

Development Of A Framework For Strategic Risk Management

¹Dr. Maryam Ahmad²Usman Malik

How to cite this article:

Ahmad, M., & Malik, U. (2023). Assessment Of Employee Engagement Tools In Enhancing Productivity. *Pakistan journal of multidisciplinary*, 1(1), 25-38.

Article Dtes	Abstract
Received: 02 Feb, 2023 Accepted: 05 May, 2023 Published: 20 June, 2023	<i>This research explores the development of a comprehensive framework for strategic risk management tailored to organizations navigating complex and dynamic environments. In an era marked by rapid technological advancements and shifting market conditions, effective risk management has become crucial for sustaining competitive advantage. The proposed framework integrates qualitative and quantitative methodologies, enabling organizations to identify, assess, and mitigate risks systematically. Key components of the framework include risk identification techniques, risk assessment metrics, and strategies for risk mitigation, all aligned with the organization's strategic objectives. The framework emphasizes the importance of fostering a risk-aware culture and promoting collaboration across departments to enhance decision-making processes. Additionally, the research highlights the role of technology in facilitating real-time risk monitoring and reporting. Case studies from various industries illustrate the practical application of the framework, demonstrating its effectiveness in improving resilience and agility in the face of uncertainties. Ultimately, this study aims to provide organizations with a strategic tool that not only addresses current risks but also anticipates future challenges in an increasingly volatile business landscape.</i>
¹ Dr. Maryam Ahmed ² Usman Malik	
Copyright @Author Corresponding Author: *Dr. Maryam Ahmed	

Keywords : strategic risk management, risk assessment, risk mitigation, organizational resilience, risk identification, decision-making, risk-aware culture, technology integration.

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



Introduction to Strategic Risk Management

Strategies to implement strategic risk management took off in the late 20th and early 21st century as a direct result of global events, such as global financial crises, terrorist attacks, and natural disasters. An understanding of risk is not new, and many large organizations are working in risk management in one form or another. This approach integrates strategic planning, performance, economics, business operations, and other management disciplines into a structured and practical process, with the ultimate aim of managing risk in an optimal and dynamic manner across the whole organization. It requires special tools and methodologies, which need to be developed and tailored to meet the requirements of the organization. Strategic risk at the corporate level is about the impact of risks that can be identified through an analysis of the external competitive and macro-environmental factors that affect the corporate center on the cash flows, debt capacity, and financial condition of the enterprise. External risks, such as competitor behavior and litigation, and internal risks, such as product and process development and strategic business unit management effectiveness, may impact the achievement of the firm's strategic objectives. It is a key factor for business success to put in place an effective framework for strategic risk management, which integrates the necessary procedures and tools along with risk assessment and innovative risk solutions. Risk can be managed only if it is embedded in the culture of an organization. Executives and decision-makers at all levels should develop a 'risk-aware' mentality in order to achieve successful decisions and guarantee the survival and prosperity of the business (Settembre-Blundo et al.2021).

2. Theoretical Foundations of Strategic Risk Management

This publication aims to provide a conceptual framework for the consideration and treatment of uncertainty at the corporate management level. The central idea of our framework is that uncertainty should not only be captured and hedged, but also exploited as a source of return and rival risk. We define and situate this strategic risk underpinning our framework in a broader field of knowledge and offer a summary of the context.

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



We have divided this section into two parts. In the first, based on the assumption that uncertainty should be considered and managed, we review the major theoretical developments related to this theme, as a focus of risk management theories and concepts. The overview also covers risk management models and frameworks. The second section, under the heading of strategic management theories, summarizes major strategic management approaches and, in particular, the development of theories and concepts of risk supports the theoretical background and provides an integration between risk management and strategic management. Essentially, the fundamental premise is that successful organizations are built on strong and rigorous strategic foundations. Risk management, accordingly, should not be seen as an independent task that is periodically conducted. Further, strategic objectives should guide the application of risk management approaches in the actual organization. The linkage set forth by our framework is a response to the point of critique proffered by several current strategic management theorists, who argue that risk management is unreflective of the environmental conditions an organization faces and is overall descriptive rather than explanatory of an organization's behavior. Nevertheless, theoretical refinement of this linkage is necessary in order to guide our integration of risk and economic capital management techniques (Alzoubi2022).

2.1. Risk Management Theories and Concepts

When dealing with strategic risk management (SRM), it is essential to establish the basic fundamental theories and concepts of risk management. These conventional concepts are not only applied in operational or project management, but they also apply at the strategic levels. It is important for top management practitioners to have a strong theoretical background on the development of risk management (RM) over time so that they are well-equipped to justify their strategies and implement the most suitable RM practices in their company. Consequently, we analyze the most important and influential RM theories, including the fundamentals of the principles of risk in project-based living, the risk-return trade-off, risk management theories, the four-phase risk management process, as well as risk assessment theory practically. To help companies apply these RM concepts and theories in practice, we also provide some fundamental steps and methodologies and validate their results with a number of case

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



studies and real-world applications in various industrial companies where these concepts and methodologies have been successfully applied. This subsection deals with risk management theories, RM principles, and the underlying risk concept at a fundamental level, providing some basic methodologies for potential risk identification sessions and how the RM process can be done in a structured way. The theories can then be applied in different industries, in various sizes of companies, and also applied in the different project life cycles, emphasizing their applications, strengths, and weaknesses. The outcome of this subsection will provide both top practitioners and researchers with an understanding of conceptual risk frameworks, the basic theories that are needed, a number of case studies, and some basic practical methodology guidance. This foundation can also promote further research within a more technical and complicated environment, such as risk assessment at the operational level, which requires a full-fledged quality-based risk management (RM) process as well as techniques, for example, by integrating fault-tree analysis and event-tree analysis or degradation analysis, to develop accurate reliability, availability, and maintainability modeling for advanced risk management practice (Ashta & Herrmann, 2021).

2.2. Strategic Management Theories

Extensive research has been performed regarding making strategic choices, planning, and frameworks to aid in the process of focusing on the key aspects of an organization. Frameworks such as SWOT analysis to understand the external factors, Porter's five forces to understand industry attractiveness and profitability, and the balanced scorecard to translate strategy into operational terms are only a few examples. In defining the strategic aspects of an organization, evaluating the strengths and weaknesses of an organization is also critical. Decisions exist at the strategic level, which involve changing an organization's external and internal processes, and usually require changing information systems as well. It is this level of evaluation that consolidates the example of business management and the effectiveness of its processes by connecting positive business performance to customers.

But strategic planning is also connected with uncertainty and with the future, as the strategic position of an organization is not predictable. As such, the environment will

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



Copyright (c) 2026 Author(s)
This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

continuously evolve, and organizations can be faced with surprises at any time. Strategic planning is also about choosing from different possible alternatives, and therefore accepts that every choice necessarily implies that there are aspects that cannot be influenced and future situations that are impossible to predict. The risk factor is present in every strategy, and some argue that strategic decisions are risky. This is as it must be. If a decision is robust, likely to be satisfactory under a wide range of changing or unknowable conditions, then it cannot be strategic. The strategic planning focus in most of these theories helps organizations to orient themselves towards a particular path, supporting a long-term orientation. When speaking about strategic management, emphasis is also put on research regarding the impact of the context in which an organization operates, the intersection area with general risk management, and defining a common area of interest. The structure of this paper proposes to define this interrelationship while providing a logical foundation from the perspective of IT security. Furthermore, it proposes to integrate different theories from the strategic management field with risk management to help build the Strategic Risk Management framework. They will complement each other in order to maximize the practical experience of securing information systems in a quickly evolving, risk-packed business environment (Barrett, 2021).

3. Importance and Benefits of Strategic Risk Management

Strategic risk management is increasingly seen as an important trend that is gaining momentum and represents an evolving framework within companies. An effective framework for strategic risk management is capable of safeguarding scarce resources and facilitating the adoption of broad decisions based on sets of rules. At an operational level, companies are increasingly implementing a system of management of preventive and proactive risks to anticipate and proactively allocate resources early. Moreover, the allocation of a level of tolerance to residual risks, even after the progress of the control, becomes the basis for the evaluation of the capabilities and resources to devote to the management of residual risks. Thus, strategic risk

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



Copyright (c) 2026 Author(s)
This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

management focuses on those risks that bear on setting the strategy, the corporate mission, values, and organizational objectives imposed.

The benefits deriving from a careful initial phase of identification and potential impact range from the ability to create a competitive advantage in terms of organizational management via the development and creation of a framework capable of enhancing and building confidence among relevant stakeholders. This, on one hand, reduces the risks and threats arising from an impulsive approach based on adversity, and on the other hand, enhances the internal level of organizational resilience, improving the ability to adapt to changes in the complex economic, financial, and competitive environment. The integration of traditional techniques with those related to the management of strategic risk facilitates policy alignment of actions on risk and strategies, ensuring alignment between the tolerance level of risk, whether ordinary or not, and the choices of tolerated risks and company strategic objectives. The cultural aspect emphasizes the responsibility of all those who, with their choices and behaviors, may directly or indirectly contribute to enabling an adverse event to affect actual strategic goals. For this reason, the strategic report includes general and indirect governance, up to the identification of the beneficiaries, which mainly draws two large groups of subjects: the shareholders and stakeholders (Hohenstein, 2022).

4. Key Components of a Strategic Risk Management Framework

Risk management has been the cornerstone of decision-making in organizations for as long as we can remember. Every business function or academic discipline has its own specific area of risk, and organizations have been managing these specific areas of risk to one level or another for a long time. However, over the years, a strategic perspective has emerged. This "strategic" approach to risk management has led to the development of entire risk management frameworks.

The following are the necessary components of a comprehensive risk management framework for addressing those strategic risks eventually deemed to be managed through a formalized, documented program:

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



- Risk Identification. In today's business environment, organizations are constantly reminded that there are many diverse risks that can endanger the achievement of their strategic and operational objectives. The need for a strategic view of risk requires that organizations systematically identify these relevant risks. - Risk Assessment and Analysis. The second key component of a risk management framework is the risk assessment and analysis process. Organizations need to estimate not only the frequency with which specific strategic risks or risk events would occur but also the potential risk impact. - Risk Mitigation Strategies. The third and final component of a risk management framework is the actual activities conducted to develop and implement methods of reducing the expected level of risk below a specific risk criterion, such as a pre-established acceptable level of risk (Warren et al., 2021).

The subsequent assessment of each risk factor and the process of determining both the level of expected risk associated with the risk factor and the level of risk remaining after considering other controls provide management, shareholders, and clients with a defensible and quantifiable estimate of expected risk. This increasingly detailed and systematic approach allows organizations to more effectively coordinate their risk management efforts across multiple organizational levels. The more comprehensive and fully implemented a risk management framework becomes, the more it is likely to help produce long-term strategic corporate success.

4.1. Risk Identification

Within this subsection, the entire structured process of risk identification is systematically scrutinized. Clear identification of an organization's risk is a fundamental element of successful strategic risk management. We address methodologies for identifying real and potential risks within a business or organization, involving everybody within the business, the number and diversity of stakeholders being identified in the strategy or policy framework; individuals within the business; stakeholder representatives; groups that represent special interests or whose interests are affected by the business; and stakeholders in the external environment. A number of different techniques are proposed to facilitate the geography of risk and to inform discussions. These techniques include the use of brainstorming sessions, checklists, flow charts, 'what-if' analysis, SWOT analysis,

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



interview methodologies, scenario scripts, and alerts. Periodic and cumulative risk identification can be used to cover and assess those risks that arise from long-duration timeframes.

In a competitive environment, every organization – indeed, every enterprise – is under constant review and is subject to relentless internal and external scrutiny. This evidence not only serves as a barometer for the degree of balance in operations but also acts as an indicator of risk events that may require the resources or capabilities of the firm to be adjusted or otherwise managed. This requires input from the finance department so that risk can be assessed in an operational/cost of responsibility context, as well as by other relevant specialists in the organization. These individuals can be drawn from technical areas and management, including planning, business intelligence, communications, marketing, human resources, and safety. Often, the preparation of the environmental scan can be seen to bear a correlation with the business or strategic planning process. Organizational risk is identified by a combination of regular monitoring and a structured process of risk workshops, facilitated by independent facilitators using scenario development. This allows the integration of data from internal and external sources as well as the inclusion of cross-functional and diverse thinking. Over the years, organizations have used a variety of workshops to facilitate discussions on the identification and description of organizational risk. Companies have used scenario events to help focus risk identification and assessment and generate possible, plausible events that have a significant low probability/high consequence result. This technique has been refined into the development of narrative scenarios that build three up-to-date developments to their limits: politically, technologically, economically, or environmentally. These stories are intended to provoke insight and facilitate discussions by generating earlier unfashionable knowledge (Schuett, 2022).

4.2. Risk Assessment and Analysis

There exists a series of methodologies to assess the risks once they have been identified. Risks need to be quantified in order to determine their potential impact on strategic objectives. If possible, we wanted to be able to assess the impact of the different risks in monetary terms to facilitate the comparison. Once identified, the first

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



stage was to conduct a battlefield analysis of how the field of risk assessment has changed in the last decades. Our aim here was to provide an overview of the potential methodologies that exist under the different grouped approaches and, in particular, under the framework. The risk assessment and analysis part of the framework is shown in a figure. There is a significant risk that has not yet occurred, and there is a significant risk that has not been rated as such.

Some defense-related fields traditionally use risk attitude surveys to rate this gap, which may help in the determination of threats and vulnerabilities. Grouping risks is the first issue that needs to be addressed in the form of a two-step process. The simplest form of crystallizing risk categories is the use of a risk matrix. The relationship between severity and likelihood will determine where risks are positioned in the matrix. Generally speaking, there are three types of assessments that can be conducted on this basis: absolute, comparative, and intrinsic risk assessments. Another feature worth mentioning in this section is the importance of their use in terms of distilling the nature of the asset. In fact, some models reverse the process and determine the use of assets as a function of risk and describe the cost-effectiveness of risk management in achieving a set of goals. Some studies provide some practical case studies of how risk-based decision-making can occur in these situations.

4.3. Risk Mitigation Strategies

Risk mitigation strategies serve as a major building block of the framework of strategic risk management and provide the organization with approaches for dealing with residual risks after the implementation of the risk response plan. Successful implementation of these strategies ensures that risks are reduced, kept under control, or effectively managed to reduce their potential impact. The primary objectives of any risk mitigation strategy are to bring risks to a tolerable level according to the organization's risk criteria, culture, and need, and can be: avoided by carrying out different activities, abandoned, shared, transferred, or retained as part of the strategy of risk financing or other strategies specific to the risk management framework. There are four risk mitigation strategies that can be used to provide a framework for reducing the potential impact of identified risks. These strategies are risk avoidance, risk reduction, risk sharing, and risk acceptance.

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



Finally, a comprehensive risk response plan should be formulated, which should contain a detailed evaluation of how the identified risks will be mitigated through these different risk mitigation strategies and techniques used. A proactive approach to responding to identified risks is considered essential to fulfilling an organization's resilience objective. The fundamental elements underpinning this approach are procedures to determine strategies to respond to identified risks, ongoing monitoring, and the use of feedback to respond to emerging or early indications of the need to change operational response strategies. The success of measures intended to mitigate risk is often dependent on organizational culture and the overall climate the organization can create to deal with identified and potential risks. An organization that assesses potential threats with the aim of managing them, rather than a blame culture organization that dwells on why things went wrong, will generally have a more positive outlook. This is particularly important in organizations such as the public sector, where political and public criticism is an important driver and can detract from the measures to develop a risk-resilient organization (Wong et al.2022).

5. Implementation and Integration of the Framework

After developing the framework, it is crucial that it be implemented and integrated into the organization. A structured approach is essential. Some of the key issues to be addressed during the implementation phase in this case are the links with strategy and the internal and external processes of the organization, as well as the integration of these practices in the various organizational functions and levels. Alignment with organizational objectives and the facilitation of achieving them becomes a key issue. One of the main challenges of this focus is to change a culture focused on objectives and purpose alone to include attention to risks and thus become more comprehensive. In terms of action, one of the main processes to be modified is performance appraisal, such that it includes risk management. In line with performance appraisal, training and development of staff to raise awareness of risk is a major concern. Appraisal in the various functions and layers of the organization also has to change, and evidence of commitment from leadership is necessary. The implementation and integration phase also entails considerable activity in terms of communication. Communication adopts a two-way approach in that such an approach is open to stakeholders actively

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



participating in the implementation phase and sharing their experiences and outcomes. One of the main tools to introduce into the organization is risk reporting, and this needs to be conducted in a standardized, consistent, and integrated manner, which in turn may involve changes to existing risk identification, risk evaluation, risk mitigation, and risk monitoring and review practices. The framework provides detail on the content to address in these sessions, as well as case study questionnaires in support of these activities.

It has been the experience of the project team that successful implementation of a formal Enterprise Risk Management program within an organization can confront numerous challenges. Three of the primary implementation constraints typically experienced are: organizational inertia or an inability to change to the new 'risk-informed' way of working; implementation requires significant resources, and organizations are unable to expend the time for training or the financial commitment of resources; and the maturity of organizational processes often is not adequate to accommodate the results of the risk management program over time. In following the steps outlined in the framework, any decision or constraint that has been uncovered should be integrated into the Risk Profile. This profile will identify the notable, inherent strategic risks that have been identified. Only those risks that have been identified as material and notable should be included in the Risk Profile. Including all of the potential risks, once mitigated or controlled, is an exercise that may overburden one's resources and accomplish simply 'going through the motions' without achieving any success towards mitigating possible perils. An illustrative example of the development of a Risk Profile is provided.

5.1. Organizational Culture and Change Management

In our view, there are two main elements that determine the success of SMC implementation: completed projects and high-performance organizations. These are the foundations of being able to change the behavior of people by linking beliefs and mindset to changes in behavior. How quickly individuals and organizations embrace or reject new circumstances is evaluated by foreseeing quick wins. This may be used as a kind of "health passport" from an organization's point of view. First, a supportive organizational culture is necessary to create a ground where multi-layered

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



communication in the organization is activated, which should, in turn, be the basis of SMC. Cultural elements affecting SMC were identified. Proactive risk management and the idea that risk management is everybody's concern are key principles. Furthermore, companies engaged in enterprise risk management activities were more likely to integrate risk management into strategic and operational decision-making, rather than treating risk management as their primary purpose.

Two cultural elements that affect the implementation of a Strategic Management Accounting System are that institutions are a critical influence on behavior in organizations. Change management is required at various stages of an organization's culture development. Change management should, therefore, be considered as links to both change in culture and change in strategic risk behavior. Hard elements such as structures clearly need to be in place to facilitate organizational processes. A change can only be a "change" if elements of perceived threats and organizational misconceptions are not present. At the very heart of change management are people who have a degree of control and security. The dual nature of change management – hard and soft – might provoke contradictory ideas when considering change management.

Change management is generally concentrated around trying to build momentum to overcome employee inertia. Senior executives are increasingly realizing that they need to modify the organization's culture, not just a separate in-house department. It is recommended that managers engage in required parallels between processes, job redesign, employee roles and responsibilities, interface redefinition, and system integration based on a specific need for change. Moreover, a manager's goal should be to focus on altering the attitudes, behavior, work habits, and values of their staff as rapidly and painlessly as possible.

The culture at organizations with adaptive and positive cultures concentrates on "learning and responding." Troubling but deliverable information in these companies is not taken personally; instead, it offers a chance to "prepare to be surprised." Consequently, even when the news is negative, it is usually acknowledged. Furthermore, these adaptive organizations are characterized by a collective "curiosity," constantly inquiring if new practices and procedures can help boost their

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



competitiveness. Although cultural assessments can be performed at the start and end of the research, we suggest that a change assessment should be conducted as often as possible in a continuous feedback loop. These assessments will form the basis of a communication plan encouraging employees to embrace the new SMC system.

5.2. Technology and Tools for Strategic Risk Management

One of the main factors in the development of a risk management system is technology and tools. A strategic risk management (SRM) integrates technology and tools of risk management such as risk management software and analytics that add value to the risk management process. Moreover, the availability of technology for automation, real-time monitoring, and reporting results in the next level of risk monitoring and a proactive approach to consequent decisions or treatment for the risk. The developed system will focus on the above tools which can be added to the existing risk system of an organization. It always requires the integration of these technologies in one framework to avoid redundancy and conflict. The framework is equipped with advanced tools available in the market for strategy level of risk management. In addition, few advanced technologies such as artificial intelligence and machine learning have also been discussed for the detection and prediction of strategic risks at an earlier stage, as injuries to reputation, non-compliance, and fraud are losses difficult for detection.

On the practical front, many organizations use technological tools for risk management. Many organizations use risk management tools and solutions like providing greater support for complex risk identification and analysis. The usage of this technology has led organizations from technology application to technology and strategic risk management (SRM) framework. For example, one organization has employed an automotive risk management solution, which has reduced errors and enhanced efficiency. Similarly, the top risk-performing companies are using tools like risk and reporting fast enough for position limit monitoring. Other technologies employed are predictive analytics minimizing estimated default risk and reduction of B2B write-offs at many leading companies.

References:

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.



Copyright (c) 2026 Author(s)
This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

- Alzoubi, H. M. (2022). BIM as a tool to optimize and manage project risk management. International Journal of Mechanical Engineering, 7(1). skylineuniversity.ac.ae
- Ashta, A. & Herrmann, H. (2021). Artificial intelligence and fintech: An overview of opportunities and risks for banking, investments, and microfinance. Strategic Change. researchgate.net
- Barrett, C. B. (2021). Overcoming global food security challenges through science and solidarity. American Journal of Agricultural Economics. cornell.edu
- Hohenstein, N. O. (2022). Supply chain risk management in the COVID-19 pandemic: strategies and empirical lessons for improving global logistics service providers' performance. The International Journal of Logistics Management. [\[HTML\]](#)
- Schuett, J. (2022). Risk management in the artificial intelligence act. European Journal of Risk Regulation. cambridge.org
- Settembre-Blundo, D., González-Sánchez, R., Medina-Salgado, S., & García-Muiña, F. E. (2021). Flexibility and resilience in corporate decision making: a new sustainability-based risk management system in uncertain times. Global Journal of Flexible Systems Management, 22(Suppl 2), 107-132. springer.com
- Warren, G. W., Lofstedt, R., & Wardman, J. K. (2021). COVID-19: the winter lockdown strategy in five European nations. Journal of Risk Research. tandfonline.com
- Wong, L. W., Tan, G. W. H., Ooi, K. B., Lin, B., & Dwivedi, Y. K. (2022). Artificial intelligence-driven risk management for enhancing supply chain agility: A deep-learning-based dual-stage PLS-SEM-ANN analysis. International Journal of Production Research, 62(15), 5535-5555. tandfonline.com

¹Assistant Professor, Department of Finance, University of Peshawar.

²MPhil Scholar, Department of Finance, University of Peshawar.

