SMB Network Assessment Report

# 1. Company Overview

This simulated assessment is based on a fictional small-to-medium business (SMB) with approximately 80 employees. The business operates out of a single office location and has a basic hybrid IT infrastructure comprising legacy on-prem systems and minimal cloud integration. The company is looking to modernize its network and improve its security posture.

# 2. Infrastructure Summary

The following components are currently part of the business IT infrastructure:

- Fortinet Firewall (edge security device)  
- Core switch (Dell/Cisco unmanaged)  
- Windows Server 2016 running Active Directory, DNS, and DHCP  
- Exchange Server 2013 (self-hosted email)  
- NAS device for local file storage  
- Department PCs (Sales: 20, HR: 10, Operations: 50)  
- Wi-Fi Access Point for mobile/BYOD access  
- Remote laptop users connected via VPN

# 3. Network Diagram

Below is the network layout diagram representing the current infrastructure:

# A computer screen shot of a computer network AI-generated content may be incorrect.4. Current Strengths

- Clear physical segmentation between internet and internal resources using a firewall  
- Centralized directory services (Active Directory)  
- Departmental separation of endpoints for organized access control  
- VPN access configured for remote work

# 5. Observed Weaknesses and Risks

- Exchange Server 2013 is outdated and unsupported, posing a security risk  
- No centralized inventory or asset management  
- Lack of modern cloud services (email, identity, backup)  
- No centralized endpoint security solution in place  
- On-prem storage introduces disaster recovery and scalability limitations

# 6. Suggested Next Steps (To Be Completed After Migration Plan)

This section will be completed in the next phase, outlining migration to cloud services, security enhancements, and modernization strategies.