CyberSecurity Trends from 2021 for IA

Targeting Emerging Risks

RAUSCH
ADVISORY SERVICES

Senior Manager / Security Practice Lead

Rausch Advisory Services

Background in Information Security, IT Audit, Systems Development, & Database Administration

Fortune 500 Experience:

Built the Global "CyberThreat Unit" for a Fortune 100 including Incident Response, Digital Forensics & Investigations, Threat Intelligence, & Penetration Testing

Leveraged Data Analytics to quantitatively measure risk and security effectiveness through Metrics & KPIs

Joshua C. Sorenson
CISM | CISA

+1 (563) 505-5251
JSorenson@RauschAdvisory.Com

SCAN ME

RAUSCH
ADVISORY SERVICES

Agenda

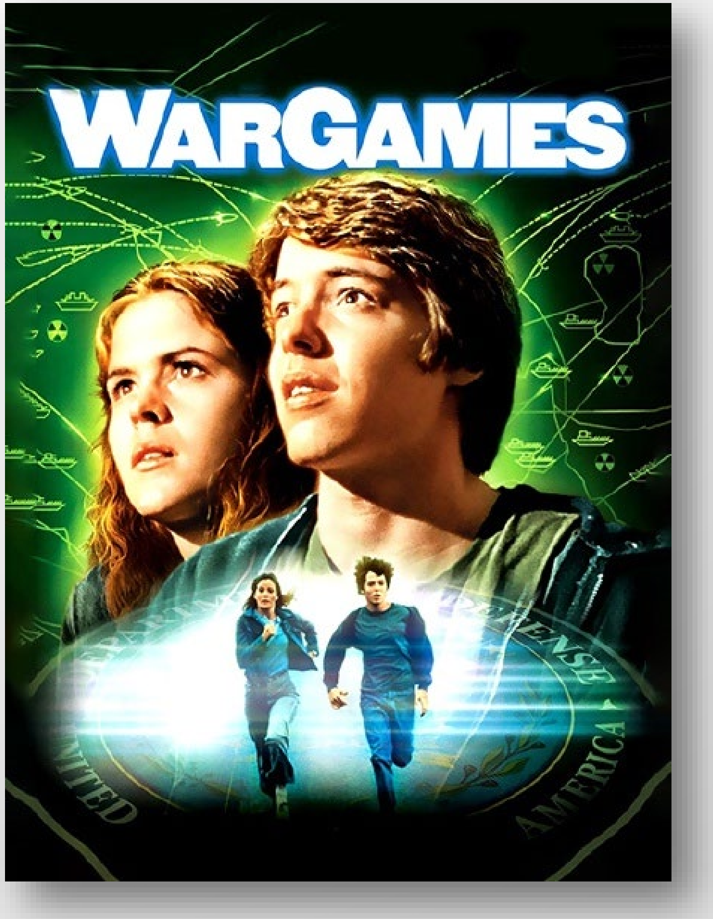
- How do we know?
- What did we learn in 2021?
- What does this mean to Internal Audit?

RAUSCH
ADVISORY SERVICES

How Do We Know?

- Comprehensive Crime Control Act of 1984
- Computer Fraud and Abuse Act of 1986

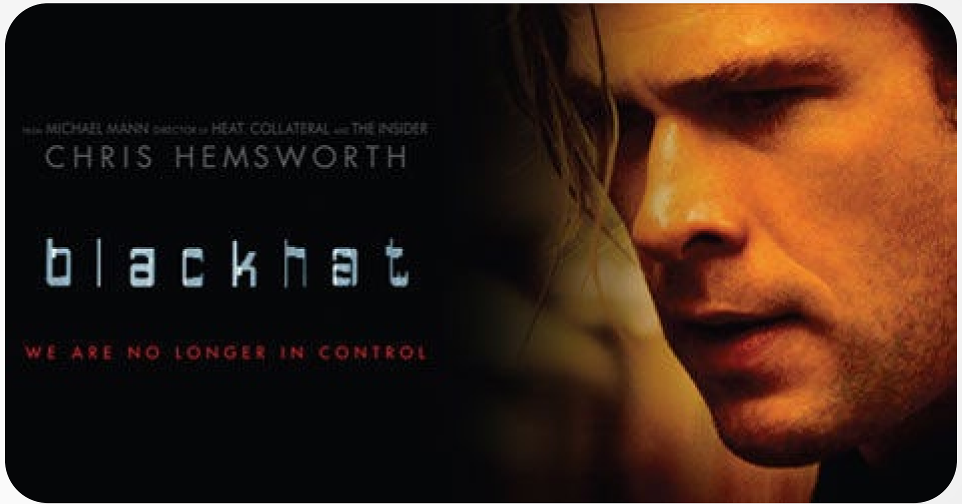
SHALL WE PLAY A GAME



"a realistic representation of the automatic dialing and access capabilities of the personal computer."

House Committee Report (H.R. Rep. 98-894, 1984)

What sources can we use today?


FROM MICHAEL MANN DIRECTOR OF HEAT, COLLATERAL AND THE INSIDER
CHRIS HEMSWORTH
blackhat
WE ARE NO LONGER IN CONTROL

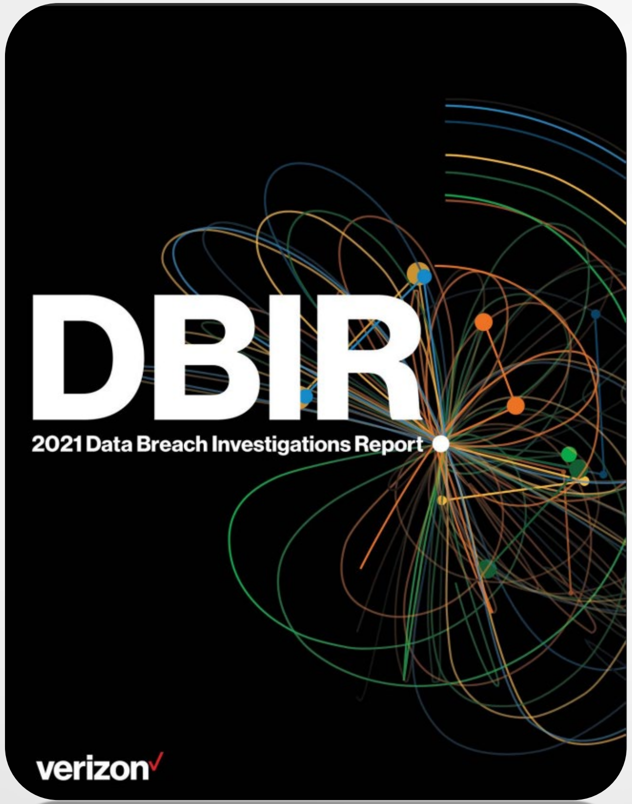
But… do you think any will give you

"a realistic representation…"

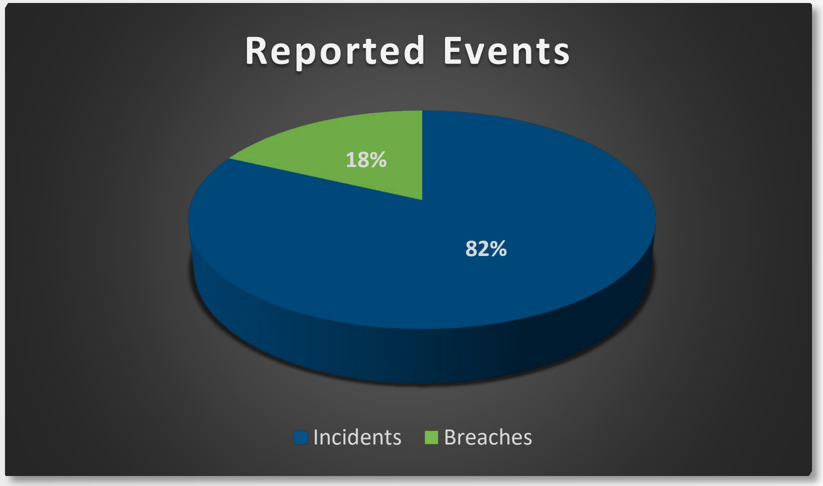
?

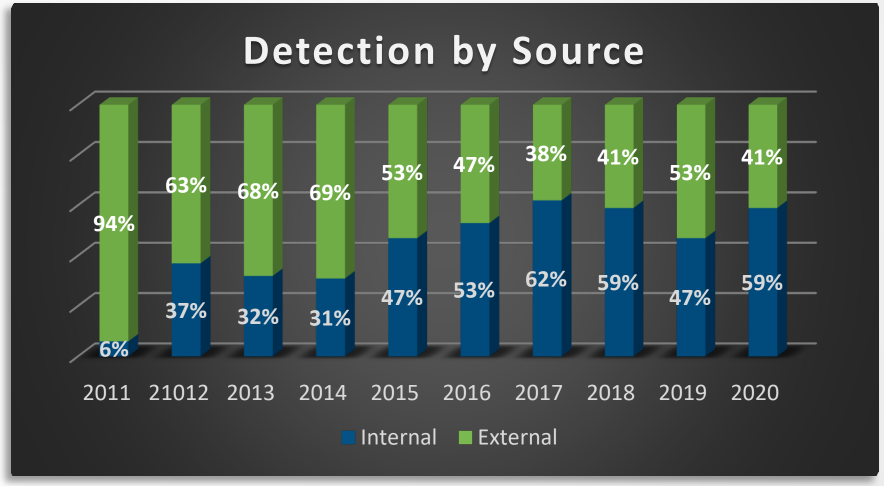
THE ONLY SAFE PLACE IS ON THE RUN
SNOWDEN
JOSEPH GORDON-LEVITT // SHAILENE WOODLEY

Perhaps there is a better way?



What Did We Learn in 2021?





The leading cause of **Incidents** was **Denial of Service**
The leading cause of **Breaches** was **Social Engineering**

Average dwell time - **24 Days**
When detected **Internally** - **12 Days**
When detected **Externally** - **73 Days**

Basic Web Application Attacks
&
System Intrusion
contributed heavily to both
Incidents & **Breaches**

Ransomware is a **key ingredient**;
constantly **changing** & **evolving**

Rising focus on compromising **Active Directory**
to create **malicious GPOs**

RAUSCH
ADVISORY SERVICES

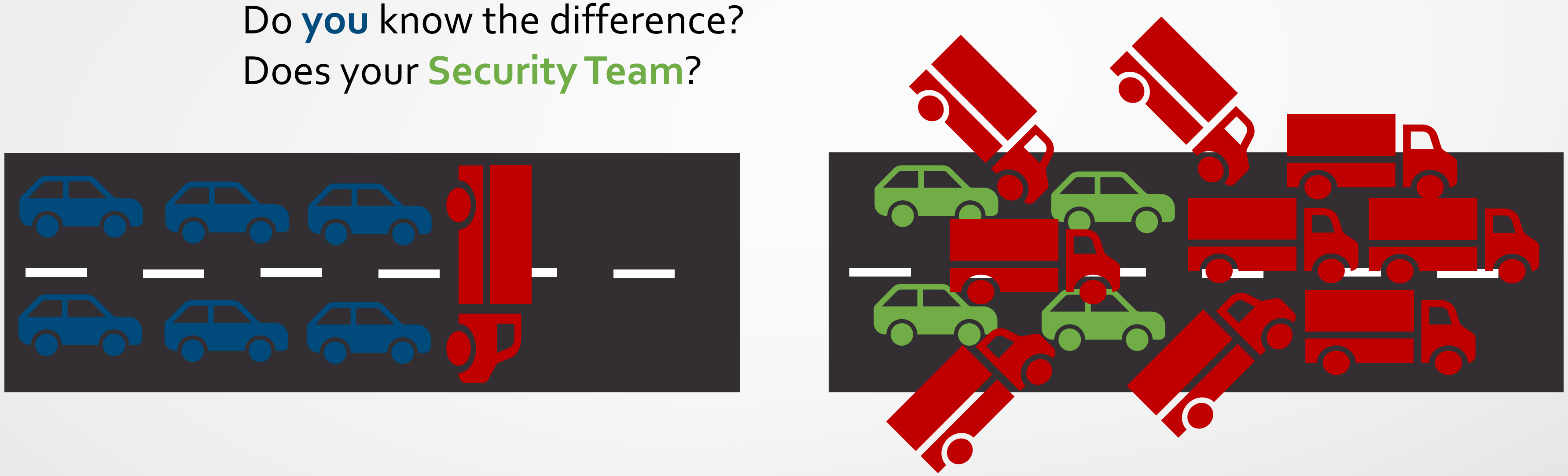
Source: Verizon Data Breach Incident Report 2021

Source: Mandiant M-Trends 2021

What Does This Mean to Internal Audit?

What is your exposure to **Denial of Service** attacks?

Have you considered **Layer-7 (Application)** and **Layer-3 (Volumetric)** attacks?
Do **you** know the difference?
Does your **Security Team**?



Where are your **defenses**? Are they **effective**?

VOIP & BackOffice

SaaS | PaaS | IaaS

eComm

Site2Site | VPN | VDI

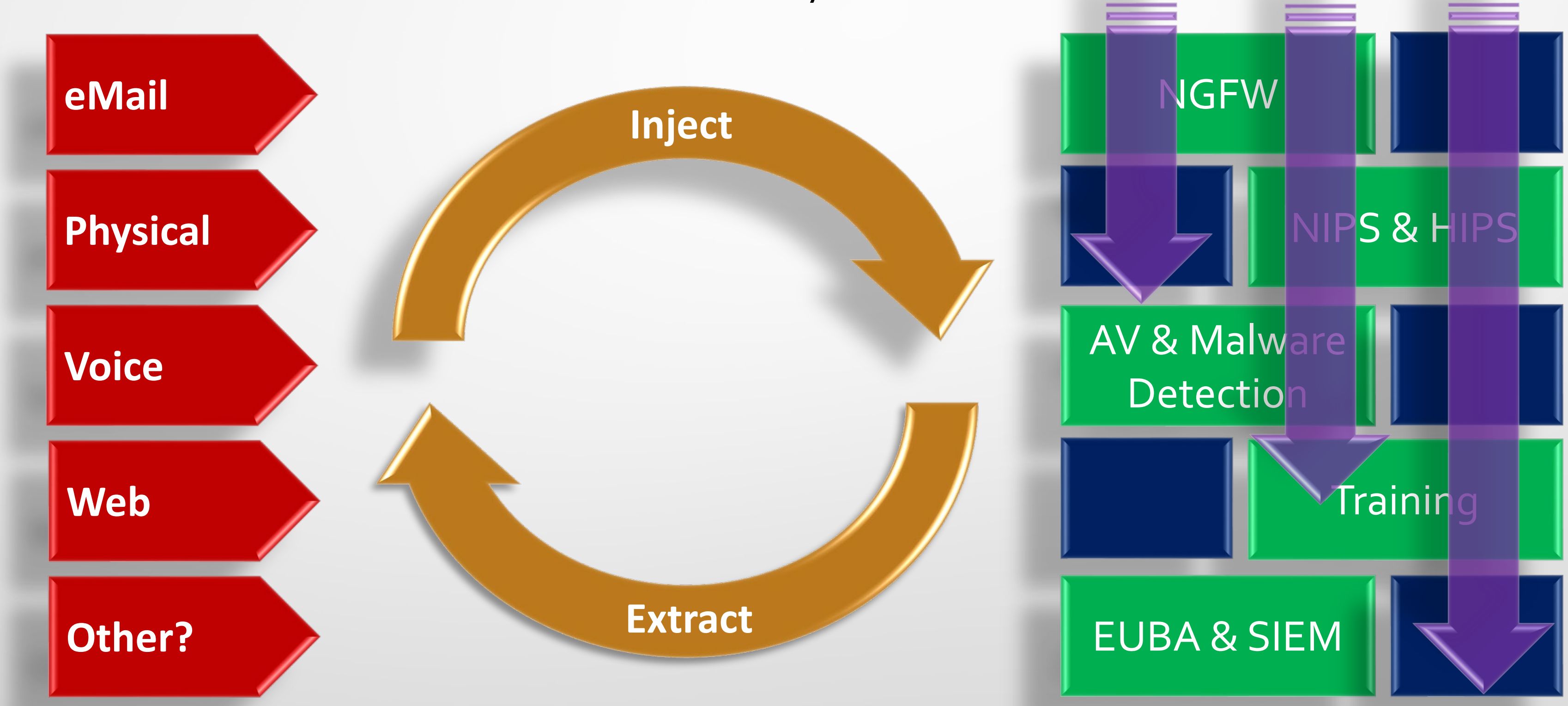
What Else?

What Does This Mean to Internal Audit?

What is your exposure to **Social Engineering**?

What & **where** are your controls? Are they **mature**? Are they **effective**?

How do you **know**?



eMail

Physical

Voice

Web

Other?

Inject

Extract

NGFW

NIPS & HIPS

AV & Malware Detection

Training

EUBA & SIEM

RAUSCH ADVISORY SERVICES

What Does This Mean to Internal Audit?

Dwell Time
# of Days
= Detection Date − Compromise Date

Average dwell time - **24 Days**
When detected **Internally** - **12 Days**
When detected **Externally** - **73 Days**
Source: M-Trends 2021 Report

What is **your** organization’s dwell time?
(How) Do you calculate it?

What can you learn from your **longest dwell time events**?

RAUSCH
ADVISORY SERVICES

Questions?

Joshua C. Sorenson
CISM | CISA

+1 (563) 505-5251
JSorenson@RauschAdvisory.Com

SCAN ME

RAUSCH
ADVISORY SERVICES