

April 19, 2021

Social Engineering



- Social Engineering
- Ethics
- Paper Presentations
 - April 19th - Ross
- Final Exam
 - Monday, April 16, 5:30PM in the normal classroom
- Assignments
 - Project
 - Presentation: Monday, Apr 26

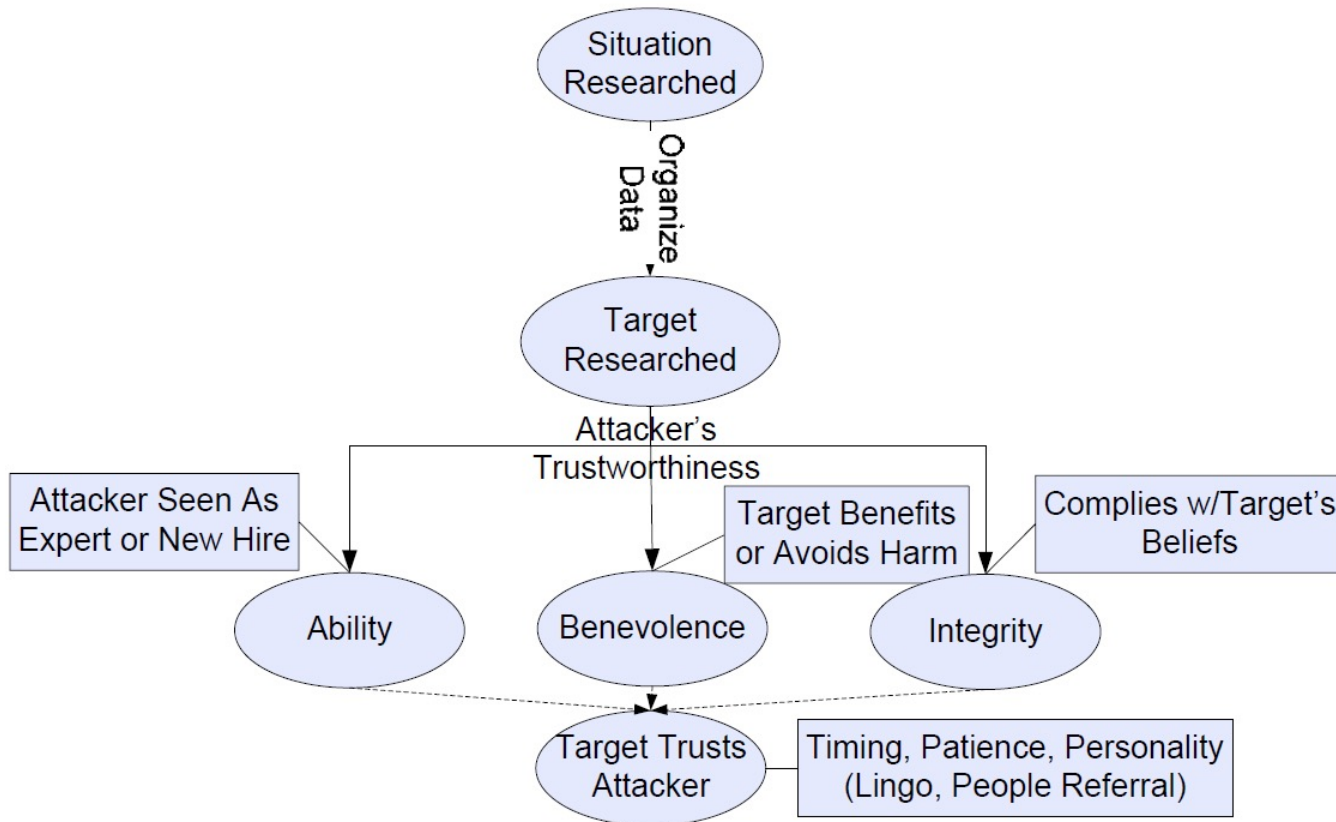
A Quote from Kevin Mitnick

“You could spend a fortune purchasing technology and services from every exhibitor, speaker and sponsor at the RSA Conference, and your network infrastructure could still remain vulnerable to old-fashioned manipulation.”

Goals of Social Engineering

- Influence Opinion
- Theft
 - Monetary
 - Intellectual Property
 - State Secrets
- Extortion
- Mayhem

Trust Model



Opsec

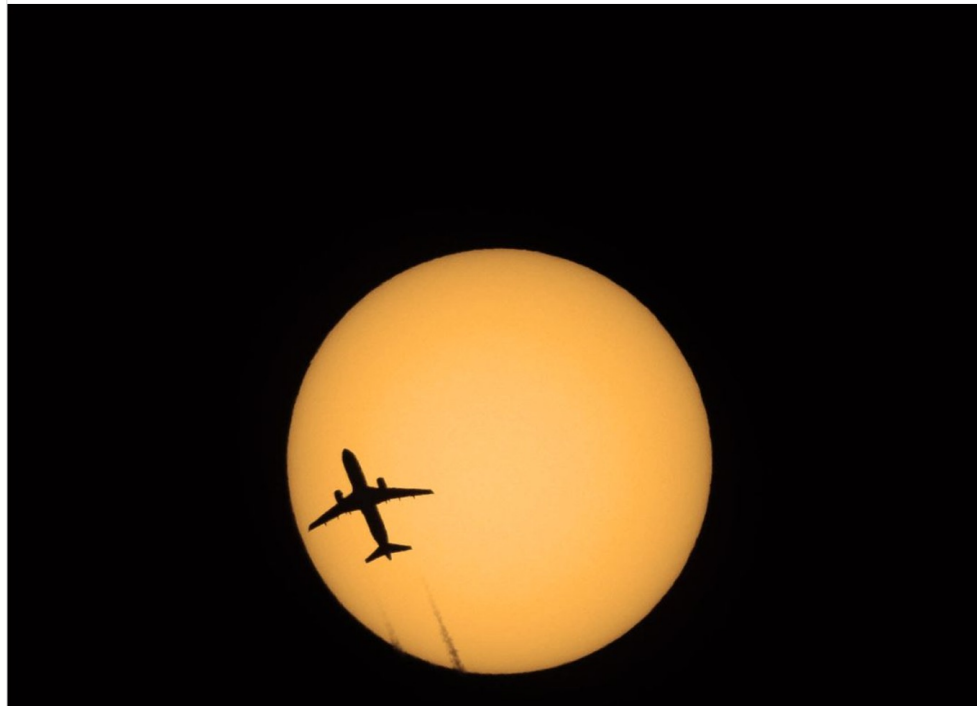


Lou Brutus ✓

April 5 at 2:18 PM · 🌐



BULLSEYE! Cruising at an altitude of 31,311ft with a speed of 483mph, [JetBlue](#) flight B62528 transits the face of the Sun while traveling from Orlando FL to Newark NJ today. This particular aircraft, a twelve-year old [Airbus](#) A320-232 using tail ID N768JB, made its first flight on December 01, 2009. [#Astrophotography](#) [#SolarPhotography](#) [#JetBlue](#) [#Airbus](#)



Types of Attacks

Legal and Ethical Issues

Question:

Should schools offer a course that teaches students
how to hack systems?

Ethical Issues

- Ethical adj. 1. pertaining to or dealing with morals or the principles of morality; pertaining to right and wrong in conduct. 2. in accordance with the rules or standards for right conduct or practice, esp, the standards of a profession.
- Examples:
 - Should companies collect and/or sell customer data?
 - Should IT specialists monitor and report employee computer use?
 - Should you act on information you inadvertently see due to having administrator privileges?

Consider Your Views on Ethical Behavior

- In every job situation, we are all eventually faced with an ethical dilemma
- How will you react? How will you determine what the “right” course of action is? What are you willing to risk to do the “right thing”?
- How far are you willing to bend? And when?
- Recommendation: As you read about these issues during your studies, take time to reflect on what you would do

Are Your Ethics Contextual?

- Are they unchanging or contextual?
 - Folks know that downloading music or software they don't own is illegal, but do so anyway because they don't believe that it hurts the owners of the IP (intellectual property)
 - You have an expectation of privacy (lockers, email, etc.) except if there is suspicion of wrong doing
 - Never tell a lie....except if
- Somehow, legal doctrine must codify these complicated and contextual courses of action

Framework for Ethics

- What motivates us to view issues a certain way?
- Are we consistent in the way we approach ethical issues?
- How do we resolve conflicts in approach?
- Two basic camps:
 - consequence-based and
 - rule-based

From: "Case Studies in Information and Computer Ethics", Richard Spinello, Prentice-Hall, 1997

Consequence-Based Ethics

- Priority is given to choices that lead to a “good” outcome (consequence)
- The outcome outweighs the method
- Egoism: the “right choice” benefits self
- Utilitarianism: the “right choice” benefits the interests of others

Rule-Based Ethics

- Priority is given to following the rules without undue regard to the outcome
- Rules are often thought to codify principles like truthfulness, right to freedom, justice, etc.
- Stress fidelity to a sense of duty and principle (“never tell a lie”)
- Exist for the benefit of society and should be followed

Another Question

- You are the security officer for a university network. You suspect that students are using P2P appliances to upload copyrighted music that they do not own. This violates federal law (DMCA) and is against the University computer use code.
- What are you going to do about it? Where is your comfort level?
- Options:
 - Do nothing until a suspicion is brought forward
 - Bandwidth limit P2P with a packet shaper
 - Filter P2P outright
 - Actively monitor the network looking for P2P
 - Read the local newsgroups and follow leads when P2P is discussed

Four Ethical Issues of the Information Age¹

- Privacy- right of individual to control personal information
- Accuracy – who is responsible for the authenticity, fidelity, and accuracy of information?
- Property – Who owns the information? Who controls access? (e.g. buying the IP verses access to the IP)
- Accessibility – what information does an organization have the right to collect? Under what safeguards?

1: Richard O. Mason, Management Information Systems Quarterly, Volume 10, Number 1, March 1986