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**Performance Task 4 – Part 1**

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**Implementing Information Security for a Mid-Sized E-Commerce Company**

**Background**:

SecureShop is a mid-sized e-commerce company that specializes in selling customizable products. Over the years, the company has built a loyal customer base of 50,000 users across the country. Customers regularly use SecureShop's website to place orders and make payments, often storing their personal information and credit card details for convenience. However, SecureShop's growth has not been matched by a proportional investment in its IT infrastructure and information security systems.

Two months ago, SecureShop suffered a major security breach. Cybercriminals exploited vulnerabilities in the website's outdated payment system to access sensitive customer data, including names, addresses, email IDs, and credit card numbers. The breach affected 3,000 customers, leading to fraudulent transactions and identity theft.

The incident went public after a whistleblower revealed that SecureShop had delayed informing affected customers for two weeks. The resulting backlash caused a massive dip in customer trust, with sales dropping by 30%. The company is now under regulatory scrutiny and facing potential fines for non-compliance with data protection laws.

You are hired as the Information Security Project Manager for a mid-sized e-commerce company, "SecureShop." The company has recently experienced a significant security breach, where sensitive customer data, including payment details, was accessed by

unauthorized parties. This incident has damaged customer trust and highlighted vulnerabilities in SecureShop's information systems.

To prevent future breaches, the company's leadership has approved a comprehensive information security overhaul. They have provided a budget of P500,000 and a timeline of 8 months to complete the project.

**Scenario Details**:

1. **Security Needs**:

- Protect sensitive customer and business data.

- Ensure secure operations of web applications and payment gateways.

- Strengthen the overall technology infrastructure.

- Implement policies for data access control and employee training.

2. **Existing Challenges**:

- Outdated hardware and software systems.

- Lack of a formal security policy or procedures.

- Employees have minimal awareness of cybersecurity threats.

- Limited internal IT staff (a team of three people).

3. **Constraints**:

- The budget cannot be exceeded.

- Operations must continue with minimal downtime during implementation.

- Employee resistance to change is anticipated due to new policies and technologies.

4. **Project Phases to Consider**:

- Planning: Define tasks, assign roles, and schedule milestones.

- Execution: Implement new systems, train staff, and migrate data securely.

- Monitoring: Continuously track progress and address deviations from the plan.

- Closure: Document lessons learned and present a final project report.

**Problem Statement:**

You are tasked with creating a comprehensive project plan to implement SecureShop's new information security measures. Using your understanding of information security implementation, SDLC, project management, and change management, address the following:

**Questions to Solve**:

1. **Planning Phase**:

- What will your Work Breakdown Structure (WBS) look like?

   ➤ To implement a comprehensive information security overhaul for SecureShop, a clear Work Breakdown Structure (WBS) is essential. The WBS will break down the project into manageable tasks, helping ensure the project is completed on time, within budget, and with minimal disruption to operations.

- How will you prioritize tasks given the limited time and resources?

   ➤ Given the limited time, budget, and resources for the SecureShop security overhaul, task prioritization is crucial for ensuring that the most critical aspects of the project are addressed first and with sufficient attention. The goal is to maximize security improvement and compliance while minimizing disruption to ongoing operations.

2. **Technical Implementation**:

- Which conversion strategy (direct changeover, phased implementation, pilot implementation, or parallel operations) will you recommend for updating the payment gateway? Why?

   ➤ The Phased Implementation strategy is the best choice for updating the payment gateway at SecureShop. It allows for gradual transitions,

minimizes disruption to operations, ensures security and compliance, and provides the opportunity for thorough testing and troubleshooting.

3. **Resource Management**:

- How will you handle the constraints of a small IT team?

  ➢ Handling the constraints of a small IT team requires a combination of strategic outsourcing, process automation, and resource prioritization. By leveraging external expertise, automating tasks, and using efficient project management, SecureShop can successfully implement its information security overhaul without overwhelming its IT team. With careful planning, collaboration, and continuous training, the company can manage its resources effectively and ensure the success of the project within the defined budget and timeline.

4. **Change Management**:

- What steps will you take to reduce resistance from employees toward the new policies and technologies?

  ➢ By involving employees early, addressing their concerns, providing thorough training, and implementing a phased approach, SecureShop can minimize resistance and foster an environment where employees feel empowered to embrace the changes.

5. **Monitoring and Control**:

- How will you monitor the project to ensure it stays within budget and meets the timeline?

  ➢ To ensure that SecureShop's information security project stays within budget and meets the timeline, I would employ a combination of regular monitoring, project management tools, milestone tracking, and risk management. Clear communication, continuous monitoring of project performance, and quick adaptation to any issues that arise will help ensure the project stays on course. Using metrics like Earned Value Management (EVM), milestone tracking, and budget monitoring will allow us to stay proactive and make data-driven decisions throughout the project lifecycle.

6.    **Project Closure**:

- What key outcomes and deliverables will you document to present during the closure phase?

  ➢ The Project Closure phase is a critical step in ensuring that SecureShop's information security overhaul is properly concluded and that all aspects of the project are documented for future reference and continuous improvement. By providing clear, detailed documentation of outcomes, deliverables, lessons learned, and future plans, you not only demonstrate the success of the project but also create a foundation for future enhancements and the ongoing protection of the company's data and systems.