

## **Case Study: IT Systems Audit Using Computer-Assisted Audit Tools & Techniques (CAATTs)**

**Scenario:** A retail company with multiple branches processes thousands of transactions daily, including sales, inventory updates, and financial records. An IT systems audit was conducted using CAATTs to assess the reliability of the transactional system, the effectiveness of access controls, and the system's compliance with regulatory requirements. The tools used included data extraction software (e.g., ACL, IDEA), real-time monitoring, and automated control testing scripts.

### **Key Findings:**

1. Duplicate sales transactions due to processing errors.
2. Weaknesses in access control, with some employees having excessive system privileges.
3. Unencrypted data transfers exposing the company to regulatory risks.

### **Recommendations:**

- Implement data cleansing and validation routines.
  - Enforce stricter role-based access controls and periodic reviews.
  - Strengthen data encryption protocols and monitor compliance regularly.
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### **Examination Questions:**

1. Describe the role of data extraction tools such as ACL and IDEA in the audit process. How do these tools contribute to the detection of duplicate transactions and data anomalies?
2. Explain how automated testing scripts are used to validate access controls during an IT systems audit. What specific risks do such scripts help identify?
3. In the case study, real-time monitoring tools were employed during the audit. What are the benefits of using continuous auditing techniques in high-volume transactional environments?
4. Based on the findings, the audit revealed unencrypted data transfers. Discuss the potential risks and regulatory implications of unencrypted data in an organization, and suggest measures to address this issue.
5. After identifying access control weaknesses, the auditors recommended enforcing the principle of least privilege. Explain what this principle entails and how it can be implemented to enhance security in the company's IT system.