Cyberspace and the Intersection of Security: New Challenges for Corporate Security, Law Enforcement, and our Privacy

Thursday, April 10, 2014

Robert Gezelter Software Consultant
35 – 20 167th Street, Suite 215
Flushing, New York 11358 – 1731   gezelter@rlgsc.com
United States of America   http://www.rlgsc.com

As a courtesy to your professional colleagues, kindly take a moment and set all personal electronic devices on silent or vibrate. Thank you!

- What has four legs and fur?
- Please write down your answers

Statement

- "I do not leave people behind."
- What does this mean? Write down your answer

What do your answers say?

- The statements are very incomplete
- Now let's take a look at your answers

What has four legs and fur?

- child's perspective

- adult's perspective

- regional variations

- professional variations

"I do not leave people behind"

- Are you a military officer?

- Are you a drug lord?

- Who is listening to your answer?

Often, sayings and facts are incomplete, yielding a mental Rorshach test, which reveals more about prejudices and underlying beliefs than anything else.

Problem Summary

$$A \Rightarrow B \neq B \Rightarrow A$$

What is "Privacy"

- What information you control?

- Antithesis: What information is public.

- What an employer/client knows BEFORE first meeting.

- What the other party knows on a first date.

Misfiring Heuristics

- AOL – Harvard Early Action

- Packet Floods

- Relaying Email

- Personnel Information

AOL – Harvard Early Action

- "Early Action" letters

- identical text

- ".edu" domain

- mass recipients

- "obviously" SPAM

Discriminatory Effects

- email newsletters

- unpublished criteria

- SPAMMER labeling

Survellance and Data Gathering

- Admissibility

- Profiling

- difference between "meets pattern" and guilt

- presumptive scenarios

Presumptive Guilt

- "The Shopping Secretary"
- "The Business Traveler"

"The Shopping Secretary"

- large purchases

- unexplained cash deposits

- access to sensitive information

- Obviously Guilty — Right? Wrong!!

"The Business Traveler"

- Out of Town

- The Hotel

- The telephone call

- Woman 20 years younger

- Physical affection

- A compromising situation — Right? Wrong!!

http://www.nytimes.com/1998/03/19/technology/forget-big-brother.html

Dangers –

- outside organizations

- gossip

- notification

- prosecution

Matching Patterns

- Incidental items can form patterns

- When/what inferences can be drawn

- When do you want to announce a pregnancy?

- Family disclosure.

- Incidental third parties

http://www.reuters.com/article/2013/08/01/us-usa-explosions-boston-blogger-idUSBR

Outside Organizations

- loss of control

- outside agendas and issues

- out of context

- containment failure

When matches go wrong

- Remarks taken out of context
- Ever said "You are dead!"?
- Ever said "Going to wreck the place."
- Who is watching?
- What is their perspective?
- Get searched/arrested/deported.

http://www.bbc.com/news/technology-16810312

Gossip – Information Distribution

- ▪ Gossip can be as damaging as prosecution

- ▪ Breach of confidentiality

- ▪ Job discrimination

Notification

- Collateral damage
- loss of control
- 2 + 2 = 17

Prosecution

- legal costs – all sides

- stopping is difficult

- may prejudice future cases

Failures of Planning

- Distributed Malaise

- Floods

- Loss of connectivity

- Cascades

Distributed Malaise

- AOL router update

- Email servers

- clogged senders

- no contingency plan

- no outside MX

- "A client SHOULD keep a list of hosts
  it cannot reach and corresponding connection
  timeouts, rather than just retrying queued
  mail items." – RFC 2821 4.5.4.1

Floods

- Can be hostile
- Can be configuration errors
- Can be software/firmware bugs
- How do you tell the difference

How can we deal with this?

- Pride goeth before the fall. Understand your limits

- Rigorously check presumptions

- Think carefully!

- Measure twice – Cut once

Questions?

Robert Gezelter Software Consultant
35 – 20 167th Street, Suite 215
Flushing, New York 11358 – 1731   gezelter@rlgsc.com
United States of America   http://www.rlgsc.com
Session Notes & Materials:
      http://www.rlgsc.com/stjohns/2014/index.html