Facebook, Twitter & Privacy

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Professor: Natalija Vlajic
Team: Erica Yoshiwara
          Giselle Borges
          Talita Santos

What do users really share

- Information users share:
  - Media (photos, videos, etc.)
  - Geographical location
  - Status

- Information companies gather through electronic tracking:
  - Liked pages
  - Friends

- What companies do with users' data:
  - Track and store data
  - Build a user profile

Privacy Policies

- Not fit for purpose:
    - Many times are unclear.

- Delivery issues:
    - Language.
    - Length.

- Result:
    - Users usually do not read.

Examples

- Life Insurance companies.
  - Look at customers' behavior.

- Jobseekers.
  - Look at candidates' profile.

- Facebook/Twitter connect button.
  - Mining data.

Facebook privacy leak

- Mapping email addresses to real names

-There is no way to not allow it by Facebook settings.

-The hacker can discover the real name and how the user looks like.

Reset Your Password

How would you like to reset your password?

- ◉ ▶ **Use my Hotmail account**
  Log in to Hotmail (if you aren't already) to quickly reset your password.

- ○ ✉ **Email me a link to reset my password**
  tah_171@hotmail.com
  t********************s@u**.br

- ○ ▯ **Text me a code to reset my password**
  +*********45
  +**********50

Talita Rodrigues
Facebook User

Not You?

No longer have access to these?   **Continue**   Cancel

Facebook privacy leak

- Reconstruction of a friend's friend list:

- Even though the user's friend list is blocked, a potential friend attacker can reconstruct it by analyzing the user's posts.

- When a friend likes or comments a post, his or her ID appears to all user's friend.

Twitter privacy leak

- Social network relay attacks:

    -Fake profiles.

    -Attackers get access to twitter contents of an user and start to copy it to a fake profile.

Twitter privacy leak

- Users' average age:

  -Twitter users are several years older than Facebook users.

  -Twitter has a default privacy settings, but just these settings are not enough to keep a user's profile safe.

  -Because of the age of Twitter's users, they don't care too much about technical details and how the privacy settings are configured.

The RIOT Software

- Created by Raytheon

•Got data from Twitter, Facebook & Foursquare.

•Built a snapshot of people.
   –Friends, places, preferences, etc.

•Could predict behaviors and movements.

•Shared with the US Government (2010).

•Raytheon authorized to export the software to foreign nations/corporations.

The Perfect Citizen Software

• Created by NSA.

• Research and development Project.

• "Big Brother" style tracking.

• Documents suggest that Raytheon had participated on the development of Perfect Citizen.

Conclusion

1. **How would you protect yourself?**
   - Always logout, use different browsers, be selective about what you accept, follow friends only policy, etc.

2. **Which are the differences between RIOT and Public Citizen?**
   - RIOT can predict a user's behavior.
   - Public Citizen is a spy software.

3. **What are the advantages of mining data?**
   - Help to find things easier.
   - Help to find potential customers and employees.

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