

Surfing the motivation wave to create security behavior change

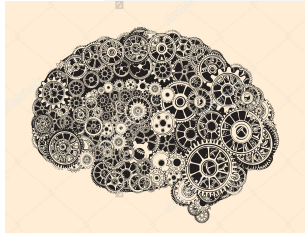
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About Me



**Computer security
meets behavioral
science**



**Co-Founder of
security behavior
change company**

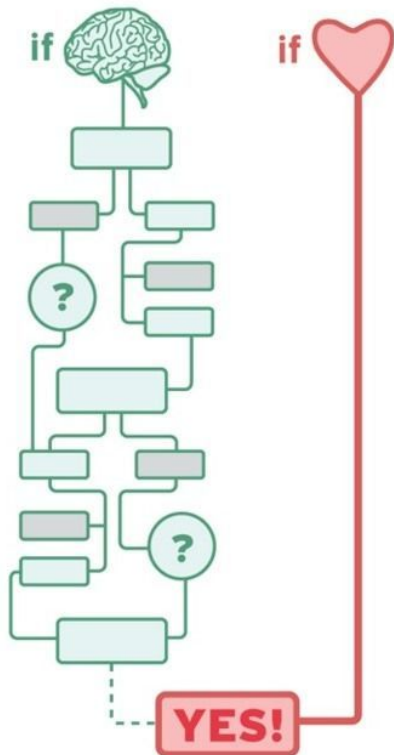


**Built and ran
Salesforce trust
engagement team**



**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 habits
- The behavioral elements of human beings that can get to us to security behavior change
- Focus on motivation as a key element

Myth #1

—
Training will change behavior

Training Doesn't Work

Historically, the industry solution has been to insist on terrible “check the box” trainings as an employee’s only defense.

95%

of breaches are caused by human factors.

15%

Retention



Rethinking Communications

The problem must be in the method of delivering this information - right?!

We've been creative about ways to get information in front of people:

- Videos
- Posters
- Newsletters
- Websites
- Talks
- Lavatories



36.5 million adults in the United States currently smoke cigarettes

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 

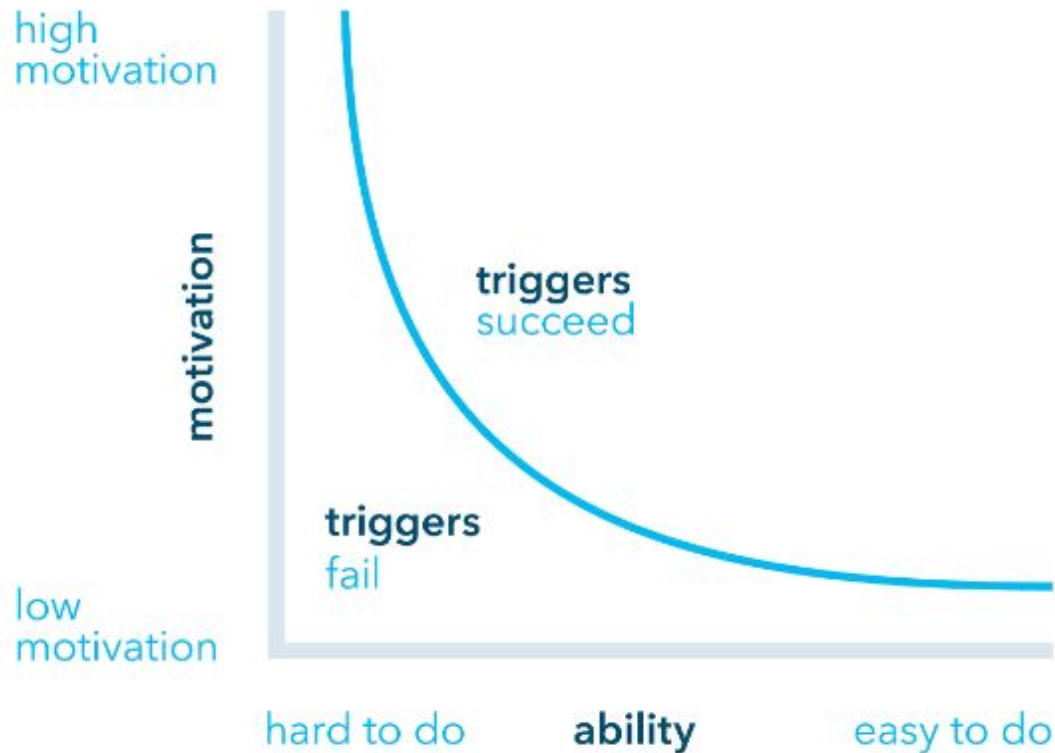
Lastpass 2017

Behavior Change Components

- Motivation
- Ability
- Triggers



Behavior Change Model



By Dr. Bj Fogg

Myth #2

People have to care about security,
all the time

Unrealistic Expectations



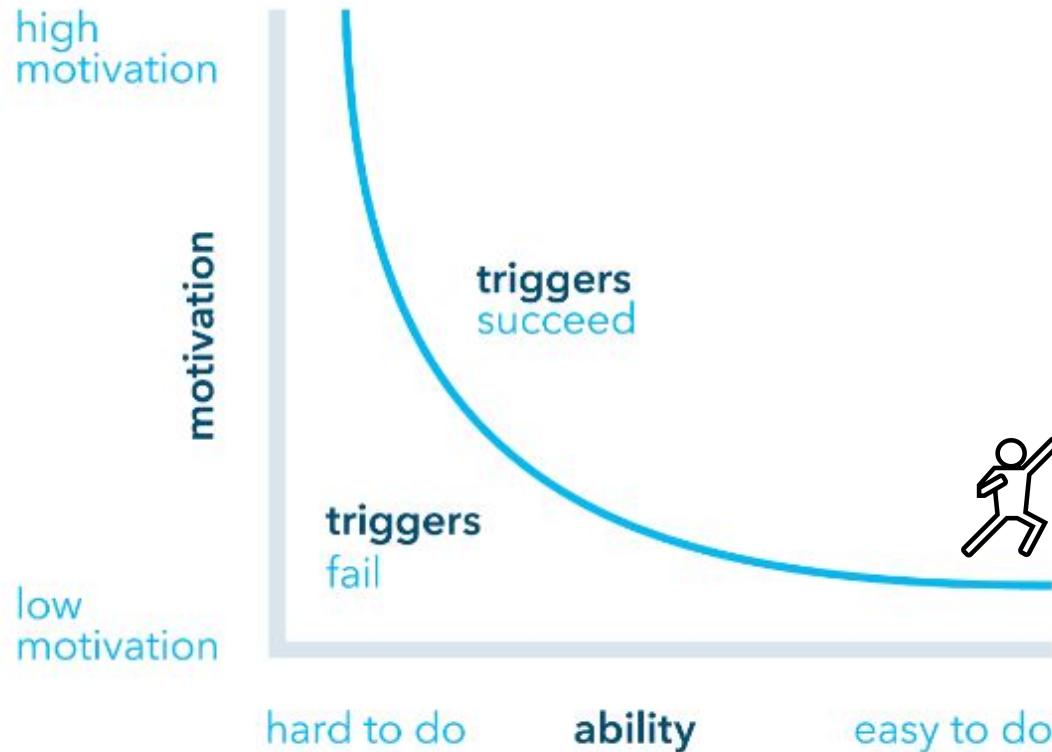
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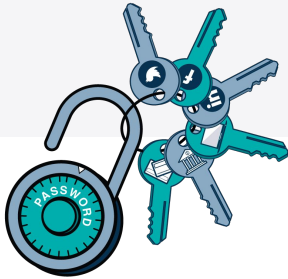


Behavior Change Model



By Dr. Bj Fogg

Security Action Can Be Simplified



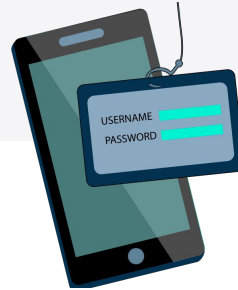
Having secure passwords for all sites

HARD

Remember 20 unique characters across 40+ sites

EASY

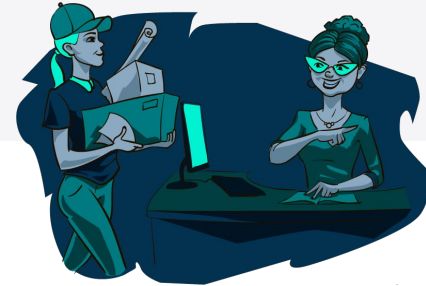
Install a password manager



Reporting suspicious activity

Look up correct email, reporting guidelines & send

Install a "Report" button

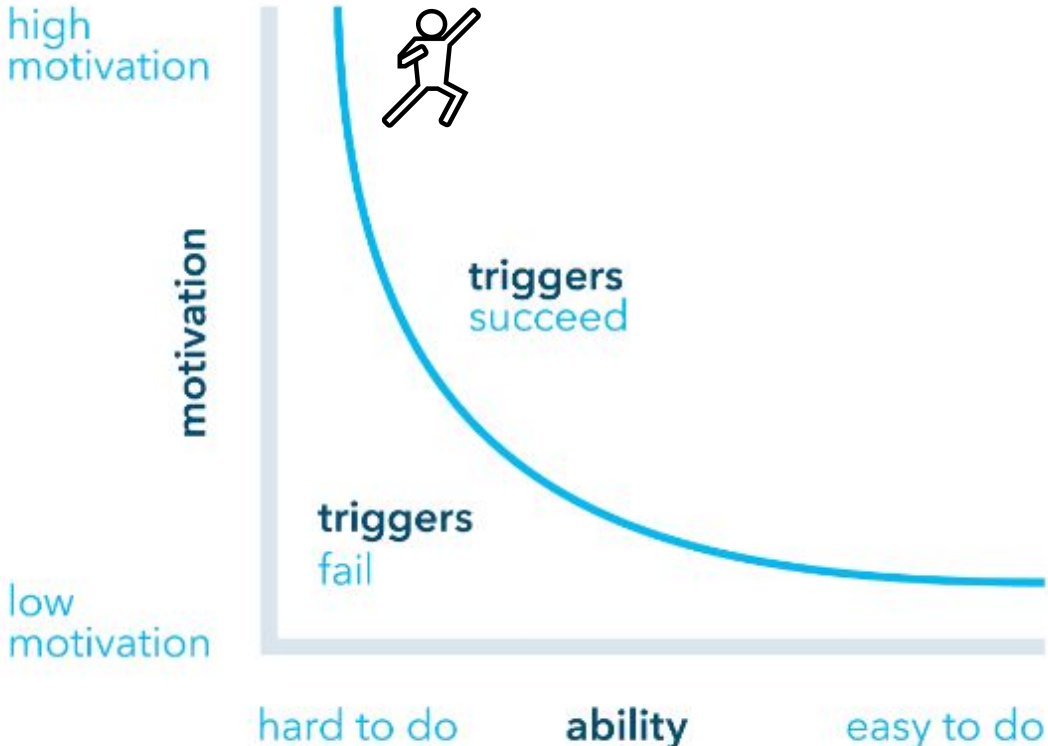


Stop tailgating

Social Accountability

Install a man-trap or in/out badging

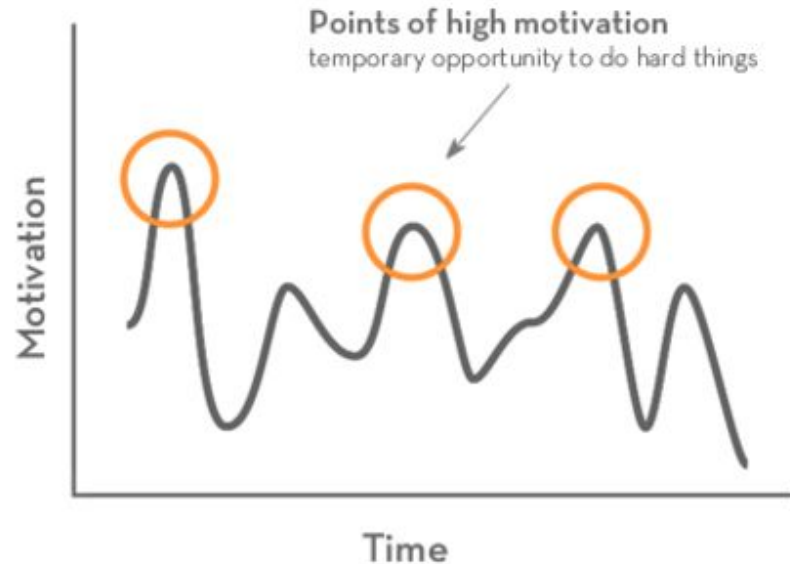
What about things that are hard to do?



By Dr. Bj Fogg

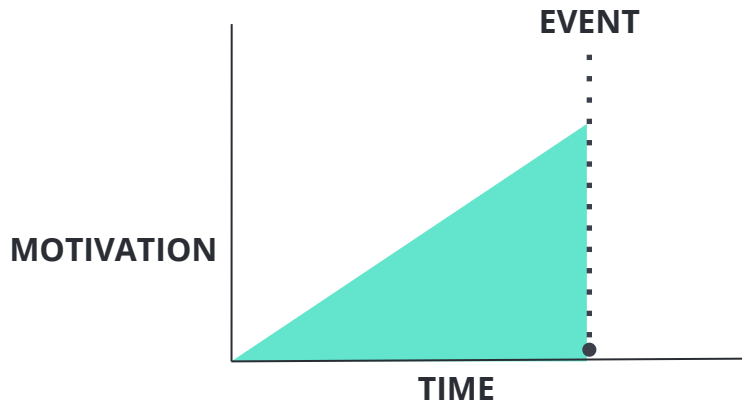
When Does Motivation Occur?

Hard things
require high
motivation.



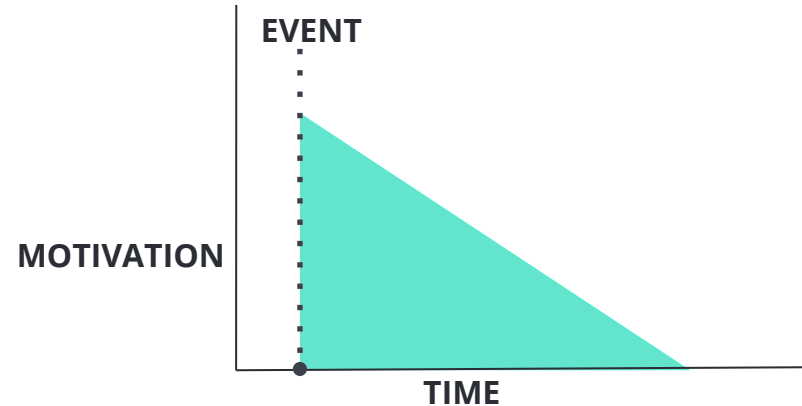
Naturally Occurring Motivation

Predictable Events



- Audits
- Red Team exercises

Unpredictable Events



- Breaches
- Incidents
- News events

The background of the slide is a dense pattern of blue butterflies. Most are a vibrant, iridescent blue with dark brown or black borders on their wings. In the center, there is one butterfly with a bright orange wing, which stands out significantly from the rest of the blue ones. The butterflies are scattered across the entire frame, creating a textured, naturalistic background.

Good leaders
seizes crises to
remake
organizational
habits.

Charles Duhigg,
The Power Of Habit

Myth #3

Money is a good motivator

Market Norms

Assigning a monetary value to an exchange



Social Norms

The actions among friends that are not based on money.

Dan Ariely, PhD
Predictably Irrational

“Generating” Motivation

- Connect security to the things people already care about.
- People are motivated by:
 - Hope/Fear
 - Social Acceptance/Rejection
 - Pleasure/Pain

extrinsic

intrinsic



Praise
Punishment
Money



Pride
Interest
Achievement
Curiosity

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

Daniel Pink, Drive

Myth #4

Shame/blame for bad behaviors is a good tactic

Positive VS Negative Motivation

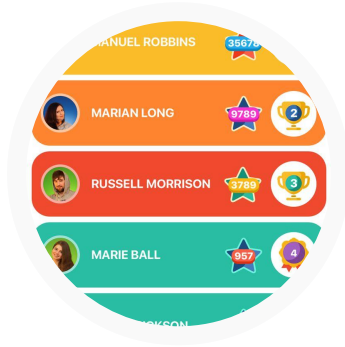
5:1

Positive to Negative
exchanges

20%

Of security teams have
positive recognition
programs

How to Create Positive Motivation



Status

Leaderboards
Top performer award



Competition

Capture the Flag
Bug Bounties



Altruism

Feedback on their impact
Champion Programs



Access

Awarded points
Access to exclusive swag

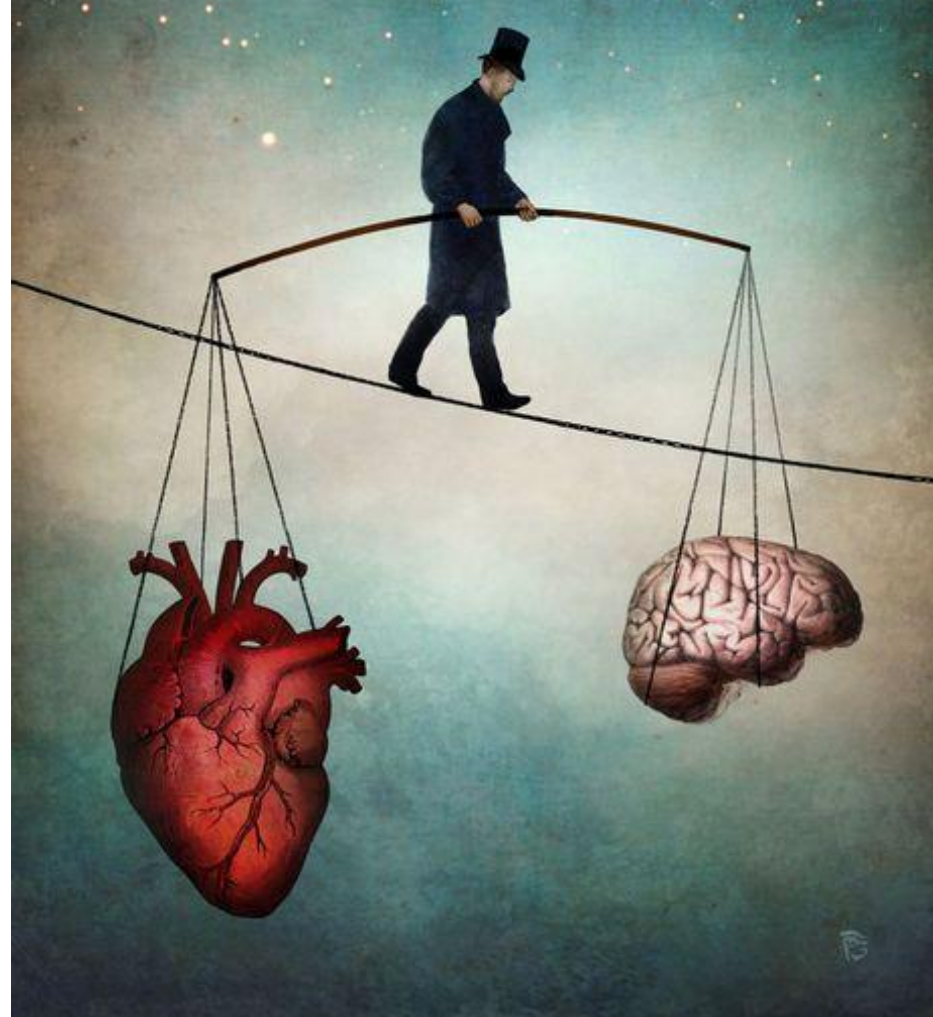


Achievement

Recognition emails
Company-wide shoutouts

Takeaways

- Motivation is required when something is hard to do.
- First- make it easy. Second- rely on motivation.
- Leverage naturally occurring events for motivation.
- Connect intrinsic motivations to security motivation.
- Negative feedback should be balanced with positive motivation.



Comments? Questions?

Let's stay in touch!

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