Security Culture

Why You Need One and How to Create It

Masha Sedova
Co-Founder, Elevate Security
About me

Cyber Analyst for defense community

Built and ran Salesforce trust engagement team

Co-Founder, building the Behavioral Security Platform

Passionate about the intersection of security & behavioral science
Customer trust is built on security
Percentage of Customers Who Say Their Trust in a Company Makes Them More Likely to Do the Following

- Be loyal: 95%
- Recommend (that company): 93%
- Buy more products and services: 92%
- Buy more frequently: 91%
- Spend more money: 88%
- Share my experiences: 86%
Imperva: Data Breach Caused by Cloud Misconfiguration

Failure to patch two-month-old bug led to massive Equifax breach

52% of all breaches in the last year were due to hacking -VDBIR
What is culture?

“The way we do things around here....”

Our experiences shape our beliefs, values, assumptions

Our behaviors are driven by beliefs

Beliefs
Values
Assumptions
Experiences
Behavior Artifacts
“Culture eats strategy for breakfast.”

-Peter Drucker
Security Culture is a Subset of Enterprise Culture
Positive vs Negative Security Culture
Competing Priorities
Pick two
Opposing forces in an employee’s business decisions

Security Debt

Security Failure

Deadlines
Cost
Bonus

Security
The Competing Security Cultures Framework

- **Process Culture**
  - Goal: Enforce Policy

- **Compliance Culture**
  - Goal: Pass Audits

- **Trust Culture**
  - Goal: Empower People

- **Autonomy Culture**
  - Goal: Get Results
Process Culture
- Managed Coordination
- Stability
- Visibility
- Standardization

Goal: Enforce Policy

Compliance Culture
- Rational Goals
- Conformity
- Repeatability
- Documentation

Goal: Pass Audits

Trust Culture
- Human Relations
- Communication
- Participation
- Commitment

Goal: Empower People

Autonomy Culture
- Adaptive Systems
- Flexibility
- Agility
- Innovation

Goal: Get Results
Results of SCDS
How do we drive change?
Root Cause Analysis
Understanding the Problem
The Five Whys Tool

Ask the five whys to get to the root of a problem.
The Five Whys- Example

Problem Statement:

*My car battery is dead*

1. Why? – The alternator is not functioning.
2. Why? – The alternator belt has broken.
3. Why? – The alternator belt was well beyond its useful service life and has never been replaced.
4. Why? – I have not been maintaining my alternator belt according to any recommended service schedule.
5. Why? I didn’t realize this had to be done.
Investigate Root Cause

- 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
Behavior
Change
Key components of behavioral science

Motivation

Ability

Trigger
Behavior change model

High

Motivation

Low

Triggers Fail

Triggers Succeed

Ability

Hard

Easy

*Dr. BJ Fogg
Behavior change model

- High Motivation
- Low Motivation
- Ability
- Triggers
  - Succeed
  - Fail

*Dr. BJ Fogg*
Security action can be simplified

<table>
<thead>
<tr>
<th>Have secure passwords for all sites</th>
<th>Report suspicious activity</th>
<th>Stop tailgating</th>
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<tbody>
<tr>
<td>HARD</td>
<td>HARD</td>
<td>HARD</td>
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<tr>
<td>Remember 20 unique characters across 40+ sites</td>
<td>Look up correct email, reporting guidelines &amp; send</td>
<td>Install a man-trap or in/out badging</td>
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<tr>
<td>EASY</td>
<td>Install a “report” button</td>
<td>Social accountability</td>
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<tr>
<td>Install a password manager</td>
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What about things that are hard to do?
Most employees will not care about security as much as we’d like them to
What motivates us?

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

Daniel Pink, Drive
How to Create Positive Motivation

Status

Competition

Altruism

Access

Achievement
The power of social proof

Kourtney Kardashian

"I have been a fan of the Manuka Doctor Kumud line for many years so when the brand asked me to be their global skincare ambassador, I couldn’t have wished for a better partnership. As part of my role in the line, I am an advocate of products that use natural ingredients. I am incredibly excited to have the opportunity to work with a brand I believe in and introduce it to my fans around the world." Kourtney Kardashian

Check out Kourtney’s announcement video below.

Customer Reviews

The Little Prince
by Antoine de Saint-Exupéry

Top critical review
See all 249 critical reviews

Top positive review
See all 1,780 positive reviews

4.5 out of 5 stars

5 star 79%
4 star 8%
3 star 4%
2 star 1%
1 star 8%

Rate this item
Write a review

Timeless, poetic translation captures the essence of Saint Exupéry’s story.

By Alida Vries on August 30, 2005

Katherine Woods’ simple and beautiful translation is the only one that does justice to The Little Prince. Published by Harbour in 1943 and 1971, her English translation is the version that translation lovers and quoted by English-speaking people around the world, even by members of English- and French-speaking Canadian Parliament.

But here is OUT OF PRINT (by Harbour, who copyrighted her translation in 1943), so snatch up used copies while you may, or be certain you are getting her in any new or used publication!
Control

Keep Your Account Safe
You can use security settings to protect your account and make sure it can be recovered if you ever lose access.

Improve Account Security

Social context

Keep Your Account Safe
108 of your friends use extra security settings. You can also protect your account and make sure it can be recovered if you ever lose access.

Improve Account Security

Social proof in security

1.36x more successful when using social proof
Compromised Rates

You were 1.2x more likely to be compromised than people in your department.

Strengthen skills
Password manager

**LastPass Use**

Password managers are the best way to have unique and strong passwords across all your accounts - both personal and work!

Autodesk CEO Andrew Anagnost uses LastPass too!

12% of your department has installed LastPass

- Installed LastPass
- Used LastPass

You earned a badge!
Applying Gamification

Keep Improving!

You're Tenuous. The rest of your company is Sturdy. You've still got a few things to do to improve your security skills.

Good job! You're 4 times more likely to report than the rest of your department!

You earned a badge!

Flimsy  Tenuous  Sturdy  Fortified  Indestructible

Leaderboard: Ranked 15th (out of 32)

<table>
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<th>Rank</th>
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<th>Department</th>
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</thead>
<tbody>
<tr>
<td>14</td>
<td>Tess Bard-Laredo</td>
<td>Marketing</td>
</tr>
<tr>
<td>15</td>
<td>You</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>16</td>
<td>Vince Amaretta</td>
<td>Finance</td>
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Understand your security culture

Assess if it's a positive or negative security culture

Identify the blockers to positive security culture

Reinforce and motivate positive behaviors
Q&A

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