

Cybersecurity Ambassador Program

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Today's Agenda

- The Challenge
- The Journey
- How we did it at Royal Roads

The Challenge

Or....there's only so much
one person can do....



The Situation

- Security Dept. of one. Me.
- Awareness is a key pillar of our security strategy.
- The message was getting stale, and...
- I was getting busy.

We Needed...

A way to continue the outreach that:

- Kept the message fresh.
- Would scale the awareness program and increase penetration.
- Allowed for varying delivery based on the culture of the target audience.

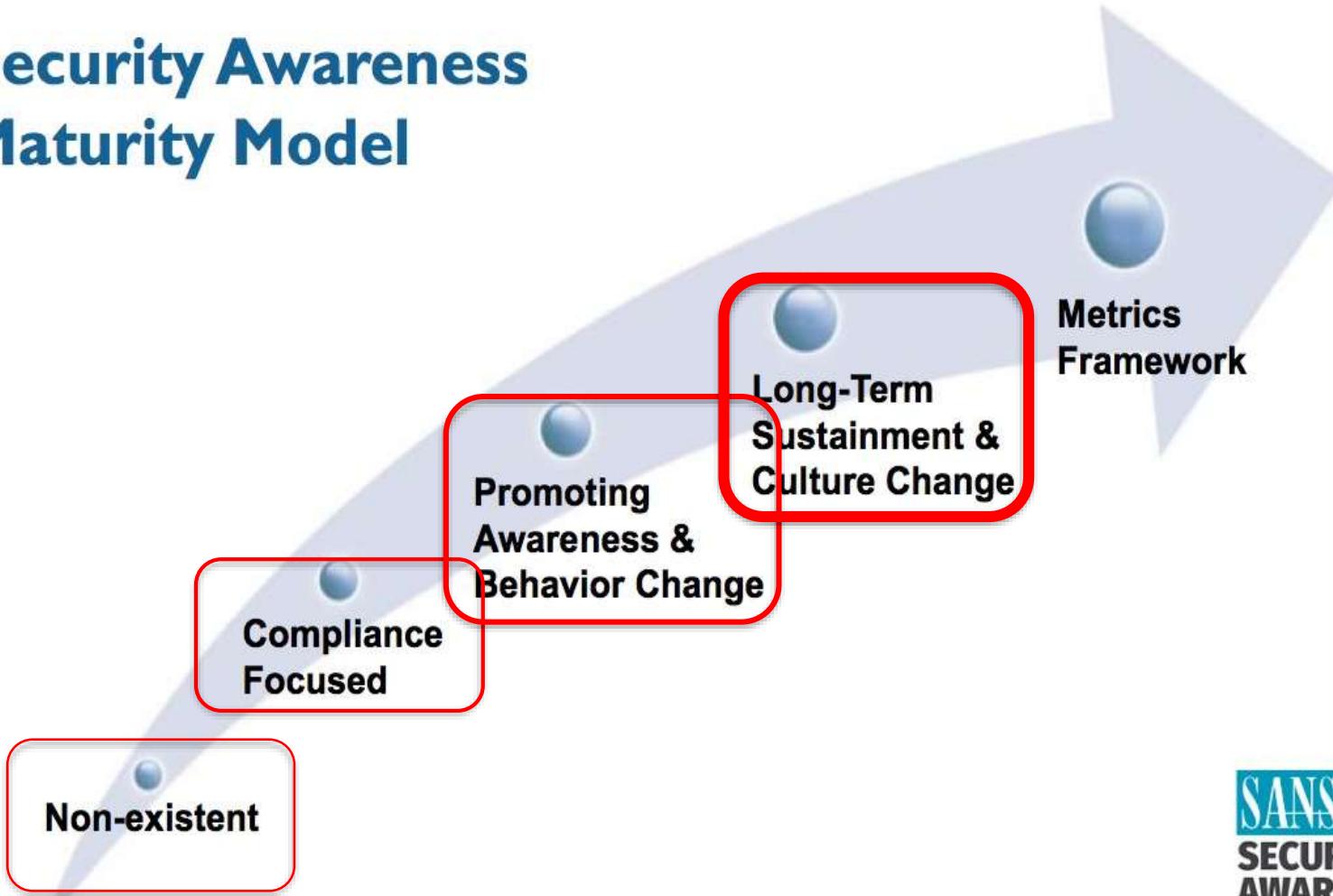
But how to solve the problem....

Finding the Solution

Or....how I came to investigate Ambassador programs in the first place....

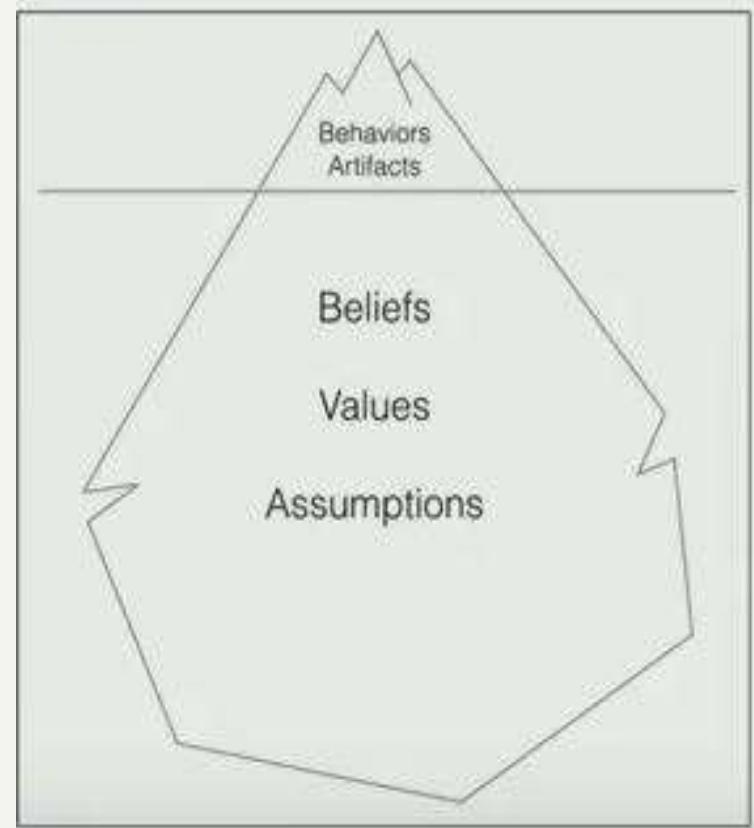


Security Awareness Maturity Model



Culture

- Goal is to go beyond behaviours and create a secure culture.
- Culture not only includes *behaviours*, but
 - Beliefs
 - Values
 - Assumptions



People Centric Security – Dr. Lance Hayden

Creating a Secure Culture

- It can take 3-10 years to change culture
- To change culture, start with behaviours.

“Culture change happens only after you have successfully altered people’s actions, after the new behaviours produces some group benefit for a period of time, and after people see the connection between the new action and the performance improvement” - John Cotter, Leading Change

Challenges to Culture Change

- Part-time nature of awareness staff.
- Customising messages across demographic groups.
- Keeping message fresh.
- Differing cultures amongst different divisions across the organization.

How can we address these challenges?

Enter Security Ambassador programs...

Security Ambassador Programs

- Staff members who volunteer their time to “spread the good word” on cybersecurity.
- Security Ambassador programs:
 - Scale your program, often at a lower cost.
 - Your staff are more likely to listen to their peers.
 - You can develop your own communications network.
 - Great feedback on what’s happening in the trenches.

Volunteer Considerations

- Expectations
- Activities
- Motivation
- Enable your volunteers



The RRU Experience



Implementation

Research

- Resources from Lance Spitzner (SANS).

Proposal to Executive

- Trial only. 1 year duration, limited to 10
- Informed / educated managers before announcing the program.
- Used internal vehicles to announce / recruit.

Recruit, train & launch

- 1 year commitment, 2 half days training.
- Thanks to RRU IT staff and BC OCIO office for assistance.
- Certificates, public announcements & cut 'em loose!

Operations

A normal week looks like:

- I circulate materials:
 - Ambassador's choice to pass them on.
 - Does it work for their team?
 - Some are for their background info only.
 - Some I specify that they are to pass on.
- I get reports on phishing emails and other issues from the ambassadors.
- I will ask for, and receive, assistance around specific projects.
- *And I try not to fill up their Inbox...*

Recognition

- Quarterly luncheons
- Vendor swag
- Say thank you and recognise good work.
Continually...

Results

At year's end I reported:

Ambassadors reported that on average they:

- handled 1-2 personal contacts per month.
- distributed 2-3 emails / awareness materials per month; and
- one ambassador reported doing presentations at team meetings.

On our phishing assessments:

- 9 out of 11 teams supported by an ambassador had a lower average click rate than the overall average.
- One team had a zero click rate.

Indicators of a cultural shift

Other Contributions

“Trusted Source” bulk email standard.

Feedback:

“People are starting to take ownership during phishing emails, there is a bit of proud conversation when someone says hey it’s a phish and I didn’t get fooled. Having that in-office validation helps build awareness through recognition.”

Other Contributions

If you did get “caught” by the phishing email:

Don’t worry. It happens. Nobody gets disciplined or reprimanded. The goal is to be vigilant and to mitigate the impact if it happens.

Unplug the network cable to isolate your computer from the network. (Ask me and I will help you).

Don’t close any programs or shut down your computer as that may destroy evidence or halt a process that IT needs in order to determine what is happening

Call the Help desk at 5555

7 Signs of Phishing
Can you spot a phishing attack?

1. Who Is This “From?”
Watch out for emails that appear to come from official organizations, such as your bank, but the From or Reply-to address is actually someone's personal email account, such as @gmail.com.

2. An URGENT Subject
Does the subject line try to create a tremendous sense of urgency or curiosity?

3. Generic Greetings
Watch out for generic salutations or greetings, such as “Dear Customer.”

4. “I just need your credit card number..”
Is the sender asking for your password, bank account details, or some other sensitive data?

5. Check Before You Click
Hover over links to find the true destination before clicking on them. If a link redirects you to an unexpected location, do not click on it.

6. Suspicious Characters
Be on the alert if an email comes from a friend or co-worker, but seems odd or doesn't read like something they would send.

7. Don't Get Attached
Do not open unexpected or suspicious attachments.

Stay Alert. Phish Happens.

Challenges

- The volunteer challenge:
silent but involved vs dropouts
- Metrics.
- Visibility around the University

The Future

Recruited an additional 4 ambassadors

- Focused recruitment to fill specific gaps

Process improvement.

Encourage the creativity and energy within the group.

A Few Final Thoughts...

Have we got you enthused?

Before you start your journey with Ambassador programs, consider:

- Maturity of your awareness program.
- Leadership support.
- Top 3 goals
- How will you motivate & enable your Ambassadors?
- How would you pilot a program?
- Administrative load.

Questions

