connected
more connected = less secure
connected

more connected = less secure
Chris Boykin
Chief Technology Officer

Future Com
STEVEN SPIELBERG Presents
BACK TO THE FUTURE™
ROBERT ZEMECKIS Film
32 years ago...

the first "com" domain name was registered
26 years ago...

AOL 1.0 released for DOS
21 years ago...

first flip-phone hits the market
19 years ago...

first MP3 player
18 years ago...

the first ever BlackBerry was released
16 years ago...

first iPod
10 years ago...

the first iPhone
6 years ago...

the BYOD craze became mainstream
4 years ago...

widespread use of public WiFi
2 years ago...

Apple Watch...
WiFi enabled cars...
today...

Internet of Things...
More Connected = Less Secure

- Who has a Social Media account?
- Who has a smart phone?
- Cloud storage of some type?
- SmartTV? AppleTV? Chromecast?
- Nest A/C System? Digital Door Lock?
Have you ever been a victim?

- Credit Card fraud
- Identity theft
- Hacked

Would this have happened if we were not so connected?

Mat Honan
Wired Magazine - Editor
Convenience vs. Security
Mobile

connected

convenient
More Connected = Less Secure

Man-in-the-Middle
More Connected = Less Secure

Man-in-the-Middle
What makes up the IoT?

- Electronics, Sensors, Cameras, Toys, etc

Objects... exchanging data... communicating... often with no human interaction

If you can build it, you can "thing" it
Things like...
By 2020, IoT growth is...

- 26 Smart objects per person
- 50B Devices
- 212B Sensors
- 44 Zetabytes of Data

*That's only 3 years from now!!*
How can they be attacked?

- Malware & Botnets
- Denial of Services - DoS
- Ransomware?
Mirai DDoS

- Malware Botnet targeting IoT devices

- Brian Krebs blog website

- Dyn DNS Servers
Affected Area for over 6 Hours
How IoT hackers turned a university's network against itself

A university found its own network turned against it - as refrigerators and lights overwhelmed it with searches for seafood.

Biggest security threat...

- According to a Security Services report from IBM, "over 95% of all incidents investigated cited human error as a contributing factor"

- Georgia Institute of Technology study showed, "87% of respondents said careless employees are greater threat to security than cyber criminals"

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We ARE the weakest link!
Revealing question...

- How many of you have security awareness training at your company?
- Keep your hand up if viruses and malware events have stopped due to this

Awareness doesn't fix the Human Security problem
Changing behavior is the key

• Make it...
  • personal
  • easy
  • fun

• Test... Train... Teach... and Repeat
Behavior Changing Approach
Testing
Security Awareness Seminar(s)
Security Awareness Training
Behavior Changing Approach

Test... Train... Teach... Repeat
"Connected" questions to ponder...

How do we live securely in this connected world?

Is convenience worth the risk?

What role can I play?

Did I leave the oven on?
connected

more connected = less secure