

## INDIVIDUAL PERCEPTIONS OF PUBLIC SECTOR'S RISK CULTURE

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### ABSTRAK

Manajemen risiko yang efektif di sektor publik sangat penting, tetapi perspektif individu menunjukkan adanya celah dalam implementasi dan budaya risiko yang lemah. Hal ini meningkatkan risiko kesalahan, kecurangan, dan korupsi. Penelitian ini mengevaluasi perspektif individu yang membentuk budaya organisasi untuk mendukung efektivitas manajemen risiko di Kantor B, sebuah instansi layanan publik dengan pengelolaan anggaran besar. Studi kasus kualitatif digunakan dengan triangulasi metode (analisis dokumen, survei, dan wawancara) serta triangulasi sumber data, dengan mengacu kerangka Institute of Risk Management dan Teori Budaya Organisasi Schein. Hasil menunjukkan budaya risiko berada pada kategori "terpenuhi sebagian", dengan mayoritas individu bertipe composed, berkesadaran risiko moderat tetapi pasif dan berfokus pada kepatuhan. Pengambilan keputusan berbasis risiko bersifat reaktif dan komunikasi risiko masih terbatas karena kekhawatiran terhadap konsekuensi. Budaya dasar organisasi menekankan formalitas, kepatuhan, dan kehati-hatian. Kantor B perlu menguatkan budaya risiko melalui kepemimpinan, transparansi, dan pelatihan terstruktur.

Kata Kunci: Budaya risiko, manajemen risiko, sektor publik, institute of risk management, teori budaya organisasi

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### ABSTRACT

Effective risk management in the public sector is essential; however, individual perspectives reveal gaps in implementation and a weak risk culture, which increase the potential for errors, fraud, and corruption. This study evaluates individual perceptions that shape organizational culture to support effective risk management at Office B, a public service agency managing a significant budget. A qualitative case study approach was employed using method and data triangulation (document analysis, surveys, and interviews), based on frameworks from the Institute of Risk Management and Schein's Organizational Culture Theory. The findings indicate that the risk culture is "partially fulfilled", with most individuals classified as composed, moderately risk-aware but passive, and compliance-oriented. Risk-based decision-making is reactive, and risk communication remains limited due to fear of consequences. The underlying culture emphasizes formality, compliance, and caution. Office B must strengthen its risk culture through leadership, transparency, and structured training.

Keywords: risk culture, risk management, public sector, institute of risk management, organizational culture



## 1. Introduction

Risk management also serves as the government's adaptive response to environmental changes and needs to be integrated with internal controls to mitigate fraud (Ilias et al., 2023; Mahama et al., 2020; Murr & Carrera, 2022; Rana et al., 2019). In the public sector, risk management is a crucial tool for enhancing organizational adaptability (Murr & Carrera, 2022) and must be aligned with the achievement of institutional goals (Pangesti Mulyono, 2020). The implementation of organizational risk management is inseparable from the prevailing risk culture, which forms part of governance and helps define organizational direction (Committee of Sponsoring Organizations (COSO), 2017).

Developing and maintaining a strong risk culture within the public sector is essential to ensure that organizations can respond to uncertainties and challenges proactively and with informed judgment (Bracci et al., 2021). A study in Saudi Arabia highlights the importance of risk culture and transparent communication for optimal public sector risk management (Murr & Carrera, 2022). Similarly, in Malaysia, a strong commitment to risk culture is identified as the foundation for effective public risk management (Ilias et al., 2023). In Indonesia, (Azria & Diyanty, 2023) found that risk culture in the public sector is often ineffective due to weak leadership, the absence of a reward-and-punishment system, and inadequate monitoring and evaluation. Furthermore, several local governments in East Java have yet to implement risk management and risk culture effectively, mainly due to a lack of leadership competence and transparency, which increases the risk of fraud and corruption (Tarjo et al., 2022). A weak risk culture significantly increases the likelihood of errors, despite the existence of formal regulations (Lam, 2017). Moreover, an incompatible risk culture can undermine risk management effectiveness and heighten the potential for fraud within organizations (Alkhyyoon et al., 2023).

Culture is shaped by social interactions involving the attitudes, values, and behaviors of individuals and groups (Ghafoori et al., 2023). Within organizations, this develops into an organizational culture that influences how risks are perceived and managed (Streicher et al., 2023). Risk culture serves as a behavioral guide for employees in assessing and managing risks to achieve institutional objectives (Sheedy & Griffin, 2017). The ability of individuals to leverage their risk preferences and competencies positively impacts the execution of risk-related tasks (Kelly, 2023). Moreover, employees who are actively engaged in understanding the risk culture tend to demonstrate improved performance (Rahim et al., 2024). Therefore, human resources play a critical role in organizational governance and cultural development, including the cultivation of risk culture. In uncertain environments, personnel with a sound understanding of risk are better equipped to assess and mitigate its impacts on both themselves and the organization.

This study uses a case study of a government financial service office tasked with providing state revenue administration services and managing disbursements of state expenditure funds to stakeholders under the supervision of a Ministry or Institution. This government financial institution plays a strategic role in managing the national budget (APBN), overseeing a total budget of IDR 790 trillion allocated to Ministries/Institutions (Government Financial Institutional, 2025). In fulfilling its mandate, this service office integrates risk management into governance and operational processes, in line with

ministerial regulations that require the identification and mitigation of risks that could impact the achievement of organizational goals (Goverment Financial Institutional, 2025).

The office was selected as the object of this study primarily due to its strategic significance and the substantial risks embedded in its operations. The aim is to examine in depth how risk culture values are embedded within individual employees who manage core business processes. A key issue in this context is that the large volume of managed funds amplifies the potential consequences of unmitigated risks. The primary risks faced by the office are linked to the administration of state finances, particularly the distribution of funds and their accountability, and are compounded by the increasing adoption of digital technologies. While digitization enhances efficiency and transparency, it also introduces new risks such as administrative errors, regulatory non-compliance, internal data leaks, corruption, acceptance of gratuities, and abuse of authority. These risks pose serious threats to the reputation of the office and its parent Ministry and may result in disciplinary action or legal consequences for the individuals involved.

The risks associated with government financial institutions are corroborated by research from Ersyafdi & Ginting (2024) who report that gratuity-related fraud is common in government agencies. Data from the Corruption Eradication Commission show that, as of 31 December 2024, there were 4,218 reported cases of gratification, with 2,958 of these occurring in government institutions (Corruption Eradication Commission, 2024). This finding aligns with the research of Tarjo (2022), which states that the suboptimal application of risk culture in Indonesia's local governments increases the likelihood of fraud and corruption. Consequently, selecting this government service office provides a relevant and critical case study for evaluating risk culture within an organization facing high financial risk and operating in an environment where fraud risks, such as gratification, are prevalent. Assessing risk culture in such a high-stakes setting offers valuable insights into how individual perceptions influence the effectiveness of risk management where it is most needed.

Previous research examining risk culture from an individual perspective includes a study by Park (2019), which found that internal factors such as the cultural environment and risk management mechanisms influence how organizational members perceive and apply risk management. Notably, the existence of formal artifacts, such as risk management policies and procedures, does not always reflect a deep, organization-wide understanding of core risk values or Basic Underlying Assumptions (BUA) (Park, 2019). Additional research by Pangesti Mulyono (2020) emphasizes that risk mitigation begins with individual employees across all business processes in pursuit of organizational objectives. Meanwhile, Sekali (2024) found that an evaluation of risk culture in private sector organizations revealed individual perspectives dominated by conscientious ethical patterns, which presented both strengths and limitations in relation to risk culture.

This study aims to evaluate individual perspectives related to risk that form layers of organizational culture that ultimately form a risk culture to support effective risk management. This research objective is supported by The Institute of Risk Management (2012a) which states that risk culture in the public sector is very important because a strong risk culture is the main foundation for effective and accountable risk management. The

Institute of Risk Management (2012a) emphasizes that evaluating risk culture on the perception of individual organizations can help identify strengths and weaknesses in the implementation of effective risk management and ensure that risk-based decision-making is well integrated into the organization's work processes.

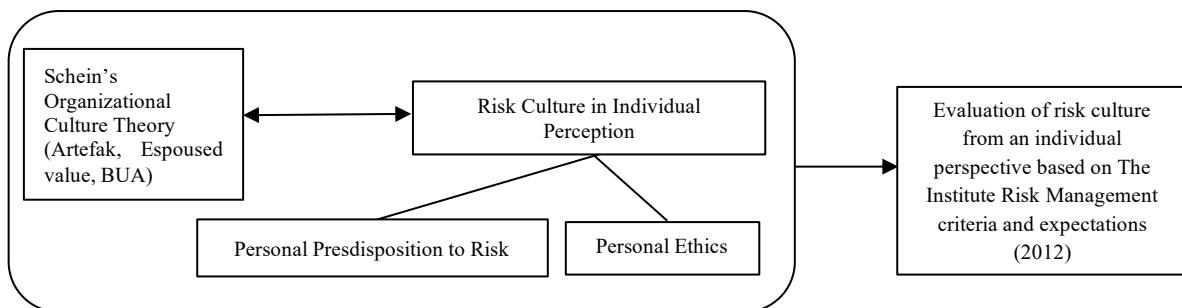
This research seeks to make the following contributions: First, in contrast to previous research by Sekali (2024) which focused on private-sector organizations, this study expands the knowledge base on risk culture from the perspective of individual employees within the public sector, particularly in a service office. Second, it addresses the methodological gap identified by Sekali (2024) who did not apply triangulation of methods or data sources to strengthen data validity. This study employs methodological triangulation by collecting data through document analysis, surveys, and semi-structured interviews. It also uses data source triangulation by interviewing multiple informants with varying roles in Office B's risk management processes. Third, this study responds to the gap in Mulyono's (2020) research, which examined only a single Regional Government entity. In contrast, this study investigates a service office at the Central Government level. Fourth, while Park (2019) focused solely on the Basic Underlying Assumptions (BUA) layer of Schein's organizational culture theory (2010), this study adopts the Institute of Risk Management's conceptual framework, elaborated with Schein's theory, to evaluate the risk culture of the selected organization. This theoretical combination is intended to deepen the understanding of how individual organizational views on risk contribute to forming the layers of organizational culture.

## 2. Literature Review

According to Edgar H. Schein (2010), organizational culture theory describes a structure comprising fundamental values that bring stability and order to organizations. This theory serves as an effective framework for understanding the complexities of organizational culture (Hogan & Coote, 2014) and helps analyze and distinguish among its various layers (Schein, 2010). The theory seeks to improve organizational performance by fostering a culture that aligns with strategic objectives. Schein (2010) identifies three key layers in organizational culture: (1) Artifacts: Visible, tangible cultural elements such as documented policies, organizational structure, risk management systems, and standard operating procedures. (2) Espoused Values: Beliefs and attitudes held by organizational members regarding policies and regulations, such as risk management policies. (3) Basic Underlying Assumptions (BUA's): Unconscious, fundamental beliefs that shape behaviors, including individual perceptions of risk. This theory is particularly useful for understanding the foundational beliefs of organizational members regarding risk culture (Park, 2019).

In a related study, Park (2019) applied this theory to evaluate risk culture and risk management in Australian public sector organizations. The findings revealed that while both executives and employees recognized the importance of risk management for compliance and negative risk control, they differed in their views on its role in strategic decision-making. Risk culture in the Australian public sector tended to emphasize administrative compliance rather than serving as a tool for innovation or operational effectiveness. Furthermore, formal layers such as documented risk management policies

and procedures did not consistently reflect a deep understanding of risk values (BUA) across all organizational levels. Figure 1 illustrates the conceptual framework used in this study.



**Figure 1. Research Conceptual Framework**

Source: Processed Research Results (2025)

Risk culture is defined as a pattern of basic assumptions learned and experienced by organizational members in responding to risks, whether internal or external (Grieser & Pedell, 2022). The Institute of Risk Management (2012a) describes risk culture as the collective values, beliefs, and understanding of risk within an organization, serving as the foundation for effective risk management. It emphasizes that risk culture is shaped through the interactions among organizational members. Effective risk management cannot be achieved without a strong risk culture, wherein all organizational members, from leaders to staff, clearly understand their roles in managing risks (Suardini et al., 2018). Individual perspectives on risk significantly influence decision-making, making them a critical component in assessing an organization's risk culture (The Institute of Risk Management, 2012a). Human Resource (HR) competencies, skills, and attitudes are key to the success of risk management strategies (Kelly, 2023).

Measuring individual perspectives is beneficial for identifying trends in attitudes, decision-making, and risk awareness, thereby enhancing risk management competencies. Research by Weber and William (1997) suggests that individual perceptions of risk affect their decision-making in uncertain situations. Understanding this dynamic enables organizations to design more effective risk communication strategies and promote risk-informed decision-making. A study by Bin Husayn et al. (2025) found that a higher perception of risk correlates with stronger adherence to risk management strategies. Additionally, Ceschi et al. (2025), who measured individual risk perceptions, shows that attitudes toward risk vary and are influenced by various factors such as age and gender. Factors that are essential to consider in developing effective risk management strategies within organizations. These studies confirm that measuring individuals' perspectives on risk provides valuable insights for improving awareness and competence in risk management. A deep understanding of individual attitudes and perceptions enables organizations to design risk management strategies that are more effective and responsive to individual needs.

The Institute of Risk Management (IRM) provides tools to assess risk culture as part of effective organizational risk management, including in the public sector. This study evaluates the implementation of risk culture in Office B using the IRM's conceptual framework, with a focus on the individual employee perspective. According to The Institute of Risk Management (2012b), risk culture is considered a strong foundation for effective organizational risk management when individual employees demonstrate risk awareness, risk-based decision-making, and the ability to communicate risk. Table 1 presents the IRM's expectations for each of these aspects.

**Table 1. The Institute of Risk Management Criteria and Expectations (2012)**

Criteria Aspect	The Institute of Risk Management Expectation
Risk awareness	Individuals understand the risks inherent in their work.
Risk-based decision-making	Individuals make decisions by considering risk impact and mitigation strategies without waiting for instructions.
Risk communication	Individuals (employees) feel comfortable reporting risks or incidents.

Source: (The Institute of Risk Management, 2012a), reprocessed

In this study, the authors measured Personal Predisposition to Risk (PPR), or an individual's perspective on risk, based on two key aspects: risk-taking and control, and emotional stability. Both aspects are considered integral to individual attitudes and behaviors. The risk-taking and control aspect reflects an individual's tendency to take risks and manage situations under uncertainty. Self-control is related to one's preference for risk-taking, which psychologically influences individual risk assessment (Zhang et al., 2022). The emotional stability aspect captures how individuals respond to pressure and challenges. Those with high emotional stability tend to remain calm and optimistic in risky situations, while those with lower emotional stability exhibit more intense emotional responses. Emotional stability significantly affects risk-related decisions in the workplace, particularly under pressure and uncertainty (Kusev et al., 2017). Geoff Trickey's Risk Type Compass (RTC) method is used to understand individual perspectives on risk. Trickey (2019) categorizes individuals into eight character types based on their risk appetite, which in turn influences their decision-making.

Individual perspectives on risk, as outlined by the PPR elements and personal ethics, contribute to the formation of organizational and risk cultures. According to The Institute of Risk Management (2012b), each individual within an organization holds unique moral values that influence daily decisions, including those related to risk. Therefore, it is crucial for organizations to understand the ethical profiles of their members to ensure sound and responsible decision-making. The Institute of Risk Management (2012b) recommends evaluating personal ethics using the Moral DNA method. This method maps an individual's moral values across three dimensions that significantly influence decision-making: (1) Obedience ethics focuses on compliance with rules and assesses the extent to which individuals follow regulations unquestioningly. (2) Care Ethics centers on empathy and respect for others, measuring concern for others' needs. (3) Rational ethics reflects

wisdom, experience, and prudence, assessing the ability to make decisions based on logic and sound reasoning. Moral DNA helps organizations foster more ethical, rational, and balanced decision-making, thereby reducing risks to organizational performance and reputation. The Institute of Risk Management (2012b) further notes that personal ethics can be analyzed in relation to an individual's age, gender, tenure, and position within the organization.

The purpose of evaluating risk culture in this study is to identify the strengths and weaknesses of risk culture as integrated within the broader layers of organizational culture in a government service office. Osman and Lew (2021) assert that optimal organizational risk culture is shaped by leadership, transparent communication, and structured risk management processes and resources. These three elements collectively support strategic risk-related decision-making.

### 3. Research Method

This research was conducted at one of the public service offices within the scope of a government financial institution. For ethical considerations, the name of this office is anonymized as "Office B." Office B was selected due to its strategic role in managing substantial state revenues and expenditures, which corresponds with the operational risks it faces. This study adopts a qualitative case study approach, aiming to evaluate the existing risk culture in Office B based on the criteria established by the Institute of Risk Management (IRM), further elaborated using Schein's Organizational Culture Theory (2010). Qualitative research seeks to understand phenomena in their natural settings, without any attempt by the researcher to manipulate the observed events (Saunders et al., 2023). A case study method is particularly suitable for exploring issues in depth within a specific context, whether related to individuals, groups, institutions, or events (Saunders et al., 2023).

A case study approach was employed in this research as it is particularly well-suited for conducting an in-depth evaluation of a specific, real-world phenomenon, in this instance, the risk culture within Office B. Qualitative research, of which the case study is a method, aims to understand phenomena within their natural contexts without attempting to alter them. Evaluating risk culture, a complex interplay of values, beliefs, and understandings, requires an exploration of the nuances of individual perspectives and organizational dynamics within their specific setting. A case study allows for this in-depth investigation of the phenomenon in one or more entities, such as an institution.

To enhance the credibility of the research findings, this study employed triangulation of methods and data sources. Triangulation strengthens data validity and minimises potential bias (Yin, 2018). In this case study, methodological triangulation was applied through the use of three data collection methods: (1) secondary data in the form of document analysis, and primary data comprising (2) surveys and (3) semi-structured interviews. Simultaneously, data source triangulation was carried out by interviewing individuals with varied roles in the risk management process of Office B. By comparing responses to similar questions, triangulation served to ensure the consistency of

interviewees' answers. Data collection occurred in two phases: (1) collection of secondary data and distribution of surveys, and (2) conducting interviews.

Secondary data comprised various risk management reports relevant to the research object. These data were analyzed to gain insights into the risk culture by examining how individuals within the organization make decisions related to risk and ethics. Secondary data were used to understand the 'artefact' and 'espoused values' layers of Schein's Organizational Culture Theory.

Primary data were used to explore the 'basic underlying assumptions' (BUA) layer of Schein's framework. The survey, as the primary data instrument, employed two models developed by The Institute of Risk Management: the Risk Type Compass (RTC) and Moral DNA. The research questionnaire included both closed and open-ended questions, utilizing a six-point Likert scale. The RTC model aims to determine individuals' levels of risk tolerance based on eight risk type categories. The Moral DNA model assesses ethical orientations that contribute to the organization's culture and decision-making processes.

Interviews, also a primary data instrument in this study, aimed to validate the findings from document analysis and surveys. In qualitative research, the term "informant" is commonly used, as it reflects their role in providing insights into the phenomenon being studied (Merriam, 2009). The interviews were conducted using a semi-structured approach to allow for comprehensive responses while maintaining alignment with the research objectives. Questions were adapted from The Institute of Risk Management's framework and contextualized for the public sector.

**Table 2. Informant Codes**

Interview Source Code	Interview Source Role
A1	Head of Risk Owner/ Business Process
A2	Head of Risk Owner/ Business Process
B1	Staff of Risk Owner/ Business Process
B2	Staff of Risk Owner/ Business Process
B3	Staff of Risk Management Manager

Source: Processed Research Results, 2025

Informants were strategically selected to ensure data source triangulation by capturing perspectives from individuals occupying different roles within the risk management structure of Office B. The five informants included two officials responsible for risk or business process ownership, one staff member from the risk management team, and two staff members involved in risk or business process ownership. Table 2 presents the codes assigned to the interview respondents.

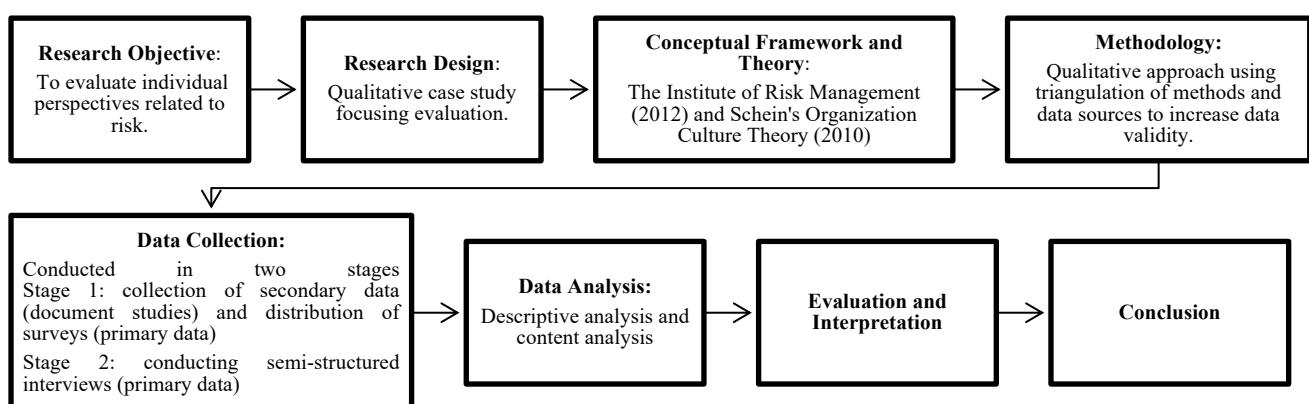
The selection of these informants was based on their direct involvement in and insights into risk management activities at Office B. Interviewing individuals from different hierarchical levels (officials and staff) and functions (risk owners/business process owners and risk management personnel) provided a more holistic understanding of the organization's risk culture. Comparing information across roles during the triangulation

process contributed to consistency and offered a more robust assessment of the organizational risk culture.

This study employed both descriptive and content analysis methods for data processing. Descriptive analysis was used to capture actual conditions without manipulation of variables, aiming to derive information grounded in factual findings and their implications (Sari & Setyaningrum, 2022). Closed-ended survey responses were analyzed using descriptive statistics. Content analysis was applied to qualitative data, including documents, open-ended survey responses, and interview transcripts, to identify insights related to the research context and themes (Merriam, 2009). This analysis was supported by NVivo 15 software. The combination of these analytical approaches enhanced the validity of interpretations, upheld the objectivity of the analysis, and ensured that the narrative was constructed in a systematic and academically rigorous manner.

#### 4. Results and Discussion

Data collection in this study began with the collection of secondary data from the research object in the form of risk management documents belonging to Office B. Document review and survey distribution were conducted simultaneously. The survey was administered via Google Forms at a predetermined time, achieving a 100% response rate from all 62 employees. This section outlines how data from document analysis, surveys, and semi-structured interviews were collected and analyzed. The results for each criterion, risk awareness, risk-based decision-making, and risk communication, are presented by integrating findings from the document review, open-ended survey questions, and semi-structured interviews. For instance, interview findings are explicitly used to "corroborate the results of secondary data processing and surveys" concerning risk awareness, risk-based decision-making, and risk communication. Figure 2 presents the systematic flowchart of the research.



**Figure 2. Research Flowchart**

Source: Processed Research Results (2025)

The document analysis and responses to open-ended survey questions were processed using content analysis, resulting in the identification of several key phrases through word frequency analysis using Nvivo15 software. The most frequently occurring words in the

secondary documents and survey responses included risk, data, leadership, socialization, and gratification. Each phrase is interpreted in the analysis of individual perception criteria in risk culture. The results of the semi-structured interviews were also analyzed using content analysis, focusing on three primary criteria, which served as themes in the data analysis.

The qualitative findings in this study provide insights into the risk culture at Office B that go beyond merely confirming existing theories, revealing specific challenges and contextual characteristics within the public sector. Although the study applies The Institute of Risk Management framework and Schein's organizational culture theory, the detailed results illustrate how these concepts are manifested in practice, including observed disconnects and behavioral patterns. A key finding is that the risk culture in Office B falls into the "partially fulfilled" category. This overall assessment, derived from the application of The Institute of Risk Management criteria, offers a concrete evaluation of the current status.

In the risk awareness criterion, document reviews and open-ended survey responses revealed that employees were aware of the risks associated with their roles. However, this awareness remains largely passive, focused more on recognizing the existence of risks—such as those related to compliance, operations, gratification, and internal data leaks—than on taking proactive steps to manage them. Through the phrases data and gratification, respondents conveyed an understanding that abuse of power, including leaking internal organizational data or accepting gratification, could damage the organization's reputation and result in disciplinary or legal consequences. The term socialization is interpreted as reflecting a lack of risk management training for all employees, indicating that awareness is still conceptual and not yet underpinned by technical competence.

These behavioral aspects of risk awareness reflect the artifacts and espoused values layers of organizational culture, interpreted through the documented values and practices of risk culture at Office B, which appear to be formalistic and not reflective of best practices. Although formal documents such as risk management charters, risk profiles, and monitoring reports exist, specific documentation on risk management training was not found. Furthermore, risk profile reports lack transparency, particularly regarding incidents such as data breaches that are essential for accurate risk profiling. The prevailing values, such as compliance and anti-gratification, are largely documented but have not yet translated into tangible behavioral implementation. This gap suggests a disconnect between written policies and practical application.

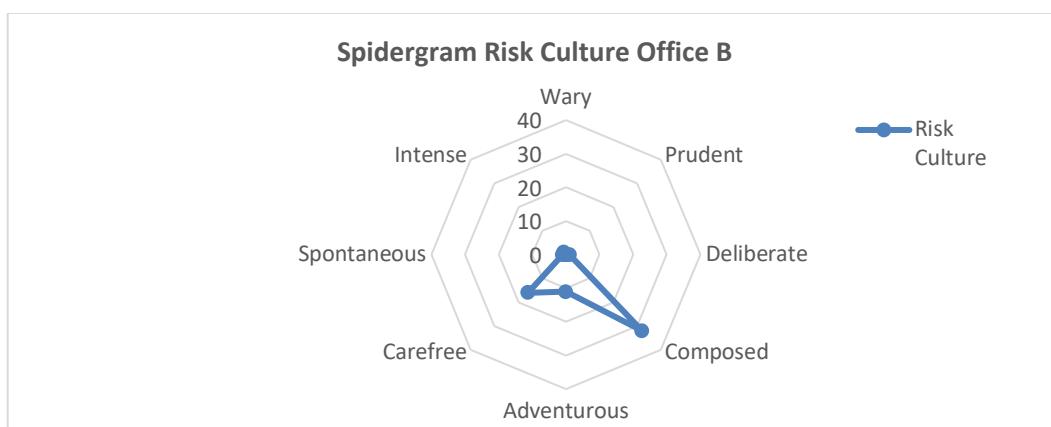
The basic underlying assumptions (BUA) layer derived from the behavioral aspects of risk awareness reflects a tendency among Office B staff to prioritize formal procedures over active engagement in risk culture. A fundamental assumption that appears to prevail is a reluctance to discuss negative risks openly or use them as a basis for organizational learning.

This risk awareness criterion was further examined through the Risk Type Compass (RTC) method, which explores individuals' perspectives on risk (Personal Perspective on Risk, or PPR). The PPR survey measures attitudinal and behavioral tendencies in relation to risk, including decision-making processes. In this study, the RTC method was applied based on two aspects: risk-taking awareness and emotional stability. These aspects reflect

how individuals respond to uncertain situations and exercise self-control, forming part of their overall risk attitude and behaviour.

Descriptive analysis of the survey responses (based on a 1 to 6 Likert scale) produced an average score of 4.14 among the 62 respondents. This indicates that respondents generally agreed with the questionnaire items. The findings revealed that Office B employees perceived themselves as compliant with regulations and Standard Operating Procedures (SOPs), yet were relatively insensitive to external criticism. Each respondent's answers were analyzed using RTC guidelines, and every employee was categorized into one of the eight RTC risk types. The results were visualized using a Risk Culture Spidergram as per The Institute of Risk Management standards.

The measurement of individual perspectives among respondents in Office B is illustrated in Figure 3, which shows that the composed individual type dominates the PPR results, comprising 51.61% or 32 respondents. According to The Institute of Risk Management (2012b), individuals of this type have a high level of risk awareness. In addition to the composed type, Office B also includes 16 respondents identified as carefree, 11 as adventurous, 1 as spontaneous, 1 as intense, and 1 as deliberate. Based on these findings, it can be concluded that, on average, individuals at Office B exhibit a moderate risk tolerance.



**Figure 3. Spidergram Risk Culture at Office B**

Source: Processed Research Results, 2025

This distribution contrasts significantly with The Institute of Risk Management's expectations, which suggest that the prudent type should dominate in an ideal risk culture. While composed individuals are effective at planned strategies, they tend to respond slowly to emergencies, and interpersonal dynamics may influence the organizational culture. This dominance highlights a specific human factor within Office B that could hinder adaptability in uncertain situations, offering a more nuanced understanding than simply stating that employees lack awareness.

The interview findings also support the results derived from the analysis of secondary data and surveys. Respondents noted that risk awareness exists at both leadership and staff levels, though understanding remains inconsistent across individuals. While risk management documents (the artifact layer) are in place, the espoused values and basic

underlying assumptions (BUA) prioritize regulatory compliance. Interview excerpts include:

*“...we follow the leadership’s direction and regulations by compiling a risk profile each year, but in reality, many employees still do not understand the risks in their work...” (A1, 2025)*

*“I know there’s a risk management requirement, and a PIC has been appointed, but in daily work, we focus more on completing tasks than actively considering potential risks...” (B2, 2025)*

*“Risk is still mainly handled by my department. Many employees are aware of its existence, but due to the absence of specific training programs or alignment with incentives, risk is often seen as the responsibility of our department alone.” (B3, 2025)*

These interviews reveal that many employees at Office B do not possess a comprehensive understanding of risk awareness. This finding is consistent with the dominance of the composed type within the organization. While risk awareness exists, it is often passive and primarily focuses on recognizing risks associated with compliance, operations, gratuities, and data breaches, rather than engaging in active risk management. The awareness is conceptual in nature and lacks technical depth, partly due to limited training. Thus, the study not only affirms the importance of awareness but also reveals its compliance-focused character and the lack of adequate support for proactive risk management.

In the risk-based decision-making criterion, the document review and open-ended survey questions frequently cited the keywords risk and leadership. Office B’s risk management report outlines formal procedures for managing risk; however, these have not been fully internalized into individual decision-making practices. The keyword leadership suggests that respondents expect leaders to model risk-aware behaviour, which would influence business process decisions with risk considerations.

At the artifact level, risk mitigation decisions are shown to be generalized and lack reference to specific past incidents. Decision-making is not fully informed by historical (lagging) or predictive (leading) data, reflecting a tendency to treat risk as an administrative formality rather than as a strategic component.

At the espoused values level, risk-based decision-making appears to be more reactive than proactive. Risk mitigation measures are routine and repetitive, lacking evaluation of their effectiveness. Leadership primarily provides directives rather than fostering a culture of autonomous, risk-informed decision-making. At the BUA level, risk is commonly perceived as a matter for administrative management rather than being embedded in daily operations. The hierarchical nature of the organizational culture leads employees to rely on instructions rather than engaging in independent risk mitigation.

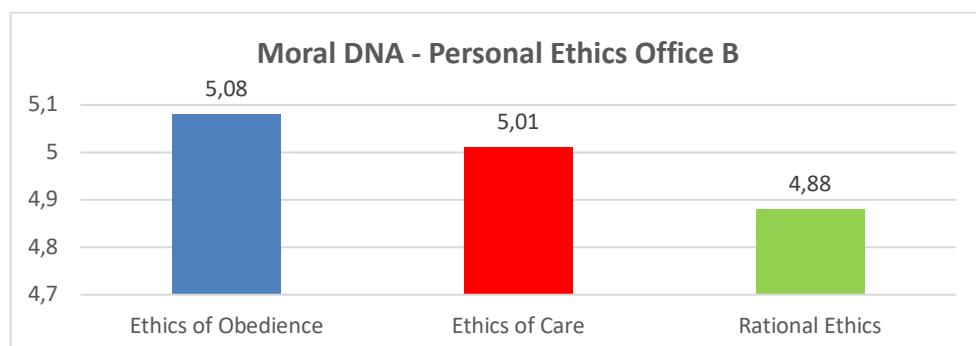
This criterion was also analyzed using the Moral DNA survey, which evaluates individual perspectives on organizational moral profiles and provides insight into prevailing ethical patterns. The Moral DNA questionnaire data were processed using Microsoft Excel to calculate the average responses and identify preferences in ethical decision-making, focusing on the ethics of obedience, care, and rationality.

Based on the results of a descriptive analysis conducted with 62 respondents, the average score was 4.98. This indicates that respondents generally agree with the questionnaire items. The Moral DNA results reveal that when faced with complex situations, employees at Office B tend to comply with regulations and standard operating procedures (SOPs) rather than seek alternative solutions. Analysis of the Moral DNA personal ethics questionnaire by gender shows that women place greater emphasis on obedience ethics and care ethics when making risk decisions, while men prioritize rational ethics. This suggests that men are more inclined to adopt competitive strategies grounded in objective and rational thinking.

The analysis by age group indicates that employees aged over 50 exhibit stronger ethical considerations related to obedience, care, and rationality compared to other age groups. This suggests that the over-50 age group may be more mature in applying these three ethical dimensions in risk decision-making. Results based on position show that echelon III officials demonstrate greater ethical consideration in obedience, care, and rationality than other groups, followed by those in echelon IV. This implies that higher-ranking officials are better able to integrate these ethics into their risk decision-making processes.

When grouped by length of service, employees with one year of service show greater ethical consideration in obedience, care, and rationality than other groups. This may indicate that newer employees tend to follow regulations more closely as part of their adaptation process, thus placing more emphasis on personal ethics in risk decisions. In contrast, employees with longer tenure show a slight but not significant decrease in care and rationality scores, while obedience remains consistently high across all groups.

Overall, the findings suggest that obedience ethics significantly influence the decision-making of individuals within the organization, as illustrated in Figure 4. This highlights that Office B employees prefer to follow directions rather than take initiative when making decisions or exploring alternative solutions. Moreover, in complex situations, they tend to adhere to regulations and SOPs rather than seek other options. These results align with the characteristics of public sector organizations, which typically prioritize compliance in fulfilling their duties and functions. Supporting this, [Wicaksono \(2015\)](#) cites Bryner's assertion that individuals in public sector organizations must comply with laws governing policy management, especially regulations related to the organization's core programs.



**Figure 4. Moral DNA Personal Ethics**

Source: Processed Research Results, 2025

The results of semi-structured interviews corroborate the findings from secondary data analysis and surveys regarding risk-based decision-making criteria. Interviewees' responses include:

*"In management meetings, we often discuss risk mitigation; it is mandatory. Risk decisions require qualitative and quantitative considerations, but sometimes they are based on habit or leadership direction rather than in-depth risk analysis." (A2, 2025)*

*"I have read the risk management report in the office, but risk mitigation decisions in the document are often too general. When urgent or negative risks arise, I prefer to wait for instructions from my superiors." (B1, 2025)*

*"Incidents of employees violating rules should be used as references in risk assessments, but in practice, they are not always considered in decision-making." (B3, 2025)*

These interviews provide insight that risk-based decision-making has not been fully implemented among individuals at Office B. They confirm the Moral DNA findings that compliance ethics dominate daily decision-making, including risk-related choices. Employees tend to await leadership guidance in negative situations, and leaders themselves exercise caution in risk reporting transparency.

This situation exceeds theoretical expectations that decision-making should be risk-based, revealing how the deeply ingrained culture of compliance and hierarchy in public sector organizations overrides proactive risk consideration. In contrast, private sector studies indicate a dominance of conscientious ethical patterns and more confident risk-taking behavior, highlighting this unique public sector trait.

Regarding risk communication criterion, document reviews and open-ended survey questions reveal frequent references to "risk," "leadership," and "socialization." The terms "risk" and "socialization" suggest that risk management socialization has not effectively fostered understanding or created an environment where employees feel comfortable reporting risks or fraud openly. The term "leadership" reflects employees' expectations that leaders should actively ensure effective risk communication. However, evidence suggests that leadership has not fully implemented effective risk communication, as indicated by the avoidance of negative risk disclosures.

At the deeper value level, the organization espouses transparency in risk reporting, but this has not yet translated into practice. Employees perceive that reporting negative risks such as fraud or data leakage could have adverse personal consequences. As a result, risks tend to be concealed or downplayed in official reports, reflecting a defensive rather than open risk culture.

Survey results based on the RTC Method and DNA Model indicate that Office B is dominated by composed individuals with a compliance ethic who take a cautious approach to risk communication. These individuals prefer to follow rules and procedures with a hierarchical orientation, communicating risks primarily through formal channels to avoid controversy. While this ensures regulatory adherence, it can result in slow, hesitant disclosure of risks.

Semi-structured interviews support these findings with comments such as:

*“We have a risk reporting mechanism, but there is no culture where employees feel comfortable reporting risks without fearing career repercussions.” (A1, 2025)*

*“Sensitive risks are usually known only to leadership.” (A2, 2025)*

*“There is a procedure for reporting incidents, but sometimes I feel safer not reporting to avoid being seen as at fault.” (B1, 2025)*

The results from processing the interview data provide an in-depth understanding that risk communication to individuals in Office B has not been fully implemented. Regarding risk communication, the study uncovered a significant issue: employees tend to avoid explicitly reporting risks, particularly negative ones such as fraud or data leaks, due to fear of adverse consequences for themselves. There is a perception that a safe and comfortable space for reporting risks has not been established. This finding reveals a crucial barrier to transparency within the organization's risk culture, which contrasts with the espoused value of transparency in reporting. The composed personality type's tendency to prefer formal channels and to err on the side of caution in disclosing risks aligns with this finding, illustrating how individual predispositions interact with the organizational environment to suppress open communication.

The results of the risk culture evaluation from the perspective of individual employees in Office B show that the risk culture is not yet strong enough to support effective risk management. Individual behaviour shapes organizational culture alongside achievements at other levels. Perceptions related to risk awareness, risk-based decision-making, and risk communication collectively create a picture of the organization's risk culture, which is expected to support effective risk management. The evaluation of individual perspectives within Office B indicates only partial fulfillment of behavioral criteria, suggesting that individual behaviors have not yet fully supported an effective risk management process. Table 3. presents the evaluation results against the criteria expected by The Institute of Risk Management, indicating that these criteria are only partially met.

Finally, applying Schein's theory revealed a significant disconnect between the formal artifact layer (documented policies and reports) and the espoused values (such as the stated importance of risk management, compliance, and transparency) on one hand, and the basic underlying assumptions (BUA) on the other. The BUA layer, which directly reflects individual perceptions and drives behaviour, includes assumptions such as avoiding open discussions of negative risks, believing compliance to be the ultimate standard, and fearing negative consequences from reporting risks.

**Table 3. Risk Culture Evaluation Results from the Individual Perspective of Office B**

Individual Behavior Criteria	Evaluation Results	Analysis and Issues	Recommendations
Risk awareness	Partially fulfilled	Document evaluation shows risk awareness mainly through compliance with regulations. Office B is dominated by composed	1. Implement risk management training that goes beyond compliance and focuses on dynamic adaptation of practices.

Individual Behavior Criteria	Evaluation Results	Analysis and Issues	Recommendations
Risk-based decision-making	Partially fulfilled	types who have some risk awareness but lack detailed and adaptive skills in managing risks under uncertainty. There has been insufficient training or technical understanding.	<ol style="list-style-type: none"> <li>Internalize risk awareness among all organization members.</li> <li>Conduct workshops to build skills in identifying, analyzing, and adapting to uncertain risks.</li> <li>Appoint risk champions in each division to guide and support others.</li> </ol>
Risk communication	Partially fulfilled	Risk decision-making has begun to form among employees, but in complex situations, individuals tend to comply with regulations and wait for orders instead of seeking alternative solutions. Decisions remain reactive and are not based on thorough risk evaluation.	<ol style="list-style-type: none"> <li>Train employees to make decisions based on risk evaluation rather than simply following orders.</li> <li>Hold practice sessions simulating difficult, real-life risk situations to enhance decision-making skills.</li> </ol>

Source: Processed Research Results, 2025

Most individuals are composed of types with moderate risk awareness and tolerance. Although risk awareness exists, it is largely limited to regulatory compliance and is neither detailed nor adaptive. This corresponds with the underlying assumption that “risk should be managed through a systematic approach rather than quick responses.” Meanwhile, moderate risk tolerance reflects a fundamental belief that “following procedures is the best way to avoid risks,” rather than actively mitigating them. Moral DNA results indicate that Office B individuals are more inclined to comply with rules and SOPs than to take initiative in decision-making. This highlights the prevailing BUA in the organization that “compliance is the gold standard in decision-making.” In complex situations, employees prefer to wait for instructions rather than seek alternative solutions, reflecting the highly regulatory and bureaucratic nature of public sector organizations. Office B employees also

tend not to report risks openly, consistent with the composed personality type's caution in expressing potential risks. This suggests a BUA that "reporting risks may lead to negative consequences," such as being perceived as incompetent or facing additional bureaucratic burdens.

This study addresses the research gap identified by [Sekali \(2024\)](#), who did not incorporate document studies in evaluating individual perspectives of risk culture. It also diverges from Sekali's findings, which reported that private sector organizations predominantly adopt ethical patterns of conscience in risk decision-making. In private sector contexts, composed and deliberate personality types tend to take more risks with confidence and careful preparation. In contrast, this study offers insight into public sector individuals who prioritize stability and adherence to organizational rules and regulations.

Additionally, this research fills the gap noted by [Pangesti Mulyono \(2020\)](#), who studied risk culture in a single regional government setting, whereas this study examines a service office within the central government. Nonetheless, the findings align with Pangesti Mulyono's conclusion that risk awareness culture in local governments requires strengthening through intensive socialization, improved risk decision-making processes, and transparent risk communication. The evaluation shows that Office B's risk awareness needs development via socialization activities focused on risk management practices, understanding risk-based decision-making, and fostering more open communication to report potential risks.

Furthermore, this research extends [Park's \(2019\)](#) focus on the BUA layer by elaborating on The Institute of Risk Management framework alongside Schein's cultural theory. The findings support Park's observation that in Australian public sector organizations, formal artifacts and espoused risk management policies do not always reflect individual employees' understanding of risk values (BUA). Risk culture in these settings is often employed as an administrative compliance mechanism rather than a strategic decision-making tool.

This study reveals that despite the presence of formal risk management systems and articulated values, the underlying beliefs and mindsets of individuals are not fully aligned, posing a fundamental challenge to achieving effective risk management. The discrepancy between formal policies or stated values and the underlying assumptions or behaviors is a critical insight derived from applying Schein's layered model in conjunction with the Institute of Risk Management framework and individual assessments. The qualitative findings support and are interpreted through Schein's Organizational Culture Theory. This study employs Schein's theory as a conceptual framework to deepen the understanding of risk culture from an individual perspective. Furthermore, the findings provide a detailed diagnostic portrayal of the risk culture at Office B, highlighting specific behavioral patterns, ethical orientations, and cultural disconnects that contribute to its classification as "partially fulfilled," thereby offering insights that extend beyond a generic theoretical confirmation.

The findings of this study have several important implications. First, from a theoretical standpoint, this research enriches the understanding of risk culture evaluation within the public sector by emphasizing the perspective of individual employees. By integrating the

Institute of Risk Management framework with Schein's Organizational Culture Theory, the study demonstrates how a layered approach can identify strengths and weaknesses within risk culture. It underscores the significant influence of the Basic Underlying Assumptions (BUA) layer on actual behavior, even in the presence of formal policies and declared values. Additionally, this study contributes to the literature by illustrating how personal risk tendencies (RTC Model) and ethical profiles (Moral DNA) interact with organizational culture in the public sector, distinguishing these dynamics from those observed in private-sector contexts, particularly within financial institutions. Second, in terms of practical implications, the study offers actionable recommendations for enhancing risk management at Office B and other public sector entities. It emphasizes that written policies and procedures alone are insufficient if employees lack robust risk awareness, fail to make proactive decisions, or do not engage in open communication. The results highlight specific interventions such as providing additional training to improve technical competencies, encouraging decision-making that transcends mere rule compliance, and fostering a psychologically safe environment where employees feel comfortable reporting risks. Furthermore, leadership must exemplify effective risk management behaviors and maintain transparent dialogue concerning risk. Third, regarding policy implications, the findings suggest that public sector policymakers must consider individual behaviors and beliefs when designing risk management systems. Policies should extend beyond formal procedural frameworks to nurture shared values and shape the deeper assumptions that guide individual risk handling. Training programs should aim to enhance staff risk awareness, improve decision-making under uncertainty, and cultivate a balanced ethical approach rather than mere compliance. Ultimately, refined risk culture policies have the potential to improve public service delivery and bolster public trust.

## 5. Conclusions, Implications, and Limitations

This study aimed to evaluate individual perspectives related to risk, which form layers of organizational culture that collectively shape the risk culture necessary to support effective risk management. The evaluation results, based on the individual perspective within the organization, indicate that the risk culture is not yet sufficiently robust to support effective risk management. This is demonstrated by all assessed criteria remaining within the "partially met" category, interpreted as not fully conforming to the expectations outlined by the Institute of Risk Management. Regarding the risk awareness criterion, the Institute of Risk Management posits that the prudent type of individual should predominate in an ideal risk culture; however, Office B is dominated by the composed type. These individuals possess risk awareness but lack detailed and adaptive capabilities for managing risks in uncertain situations, primarily due to insufficient training and technical understanding. Concerning risk decision-making, although employees demonstrate some formation of decision-making processes, Moral DNA results reveal that under complex conditions, employees at Office B predominantly opt to comply with regulations and await instructions rather than seek alternative solutions. Decisions tend to be reactive, with limited emphasis on rigorous risk evaluation. Additionally, risk communication is problematic, as employees are perceived to adopt a cautious approach by not openly disclosing risks, and there is a lack of a supportive environment for risk reporting. At the

artifact level, Office B exhibits formalism; written policies exist but are not fully enacted in practice. Organizational values stress compliance, accountability, and transparency in risk management, yet a gap remains between espoused principles and actual implementation. The BUA layer emerges as the primary influence on risk culture, consistent with the Institute of Risk Management's assertion that risk culture is shaped by individual perceptions and behaviors.

This research contributes to enriching the understanding of risk culture evaluation in the public sector by focusing on individual employee perspectives. The study demonstrates how the applied methodology can identify vulnerabilities in risk culture, thereby presenting opportunities for improvement in risk management. This approach holds practical value for practitioners and can be adapted across various government agencies. More broadly, the findings support efforts to enhance public service effectiveness through improved risk management practices.

This study has several limitations. First, it was conducted on only one research subject, which limits the ability to capture the perspectives of all individual public sector organizations. Future research could include two or more public sector organizations to enable comparative analysis. Second, the sample size in this study is small; although the questionnaire data are considered representative of the organization at the time of research, the qualitative method employed did not incorporate quantitative data. Results may differ with a larger sample size or in the event of employee turnover. Since perceptions of risk culture are influenced by individual experiences, findings may vary depending on employees' backgrounds. Future studies could increase the sample size by selecting public sector organizations at echelon I or II levels and applying quantitative methods to gain a more detailed, numerical understanding. Third, this study relied on Schein's organizational culture theory to describe the layers of organizational culture associated with risk culture. Future research could explore other organizational culture theories or frameworks relevant to organizational risk culture.

## References

Alkhyyoon, H., Abbaszadeh, M. R., & Zadeh, F. N. (2023). Organizational risk management and performance from the perspective of fraud: A Comparative Study in Iraq, Iran, and Saudi Arabia. *Journal of Risk and Financial Management*, 16(3). <https://doi.org/10.3390/jrfm16030205>

Azria, R. N., & Diyanty, V. (2023). Evaluasi budaya risiko menggunakan risk culture aspect model (studi kasus pada direktorat jenderal X). *Jurnal Akuntansi Manado*, 4(2), 226–248. <https://doi.org/10.53682/jaim.vi.6604>.

Bin Husayn, A., Abdullah, M., & Rimmel, G. (2025). The relationship between risk perception and risk management: a systematic literature review. *Journal of Risk Research*, 27, 1–18. <https://doi.org/10.1080/13669877.2024.2447258>

Br Karo Sekali, R. (2024). Evaluasi atas implementasi budaya risiko pada perusahaan finansial ABC. *Owner*, 8(3), 2225–2234. <https://doi.org/10.33395/owner.v8i3.2167>

Bracci, E., Tallaki, M., Gobbo, G., & Papi, L. (2021). Risk management in the public

sector: a structured literature review. *International Journal of Public Sector Management*, 34(2), 205–223. <https://doi.org/10.1108/IJPSM-02-2020-0049>

Ceschi, A., Dusi, M., Ferrara, M., Tommasi, F., & Sartori, R. (2025). Individual differences in risk attitude among managers: a multilevel approach. *International Journal of Organizational Analysis*, 33(12), 1–17. <https://doi.org/10.1108/IJOA-02-2024-4251>

Committee of Sponsoring Organizations (COSO). (2017). Enterprise risk management integrating with strategy and performance. In *The Committee of Sponsoring Organizations of the Treadway Commission: Vol. I* (Issue June). <https://www.coso.org/Documents/2017-COSO-ERM-Integrating-with-Strategy-and-Performance-Executive-Summary.pdf>

Corruption Eradication Commission. (2024). *Gratification report based on agency*. <https://www.kpk.go.id/id/publikasi-data/statistik/gratifikasi-1>

Ersyafdi, I. R., & Ginting, R. (2024). Gratifikasi dalam perspektif mahasiswa akuntansi: Dilema atau probelamtika. *Akurasi : Jurnal Studi Akuntansi Dan Keuangan*, 7(1), 17–34. <https://doi.org/https://doi.org/10.29303/akurasi.v7i1.478>

Ghafoori, E., Mata, F., Faulkner, N., & Tear, M. J. (2023). Measuring risk culture in finance: Development of a comprehensive measure. *Journal of Banking and Finance*, 148, 106720. <https://doi.org/10.1016/j.jbankfin.2022.106720>

Goverment Financial Institutional. (2025). *Annual report 2024*.

Grieser, F., & Pedell, B. (2022). Exploring risk culture controls: to what extent can the development of organizational risk culture be controlled and how? *Journal of Accounting and Organizational Change*, 18(5), 752–788. <https://doi.org/10.1108/JAOC-11-2020-0189>

Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609–1621. <https://doi.org/10.1016/j.jbusres.2013.09.007>

Ilias, A., Baidi, N., Ghani, E. K., & Omonov, A. (2023). A qualitative investigation on risk management implementation in the Malaysian public sector. *Economic Affairs (New Delhi)*, 68(2), 1247–1261. <https://doi.org/10.46852/0424-2513.2.2023.30>

Kelly, P. (2023). Are you competent coping with uncertainty and risk? Implications for work-applied management. *Journal of Work-Applied Management*, 15(2), 241–251. <https://doi.org/10.1108/JWAM-10-2022-0071>

Kusev, P., Purser, H., Heilman, R., Cooke, A. J., Van Schaik, P., Baranova, V., Martin, R., & Ayton, P. (2017). Understanding risky behavior: The influence of cognitive, emotional and hormonal factors on decision-making under risk. *Frontiers in Psychology*, 8(FEB), 1–10. <https://doi.org/10.3389/fpsyg.2017.00102>

Lam, J. (2017). Implementing enterprise risk management. In *Implementing Enterprise Risk Management*. John Wiley & Sons, Inc.

Mahama, H., Elbashir, M., Sutton, S., & Arnold, V. (2020). New development: Enabling enterprise risk management maturity in public sector organizations. *Public Money and Management*, 0(0), 1–5. <https://doi.org/10.1080/09540962.2020.1769314>

Merriam, S. B. (2009). *Qualitative research a guide to design and implementation revised and expanded applications in education research and case study applications in education*. Jossey-Bass A Wiley Imprint.

Murr, P., & Carrera, N. (2022). Institutional logics and risk management practices in government entities: evidence from Saudi Arabia. *Journal of Accounting and Organizational Change*, 18(1), 12–32. <https://doi.org/10.1108/JAOC-11-2020-0195>

Osman, A., & Lew, C. C. (2021). Developing a framework of institutional risk culture for strategic decision-making. *Journal of Risk Research*, 24(9), 1072–1085. <https://doi.org/10.1080/13669877.2020.1801806>

Pangesti Mulyono, R. D. A. (2020). How important risk management culture in local governments? *Journal of Governance and Public Policy*, 7(1), 35–40. <https://doi.org/10.18196/jgpp71121>

Park, Y. J. (2019). Risk culture and risk management in the Australian public sector. In *The Australian National University* (Issue April). <https://doi.org/10.25911/5dd7ab6962108>

Rahim, A., Rosid, M. H. O., & Hasan, N. (2024). Risk culture and employee performance for optimal organizational success: the mediating role of employee satisfaction and employee engagement. *Management Research Review*, 47(11), 1722–1749. <https://doi.org/10.1108/MRR-12-2023-0892>

Rana, T., Wickramasinghe, D., & Bracci, E. (2019). New development: Integrating risk management in management control systems—lessons for public sector managers. *Public Money and Management*, 39(2), 148–151. <https://doi.org/10.1080/09540962.2019.1580921>

Sari, Y., & Setyaningrum, D. (2022). *Risk management in public educational institution (case study at XYZ education and training center)*. 129. <https://doi.org/10.4108/eai.10-8-2022.2320878>

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2023). *Research methods for business students (9th ed.)*. Pearson Education Limited.

Schein, E. H. (2010). *Organizational cultural and leadership (4th ed.)*. Jossey-Bass A Wiley Imprint.

Sheedy, E., & Griffin, B. (2017). Risk governance, structures, culture, and behavior: A view from the inside. *Corporate Governance: An International Review*, 26(1), 4–22. <https://doi.org/10.1111/corg.12200>

Streicher, B., Bielefeld, M., & Eller, E. (2023). The risk culture framework: Introducing an integrative framework for holistic risk analysis. *SAGE Open*, 13(3), 1–10. <https://doi.org/10.1177/21582440231191789>

Suardini, D., Rahmatunnisa, M., Setiabudi, W., & Wibowo, C. B. (2018). The existence of risk culture in risk management implementation on the West Java provincial government. *European Research Studies Journal*, 21(Special Issue 3), 488–502. <https://doi.org/10.35808/ersj/1404>

Tarjo, T., Vidyantha, H. V., Anggono, A., Yuliana, R., & Musyarofah, S. (2022). The

effect of enterprise risk management on prevention and detection fraud in Indonesia's local government. *Cogent Economics and Finance*, 10(1). <https://doi.org/10.1080/23322039.2022.2101222>

The Institute of Risk Management. (2012a). *Risk culture: Under the Microscope Guidance for Boards*. Protiviti.

The Institute of Risk Management. (2012b). *Risk Culture Resources for Practitioners*. Protiviti.

Trickey, G. (2019). *Risk Type Compass Technical Manual: Fourth Edition* (Issue 86). Psychological Consultancy Ltd.

Weber, E. U., & Milliman, R. A. (1997). Perceived risk attitudes: Relating risk perception to risky choice. *Management Science*, 43(2), 123–144. <https://doi.org/10.1287/mnsc.43.2.123>

Wicaksono, K. W. (2015). Akuntabilitas organisasi sektor publik. *JKAP (Jurnal Kebijakan Dan Administrasi Publik)*, 19(1), 17. <https://doi.org/10.22146/jkap.7523>

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE.

Zhang, Q., Wang, X., Miao, L., He, L., & Wang, H. (2022). The effect of chronotype on risk-taking behavior: The chain mediation role of self-control and emotional stability. *International Journal of Environmental Research and Public Health*, 19(16068). <https://doi.org/10.3390/ijerph192316068>