CIS-481: Introduction to Information Security

Module 11 - Implementing Information Security

Exercise #11

Team: 5

Participants: Sam Martin, Abril Beascoechea, Charles Degboe, Nicholas Zhang, Ricardo Portillo

Logistics

A. Get together with other students on your assigned **Team** in person and/or virtually.

B. 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 and may impact your performance on assessments, especially with respect to the essay questions.

C. Choose a scribe to prepare a final document to submit via Blackboard for grading, changing the names of the two required files to denote the number of your assigned **Team**.

Problem 1 *(10 points)*

Name and describe the four basic conversion strategies discussed in the text on pages 437-438 that may be used when converting to a new system. Under which circumstances would each be considered the right approach?

Direct Changeover- Known as "cold turkey" this method means to stop the current method and to begin the new one. The right approach to use this method would be for something simple, like a new password protocol that employees have to follow.

Phased Implementation- This is the most common implementation technique and involves one part of the new system being brought out before the rest is. This technique will be used during an expansive security project implementation

Pilot Implementation- The entire security system will be placed in a singular office, department, or division before expanding out to the rest of the organization. This will work well when the isolated experimental group will not affect the business in any way so you can safely test out the new system without causing any harm.

Parallel operations- This involves running two different systems at the same time, an example could be two firewalls. You would use this when confidence lacks in the new system so the old one can be there for backup, the drawbacks are you have to maintain two systems at once.

Problem 2 *(15 points)*

Write a job description for Kelvin Urich, the project manager described in the opening scenario of this module (on pages 417-418). Be sure to identify key characteristics of the ideal candidate, as well as work experience and educational background. Also, justify why your job description is suitable for potential candidates for this position.

Position Title: Project Manager

Department: Information Technology

Reports To: Information Technology director

Location: Office/Remote

Job Overview: Responsible for the management of generally smaller projects or aspects of a larger program involving all duties and responsibilities to ensure the initiation, progressing, and completion of a project on time. Application of professional principles, techniques, and practice to lead and control the project in Cost, Schedule, Performance, and Risk to the satisfaction of customers. Manages schedule, progress, and provides feedback to the project team and project leadership.

Key Responsibilities:

Project Planning and Execution: Detail project plans to include tasks, subtasks, action items, timelines, and resource allocation. Ensure that the projects not only align with organizational goals but also with security policies.

Stakeholder Management: Communication of project objectives, plans, and status updates to stakeholders, including technical review committees, department heads, and senior management. Address concerns and ensure stakeholder buy-in.

Change Management: Facilitate change control meetings to present a change request and obtain the necessary approvals. Manage and document changes in project scope and schedule.

Risk Mitigation: Enumerate the risks and mitigation strategies. Perform threat analysis to guide security upgrades and project planning.

Team Coordination: Assign the task to appropriate team members, track their progress, and ensure all departments work with each other in collaboration. Identify problems found during project execution and fix them.

Documentation: Ensure that all documents on the project are complete, whether in the form of plans, reports, or change requests. Maintain all documents updated and available for the

relevant parties. Continuous Improvement: Review the project outcomes and processes to implement improvements in future projects.

Key characteristics:

- Strong social/teamwork skills
- Strong organizational and planning skills
- Strong technical skills (budgeting, risk management, writing/documentation)

Work Experience:

Previous leadership or management experience.
Technical analyst experience.

Educational Background:

This role should hold some or all of the following security project management certifications: GIAC Certified project manager, EC-Council IT Security Project management, SIA certified security project manager, and PMI project management professional.

Minimum of a Bachelor's degree in business management, computer science, IT, information security, etc, with a master's degree being preferred.

Why this job description is suitable:

This job description is suitable because it goes over the desired skills and knowledge for the role, as well as defining the responsibilities of the position. Expectations are laid out and content is based on context given from the textbook.