# Wis Fresh Fruit & Vegetable Conference

Protect your business from Cyber Threats

## Introduction

Mike Masino

**Program Director** 

Cyber Security Program, Madison College

mmasino@madisoncollege.edu

## Introduction

## **Denny Wright**

Instructor Network Specialist Program, Madison College

dwright2@madisoncollege.edu

Co-Owner The Wright Way Farm

thewrights@thewrightwayfarm.com

## Topics

- Phishing Attacks
- Weak Password/Authentication
- Malware
- Ransomware
- Social Media
- Web presence

## **Statistics:**

- The most widespread threat
- Accounts for 90% of all breaches
- Over 12 billion in business losses last year

What is it?

When an attacker pretends to be a trusted contact, and entices a user to click a malicious link, download a malicious file, or give them access to sensitive information, account details or credentials.

Why is it difficult to defend against?

- Social Engineering is used to target unsuspecting people
- The attack comes down to a person making a decision
- The best defense is educating users

## What can you do?

The best defense against phishing style attacks is recurrent Security Awareness Training for staff and employees.

- Madison College
  - https://my.madisoncollege.edu/app/catalog/showCourse/MATC1/006948/DEGR
- Expert Insights
  - o <a href="https://www.expertinsights.com/services/security-awareness-training/reviews">https://www.expertinsights.com/services/security-awareness-training/reviews</a>

# Questions?

## **Statistics:**

- 19% of employees
  - Use easily guessed passwords
  - Share passwords across accounts

## What is it?

Weak Password:

 Easily guessed or cracked password that can be quickly overcome by an adversary

#### **Shared Passwords:**

• Using the same password for multiple platforms

## Why is it difficult to defend against?

### Human nature

- People will tend to use something as easy as possible for a password unless complexity rules are enforced
- People will tend reuse passwords
  - They may use the same password on a less secure site.

## What can you do?

- Multi-factor Authentication
  - Google Authenticator
    - https://support.google.com/accounts/answer/1066447?co=GENIE.Platform%3DAndroid &hl=en
  - Google Multi-Factor
    - https://www.google.com/landing/2step/
  - Microsoft Multi-Factor
    - https://support.microsoft.com/en-us/help/12408/microsoft-account-how-to-use-two-step-verification
- Password Management Platforms
  - https://www.expertinsights.com/services/business-password-management/reviews

## Questions?

## **Statistics:**

From 2018 to 2019

- 350,000 Malware version identified every day
- New malware released every 7 seconds

## What is it?

Malicious code that hackers create to gain access to networks, steal data, or destroy data on computers.

Malware usually comes from malicious website downloads, spam emails or from connecting to other infected machines or devices

## **Examples:**

- <u>Viruses:</u> A harmful piece of code that enters your computer through being downloaded, or when you click a link. Viruses come in many shapes and forms and can have many effects on your device.
- <u>Spyware:</u> A particular kind of programme that enters your device (again, through being unintentionally downloaded or by you clicking on a bad link). Spyware watches what happens on your device and can capture information such as passwords or bank account numbers. It may also turn on your webcam and use this to watch what you type or to catch you doing something that might be embarrassing if others saw the video...
- Ransomware: Ransomware is a programme that enters your device (again, downloading, link clicking) and holds your device hostage. The programme will threaten to destroy your information unless you pay a ransom (which is generally in the form of Bitcoin nowadays, though it may be a wired amount of money).

## Why is it difficult to defend against?

- I has many different implementations
- It is a constantly evolving threat
- Most modern malware is designed by and for professional criminals

## What can you do?

- Personal vigilance,
- Products to filter for Malware
  - Network based
    - https://www.expertinsights.com/services/cloud-web-filtering /reviews
  - Endpoint based
    - https://www.techradar.com/news/best-endpoint-security-sof tware

# Questions?

## **Statistics:**

- One of the most common cyber-attacks
- 71% of ransomware attacks targeted small businesses (More likely to pay ransom)
- Average Ransom demand? 116,000.00
- Most lucrative form of attack

What is it?

Ransomware involves encrypting company data so that it cannot be used or accessed, and then forcing the company to pay a ransom to unlock the data.

## Why is it difficult to defend against?

- It is usually the end result of a combination of the other tactics used in this presentation
- Ex:
  - Phishing -> Malware -> Ransomware
  - Weak Passwords -> Ransomware
  - Insider Threat -> Ransomware

## What can you do?

- Start with using best practices in the other sections of this presentation
- IMPORTANT: Your best defense against a ransomware attack is to have a through backup strategy in place

# Questions?

## What is it

- Social media is an important part of your business's online image and advertising.
- Social media allows you to interact directly with customers from around the world

## Common threats

- Hacked accounts
- Stolen passwords
- Brand impersonation
- Uncontrolled user and account access

## Hacked accounts

- Can use your brand to spreading malware and scams to your customer base
- Loss of trust in the brand can result

#### What to do:

• Keep a close eye on when/where your account is logged into

## Stolen passwords

• Can allow a criminal full access to your account

#### What to so:

- Never use the same passwords on private and business profiles
- Don't let unauthorized users log into your social media profiles

## Brand impersonation

 Attacker attempts to impersonate a trusted brand or personality (makes a copy of your profile)

## What to do

- Report them to the site you're using
- Post a warning to your followers.

## Uncontrolled user and account access

- Current employees who don't need access to your account to do their job
- Former employees who may still have access

#### What to do

- Keep the number of users small and manageable
- Have a system in place for employees that are leaving

# Questions?

## MATC Programs

For more information on Madison Colleges Cyber Security of other Information Technology programs.

http://itins4.madisoncollege.edu/IT/programs.html

For more information on Madison Colleges Agricultural Equipment Program.

https://madisoncollege.edu/program/agricultural-equipment-technology

## Presenters contact Information

## Mike Masino

<u>mmasino@madisoncollege.edu</u>

## Denny Wright

dwright2@madisoncollege.edu