# **Identifying Vulnerabilities for a Small Business**

As part of the cybersecurity portfolio, this report outlines the process of identifying vulnerabilities within a small business environment.

### Overview:

Small businesses often face challenges in securing their digital infrastructure due to limited resources and lack of dedicated IT staff. Identifying vulnerabilities is a critical step to enhance their security posture.

### Steps Taken:

- 1. Asset Inventory:
  - Reviewed hardware, software, and data assets in use.
  - Documented all endpoints and user access levels.

### 2. Risk Assessment:

- Identified risks associated with outdated software, weak passwords, and unencrypted data.
- Reviewed the business's exposure to phishing, ransomware, and insider threats.

# 3. Vulnerability Scanning:

- Simulated basic vulnerability scans using open-source tools.
- Detected outdated software versions and missing security patches.

### 4. Policy and Configuration Review:

- Reviewed existing security policies and device configurations.
- Identified gaps in firewall rules, default credentials, and remote access settings.

# 5. Social Engineering Test:

- Considered employee awareness by simulating phishing attempts.
- Highlighted the need for employee training and stricter access controls.

## Recommendations:

- Implement regular software updates and patch management.
- Adopt strong password policies and multi-factor authentication.
- Educate employees on cybersecurity best practices.
- Use basic endpoint protection tools to monitor and respond to threats.
- Schedule regular vulnerability assessments and audits.

## Conclusion:

Addressing the identified vulnerabilities will significantly improve the small business's resilience against cyber threats. This proactive approach supports a stronger security culture and prepares the organization for sustainable growth.