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Elevate Organizational Survival: Introducing an Adaptability Assessment/Test in Organizational Premortem Strategies Toward Developing Performance-Based Navigation

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Why do so many firms as they mature lose their capacity to adapt and prosper?

As companies evolve, they encounter numerous challenges in sustaining their ability to adapt and thrive. Assessing adaptability before facing failure is essential for organizations aiming to navigate changing internal and external environments successfully. Evaluating adaptability before crises emerge is not only crucial for survival but also for positioning oneself to flourish in evolving conditions.

Adaptability, seen as an emergent systemic property, requires organizations to sustain performance amid fluctuating conditions. Since performance depends on both controlled and uncontrolled variables, careful monitoring of these factors is vital. Assessing adaptability involves adopting the perspective of the organization as a complex adaptive system, recognizing its inherent interconnectedness and dynamic nature. From this viewpoint, adaptability emerges from the interaction of controlled and uncontrolled performance variables, highlighting the delicate balance needed for effective adaptation.

Modeling organizational assessment within complex adaptive systems principles for creating a simulator as a performance-based navigator is essential for understanding and improving organizational performance. Simulation simplifies real-world processes by mimicking their behavior and showing how they evolve over time under different conditions and especially under worst case scenario. These simulations, typically computer-based, using an artificial intelligence

(AI) platform provide visual and interactive representations to aid management in decision-making.

To effectively assess organizational adaptability, it's crucial to embrace concepts including feedback, nonlinearity, and time delays. These principles foster a systems-thinking approach, necessary for navigating complex global challenges. Conventional adaptability assessments often rely on linear predictive methods, such as comparing past performance against industry standards or conducting forward-looking evaluations like bank stress tests.

We advocate for a transformative approach to adaptability assessment, centered on real-time information gathering within a dynamic learning and adaptation framework. Our initiative, dubbed Performance-Based Navigation, seeks to create an adaptability assessment simulator. This innovative tool will delve into the intricate structure and evolution of systemic metrics, informed by a robust theoretical model of system competence.

Through meticulous design and seamless integration with organizational systems, Performance-Based Navigation will craft a compelling narrative for change. It will empower organizations to undergo profound transformations by executing complex operations with precision and reliability, thus driving meaningful progress and resilience.

The concept of designing and developing an adaptability assessment simulator, originated from discussions with Vince Barabba, who retired in 2003 as the general manager of corporate strategy and knowledge development at General Motors Corporation. Barabba (with the support of Carl Spetzler of the Strategic Decision Group) was one of the architects of GM's turnaround in the 1990s, recognized the pressing need to understand why GM after more than a decade of success encountered challenges in adapting to the volatile, uncertain, complex, and ambiguous (VUCA) environment prevalent in the eralyp-2000s business landscape. His curiosity was directed and expanded in his book, *Surviving Transformation*, published in 2004, which provided valuable insights into the challenges GM faced from 1990 to 2003 and the strategies necessary for survival and adaptation during that time frame.

The unanticipated decline in GM's performance from 2003 to 2009, culminating in bankruptcy and requiring US government intervention, prompted a profound introspection into the reasons behind this downfall. Despite GM's longstanding dominance in the automotive industry, it struggled to effectively weather the storm of the VUCA environment. The failure to adapt adequately to changing market dynamics, technological advancements, shifting consumer preferences, and global economic challenges likely contributed to its decline. Many observers further hypothesize that factors such as organizational inertia, bureaucratic hurdles, slow decision-making processes, lack of innovation, static leadership mindset and failure to anticipate and respond to emerging trends played a role in GM's inability to navigate the VUCA environment successfully.

The case of GM serves as a poignant reminder of the critical importance of adaptability, agility, and foresight in the fast-paced and increasingly unpredictable business landscape. Indeed, discussions and analysis with Barabba of his published books and papers highlighted the critical importance of endowing organizations with the capacity to learn and adapt, particularly by learning from past decisions and adapting to new environments. These reflections to better understand the challenges of performance in turbulent contexts generated the concept of the premortem technique to assess adaptability.

Postmortem and Premortem

A postmortem by definition refers to after death and commonly focuses on the search for cause(s) following loss of human life. In an organization, an after-action review which focuses on why results were not as expected is similar in that it is performed after a loss or failure has occurred. A premortem as its name suggests involves imagining a failure or loss before it is evident then working backward to determine why and what potentially may have contributed to it. Notable development of the premortem as a method of risk assessment has been described by Gary Kline.¹

¹ <https://hbr.org/2007/09/performing-a-project-premortem>

A premortem may be used in strategic planning and decision-making processes to anticipate potential systemic failures or shortcomings before they occur. It involves imagining that a project, decision, or initiative has failed and then identifying why it might have failed. This approach allows teams to proactively identify potential pitfalls, risks, and obstacles that could derail their plans, enabling them to take preventive actions to mitigate these risks before they materialize.

Premortems offer organizations a structured approach to learning from past decisions by envisioning potential failure scenarios and identifying the underlying factors that could lead to those outcomes. By conducting premortems, organizations can proactively assess the risks and vulnerabilities associated with their decisions and initiatives, allowing them to make necessary adjustments and improvements before implementation.

Appropriate use of premortems foster a culture of continuous learning and adaptation within the organization. By routinely engaging in premortem exercises, leadership become adept at anticipating challenges, recognizing failure patterns, and developing strategies to mitigate risks effectively. This iterative process of learning and adaptation enables organizations to stay responsive to changing circumstances and emerging threats in their environment.

Premortems serve as a valuable tool for organizations seeking to enhance their capacity to learn and adapt. Organizations can systematically identify and address potential pitfalls by incorporating premortem techniques into their decision-making processes, thereby improving their resilience and ability to thrive in dynamic and uncertain environments.

Conducting a premortem, as opposed to waiting for failure then conducting a postmortem, helps develop the ability of organizations to anticipate what the future may require of them in several ways:

1. Identify Risks Early: Premortems enable leadership and teams to identify potential risks and challenges before they can manifest and cause significant damage to the project or organization.
2. Improve Preparedness: Organizations can better manage uncertainties and unforeseen events by anticipating failure scenarios and developing mitigation strategies.

3. **Promote Critical Thinking:** Premortems encourage leaders and teams to think critically and creatively about potential challenges and vulnerabilities, fostering a proactive risk management culture within the organization.
4. **Enhance Decision-Making:** By considering possible failure scenarios, leaders and teams can make more informed decisions and develop contingency plans to address potential issues before they arise.
5. **Facilitate Learning:** Premortems provide valuable learning opportunities by analyzing past failures and applying those insights to future decision-making processes, thereby improving the organization's resilience and adaptability.

Overall, premortems serve as a powerful tool for organizations to anticipate and mitigate risks, enhance decision-making processes, and foster a proactive approach to addressing challenges and uncertainties in the future.

Assessing Organizational Adaptability

An adaptability assessment or test evaluates an organization's ability to maintain its performance under threatening and stressful conditions, find innovative ways to make progress and adapt to changing situations. Adaptability is recognized as a critical soft skill/emergent property of an adaptive organization. In various worst-case scenarios, adaptability enables the organization to adjust quickly to change that can determine the success and perhaps survival of a business, particularly in industries where innovation is a fundamental component of the strategy.

Adaptable organizations demonstrate flexibility and versatility, enabling them to effectively navigate uncertainty and ambiguity in their respective business environments. Adaptable organizations are highly tolerant of rapidly changing circumstances and can embrace challenges to move forward despite obstacles. These organizations can thrive in turbulent environments, leveraging their adaptability to overcome challenges and succeed.

Using an adaptability test paired with a premortem scenario allows organizations to assess how well they would function in an increasingly VUCA environment. Evaluating the results of a test

of adaptability can help organizations to identify areas for improvement and develop strategies to enhance their agility and resilience in response to dynamic market conditions and emerging challenges. An assessment of adaptability provides valuable insights to inform decision-making and help organizations better prepare for and navigate uncertainties in today's rapidly evolving business landscape.

Adaptability Premortem Simulator to Enable Performance-Based Navigation

Simulation-based assessment of adaptability involves creating realistic scenarios that mirror real-life situations and challenges. Organizational leaders are placed in these simulated environments where they can demonstrate abilities, decision-making skills and problem-solving capabilities. Developing the adaptability assessment simulator may benefit from using state-of-the-art Generative AI. This encompasses a range of models capable of creating new content, e.g., text, images, sounds, and complex data structures using synthetic data; and to learn from then generate outputs that align with information patterns.²

The following sequence outlines the progression from recognizing maladaptation to implementing strategies for organizational survival and success in volatile, uncertain, complex, and ambiguous (VUCA) environments.

1. Recognizing Maladaptation: This refers to the failure of an organization to effectively adapt to changing circumstances, leading to decreased performance or even failure.
2. Adaptation: This refers to maintaining performance in the face of changing environments. It signifies the ability of an organization to adjust its strategies, processes, and structures to align with evolving conditions.
3. Performance in Changing Contexts/Environments (VUCA/Turbulence): Organizations must perform well despite the challenges posed by VUCA environments. This involves measuring performance metrics and ensuring they remain effective in turbulent conditions.

² David Sweenor (2023): <https://www.linkedin.com/pulse/business-applications-generative-ai-david-sweenor/> and <https://www.linkedin.com/pulse/generative-ai-vs-traditional-whats-better-david-sweenor-lg16e/>

4. Measures of Performance: Various metrics are used to assess organizational performance, indicating how well the organization adapts to changing environments and achieves its objectives. The metrics may be presented in the form of a dashboard.
5. Executive Organizational Dashboard: This is a colorful display that provides a comprehensive view of organizational performance, allowing executives to monitor key metrics and make informed decisions.
6. Premortem/Scenario Planning: This form of future-oriented scenario planning involves imagining realistic worst-case scenarios and identifying vulnerabilities which can reveal areas requiring adaptation.
7. Test of Adaptability: This test evaluates the organization's ability to adjust its strategies and operations in response to changing circumstances presented in the premortems.
8. Test of Robustness and Resiliency: If the adaptability test reveals low adaptability (mal-adaptivity), additional tests of robustness and resiliency are necessary. These tests – also in the form of realistic premortems - assess the organization's ability to withstand shocks and bounce back from adversity.
9. Change in Mindset (Cognitive Agility): Addressing maladaptively often requires a shift in mindset, emphasizing cognitive agility—the ability to think flexibly and adaptively in response to new information and challenges.

This sequence emphasizes the importance of recognizing maladaptation, assessing, and measuring performance in changing environments, utilizing techniques and tools including premortems and organizational dashboards, and ultimately fostering adaptability, robustness, and resiliency to thrive in VUCA conditions.

Developing the Adaptability Assessment Simulator/ Performance-Based Navigation

Our aim for the development of Adaptability Assessment Simulator/ Performance-Based Navigation is to develop a computer simulation, essentially a virtual model of the organization's performance dashboard and processes including software that replicates the behavior of the enterprise. Computer simulations are widely used across and within different domains to enable understanding of complex situations. They work by presenting scenarios representing real-world

systems using mathematical equations or rules, then projecting how they behave over time. An example from NASA (2020, p. 2)³ is presented:

The LOFT scenario was created with pilot input from both the airlines as well as NASA. The overriding design consideration was to make a complex scenario requiring numerous problem events constructed in a way to make things flow as they might in the real world. This meant that an early failure would have consequences later in the simulated flight much like failure events in actual flight. The major events are described below. In addition to these events there were short duration (approximately 60 seconds) display anomalies embedded in the scenario. These may or may not have been noticed by the test subjects dependent on the workload at the time.

Similar to how a flight simulator helps airline pilots and navigators improve skills, the Adaptability Assessment Simulator will help management leaders gain deeper insights into their organization and its proficiencies to adapt to the environment. The Adaptability Assessment Simulator will be a valuable tool for navigating environmental complexities, aiding in anticipation, and guiding decision-making processes.

Every organization or institution is faced with a set of interacting threats and opportunities that if it were to continue doing what it is doing currently, that is, if it were to fail to adapt to a changing internal and external environment, would eventually destroy itself even if it could predict the course of this change perfectly. The Adaptability Assessment Simulator offers simulated instances in which an organization or institution is faced with an adaptation crisis here and now—not sometime in the future – and tests the degree to which it is capable of surviving in this environment.

In conclusion, organizations that have been designed to be able rapidly to learn from and adapt to their own successes and failures, and those of relevant others in a VUCA environment, will demonstrate adaptive proficiencies in the Adaptability Assessment Simulator. These

³ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://ntrs.nasa.gov/api/citations/20200002935/downloads/20200002935.pdf

organizations should be capable of adapting to internal and external changes that affect performance, and of anticipating such changes and taking appropriate action before these changes occur. Such organizations will also demonstrate that they are robust, resilient and agile in thinking.

Organizations unable to adapt to their own successes and failures, and those of relevant others in a VUCA environment, will demonstrate maladaptive performance in the Adaptability Assessment Simulator/ Performance-Based Navigation. Such organizations will also demonstrate inadequate robustness, resilience, and agility in thinking.