

Human Behavior and Innovation:

Strategies for Implementing Change

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Chairman, Committee on Accreditation, The Pro Board®



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Chicago Fire Department Engine 63's house



About me:



- Eagle Scout
- EMT (1990-present)
- Edge-Scott FPD (1992-2016)
- RN/TNS (1997-present)
- University of Illinois Fire Service Institute (1998 - present)
- Pro Board Fire Service Professional Qualifications System (2013 - present), currently the Chair of the Committee on Accreditation
- Education:
 - BSN, UIC, Nursing
 - Ed. M., UIUC, Global Human Resource Development
 - Ed. D., UIUC, Educational Policy and Organizational Leadership

Plan for the session:



- What is culture?
- Why is adopting a new product so difficult in the fire service?
- What can we do to increase the odds of success for our products?

A Fire and Emergency Services Definition:

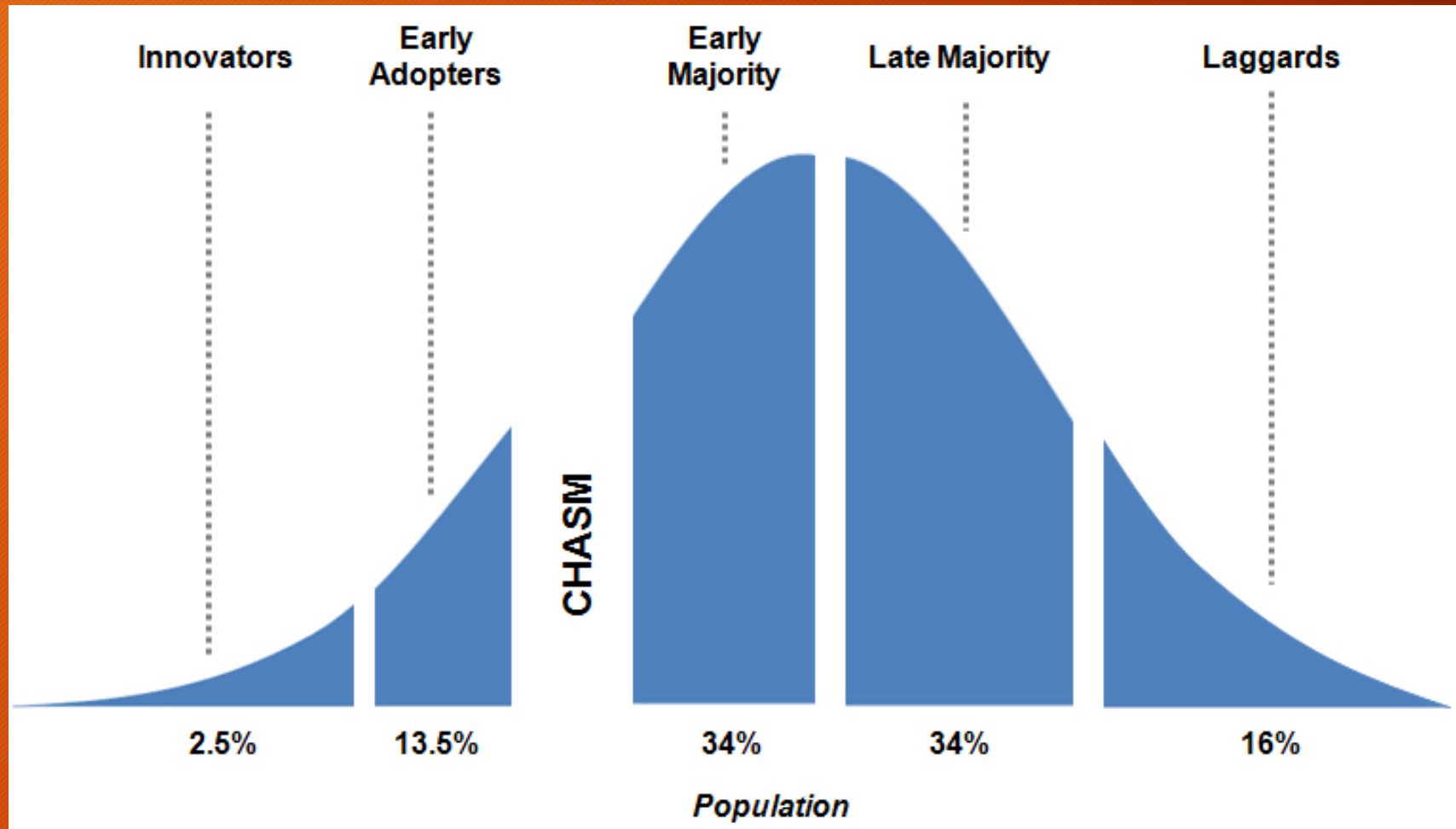


All behaviors, ideas, attitudes, and values shared by a group that are being transmitted to new and future members of the group.

Culture is influenced by history, uniforming, facilities, vocabulary, leadership, and management within the organization.

~Chief Dennis Compton, 2003

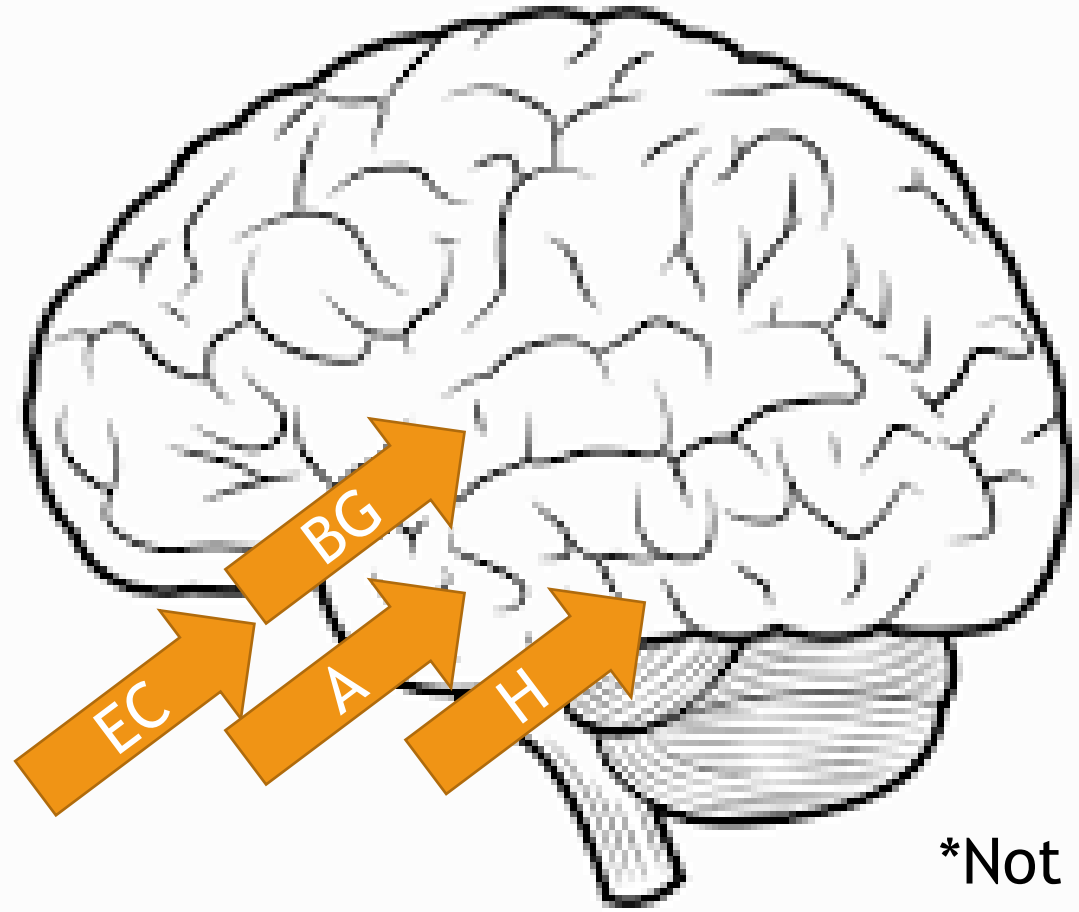
From Rogers, E.M.(2003). Diffusion of innovations



Wired to Resist

Andretta, B. (2017). *Wired to resist: The brain science of why change fails*. 7th Mind Publishing, Santa Barbara, CA.

A: Amygdala
EC: Entorhinal
Cortex
BG: Basal Ganglia
H: Habenula

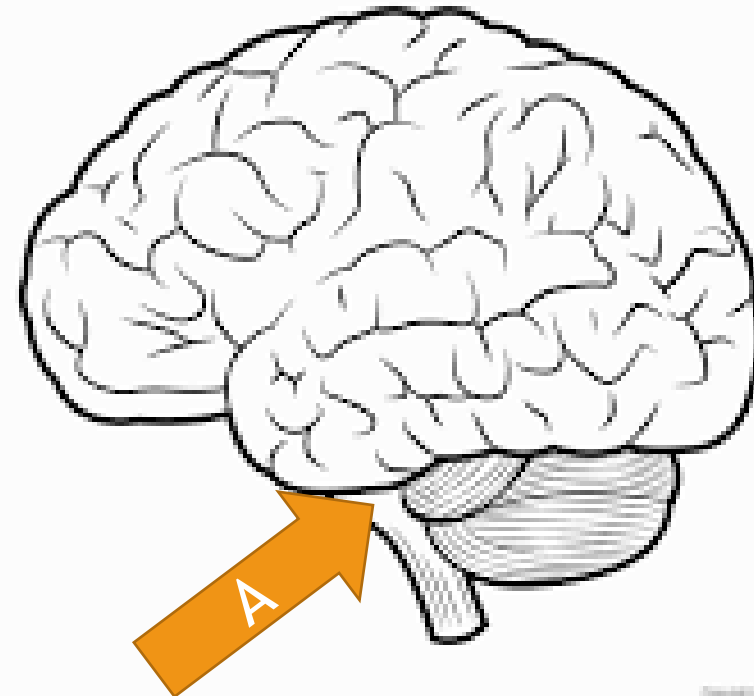


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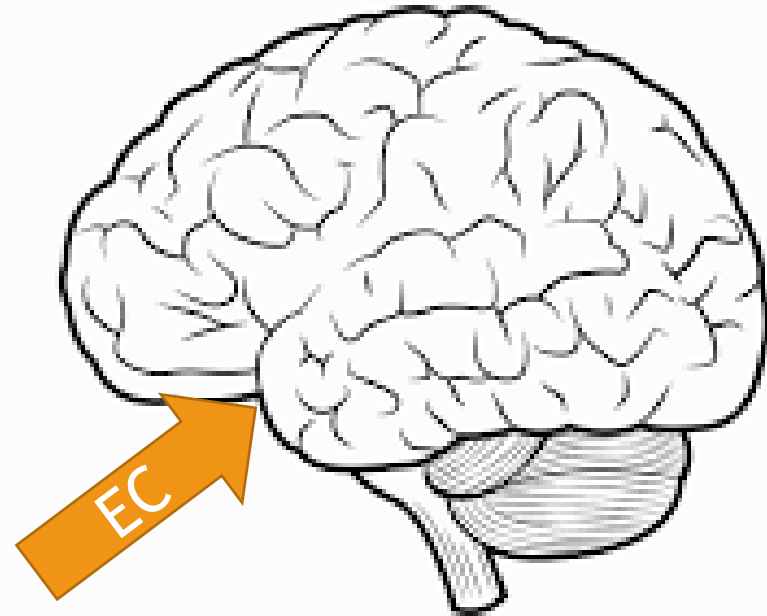
Brain Structures

- A: Amygdala:
Fear
- EC: Entorhinal
Cortex
- BG: Basal
Ganglia
- H: Habenula



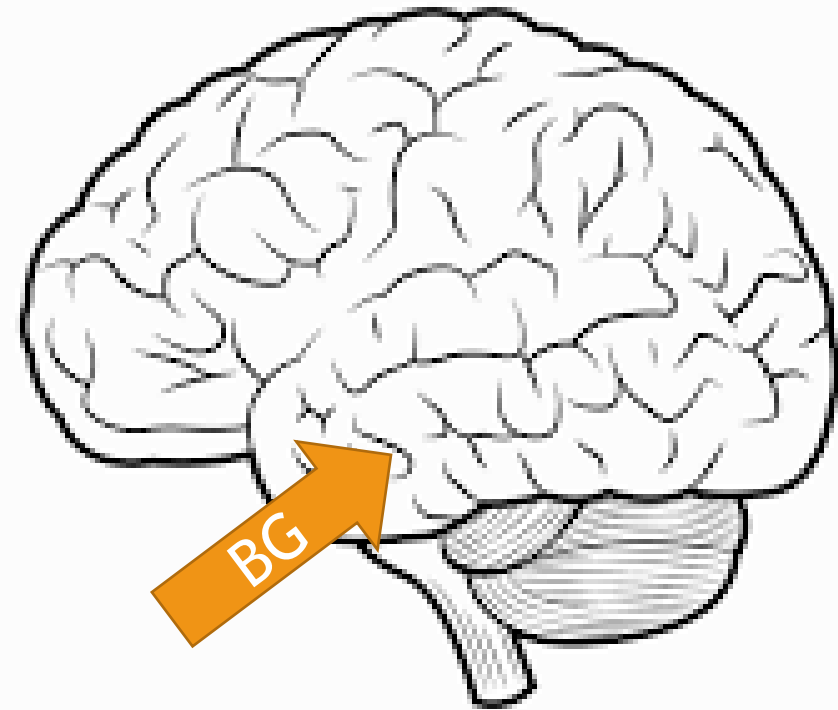
Brain Structures

- A: Amygdala
- EC: Entorhinal Cortex:
Navigation
- BG: Basal Ganglia
- H: Habenula



Brain Structures

- A: Amygdala
- EC: Entorhinal Cortex
- BG: Basal Ganglia: Action Selection
- H: Habenula



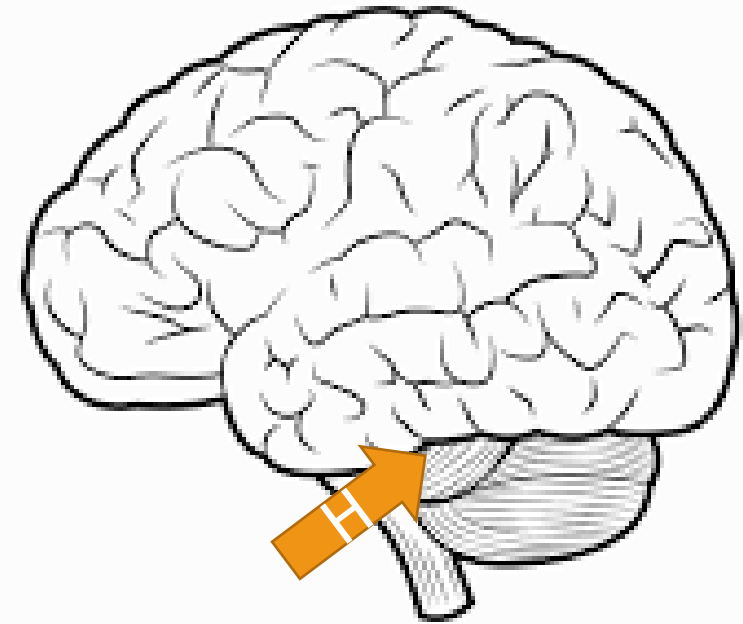
Habenero



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Brain Structures

- A: Amygdala
- EC: Entorhinal Cortex
- BG: Basal Ganglia
- H: Habenula: Pain Avoidance



Gallet Helmet (Christen & Malone, 2005)



- Lighter
- Better visibility
- Better impact distribution
- Lower Center of Gravity
- Better eye and face protection
- Better vehicle crash protection
- Better mask-to-face interface
- BUT...



Also from Christen and Malone:



- “Although a large number of potential solutions to various fire fighting needs exist, their transition to the field is extremely poor.”
- “The culture and tradition of the fire service has been an impediment to protective equipment technology.”
- “Without a coordinated integration of research and technology, the fire fighter protection effort will continue it’s slow rate of progress.”



The Influencer Model

Patterson, K., & Grenny, J. (2007). *Influencer: The power to change anything*. Tata McGraw-Hill Education.

The Influencer Model

	Motivation	Ability
Personal		
Social		
Structural		

The Influencer Model

	Motivation	Ability
Personal	Make the Undesirable Desirable	Surpass Your Limits
Social	Harness Peer Pressure	Find Strength in Numbers
Structural	Rewards and Accountability	Change the Environment

Applying the Influencer Model to Skin Decon

	Motivation	Ability
Personal	<ul style="list-style-type: none">• Firefighters are more likely to get cancer.• Decon after firefighting reduces carcinogen exposure.	<ul style="list-style-type: none">• Where to find the decon wipes.• How to use them to decon skin effectively.• Which body parts to decon.

Social

Motivation

- Instructors must model the behaviors we want to see in students.
- Incorporate decon into post-fire activities.

Ability

- Offer wipes to each other. Designate a wipe distributor.
- Use peer leaders to influence others.

Structural

Motivation

- Add signage to reinforce the how and why and identify wipe locations.
- Develop an accountability and rewards system.
- Catch people “doing it right.” (+ Deviance)
- San Diego FD Helmet Decal

Ability

- Have abundant locations for wipe distribution.
- Maintain more-than-adequate supply so you don't run out

Example 2:

Help Mitigate Firefighter Cancer Risk

Portable Gross Decon To Remove Particulates At The Scene

The DECON/pak is a self-contained agent proportioning and rinse application system helping to provide simple gross decontamination of firefighting personnel and equipment.



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	Motivation	Ability
Personal	What's the why? What's the science?	Help customers train
Social	Showcase customer users	Decon challenge decal
Structural	Quarterly decon awards	Branded Reminder Signage

Example 3: Clean Locker



	Motivation	Ability
Personal	What's the why? What's the science?	Help customers train
Social	Showcase customer users	Decon challenge decal
Structural	Quarterly decon awards	Branded Reminder Signage

Example 4: 360 Video



	Motivation	Ability
Personal	What's the why? What's the science?	Help customers train
Social	Showcase customer users. Tie back to NFPA	Gamification
Structural	Quarterly recognition awards	

Example 5: SAM



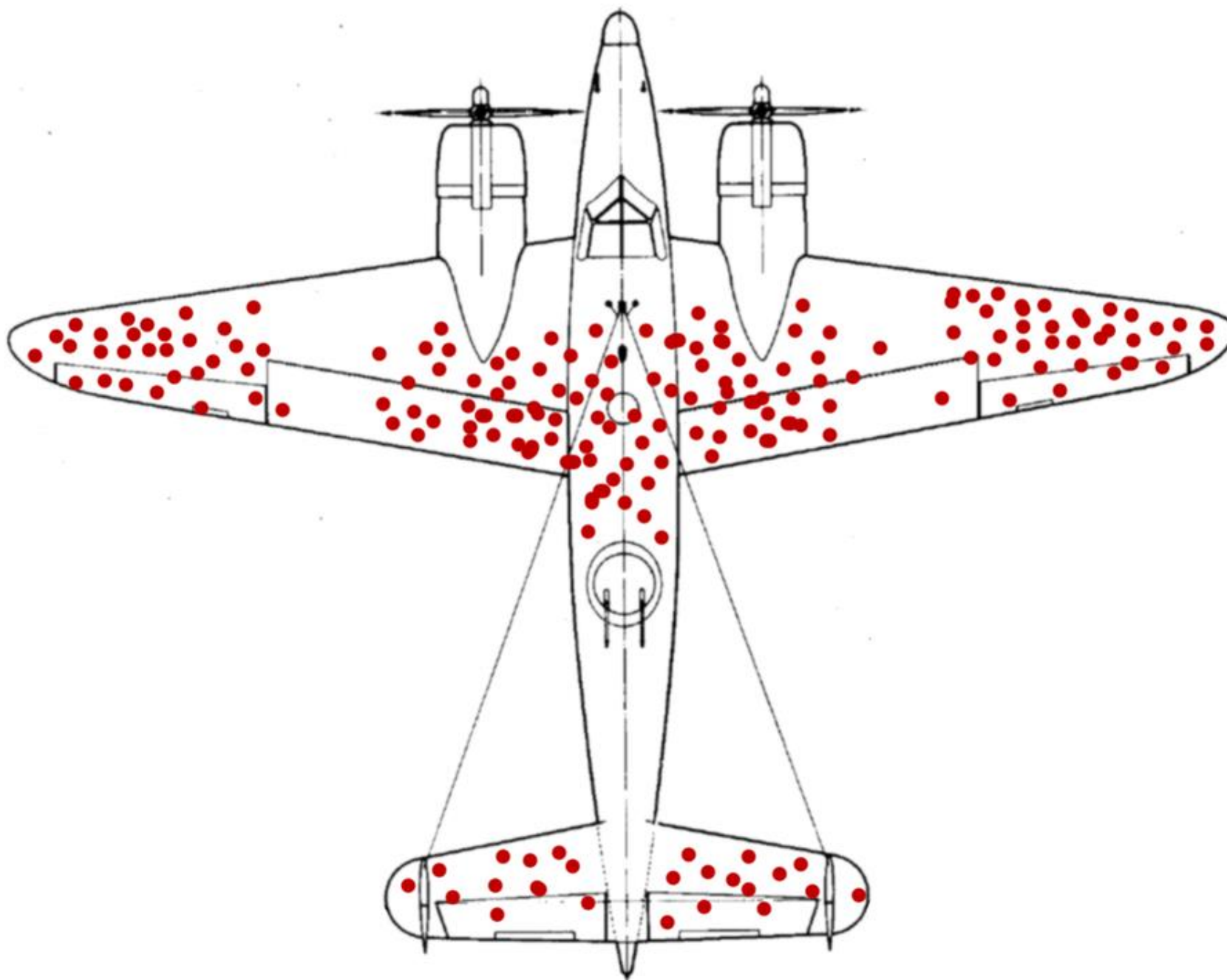


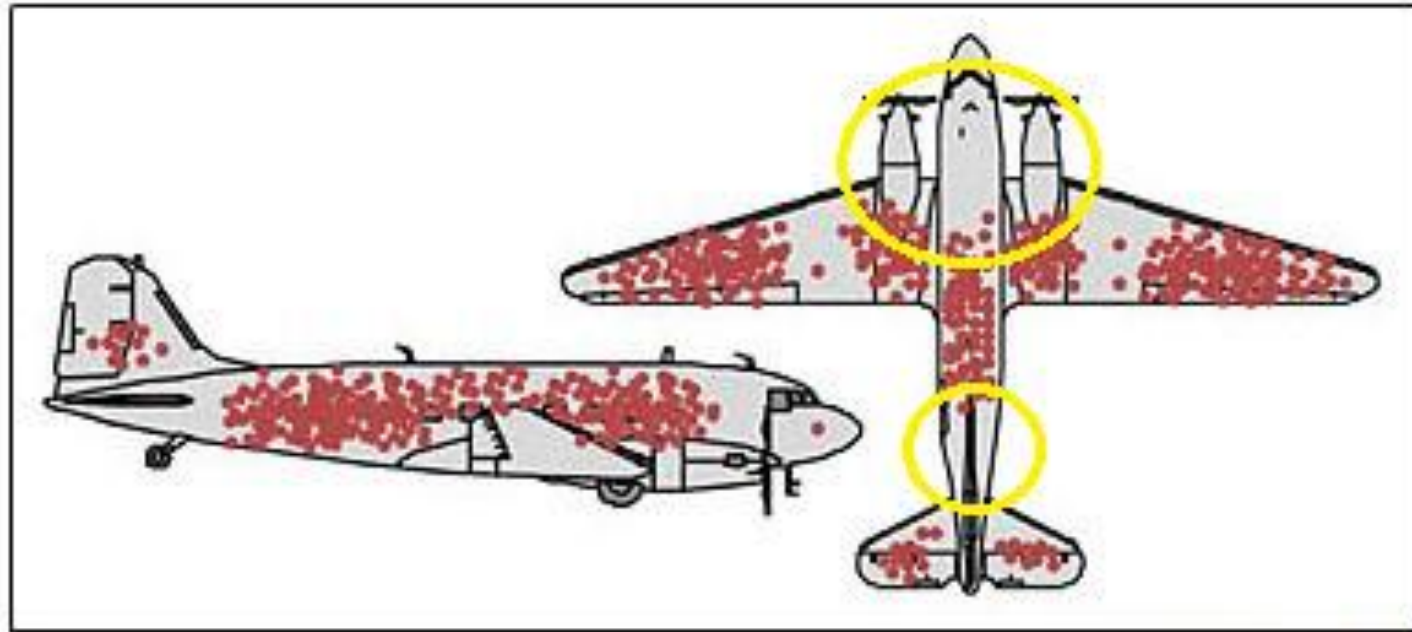


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	Motivation	Ability
Personal	What's the why? What's the science?	Help customers train- ongoing support
Social	Showcase customer users	Make it fun- is there a competition?
Structural	Quarterly awards	This one's a given





Credit: Cameron Moll

Gentlemen, you need to put more armour-plate where the holes aren't because that's where the holes were on the airplanes that didn't return - Abraham Wald 1942.

A Closing Thought from Geert Hofstede:



“Uniformed organizations have to balance their attempts to introduce new ways of working... with the necessity of preserving traditional basics. Changing uniformed cultures requires patience and wisdom.” 2000, p. 481.



THANK YOU for the opportunity to share.



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