

# CIS-481: Introduction to Information Security

## InfoSec Chapter Exercise #3 - Option D

**Team: Seven**

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### Logistics

- A. Get together with other students on your assigned team in person and virtually.
- B. Review the four options available and decide on only one to pursue as a team.
- C. Discuss and complete this assignment in a collaborative manner. Don't just assign different problems to each teammate as that defeats the purpose of team-based learning.
- D. Choose a scribe to prepare a final document to submit via Blackboard for grading, changing the file name provided to denote the number of your assigned **Team**.

### Problem 1

The FBI maintains an extensive site dedicated to cybercrime:

<https://www.fbi.gov/investigate/cyber>

Related is the FBI's Internet Crime Complaint Center:

<https://www.ic3.gov/>

1. What are the FBI's key priorities in preventing cyber crime and abuse? *(10 points)*
  - The first key priority is computer and network intrusions. They are concerned with counterterrorism, counterintelligence, and criminal cases.
  - The second key priority is ransomware attacks. Ransomware is a type of information extortion. Stolen or inactivated assets may be held hostage to extract payment of ransom. It is malware designed to block access to a system or data until a sum of money is paid. Most ransomware encrypts files on the affected computer, making them inaccessible, and payment is demanded in exchange for restoration. The FBI does not recommend paying the ransom because there is no guarantee the data will be recovered.
2. Review the most recent Annual Report of FBI's Internet Crime Complaint Center. Describe the 5 previous years' complaint statistics. *(5 points)*
  - There have been a total of 1,707,618 complaints to the IC3 from 2015-2019.
  - In 2015, the total number of complaints was 288,012. From 2015 to 2016, the number goes up by about 10,000, totaling with 298,728. In 2017, there was a small increase in the number of complaints, ending with 301,580. However, during the next two years, there is a big spike in the number of complaints. In 2018, the number goes to 351,937—in 2019, it increases to 467,361. Within two years, the number of complaints went up by about 150,000.
  - From 2015-2019, there has been a rounded value of nearly \$10.2 billion lost. Beginning in 2015, there was a loss of about \$1.1 billion. In 2016, that number rose to about \$1.5 billion. In 2017, that number went back down to about \$1.4 billion. However, just like the number

of complaints, the numbers began to spike. In 2018, the amount of money lost went up to nearly \$2.7 billion. Then, in 2019, that number rose even further to nearly \$3.5 billion. It's evident that 2018 and 2019 were the years that saw the most loss of money due to the huge number of claims from people who were dealing with cybercrimes.

3. Based on these, evaluate the effectiveness of applications of cybersecurity in preventing crime and abuse. *(10 points)*
  - There was a substantial jump between 2018 and 2019 in comparison to 2015-2017. When looking at the IC3 reports, 2015's main topics are compromised business emails, compromised email accounts, and ransomware. Comparatively, 2019 covered compromised business emails.
  - As computer literacy increases, the number of victims does too. In 2019, the largest age group that filed reports are those above 60 years of age. In addition, phishing scams were the most common crime type. As we can see by the aforementioned topics, email is susceptible to attacks.
  - Though more people are using personal devices such as laptops and smartphones, it does not mean they fully understand the risks. The majority of victims don't know they are being taken advantage of via phishing scams.
  - On the cybercrimes page there is a section regarding protections. This serves as the awareness portion of SETA. While all of the tips fall in line with standards, it doesn't seem like it is reaching people in this age group. For that reason, we cannot say it is effective.