Using Motivation To Drive Security Behavior Change

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About Me

Computer security meets behavioral science

Built and ran Salesforce trust engagement team

Co-Founder, building security behavior change platform

Passionate about transforming security behaviors from “have to” to “want to”
“I want my employees to be better at security”

This presentation will explore:

- Myths about influencing security behaviors
- The behavioral elements of human beings that can get to us to security behavior change
- Focus on motivation as a key element
Knowing Isn’t Enough

WE UNDERSTAND WHAT GOOD PASSWORD BEHAVIOR SHOULD LOOK LIKE

- 59% know a secure password is important
- 91% understand the risk of reusing passwords

YET WE CONTINUE TO EXHIBIT POOR PASSWORD HABITS

- 41% choose a password that is easy to remember
- 61% use the same or similar passwords

Lastpass 2017
"Insanity is doing the same thing over and over again and expecting different results"

*Albert Einstein*
Behavior Change Components

- Ability
- Motivation
- Triggers
Behavior Change Model

By Dr. Bj Fogg
Ability
Behavior Change Model

By Dr. Bj Fogg
Security Action Can Be Simplified

Having secure passwords for all sites
- Remember 20 unique characters across 40+ sites

Reporting suspicious activity
- Look up correct email, reporting guidelines & send

Stop tailgating
- Social Accountability
- Install a man-trap or in/out badging

Easy
- Install a password manager

Hard
- Install a “Report” button
Motivation
What about things that are hard to do?

By Dr. Bj Fogg
When Does Motivation Occur?

Hard things require high motivation.
Naturally Occurring Motivation

Predictable Events

- Audits
- Promotion season

Unpredictable Events

- Breaches/Incidents
- Red Team Exercises
- News events
Good leaders seize crises to remake organizational habits.

Charles Duhigg, The Power Of Habit
What Motivates Us?

“People will do things because they matter, they are interesting, part of something more important.”

*Daniel Pink, Drive*
Positive vs Negative Motivation

**Performance**

5:1 Positive to Negative exchanges

**Source** Losada & Heaphy: The Role of Positivity and Connectivity in the Performance of Business Teams, 2004

HBR.Org
How to Create Positive Motivation

- **Status**
  - Leaderboards
  - Top performer award

- **Competition**
  - Capture the Flag
  - Bug Bounties

- **Altruism**
  - Feedback on impact
  - Champion Programs

- **Access**
  - Awarded points
  - Access to exclusive swag

- **Achievement**
  - Recognition emails
  - Company-wide shoutouts
Triggers
Security Triggers

The recipient mark@ink-42.com does not belong to your organization and is not in your list of contacts. Be careful with sensitive information.

Hi Mark,

Attaching the launch plans for our soon to be released product.

Cheers,
Kelly
Putting It All Together
Lessons Learned in Changing Tailgating Behavior

**Goal:**
To ensure that people wore their badges visibly at all times while in secured spaces and not allow unbadged person tailgate behind them.

**Assumption:**
People didn’t know that this was policy.
Bring “awareness” to them via digital posters
- Passive education
- Very limited results
Lessons Learned in Changing Tailgating Behavior

“I don’t feel comfortable confronting my peers.”
(Ability + Motivation)

“Tailgating isn’t really a big problem, right?”
(Motivation)

“I broke my badge pull reel and don’t have a replacement, so I keep my badge in my wallet.”
(Ability)
Phishing Campaign Model

- Case studies of phishing related breaches
- Leaderboard of top reporters
- Thank you emails to employee + managers
- Kudos of breach-prevention on company call.

- Detection skills
- Phishing practice
- Reporter button
- Safe sender

High motivation

Low motivation

Hard to do

Ability

Easy to do
Takeaways

- Motivation is required when something is hard to do.
- First- make it easy with technology. Second- rely on motivation.
- Leverage naturally occurring events for motivation.
- Connect intrinsic motivations to security motivation.
- Negative feedback should be balanced with positive motivation.
- Use triggers in the moment they are needed.