## 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.* | 2 | 3 | 6 |
| 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 | 3 | 6 |
| Theft | *The bank's safe is left unlocked.* | 1 | 3 | 3 |
| Supply chain disruption | *Delivery delays due to natural disasters.* | 2 | 2 | 4 |
| 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 |

**Explanation of Scores:**

**Business Email Compromise:**

* Likelihood: 2 (Moderate chance due to potential phishing attacks on employees)
* Severity: 3 (High impact as it can lead to significant financial and data losses)
* Priority: 6 (Moderate likelihood x High severity)

**Compromised User Database:**

* Likelihood: 2 (Moderate chance due to potential vulnerabilities in encryption)
* Severity: 3 (High impact due to the exposure of sensitive customer data)
* Priority: 6 (Moderate likelihood x High severity)

**Financial Record Leak:**

* Likelihood: 2 (Moderate chance due to potential misconfigurations)
* Severity: 3 (High impact as it can lead to severe financial and reputational damage)
* Priority: 6 (Moderate likelihood x High severity)

**Theft:**

* Likelihood: 1 (Low chance given the bank's low crime rate)
* Severity: 3 (High impact if it occurs, causing significant financial loss)
* Priority: 3 (Low likelihood x High severity)

**Supply Chain Disruption:**

* Likelihood: 2 (Moderate chance due to natural disasters in a coastal area)
* Severity: 2 (Moderate impact affecting operations temporarily)
* Priority: 4 (Moderate likelihood x Moderate severity)