



/whois

Brett L Scott - Director level at TD SYNEX

Cybersecurity professional - hacker - urban farmer

Programmer since 1987 (professionally)

Hands-on technical

Founder the National Cyber War Foundation and

The Arizona Cyber Warfare Range

The Wisconsin Cyber Threat Response Alliance, Michigan, Georgia, Wyoming



2021 Amplify Oshkosh



The poster is for the 'Amplify Oshkosh' event. It features a portrait of Brett Scott on the left. The main title is 'AMPLIFY IT' with the subtitle 'Time to Rethink Your Cybersecurity'. The event is on November 16, from 7:00 am to 1:00 pm at the Oshkosh Convention Center. The theme is 'THRIVING IN STORMY WATERS'. The text describes the challenges of cybersecurity in a rapidly changing environment and offers a 360-degree perspective. Sponsors include Stellar One, SMART, and Capital One. The registration link is provided at the bottom.

Amplify Oshkosh Presents
AMPLIFY IT
Time to Rethink Your Cybersecurity

November
16
7:00 am - 1:00 pm
OSH CONVENTION CENTER
OSHKOSH WISCONSIN CENTER

THRIVING IN STORMY WATERS
Cybersecurity resilience that embraces today's cybersecurity landscape

With the massive shifts in your environments in a time of massive growth in cyber attacks, are you taking the steps needed to get back up to speed? How much weaker is your organization now than it was just a few years ago? Do you know where to look, and how to get the real answers? Steady the ground underneath you by getting an accurate situational overview from the hard lines of cyber expertise. Get a solid 360-degree perspective. Step ahead in the marketplace.

Featuring the Keynote Speaker
Brett Scott
Director, Security, Training and Incident Response at Tech Data Global Security Practice

The Sponsor: **STELLAR ONE**
Sponsor: **SMART**
Multi-Sponsor: **Capital One**

Register At: Amplify@oshkosh.com

<https://www.youtube.com/watch?v=B-IBmRfL5rw&t=750s>



I have a face for radio





What do you think?

Which speech was better?

What medium is better?

What medium is more effective?

**The audio clip
was a deep fake!**

A decorative graphic at the bottom of the slide consisting of a series of vertical, rounded rectangular bars of varying heights, resembling an audio waveform or a stylized bar chart. The bars are light teal and set against a darker teal background.

Cybersecurity and Regulatory Constructs





The Finance executives speak...

- During the past 12 months, **34.5%** of polled executives report that their organizations' accounting and financial data were targeted by cyber adversaries.
- Within that group, 22% experienced at least one such cyber event and 12.5% experienced more than one.
- Nearly half (**48.8%**) of C-suite and other executives expect the number and size of cyber events targeting their organizations' accounting and financial data to **increase** in the year ahead.

- **Just 20.3%** of those polled say their organizations' accounting and finance teams work closely and consistently with their peers in cybersecurity.
- **Nearly half of executives expect cyber-attacks targeting accounting, other systems**

Source: Deloitte Center for Controllershship poll



The losses are significant

In 2022, **76%** of organizations were targeted by a **ransomware** attack, out of which 64% were actually infected. Only 50% of these organizations managed to retrieve their data after paying the ransom. Additionally, a little over 66% of respondents reported to have had multiple, isolated infections.

A research company Trellix determined **78%** of **business email compromise (BEC)** involved fake CEO emails using common CEO phrases, resulting in a 64% increase from Q3 to Q4 2022. Tactics included asking employees to confirm their direct phone number to execute a voice-phishing – or vishing – scheme. 82% were sent using free email services, meaning threat actors need no special infrastructure to execute their campaigns

Federal Trade Commission (FTC) data shows that consumers reported losing nearly **\$8.8 billion** to fraud in **2022**, an increase of more than 30 percent over the previous year. Much of this fraud came from fake investing scams and imposter scams. Perhaps most alarming in this report was that there were over **1.1 million** reports of identity theft received through the FTC's IdentityTheft.gov website



The Threats





Organizational Threats - Regulatory and Insurance

- Many compliance related frameworks (FSSCC, NYDFS, FFIEC, SOX)
- Federal and State Regulators
- PII
- State privacy laws and regulations
- International privacy laws and data regulations
- Rising costs
- Higher barriers
 - Not only if you have a control in place
 - What vendor?
- Staff / Contractor training requirements
- “Industry best practices”



Threats

External

Hactivists

Political / Religious groups

Cyber Criminals

Nation states

Internal

Insider threats

Commission

Omission

Supply Chain Vulnerabilities

Misconfigurations

Blind spots



**The risks are not always
technology**





Phishing

- Easy and low cost
 - 3% to 8% will always click
- Open source toolkits are free
- Professional services
- AI based

85% of breaches are based on lost/stolen
credentials



Social Engineering

- Exploitation of human nature
 - Frequently leads to business process deviation
 - Lots of open source tools to aid the attackers
-
- But there is one threat you are not prepared for and it will cause your organization great harm...



Business Email Compromise (BEC)

- Compromised or well faked email from authorized company personnel
- Financial transactions
- May target:
 - ACH / Wire Transfers
 - Your staff - payroll / benefits
 - Your vendors
 - Your customers!



Deep Fakes





Deep Fakes

Open source AI

Free or near free

No rules

Hard to detect



Artificial Intelligence (AI)

- The artificial is that it, in reality, is just an algorithm
- It does causes people to:
 - Think differently
 - Attack systematically
 - Automate attacks
- Lots of energy is pouring into “AI” attacks
 - Tools
 - Processes
 - Resources
 - Talent
 - Platforms
 - Data



AI / Automation reduces the need for friends

- Single entities can now marshal the same or greater effort than hacking teams
- Automation speeds up the process to
 - Compromise
 - Exploit
 - Cause harm
- Lone wolf attackers have less exposure to operational risks
- Automation will enable the lone wolf attackers to reconnect in the future with even greater scale, effectiveness, and harm



**The risks are not always
technology**





How recent federal moves put your organization at greater risk

- Holding organizations/people accountable
 - Targeting vendors only?
 - What about your organization for not following best practices?
 - Scenario: The vendor released an emergency patch, your organization did not update your systems in a timely manner
 - Does not have to be explicit
- Remember PCI?
 - Started out as a suggestion
 - Currently a big industry with costs and fines
- The recent moves acknowledge the federal government cannot solve the problems
 - It is your turn...



Defeating today's threats





Obviously the basics / past strategies

- Zero Trust methodologies
- Threat Intelligence
- Stronger Identity solutions
- Faster patch management
- Regular cybersecurity assessments



Combating Deep Fakes

- Do unto them as they do unto us
 - Use their tools and methodologies
- Implement updated business processes
 - Start with finance
 - Think it through from an adversarial perspective
 - You have it right when the insiders cannot break it
- Train everyone on the new processes
 - Start with your CEO
 - Get an explicit commitment
- Empower your people
 - Nature is amazing



Make new friends





Local resources

- National Cyber War Foundation
 - The Arizona Cyber Warfare Range (AZCWR) <https://azcwr.org>
 - Wisconsin Cyber Threat Response Alliance (WICTRA) <https://wictra.org>
 - Michigan Cyber Threat Response Alliance (MICTRA) <https://mictra.us>
 - Georgia Cyber Warfare Range (GACWR) <https://gacwr.org>
 - Wyoming is coming online coming soon...
- ISSA / ISC2
- Infragard.org (not .com !)
- National Guard
- Local security meetups