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Loss of Trust Due to Hacking

Computer hacking can potentially cause monetary, emotional, and even physical damage. Even if there is no apparent damage caused by a hacker's attack, trust is damaged by all forms of hacking. This loss of trust has far reaching effects; in the Cuckoo's Egg Clifford Stoll says that hacking isn't "measured in dollars ripped off, but rather in trust lost" (196).

Trust in the compute network is what allows us to purchase goods and services, communicate with friends, and collaborate with colleagues online. You trust that the information you provide to an organization will be kept safe. You trust that when you send an email to your friend that it will arrive unmodified and safe to open. You trust that the medical equipment your doctor uses will function correctly.

A hacker can easily break this trust with potential deadly and unintended consequences. Stoll talks about how the hacker he was tracking broke into the Bevatron computer system. This computer was used in cancer treatments and an error could result in healthy cells being killed instead of the cancer cells. The hacker not knowing the purpose of this system began to modify the operating system, unaware that his actions could cause the computer to malfunction and potentially kill someone (243).

Hackers spread "distrust and paranoia" (Stoll, 417) and make people worry if the networks and software they use are safe. Stoll argues that networks "can only exist when people

trust each other” (372). He also talks about how this lack of trust discourages organization from funding improvements to the network (196). He goes on to argue that “a hacker’s abuse of this openness might mean the end of the casual, communal way the networks are run” (353).

In addition to hackers spreading fear about the networks, their hacking also causes fear of public software and causes people to “blame every software quirk on viruses” (Stoll, 371). Public software is useful in that it can enable people to use the solutions that others have already built to solve their problems. Stoll was faced with the problem of creating a software program to model how much different telescope designs would bend. Fortunately, he was able to find an already written program that did what he needed, and didn't have to spend the time to write it himself (159). Using this program required him to trust it would function correctly and did not contain malicious code placed there by a hacker. “People stop trusting public software, and eventually the sources of public software dry up” (Stoll, 395).

While hacking can result in losses of data, time, and money these are often reparable. Insurance and consumer protection laws can help restore money stolen by hackers (FTC). The time and effort spent securing the system makes it more resistant to later attacks. Despite this, there is no easy way to repair the trust lost by a hacker breaking into a system.

Recently several users of Apple's iCloud service suffered from a data breach that resulted in photos of them being released into the public. Despite Apple's claims that their iCloud service was not breached (Kerris), this incident caused users to lose trust in Apple's ability to protect their data.

A hacker may feel that they are “ethically neutral” (Stoll, 364) or even ethically justified in their actions. Nevertheless, all forms of hacking whether for fun, curiosity, profit, or espionage

cause a loss of trust. “When someone breaks into a computer, they destroy that trust” (Stoll, 196). “To preserve our sense of trust . . . we have to take it seriously when people break that trust” (Stoll, 353).

Works Cited

Kerris, Natalie. "Apple Media Advisory - Update to Celebrity Photo Investigation." *Apple Press Info*. Apple, 2 Sept. 2014. Web. 23 Feb. 2015.

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Stoll, Clifford. *The Cuckoo's Egg: Tracking a Spy through the Maze of Computer Espionage*. New York: Doubleday, 1989. Kindle Edition.