Lab 1.2: Risk Worksheet Solutions IN618 Security

Exercise one

Suppose that a qualitative analysis rates the following risks as below.

Security Event	Event Probability	Resulting Harm
Web Site Defacement	Medium	Low
XSS Attack	High	Medium
Buffer Overflow on Web Server	Low	High
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Rate these risks from highest to lowest priority.

- 1. XSS Attack
- 2. Buffer Overflow
- 3. Defacement

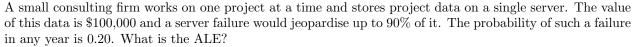
Exercise two

A web site generates \$25,000 per hour in revenue. The probability of a web site outage in any given year is 10% and such an outage would last 2 hours and cost \$1200 to correct. What is the Annual Loss Expectancy (ALE)?

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Cost of outage: (\$25,000 * 2 \text{ hours}) + \$1200 = \$51,200
Probability of outage in a given year: 0.1
ALE = cost * probability = \$51,200 * 0.1 = \$5,120
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Note: Some of our discussion around this in class was a bit muddled, so slightly different answers were accepted.

Exercise Three



ALE = cost * probability = (0.9 * \$100,000) * 0.2 = \$18,000

Exercise Four

You have a \$3 million data centre located in an area at risk of flooding. A major flood that would destroy the data centre occurs once every hundred years. Compute the ALE.

ALE = cost * probability = \$3,000,000 * 0.01 = \$30,000

Based on this ALE, would you recommend that the company spend \$35,000 per year to control this threat?

No. The cost to control the threat exceeds the cost of the threat.