REIMAGINING BUSINESS RESILIENCE FOR THE AGILE AGE
In his seminal 1921 work, *Risk, Uncertainty and Profit*, University of Chicago economist Frank Knight distinguished measurable risk, when the probability of an outcome can be quantified, from immeasurable uncertainty, when the degree of unpredictability makes probability incalculable—what former Secretary of Defense Donald Rumsfeld would call an "unknown unknown." Measurable risk, by and large, can be planned for if not entirely prevented. It's simple cause-and-effect. But true uncertainty? You don't know what you don't know.

Though a century has passed, the Knightian concept of uncertainty remains an ongoing business challenge. Most approaches to risk management attempt to reduce uncertainty—anticipating the unknown and managing surprise through scenario planning, often focusing on hypothetical extremes. What can't be defined or managed is shifted to a third-party insurer.

But this reductive approach has limitations. It assumes that the variables at play are fixed and that the scope of what's unknown is finite. No matter how sophisticated our statistical modeling techniques become, the universe of uncertainty continues to expand, at a pace at which no amount of information gathering can keep up.

Underlying that uncertainty are converging and multiplying forces of change, spanning every domain from technology to geopolitics to the environment. The rate of change for each driving force is growing exponentially, as is the degree of interconnectivity and the strength of those connections, giving rise to new interdependencies and emergent trends. Digitization has erased the last physical barriers among people, places and things—setting the world on a course for increasing and irrevocable connectivity. We now live in a networked, global society, where communication happens in real time and information spreads across geographical borders faster than it can be fact-checked.
Changing climate  
Degrading environment  
Ageing population  
Rising chronic diseases  
Rising income and wealth  
Rising urbanization  
Increased polarization of societies  
Degrading environment  
Increasing national sentiment  
Rising geographic mobility  
Changing landscape of international governance  
Rising cyber dependency  
Growing middle class in emerging economies  
Rising income and wealth disparity  
Ageing population  

Economic Risks  
Environmental Risks  
Geopolitical Risks  
Technological Risks  
Societal Risks  

Number and strength of connections ("weighted degree")  

Connectivity is both a contributor to and consequence of accelerating complexity. It’s a self-fulfilling prophecy: The number of interactions between events and entities has created new feedback loops, amplified the complexity of existing feedback loops, and forged new links between previously independent risk domains, thereby increasing network density and opacity. Linear causal chains become dynamic causal loops with constantly changing system parameters, making it nearly impossible to untangle a discrete cause from effect or predict cascading effects with any degree of accuracy. At the same time, greater interconnectivity is increasing the speed at which these interactions occur: More is happening at an accelerated pace.

The result is that businesses must contend with a highly unpredictable and perpetually unstable operational environment. Trends can be observed and measured, but their interplay in specific situations and eventual trajectory are vague at best. We now live in a continuous state of persistent threat. And there is less time than ever before to react and respond.

“If we accept the idea of residual uncertainty, but believe we can survive and prosper by having a deliberate planning process that, over time, develops a set of contingency plans that can be called upon when needed, we have not fully appreciated the nature of the uncertainties we face.”

— Accept Reality and the Agility Imperative; David S. Alberts, Ph.D.; 2010
The Evolution of Risk Management

Our understanding of risk has changed dramatically in the last five to ten years, producing new concepts and methodologies as well as adapting old ones. Yet the practice of risk management remains the same. This new school of thought does not negate traditional business continuity initiatives but does highlight their inadequacies. Here’s how we can evolve business continuity programs for the realities of complex risk:

We need to include multiple risk domains. Thanks to advances in technology, science and economic theory, we now know that not all risk is created equally; it exists on a spectrum that can be divided into four quadrants based on the relationship between cause and effect: simple, complicated, complex and chaotic.

Disorder
Unknown Risk Domain

- **COMPLEX**
  - Known Unknowns
  - EMERGENT PRACTICE
  - Example: Major Customer Loss
  - Relationship between cause and effect apparent in retrospect
  - Pattern management; perspective filters
  - Probe-Sense-Respond

- **CHAOTIC**
  - Unknown Unknowns
  - NOVEL PRACTICE
  - Example: Terrorist Attack
  - No discernible relationship between cause and effect
  - Stability-focused intervention; crisis management
  - Act-Sense-Respond

- **COMPLICATED**
  - Knowable Unknowns
  - GOOD PRACTICE
  - Example: Internet Outage
  - Predictable relationship between cause and effect
  - Scenario planning; systems thinking
  - Sense-Analyze-Respond

- **SIMPLE**
  - Known Knowns
  - BEST PRACTICE
  - Example: Loan Default
  - Obvious relationship between cause and effect
  - Standard operating procedures; process reengineering
  - Sense-Categorize-Respond

Source: Cynefin Framework by Dave Snowden
Each risk domain requires a distinct approach and different problem-solving techniques. However, most standard risk management activities—impact assessments, policies, plans and exercises—are only designed to address well-ordered "simple" or "complicated" threats, despite them representing an increasingly small fraction of business risk. Yet a disproportionate amount of time and capital is allocated to managing the risk that is easiest to understand.

As explained by renowned cognitive psychologist Dr. Gary Klein, Ph.D., well-ordered domains are structured and predictable. We understand cause and effect and can systematically engineer the change we want. Because conditions are relatively stable, we can construct comprehensive procedural guides with all known requirements. The majority of time and financial investment is spent on upfront planning and process development. Traditional preparation activities are focused on comprehensive documentation and, to a lesser extent, employee adoption via exercises and testing. If, in practice, an organization falls short in its response, their failure is due to poor preparation or incompetence.

Consider, for example, a retail bank that has a customer miss a credit card payment. The bank should have a tried-and-true process in place that can be implemented to resolve the issue, since this is an expected occurrence.

In complex and chaotic risk domains, however, circumstances may change rapidly and unexpectedly. There are more variables and linkages between them to consider, some of which we may not know. We cannot be entirely sure of what causes events, nor can we make good predictions about what will happen next.

Consider here the catastrophic Chernobyl disaster. The explosion of a nuclear power plant was a novel event with unexpected consequences well beyond the initial fatalities. According to Mikhail Gorbachev, Chernobyl was the "real reason" behind the collapse of the Soviet Union.

Rather than tackle complexity head-on, the tendency is to oversimplify complex problems and retrofit them into an ordered risk mold. Traditional planning and preparation methodologies don’t work well in complex and chaotic risk domains and can inadvertently do more harm than good. Attempts at contingency planning devolve into imagining and preparing for worst case scenarios—a futile endeavor as the list of worst-case possibilities grows infinitely longer and increasingly dubious. And when put into practical use, they only work insofar as the conditions remain constant. One size doesn’t fit all: When facing ambiguous and unpredictable situations, we need to apply a different decision model that relies on narrative techniques and multiple perspectives rather than hard-and-fast rules.
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Source: Cynefin Framework by Dave Snowden
2. THINK DIFFERENTLY WHEN IT COUNTS.

“No problem can withstand the assault of sustained thinking.”
– Voltaire

Crisis management demands timely, effective decisions based on judgment of available information—in other words, critical thinking. It’s not a process or technology or framework; it’s a cognitive capability that comes down to people. Amid accelerating change and complexity, organizations need leaders who apply problem-solving skills to any situation, under significant pressure and time constraints. Building up the critical thinking capability requires investing in education, and developing deeper and more varied expertise across the organization. Employees need to be taught methods for making sense of disruptive change, interpreting information and gaining additional insight when information is incomplete. They need to be trained to recognize their own unconscious biases and develop strategies to negate them.

Critical thinking is only one piece of the people puzzle. The right decision can be reached, but it means nothing if it isn’t implemented. Effectively responding to risk is also an exercise in change management. Like business continuity, change management is often treated as a check-the-box list of processes and rote communications. But engendering long-term behavioral change requires more direct—and convincing—engagement. To combat resistance to change, you need to understand the underlying psychology behind it. While you can’t force behavior change, you can influence it by changing the perception around the desired behavior. Think of it as behavior change marketing.
Research shows that new behaviors are easily derailed in stressful and busy situations—and a crisis would certainly qualify. Organizations need to take a page from behavioral scientists by designing behavioral interventions. That might mean changing the conditions of the operational environment rather than people directly, or it could mean introducing a system of positive reinforcement.
3. RUN YOUR PROGRAM LIKE A BUSINESS.

“Nothing happens until someone sells something.”
– Thomas Watson, IBM Founder

Imagine the risk management program as an early-stage startup. What does every startup need to get off the ground? Funding. How do you get funding? By winning clients. To win clients, you need a pitch and a good story. You need a differentiated product to sell, one that addresses the needs of the current market. In other words, flip your mental model to that of an entrepreneur: treat your share of the corporate budget like its own book of business, and your internal stakeholders like clients.

When you shift your mindset to running risk management as a business, new questions arise: What’s your five-year plan? What stage is the program currently in and how long will it take to mature? What data are you collecting and why? What products are in the development pipeline?

### 90%
- BIAs
- Plans
- Assessments
- Exercises

### 60%
- Global Processes
- Portfolio Planning
- CFO BIA
- Resiliency Engineering
- Third-Party Risk
- Capital Expenditures

### 30%
- BIAs
- Plans
- Assessments
- Exercises

### 5%
- ?

### 5%
- ?

### 10%
- Machine Learning
- Bots
- Blockchain
- ?
These are the questions you need to answer to effectively make the business case to transform your risk management program from a purely administrative function to a strategic driver of value. Transformation does not necessarily mean increased resilience investment, but a shift in how capital is allocated and investments are prioritized.
Welcome to the New Era

In short, the way most businesses manage risk doesn’t work anymore. Not only do we need to evolve our business continuity programs, we need to rewire the way we think about risk altogether.

Conventional approaches continue to perpetuate a “wait-for-impact” culture, forcing businesses into a defensive posture rather than an opportunistic one, inhibiting their response and reaction time. Instead, the risk management function must contribute to a culture of resilience and agility.

It’s a new era of complex local, regional and global change, fraught with uncertainty and risk—but also new possibilities. Disruption can be turned from threat to opportunity—if organizations are agile enough to seize it.