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WELLS INTERNATIONAL COLLEGE

Develop ICT Solution

Assessment One

|  |  |  |  |
| --- | --- | --- | --- |
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**Assessment 1 – Presentation**

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**All my assessments and working could be found:** <https://artnfur.github.io/ictsolution/>

***Instructions:***

You need to analyse a case scenarios and complete tasks mentioned after scenario.

You need to demonstrate your develop ICT solution ability to identify the solution, determine client support and manage the team in development an awareness of cyber security in workplace.

***Duration:***

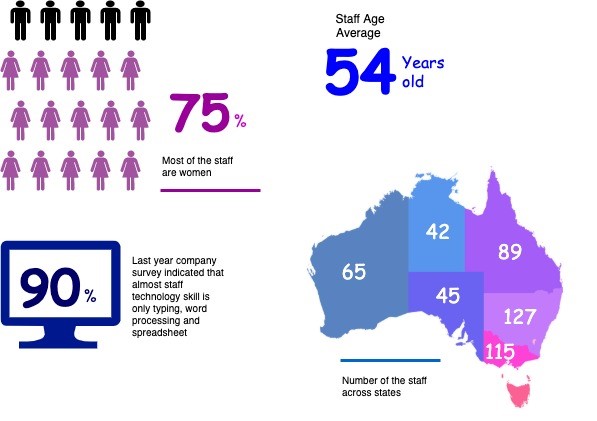
Trainer will set the duration of the assessment.

***Evidence required:***

|  |  |  |
| --- | --- | --- |
| *Tasks* | *Evidence* | *Submission* |
| Identifying issue and | A complete issue report and selected solution, including a presentation. | Presentation in front of the class and the trainer. Also, in printing |

# Case scenario

Established in 1999 with offices located throughout the western Sydney, Heaven Systems is a world-class, full-service provider of residential, commercial, and logistics-based transportation solutions for businesses and individuals. Many of the world’s largest, most respected corporations rely on the company’s unwavering commitment to innovation, quality, and customer service to move their employees, offices, and industrial facilities—domestically and internationally—anywhere in the world. Heaven Systems was experiencing an increase of phishing emails that were reaching employee inboxes and introducing the risk of a data breach. As phishing attacks increased, productivity slowed down while end users waited for IT to investigate the suspicious emails. “Phishing emails were getting more specific and sophisticated, and we worried that an employee might open one and cause serious damage,” said David Potter, IT Director at Heaven Systems. While there are multiple layers of security to filter email as it enters Heaven Systems’ network, it’s still possible for some targeted phishing emails to slip through and get into employee in-boxes. For this reason, IT must rely on end users to determine whether an email is safe to open. But it’s not always easy to tell. “For instance,” said Potter, “one area of the company was getting phishing emails that looked legitimate. They appeared to come from a customer, but the attachment was malicious.” Refer to employee background statistic show below:



To help employees identify phishing emails, IT holds annual training to show them what red flags to look for. Then, IT sends mock phishing attacks to test them. If a user clicks on a couple simulated phishing emails, they’re required to take the security training again. Human nature being what it is, some users were ignoring legitimate email because they didn’t want to make a mistake that would require them to take the training again. Others decided to play it safe and send every questionable email they received to IT to see if it was OK. While IT recognized the obvious threats, even they had to question some of the attachments. “You can imagine the amount of time we spent investigating emails,” said Potter. “It took about an hour per email to copy the attachment to a USB drive and then spin up a machine to test the file off network,” he explained. “That’s valuable time that IT could spend doing other things.”

You are work as an IT project manager assigned by Potter to handle this problem in the company. The company decide to use the system to detect a Spear-Phishing. To accelerate suspicious email analysis and response, Heaven Systems implemented MailMon, an automated phishing incident reporting and response service that empowers end users to report suspicious emails directly from the inbox. MailMon runs on Microsoft Exchange 2013 or newer and Office365; it is deployed to end users as an Outlook plug-in, including Outlook App for Android and iOS devices.

You and your friend are 10 years’ experience staff in the company. After you evaluate the MailMon, it generates a report in the complex form, many of the staff including a current IT department are not familiar with the system. Potter approved on new project team recruitment, and HR organised 3 **new graduated** IT staffs joining your team. Potter would like your team to gain more awareness on this cyber security incidence.

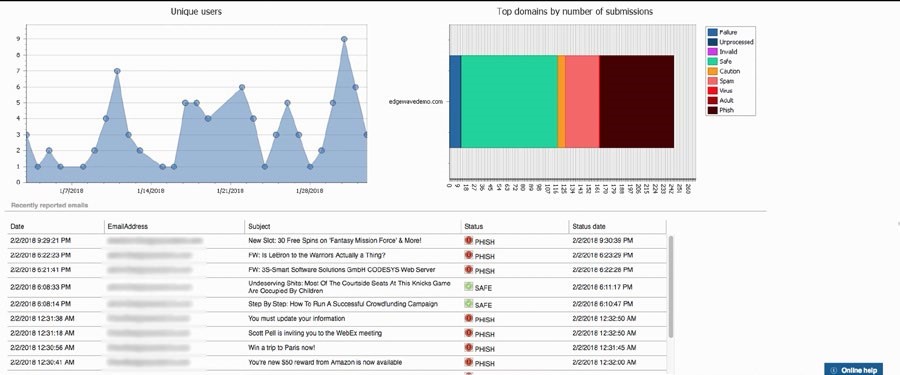


Figure: MailMon Monitoring Sample

## Heaven Systems internal IT Service Agreement

|  |  |  |
| --- | --- | --- |
| **Severity Level** | **Description** | **Target Response** |
| 1 (Outage) | Entire Company Server down | Immediately |
| 2 (Critical) | Entire Department Server down | Within 15 Minutes |
| 3 (Urgent) | Staff computer down | Within 1 hours |
| 4 (Important) | Staff computer not work properly or potential for interrupt their routine work | Within 3 hours |
| 5 (General) | Upgrade software  Training request | Within 48 hours |

# Task 1: Scope issue

*Now, in the mid of November, you are required to prepare the report for the management team on company security awareness. The report should indicate:*

1. *The company current issue:*

* The major issue is Heaven Systems experiencing an increase of **phishing email attacks** that were reaching employee inboxes and introducing the **risk of a data breach** and this led to productivity slowing down.
* **Phishing attacks** are getting more strategic and sophisticated that even though they have security filter they still need to rely on end user to determine whether email is safe to open or not. For this reason, end user needs to get trained how to identify **phishing emails**.
* Employee statistics shows that most of the end users are women age over 50 years old and have intermediate technology skills (typing, word processing, spreadsheet). Furthermore, staff are dispersed across the country. Suggesting making IT training happen is very challenging.

**More ICT security issues attached in the end of this assessment (Reference)**:

The company face an increase in **phishing emails**, but the staff does not have enough ability to handle them.



Refer: [Types of phishing email attacks](https://www.appsealing.com/types-of-cyber-attacks/)

At its core, phishing exploits human impulses through an attractive message or offer. Attackers usually resort to phishing attacks by targeting large groups and hence increase the chances of at least some targets falling victim to the attack. A typical example of a phishing attack involves the attacker impersonating an individual or establishment and sends emails to unsuspecting targets asking for immediate help with a link attached to the communication. The innocent user clicks on the link, which takes them to a fake website that looks similar to a legitimate website. The person, unaware of the trap, falls into it and ends up sharing personal details with the attacker, who then robs the user even before they realize that they have been attacked.

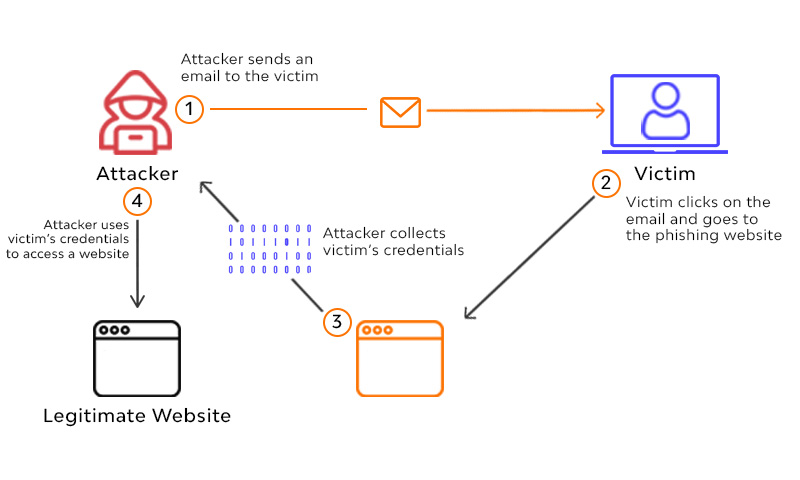


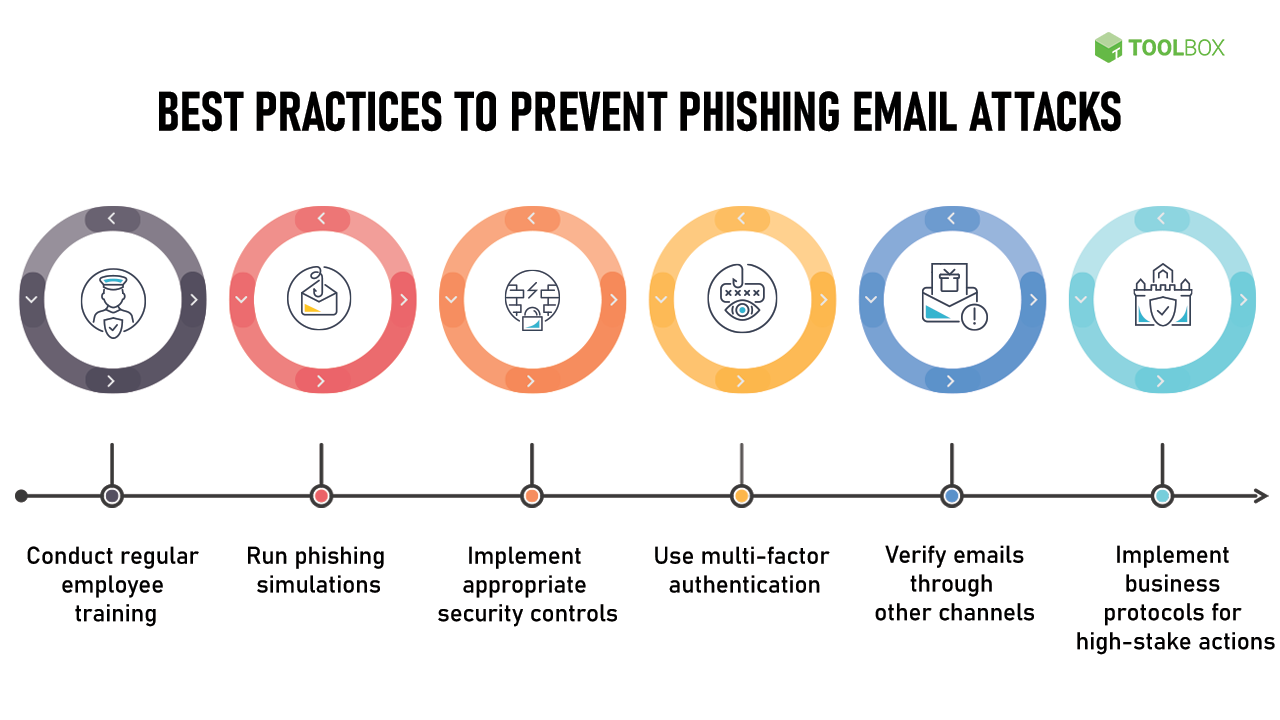
Figure: Example of phishing email attack.

**Phishing** is a way that cybercriminals steal confidential information, such as online banking logins, credit card details, business login credentials or passwords/passphrases, by sending fraudulent messages (sometimes called ‘lures’).

1. *Brief for possible solution to identified issue. Each solution must be assessed on* 
   * *commercial potential*
   * *suitability for the target audience or purpose*
   * *feasibility of implementing solution*

**The solution is:**

* Developed online IT training and put in on the internet so it can be accessed anytime and anywhere. For example, users have attended the actual training but feel that he wants to do it again, he can access the material anytime and anywhere he/she is.
* Developed face to face IT training to users who feel that online training is not enough for them as their IT skills are low.
* Get a representative from each state. Each representative need has intermediate to advance IT skills. Train this representative to do the face-to-face training to
  + Commercial wise - The solution will benefit business as the productivity will rise again and solve the issue.
  + Suitability for the target audience or purpose – IT training need not be technical for the end user, but representative will have more technical training as he will be one acting as an IT support for that state.
  + feasibility of implementing solution – the training does not require IT staff to travel as he can do training online and will get just a representative from each state. Organization can save money.



Refer: [Prevent Phishing Email Attacks](https://www.toolbox.com/it-security/vulnerability-management/articles/what-is-a-phishing-email-attack/)

Protect yourself from phishing attempts

The best way to protect yourself from phishing attempts is to stay abreast of current threats, be cautious online and take steps to block malicious or unwanted messages from reaching you in the first place.

**Take the following steps to protect yourself from phishing attempts:**

* Don’t click on links in emails or messages, or open attachments, from people or organizations you don’t know.
* Be especially cautious if messages are very enticing or appealing (they seem too good to be true) or threaten you to make you take a suggested action.
* Before you click a link (in an email or on social media, instant messages, other web pages, or other means), hover over that link to see the actual web address it will take you to (usually shown at the bottom of the browser window). If you do not recognize or trust the address, try searching for relevant key terms in a web browser. This way you can find the article, video or web page without directly clicking on the suspicious link.
* If you're not sure, talk through the suspicious message with a friend or family member, or check its legitimacy by contacting the relevant business or organization (using contact details sourced from the official company website).
* Use a spam filter to block deceptive messages from even reaching you.
* Understand that your financial institution and other large organizations (such as Amazon, Apple, Facebook, Google, PayPal and others) would never send you a link and ask you to enter your personal or financial details.
* Use safe behavior online. Learn how to [use email safely](https://www.cyber.gov.au/node/1522) and [browse the web safely](https://www.cyber.gov.au/node/1520).
* Stay informed on the latest threats – sign up for the [ACSC Alert Service](https://www.cyber.gov.au/node/1601/). You can also find information about the latest scams on the Australian Government’s [Scamwatch website](https://www.scamwatch.gov.au/).

**Take simple steps to prevent phishing email attacks:**

* Do not open any email if you do not clear where it came from.
* Take time to confirm the relevant company email or web site address.
* Call or email follow the office site info to confirm true or false.

# Task 2: Selected solutions with Presentation

1. *Conduct a brainstorm on identified issue*
2. *Compare an idea solution for identified issue*
3. *Selected the solution and communicate to stakeholder (Your trainer)*

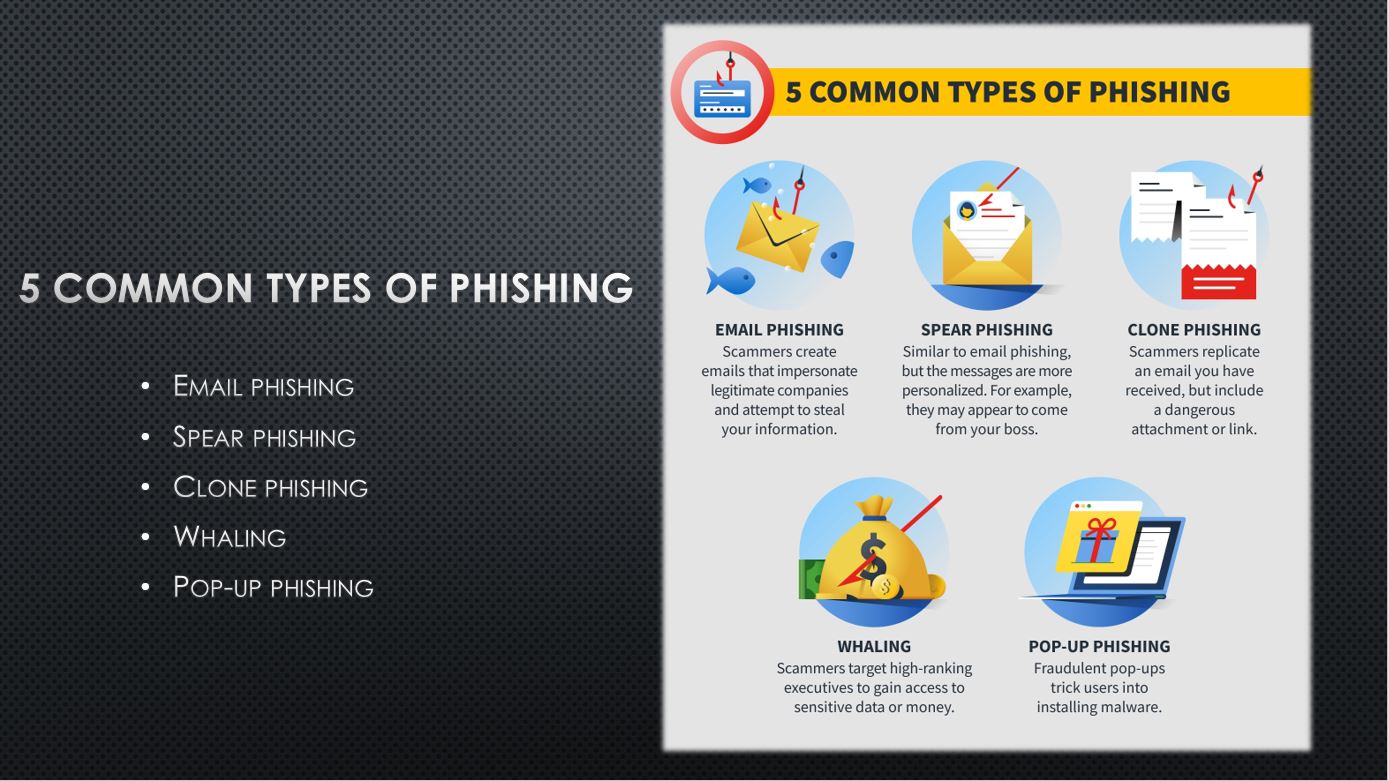
*a.* ***Prepare some (10) presentation slides*** *to present the following items to your trainer (All group members have to present equally)*

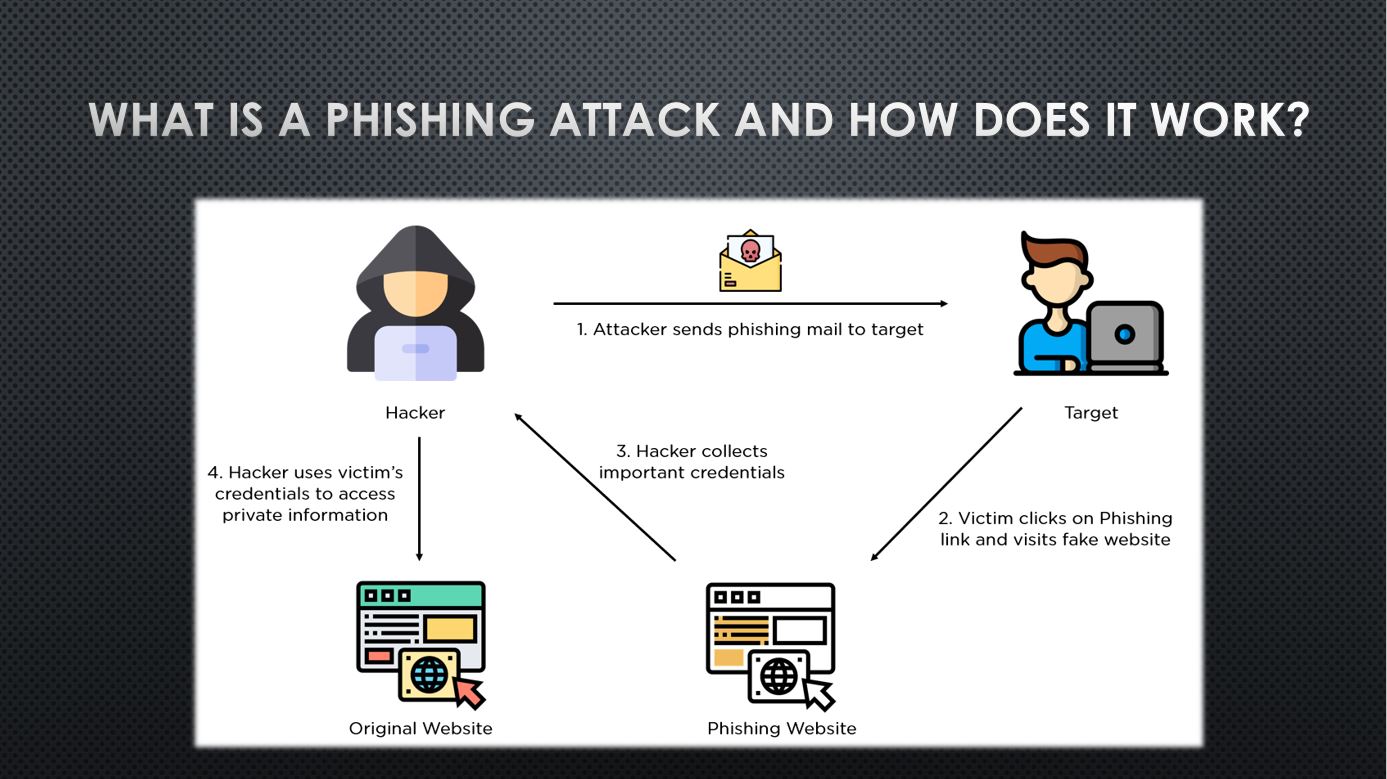
* + *Identified issue*
  + *Brainstorming evidence*
  + *Selected solution*

1. *Record feedback from your trainer and finalised the solution*

## Presentation

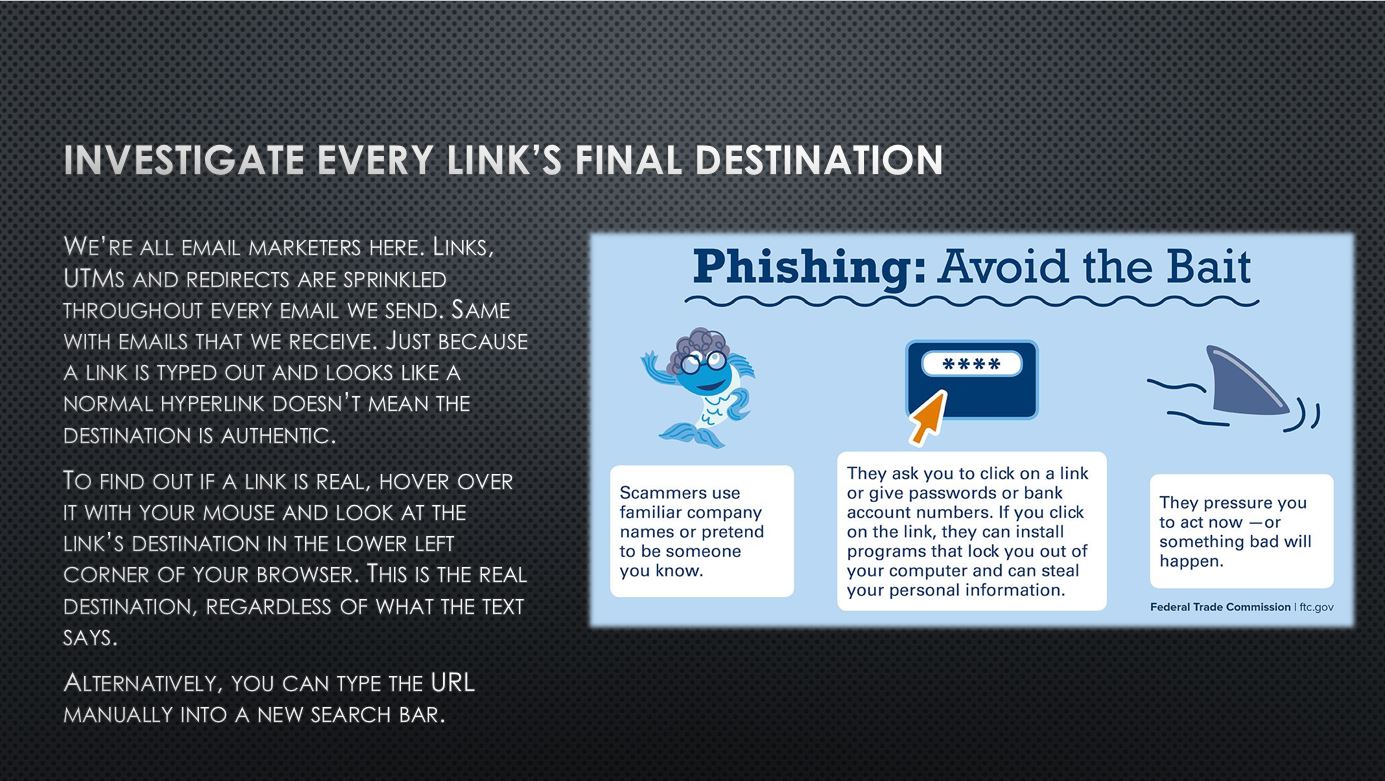


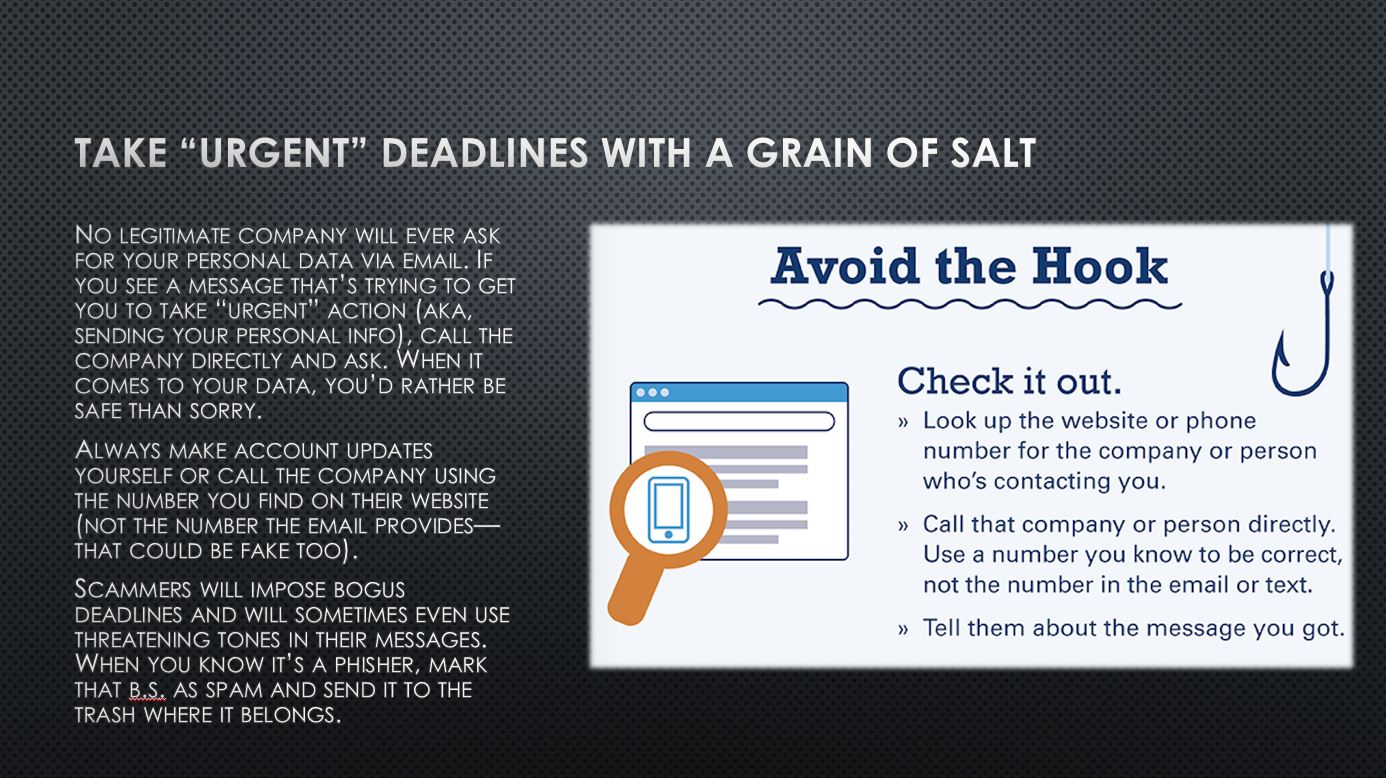






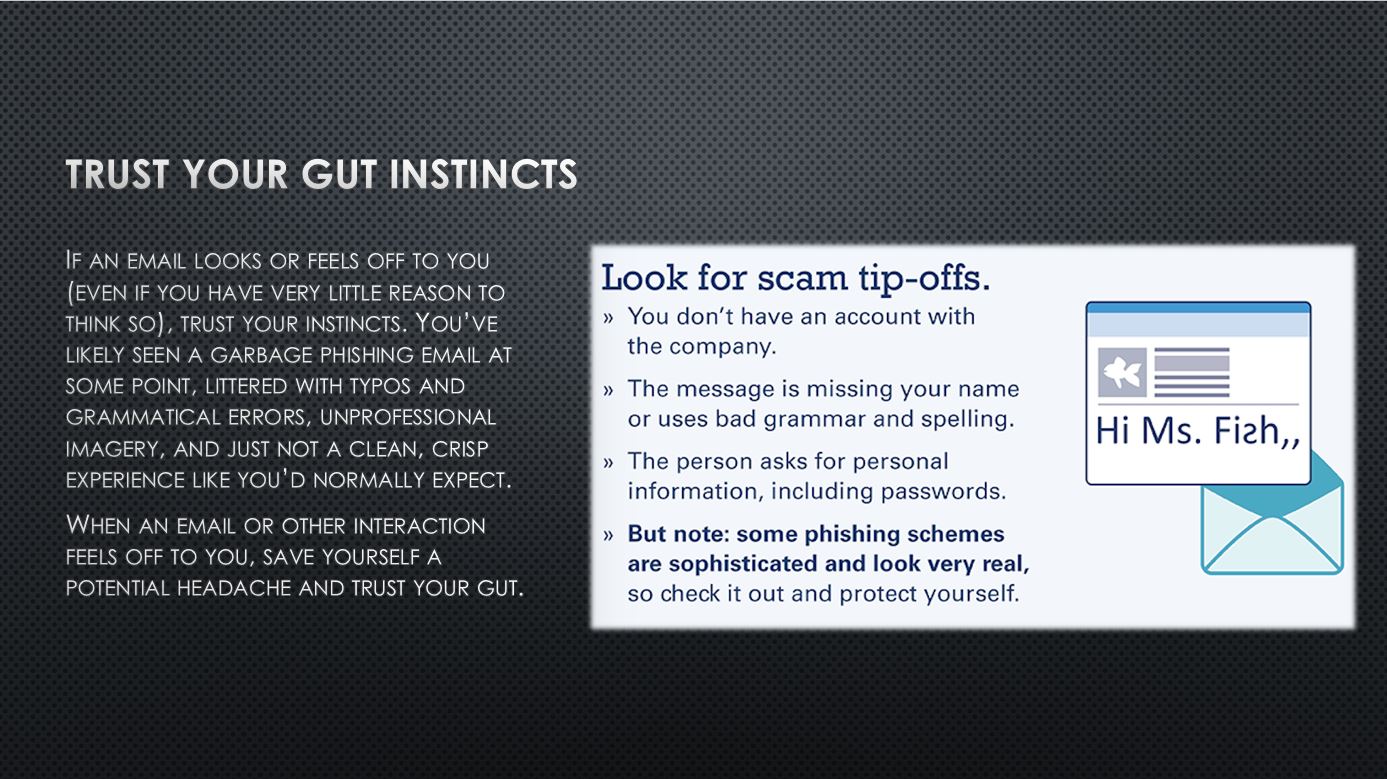












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# REFERENCE

**See my case study about ICT security case:**

