

*charles* schwab 1 CACI - March, 2016

## We Sell Bikes, LLC.

- Revenue: \$2M
  - Five stores across state (40%)
  - Website (35%)
  - eBay (25%)
- Advertise solely on Social Media
- Partner with WeFixBikes for repairs to keep overhead down
- Modern infrastructure & sales tools (computers, tablets, phones)



#### Threat 1: Attack the Humans

- Employees of SB are frequent targets of phishing (email) and phone scams
- Attackers seek to:
  - Gain remote access to online services like banking and payroll
  - Convince employees to move money or pay fake debts
  - Have employees install software



#### Threat 2: Install Malware

- Employees of SB are frequently targeted to install unauthorized software that can:
  - Steal usernames & passwords to financial services
  - Encrypt computers/laptops that cripple business functions, and hold them ransom until the SB pays via bitcoin



## Threat 3: Deny Access

- Attackers know the value of web services and e-commerce to SB
- Attackers will:
  - Initiate continuous flooding of web sites, e-mail servers and other services that contribute to revenue
  - Hold these services ransom until payment is made



#### Threat 4: Attack Third Parties

- Attackers can figure out which partners and services your SB relies on
- Will initiate attacks 1-3 on these supply chain partners and "reflect" them onto your SB
  - Gain Access
  - Deny Revenue
  - Steal funds / customer info



## SB Cyber Security Check-Up

- Train your staff to resist phishing & manipulation
- Bring in a valued security partner to evaluate your SB posture and resistance to attacks
- Continuous evaluation and testing (annually), similar to a yearly physical exam



## Security is a Partnership

- At Schwab, we believe security is a partnership between Firm & client
- We communicate this through:
  - Schwab Safe program
  - Reminders in e-mail & phone
- We execute on this partnership by:
  - Investing in security programs
  - Increasing identification processes
  - Providing clients tools

#### SchwabSafe

Schwab's security measures are designed to keep your personal information safe.

How We Protect Client Accounts at Schwab



- + Information Security
- + Technology
- + Operational Controls
- + The Schwab Security Guarantee

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### Thank you

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More Information on Schwab Safe: <a href="http://www.schwab.com/public/schwab/nn/legal\_compliance/schwabsafe">http://www.schwab.com/public/schwab/nn/legal\_compliance/schwabsafe</a>

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# Appendix

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#### **Cybersecurity and Small Businesses**

Small businesses form the backbone of the U.S. economy - one in two American workers are employed at a small business, and 15 million new jobs were created at small businesses between 1993 and 2009. Unfortunately, small businesses are vulnerable to cyberattacks, and many must improve the manner in which they safeguard their information.

Percentage of small businesses that will close within six months of a cyberattack 60%

Percentage of cyberattacks aimed at small companies... ...in 2011 18%

> ...in 2014 **36%**

...do not have a formal written Internet security policy for employees

...do not even have an informal Internet security policy for employees

Percentage of small businesses that...

The
Cybersecurity
Disconnect:
Percentage
of small
businesses
that...

...say their company is safe from cyber-threats such as hackers, viruses, malware or breaches

...say they are not concerned about external (hackers stealing data) or internal (employees stealing data) threats

...believe a data breach incident would have no impact on their business

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66

...do not have a privacy policy that employees must comply with when they handle customer or employee information

...do not have a policy for employee social media use on the job

...do have a policy for employee social media use on the job

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