

ACTION BIAS

and the Two Most Dangerous
Words in Cybersecurity



SPEAKERS



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OVERVIEW

- Traditional cybersecurity goals
- Cognitive bias
- Action bias in cybersecurity
- Countermeasures

TRADITIONAL CYBERSECURITY GOALS

jj5UFd491se7

password123

12345qwerty

n2FG0tK2c

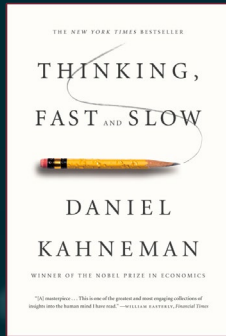


HUMAN REACTIONS to CRISIS



COGNITIVE BIAS

HEURISTICS & BIASES



System 1: fast / automatic

System 2: slow / deliberate

THE VARIETY OF COGNITIVE BIASES

Action bias

Input bias

Hindsight bias

Endowment effect

Confirmation bias

Overconfidence bias

Optimism bias

Outcome bias

Magical thinking

Paradox of choice



ACTION BIAS



BUSINESS AIRLINE

LEAGUE

SOFTWARE T

ACTION BIAS in CYBERSECURITY



ACTION BIAS is the impulse to act to gain a sense of control over a situation and eliminate a problem; it is most likely to occur if others expect us to act.



IN CYBERSECURITY, Action Bias can lead to increased risk and damage from various events; it is approached differently by users, administrators, or executives.

IMMEDIATE *vs.* NON-IMMEDIATE ACTION

- Some situations **DO** require immediate action.
- We are not suggesting you let bad things happen.
- Have a plan and follow the plan.



The TWO MOST DANGEROUS WORDS in CYBERSECURITY

NEVER AGAIN

COUNTERMEASURES to ACTION BIAS



What are the *wrong* countermeasures?

COUNTERMEASURES to ACTION BIAS

RISK MANAGEMENT
CULTURE CHANGE

LEADERSHIP EDUCATION
SLOW DOWN

Preparation, analysis, and education can help avoid damaging impacts of cyberattacks and avoid complications due to ill-considered reactions to malicious events.

COUNTERMEASURES to ACTION BIAS

Research Ideas

- Validate threats
- Simplify and normalize deep thought vs. a reflex
- Evolve the mental models

SUMMARY

“

A delay is better than a disaster.

”

Chelsey “Sully” Sullenberger, Capt., US Airways Flight 1549

TAKEAWAYS

Next week, you should:

- Start spreading the word about action bias to raise awareness

In the next 3 months, you should:

- Review your plans and SOPs
- Develop appropriate metrics and goals

Within 6 months, you should:

- Run a TTX
- Work on culture change

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