



# Operational Risk Management Analysis of the Megah Ria Decoration Services Business in Maros Regency

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**Abstract.** The wedding service industry is seasonal, labor-intensive, and highly dependent on operational readiness, making it vulnerable to various risks. In Maros Regency, South Sulawesi, many wedding decoration providers have gone out of business, yet Megah Ria Decoration Services has managed to survive for decades and remains trusted in the community. This study aims to identify the operational risks faced by Megah Ria and to formulate appropriate operational risk management strategies. The research employed a descriptive qualitative method with data collected through interviews, observations, and documentation. Data analysis was carried out using data reduction, data display, and conclusion drawing. The findings reveal several major operational risks, including equipment damage, human error, weather disruptions, and the absence of standardized procedures. To address these risks, Megah Ria applies simple yet effective operational risk management strategies, such as replacing damaged items rather than delivering poor service, repainting and maintaining metal equipment, conducting periodic replacement or purchasing of new items, and anticipating the impact of extreme weather. These strategies demonstrate how a traditional business can sustain operations through practical risk management practices. The study also explains why Megah Ria has remained resilient while many competitors have failed, and it contributes valuable insights for MSMEs in the wedding service sector to improve sustainability.

**Keywords:** Operational Risk, Risk Management, Wedding services, Business Sustainability, MSMEs

## 1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are one of the key pillars of Indonesia's economy, as they absorb a large workforce and contribute significantly to the Gross Domestic Product (GDP). Within developing economies, micro, small, and medium enterprises (MSMEs) contribute significantly as providers of jobs, income, skills, and essential goods and services. The advancement of MSMEs helps to enhance the purchasing power of society [1]. In Indonesia's dynamic economic landscape, MSMEs play a significant and influential role, making them an area of great interest [2]. However, the sustainability of MSMEs is highly vulnerable to various risks, including financial, marketing, and operational risks. These risks are even more

pronounced in service-sector MSMEs, most of which heavily depend on specific moments and face a high degree of uncertainty. One of the service sectors worth examining is the wedding industry, given its seasonal nature, labor-intensive characteristics, and strong dependence on operational aspects.

In Maros Regency, South Sulawesi, the risks faced by businesses in the wedding service industry are clearly evident. Several wedding decoration providers have gone out of business, unable to withstand market dynamics and recurring operational challenges. Nevertheless, amidst these conditions, Megah Ria Maros has managed to survive for decades and remains recognized as one of the traditional wedding service providers in the community. Located in Maros Regency, South Sulawesi Province, Indonesia, Megah Ria specializes in wedding decoration services, offering rentals for tents, chairs, decorations, and traditional attire, while still relying on a relatively simple and traditional operational system. Despite its resilience, the business continues to face significant operational risks, including equipment damage, limited manpower, the absence of standardized procedures, and unpredictable weather conditions. These risks directly affect customer satisfaction, business sustainability, and competitiveness in an increasingly tight market.

Risk represents the possibility or uncertainty about future outcomes. A life without risk would be less meaningful and lack challenges. It can be described as the influence of uncertainty on achieving objectives, covering departures from expected outcomes in either a favorable, unfavorable, or mixed direction [3]. Therefore, every step inevitably comes with its own set of obstacles. Anticipating risks before they occur is essential, which highlights the importance of effective risk management. Risk management is essentially the process of systematically handling potential threats to minimize their negative impacts and ensure the continuity and competitiveness of a business.

Academically, research on risk management has mostly concentrated on the trade, culinary, manufacturing, and banking sectors, while the wedding service sector has received little attention. This indicates a research gap, even though the wedding service sector carries substantial, distinct, and specific risks. The case of Megah Ria Maros is particularly interesting because this business remains traditional, has not fully adapted to digital technology, yet has managed to survive while many similar businesses have failed.

Although risk management research has been widely conducted in healthcare [4], climate change [5], and public services [6], no study has specifically analyzed operational risks in the wedding decoration service sector. This highlights the novelty of the present study, as it fills the research gap and contributes to the literature on MSME risk management with a focus on the underexplored decoration service industry. In addition, this study also provides practical contributions by proposing mitigation strategies based on ISO 31000:2018 that can be directly applied by traditional businesses such as Megah Ria.

Based on these conditions, this study was conducted with the aim of identifying the operational risks faced by Megah Ria Maros and formulating relevant mitigation strategies. Using a qualitative approach through observation and interviews, this research offers a new perspective by exploring the specific risks encountered in the wedding service business and the mitigation strategies applied. Accordingly, the

implementation of well-planned risk management is crucial for business sustainability. This study is expected to contribute to enriching the literature on MSME risk management, particularly in the wedding service sector, which remains underexplored. The findings also provide practical benefits for similar businesses in managing operational risks in order to survive and grow amid increasing competition. In addition, this study seeks to identify, analyze, and evaluate the operational risks of Megah Ria Decoration Services in Maros, as well as to formulate appropriate risk mitigation strategies based on the ISO 31000:2018 risk management framework. Thus, the research problem can be formulated as how Megah Ria Decoration Services can identify, analyze, evaluate, and formulate mitigation strategies for the operational risks it faces, by referring to the ISO 31000:2018 risk management process.

## **2. Literature Review**

### **2.1 Concept of Risk**

Risk is the uncertainty about future events that may occur. Every decision made always carries its own risk. . It can be defined as the influence of uncertainty on achieving objectives, covering departures from expected outcomes in either a positive, negative, or combined manner [3]. Risk is not always negative, but it can also create valuable opportunities if managed properly. Therefore, organizations need to continuously adjust their approaches in order to deal with risks more effectively. Addressing this challenge requires adopting new perspectives in framing the problem and being prepared to redefine the fundamental concept of risk management [7]. Vulnerability may be determined by the extent of exposure and the degree to which values at risk—comprising beneficial and desirable entities, attributes, qualities, or principles vital to communities are susceptible to harm [8].

### **2.2 Risk Management**

Risk management is a governance mechanism for anticipating potential losses. Risk management is required because of the complexity and uncertainty embedded within its projects [9]. Effective risk management enhances the chances of achieving objectives, minimizes costs, and improves overall operational efficiency. Risk management is not merely about avoiding losses, but also a strategy to create added value and enhance business competitiveness. Risk management should be implemented in strategic planning and throughout the organization. Risk management can be defined as a comprehensive process involving hazard identification, evaluation, the selection of appropriate responses, and continuous monitoring [4]. Integrating risk management into all levels of decision-making ensures that potential threats are systematically addressed and that opportunities can be optimized for long-term sustainability [3]. Moreover, providing information about likelihood and potential impact severity affects perceived risk, forecast trust, and behavioral intention [6], which highlights that the effectiveness of risk management depends not only on systematic processes but also on the clarity of communication. Communicating that extreme events

are unlikely can lower people's perceived risk, diminish trust in the warning, and weaken their intention to act [6], indicating that effectiveness relies not only on the process itself but also on the way information is conveyed.

### **2.3 Types of Risk**

The risk management process, as outlined in ISO 31000 (2018), consists of six interrelated phases: establishing the scope, identifying risks, assessing risks, evaluating risks, treating risks, and reporting or monitoring outcomes. This framework highlights that risk management is not a one-time activity but a continuous and systematic cycle that should be embedded within organizational strategy and operations. By following these phases, organizations are able to anticipate potential threats, minimize negative impacts, and seize opportunities that may arise from uncertain conditions.

Although various models of risk management exist, ISO 31000 has become one of the most widely adopted international standards because it provides a flexible structure that can be applied to organizations of different sizes and industries. According to Bromiley et al. (2016) The framework generally classifies risks into four categories, namely strategic, operational, financial, and hazard [10]. Project risk assessment involves identifying, estimating, and evaluating potential risks to apply suitable methods and technologies for effective control, maximizing positive outcomes, minimizing negative impacts, and ensuring project reliability and safety [11]. Dynamic risk factors are attributes that can vary over time and indicate possible changes in outcomes[12].

Risk analysis involves consideration of the sources of risk, their consequences and the likelihood that those consequences may occur [4], which demonstrates that the classification of risks is strongly tied to the systematic evaluation of causes, impacts, and probability. Each phase of the process is designed to ensure that risks from these categories are systematically identified, analyzed, and mitigated through informed decision-making. In this sense, the risk management process serves not only as a protective mechanism against losses but also as a strategic tool to enhance organizational resilience and long term sustainability. Furthermore, impact-based approaches weight the potential severity of outcomes by the likelihood of them occurring [6], confirming that despite differences among risk categories, assessment remains centered on likelihood and impact. In addition, risk categories can overlap and interact, creating "riskscapes" that require integrative assessment approaches [8] .

### **2.4 Operational Risk Management**

Operational risk arises when failures occur in the execution of employee responsibilities [13]. It is widely acknowledged that operational risk arises from weaknesses or failures in internal processes, human errors, system malfunctions, or external events that disrupt company operations [14]. These risks are particularly critical because they directly affect service delivery, efficiency, and customer satisfaction. For businesses in the service sector, operational risks are often more pronounced since the quality of service relies heavily on human resources, timely execution, and equipment reliability.

Operational risk management involves overseeing work processes, workforce management, and technical support within an organization [13]. Effective operational risk management therefore requires not only preventive measures, such as regular maintenance and training, but also responsive strategies, such as contingency planning and quick recovery systems. In the context of small and medium enterprises (SMEs), operational risk management becomes even more important due to limited resources and the absence of formalized systems. Failure to address operational risks may result in financial losses, reputational damage, and even business closure. Conversely, organizations that implement structured operational risk management are better positioned to maintain business continuity, adapt to environmental changes, and strengthen their competitive advantage.

## **2.5 Risk Management Process Based on ISO 31000:2018**

According to the international risk management standards ISO 31000, a general risk management process comprises several essential stages: (i) defining the organizational context, (ii) identifying risks, (iii) analyzing risks, (iv) evaluating risks, (v) treating risks, (vi) monitoring and reviewing, and (vii) communicating and consulting [4]. In ISO 31000, risk is characterized by four interrelated components: sources that could generate or increase risk, events or changes in circumstances, the impacts produced by those events, and the probability that they will occur [15]. According to ISO 31000, organizations are encouraged to adopt a structured approach to risk management, beginning with the identification and analysis of risks, then evaluating them to determine whether treatment is necessary to align with their risk criteria (ISO, 2018). The framework further highlights the need for ongoing consultation with stakeholders and stresses that risk controls must be consistently monitored and reviewed to verify their effectiveness and to determine whether additional measures are required [16]. Resilience, the central aim of mitigation, preparedness, response, and recovery, is the capacity to bounce back from disasters or hardship, while prevention emphasizes avoiding hazardous or high-risk situations [17].

Addressing the complexity of interdependent risks requires the use of conditional probabilities to properly represent their likelihood. However, the existing matrix-based tools remain insufficient in reflecting the severity and interconnected nature of these risks. Moreover, clear guidelines are still lacking regarding how cost–benefit analysis should be carried out in relation to risk networks, decision-makers’ tolerance levels, and the positioning of individual risks within the matrix. The risk assessment matrix serves as a systematic instrument to assess the severity of risks, facilitate comparisons among different risk categories, and establish priorities for which threats should be addressed first [18].

The risk assessment matrix is regarded as a structured technique that helps determine the level of risk, enables comparisons among various risks, and establishes which threats should be prioritized for control [4]. Consistent with this perspective, in many disciplines risk evaluation is commonly carried out using a likelihood–impact matrix; however, alternative approaches become necessary when dealing with outcomes that are characterized by high impact but low probability [5]. Moreover, a critical issue in

consultation processes lies in the fact that, although they appear to encourage public participation, in practice the viewpoints expressed are often disregarded whenever they do not align with the predetermined patterns or frameworks [19].

### **3. Methodology**

#### **3.1 Research Design**

This study employed a descriptive qualitative research method to explore the operational risks faced by Megah Ria Decoration Services in Maros Regency, South Sulawesi, Indonesia. A qualitative approach was considered appropriate because it allows for an in-depth exploration of complex phenomena in their real-life context. The research design focused on capturing both strategic perspectives from the owner and practical experiences from employees to ensure a comprehensive understanding of operational risks.

#### **3.2 Data Collection and Analysis**

Data were gathered through direct observation and in-depth interviews. The purpose of the interviews was to obtain practical evidence regarding the forms of cyber-attacks experienced by hotels, the common vulnerabilities observed, and the effectiveness of existing risk management practices[20]. In this study, however, the interviews specifically explored operational risks in the wedding decoration business, such as equipment damage, human error, and the influence of natural disasters. Observations were conducted on site to understand the condition of equipment, workflow, and potential risks occurring during daily operations, while interviews were carried out with the business owner and employees. The owner provided insights into strategic decisions and long-term risk management practices, whereas employees shared experiences of operational risks encountered in the field.

The data collected from both methods were analyzed descriptively using the Miles and Huberman framework, which involves three steps: data reduction, data display, and conclusion drawing/verification. This process enabled the researcher to systematically organize and interpret the findings in order to identify the main operational risks and to describe the risk management strategies implemented by Megah Ria.

### **4. Result**

The findings of this study provide a comprehensive overview of the operational risks faced by Megah Ria Decoration Services. Established in 1995, Megah Ria has been serving the wedding decoration industry in Maros Regency for nearly three decades. Despite many competitors in the same sector going out of business, Megah Ria has managed to survive and maintain its reputation as one of the trusted providers in the community. The business specializes in tent rentals, traditional decorations, chairs, and wedding attire, relying mostly on simple and conventional operational systems.

Based on field observations and in-depth interviews, it was revealed that while this traditional system supports resilience, it also makes the business more vulnerable to various operational risks that directly affect service quality and customer satisfaction. The findings further show that risks occur not only from external factors such as unpredictable weather, but also from internal issues such as human errors and equipment maintenance.

The owner revealed that around seven other decoration businesses in Maros had gone bankrupt. The possible causes include the lack of skilled employees and the absence of supporting business networks. In contrast, Megah Ria has sustained operations through partnerships with more than 11 local collaborators known as “indo botting.” Indo botting act as intermediaries who directly interact with customers, take orders, and channel them to Megah Ria as the service provider. Thus, Megah Ria rarely communicates directly with end customers but works as a trusted partner fulfilling their needs. Additionally, Megah Ria conducts simple post-event monitoring to evaluate decoration quality and identify shortcomings. Though informal, this serves as a useful feedback mechanism.

#### 4.1 Establishing the Context.

In accordance with ISO 31000:2018, establishing the context is the first stage of the risk management framework, which aims to understand both the internal and external environment of the organization. To achieve this, an internal and external analysis was conducted on Megah Ria Decoration Services.

The contextual analysis also highlights that despite the high profit potential, the wedding decoration industry in Maros is highly risky, as evidenced by several competitors going out of business. Megah Ria’s reliance on “indo botting” partnerships and its practice of post-event monitoring are therefore essential factors in sustaining its business model.

The analysis shows that Megah Ria has several strengths, such as long-standing business experience since 1995, high wages that attract and retain employees, and a strong reputation that allows the company to survive despite intense competition. However, weaknesses also exist, particularly the limited workforce and dependency on manual labor. The internal factors of Megah Ria, including its strengths and weaknesses, are presented in Table 1. Externally, opportunities lie in the growing demand for creative and modern decorations, while threats mainly come from competitors, seasonal fluctuations, and extreme weather. The external factors of Megah Ria, including opportunities and threats, are summarized in Table 2.

**Table 1.** Analysis of Internal Factors (Strengths and Weaknesses)

Strength	Weakness
Long business experience since 1995.	Limited human resources affecting operational capacity
Skilled and multitasking workforce.	Dependence on manual labor, low automation.

Employee retention strategies (compensation, allowance, vehicle loans).	Seasonal business (fluctuating orders).
Better service and quality compared to competitors.	Limited capital to follow decoration trends.
Owner’s technical skills (welding, painting, repairing).	Declining quality of materials (leaky tarps, rusty frames, dirty fabrics).
<b>Good Quality</b>	

Source : Author elaboration, 2025

**Table 2.** Analysis of External Factors (Opportunities and Threats)

Opportunities	Threats
Stable demand for wedding decoration services.	Intense price competition.
Use of social media for promotion.	Environmental risks (rain, strong wind, location constraints)
Partnership with vendors and mobile workshops.	Vehicle operational risk.
	Heft of decoration items.
	Fluctuating purchasing power
	Rapidly changing decoration trends

Source : Author elaboration, 2025

**4.2 Risk Identification**

The risk identification process found several major risk sources, including vehicle operational risk, the heavy weight of decoration items, fluctuating purchasing power, and rapidly changing decoration trends. The detailed risk identification results are presented in Table 3.

**Table 3.** Risk Identification

No	Category	Sub-Category	Specific Risk	Impact
R1	Internal Process	Transport/Logistics	Vehicle breakdown, difficult road access to the event location	Delay in decoration setup.
R2	Internal Process	Asset/Equipment	Equipment damage (leaking tarp, damaged chair, rusty frame, torn fabric, malfunctioning light).	Decline in decoration quality potentially leading to customer complaints
R3	Internal Process	Asset/Equipment	Loss of rented items at event venue	Financial loss, conflict with customers

R4	Internal Process	Work Culture	Traditional culture without check-list	Forgotten items, driver goes back and forth, wasted time
R5	People	Human Error	Workers often forget or bring wrong items; some without mobile phones	Shortage of materials on site, overwhelmed workers, delayed decoration
R6	People	Health & Safety (OHS)	Physical injury (hand injury when installing fabric clips) and work fatigue (carrying heavy items over long distance)	Reduced productivity, potential accidents
R7	People	Workforce Availability	Limited workers, especially during multiple simultaneous events	
R8	People	Work Delay	Workers overwhelmed, weak coordination	Potential
R9	System	Information & Administration	Manual order recording	Scheduling errors, miscommunication with customers
R10	External Event	Weather & Nature	Heavy rain, strong winds	Damaged decorations, failed setup, additional costs
R11	External Event	Weather & Nature	Tent collapse or blown away by strong winds	Equipment damage, potential accidents
R12	External Event	Socio-Cultural	Seasonal/fluctuating demand (Ramadhan, Maulid, rainy season)	Idle capacity, unstable revenue
R13	External Event	Market & Competition	Competitors more innovative and trend-adaptive	Loss of customers
R14	External Event	Financial	Risk of late or non-payment by customers	Financial losses, disrupted cash flow

Source : Author elaboration, 2025

The results of this study show that operational risks at Megah Ria come not only from inside the business (such as the lack of SOPs or worker negligence), but also from outside factors like weather, seasonal demand, and customers' economic conditions. This is in line with previous studies, which highlight that small and medium-sized enterprises (SMEs) in the service sector are very vulnerable to both internal and external risks [4] [5].

Overall, the most common risks are human error and the absence of SOPs, which often cause delays and lower service quality. Based on field observations, it was found that the most frequent operational errors stemmed from human resources, such as

insufficient fabric, negligence, and other similar mistakes. On the other hand, risks that rarely occur but have a big impact (for example, broken chairs or tents collapsing due to strong winds) are still a serious concern because their effects can be dangerous. This supports the view of [5] about the importance of preparing for High Impact–Low Likelihood (HILL) risks in any business sector. Therefore, identifying risks gives a clear picture of the types of threats faced by Megah Ria. This step becomes the basic foundation for the next stages, such as assessing probability, evaluating impacts, setting priorities, and planning mitigation strategies.

**4.3 Risk Analysis.**

The risk analysis stage is carried out to assess the severity level of each risk based on a combination of probability (likelihood) and impact. In this study, the assessment was conducted using a simple scale (Low, Medium, High) in accordance with the ISO 31000:2018 framework. Risk analysis was carried out by assessing the probability and impact of each risk. The risk analysis results for Megah Ria Decoration Services are shown in Table 4.

**Table 4.** Risk Analysis of Megah Ria Decoration Services

No	Specific Risk	Likelihood	Impact Level	Initial Risk Level
R1	Vehicle breakdown, difficult road access	Medium	High	High
R2	Equipment damage (leaking tarps, broken chairs, etc.)	Low	High	Medium
R3	Loss of rented items at event venue	Low	High	Medium
R4	Traditional work culture without checklist	High	Medium	High
R5	Human error (forgotten items, workers without phones)	High	Medium	High
R6	Physical injury/work fatigue	Medium	High	High
R7	Workforce shortage during multiple events	High	High	High
R8	Work delays due to poor coordination	Medium	High	High
R9	Manual order recording system	Low	High	Medium
R10	Heavy rain, strong winds damaging decorations	Medium	High	High
R11	Tent collapse/blown away by strong winds	Low	High	Medium
R12	Seasonal/fluctuating demand (Ramadhan, Maulid, rainy season)	High	Medium	High
R13	Competitors more innovative/trend adaptive	Medium	High	High
R14	Late or non-payment by customers	Low	High	Medium

Source : Author elaboration, 2025

The 3x3 risk matrix used to classify the likelihood and impact of each risk is presented in Table 5.

**Table 5.** 3x3 Risk Matrix

	<b>Low Impact</b>	<b>Medium Impact</b>	<b>High Impact</b>
<b>High Probability</b>	Medium	High	High
<b>Medium Probability</b>	Low	Medium	High
<b>Low Probability</b>	Low	Low	Medium

Source : Author elaboration, 2025

The analysis shows that dominant risks fall under the High category, particularly those related to human resources and internal processes (R4, R5, R7, R8), as well as external factors such as weather (R10) and seasonal demand (R12). Risks with low probability but high impact, such as equipment damage (R2), loss of rented items (R3), tent collapse (R11), and late payments (R14), are classified as Medium. Despite their rarity, these risks remain significant due to their potentially severe consequences.

#### 4.4 Risk Evaluation.

The risk evaluation stage aims to determine which risks should be prioritized. Priority risks are those which, after the analysis process, are assessed as having the highest likelihood and/or impact on business continuity. Evaluation was conducted by comparing the risk levels with the established criteria (high = top priority, medium = secondary mitigation, low = monitoring only). The risk evaluation results of Megah Ria are presented in Table 6.

**Table 6.** Risk Evaluation Results of Megah Ria

<b>Priority Category</b>	<b>Specific Risks (Code)</b>
High Priority	R1 Vehicle breakdown/access road issues, R4 No checklist culture, R5 Human error, R6 Physical injury & fatigue, R7 Workforce shortage, R8 Work delay/poor coordination, R10 Extreme weather, R12 Seasonal demand fluctuation, R13 Competitive innovation
Medium Priority	R2 Equipment damage, R3 Loss of rented items, R9 Manual order system, R11 Tent collapse, R14 Late payments
Low Priority	None

Source : Author elaboration, 2025

The evaluation shows that most of Megah Ria's risks fall under the High Priority category. Priority risks are those which, after the analysis process, are assessed as having the highest likelihood and/or impact on business continuity. This highlights the

business’s vulnerability to operational risks, especially those related to human resources (human error, work culture, labor shortage) and external factors (extreme weather, demand fluctuations, competition). Risks in the Medium Priority category should not be overlooked, as their consequences can be serious, such as lost equipment or delayed payments.

**4.5 Risk Treatment.**

Risk treatment was conducted by developing mitigation strategies for each risk, using both preventive and corrective measures. This stage ensures that the risks identified and analyzed are not only recognized but also effectively controlled. The proposed risk mitigation plan for Megah Ria is presented in Table 7. Therefore, mitigation strategies were designed according to the characteristics of each risk, Megah Ria’s resource capacity, and the practical applicability of risk management within a traditional wedding decoration business.

**Table 7.** Risk Mitigation Plan of Megah Ria

Code	Specific Risk	Mitigation Strategy
R1	Vehicle breakdown, road access issues	Conduct regular vehicle maintenance, prepare a backup vehicle, and carry out a site survey before delivery to anticipate road difficulties.
R2	Equipment damage	Regular inspections, repainting rusty frames, patching or doubling leaking tarpaulins, replacing torn fabrics, and checking equipment before departure.
R3	Loss of rented items	Implement a checklist system for items, appoint an on-site supervisor, and label specific items for easier monitoring.
R4	No checklist culture	Develop written SOPs and implement a standardized checklist system before departure, assigning one person to ensure item completeness.
R5	Human error (forgetting items, no phone)	Conduct regular briefings, divide tasks clearly, require all workers to carry communication tools, and enforce the use of checklists as the main control tool.
R6	Physical injury/fatigue	Distribute workloads fairly, use trolleys or lifting aids, provide basic OHS training, and prepare a first aid kit (P3K) at every work site.
R7	Workforce shortage	Hire part-time or seasonal workers during peak events, prepare flexible shift schedules, and collaborate with indo botting partners for additional labor if needed.
R8	Work delays	Strengthen team coordination by appointing a field leader, create internal communication groups, and prepare detailed work timelines for each event.
R9	Manual order recording	Improve administrative discipline through standardized order books and systematic documentation; consider gradual digitalization in the long term.

R10	Extreme weather (heavy rain, strong wind)	Patch or double tarpaulins to prevent leaks, secure decorations during rain, and strengthen tents using ropes and large nails to avoid collapse or being blown away.
R11	Tent collapse	Use heavy-duty ropes and large ground nails to reinforce tents, and assign workers to monitor tent stability during the event.
R12	Seasonal demand fluctuation	Monitor event demand patterns and adjust workforce allocation to avoid idle capacity.
R13	Competitive innovation	Conduct trend research via social media, provide creative training for workers, and collaborate with wedding vendors to expand services.
R14	Late or non-payment by customers	Require a minimum down payment (DP), use simple written agreements, and encourage secure payment through bank transfers.

Source : Author elaboration, 2025

Megah Ria's mitigation strategies are mostly practical, reflecting the nature of a traditional business. However, adopting SOPs and digitalizing order management could improve efficiency and reduce human errors. Preventive measures such as vehicle and equipment maintenance are essential to reduce long-term losses. Partnerships with indo botting also serve as an external mitigation strategy, as they help stabilize orders and reduce marketing risks.

**Preventing forgotten items.** The most crucial strategy for Megah Ria is the implementation of a standardized checklist system before departure. This directly addresses the most frequent issueworkers forgetting fabrics, tools, or decorations-which forces drivers to return and delays the setup process. By applying a checklist, the risk can be significantly reduced.

**Strengthening human resources.** Human error can also be minimized through regular briefings, clear task distribution, and mandatory use of communication tools. In addition, basic OHS practices such as fair workload distribution and the provision of first aid kits (P3K) are necessary to reduce injury and fatigue risks.

**Vehicle and equipment maintenance.** Vehicles and equipment are core assets of Megah Ria. Regular maintenance, preevent inspections, and preparing spare items (lights, tarpaulins, chairs) are preventive measures that help sustain service quality.

**Managing seasonal demand.** To cope with demand fluctuations during Ramadhan, Maulid, or the rainy season, product diversification is a key strategy. By offering hampers, flower bouquets, or decorations for non-wedding events, Megah Ria can maintain revenue stability.

**Customer relationship management.** The risk of late or unpaid transactions can be mitigated through a down payment policy (at least 50%), simple written contracts, and

secure digital payments. This helps protect Megah Ria's cash flow while also providing transaction certainty.

**Innovation and competitiveness.** Although Megah Ria still relies on traditional methods, monitoring decoration trends via social media, creative training for workers, and collaboration with wedding vendors are important strategies to sustain competitiveness in the long run.

#### 4.6 Monitoring and review.

The monitoring and review stage ensures that mitigation strategies are implemented and continuously adapted to current conditions. Monitoring is conducted periodically, while reviews are carried out when there are significant changes (e.g., extreme weather, pandemics, or new decoration trends). Monitoring & Review Activities at Megah Ria: First, vehicle and equipment inspections before and after events. second, weekly evaluation of decoration team performance. Third, seasonal reviews regarding demand patterns (Ramadhan, rainy season). Fourth, Monthly meetings to assess SOP and checklist effectiveness.

According to the owner, monitoring is also performed informally after each event, where he personally reviews the decoration setup and discusses with workers what went well and what still needs improvement. Although not yet formalized, this reflective practice functions as a valuable feedback mechanism. Monitoring and review are crucial since operational risks are dynamic. Megah Ria must maintain flexibility by continuously adapting its procedures to changing field conditions.

## 5. Discussion

The findings of this study show that traditional wedding decoration services such as Megah Ria face significant operational risks. The most frequent risks include human error and the absence of SOPs/checklists, while other risks such as equipment damage or tents collapsing due to strong winds are rare but highly impactful. These results emphasize that even small and traditional service businesses carry substantial risks that can affect long-term sustainability.

This is consistent with [4], who highlighted that operational risks in service sectors arise from a combination of internal factors such as limited labor and external factors such as environmental conditions. Similarly, this study found that internal factors (worker negligence, lack of SOPs) and external factors (weather, seasonal demand fluctuations) are the main sources of risk. However, unlike [4] who focused on the healthcare sector, this study investigates the wedding decoration service industry, which has received little prior attention.

These findings are also in line with [4], who emphasized that operational risks in service sectors are often exacerbated by limited labor and the absence of formal management systems. In the case of Megah Ria, the lack of SOPs and reliance on traditional work culture further increase vulnerability. The findings also align with [5],

who stressed the importance of anticipating High Impact–Low Likelihood (HILL) risks. In the context of Megah Ria, risks such as tent collapse or broken chairs are rare but dangerous, requiring careful mitigation. The main difference lies in scope: [5] examined climate-related risks, while this research addresses risks within the traditional creative industry. In addition, [21] in the healthcare sector showed that the success of mitigation is strongly influenced by critical variables in the field. This is relevant to Megah Ria, where factors such as traditional work culture and the role of indo botting partnerships significantly affect business resilience.

Public risk perception is influenced by information about probability and impact [6]. This resonates with the findings here, where Megah Ria's workers tend to underestimate rare risks despite their severe consequences. Thus, mitigation strategies such as SOPs and checklists are crucial to enforce discipline and preparedness.

This study also complements the findings, which emphasized that MSMEs need simple yet consistent risk management strategies [20] [22]. Megah Ria demonstrates that practical steps such as equipment maintenance, the use of checklists, and post-event monitoring are sufficient to sustain business operations. However, unlike [20], which focused more on financial aspects, this study emphasizes operational risk. Consistent with [11], this study also highlights the importance of systematic risk analysis structures, even though the context differs (biomass energy vs. wedding decoration). Likewise, this study confirms that simple but consistent systems can deliver significant mitigation results.

Furthermore, the results reinforce the studies of [23] & [15], which found that partnerships with business collaborators improve MSME resilience. In Megah Ria's case, the role of indo botting as intermediaries has been vital in maintaining revenue streams and ensuring business continuity. Thus, this study adds empirical evidence that partnership networks are an integral part of risk mitigation. Therefore, this study underlines that business networks and collaboration are crucial in strengthening MSME resilience. In the case of Megah Ria, the role of indo botting not only secures revenue streams but also serves as an informal mechanism for risk distribution.

In conclusion, this study makes two key contributions. Theoretically, it extends the literature on MSME risk management by addressing the underexplored wedding decoration sector. Practically, it provides actionable strategies that can be directly applied, such as implementing checklists before departure, conducting regular vehicle maintenance, strengthening SOPs, and preparing first aid kits (P3K). These simple but effective measures ensure that traditional businesses like Megah Ria can maintain sustainability amid uncertainty.

## **6. Conclusion**

### **6.1 Conclusion and Implications**

This study analyzed the operational risk management of Megah Ria Decoration Services in Maros Regency using the ISO 31000:2018 framework. The findings reveal that Megah Ria, despite being a traditional business, faces diverse operational risks ranging from internal weaknesses such as human error and the absence of SOPs, to

external factors including extreme weather and seasonal fluctuations. Through risk identification, analysis, and evaluation, the study found that the majority of risks fall into the high-priority category, particularly those related to human resources, work culture, and environmental uncertainty.

The risk treatment strategies proposed—such as implementing standardized checklists, conducting regular vehicle and equipment maintenance, reinforcing tents with ropes and large nails, providing OHS training, and requiring down payments from customers—are practical solutions aligned with Megah Ria's resource capacity. These findings highlight that even simple measures can effectively reduce vulnerability and improve business sustainability.

Theoretically, this study contributes to MSME risk management literature by addressing the underexplored wedding decoration service sector. Practically, it provides insights for similar traditional businesses on how to apply risk management principles without requiring advanced digital systems. In particular, the introduction of checklist systems and simple monitoring mechanisms can significantly minimize frequent operational errors and improve service reliability.

## 6.2 Limitation and Future Research

This study is subject to several limitations. First, the data collection was limited to a short period with only five respondents, representing all workers in Megah Ria. Although triangulation between interviews and observations was conducted, the small sample size limits the generalizability of the findings. Second, the study focused only on a single case (Megah Ria) without comparative analysis with other businesses in the same sector, which restricts the broader applicability of the results. Third, the qualitative approach provides in-depth insights but does not quantify the financial impact of each risk.

For future research, comparative studies across multiple wedding decoration businesses could be conducted to validate and enrich these findings. Quantitative approaches may also be employed to measure the economic impact of operational risks, such as the cost of delays, equipment damage, or customer complaints. In addition, future research could explore how digitalization (e.g., digital order systems or inventory management apps) might enhance risk management in traditional MSMEs while still considering their resource constraints.

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