**Project Proposal**

**Submitted by: NetSolutions IT Group**

**Course: Technologist Project (CNET 327, Sec: 006)**

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**Date: January 22, 2024**

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**Proposal to Paramount Superstore**

**From : NetSolutions IT Group**

**Title : Network infrastructure for Paramount Superstore**

This proposal is directed towards the development of the Network infrastructure of the newly emerging Paramount Superstore. This report defines the targeted objectives proposed by our networking team for the start-up of a superstore. The project will be limited by a set budget which will be discussed following the approval of the plan.

**Technical Objectives of the Network**

* DNS for mapping requests to correct IP addresses.
* DHCP services to provide IP addresses to all nodes.
* AD-DC to group and control access given to various endpoints.
* Web server for store's internal operations.
* Inventory management system hosted on the Web server.
* Wi-Fi service for the customers.
* VoIP service for the store operations.
* Firewall security to intercept internet traffic.
* Redundancy with a backup router, so if the main router with ISP fails, the market still has access to its inventory and the market website locally.

**Thesis**

NetSolutions IT Group offers a comprehensive proposal for crafting a resilient network infrastructure designed to cater to the specific requirements of Paramount Superstore. The primary objective of the project is to establish a secure and efficient network environment while adhering to a predetermined budget. This document delineates the principal technical goals aligned with the CEO's outlined specifications for Paramount Superstore.

These goals include implementing DNS for precise IP address mapping, deploying DHCP services for seamless IP allocation, employing AD-DC for centralized access control, and setting up a dedicated web server to host a mission-critical inventory management system for internal operations. Moreover, the proposal incorporates features such as customer-centric services like Wi-Fi and store operations-centric VoIP. The proposal underscores the importance of firewall security to intercept internet traffic and safeguard data integrity. To address potential risks, a redundancy plan with a backup router is suggested, ensuring uninterrupted access to inventory and the market website in the event of a main router failure. Upon approval, a detailed budget discussion will be initiated to facilitate the smooth execution of the project.

**Proposed Topology**

