

DIGITAL PRIVACY: DATA BREACH

Workshop created by Yusuf Ganyana (twitter.com/flesymz) for DiGITAL YOU 2022 (#DigitalYou)

Time: 90 minutes

Essential question

What steps can we take to minimize unauthorized access to your data?

Established Goal

In this session, participants will learn how to be their first line of defense in preventing data breaches.

Learning Outcomes

By the end of the lesson, participants will be able to:

- Minimize a data breach by keeping their data safe
- Recognize when something is wrong
- Respond quickly in order to minimize impact

Training Session Materials:

- Projector and presentation slides
- Handouts of presentation in case there is no projector
- Copies of workshop schedule
- Copies of handouts and instructions for activities
- Stationery: posters, markers, pens, notepads, sticky notes
- Copy of attendance sheet
- Copies of photo consent form
- Copies of evaluation/survey form

LEARNING OVERVIEW

Personal data is the new gold in the digital age. However, given that human error and honest mistakes in data breaches accounts for 90% of all cyber-attacks, it's critical that we begin with individual security awareness training if we want to strengthen the security measures already in place. Not only will this minimize unauthorized access to personal data, but it will also allow for faster and more effective breach detection and response.

This workshop was inspired by Tactical Tech's [Digital Enquirer kit](#).

Workshop type: Offline



FACILITATION NOTES

🕒 **INTRODUCTION - 10 minutes**

- The host explains housekeeping rules such as:
 - Location of bathrooms
 - Use of cellphones
 - Photo consent,
 - Signing the attendance sheet
 - Share the workshop schedule
- Host to welcome the facilitator(s)
- The facilitator(s) to introduced themselves, give a brief overview of the workshop i.e. title, objectives, and expected outcomes.
- Facilitator(s) to give a brief overview of Tactical Tech and the GOETHE INSTITUT.

🕒 **ICEBREAKER - 5 minutes**

[NOTE] You can use the sample icebreaker below or any other icebreaker that you are comfortable with and that the participants can relate to.

THE NOSTALGIC FALLACY

[DEMONSTRATE]

Recruit a volunteer from among the participants; if you have a co-facilitator, that's even better.

In turn, introduce yourself by first name, then ask your colleague/volunteer three simple questions about their background. See below sample questions:

- a. Which of your many nicknames is your favorite?
- b. Do you have a celebrity crush?
- c. With which celebrity do you share a birthday?
- d. In what city were you born?
- e. Where was your first vacation destination?
- f. What was your first phone number?
- g. Where did your parents first meet?
- h. What was your first pet's name?

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Now **[INVITE]** the participants to join in.

[ENCOURAGE] them to interact with someone they just met in the workshop today for the icebreaker to be effective.

Next, congratulate them on their role as social engineers.

[EMPHASIZE] It is also possible to unknowingly reveal personal information without having it stolen.

[EXPLAIN] The questions you were asked may appear simple, but you are disclosing personal information that could be used to reset your password or gain access to your account without knowing the password.

[REMINDE] them to stay alert at all times, especially if the subject manipulates their emotions, as they did in this case by distracting them with nostalgia.

– MAIN LESSON –

 **60 minutes**

[REMEMBER] Pause periodically to make sure the concept is understood

[ASK] *What is data; personal data?*

[ENCOURAGE] them to name some personal data they may be familiar with: It might be helpful to ask the kids to write on the flipchart or sticky notes different types of data (name, address, age, fingerprint, face, etc.) so that they can see how pretty much everything is data and how it is deeply personal (weight, health status, income, etc.)

Sample definition

Data is a collection of facts, whereas personal data is information that uniquely identifies an individual.

[PAUSE] Questions?

[ASK] *What is a breach?*

[ENCOURAGE] them to name a few types of breaches they are aware of; for example, they can define a breach as someone stealing money from a bank or gaining access to their house.

[PAUSE] Questions?

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[ASK] *What is personal data breach?*

Note: *Tell a story to which they can relate.*

In the Digital Inquiry Kit, there is a point where Lina leaves her phone unattended, mark you, she has not set a lock password and anyone with a malicious intention could easily retrieve information such as correspondences Lina's had with Junior's friends, skew it to fit their agenda, and deliberately leak it to the public. This could

EXPLAIN have dire consequences of all parties involved.

As a follow up to this story, you can associate data breach with unauthorized individuals stealing or accidentally gaining access to sensitive or confidential information by copying, transmitting, viewing, or using it.

[EMPHASIZE] that data breaches occur as a result of technological flaws and user behavior. As a result, all efforts should be focused on strengthening these two aspects.

[PAUSE] Questions?

[ASK] *What are some examples of personal data breaches?*

[SHARE] the following sample examples on how sensitive personal information is compromised

1. Unauthorized individual gaining access to your laptop or email account.
2. Sending an email containing personal information to an incorrect recipient.
3. A bulk email that uses 'to' or 'cc' but should have used 'bcc' (blind carbon copy).
4. A disgruntled employee copies a contact list for personal use.
5. Unauthorized modification of personal data e.g. ransomware encryption
6. Theft or loss of an unencrypted and unlocked computing or storage device, such as a flash drive, laptop, or mobile device.

[PAUSE] Questions?

[ASK] *How would someone benefit from stealing your personal data?*

Sample responses

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- Sell your data: Cybercriminals are attracted to data breaches because they are lucrative. Stolen data is sold on the dark web to be used to commit more crimes.
- Identity theft: It is used to gain benefits at the victim's expense, such as taking out a loan in their name or taking over an account (mobile phone number)
- Often used for character assassination (reputational damage)
- Ransomware: Hackers extort victims for a good return on their time investment.
- Because they can, for example, take control of celebrity social media to gain fame.
- Gain access to your equipment for bitcoin mining.

[ASK] *How do data breaches occur?*

[EMPHASIZE] It depends on how access has been gained to your data

[SHARE] the following examples

- An exploit attack against an out-of-date operating system
- Weak passwords that can be cracked or guessed.
- Malware attacks e.g. spyware.
- A virus can be delivered via downloads from a compromised website e.g. Ransomware, adware,
- If an organization fails to put strong security measures in place to protect your data, and as a result, a cyber-attack on that service compromises your data.
- Social engineering: a psychological manipulation of people used by criminals and cyber-crooks to trick users into disclosing sensitive information

[PAUSE] Questions?

Activity

[ENCOURAGE] participants to match the cases to the keywords

[NOTE] It's best if they work in pairs.

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KEYWORD	DESCRIPTION
Spyware	A type of malicious software that prevents access to a computer system until a fee is paid.
Pharming	Occurs when an attacker sends an email or other form of communication pretending to be a reputable entity or person; it is responsible for 90% of data breaches.
Phishing	Any software intentionally designed to cause damage to a computer
Malware	Designed to obtain data without the user's consent.
Ransomware	The fraudulent practice of directing internet users to a bogus website that mimics the appearance of a legitimate one, in order to obtain personal information.

[SHARE] the following answers

- Spyware: Designed to obtain data without the user's consent.
- Pharming: The fraudulent practice of directing internet users to a bogus website that mimics the appearance of a legitimate one, in order to obtain personal information.
- Phishing: Occurs when an attacker sends an email or other form of communication pretending to be a reputable entity or person; it is responsible for 90% of data breaches.
- Malware: Any software intentionally designed to cause damage to a computer
- Ransomware: A type of malicious software that prevents access to a computer system until a fee is paid.

[PAUSE] Questions?

Break 

[PAUSE] Take a break, alternatively engage participants in an energizer.

Sample energizer

The counting game

[REMEMBER] This is an individual but group exercise.

[DEMONSTRATE]

- Raise your right hand above your head and shake it four times.
- Raise your left hand above your head and shake it four times.
- Lift your right leg and shake it four times.
- Lift your left leg and shake it four times.

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- Repeat the process, but this time reduce the count by one, so you count to three, followed by two then one.

Now **[INVITE]** the participants to participate.

[REMIND] them that if any participant does it incorrectly, the countdown will begin again.

[ASK] *How does a data breach affect the victim?*

[SHARE] the following answers

The following outcomes may occur depending on the type of data involved:

- Destruction or leakage of confidential information, which may harm your reputation to the point of making it difficult to find employment.
- Intellectual property theft can cause significant financial loss due to the loss of income generated by your creations/products.
- If you are the custodian of other people's data, you may face legal issues and compensation for those affected.
- A financial data breach can be devastating to an individual, erasing all of their savings.
- Identity theft can lead to a variety of problems, including debt. It may also put you on the cops' radar as a result of fraud.

[PRO TIP] Advise the participants to check <https://haveibeenpwned.com/> to see if accounts linked to their emails have been compromised (this tool checks existing data breaches for your email address and reports what was leaked).

[PAUSE] Questions?

[ASK] *What should you do when a breach occurs?*

Activity

[ENCOURAGE] participants to match the events to the appropriate action.

[NOTE] It's best if they work in pairs.

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EVENT	ACTION
Your encrypted backup of personal data on a flash drive has been stolen.	Reset the password for the affected account as soon as possible, and take any other precautions necessary to reduce the risk.
Your username, password, and purchase history have been published online as a result of a hack of an online service to which you subscribe.	Call their customer service line to report a data breach.
You get a bank statement for someone else.	The data is not compromised as long as it is encrypted.

[SHARE] the following answers

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You get a bank statement for someone else.	Call their customer service line to report a data breach.

[SHARE] more examples

- If you suspect a breach involving your financial information, notify your bank and keep an eye on your accounts for any unusual activity.
- Make sure each of your accounts has a strong and unique password. If you used the password from the compromised account on any other accounts, quickly change it.
- Attempt to determine what data may have been stolen.
- Notify family and friends to be on the lookout.
- After a data breach, don't respond directly to requests for personal information; it could be a social engineering attack.

[PAUSE] Questions?

[ASK] *How can we minimize a security breach?*

[SHARE] the following examples

- Make sure each of your accounts has a unique password; passphrases are recommended.
- Do not open emails from unknown sources.
- Protect your devices with a combination of anti-theft hardware and software.
- Make sure an old hard drive/computer is properly wiped before disposing.
- Make regular secure backups of your files to mitigate the negative effects of a ransomware attack.
- Use a screen lock and keep your phone's software up to date.
- You should not root or jailbreak your phone.
- Use anti-virus and anti-malware software to protect your computer and other devices.
- Share as little personal information as possible in the public domain.
- Pause and reflect before you click to avoid clickbait

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[POINT OUT] A secure connection (HTTPS or SSL certificate) does not guarantee the website's safety and trustworthiness. Matter of fact, malicious websites, particularly phishing sites, are increasingly using HTTPS.

[SUGGEST] participants to look into using dice-generated passphrases at <https://www.eff.org/dice>

Q&A

[ASK] *What questions do you have for me?*

[INVITE] and encourage the participants to ask questions or seek clarification to a point that wasn't clear or to some extent, unmet expectations.

— CONCLUSION —

10 minutes

Although we are not immune to data breaches, good computer security habits and user awareness can reduce our vulnerability and help you survive a breach with less disruption. For example, just as you wouldn't leave your front door open all day for anyone to walk in, you should keep your personal data secure by never leaving any windows or doors open for a hacker to get through.

In this workshop, we talked about: -

- What is data; personal data?
- What is a breach?
- What is a personal data breach?
- How would someone benefit from stealing your personal data?
- How do data breaches occur?
- How does a data breach affect the victim?
- What should you do when a breach occurs?
- How can you minimize a security breach?

Wrap up

[DISTRIBUTE] the evaluation form and allow them time to complete it.

[REMEMBER] Gather the forms before they depart.

[THANK] them for their participation, and **[ENCOURAGE]** them to share what they have learned with family and friends.

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