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CONFERENCE+AWARDS

May 1-3, 2017

The Scottsdale Resort  
Scottsdale, Arizona



## Aligning Proactive Security with Modern Threats



PRODUCED BY  
**CSO**  
FROM IDG

# Improving Safety and Security Through Improved Awareness

**Bob Eichler**

Director of Information Security  
*Cancer Treatment Centers of America*

Cancer Treatment Centers of America®



Making Information Security Important to Your Users  
Bob Eichler – Director, Information Security



*"In an age of cyber threats, we must ensure that a patient's information is treated with as much care as our clinicians give their bodies."*

*- Bob Eichler*

## Bob Eichler

- Director of Information Security at Cancer Treatment Centers of America since 2009
- Charged with protecting some of the most sensitive information people possess
- Previously Enterprise Security Architect at one of the world's largest airlines
- 20+ years' experience in IT Security space
- Smart enough to surround myself with really good security professionals!

# \$1,000,000,000



A report by cybersecurity company, Herjavec Group, asserts that \$209M was paid in cyber-ransoms in 1Q 2016.

# Ransomware is worth a cyber criminal's investment

2016 numbers from the Internet\*:

- Number of new ransomware modifications in Q1: 2,900
- Number of new modifications in Q3: 32,091 (11x as many!)
- Q1 – Individuals attacked every 20 seconds
- Q3 – Individuals attacked every 10 seconds (2x as fast!)
- Q1 – Business attacked every 2 minutes
- Q3 – Business attacked every 40 seconds (3x as fast!)

# The power of a mouse click...

- Encrypt every file on your computer
- Encrypt every file on a departmental shared drive
- Encrypt every file on every mapped drive that can be reached on the network
  - (Thanks a lot, Locky!)



- AV + Anti-malware solutions
- Anti-spam / content filtering
- Backup / recovery procedures
- Alerting / notification procedures
- Awareness training program
  - Newsletters
  - Computer based training
  - Handouts
  - Phishing exercises

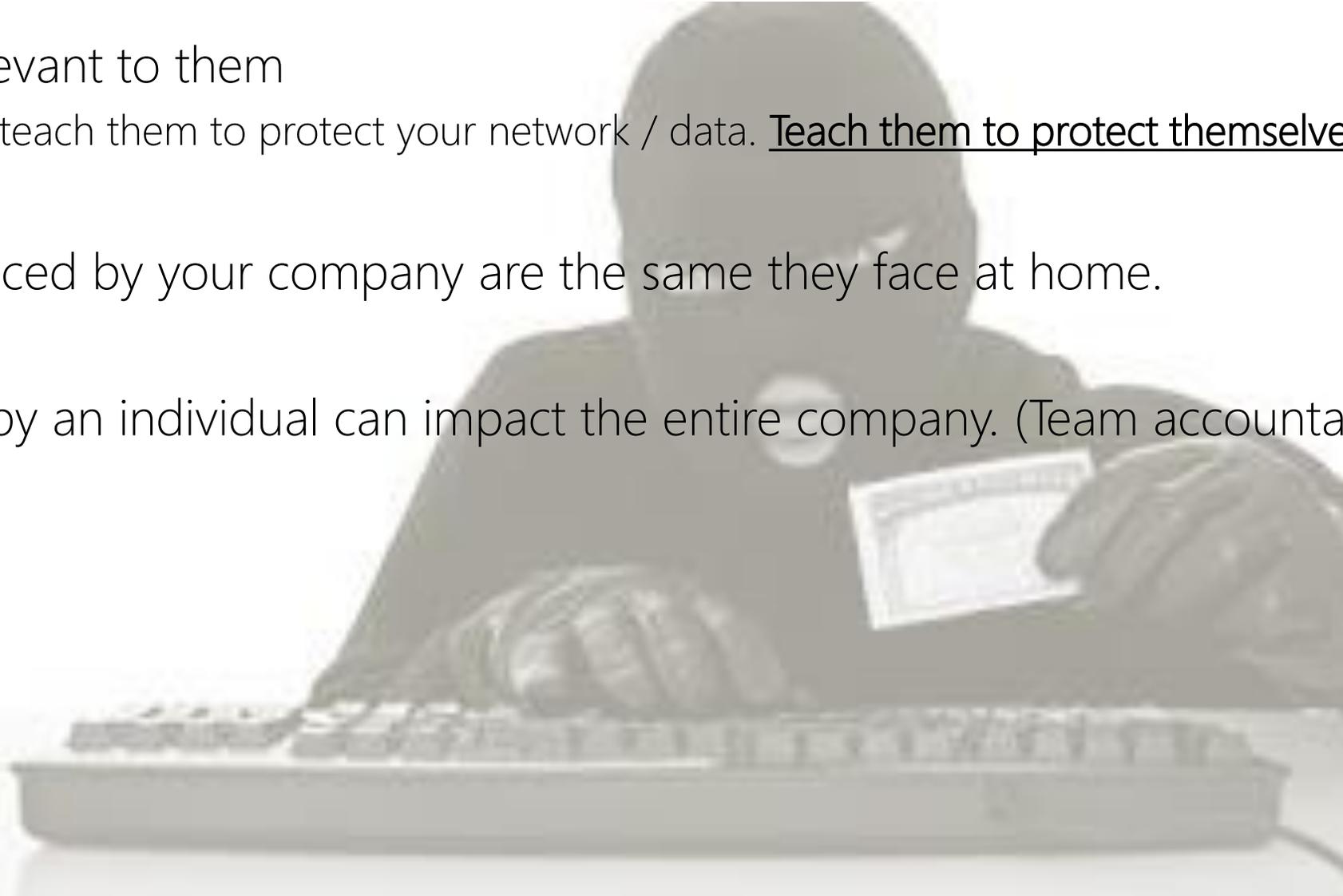
# How do you engage your users?

Make it relevant to them

- Don't teach them to protect your network / data. Teach them to protect themselves.

The risks faced by your company are the same they face at home.

A mistake by an individual can impact the entire company. (Team accountability)



# The Talk...

...about Passwords!

How many passwords do you need to manage?

*Average is 20-30*

How do you manage all these?

*Most try to make them all the same*

Who has a Yahoo email account?

*Compromised for 2-3 years*

The password you have been using for everything has been floating around the Internet for years

When's the last time you changed you personal email password?



...about Malware!

## From compromised websites:

When you're on MSN.com or Facebook, and click on the link to see the child stars of the '80's and '90's, you're no longer where you started.



## From Email / Phishing:

You've successfully avoided the Nigerian Oil Minister

What about the message from "FedEx"?

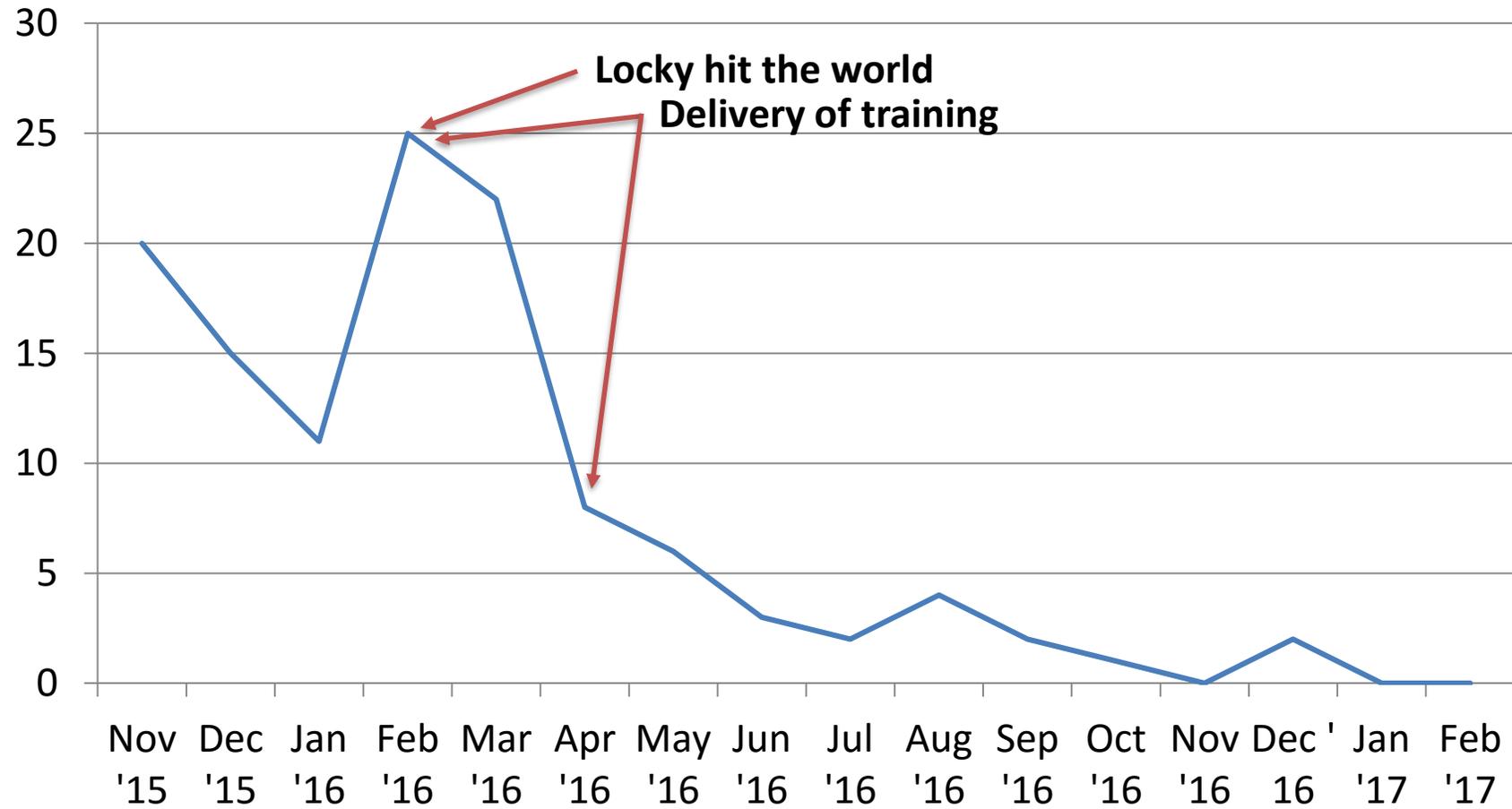
What about the message with the receipt / invoice / resume?

What about the message from your boss?

# What was the impact?

- We know there are no silver bullets...
- Standard tools had positive impact
- General awareness helped reduce impact
- How many people did your training really reach?

# Security events



## Lessons learned and takeaways:

- Emails and Posters are of limited value
- Mandatory online training courses are slightly better
- Large, generic, meetings are avoided because users are “too busy” or they “forgot”
- People react best when spoken to in smaller groups, in their local work area
- Make the risk relatable. Provide real examples. Try to make it humorous. Tie it to something personal. Allow for Q/A.

Examine entire information security budget:  
2015 CIO magazine article: 11-15% of your IT budget

Does the investment of a few thousand dollars in resource time and travel provide an adequate return?

I assert "YES!"