**Vulnerability Assessment Report**

**1st January 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 June 20XX to August 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 serves as a centralized repository for substantial volumes of critical business data, facilitating efficient storage and management. This server is employed to house essential customer information, campaign data, and analytical insights, enabling subsequent analysis for performance tracking and the customization of marketing strategies. The safeguarding of this system is paramount due to its frequent utilization in the execution of marketing operations, ensuring the protection of sensitive data and maintaining the integrity of marketing endeavors.

# 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 methods of the business. The likelihood of a threat occurrence and the impact of these potential events were weighed against the risks to 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.