## Risk register

### **Operational environment:**

The bank is located in a coastal area with low crime rates. Many people and systems handle the bank's data—100 on-premise employees and 20 remote employees. The customer base of the bank includes 2,000 individual accounts and 200 commercial accounts. The bank's services are marketed by a professional sports team and ten local businesses in the community. There are strict financial regulations that require the bank to secure their data and funds, like having enough cash available each day to meet Federal Reserve requirements.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Asset** | **Risk(s)** | **Description** | **Likelihood** | **Severity** | **Priority** |
| Funds | Business email compromise | *An employee is tricked into sharing confidential information.* | 3 | 3 | 9 |
| Compromised user database | *Customer data is poorly encrypted.* | 2 | 3 | 6 |
| Financial records leak | *A database server of backed up data is publicly accessible.* | 2 | 2 | 4 |
| Theft | *The bank's safe is left unlocked.* | 2 | 2 | 4 |
| Supply chain disruption | *Delivery delays due to natural disasters.* | 1 | 1 | 1 |
| Notes | *How are security events possible considering the risks the asset faces in its operating environment?* | | | | |

**Asset:** The asset at risk of being harmed, damaged, or stolen.

**Risk(s):** A potential risk to the organization's information systems and data.

**Description:** A vulnerability that might lead to a security incident.

**Likelihood:** Score from 1-3 of the chances of a vulnerability being exploited. A 1 means there's a low likelihood, a 2 means there's a moderate likelihood, and a 3 means there's a high likelihood.

**Severity:** Score from 1-3 of the potential damage the threat would cause to the business. A 1 means a low severity impact, a 2 is a moderate severity impact, and a 3 is a high severity impact.

**Priority:** How quickly a risk should be addressed to avoid the potential incident. Use the following formula to calculate the overall score: **Likelihood x Impact Severity = Risk**

## Sample risk matrix

**Severity**

**Likelihood**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Low  1 | Moderate  2 | Catastrophic  3 |
| Certain  3 | 3 | 6 | 9 |
| Likely  2 | 2 | 4 | 6 |
| Rare  1 | 1 | 2 | 3 |

## Scores Explanation

**Likelihood scores:**

Business email compromise: 3 (High likelihood due to the large number of employees and remote work vulnerabilities)

Compromised user database: 2 (Moderate likelihood given poor encryption practices)

Financial records leak: 2 (Moderate likelihood, depending on the accessibility of backup servers)

Theft: 2 (Moderate likelihood in a coastal area with potential for opportunistic theft)

Supply chain disruption: 1 (Low likelihood, influenced by natural disaster frequency)

**Severity scores:**

Business email compromise: 3 (High severity due to the potential sharing of confidential customer information)

Compromised user database: 3 (High severity as it affects customer data security)

Financial records leak: 2 (Moderate severity due to regulatory and financial implications)

Theft: 2 (Moderate severity, depending on the amount of cash or assets stolen)

Supply chain disruption: 1 (Low severity, impacting delivery but not core operations directly)