**Vulnerability Assessment Report**

**1st July 20XX**

# System Description

The server hardware consists of a powerful CPU processor and 128GB of memory. It runs on the latest version of Linux operating system and hosts a MySQL database management system. It is configured with a stable network connection using IPv4 addresses and interacts with other servers on the network. Security measures include SSL/TLS encrypted connections.

# Scope

The scope of this vulnerability assessment relates to the current access controls of the system. The assessment will cover a period of three months, from May 20XX to June 20XX. [NIST SP 800-30 Rev. 1](https://docs.google.com/document/d/1pRpdpQMEWskxSkwqEMv8W7A7x8GXQlcn0hEcDzWet3Y/template/preview?usp=sharing&resourcekey=0-3GRRWAd8HryVgof-Jc33yA) is used to guide the risk analysis of the information system.

# Purpose

The database server is a centralized computer system that stores and manages large amounts of data. The server is used to store customer information, campaign details, and analytic data that can be used to track performance and personalize marketing efforts. It is critical to secure the system because it is required in regular marketing operations. If the customer data is compromised then it may impact company financial loss.

# Risk Assessment

| **Threat source** | **Threat event** | **Likelihood** | **Severity** | **Risk** |
| --- | --- | --- | --- | --- |
| *Hacker* | *Obtain sensitive information via exfiltration* | *3* | *3* | *9* |
| *Employee* | *Disrupt mission critical operations* | *2* | *3* | *6* |
| *Customer* | *Alter/Delete critical information* | *1* | *3* | *3* |

# Approach

Risks considered the data storage and management procedures of the business. Potential threats sources and events were determined using the likelihood of a security incident given the open access permissions of the information system. The severity of potential incidents were weighed against the impact on day-to-day operational needs.

# Remediation Strategy

Implementation of authentication, authorization, and auditing mechanisms to ensure that only authorized users access the database server. This includes using strong passwords, role-based access controls, and multi-factor authentication to limit user privileges. Encryption of data in motion using TLS instead of SSL. IP allow-listing to corporate offices to prevent random users from the internet from connecting to the database.