

## The Influence of ISO 31000 on Risk Culture: A Systematic Literature Review

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### Abstract

*This study aims to provide a synthesis of the relationship between ISO 31000 and risk culture. Using a Systematic Literature Review (SLR) approach, the study examines how ISO 31000 influences organizational risk culture. The review is based on 20 journal articles indexed in Scopus (Q1–Q4).*

*The findings indicate that the impact of ISO 31000 on risk culture is mixed. However, 16 out of 20 studies (80%) report a positive influence, particularly when supported by strong top management commitment, leaders' emotional intelligence, and integration with strategic planning. In addition, key determinants of a risk-aware culture—such as accountability, effective communication, a common risk language, incentive systems, and continuous training—play a significant role in strengthening the relationship between ISO 31000 implementation and risk culture.*

*Keywords: Enterprise Risk Management, ISO 31000, & Risk Culture*

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## 1. Introduction

In an era of global uncertainty characterized by geopolitical changes, technological disruption, and the COVID-19 pandemic, organizations are required to develop high adaptive capacity to manage risks that may hinder the achievement of organizational objectives (Kilic & Vavvay, 2025; Selvaseelan, 2018). Risk management has evolved from a loss prevention function into a strategic tool that supports decision-making and value creation. The international standard ISO 31000, first issued in 2009 and revised in 2018, provides a comprehensive framework consisting of principles, structure, and processes applicable across organizations (Singgih & Alijoyo, 2025). This standard emphasizes that risk management aims to create and protect value through systematic processes of risk identification, analysis, evaluation, and treatment (Alijoyo, 2022).

However, a significant gap remains between the conceptual framework of ISO 31000 and its practical implementation. Several studies argue that ISO 31000 is principle-based, offering guidance on what should be done but lacking detailed instructions on how to implement it effectively (Gleißner & Berger, 2024; Samad, 2026). Consequently, some organizations adopt ISO certification primarily for reputational purposes without addressing misaligned incentives, lack of psychological safety, and structural weaknesses such as the dependence of the Chief Risk Officer (CRO) on the CEO (Samad, 2026). This phenomenon,

often referred to as compliance theater, reflects formal compliance without substantive effectiveness. Empirical evidence also supports this concern; for example, (Bjornsdottir et al., 2022) found that ISO certification does not guarantee effective risk management, as several certified organizations still exhibit weaknesses in risk analysis, assessment, and treatment processes.

On the other hand, empirical studies suggest that organizations with strong risk culture are more successful in implementing ISO 31000. Research by (Kanu, 2022) in Nigeria, Kenya, and Ghana demonstrates a significant positive relationship between ISO 31000-based Enterprise Risk Management (ERM) and risk culture. Similarly, (Arofah et al., 2025) found that risk culture significantly moderates the relationship between ISO 31000 implementation and internal control effectiveness in Indonesian public institutions. (Zainudin, 2019) further identifies key determinants of a risk-aware culture, including top management support, accountability, communication, employee involvement, common risk language, training, and strategic alignment.

Leadership and emotional intelligence also play a crucial role in shaping risk culture. (Ardilo, 2022) shows that leaders with high emotional intelligence are more capable of fostering a risk-aware culture and achieving higher levels of risk management maturity. Conversely, weak leadership capacity results in underdeveloped risk culture, leading to symbolic rather than substantive implementation of ISO 31000. Supporting this, (Singgih & Alijoyo, 2025) highlight that in many organizations, risk culture remains limited to managerial levels and fails to permeate operational practices, resulting in suboptimal implementation.

This study aims to provide a comprehensive synthesis of how ISO 31000 influences risk culture over the past decade (2016–2026). Using a Systematic Literature Review (SLR), this research seeks to identify research trends, assess consistency across contexts, and highlight existing research gaps. Furthermore, it provides a foundation for future studies by mapping key variables, theoretical perspectives, methodologies, and research contexts related to ISO 31000 and risk culture.

## 2. Research Methodology

This study employs a Systematic Literature Review (SLR) approach, following the PRISMA guidelines to identify, analyze, and evaluate relevant studies on risk culture. The literature was collected from reputable databases, including Scopus, ProQuest, and Google Scholar, covering publications from 2016 to 2026. The inclusion criteria focused on studies examining ISO 31000 and its relationship with risk culture.

Table 1. Journal Index Distribution

Journal Index	Number of Articles	Percentage (%)
Q1	4	20%
Q2	6	30%
Q3	5	25%
Q4	5	25%
Total	20	100%

The distribution indicates that the selected articles are drawn from Scopus-indexed journals (Q1–Q4), reflecting the academic credibility of the topic.

The article selection process was conducted through three main stages:

1. keyword-based searching focusing on the relationship between ISO 31000 and risk culture.
2. screening based on titles, abstracts, publication year, and study findings; and
3. full-text assessment to ensure relevance and eligibility..

### **3. Results and Discussion**

The systematic literature review covering 2016–2026 identifies several dominant theoretical perspectives linking ISO 31000 and risk culture. Organizational culture theory emerges as the most frequently used framework, followed by Enterprise Risk Management (ERM) theory and leadership/top management support perspectives. Other approaches, such as institutional, contingency, and benchmarking theories, are used to a lesser extent. This distribution indicates that risk culture is primarily understood as a behavioral and organizational phenomenon, rather than purely a technical risk management issue.

Empirical findings from 20 reviewed studies show that the relationship between ISO 31000 and risk culture is not fully consistent. While 16 studies report a positive relationship, 4 studies find weak or insignificant effects. This inconsistency may be explained by differences in research context, methodology, measurement, and theoretical frameworks.

The synthesis reveals that the impact of ISO 31000 on risk culture is neither linear nor automatic. On one hand, many studies confirm that ISO 31000 can strengthen risk culture when supported by top management commitment, strategic integration, and structural alignment. For example, (Kanu, 2022) finds a significant positive relationship between ISO 31000-based ERM and risk culture ( $\beta = 0.664$ ;  $p < 0.001$ ), where risk culture acts as a mediating variable linking ERM to organizational performance. Similarly, (Arofah et al., 2025) demonstrate that risk culture significantly moderates the relationship between ISO 31000 implementation and internal control effectiveness ( $\beta = 0.231$ ;  $p = 0.004$ ).

However, other studies highlight limitations of ISO 31000. Its principle-based nature makes it flexible but also vague, increasing the risk of “compliance theater,” where organizations formally adopt the standard without substantive implementation (Samad, 2026). Supporting this, (Agarwal & Kallapur, 2018) show that organizations may develop compliance-based or defensive risk cultures, characterized by over-reporting and risk aversion rather than genuine risk awareness. Furthermore, (Gleißner & Berger, 2024) note that only a

small proportion of studies explicitly address risk culture, indicating a gap in the literature despite its recognized importance.

The literature also identifies key determinants of risk culture that influence ISO 31000 implementation. These include top management support, accountability, communication, common risk language, incentives, training, and strategic alignment (Kravariti et al., 2023; Wong et al., 2021; Zainudin, 2019). Leadership quality, particularly emotional intelligence, is also critical. (Ardilo, 2022) finds that leaders with high emotional intelligence are more effective in building a risk-aware culture and achieving higher levels of risk management maturity.

Conversely, weak risk culture undermines ISO 31000 implementation. (Bjornsdottir et al., 2022) show that ISO-certified organizations may still exhibit deficiencies in risk analysis and assessment capabilities. Similarly, (Singgih & Alijoyo, 2025) find that risk awareness often remains confined to managerial levels, failing to permeate operational practices. This leads to symbolic rather than substantive implementation. Additionally, fragmented or silo-based risk management systems further reduce effectiveness (Kilic & Vavvay, 2025).

In summary, the effectiveness of ISO 31000 in shaping risk culture depends on organizational context, leadership quality, and the extent to which risk principles are internalized into daily practices. Without a strong and embedded risk culture, ISO 31000 risks becoming a formal compliance tool rather than a value-creating framework..

#### **4. Conclusion**

Based on the synthesis of 20 reviewed articles, this Systematic Literature Review concludes that ISO 31000 has a significant influence on risk culture; however, this influence is not automatic and depends on several contextual factors. Empirical evidence demonstrates that ISO 31000-based Enterprise Risk Management (ERM) is positively associated with risk culture (Arofah et al., 2025; Kanu, 2022; Vhanda et al., 2025), where risk culture acts as a mediating or moderating mechanism that translates the benefits of ISO 31000 into improved organizational performance.

The effectiveness of this relationship is determined by key factors such as top management support, accountability, communication, a common risk language, incentive systems, leadership emotional intelligence (Ardilo, 2022), and structural reforms such as the independence of the Chief Risk Officer (CRO) (Samad, 2026). Conversely, organizations with weak risk culture tend to experience compliance theater and symbolic compliance, where ISO 31000 implementation remains formalistic and fails to generate real value ((Agarwal & Kallapur, 2018; Bjornsdottir et al., 2022; Singgih & Alijoyo, 2025).

A key finding of this review is that the relationship between ISO 31000 and risk culture is reciprocal. A strong risk culture enables effective implementation of ISO 31000, while successful implementation further reinforces risk culture. However, the literature remains

limited in addressing risk culture comprehensively—only 16.2% of studies explicitly discuss it (Gleißner & Berger, 2024). At the same time, ISO 31000 is often criticized for being vague and principle-based, lacking specific guidance on how to build and sustain risk culture.

Therefore, organizations aiming to implement ISO 31000 effectively should treat risk culture as a foundational element that must be deliberately developed through committed leadership, open communication, aligned incentive systems, continuous training, and the integration of risk into all business processes and strategic decision-making. Without a strong risk culture, ISO 31000 risks becoming merely a compliance exercise with limited organizational value.

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