

# 3 Ways to Avoid the Computer Repair Guy

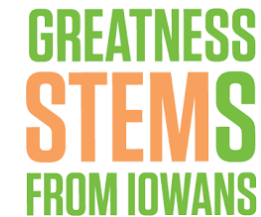
with **Ben Hayes**

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# Who am I?





# Class Outline

- Section 1 – Cyber Security Overview
- Section 2 – Protect Yourself
- Section 3 – Protect Your Device
- Section 4 – Protect Your Data

# Section 1: Cyber Security Overview

- Types and Threats
- Trends and Stats





# Types and Threats

- Malware
- Phishing



Types of Cybersecurity Threats StealthLabs		Malware	Phishing
Spear Phishing	Man in the Middle Attack	Denial of Service Attack	SQL Injection
Zero-day Exploit	Advanced Persistent Threats	Ransomware	DNS Attack

## Types of malware



# Malware

Malware, or malicious software, is any program or file that is intentionally harmful to a computer, network or server.

Types of malware include computer viruses, worms, Trojan horses, ransomware and spyware.

### ☐ Ransomware

- Encrypts a victim's data and prevents access until a ransom payment is made

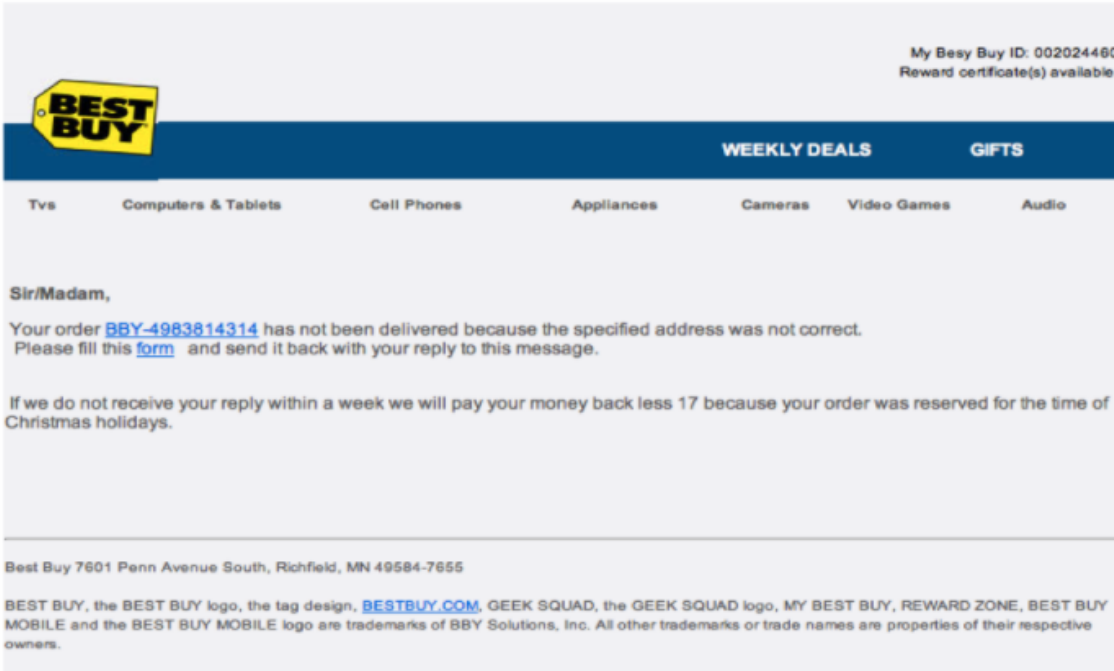
### ☐ Scareware

- An attack that claims to have detected a virus or other issue on a device and directs the user to download or buy malicious software to resolve the problem.



From: Best Buy <BestBuyInfo@fashionlab.com.ua>  
Subject: Special Order Delivery Problem  
Date: December 20, 2013 11:06:08 AM MST  
To: dave  
Reply-To: Best Buy <BestBuyInfo@fashionlab.com.ua>

Hide



# Phishing

Phishing is a type of social engineering attack often used to steal user data, including login credentials and credit card numbers.

It occurs when an attacker, masquerading as a trusted entity, dupes a victim into opening an email, instant message, or text message.

1 Attachment, 7 KB Save Quick Look

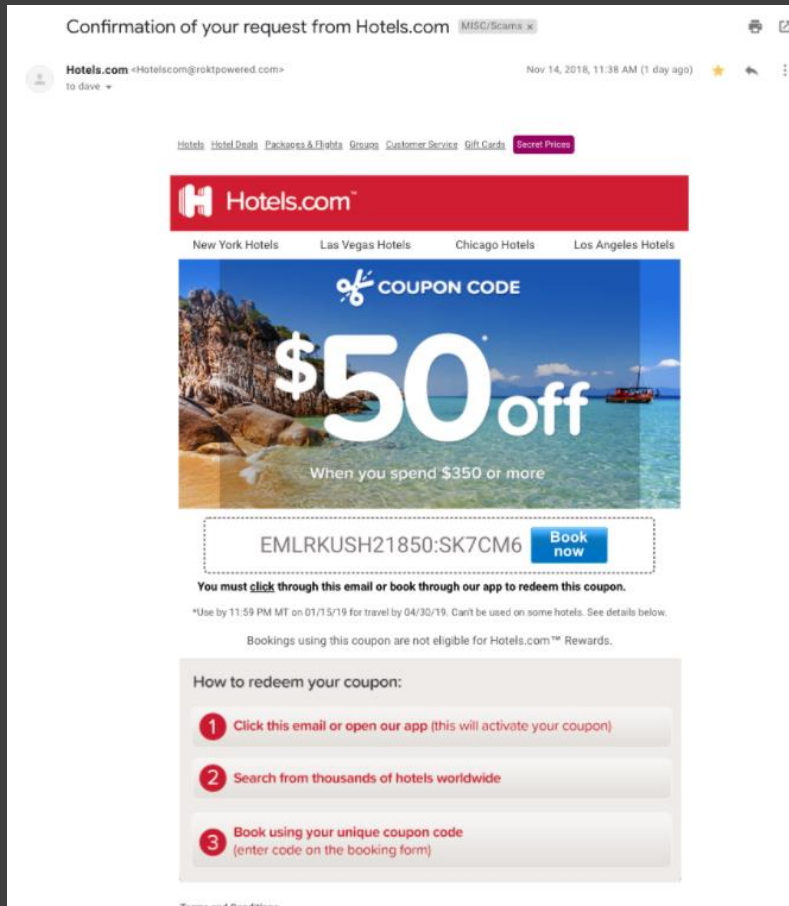
Dear customer,

We regret to inform you that your account has been restricted.  
To continue using our services please download the file attached to this e-mail and update your login information.

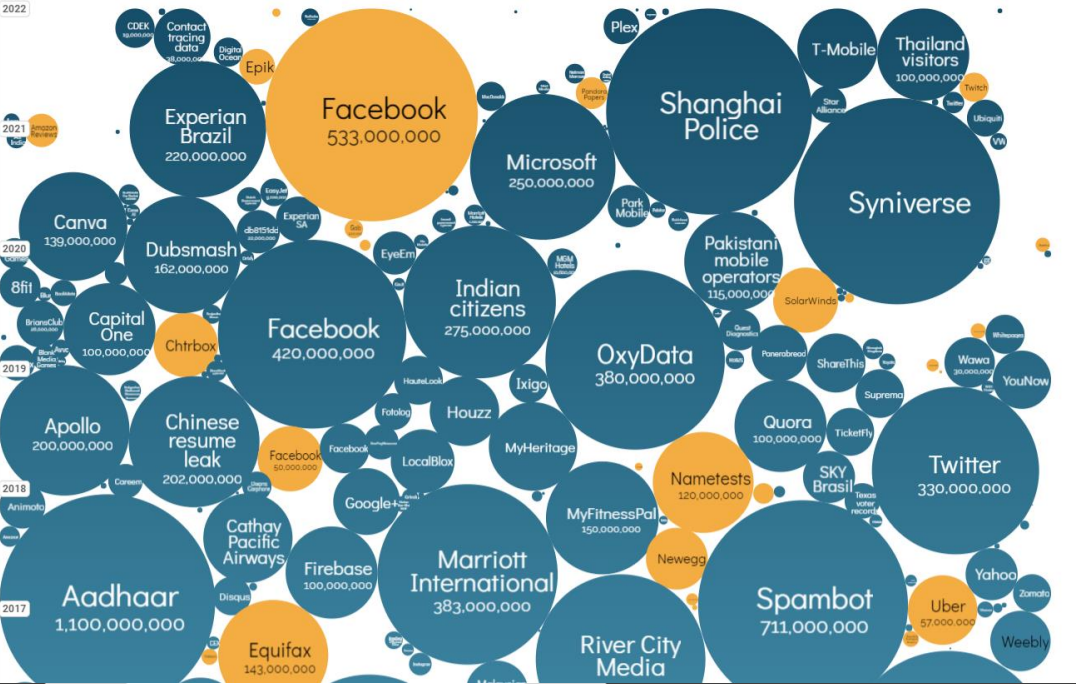
GlobalPaymentsInc



[update2816.html \(7 KB\)](#)







# Trends and Stats

- The global average cost of a data breach is USD 3.92 million
- Cybercrime breaches to increase by 76% by 2024
- Over 50% of all global data breaches to occur in the United States by 2023
- The average cost of a data breach to a US company is USD 7.91 million
- The average number of days to identify an incident is 206 days
- Cyberattacks on IoT devices increased by 300%
- Data breaches exposed 22 billion records in 2021
- The top malicious email attachment types are .doc and .dot which make up 37 percent; the next highest is .exe at 19.5 percent



<https://www.informationisbeautiful.net/visualizations/worlds-biggest-data-breaches-hacks/>



## Section 2:

### Tip #1 – Protect Yourself

- Password Practices
- Phishing Awareness
- Scareware Awareness
- Account Health Check
- Tools to Help





# Password Practices

- ❑ Passphrase
  - Still just a password, but longer
  - Most likely a sentence
  - Includes upper-case and lower-case letters and punctuation
  - Much more secure than a shorter password with more complexity
- ❑ Strong Passwords
  - Not easy to guess
  - Length is more important than complexity
  - Effective password should be no less than 14 characters
  - Don't share passwords with other accounts
- ❑ Multi-Factor Authentication
  - Prevents password guessing or brute force attacks
  - Requires more authentication to gain access



<https://www.security.org/how-secure-is-my-password/>



MS Online Services Team

msonlineservices@micosrftfonline.com



To You

Wednesday, April 24, 1:00 PM

13 July 2016 at 9:38 AM

IJ

To: [Redacted]  
Reply-To: [Redacted]  
Payment

Hi Michael,

Please find enclosed vendor banking instructions for a payment that was suppose to go out in the previous week. I need you to process it immediately.

I am a bit busy now but will give you a call within the hour regarding the payment.

Regards,

[Redacted]

Sent from my Mobile

Once you have successfully signed in, you can create a new password by following the instructions on the si

We appreciate your prompt attention to this matter, and look forward to continuing to meet your business ne

Thank you for choosing to host your IT solutions with Microsoft.

Sincerely,  
The Microsoft Online Services Team

# Phishing Awareness

- The message is sent from a public email domain
- The domain name is misspelled
- The email is poorly written
- It includes suspicious attachments or links
- The message creates a sense of urgency



# Scareware Awareness

- Never click links or download files from pop up ads or unfamiliar email senders.
- Install a pop-up blocker and spam filter which will detect many threats and even stop scareware pop up ads and infected emails from reaching your device.
- Invest in cybersecurity software from a reputable antivirus vendor and ensure all installations are up to date.
- Log into your account through a new browser tab or official app—not a link from a scareware alert, email or text message.
- Only access URLs that begin with HTTPS.
- Never share personal information, such as account numbers, passwords or credit card details, via phone, email or unsecured site.





';--have i been pwned?

# Account Health Check

Check your account health frequently as breaches happen all the time.

- Check if your email has been exposed in the Dark Web  
<https://haveibeenpwned.com/>
- Check if your passwords have been exposed  
<https://haveibeenpwned.com/Passwords>

The LastPass logo, featuring the word "LastPass" in black and red, followed by three red dots and a registered trademark symbol.

LastPass...



# Tools to Help

These tools can help protect you and make life online a lot easier to manage.

- LastPass – [www.lastpass.com](http://www.lastpass.com)
- AdBlocker Plus - [adblockplus.org](http://adblockplus.org)



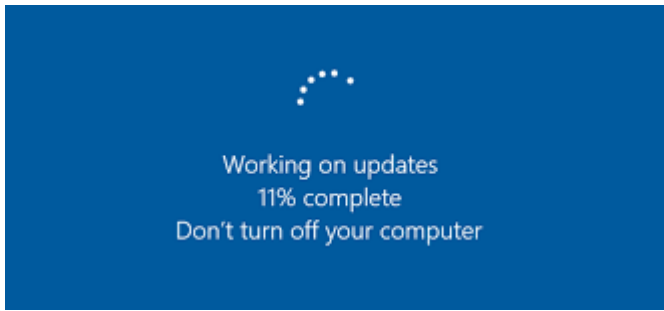


## Section 3:

### Tip #2 - Protect Your Device

- Software Updates
- Locking Your Devices
- Remove Unwanted Applications
- Malware Protection





# Software Updates

Hackers love security flaws, also known as software vulnerabilities. A software vulnerability is a security hole or weakness found in a software program or operating system.

Hackers can take advantage of the weakness by writing code to target the vulnerability. The code is packaged into malware.

An exploit sometimes can infect your computer with no action on your part other than viewing a rogue website, opening a compromised message, or playing infected media.





# Locking Your Device

Mobile technology allows us to perform many tasks while we are on the go, from online banking and shopping to emailing.

Mobile security is important as our smartphones hold a lot of sensitive data. Locking your phone is a simple security step, yet many people don't use a screen lock.

Generally, you should always lock devices that have sensitive data on them. This includes computers, mobile devices, and tablets.

Most devices have a setting that will automatically lock your device after a certain period of inactivity. This is especially beneficial if you tend to forget to lock your computer.

If you're on a mobile device, you may be able to restrict or lock individual apps through the settings on your phone.





# Remove Unwanted Applications

Old apps that no longer get updates or that you haven't updated in some time because you never use them can harbor serious security flaws.





# Malware Protection Tips

- Ensure you have anti-virus running on your device
- Use an email system that help filter out spam and potentially malicious links and downloads
- Use pop-up blockers and other add-ins that anti-viruses won't stop
- Use multi-factor authentication (MFA) whenever possible



## Section 4:

### Tip #3 – Protect Your Data

- Backups
- Internet Data
- Secure Browsing







# Backups

Backup software offers protection for data by copying desktops and laptops, and other devices in case of user error, malicious attack, corrupt files, or a physical disaster that renders personal data inaccessible.



<https://www.carbonite.com/>



# Internet Data

HTTP cookies are essential to the modern Internet but a vulnerability to your privacy. Cookies let websites remember you, your website logins, shopping carts and more.

Removing cookies can help you mitigate your risks of privacy breaches. It can also reset your browser tracking and personalization.

Removing normal cookies is easy, but it could make certain web sites harder to navigate. Without cookies internet, users may have to re-enter their data for each visit.





# Secure Browsing

- Incognito Mode - In Incognito, none of your browsing history, cookies and site data, or information entered in forms are saved on your device.
- VPN's - Hide your internet activity and location to avoid being tracked (especially on public WiFi networks).
- Anonymous Browsing – Use Tor Project Browser and VPN to help hide your identity.

<https://www.expressvpn.com/>  
<https://www.torproject.org/download/>



## Section 4: Conclusion

- Protect Yourself
- Protect Your Device
- Protect Your Data

