

Lab #8: Cybersecurity Strategy Development

Grade: 6%

Objective

Leverage knowledge that you have obtained in the semester to propose a concise cybersecurity strategy for a hypothetical company, "TechSolutions," focusing on enhancing security in light of expanding remote work operations.

Scenario

TechSolutions, a software development firm, is transitioning to a predominantly remote work model. This shift raises concerns about securing sensitive data, maintaining secure access for employees, and defending against increasing cyber threats. The company's IT department, while experienced, is new to managing cybersecurity challenges in a remote work environment.

Task Overview

As a consultant, you are to draft a strategic outline covering key cybersecurity considerations for TechSolutions. Your strategy should be succinct, actionable, and tailored to the remote work model, focusing on immediate steps and technologies that can be implemented to mitigate risks.

Assignment Details:

1. Identify Key Threats (~1/2 page):

- a. Briefly describe three major cybersecurity threats that remote work may pose to TechSolutions. Consider aspects like data breaches, phishing, and insecure Wi-Fi connections.

2. Recommend Solutions (~1/2 page):

- a. **Endpoint Security:** Suggest strategies for securing employees' devices, including the use of anti-malware tools, VPNs, and encryption.
- b. **Identity and Access Management (IAM):** Propose an IAM approach incorporating multi-factor authentication (MFA) and secure password policies
- c. **Data Protection:** Outline methods for ensuring data privacy and integrity, focusing on encryption for data in transit and at rest.
- d. **Network Security:** Recommend tools and practices for securing network access, emphasizing cloud-based security solutions suitable for remote operations.
- e. You can add more solutions.

3. Training and Awareness (~1/2 page):

- a. Design a brief plan for an ongoing employee training program on cybersecurity awareness. Highlight key topics such as recognizing phishing attempts, secure use of home networks, and best practices for data handling.

4. Add a discussion and conclusion (~1/2 page):

Submission Guidelines:

- **Length:** 2 pages, single-spaced, font size 10, 1 inch margin on all sides.
- **Format:** Submit in PDF format, ensuring the document is well-organized with proper headings and clearly written.
- Cite all your sources in IEEE format.

Evaluation Criteria:

- Relevance - The strategy must directly address the unique challenges of remote work cybersecurity.
- Practicality- Recommendations should be actionable and feasible for a mid-sized company.
- Clarity- Ideas should be expressed clearly and concisely, with a logical flow.
- Comprehensiveness - Though brief, your submission should cover the spectrum of cybersecurity concerns relevant to the scenario.