# BGSU CyberGuardian Phishing and Social Engineering



**BOWLING GREEN STATE UNIVERSITY** 

#### Web Activities

Why do we browse Internet?





searching on



social networking



• e-commerce



driving directions



reading



watching



# Security-sensitive Web Activities

Online shopping



E-banking



Managing confidential emails



### Common Risks







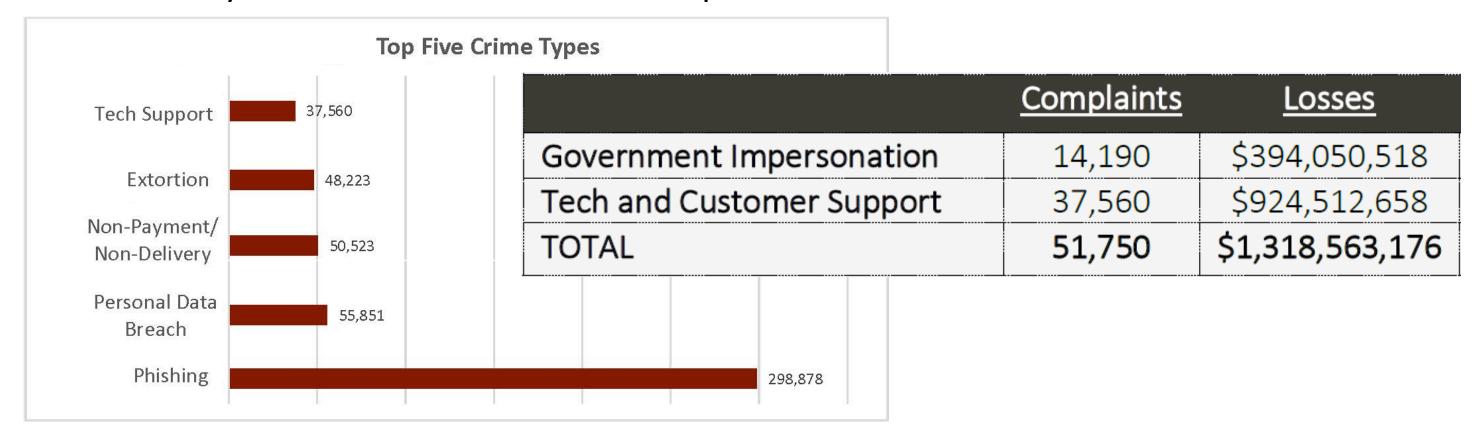


3



### Cyber-attacks and Social Engineering

- Cyber-attacks are happening every second of every minute of every hour of every day. No one will ever be immune to them.
- According to the FBI Internet Crime Report available at ic3.gov, Americans lost \$12.5 billion to cybercrime in 2023. That is \$40 per American.



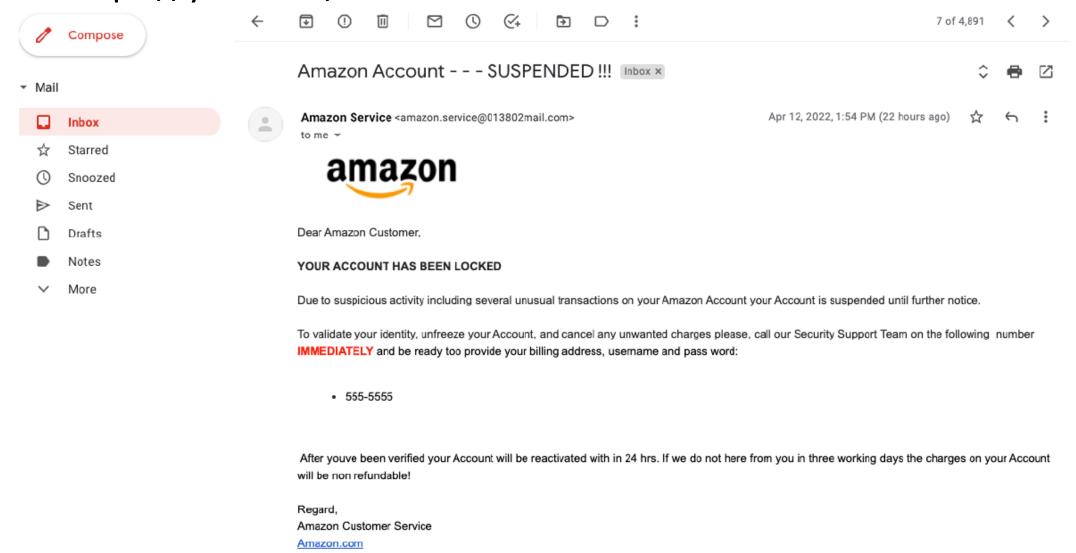
Over 90% of Cyber-attacks begin with Social Engineering

### How to Stop 90% Cyber-Attacks?

- Over 90% of Cyber-attacks begin with Phishing
  - https://youtu.be/Y7zNIEMDmI4
- The Best Approach is to educate our people.
- Creating awareness of Cybersecurity, particularly Social Engineering, can stop 90% of Cyber-attacks.
- Can save 90% of losses due to Cyber-attacks.

### Most Common Attack: Phishing

- The following video clip demonstrates Phishing:
  - https://youtu.be/Y7zNIEMDmI4



### Most Common Attack: Phishing

From: Raymond Craig <racraig.bgsu@gmail.com>

Sent: Thursday, February 21, 2019 4:33:00 PM

To: Ruinian Li

Subject: Urgency

Are you available?

--

Dr. Raymond Craig

Dean,

College Of Art & Science

Bowling Green State University

Bowling Green, Ohio

43403-0001

From: Jong Kwan Lee <leej.bgsu.edu@gmail.com>

Sent: Wednesday, March 20, 2019 10:23 AM

To: Robert Charles Green Subject: Good morning

Are you available? I will be in a meeting soon with a limited phone calls, give me your cell phone number to quickly text you.

Thank you.

Jong Kwan "Jake" Lee, Ph.D.

Position: Associate Professor, Acting Chair

**Bowling Green State University** 

Bowling Green, OH

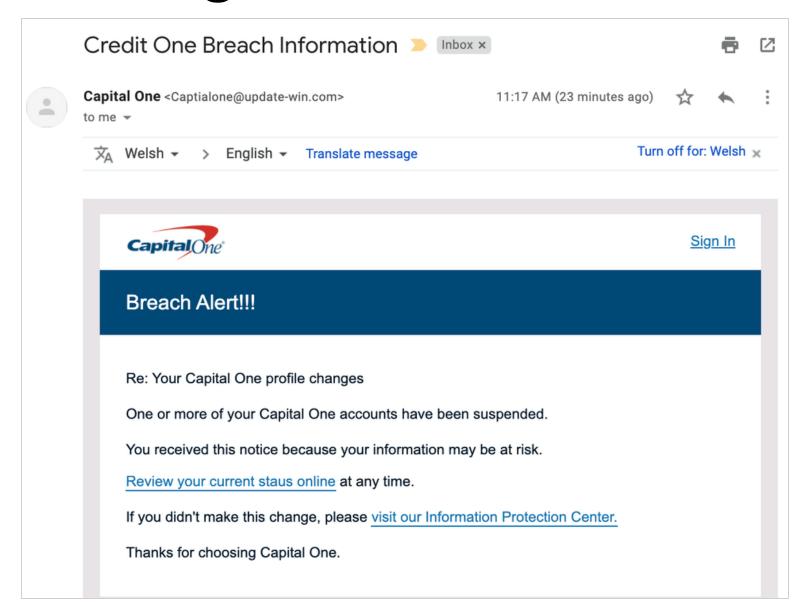
43403-0001

Phone: 419-372-2407 Email: <u>leej@bgsu.edu</u> Address: Hayes 223

# Determining Phishing Messages

- You will see a series of screenshots in the following slides related to phishing
- For each one, decide whether you think it is a phishing email or not
- If you think it is a phishing email, explain why it might be a phishing email





Answer: Phishing (Suspicious email address)

#### Chase Online Alert



Dear Customer,

At rackspace, we're committed to providing the tools you need to help you monitor your account(s).

\*A review of your recent activities regarding multiple login attempt has raised some concern.

For your safety we have suspend your login access. Some or all of your emails may have been deleted.

https://www.thefitdollar.com/gabbyr/

Use the link below to remove restriction on your ftimer.html

Click or tap to follow link.

https://app.rackspace.com/remove/restriction/access

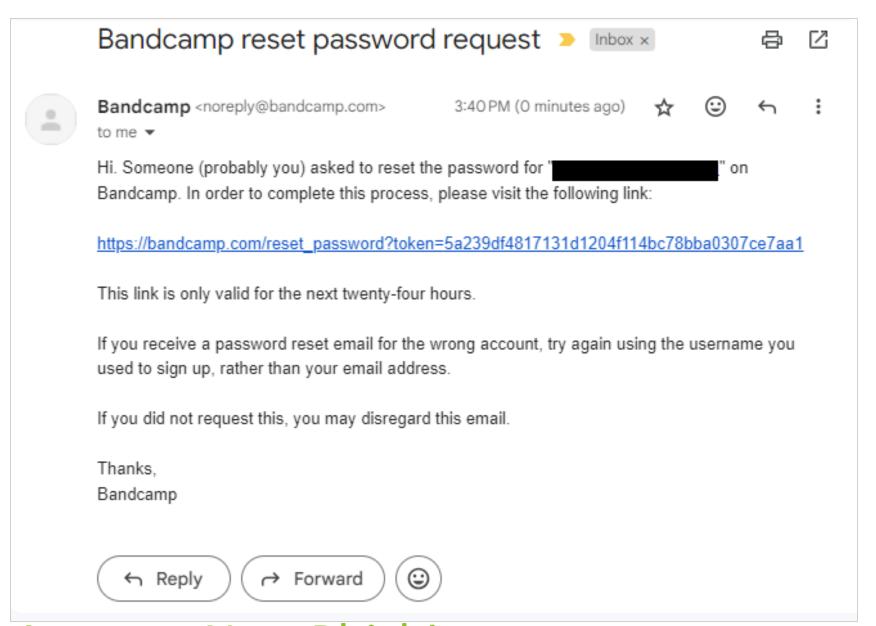
Please do not reply to this Automatic Alert.

We appreciate your business.

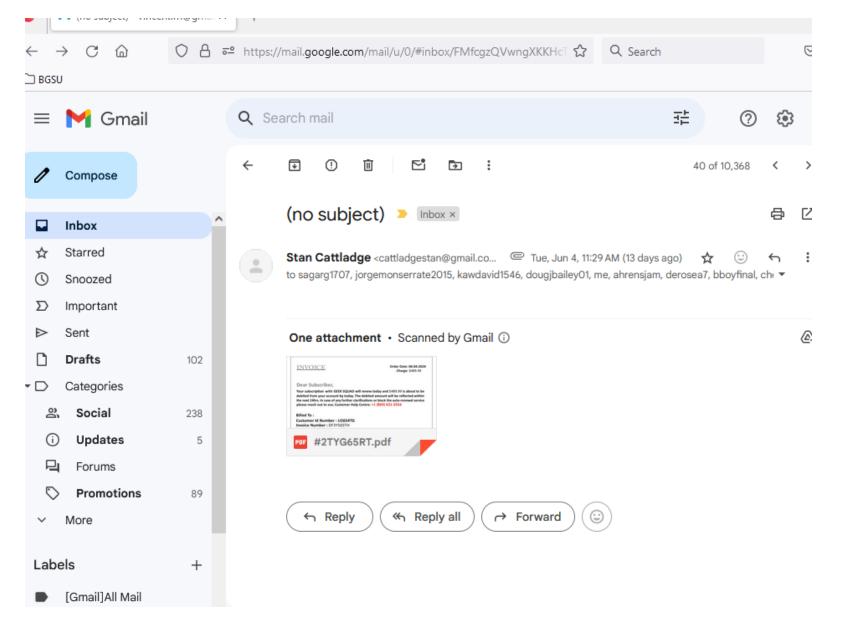
Sincerely,

Online Email Team

#### Answer: Phishing (Suspicious email address and link)



#### **Answer: Non-Phishing**



#### **INVOICE**

Order Date: 06-04-2024 Charge: \$489.99

#### Dear Subscriber,

Your subscription with GEEK SQUAD will renew today and \$489.99 is about to be debited from your account by today. The debited amount will be reflected within the next 24hrs. In case of any further clarifications or block the auto-renewal service please reach out to our, Customer Help Centre: +1 (804) 631-3556

Billed To:

Customer Id Number: U2654TG Invoice Number: DF3Y565TH Renewal Date: June 04, 2024

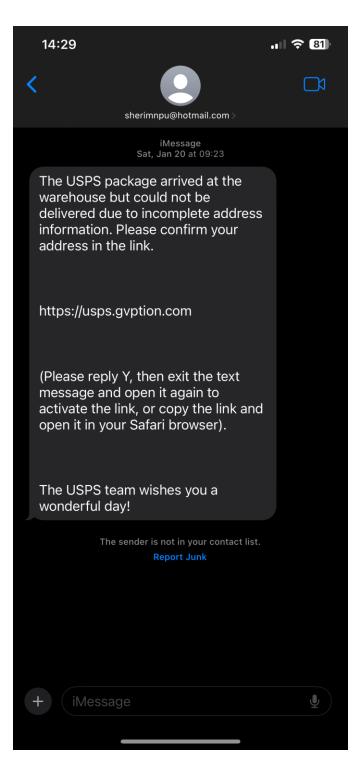
Product Name	Product Amount	Product Code	Order ID
Security Services	\$489.99	52483-XCYGH	GUJ566T65

If you didn't authorize this charge, You have 24 Hrs. To cancel & get an instant refund of your annual membership, Please contact our customer care: +1 (804) 631-3556

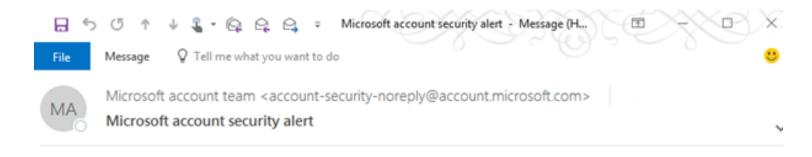
Please do not reply to this email. This mailbox is not monitored, And you will not receive a response.

Digitally yours, Best Buy & Geek Squad,

Customer support : +1 (804) 631-3556



Answer: Phishing (Suspicious email address and link)



#### Microsoft account

#### Security alert

We think that someone else might have accessed the Microsoft account contoso.com. When this happens, we require you to verify your identity with a security challenge and then change your password the next time you sign in.

If someone else has access to your account, they have your password and might be trying to access your personal information or send junk email.

If you haven't already recovered your account, we can help you do it now.

Recover account

Learn how to make your account more secure.

Thanks,

The Microsoft account team

#### **Answer: Non-Phishing**

## A Phishing Demo

Watch a live demo of a phishing attack



#### Discussion

- Do you think two-factor authentication (phone verification for example) prevents attackers from logging into your account if you enter your credentials on a phishing website?
- What actions would you take after realizing that you entered your credentials on a phishing website?