



CENTER FOR **CYBERSECURITY**  
AT THE UNIVERSITY OF WEST FLORIDA

# Securing Florida's Cybersecurity Future

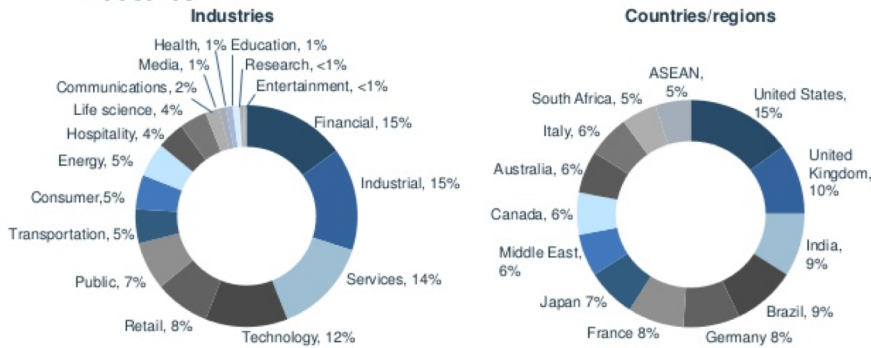
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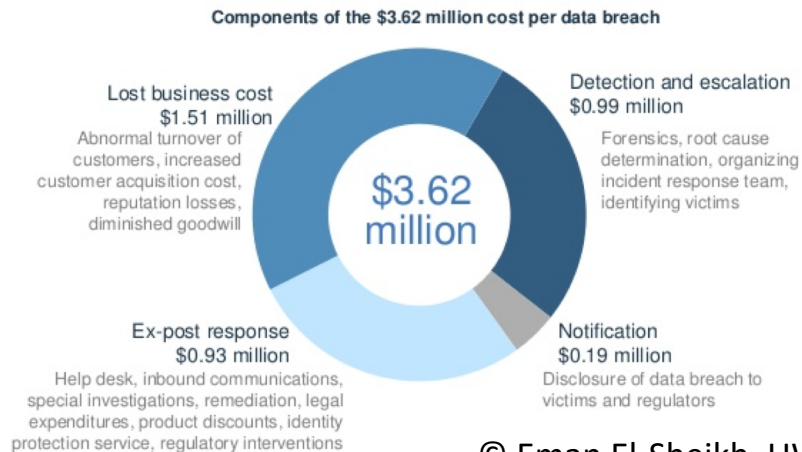


# Why Cybersecurity is Important for Every Business

The 2017 Ponemon Cost of Data Breach Study covered 1,900 individuals across 419 companies in 13 countries or regions and 17 industries



The largest component of the total cost of a data breach is lost business



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## 6 Cyber Attacks Business Networks will Face in 2018

### 1 Malware

A malicious program installed on a PC. I.e. Trojans, worms, or adware.

**18%**

come from clicking malicious links in emails.

### 2 Phishing

Uses social engineering to learn a user's password or personal data.

**Equifax** was a victim of this during a massive data breach in early 2017.

### 3 Brute Force Password Attacks

A computer tries every possible combination for a password until successful.

### 4 Denial of Service (DoS) Attacks

Overwhelms the network or servers with high volumes of traffic which disrupts all services.

### 5 Man in the Middle (MITM) Attacks

The hardest to find. Pretends to be the destination for the information, copies it all, and then passes the information on to the real destination.

### 6 Rogue software

Installs itself to do something that wasn't originally intended, often posing as something beneficial, like security software or a movie player.

## Cyber Attacks by the Numbers

**43%**

of cyber attacks target small business\*

**64% of companies have experienced web-based attacks.**

**62% experienced phishing & social engineering attacks.**

**59% of companies experienced malicious code**

**51% experienced denial of service attacks.**

**LOGICAL FRONT**

\*Statistics courtesy of www.itspmagine.com

# Enhancing Cybersecurity Resiliency

- Establish, execute, test and update cybersecurity practices and policies
- Stay up-to-date on evolving cyber risks and defense strategies
- Require ongoing cybersecurity training for all personnel



[NIST Cybersecurity Framework](https://www.nist.gov/cybersecurity)

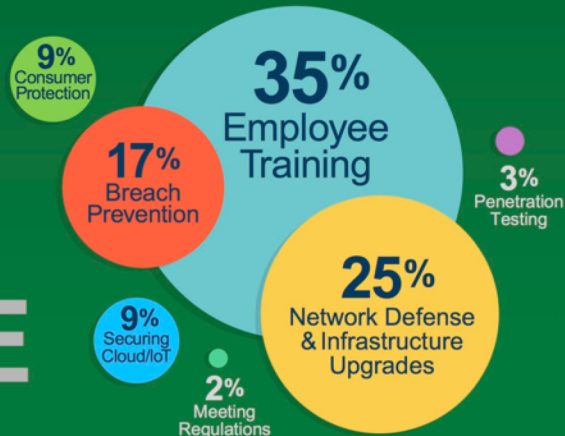
# Enhancing Cybersecurity Resiliency

## 2018 Cybersecurity Trends



A survey of over 100 CISOs found that employee training should be the top priority to improve security for business.

## MOST CRITICAL DEFENSE

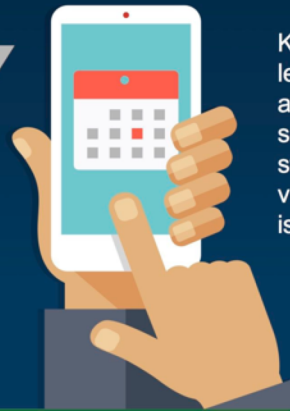


## MOST CISOs REPORT TO CIOs

Organizational structure doesn't impact frequency of reporting to board of directors.



## REPORTING FREQUENCY



Keeping top leadership abreast of security strengths and vulnerabilities is a priority.

## RECOMMENDATIONS FOR 2018

Since employees serve as the first line of defense, FS-ISAC recommends training employees should be prioritized for all CISOs, regardless of reporting structure.





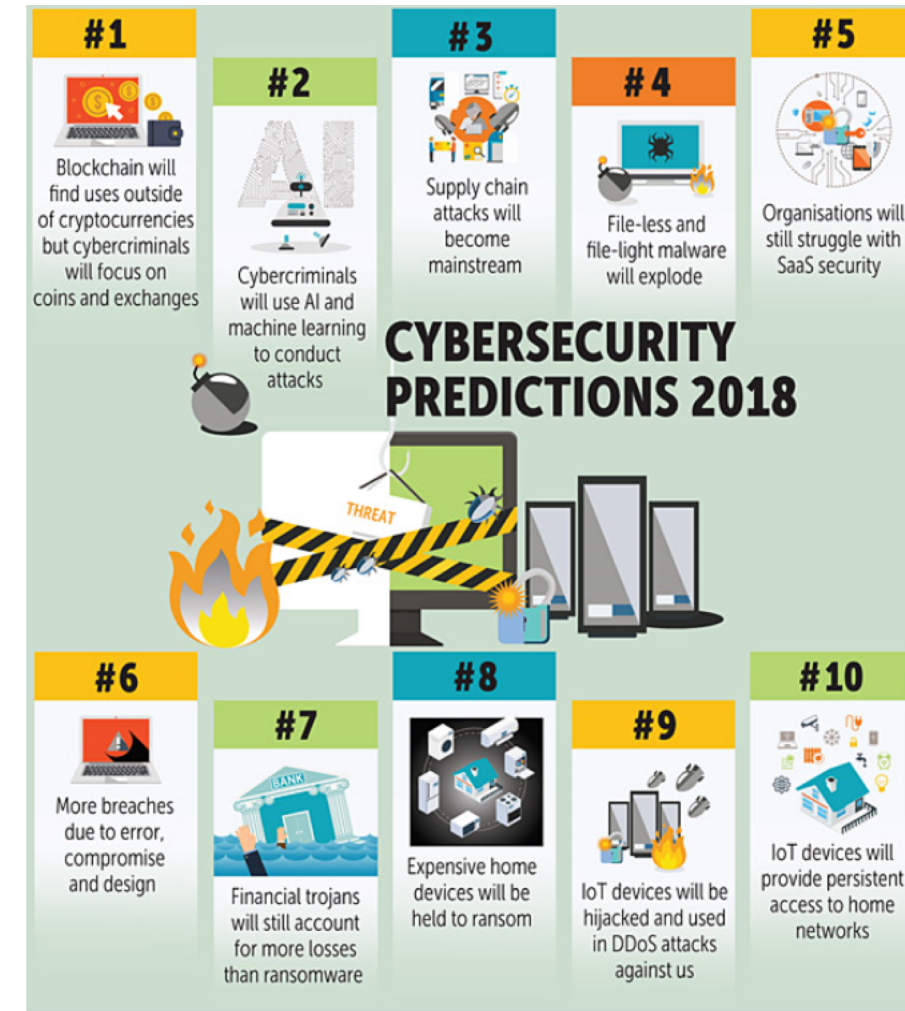
# The Future of Cybersecurity

- Advanced technologies will impact both cyber defense and offense
- Develop innovative models of education, training and workforce development
- Make cybersecurity everyone's business
- Advance Florida as a leader in cybersecurity resiliency
  - 2019 NSA/DHS Cybersecurity Executive Leadership Forum [uwf.edu/elf](http://uwf.edu/elf)
  - April 24-25, 2019, Pensacola Beach, FL

[uwf.edu/cybersecurity](http://uwf.edu/cybersecurity)

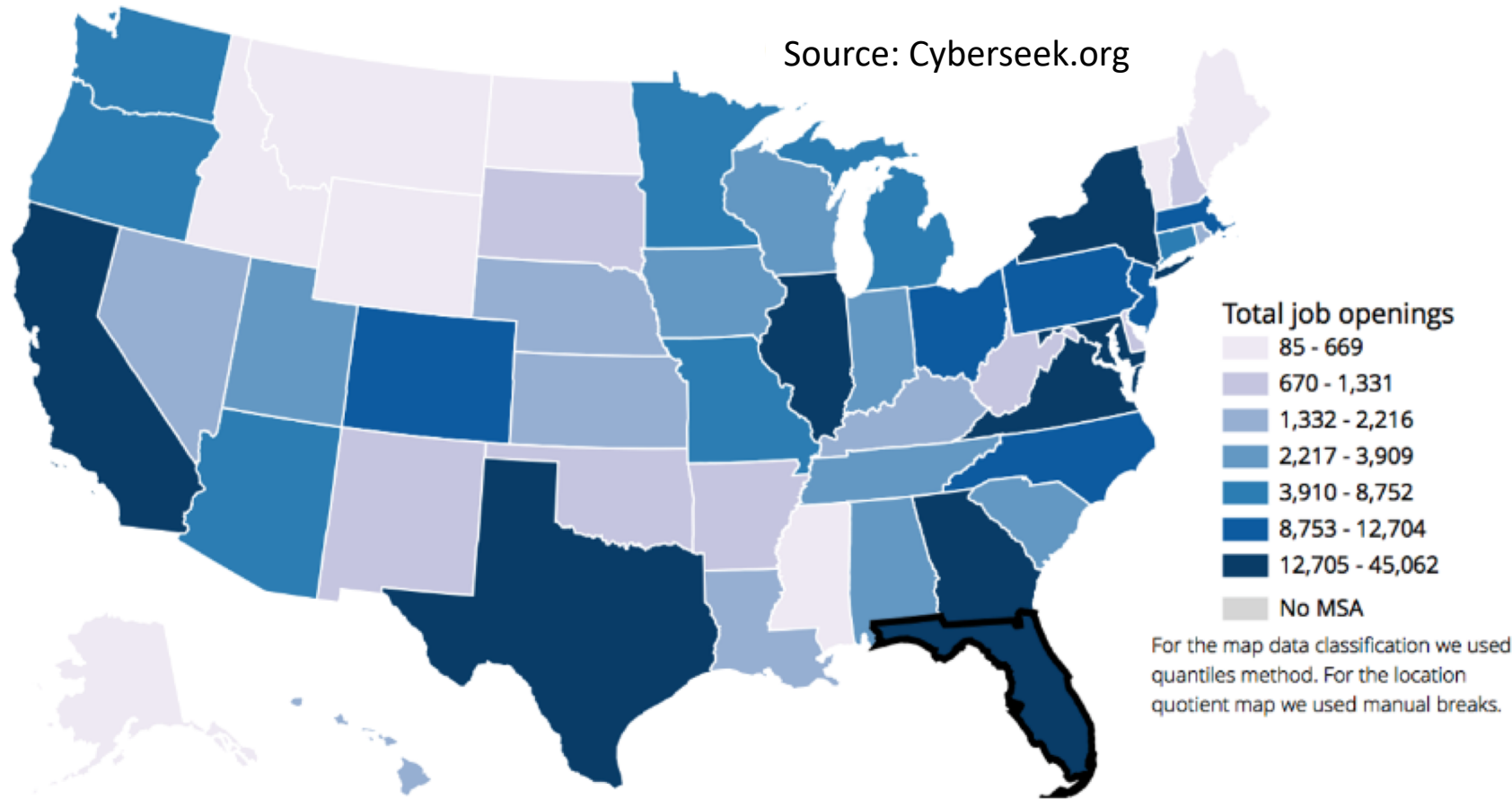
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Source: Symantec



# Securing Florida's Future through Cybersecurity

Source: Cyberseek.org



[uwf.edu/cybersecurity](http://uwf.edu/cybersecurity)

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FL employed: 38,669  
FL job openings: 13,504

Source: Cybersecurity Ventures

## CYBERCRIME COSTS



Cybercrime damages will cost the world **\$6 trillion annually by 2021**, up from \$3 trillion in 2015. Costs include destruction of data, stolen money, and other.

## SECURITY SPENDING



The world will spend **\$1 trillion cumulatively from 2017-2021** on cybersecurity products and services - to combat cybercrime.

## CYBERSECURITY JOBS



There are **1 million cybersecurity job openings in 2016**, with a projected shortfall of 1.5 million by 2019. Unemployment stays at 0%.

# Additional Information

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