Enabling The Human

Using Gamification to Transform Security Mindset of an Organization

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@modMasha
I want my employees to:

- Make less security mistakes
- Have more security common sense
- Care more about their actions
- Be more vigilant

Often our requirements are very general

What Does Security Awareness Mean To Your Organization?
What Are Your Vital Behaviors?

Ask:
What behaviors am I trying to change?

Ask:
What will people do differently after my effective program is in place?

Ask:
How will I measure this?
What Are Your Vital Behaviors?
What behavior does this change?

“More people will take more training more often”

Learning Pyramid

- Lecture: 10%
- Reading: 20%
- Audiovisual: 30%
- Demonstration: 50%
- Discussion: 75%
- Practice doing: 90%
- Teach others

Source: National Training Laboratories, Bethel, Maine
How To Choose Vital Behaviors
Prioritizing your vital behaviors

1. What are your most frequent incidents?
2. What would be the most damaging to your company?
3. What are easy wins?

Less is more:
• Asking for executive backing on too many behaviors can dilute the power of their support.
• Have a backlog of behaviors but only act on the top few.
• Have a few wins and iterate.
Linking Results to Vital Behaviors

1. Think like a Chief Security Officer
   - # of Security Champions in Org

2. See something, say something
   - # of people who detect and report a vulnerability

3. Say no to badge surfing
   - # of unauthorized people accessing secure areas

4. Don’t get fooled by Phishing
   - # of people who fall victim to a phishing attack

5. Get certified and be ready
   - # of employees who completed annual security training
Can this be solved with technology?

- Do it! Changing mindset is the hardest way to go about enforcing change.

“I didn’t realize that security was part of my job”

- Communication, marketing, awareness campaigns

“I didn’t know what to do about it”

- Training and skills

“I didn’t have the resources or support to do it”

- Management alignment

“I didn’t want to”

- Gamification and incentives
Why Does “Want To” Matter?
Most employees prefer a visit to the dentist over taking security training
Getting To “Want to”  
It’s About Unleashing “Discretionary Performance”

Can we get more people to choose the stairs by making it fun?
It’s Not About Playing Games At Work

(Though 70% of Execs Admit Playing Video Games at Work)
Gamification Elements

1. **Autonomy**: we like having choices
2. **Mastery**: we like getting better at what we do
3. **Feedback**: we like getting feedback on how we are doing
4. **Purpose**: meaning amplifies what we do
5. **Social**: all this means more with others
Gamifying Security

1. Pick Vital Behaviors
2. Connect to Purpose
3. Test And Give Feedback
4. Reward/Recognize or Educate
5. Socialize
Vital Behaviors: Phishing, Reporting, and Badge-Surfing
Connect to Purpose

CYBER CRIME VICTIMS

556 MILLION PER YEAR

1.5+ MILLION PER DAY

18 PER SECOND
Connecting to Purpose
How attackers exploit “bugs in human hardware”

“Can you hold that office door open for me, my arm’s broken and this package is heavy.”

“Holy wow…Check out this video of a giant snake eating a zoo keeper!”

“If you don’t pay the fine, your files will be locked and you will be reported to the FBI!”
Test With Feedback

DON’T GET FooLED By
Recognizing Badge-surfing awareness

THANK YOU FOR SAYING NO TO BADGE-SURFING.

LET'S GET YOU REWARDED!

Post a photo of yourself holding this card on Chatter with @Security and #StrongestLink to receive your Jedi points & prizes.

SECURITY

Be the strongest link.
Recognizing Reporting

Benjamin to Christine

Thanks for reporting an email you found suspicious to the CSIRT. Your demonstrating our #1 value #TRUST

Learn more about reporting suspicious activity at https://sites.google.com/a/salesforce.com/csirt/report

Want to learn more about Trust points and Jedi Badges? http://intranet.internal.salesforce.com/departments/security/Jedi_Program.html

@Daniel  @Masha Sedova  @Warwick

Masha Sedova to Christine

Well done on earning the first security champion level! Stay Paranoid!

Want to learn more about Trust points and Jedi Badges? http://intranet.internal.salesforce.com/departments/security/Jedi_Program.html

apprentice
Beware the Dark Side, young Level 1 Security Apprentice

trust_points_100
Congratulations! You've earned 100 Trust points.
Reward: Security Champion Program

- **Apprentice**: Basic awareness
- **Padawan**: Successful Testing
- **Knight**: Doing
- **Master**: Teaching
- **Grand Master**: Innovating

**Trust Points**
- 100
- 200
- 300
- 400
- 500
- 600
<table>
<thead>
<tr>
<th>Item</th>
<th>Point Value</th>
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</thead>
<tbody>
<tr>
<td>Receiving a Trust badge</td>
<td>50</td>
</tr>
<tr>
<td>Read security newsletter and chatter about it</td>
<td>50</td>
</tr>
<tr>
<td>Reporting phishing email/ social engineering call</td>
<td>100</td>
</tr>
<tr>
<td>Completing 100 level course</td>
<td>100</td>
</tr>
<tr>
<td>Completing 200 or 300 level course</td>
<td>200</td>
</tr>
<tr>
<td>Identifying a vulnerability (P0 - P3)</td>
<td>P0 =500, P1=300, P2=200, P3=50</td>
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<tr>
<td>Attending a Security lunch and learn</td>
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<tr>
<td>Winning a bug bounty event</td>
<td>500</td>
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<tr>
<td>Attending hands-on security training course</td>
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<td>Interning with Trust</td>
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Incentives and Rewards

- Competition
- Achievement
- Status
- Self-Expression
- Altrusim
The Results

6,000
Salesforce Employees Have Gone Through This Experience

50%
Less Likely to Click on a Phishing Link

82%
More Likely to Report Threats to security@salesforce.com
Incident Detection
Employee and customer reports

“Someone just badge surfed into 3 Landmark”

- Salesforce employees trained to report *any* suspicious activity.
- Customer reports also welcome.

“My mouse cursor is moving by itself”

“My browser proxy settings were changed”

“Is this email really from American Express?”

“I lost my sweater on BART”
I got an email from info@supportforce-desk.com asking me to update my RSA token immediately because of a systemwide upgrade. I'm a little skeptical, not only because the message uses "do" for "due" (red flag for a writer!), misspells "inconvenience," and uses only my login name, but also because I just updated my token not long ago. Is this a security test or a legit request? I'm guessing the former. ... More

Devanshu Patel, Ed Mengel, and 2 others like this.

Christopher
Forward to security@salesforce.com anytime you get something that smells phishy like this one

Like · 1 person · Yesterday at 10:25 AM

Adam
Hey @Emily

Use this site - https://sites.google.com/a/salesforce.com/csirt/report?pli=1 to report the email. They are pretty quick to get back to you to let you know if it's legit or not.

@Security

Like · 1 person · Yesterday at 10:20 AM

Emily
Thanks very much, Christopher and Adam. I'll send this to Security to see what's up.

Like · 1 person · Yesterday at 10:27 AM

Stovo
Yeah I just got the same thing. Looks very suspect.

Like · 1 person · Yesterday at 10:34 AM

Dan
scam good catch

Like · 2 people · Yesterday at 10:36 AM

Lisa
@Jim Tyner - FVI....right decision to send to security!

Like · 1 person · Yesterday at 10:49 AM

Tracy
Snap - and had same concerns - also emailing security

Like · Yesterday at 2:24 PM

Masha Sedova to Emily

Emily! You totally rocked this security test! You identified every single thing that was a clue to this being a phishing email. And thanks for posting on chat to educate other folks in the company!

Way to go! ... More

Trust Points 100
Congratulations! You've earned 100 Trust points.
Q&A

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