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**Performance Task 5**

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| **Direction:** Read carefully the given scenario and answer the set of questions provided below.    **SCENARIO: ANALYZING RISKS IN DEVELETECH**  Develetech, a leading tech company renowned for its innovative solutions, has recently expressed concerns about the security of its server room located on the first floor of its main headquarters. The room, strategically positioned next to the bustling main lobby, serves as the nerve center housing critical infrastructure including the employee data server and client data server.  As the appointed security analyst, you embark on a meticulous journey to conduct a comprehensive risk analysis of the server room's physical security. Upon arrival, you observe the room's layout: it boasts no windows, a deliberate choice to minimize external vulnerabilities. However, this also means that anyone gaining unauthorized access would have the advantage of operating without detection from prying eyes outside.  Your assessment begins with the primary entry point - a sturdy door equipped with a numeric keypad lock. While this provides a layer of access control, you note potential weaknesses such as the risk of unauthorized individuals obtaining the code through observation or social engineering tactics. Additionally, the reliance on a numeric keypad raises concerns about the susceptibility to brute force attacks if the code lacks complexity or is not changed regularly.  Moving beyond the door, you scrutinize the surrounding environment. The proximity to the main lobby, while convenient for authorized personnel, presents a heightened risk of unauthorized access by individuals who may blend into the flow of foot traffic or exploit distractions during peak hours. Moreover, the lack of surveillance cameras in the immediate vicinity diminishes the ability to monitor and respond to suspicious activities effectively.  As you delve deeper into your analysis, you consider the potential consequences of a security breach within the server room. The compromised employee and client data servers pose a significant threat not only to Develetech's proprietary information but also to the privacy and integrity of sensitive data entrusted to the company by its employees and clients.  Armed with your findings, you compile a detailed report outlining the vulnerabilities identified along with recommendations to bolster the physical security of the server room. Your proposed measures include enhancing access controls through the implementation of biometric authentication systems, augmenting surveillance coverage with strategically placed cameras, and reinforcing employee training initiatives to promote vigilance and adherence to security protocols.  As Develetech weighs the implications of your analysis and deliberates on the proposed security enhancements, your insights serve as a critical catalyst for safeguarding the integrity and confidentiality of the company's vital assets housed within the server room.  **QUESTIONS:**   1. What are the specific concerns Develetech has regarding the security of its server room?   Develetech will face concerns such as unauthorized access to server room, risk of social engineering, numeric keypad vulnerability to brute force attacks, and lack of surveillance cameras in the area   1. Why is the server room strategically positioned next to the main lobby? What advantages and disadvantages does this location pose for physical security?   Convenient access to the server room is beneficial for personnel who frequently need it, but it also increases the risk of unauthorized access due to high foot traffic and potential for blending in.   1. Describe the primary entry point to the server room. What security measures are in place, and what potential weaknesses do they present?   Access control at the entry point is secured through a numeric keypad lock, addressing potential weaknesses such as code observation and brute force attacks, despite the robust security measures in place.   1. How does the absence of windows in the server room impact its security? What are the trade-offs of this design choice?   The security impact of windows in a room can significantly reduce external vulnerabilities, but they also increase the risk of undetected breaches, as seen from outside.   1. What risks are associated with the proximity of the server room to the main lobby? How might unauthorized access occur in this scenario?   The busy nature of the lobby increases the risk of unauthorized access, as individuals may blend in with foot traffic or exploit peak hours. Unauthorized access scenarios include tagging or piggybacking behind authorized personnel.   1. How would a breach in the server room's security affect Develetech's proprietary information and the privacy of sensitive data belonging to employees and clients?   Confidentiality of client data is at risk due to potential misuse, posing a significant risk to Develetech's operations and potentially affecting its reputational standing.   1. What recommendations did the security analyst propose to enhance the physical security of the server room? How would each recommendation address the identified vulnerabilities?   Biometric Authentication Systems - Stronger systems, utilizing unique biological traits, reduce the risk of code observation or social engineering, enhancing security and efficiency.  Surveillance Cameras - Enhances monitoring and response to suspicious activities by strategically placing cameras to ensure quick detection and swift action.  Employee Training Initiatives - Regular training promotes vigilance and adherence to security protocols, enhancing the overall security of the organization.   1. What role do surveillance cameras play in mitigating security risks in the server room's vicinity? Why is their absence a concern?   Real-time monitoring and surveillance are crucial in preventing unauthorized access and detecting suspicious activities, thereby enhancing the effectiveness of risk mitigation measures and ensuring effective response to potential threats.   1. How might the implementation of biometric authentication systems improve access control to the server room? What are the advantages of this approach?   Biometric systems provide unique access control, reducing risks associated with code sharing and observation. They are quicker, more convenient, and harder to bypass than numeric keypads, making them more secure.   1. What measures can be taken to reinforce employee training initiatives and promote vigilance regarding security protocols in and around the server room?   Regular security awareness workshops and training sessions are essential for implementing security protocols. These workshops provide clear guidelines on reporting suspicious activities and incidents. Encouraging a culture of security through communication and rewards, and ensuring employees understand the importance of adhering to security protocols are also crucial. |