Beyond Traditional Risk Management: Integrating Horizon Scanning and Strategic Risk Prioritization

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This journal article examines current efforts to merge horizon scanning and risk prioritization methodologies to comprehend emerging concerns better and classify them as either risk-related problems to be resolved or strategic opportunities to be exploited. Continuing to concern governments and global enterprises is the lack of correlation between data on developing challenges and credible strategic decisions. As demands for time and money expand, these obstacles are expected to intensify. Gathering insights would guide strategic choices at every level of the firm. Efforts to merge horizon scanning and risk prioritization using a qualitative weight of evidence framework is one method for developing a systematic procedure. This strategy detects all potential signs of future change with a significant influence on risk-stratified strategic missions and underlying values. Moreover, this approach supports the investigation of elements beyond the control of organizations, understanding that resilience is contingent upon the adaptability of management methods and the readiness to deal with various unforeseen events. I will also examine how leaders may utilize this framework to develop an excellent strategic plan with consistency. Last but not least, there will be proposals for future improvements to bolster trust in using horizon scanning for risk-stratified strategic planning.

Keywords: futures, horizon scanning, prioritization, risk, strategic decision-making

While it is likely that enterprises of all sizes were unprepared for the disruption created by Covid-19, the question is whether better foresight utilizing horizon scanning would have been helpful.

The *2020 Global Risk Report* (Brende, 2020) describes the most likely and consequential threats that could have occurred in 2020. Furthermore, while the usual suspects, such as

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climate change, cyberattacks, and geopolitical tensions, were included, there was little discussion of a global pandemic, nor was it listed as one of the most likely or significant risks to consider in 2020. Of course, it is crucial to evaluate specific risks, but it is equally essential to avoid becoming overly fixated on them to the exclusion of all other possibilities.

Undoubtedly, enterprises of all sizes were unprepared for such disruption, but one can only ponder whether the outcomes would have been different had better foresight measures been appropriately applied. With the world becoming more interconnected than ever before, it is not inconceivable that another crisis of similar proportions could occur in the future; and if it does, what lessons are there to be gleaned from the catastrophe of 2020?

Post-pandemic, the current risk landscape is greatly influenced by an unsettled geopolitical climate in which new centers of power and influence are rising. At the same time, existing alliance structures and global institutions are tested. While these developments can pave the way for new partnership arrangements in the future, they are now straining coordination systems and posing challenges to shared responsibility norms. Risks that were formerly apparent only on the far horizon may become a tsunami of catastrophic proportions if leaders do not learn how to analyze and respond to these tumultuous situations. The good news is that the opportunity for action still exists for a short time. Despite global concerns, there is still an opportunity for leaders to go beyond balance sheets and concentrate on the most pressing needs of the future, using the integrated tools of horizon scanning and strategic risk prioritization.

Evaluating risk velocity

The most straightforward method would be to incorporate risk velocity into the effect score (see Figure 1). The higher the score, the faster the effects or repercussions are perceived, and vice versa. Other risk experts recommend including risk velocity in a well-defined scoring model.

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Figure 1: Risk Prioritization Matrix

Risk assessment and rating is a crucial component of the horizon-scanning procedure, as it helps to identify the most critical threats and opportunities that require concentrated attention. Horizon scanning involves not only the detection of prospective dangers but also the discovery of possibilities, difficulties, and expected future developments on the periphery of present thought and planning.

Should risk velocity be measured as part of enterprise risk management? Again, the perspectives of professionals vary. Some insist that risk velocity must be incorporated. Others take a more realistic approach and emphasize that the organization's size and complexity must be considered before deciding. Those in the latter group stress the need to keep risk management as straightforward as feasible.

Regardless of the position one chooses, it is essential to consider how quickly the organization will feel the effects of risks. This will provide a more accurate risk assessment and enable one to prioritize risk mitigation actions by assessing the amount of reaction time available.

Overview of the Process

Concerns about the origin, plausibility, and relevance of horizon scanning data affect decision-makers' faith in the process and use of the outputs (Garnett et al., 2016). These issues can be addressed by integrating elements of risk assessment and prioritization to

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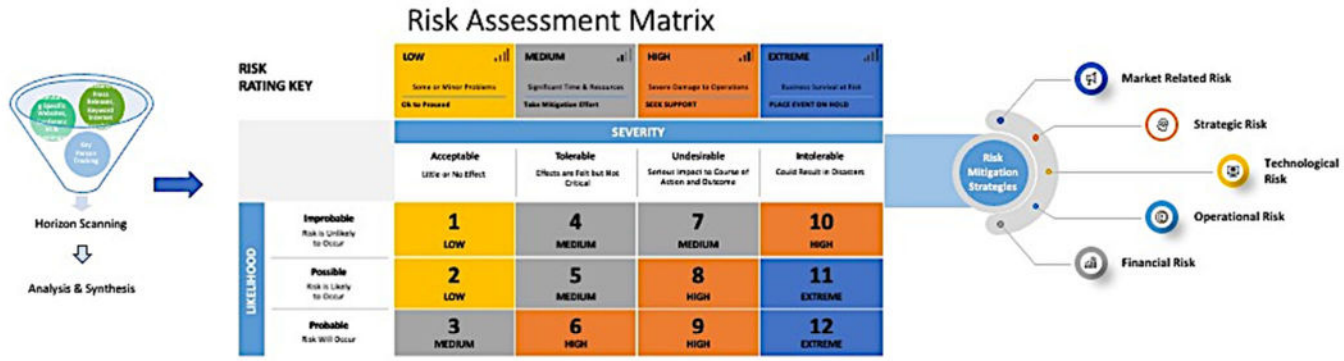
provide decision-makers with a risk-based framework for interpreting horizon scanning outputs in a meaningful and relevant manner, thereby supporting strategy for long-term planning, typically beyond a 10-year time horizon. In the suggested technique, information is continually collected from open sources and evaluated to acquire real-time environmental context data. For a comprehensive analysis of the external macro environment (big picture) to detect and comprehend early (weak) signals of change, open-source knowledge and information about emerging issues are cross-referenced with academic and non-academic literature and expert opinions using a weight of evidence framework (Garnett et al., 2016). Through informal and institutional networks (e.g., national security, governmental policies, economic dilemmas, societal issues, healthcare, food, and the environment), risk prioritization methodologies and horizon scanning (Linstone & Turoff, 1976) are applied to identify developing trends and appreciate their far-reaching, long-term consequences. Clustering approaches, such as network analysis (Könnölä et al., 2012), are used to discover cross-cutting problems and priorities to aid decision-making (Miles & Saritas, 2012).

Figure 2" Integrated Horizon Scanning and Risk Prioritization Approach



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Applying the Framework

The notion of *degree of certainty* is used to improve issue comprehension, modify strategic thinking, and assist the communication and support of corporate choices (Campbell et al., 2007). Evaluating the degree to which several forms of evidence support or refute a claim, known as the *weight of evidence*, is a crucial component of decision-making processes (Linkov et al., 2008). The Integrated Horizon Scanning architecture (Figure 2) employs several data or information sources (lines of evidence) with varying provenance (quality) that vary in the degree to which separate lines of evidence support or contradict a specific claim or hypothesis (strength of evidence) (Garnett et al., 2016). The Integrated Horizon Scanning architecture enables the synthesis of information from several sources instead of relying on a particular assessment method (Suter & Cormier, 2011). Every paradigm for strategic foresight includes a measure of causality and assures data relevance. Each appraisal entails the challenge of relevance, which necessitates an assumption of causality or link (Susser, 1991).

Assessing Information

Even when supplemented by academic and non-academic literature (where available), the information and data generated during horizon scanning do not represent proof in the scientific sense that corporations have grown to expect. Instead, horizon-scanning information is often based on expert opinion and may originate from various sources, including trade organizations, social networks, corporate websites, and blogs. Using the Integrated Horizon Scanning framework, it may not be possible to regulate the quality of these sources, but these limitations may be overcome if (Schultz, 2006):

- Formal examination of a vast array of information sources in horizon scanning is conducted, in addition to the consideration of conventional kinds of evidence (e.g., academic journals).
- An evaluation of the statistical or methodological rigor applicable to all information sources in horizon scanning occurs.
- The evaluation score assesses the evidence supporting a claim without implicitly discarding essential information or weak signals.

These conditions suggest that horizon scanning processes should combine two core functions: an intelligence-gathering function that collects various information to challenge conventional thought consistently, and a sense-making function that transforms data into knowledge to inform better decision-making (Garnett et al., 2016). The use of a qualitative approach by the Integrated Horizon Scanning framework satisfies both requirements, allowing for consistency in evaluating different sources of information and synthesis of other lines of evidence, as well as rigor in assessing the

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significance of emerging trends and deriving the broad, long-term risk implications and strategies to mitigate them (Garnett et al., 2016).

Connecting to Decision-Making

Horizon scanning strategies purposely challenge the mental maps of today's leadership teams by providing these decision-makers with future, high-impact problems that reflect an increase in uncertainty and are thought to be the outcome of actions that are becoming more unpredictable. It is difficult to convince decision-makers to examine probable future occurrences that deviate from current trends and growth patterns. According to studies on the use of foresight (including horizon scanning) to build forward-thinking innovation strategies, the role of strategic leaders shifted from being mere budget cycle thinkers to forward-thinking strategists of opportunity.

Leaders must make significant attempts to use the combined knowledge of several subject matter experts to examine and challenge prevalent mental models. The utilization of stakeholder workshops to engage on a wide scale and at all organizational levels demonstrates the significance of intelligence gathering inside the company. The active engagement of leaders and other critical internal stakeholders in workshops fosters buy-in. It increases the likelihood that workshop outputs will influence the formulation of strategies and other long-term organizational initiatives. Horizon scanning may, thus, serve as the beginning phase in intelligence collection for strategy formulation, which can subsequently be used to build or launch various processes or strategic intelligence instruments necessary to assist strategy and risk mitigation development (Havas et al., 2010). It is crucial to engage the proper mix of experts. It should engage several leaders, stakeholders, and interest groups, including academics, industry, government and non-governmental organizations, and consumers.

Increasing the use of expertise to validate horizon scanning data has not had the desired effect of increasing degrees of certainty; somewhat, claims of bias or inadequate representation of knowledge in workshops have undermined the legitimacy of outputs, resulting in dissatisfaction with scanning processes or outcomes (Garnett et al., 2016). The selection of specialists is essential for tackling bias issues. Chapman (2004) advises the use of "the best professional judgment" (p. 13). This refers to those with a comprehensive understanding of the subject, such as those with a firm grasp of current problems, knowledge of the trajectory and development of the issues, and awareness of stakeholders and public perception (Garnett et al., 2016). Selecting a range of experts ensures that multiple knowledge bases inform the process since distinct groups of experts may emphasize specific challenges and reach particular conclusions.

For the findings of horizon scanning to impact decision-making, knowledge management/translation and interpretation are also necessary. If a strategy is progressed, it is often essential to synthesize concerns into meaningful clusters

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connected to decision-making frameworks. This involves identifying problems that may affect the number of strategic opportunities and issues that may impact operational specifics.

Summary

In the Foundation series of science fiction books by Isaac Asimov (Asimov, 1991), a mathematician constructs a system to foresee and control the future. *Astounding Stories Magazine* published the first story in the series in 1942, and Mr. Asimov's prescience is remarkable (Asimov, 1942). Similarly, modern risk managers may profit from horizon gazing. This tool helps corporate risk managers identify early indicators of future changes or trends to proactively evaluate the effect of business risk on the company.

As the world grapples with rapid technological and demographic shifts, integrating horizon scanning with strategic risk prioritization is more critical than ever. Today's leaders need to sharpen their focus on future risks and opportunities as owners of this framework in the risk management process. This can be accomplished by:

- Assessing the situation first
- Considering quickly obtained information
- Thinking creatively beyond a particular situation or sector
- Mapping change drivers to inform strategy and delivery
- Creating peer groups and collaborating

Implementation of this framework will promptly alert leaders to potential dangers, allowing them to identify risks and opportunities associated with these occurrences and to adapt as necessary. Leaders can create robust, novel, and future-oriented strategies by integrating this essential tool into the risk mitigation process.

About the Author

Dr. Rodney B. Woods is a 2021 Strategic Foresight doctoral graduate of Regent University. He is currently working as the vice president and chief clinical engineer for BlueCross BlueShield of Tennessee.

Dr. Woods serves as the board chair for the Kosovo Leadership Academy, a private STEAM (Science, Technology, Engineering, Arts, and Mathematics) school in Mitrovica, Kosovo. His primary research interests lie in strategic foresight, leadership, strategy, innovation, culture, and social change. He is currently working on his first book, *Envision: Leading and Thriving In Disruption*, and several workshop modules teaching the Envision Adaptive System.

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