











## TRENDS IN CYBERSECURITY

Investigations by industry are among the highest in the Retail-Hospitality sector globally

Investigations by Industry are at the highest in the Retail-Hospitality sector nationally

**Tailored** phishing emails are more common

Telephone
phishing emails
are more common





#### THE CHALLENGE

The technological pace is increasing



It is estimated that there will be **17.4b more devices**than the number of humans projected by 2020. <sup>1</sup>

By 2018, **70%** of mobile professionals will conduct all of their work on personal smart devices. <sup>2</sup>



- 1. Source: U.S. Census Bureau, International Database http://www.census.gov/data/developers/data-sets/international-database.html/
- 2. Source: Gartner http://www.gartner.com/technology/topics/

#### THE CHALLENGE

**Accelerating cyber threats** 





49% of Businesses reported being the victim of a cyber ransom attack in 2016

Source: TechRepublic 2017 article "49% of businesses fell victim to cyber ransom attacks in 2016

https://www.techrepublic.com/article/49-of-business-fell-victim-to-cyber-ransom-attacks-in-2016/

#### THE CHALLENGE

**Creating greater cost drain** 



Attacks and breaches by 2019 will cost businesses

\$2.1T

every year.

5

Source: Forbes.com 2017 article "Cyber Crime Costs Projected to Reach \$2 Trillion by 2019" –

https://www.forbes.com/sites/stevemorgan/2016/01/17/cyber-crime-costs-projected-to-reach-2-trillion-by-2019/#114dbaeb3a91

#### THE CHALLENGE

**Creating greater resource drain** 

Accelerating Cybersecurity Market **Forces** Local Relationships Worldwide

shortfall of 1.8m

professionals in the global information security workforce by 2022.



Source: 2017 Global Information Security Workforce Study (GISWS)



Since January of 2017, at least 16 major retailers were hacked and likely had information stolen from them



A report from cybersecurity firm Shape Security showed that almost 90% of the login attempts made on online retailers' websites are hackers using stolen data



Many of these breaches were caused by flaws in payment systems that were taken advantage of by hackers





# TRENDS IN CYBERSECURITY









#### **ORBITZ**



ANNOUNCED: March 1, 2018 - someone had gained unauthorized access to one of its legacy travel booking platforms



IMPACT: Breach exposed the details of 880,000 customers' payment cards between October 1, 2017 and December 22, 2017

TAKEAWAY: Outdated legacy software and systems might have created the security risk – examine old systems and storage





# SAKS FIFTH AVENUE / LORD & TAYLOR



ANNOUNCED: March 28, 2018 – Breach actually occurred in May 2017



IMPACT: Third-party called "Fin7" posted to underground market hub, called "BIGBADABOOM-2," which advertised the details of five million payment cards for sale

AT RISK: Fin7 released the details of 125,000 cards stolen from the two luxury department stores

**TAKEAWAY:** Create stronger malware precautions on point-of-sale systems / insist on chip & PIN, not swipe

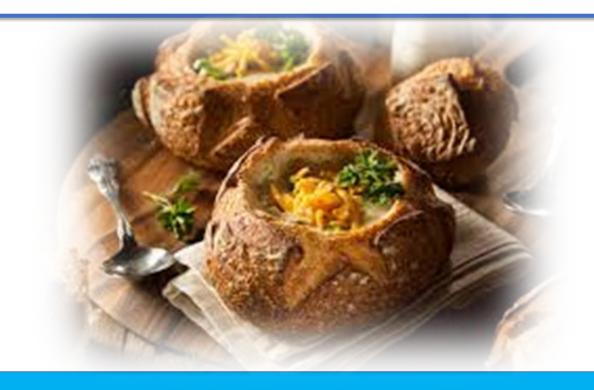




#### PANERA BREAD



ANNOUNCED: April 2, 2018 - notified of a data leak due to flaw contained on website



IMPACT: At the time, it said personal information, including names, addresses, and partial credit card numbers may have leaked, though the company says the investigation is ongoing

AT RISK: Unknown. "Our investigation is continuing, but there is no evidence of payment card information nor a large number of records being accessed or retrieved." Conduct regular penetration tests!





#### **SEARS HOLDINGS**



ANNOUNCED: April 2018 - alerted customers of an undisclosed "security incident"



IMPACT: The incident affected up to 100,000 shoppers who bought items online from September 27, 2017 to October 12, 2017





#### **ADIDAS**



ANNOUNCED: June 2018 - an "unauthorized party" said it had gained access to customer data on Adidas' US website



GROUP

IMPACT: Adidas did not say exactly how many customers could have been affected by the breach, but an Adidas spokeswoman confirmed it is likely "a few million."

AT RISK: The data that is potentially at risk includes customer contact information, like email addresses and physical addresses, as well as login information, like usernames and passwords.





#### **MACY'S**





**ANNOUNCED: July 10, 2018** 

"We have investigated the matter thoroughly, addressed the cause and, as a precaution, have implemented additional security measures. Macy's, Inc. will provide consumer protection services at no cost to those customers. We have contacted potentially impacted customers with more information about these services."



Customers shopping online at macys.com or bloomingdales.com between April and June 2018 could have had their personal information exposed





#### **CHEDDAR'S SCRATCH KITCHEN**



ANNOUNCED: Notified by government officials in August 2018 that they were a target of a cyber attack



IMPACT: Customers who visited Darden Restaurants-owned Cheddar's Scratch Kitchen between November 3, 2017, and January 2, 2018, may have had their credit-card information stolen

AT RISK: Darden estimates that <u>567,000</u> payment card numbers could have been compromised





#### **FACEBOOK & GOOGLE+**



ANNOUNCED: Facebook discovered on September 25, 2018, that attackers exploited software vulnerability





ANNOUNCED: October 8, 2018 - Google+ to

shutdown due to breach (since 2015)



IMPACT: Hackers gained access to nearly 50 million Facebook user accounts. For Google+, 496,951 users' full names, email addresses, birth dates, gender, profile photos, places lived, occupation and relationship status were potentially exposed

**TAKEAWAY: To be determined...** 





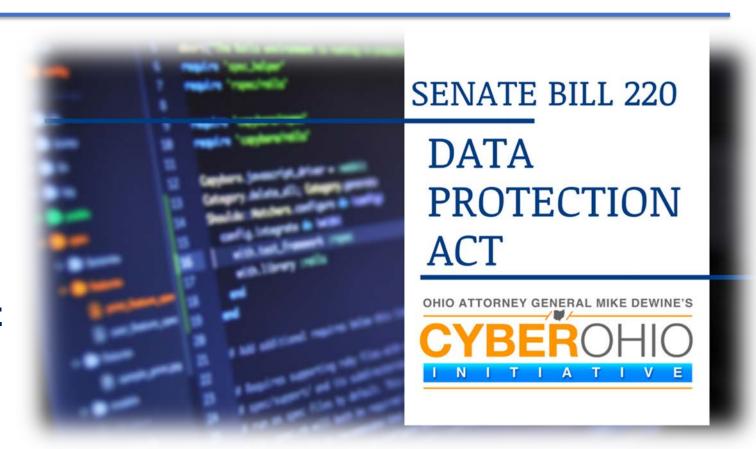






SIGNED: Signed into law by Governor Kasich on August 3, 2018

WHAT IS IT? First of its kind safe harbor against data breach lawsuits for businesses that implement and maintain cybersecurity programs that meet certain industry-recognized standards



Fundamentally different than punitive approaches other states have taken – *e.g.*, California Consumer Privacy Act imposes penalties and obligations on California businesses





**EFFECTIVE DATE:** November 2, 2018

BENEFIT: Provides an affirmative defense to certain tort claims related to cybersecurity

The law does not require businesses to comply with the Ohio DPA

Rather, a business that can demonstrate its cybersecurity program meets certain enumerated standards is eligible for the defense to liability for the breach





NOT ONE-SIZE-FITS ALL: Recognizing that different businesses have different needs, the law accounts for individual factors

FLEXIBILITY: business can choose from different cybersecurity <u>frameworks</u> as the foundation for a program, allowing it to tailor its program based on particular industry / circumstances

#### **TWO INCENTIVES:**

- (1) Opportunity for businesses to evaluate and improve their current program, which lessens the likelihood of a breach
- (2) If a breach still occurs, DPA provides a safe-harbor against tort claims asserting that the business has adequate security measures





#### EIGHT AVAILABLE FRAMEWORKS FOR AFFIRMATIVE DEFENSE TO CERTAIN TORT CLAIMS

CENTER FOR INTERNET SECURITY'S CRITICAL SECURITY CONTROLS FOR EFFECTIVE CYBER DEFENSE

FEDERAL INFORMATION SECURITY MODERNIZATION ACT

FEDERAL RISK AND AUTHORIZATION MANAGEMENT PROGRAM'S SECURITY ASSESSMENT FRAMEWORK

**GRAMM-LEACH-BLILEY ACT'S SAFEGUARDS RULE** 

HEALTH INFORMATION TECHNOLOGY FOR ECONOMIC AND CLINICAL HEALTH ACT

HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT'S (HIPAA) SECURITY RULE

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)/INTERNATIONAL ELECTROTECHNICAL COMMISSION'S (IEC) 27000 FAMILY – INFORMATION SECURITY MANAGEMENT SYSTEMS STANDARDS

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY'S (NIST) CYBERSECURITY FRAMEWORK

NOTE: PCS DSS IS NOT AN ELIGIBLE FRAMEWORK





#### **FIVE FACTORS TO CONSIDER**

THE ORGANIZATION'S SIZE AND COMPLEXITY

THE NATURE AND SCOPE OF ITS ACTIVITIES

THE SENSITIVITY OF THE PERSONAL INFORMATION PROTECTED UNDER THE PROGRAM

THE COST AND AVAILABILITY OF TOOLS TO IMPROVE ITS INFORMATION SECURITY

THE RESOURCES AVAILABLE TO THE ORGANIZATION.





In order for a business to take advantage of the safe-harbor, their cyber program must:

Protect the security and confidentiality of personal information

Protect against any anticipated threats or hazards to the security or integrity of personal information

Protect against unauthorized access to the acquisition of personal information that is likely to result in a material risk of identity theft or other fraud for the associated individuals





#### **RECAP: WHAT DOES THE ODPA DO?**

DOES NOT CREATE
"MINIMUM
STANDARD"

DOES NOT MODIFY
OHIO'S CURRENT
NOTIFICATION LAW –
0.R.C. 1349.19

DOES PROVIDE
AFFIRMATIVE DEFENSE
TO TORT ACTIONS
UNDER OHIO LAW

CREATES INCENTIVE TO REVIEW CURRENT CYBERSECURITY PROGRAM

IMPLEMENT
QUALIFYING
CYBERSECURITY
PROGRAM FOR
AFFIRMATIVE DEFENSE





# QUESTIONS

ALFA International The Global Legal Network Local Relationships Worldwide