on the Dark Web.