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The effect of Enterprise Risk Management on performance of business organization in Malaysia: A Scoping Review

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Abstract

Risk management typically entails dealing with significant ambiguity on physical, monetary, cultural, and social dimensions, each with its own set of ramifications, and dealing with risk in these choices is a component of decision-making. The impact of internal and external factors on economic growth may heighten the importance of proper risk management in business organizations. Thus, this study conducted a scoping review to gain a more comprehensive knowledge of the relationship between Malaysian business organizations that have implemented the Enterprise Risk Management (ERM) framework and their performance. A search of the Google Scholar electronic database was carried out. Seven peer-reviewed articles published between 2015 and 2018 were included in the review. While the study validates past resilience researches conceptual and issue findings, it also provides a useful evaluation of major concerns related to ERM implementation and organizational performance. Recommendations for practitioners and researchers are provided.

Keyword: *Scoping review, Enterprise Risk Management, Organizational performance, Malaysia.*

1. Introduction

The complexities associated with risks frequently involve dealing with significant ambiguity on physical, monetary, cultural, and social dimensions, which have varying consequences far beyond the direct physical harm to financial or physical assets, people, or ecosystems that influences how a social operates and people think. Risk is the art and science of decision-making, as well as an understanding of the nature of risk, are at the heart of our modern economy. The pursuit of objectives entails risks, and coping with risk in these choices is an aspect of decision-making. In this age of globalization, organizations encounter challenges that affect their reliability, relevance, and trust. As a result, the impact of internal and external factors on economic growth may increase the need of proper risk management in the business organization (Chock, 2018). Organizations are required to create and implement competitive strategies in order to thrive in an ever more demanding and rapidly changing environment. The elements and influences that produce uncertainty and may have an impact on organizational objectives. According to Hopkin (2017), risk in general could be described as an incident that has the potential to impact (inhibit, enhance or cause doubt about) the effectiveness and efficiency of an organization's essential activities. Consequences might be favourable, negative, or a divergence from what was expected.

The overarching goal of risk management is to identify potential future occurrences that may have a favourable or negative impact on the organization's objectives. Thus, possible problems must be identified, prioritized, and proactively managed by implementing one or more control alternatives in a timely way before the occurrences have an impact on the project's, business's quality, or cost (Soltanizadeh et al., 2016). Furthermore, risk affects all levels and services in organizations, from the highest strategic and governing levels to the lowest operational and procedural levels. Within that setting, there is a requirement to identify and manage risks using a specified approach within a best-practice framework (Kasim, & Hanafi, 2017). Nonetheless, risk management is an important component of organizational governance. Risk management has been highlighted as an essential discipline created over years and implemented through tools, strategies, and approaches to control risks connected with business and projects at all levels (Soltanizadeh et al., 2016).

2. Background

The increasing importance of risk management programs and practices in various industries has given rise to a new risk management strategy known as enterprise risk management (ERM). ERM is an essential methodology for managing a wide range of risks in a more holistic way than the old risk management strategy, which is based on a silo approach (Gordon et al., 2009). ERM is a process used in strategy setting and across the enterprise by an entity's board of directors, management, and other personnel to identify potential events that may affect the entity and manage risk to be within its risk appetite, in order to provide reasonable assurance regarding the achievement of entity objectives (COSO, 2004). Enterprise risk management (ERM) is a comprehensive approach to risk identification in a business organization (Lai, Shad, & Khan, 2018; Annamalah et al., 2018). Thus, implementing ERM in an organization's strategy and business objectives enables organizations to make better decisions and optimize outcomes (COSO, 2017). ERM is defined as a technique developed to identify probable events that may affect business organizations ability to achieve their objectives (COSO, 2017). Companies use ERM to avert bankruptcies by identifying potential risks, consistently monitoring their operations, and focusing on financial situations during the risk identification process (Hopkin, 2017). Thus, managers must make decisions in the face of ambiguity and incomplete information (Lai, Shad, & Khan, 2018; Annamalah et al., 2018). Without suitable guidelines, management is more likely to make a bad judgment, which will have a negative impact on the firm's performance in terms of finance, operations, and productions.

Enterprise risk management is the culture, capabilities, and practices that business organizations include into strategy development and employ when implementing that plan, with the goal of managing risk in the creation, preservation, and realization of value (COSO, 2017). Organizations can benefit from ERM in a variety of ways. To begin, ERM is a systematic and holistic integrated strategy to managing risks encountered; it not only eliminates potential risks, but it also monitors identified opportunities and hazards (Chock, 2018). However, under traditional risk management, organizations might reduce risks by using a silo strategy in which they must solve every risk they confront. Second, ERM with limited solutions will solve every feasible risk, reducing expenses and freeing up time to focus on business solutions. In comparison to traditional risk management, it can tackle hazards through a silo strategy, which is both costly and time-consuming (Lai, Shad, & Khan, 2018). Finally, ERM can assist organizations in minimizing risks and successfully managing these risks in order to avoid unfavourable effects in the future.

ERM is used to identify the risks and determine the best solution to handle those risks through an integrated framework for internal control systems defined by the Treadway Commission's Committee of Sponsoring Organizations (COSO) (COSO, 2017). According to COSO, the goal of ERM is to provide reasonable certainty about the achievement of organizational objectives. The COSO framework was systematically designed to assist business organizations in establishing, assessing, and improving internal control, and it is widely used as a standard by many organizations (Akinleye and Kolawole, 2020). The integrated framework includes five internal control components: control environment, risk assessment, control activities, information and communication, and internal control monitoring (Anderson and Eubanks, 2015).

There has been extensive prior research demonstrating the benefits of ERM in improving organization performance. Organizational performance is defined as the efficacy of an organization in terms of its financial and operational performance, as well as how well it is managed and the value it provides to customers and other stakeholders (Rashid et al., 2018). The combination of these two indicators will assist management in gaining a broader view on performance measurement, including the extent to which resources are effectively and efficiently utilized, competitiveness, and readiness to handle growing external demands. Several accounting and traditional indicators, such as return on assets, return on equity, earnings per share, Tobin's q, and so on, are utilized for performance evaluation in various organizations (Shad & Lai, 2015). In their study, Callahan and Soileau (2017) used large industrial samples found that firms that applied ERM process maturity obtain superior operating performance than firms in the same industry that just utilize the metric approaching the profit-making process. Muslih (2019) in his research on the banking industry in Indonesia discovered a substantial association between ERM and business performance. Thus, ERM is a strategy for dealing with the volume and complexities of the risks that today's business organizations face (Ahmad et al., 2014).

The literature reveals that few reviews (systematic or scoping reviews) on the relationship between ERM and performance have been conducted (Esa et al., 2018). Thus, there is an opportunity to conduct additional reviews in order to acquire a more in-depth understanding of the relationship between business organizations that have implemented the ERM framework and their performance. This study investigated the influence of ERM on business organization performance. The study's findings will give empirical evidence on the distinctive contribution of ERM in establishing policies that lead to improved company performance in Malaysia.

3. Method

3.1 Design

The scoping review process was performed on July 2021. The first phase of this scoping review was to construct a scoping review question and identify keywords pertinent to the scoping issue that would provide a valuable contribution to the relationship between ERM and business organization performance. Based on the paradigm described by Arksey and O'Malley (2005), an interpretative scoping review methodology was chosen for this study. This method charts, collects, and summarizes the established literature on a given topic, and seeks to classify all existing literature on the topic, regardless of its quality. Scoping review differs from systematic reviews in that it does not include an assessment of the study's quality (Arksey & O'Malley, 2005). The framework consists of the following stages:

- Identifying the research question
- Identifying relevant studies
- Study selection
- Data charting and Collation
- Summarizing and reporting the results

Stage 1: Identifying the Research Question

To clarify the objective of the scoping study and build an effective search strategy, the concept, target population, and context were identified (Arksey & O'Malley, 2005). The research question for this scoping review was, "According to the prior literature, what is the relationship between ERM and business organization performance in Malaysia?" Thus, scholarly publications were collected in a systematic manner to answer this question.
The scoping review question in this study was based on PCC (people, concept, and context) (Peters et al., 2020). The population of this research question is business organizations; the concept is the relationship between ERM and business organization performance; and the context is Malaysia. In this case, ERM, business organization performance, and Malaysian business organizations supply some of the inclusion requirements that Arksey and O'Malley (2005) utilize in the process of discovering relevant literature and selecting literature for the next step.

Stage 2: Identifying Relevant Literature

The second step of the scoping review is to identify specific literatures. This study devised a strategy for searching English-language peer-reviewed publications for a variety of sources that would aid in answering the review question. The decision was made to conduct the search in Google Scholar databases, as shown in Table 1. The data were entered into the PRISMA (the preferred reporting items for systematic reviews and meta-analyses) format (Moher et al., 2009).

The database was scoured for papers published between 2015 and 2018. The time frame was chosen because Malaysian businesses were operating normally and were unaffected by the Covid-19 outbreak. Malaysia introduced the Movement Control Order (MCO) in early 2019. The authors created and changed the text search utilizing words and subject headings that were customized for the database. The first phase involved identifying the keywords that would be utilized in the search process. Based on prior studies and thesauruses, selected keywords relating to ERM, business organization performance, and Malaysia are shown in Table 1. Duplicate items were deleted at this stage following meticulous screening.

Table 1. The search string used for the scoping review process

Databases	Keywords used
Google Scholar	("Enterprise Risk Management" OR "ERM" OR "Risk Management") AND ("Organization performance" OR "company performance") AND ("Malaysia")

Stage 3: Selecting Literature

Initially, 1520 articles were identified. After removing duplicates, the authors screened the titles and abstracts of 1494 articles in batches to choose literature for inclusion in the scoping review. The authors assessed whether a certain source should be read in full based on the inclusion and exclusion criteria shown in Table 2. Twenty six articles were read in their entirety. The authors addressed the article's relevance to the research issue as well as whether it fit the inclusion criteria. When there was doubt about whether an article fit the inclusion criteria, the authors rejected it. In the end, seven articles were included. Figure 1 depicts the selection procedure.

Table 2: Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Types of article	Original research, published in a peer review journal	Articles that were not peer review or original research
Time Period	2015 to 2018	Studies outside these dates
Types of respondents	Malaysian business organizations,	Non Malaysian
Language	English	Non-English studies
Phenomenon of interest	The relationship between ERM and business organization performance	Other than ERM and business organization performance

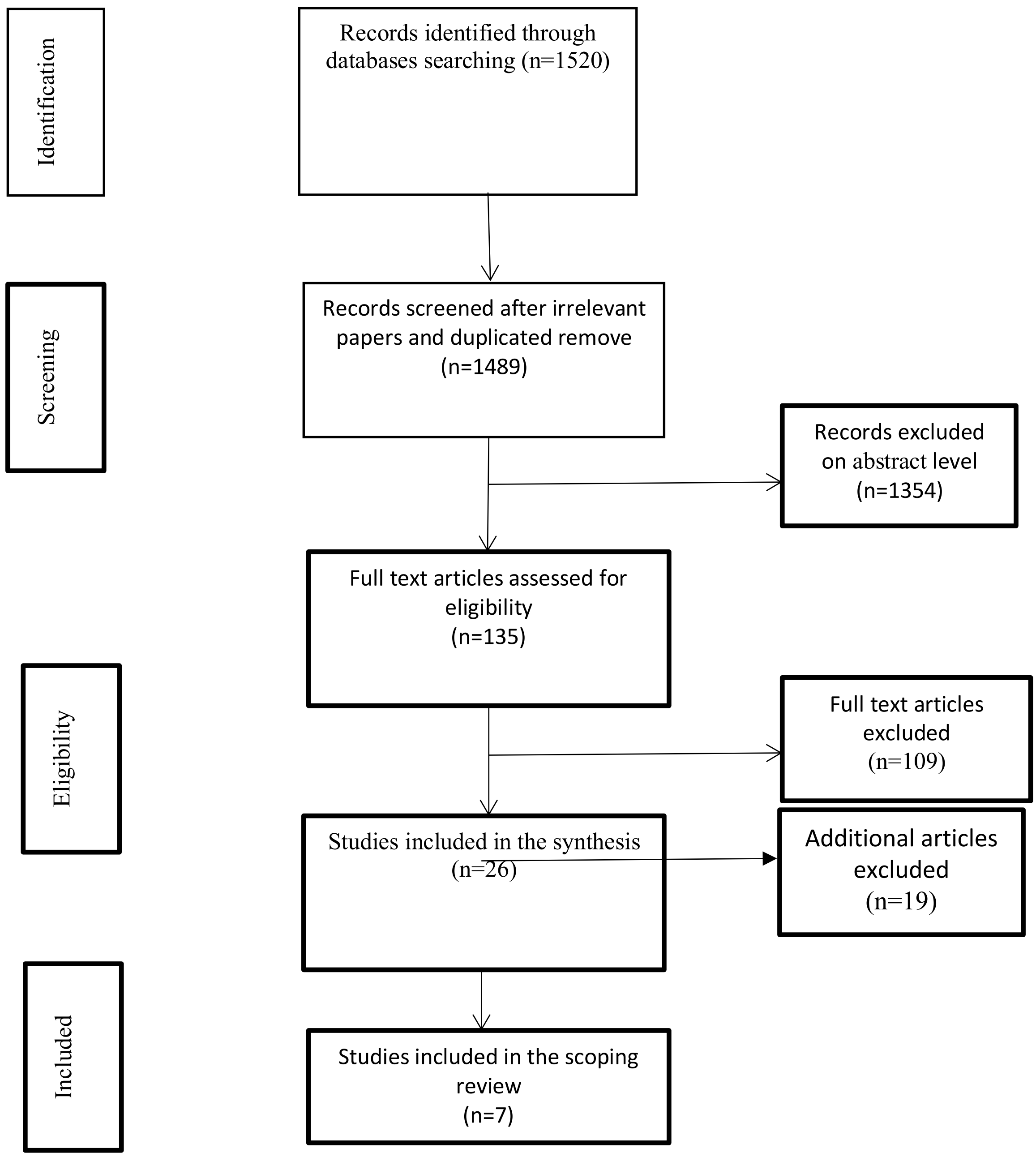

Figure 1. Summary of the selection of publications

Stage 4: Data charting and collation

Arksey and O'Malley (2005) define data charting as a strategy for extracting data from publications that best meet the study objective using both a narrative and analytic approach. As a result, this is an approach for sifting, charting, and sorting resources on significant issues and themes in order to synthesize and analyse data. Each article's summary was organized into a scoping table by author, publication year, country, aim, design/methods, participants/sample size, and outcomes. Table 3 provides an overview of the material included. An iterative and thematic method was utilized to answer the study question, "What is the relationship between ERM and business organization performance in Malaysia?" The literature was organized topically based on key issues concerning the ERM link with business organization performance.

Table 3: Overview of included literature

Authors and country	Aim	Design/methods	Participants /sample size	outcome
Ping & Muthuveloo, (2015) Malaysia	To evaluate the impact of ERM implementation on company performance using the COSO (2004) ERM Integrated Framework, as well as the function of the Board of Directors, the firm's complexity, and size.	Quantitative method with questionnaire survey.	This study's participants are Public Listed Companies (PLCs) on the main market in Bursa Malaysia (n=103).	According to the findings, ERM implementation has a considerable influence on firm performance, while BODs, firm size, and firm complexity all have a significant influence on firm performance.
Soltanizadeh et al., (2016) Malaysia	To investigates the impact of business strategy on ERM implementation, the impact of ERM implementation on organizational performance, and the role of ERM in mediating the relationship between business strategy and organizational performance.	Quantitative methods with questionnaire survey. The research investigates the link between Business strategy (Cost leadership and differentiation) as independent, ERM (mediating) and company performance as dependent variables.	Public-listed firms on the main board of Bursa Malaysia (n = 174)	Only the cost leadership strategy has a substantial positive link with ERM in business strategy; however, the differentiation strategy has no significant effect on ERM; all other variables (economic environment, management style, technology, and innovation) are regarded stable. However, ERM has a very significant positive impact on the performance of Malaysian public listed companies.
Masood, Aktan, & Javaria. (2017) UK, Bahrain & Pakistan	This study investigates the functions of enterprise risk management in moderating the relationship between company resources and organization performance.	The conceptual framework was created by merging the resource-based theory (RBT) with Donabedian theory, and hypotheses were tested using the partial least squares technique.	Data were collected through the questionnaire survey from firms listed on Malaysia Bourse by using judgment sampling (n = 234)	The results show that intangible resources are favourably and significantly related to organizational performance when ERM is used as a mediator. ERM, on the other hand, does not mediate the relationship between tangible resources, capabilities, and organizational performance.
Kasim, & Hanafi, (2017) UAE	The major goal of this research is to determine the extent to which ERM implementation can increase shareholder wealth.	Quantitative methodology- Mail survey questionnaire. Multiple regression analysis is utilized in this study where ERM as the independent variable and shareholders' as dependent variable. The research framework was developed through stewardship and agency theories.	Public-listed firms on the main board of Bursa Malaysia (n = 283)	The overall observation revealed that ERM was significant in explaining the variation in shareholders' wealth.

Annamalah et al., (2018) Malaysia	To investigate the role of ERM framework implementation in improving organization performance by utilizing Economic Value Added as a measurement tool. This study also explore the relationship between profit, reduce cost of capital and shareholders value with ERM	Quantitative methodology – Linear regression analysis is utilized in this study.	Purposive sampling of selected the firms that are operating in Malaysian oil and gas sector. The respondents for this study were the senior officials of the companies who have had at least some experience in their ERM (n= 120)	According to the findings of the regression analysis conducted for this study, there is a strong and positive association between Enterprise Risk Management and operational risk, market risk, political risk, health, safety, and environmental risk, and organization performance.
Lai, Shad, & Khan, (2018) Malaysia & Hong Kong	The aim of this research paper is to gain insights into the value creating determinants of enterprise risk management (ERM) implementation and its economic value added (EVA).	Quantitative methodology-survey questionnaire- Bivariate and regression analysis were used in examining the association and impact of ERM implementation towards various factors of EVA measurement	Public-listed firms on the main board of Bursa Malaysia (n = 120)	Results of the study show that implementing ERM improves net operating profit after tax and return on invested capital while decreasing the cost of financial distress, cost of external financing, informational asymmetries, the agency problem, and the organizations' weighted average cost of capital.
Shad & Lai, (2015) Malaysia	To investigate empirically the impact of ERM on company performance as measured by Economic Value Added (EVA).	The quantitative approach. The study looks into the relationship between ERM and business success as assessed by Economic Value Added (EVA).	The population for this research is public listed non-financial companies in the Malaysian bourse (n = 280)	The empirical research results reveal that ERM implementation has a considerable beneficial influence on firm performance via Economic Value Analysis (EVA).

Stage 5: Summarizing, and reporting findings

The final stage of Arksey and O'Malley's (2005) scoping review framework summarises and reports findings.

4. Findings

This scoping review yielded seven articles. Most of the authors are from Malaysia, with the exception of three papers, United Kingdom, Bahrain and Pakistan (Masood, Aktan & Javaria, 2017), United Arab Emirate (Kasim & Hanafi, 2017), and Malaysia and Hong Kong (Lai, Shad, & Khan, 2018). All the literature in this study are quantitative methods. This segment, focused on the research problem. Literatures examined ERM relationship with organization performance measured through Economic Value Added (EVA), COSO ERM Integrated Framework, business strategy, firm resources, shareholders wealth, and also mediating role of ERM. The literature has identified three major topics (Table 3): (1) Organizational Performance, (2) Resource Allocation, and (3) Business Strategy.

4.1 Organizational Performance

Many studies have been carried out to demonstrate the empirical evidence of the impact of ERM implementation on organizational performance. They reported that ERM boosted firm value considerably. In this scoping review, ERM has a beneficial impact on organizational performance, according to Shad and Lai (2015), Ping and Muthuveloo (2015), Soltanizadeh et al. (2016), and Annamalah et al. (2018). According to Kasim and Hanafi (2017), the primary goal of ERM is to produce, safeguard, and increase shareholder wealth, and in their research, they discovered that ERM was capable of increasing shareholder wealth. While Lai, Shad, and Khan (2018) found that ERM implementation considerably improves net operating profit after tax and return on invested capital in their study. The study also discovered that the cost of financial distress, the cost of external funding, informational asymmetries, the agency problem, and the organizations' weighted average cost of capital were reduced.

4.2 Resource Allocation

Masood, Aktan, and Javaria (2017) investigate the function of enterprise risk management in mediating the link between organizational resources (tangible, intangible, and capabilities) and organizational performance. In their study, which used firm resources as the independent variable, ERM as the mediating variable, and firm performance as the dependent variable, they discovered that only intangible resources (e.g., organization specific capabilities) are positively and significantly associated to firm performance through ERM as the mediator. It implies that effective allocation of intangible resources is critical for high performance.

4.3 Business Strategy

ERM implementation is an important aspect of an organization's strategic planning and objectives since it enables organizations to make better risk-adjusted decisions that increase shareholder value. ERM enhances risk awareness throughout the organization, enabling for better operational and strategic decisions, allowing management to meet strategic objectives, minimize earnings volatility, and boost profitability (Shad & Lai, 2015).

According to Porter's framework, organizations can achieve a competitive advantage through methods such as cost leadership and differentiation (Porter, 1980). Cost leadership provides a competitive advantage by having the lowest price, whereas differentiation gives a competitive advantage by offering new and unique qualities to its products or services. Soltanizadeh et al. (2016) explore the impact of business strategy on ERM implementation, the impact of ERM implementation on organizational performance, and the function of ERM in mediating the relationship between business strategy and organizational performance. They discovered that only the cost leadership strategy has a significant beneficial link with ERM in business strategy; nonetheless, ERM has a very big positive impact on Malaysian organization performance overall.

5. Discussion

This study indicates the usefulness of ERM adoption and confirms to a reasonable extent, the impact of ERM in balancing risks and opportunities in business organizations, while maximizing value to shareholders and striving to maintain competitiveness. All of the articles evaluated acknowledged ERM as one of the most important tools in controlling risks in organizations and ensuring that disasters are avoided to the greatest extent possible, which is in accordance with the organization's objectives. The articles also showed that most organizations acknowledged that dealing with risk in silos is not an effective strategy to manage the various types of risks that the organization faces. The ERM framework ensures organizations' risk management effectiveness by assuring stakeholders of management's competencies in risk governance. Company directors can recognize the impact of ERM on organizational performance as well as the importance of business strategy in ERM implementation. As a result, the organization's leaders and boards of directors (BODs) should be committed to ERM, as they are accountable for protecting, improving, and maximizing shareholder value.

The primary goal of any business is to maximize shareholder value by attempting to improve its Economic Value Added (EVA), which also means that the firm's shareholder value will increase. However, many businesses fail as a result of poor risk management; hence, ERM implementation assures that the company's ownership is not transferred to debt holders through bankruptcy (Shad & Lai, 2015). BODs can impact an organization's success by assessing and adopting the organization's strategic plan, ensuring that the organization's internal control system is appropriate, and practicing integrity. This study also demonstrated that BOD monitoring has a substantial impact on moderating the association between the level of ERM adoption and company performance. Furthermore, according to this study, the ramifications of ERM should be assessed in terms of financial and non-financial variables. According to risk management theory, ERM adoption results in a variety of tangible and intangible benefits, which leads to an increase in operating margins, a reduced cost of capital, and a higher return on invested capital, all of which improve the organization's performance.

6. Conclusions

The scoping review's conclusions have consequences for researchers and academics, practitioners and company directors, as well as regulatory parties. This study established a substantial link between ERM implementation and organization performance in Malaysia. That is, this scoping review adds to the understanding of ERM implementation in improving business performance in Malaysian business organizations. The contribution will be significant because understanding the effects of ERM implementation in business organizations would help to improve organization performance. Thus, this study is significant for practitioners and policymakers to better understand the importance of ERM implementation in risk management.

According to this scoping review, Enterprise Risk Management (ERM) application improves business performance in terms of cost of capital, profitability, and shareholder value, and it is seen as a strategic tool for an organization's success. Therefore, it is suggested that firms establish an in-house committee for Enterprise Risk Management in order to identify risk factors and Enterprise Risk Management objectives. Furthermore, the impact of risks must be identified, as this information is particularly useful to shareholders when determining the possibility of a prospect for their investments.

As a result, this study concludes that organizations should focus their time and other resources, such as manpower, IT structure, employee training, and so on, to establishing a rigorous and successful ERM framework in their organization. A continual education program in the organization should assist management in incorporating components of ERM into employee performance reviews, so implicitly compelling employees to embrace the ERM philosophy in their daily business operations. Once the ERM philosophy has permeated the organization's daily operations, management will be able to see not only an improvement in business performance, but also a rise in shareholder value. Finally, ERM implementation is an important avenue for boosting the organization's value.

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