Ethics and Security

Final Exam

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**Q.2 In class, we discussed five possible solutions to spam. Are these solutions ethical? What problems might they create?**

**1. Require an explicit opt-in of subscribers**

**2. Require labeling of email advertising (all commercial emails must write ADS on the subject line)**

**3. Add a cost to every email that is sent for ads. A micropayment system is proposed**

**4. Ban unsolicited email by laws (laws to prohibit spam as those laws made to junk faxes)**

**5. Increase sophistication of SPAM filters and apply the solutions to texts.**

**Answer:**

**1.Require an explicit opt-in of subscribers**

According to my opinion it is ethically correct. The user must have a choice that he/she wants to opt in the service of receiving the email feeds.

**2. Require labeling of email advertising (all commercial emails must write ADS on the subject line)**

According to my opinion every advertising email should have advertisement label so the user may or may not check advertisement email but if you do not add label user may check the email and find it annoying.

**3.Add a cost to every email that is sent for ads. A micropayment system is proposed**

According to my opinion its is not ethical as everyone has right to marketing their products. If it is implemented, it would be very costly to market for various companies and the revenue may fall. Also, customer could not get the benefits of promotion and deals communicated through email.

**4. Ban unsolicited email by laws (laws to prohibit spam as those laws made to junk faxes)**

According to my opinion, banning unsolicited spam emails is ethically correct as user has right to prohibit the spam emails. Users are getting may more spam mails now a days. Maybe it should contain the virous.

**5. Increase sophistication of SPAM filters and apply the solutions to texts.**

According to my opinion it is ethically correct. It would give more flexibility to the user.

**Q.3 Read the article: “JBS paid $11 million ransom after cyberattack” (CBS News, June 10, 2021) https://www.cbsnews.com/news/jbs-ransom-11-million/**

**1. Which categories of cyber security were influenced by this attack?**

**2. Which elements of cyber security were influenced by this attack?**

**3. What was the motivation of the attackers?**

**4. What tools were used in the attack?**

**5. How could the company have prevented this?**

**6. Is the company morally responsible for the disruption of service.**

**You may look up other news sources to learn more about this event if you think it will help you answer the question, but you must be sure to reference them.**

**Answer :**

**1. Which categories of cyber security were influenced by this attack?**

**--Denial of Service influenced the cyber attack on the JBS.**

**2. Which elements of cyber security were influenced by this attack?**

* **Application security: Company application is compromised.**
* **Network Security: Hackers hacked the network of the JBS.**
* **Operational Security: Operation of the centralised system is compromised.**
* **Information security: Attacker hacked the data and shutdown the system.**

**3. What was the motivation of the attackers?**

Attackers demanded the ransom from the company. So money is involved in this attack.

**4. What tools were used in the attack?**

Ransomeware is used to attack the company internal network.

**5. How could the company have prevented this?**

The attack could be prevented

1.Early detection

2.Robust it infrastructure.

**6. Is the company morally responsible for the disruption of service.**

Yes, company is morally responsible for the disruption of the service. Many plants are shut down immediately and shortage of meat in all over the country. Employees also got affected .

Brand value of the company is also compromised.

**Q.1 Research online an instance in which a company violated the guidelines of Fair Data as discussed in class. With reference to the areas and categories, we discussed in class to determine if data if fair (think provenance and fidelity):**

**1. Briefly describe the situation.**

**2. Using the definitions provided in class, (e.g., biased systems) identify all the Fair Data guidelines the company violated.**

**3. Again, in reference to ideas discussed and presented in class, provide some suggestions for how the company could ethically address the violations and ensure Fair Data.**

**Ans:**

References:

* <https://www.digiaware.com/2021/07/cybersecurity-case-study-jbs-ransomware-cyberattack-worlds-biggest-meat-supplier/>
* <https://www.intelice.com/jbs-ransomware-attack/>
* https://www.cbsnews.com/news/jbs-ransom-11-million/