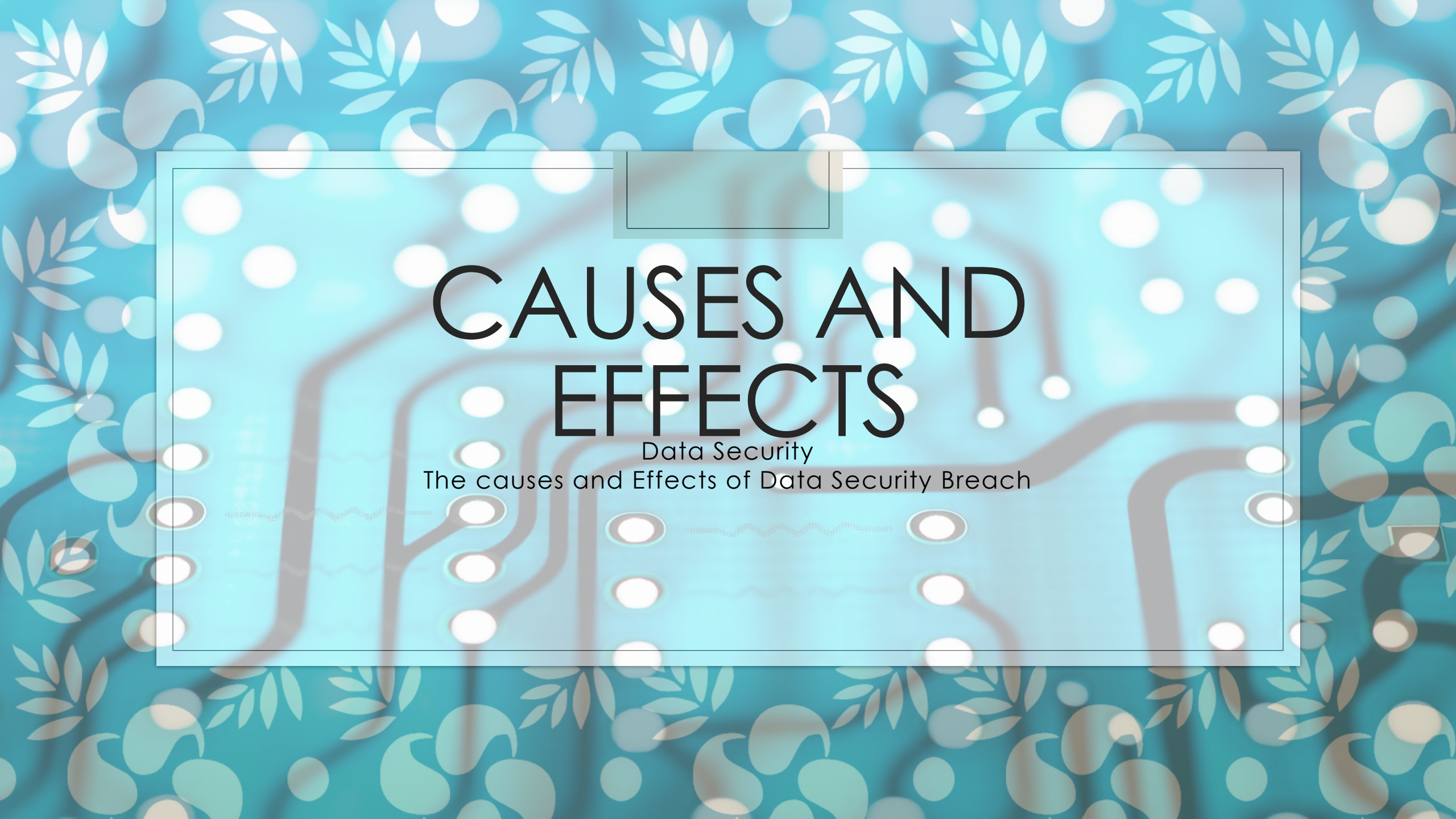




CAUSES AND EFFECTS

Data Security

The causes and Effects of Data Security Breach

What is a data security Breach?



A data breach is an incident in which sensitive, protected or confidential data has potentially been viewed, stolen or used by an individual unauthorised to do so.



Data breaches may involve personal health information, personally identifiable information, trade secrets or intellectual property.

Real life examples

Data breaches are a daily occurrence. They happen so frequently that it is difficult just keeping up with what data has been breached, let alone how it happened. However, what constitutes a big data breach as opposed to a small one? Below are some of the biggest data breaches to date. The list is not necessarily the number of records that were compromised but how much risk or damage the breach caused companies, insurers and individuals.

1. Yahoo
2. Adult Friend Finder
3. Ebay

See the next pages for explanations for each.

Example 1: Yahoo

- Date: 2013-14
- Impact: 3 billion user accounts
- Details: In September 2016, Yahoo announced it had been the victim of the biggest data security breach in history. They claimed it was likely by a 'state sponsored actor' as far back as 2014.
- The breach compromised real names, e-mail addresses, dates of birth and telephone numbers of over 500 million users.
- The vast majority of the passwords were 'hashed' using a robust algorithm.
- However, a few months later Yahoo disclosed that it had also been hacked by a different group, and that one billion accounts had been compromised back in 2013.
- Besides names, dates of birth, e-mail addresses and passwords that had not been protected, just as those involved in 2014, security questions and answers were also compromised.
- In October 2017, Yahoo revised that estimate, saying that, in fact, all 3 billion user accounts had been compromised.
- An estimated \$350 million was knocked off Yahoo's sale price to Verizon after the breaches were disclosed.
- URL: <https://www.reuters.com/article/us-yahoo-cyber/yahoo-says-all-three-billion-accounts-hacked-in-2013-data-theft-idUSKCN1C82O1>

Example 2: Adult Friend Finder

- Date: October 2016
- Impact: More than 412.2 million accounts
- Details: The friend finder network is a dating site that contains a lot of adult-related content.
- The people who would use this site, and have accounts, would not want their details stolen for fear of embarrassment and potential damage to their reputation.
- Sometime in October 2016, hackers stole 20 years' worth of data from six databases that included names, e-mail addresses and passwords.
- Most of the passwords were only protected using a weak hashing algorithm called [SHA-1](#).
- The passwords were all cracked by the time the data set was exposed online in November that year.
- Read more about the [Adult Friend Finder breach](#)
- URL: <https://www.lifewire.com/what-is-sha-1-2626011>
- URL: <https://www.csoonline.com/article/2925833/adult-friend-finder-confirms-data-breach-3-5-million-records-exposed.html>

Example 3: Ebay

- Date: May 2014
- Impact: 145 million users compromised
- Details: In May 2014, eBay reported a cyber-attack. They said that the names, addresses, dates of birth and encrypted passwords of all of its 145 million users had been compromised
- The company said that hackers had gained access to the eBay network using the credentials of three employees and had full access for 229 days, during which they were able to steal the customer database.
- Customers were asked to change their passwords by eBay as a security measure.
- They stated, however, that credit card and bank details of customers were not breached due to that information being stored on a separate database.
- Read more: [click here](#)
- URL: <https://www.csoononline.com/article/2157782/security-awareness-raising-awareness-quickly-the-ebay-database-compromise.html>



TASK

Now do Task 13