

Phishing Attacks

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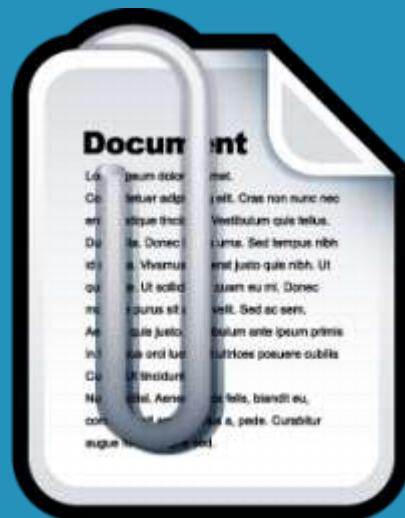
1. What is Phishing?
2. Why Phishing?



What is Phishing Attack

Phishing email messages, websites, and phone calls are designed to steal money or sensitive information. Cybercriminals can do this by installing malicious software on your computer, tricking you into giving them sensitive information, or outright stealing personal information off of your computer.

- Phishing is the most common way attackers illegally access systems,
- A phishing message is designed to trick you

A large input field with a black border and a white background. Inside the field, the word "USERNAME" is written in a black, sans-serif font. Below it is another input field with a black border and a white background, containing several black asterisks: "*****".

Click an
Unsafe Link

Open an
Unsafe File

Type your
Password

Transfer
Funds

Cyber attackers phish for different reasons, but they all phish.

Criminals
Money
Fraud
Identity Theft



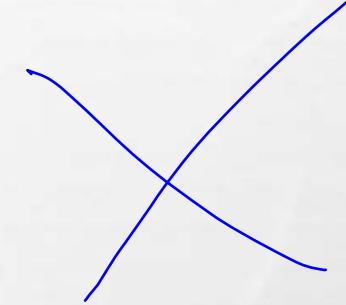
Intelligence
Sensitive Data
Network Access
Infrastructure



Hacktivists
Public Web Pages
Social Media



Types of Phishing Attack



Social engineering exploits information readily available on social media profiles like Facebook or LinkedIn. This includes personal details such as name, date of birth, location, workplace, interests, hobbies, skills, relationship status, telephone number, email address, and even favorite foods. Cybercriminals can use this information to craft convincing messages or emails, increasing the likelihood of their deceit being perceived as legitimate.

Types of Phishing Attack

1. **Link Manipulation** - Phishing is a deceptive tactic that frequently involves link manipulation. Cybercriminals mimic trusted sources by altering email links, often using misspelled URLs or subdomains to trick recipients. Email clients and web browsers sometimes preview linked destinations, aiding in detecting fraudulent links.

Types of Phishing Attack

2. **Spear phishing** - Spear phishing, targeting specific individuals or organizations, involves gathering personal details through social engineering to enhance the success rate. This method dominates internet-based attacks, constituting 91% of all phishing attempts.

Types of Phishing Attack

3. **Clone phishing** - Email spoofing involves creating a nearly identical copy of a previously sent email, including its content and recipient addresses. However, the attachment or link in the email is substituted with a malicious version. This spoofed email is then sent from an address made to look like it's from the original sender.

Types of Phishing Attacks

4. **Voice Phishing** - Voice phishing, also known as "vishing," is a form of criminal activity wherein perpetrators use social engineering techniques via telephone to extract personal and financial data from individuals. This information is then exploited for monetary gain, often targeting credit card numbers or data crucial for identity theft schemes.

Phishing messages are designed to get you to react quickly without thinking too much.



Sense of Urgency



Offers of Money



Confirmations



Odd Requests



Rewards



IT Support

What should I do when I get a phishing email?

→ 3 Possible

①

②

③

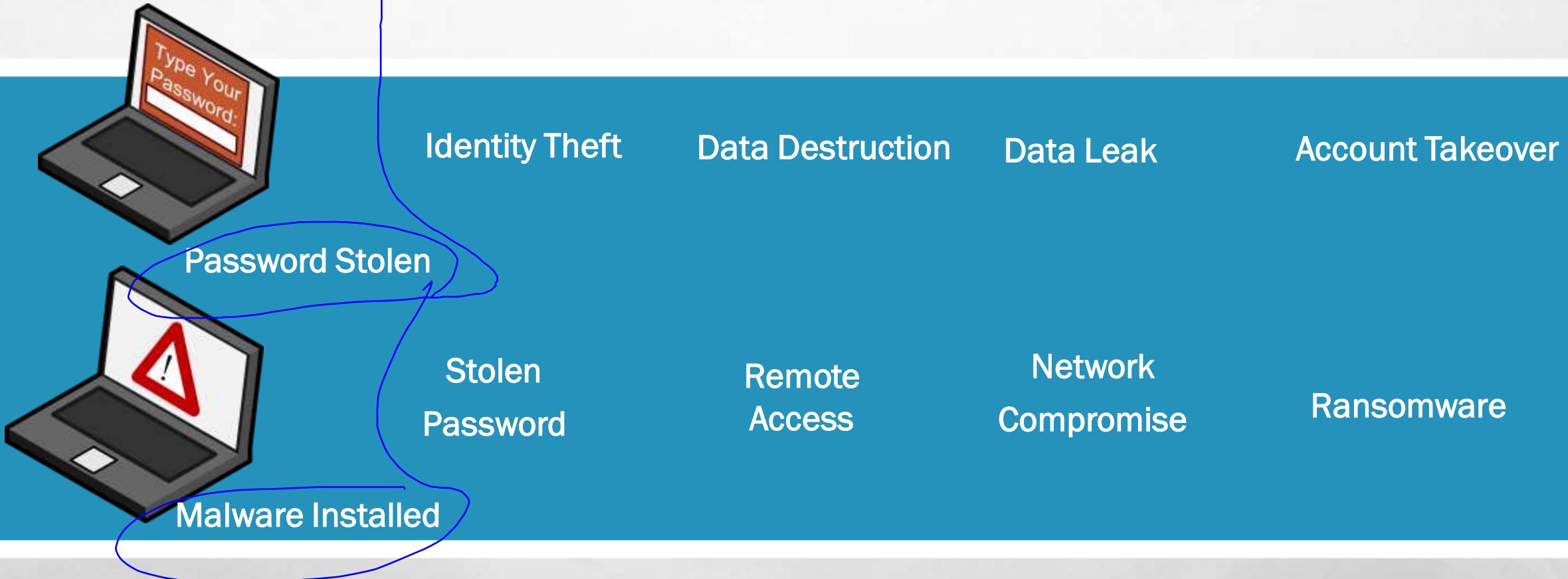


Click

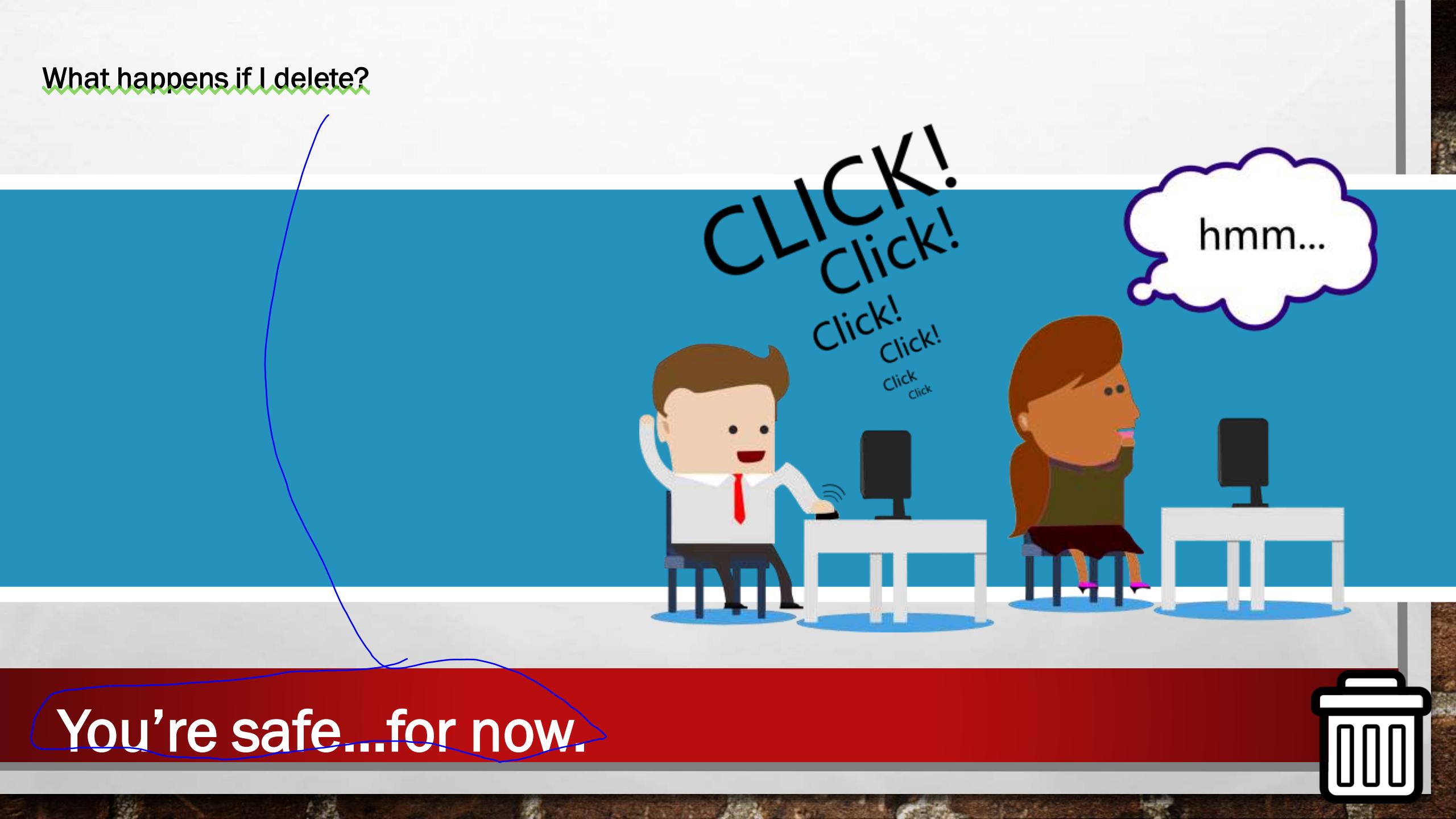
Delete

Report

What happens if I click?



What happens if I delete?



CLICK!
Click!
Click!
Click!

You're safe...for now.



What happens if I report?



**Review
Links**

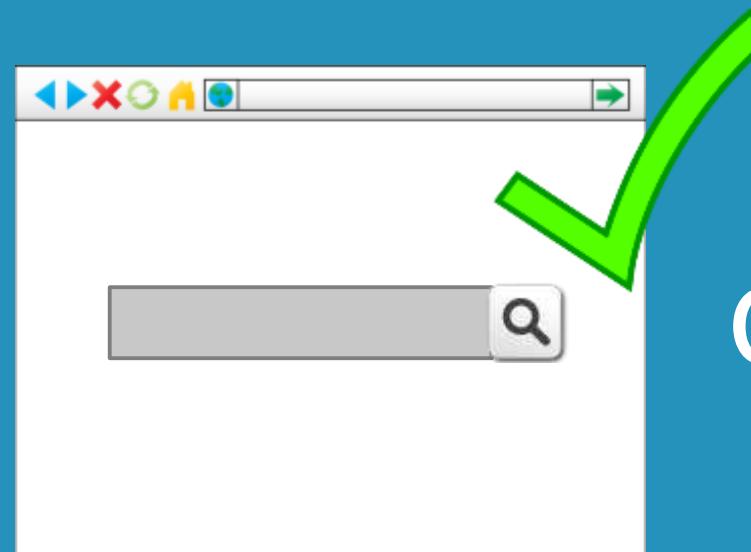
**Check
Accounts**

**Block
Domains**

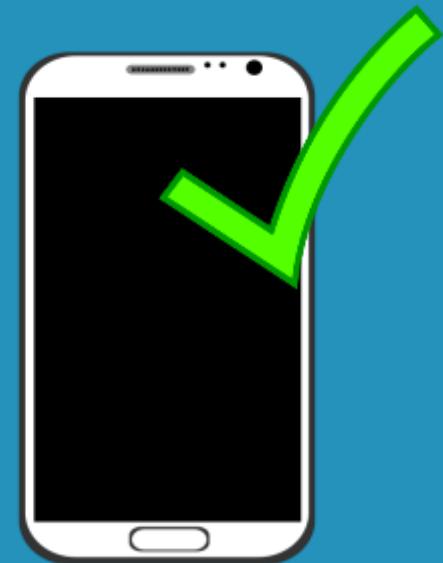
**Remove
Messages**



If you aren't sure...



Or



Skip the Link
Ignore the File

Go to The Source

Some Examples!

Phishing email

[REDACTED] @Vanderbilt.Edu>¹
Sent: Monday, December 8, 2014 6:35 AM
[REDACTED]
Subject: RE: ITS HELP-DESK ²

Dear user,

<http://its---access---desk.jgsy.com/>
The [REDACTED] been assigned to you. Please log in to complete these evaluations.
[CLICK HERE TO EVALUATE USING SECURE ENCRYPTION](#)

NOTE: You [REDACTED] log in will time out after 60 minutes. Your responses will be lost if you do not click on the "secure" button before 60 minutes lapses. There is no prompt when your 60 minute session has expired. Please save extensive comments periodically and check your time.

³
ITS help desk
ADMIN TEAM
©Copyright 2014 Microsoft ⁴
All Right Reserved.

#1 The Transfer

FROM **Sara**
TO **Ahmed**
SUBJECT **Transfer Problem**

Hello Ahmed,
I am trying to get payment to
a vendor. It is important they
get paid by close of business.
Can you please wire 7,540 to...

#2 The IT Support Alert

Hello Sara,
Your computer has been
infected with the RealBad2.0
Malware that you saw on the
news. You must [Click Here](#) to use
our scan

FROM

ITHelp

TO

Sara

SUBJECT

Suspicious Activity

FROM	Super Shoppers, LLC	
TO	Sonia	
SUBJECT	Package Damaged	

Dear Sonia,
We apologize in advance, but
your recent order was damaged
in delivery. We are unable to
issue a refund until you confirm
Account details with this form.

#3
Confirm
Now!

FROM **Security@CrazyMail.Net**

TO **Maria Mailer**

SUBJECT **Password Compromise**

Dear Maria,
Your account has been locked
due to potential compromise.
You must go to this site to
secure your account.

CrazyMail Secure Reset

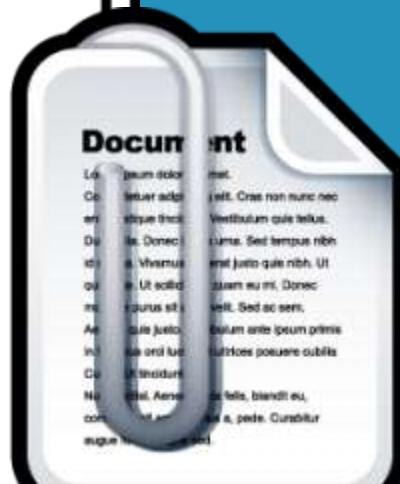
#4
Password
Reset

#5

Cry for Help

HI,

I need to submit this file for class but it won't open on my computer. Can you PLEASE save as a PDF and send to me???



FROM

N.Trouble@g.Harvard.edu

TO

Ahmed

SUBJECT

HELP!!!

FROM

eFaxService@proserv.ly

TO

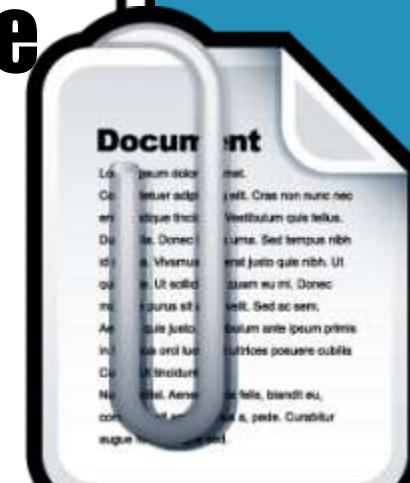
Sara

SUBJECT

Your

**efax Premium User,
Your electronic fax is attached.
This file is intended only for the
recipient and is considered
confidential.**

This is not my document.



#6 Attach And Attack

Tips to protect yourself from Phishing emails

1. IT will **NEVER** ask for your password over email. Please be wary of any emails asking for passwords. **Never send passwords, bank account numbers, or other private information in an email.**
2. Be cautious about opening attachments and downloading files from emails, regardless of who sent them. **These files can contain viruses or other malware that can weaken your computer's security.**
3. If you are not expecting an email with an attachment from someone, such as a fax or a PDF, please **call** and ask them if they indeed sent the email. If not, let them know they are sending out Phishing emails and need to change their email password immediately.
4. **Never enter private or personal information into a popup window.**
5. If there is a link in an email, use your mouse to hover over that link to see if it is sending you to where it claims to be, **this can thwart many phishing attempts.**
6. Look for '**https://**' and a **lock icon** in the address bar before entering any private information on a website.
7. Look for spelling and bad grammar. Cybercriminals are not known for their grammar and spelling.