CSCI 301 Data Breach Presentation:
the Ashley Madison data breach

< July – August 2015 />

By *Riley Osborne*

12/5/2022

What is Ashley Madison?

- Dating site for married people
  - ➤ "Life is short. Have an affair."
  - ➤ Parent company Avid Life Media
- Set up
  - ➤ men pay, free for women
- Features
  - ➤ "full delete" service
    - ▪ Cost around $20 fee
    - ▪ Completely erase profile information

Data Breach Incident

- Who
  - "The Impact Team"
    - Very experienced (self-acclaimed)
    - Can not find out if they were caught
- What was compromised
  - 60 GB of company data
    - Includes real names, financial info, residence info
- When
  - Attack announced by hackers July 19th, 2015
  - Threat to release data if not shut down.
  - Data released August 18th and 20th, 2015
- Why
  - Hacktivist Vigilantism
    - To stop Avid Life Media blackmailing
    - "full delete" a scam
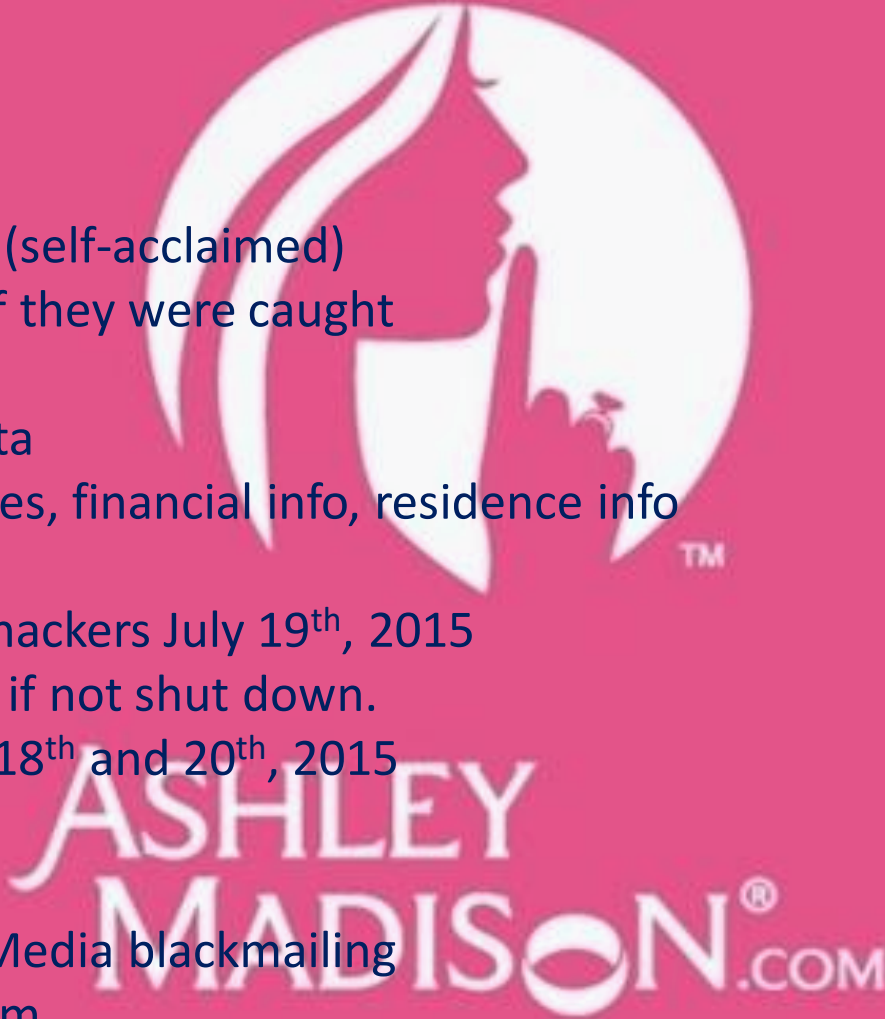
How it Occurred

- Bad security
  - ➢ "Nobody was watching"
  - ➢ VPN from internet to root on all servers
  - ➢ "Worked hard to make fully undetectable" then "found nothing to bypass"
- Access to:
  - ➢ 300 GB of data
    - ▪ Language of "dumps" suggests a database dump
  - ➢ Had password to CC processor
    - ▪ Store CC number and billing address
  - ➢ Released 60 GB

ASHLEY MADISON®.COM

Effects

- Potentially tens of millions of site users' privacy compromised
  - 1,200 Saudi Arabia .sa emails
    - Adultery punishable by death
  - Several thousand .mil & .gov emails registered
- Hackers wrong
  - "Two wrongs don't make a right"
  - Dumped data abused
    - Extortionists scam with data
    - Vigilantes seek public humiliation
- Loss of life
  - U.S. man
  - Louisiana pastor citing the breach
    - My husband knew that grace, but somehow forgot that it was his when he took his own life."

Countermeasures

- Make security the main priority
- Test security
  - ➢ Penetration Testing and Vulnerability assessments
- Have an Incident Response plan
  - ➢ Include public relations part
- Code
  - ➢ Test software and source code
  - ➢ Patch all bugs, weaknesses
- User
  - ➢ How about not signing up for adultery?

ASHLEY MADISON®.com

Sources:

About Ashley Madison:

https://chicagoreader.com/reader-partners/ashley-madison-review-does-it-work-in-2021-is-it-real-we-tried-it-and-paid-for-a-membership/

Explanation of the hack:

https://www.forbes.com/sites/ericbasu/2015/10/26/cybersecurity-lessons-learned-from-the-ashley-madison-hack/?sh=79bb10a64c82

Conversation with hackers:

https://www.vice.com/en/article/bmjqyz/ashley-madison-hackers-speak-out-nobody-was-watching

After effects:

https://en.wikipedia.org/wiki/Ashley_Madison_data_breach#cite_note-firstlook-14

https://krebsonsecurity.com/2022/07/a-retrospective-on-the-2015-ashley-madison-breach/

Wife's quote:

https://www.theguardian.com/technology/2016/feb/28/what-happened-after-ashley-madison-was-hacked