

Planning for Un-Plannable Risks

Problem Statement: We as humans have built-in cognitive biases and psychological flaws that impede our understanding of Risk and Probability. We are therefore surprised by unforeseen events, including Black Swans. Building innovative controls and practices into our Risk Management, Cyber-Security, Business Continuity and other programs can compensate for these flaws and make our programs tolerant of the Unforeseeable.

Black Swan Defined

- Unpredictable
- Massively game-changing
- In hindsight foreseeable
- 9/11: successful asymmetrical attack on a world superpower through a known threat vector
- 2003 US Northeast blackout: widespread power outage caused by one overheated wire shorting out on a tree: 55MM impacted across 7 states and Canada, \$6B economic impact
- 2010 Eyjafjallajokull volcano: presence of ice cap boosted impact of minor eruption to shut down European airspace and cripple global travel: \$5B economic impact
- 2010: Fukushima quake and tsunami overwhelmed Japan defenses, causing nuclear reactor catastrophe. \$25-250B economic impact
- 2011: Super Storm Sandy, less-than-hurricane on US Northeast coast. \$65B economic impact

Trends and Drivers Influencing 21st Century Risks

Exponential explosion of data	Disintermediation of technology	Technical interconnectedness (IoT)
Increasing speed of business and social innovation and change	Evolution from Mediocristan to Extremestan	Increasing concentration risk through globalization/consolidation

Our Cognitive Biases

Gambler's Fallacy

Belief that past events influence present risk

Choice-Supportive Bias

Belief that one's on choices were better than they were

Base Rate Bias

Focusing on edge data not base data when estimating risk

Anchoring Bias

Fixation on past risks instead of evolving risks

Texas Sharpshooter

Misapplying result to prove preconceived theory

Normalcy Bias

Discounting risks not directly experienced

Availability Bias

Over-estimation of low but emotionally impacting risk

Zero-Risk Bias

Preference to eliminate one risk vs larger overall reduction

Bias Blind Spot

Lack of acceptance of one's own bias in decision-making

Confirmation Bias

Focus on confirming rather than disproving hypotheses

Controls and Practices to Mitigate Against Unforeseeable Risks

Move past "a bad thing" to "some bad thing" happening	Assume <i>Yes</i> and plan accordingly	Move from <i>Reactive</i> to <i>Proactive</i> to <i>Preemptive</i>
Balance <i>Predicting</i> (Risk Mgt) and <i>Preventing</i> (High Availability. Redundancy) with <i>Responding</i> (Business Continuity, Crisis Mgt, Disaster Recovery)	Incorporate independent perspective and external practices into risk identification, management and exercising	Manage Supply Chain Risk holistically with assessment, investigative due diligence, review and joint planning and exercising
Train and exercise, focusing on desired behaviors and outcomes not scenario details	Counterbalance your Blind Spots with diversity of viewpoints, questioning assumptions and lateral thinking	Move from Scenario-Based to All-Hazard/Business Impact Planning