



## Cybersecurity Essentials: Understanding the Digital Battlefield

A Quick Guide for Staff – Provided by Alpha IT Solutions

### Introduction: Our Digital Vault

Cybersecurity is the practice of protecting our systems, networks, and data from unauthorised access. It acts as our digital high-security vault, ensuring three core principles:

- **Confidentiality:** Information is only accessible to those authorised to see it.
- **Integrity:** Data is accurate and has not been tampered with.
- **Availability:** Systems and data are ready for use when needed.

### Common Digital Threats

Awareness is our first line of defence. Be mindful of these common 'Digital Viruses':

- **Malware:** Broadly refers to any harmful software.
  - **Viruses:** Self-replicating programmes that corrupt data and steal information.
  - **Ransomware:** Encrypts files and demands payment for their release (e.g., the 2021 HSE attack).
  - **Spyware:** Secretly monitors activity to collect passwords and personal data.
  - **Trojans:** Disguise themselves as legitimate software to create 'backdoors' for attackers.
- **Phishing:** Deceptive emails or websites designed to trick you into revealing sensitive credentials.
- **Denial-of-Service (DoS):** Flooding a network with traffic to make it unavailable to users.



## Why It Matters

A single breach can have devastating consequences for our organisation:

- **Financial Impact:** Stolen funds, legal fees, and significant regulatory fines.
- **Reputational Damage:** Loss of customer trust and a decline in future business.
- **Legal Consequences:** Failure to protect data can lead to penalties under **GDPR**.
- **Ethical Responsibility:** Protecting customer data is not just a legal requirement; it is our duty to those who trust us with their information.

## Your 5-Step Security Checklist

1. **Use Strong Passwords:** Ensure they are long, unique, and never reused across accounts.
2. **Keep Software Updated:** Always install the latest security patches for your operating system and apps.
3. **Practice Safe Browsing:** Do not click on suspicious links or download files from untrusted sources.
4. **Maintain Antivirus Protection:** Ensure reputable antivirus software is installed and regularly updated.
5. **Be Sceptical:** If an offer or request seems too good to be true or creates artificial urgency, it is likely a scam.

**“Cybersecurity is an ongoing process, not a one-time fix. We are all in this together.”**

*For technical assistance, please contact the Alpha IT Solutions support team.*

