



EXPLORING THE RELATIONSHIP OF ENTERPRISE RISK MANAGEMENT AND BUSINESS PERFORMANCE OF PAGADIAN BAO-BAO OWNER-OPERATORS

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ABSTRACT

Pagadianons depend heavily on Bao-Bao, not just as their primary public transport but also as a source of livelihood, underscoring the need for better enterprise risk management (ERM) practices to address operational inefficiencies and improve business performance. The participants were bao-bao owner-operators located within Pagadian City, Zamboanga del Sur. They were selected using a purposive sampling technique based on a specific criterion. Survey questionnaires adapted from the study by Saranza et al. were administered to 198 respondents to assess two variables: degree of ERM observance—compliance, financial, operational, strategic, and reputational indicators—and level of business performance, financial performance, customer satisfaction, and market share. Moreover, a correlational research design was used, with results indicating high ERM observance and high business performance, resulting in a moderate positive correlation between the two variables. The findings indicate that these operators enjoy high customer satisfaction and stable financial performance; however, they face challenges in increasing their market share due to various internal and external constraints. Based on the findings, the researchers recommend enhancing ERM practices among Bao-Bao owner-operators by focusing on strategic planning and diversifying income for long-term stability. Likewise, government agencies like MTFRU and LTFRB may provide support programs and ease regulatory burdens. Future researchers are encouraged to explore unexamined variables and expand the study of ERM across other local transportation sectors.

Keywords: *enterprise risk management, Bao-Bao owner-operator, business performance, correlation, transportation*

INTRODUCTION

Globalization has emerged as a key driving force behind economic, social, and cultural transformations within an increasingly interconnected world. Among the various factors contributing to globalization, transportation stands out as a crucial cornerstone of the global economy, facilitating the movement of goods and services and thereby



propelling economic growth and development (Smoteks, 2024). This dynamic not only benefits trade but also significantly impacts individuals. Research indicates that approximately 51% of the global population commutes by public transportation (Gajbhiye, 2024). Public transportation, or transit, encompasses any mode of transport accessible to the general public for a fee, covering passenger and freight services across land, air, and maritime modes (Merriam-Webster, 2023). Estimates suggest that global passenger traffic may reach 9.4 billion by 2024, while around 11 billion tons of goods are shipped annually, underscoring the sector's critical role in supporting populations across multiple nations (Airports Council International, 2023; International Chamber of Shipping, 2024).

Despite its transformative capabilities, the transportation industry faces numerous challenges, including regulatory changes, economic fluctuations, safety vulnerabilities, unforeseen events, and rapid technological advancements (Endava, 2022). A remarkable indication of these vulnerabilities was highlighted during the COVID-19 pandemic, which presented substantial security and operational challenges, particularly for small and medium-sized enterprises (SMEs). Studies emphasize that SMEs encountered significant constraints, curtailing their ability to capitalize on emerging business opportunities (Mošková et al., 2023, as cited in Sarker, 2022; Abu et al., 2023).

In this context, Enterprise Risk Management (ERM) has emerged as a vital approach to navigating the complexities presented by such challenges. Numerous global studies have highlighted the potential of ERM in enhancing business resilience and overall performance (Lisdiono et al., 2022). For SMEs, firm performance remains a primary focus in ERM's impact; for instance, the implementation of ERM in Malaysia has revealed positive relationships with profitability and firm performance (Mohd Ali et al., 2019). Similarly, evidence from Chinese corporations confirmed a direct link between ERM and financial innovation (Guo et al., 2024), while other studies found that ERM significantly influences operational processes and financial performance across firms (Al-Nimer et al., 2021; Ersoy & Tanyeri, 2021).

Contrary to these findings, some research has questioned the efficacy of ERM in enhancing business performance, particularly in the context of Spanish SMEs, where no significant correlations were observed (González et al., 2020). This skepticism is echoed by other national studies, which suggest that integrating strategic planning with ERM is crucial for achieving performance improvements (Kanu, 2020). Locally, a study in the Philippines documented positive associations between effective cash flow management as an ERM practice and improved financial performance in the specialty beverage sector (Arojo et al., 2024).

Moreover, the COVID-19 pandemic catalyzed the development of novel strategies in the public transportation sector, with studies indicating improvements in revenue, ridership, and urban air quality through the implementation of post-lockdown policies (Subbarao & Kadali, 2022). The increased demand for alternative transport solutions, such as ride-sharing services in Algeria (Ferial & Djemadi, 2024) and Malaysia (Jayaraj et al., 2019), underscores the shifting dynamics in transportation preferences and governance challenges.

Investigating governance's role, studies have illuminated opportunities for improving transportation management and community satisfaction through good governance practices (Karunia et al., 2023). Furthermore, the complex landscape of the transport industry entails multiple risk dimensions, including financial and reputational

risks, necessitating a robust ERM approach to mitigate potential challenges (Borodavko et al., 2020; Adeabah et al., 2022; Kovalova et al., 2021).

In the Philippines, local studies on ERM practices reveal a range of challenges faced by the transportation sector, including outdated infrastructure and poor maintenance of public vehicles (Gamboa, 2021). Legislative action has been slow, and modern risk management frameworks appear to be lacking within the local transportation industry (Lockton, 2024). Consequently, the call for effective ERM implementation has grown, given the transport sector's vital role in stimulating economic activity and providing livelihoods for millions of Filipinos (Guno et al., 2021).

Despite efforts such as the Public Utility Vehicle Modernization Program to address systemic inefficiencies, deeper ERM integration remains essential (Jabal, 2023). Within the transportation spectrum, four primary travel modes exist in the Philippines: rail, road, maritime, and aviation, with road vehicles like jeepneys, motorcycles, and tricycles as the most prevalent (Department of Energy, 2021; Agaton et al., 2019). In Pagadian City, tricycles historically served as the main form of public transport but have been increasingly replaced by bao-bao vehicles since 2019, showcasing the evolving landscape of local transportation (RPN Social, 2022).

Given this comprehensive review of the literature, a notable research gap persists in quantitative studies assessing the relationship between ERM practices and the business performance of bao-bao owner-operators in Pagadian City, Zamboanga del Sur. This study aims to bridge this gap by investigating the predictive relationship between ERM practices and the performance metrics of local transportation businesses, addressing the critical need for empirical data to inform tailored risk management strategies that enhance outcomes within this sector.

This study presents a conceptual framework to elucidate the relationship between Enterprise Risk Management (ERM) practices and business performance among bao-bao owner-operators in Pagadian City. Building on a comprehensive literature review and content analysis, the framework introduces a structured approach that encompasses five specific domains of ERM—compliance, financial, operational, reputational, and strategic—and examines their influence on business performance through three key metrics: financial outcomes, customer satisfaction, and market share.

Figure 1

Schematic Diagram of the Study

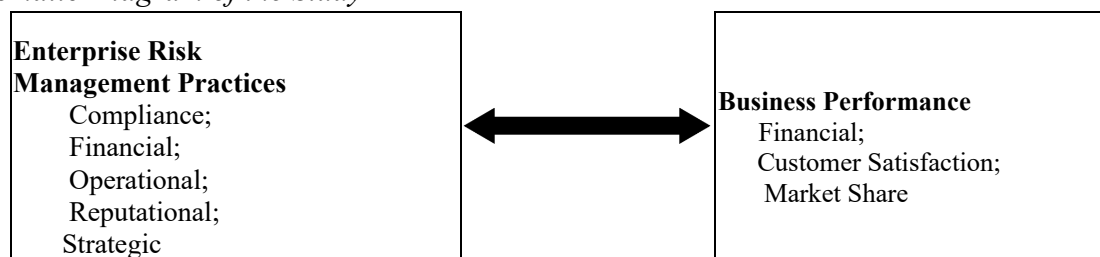


Figure 1 illustrates the reciprocal relationship between ERM practices and business performance, emphasizing the dynamic interplay where ERM strategies impact business outcomes, while performance results, in turn, inform future ERM practices. This bidirectional relationship highlights the continuous adaptation required for effective risk management in transportation businesses, as operational risks can significantly affect an organization's ability to achieve its goals (Curtis et al., 2012; Twaddell et al., 2018).



The study is anchored in Donaldson's (2001) Contingency Theory. This theory posits that effective management approaches must align with an organization's specific internal and external conditions (Donaldson, 2001). This theory is particularly relevant to how bao-bao operators tailor their ERM practices to address unique operational risks and market challenges, suggesting that performance is optimized when risk management strategies are customized to fit specific circumstances.

Additionally, this research incorporates the COSO ERM Framework, which offers a comprehensive resource for organizations to identify and mitigate risks while integrating risk management into strategic planning and performance measurement (COSO, 2017). The Balanced Scorecard (BSC) theory further enriches the analysis by providing a multidimensional perspective on performance management, assessing financial and non-financial metrics across four dimensions: financial, customer, internal processes, and learning and growth (Kaplan & Norton, 1996; Tarver, 2024).

By synthesizing Contingency Theory, the COSO ERM Framework, and the Balanced Scorecard, this research seeks to investigate how tailored ERM practices influence business performance among bao-bao owner-operators in Pagadian City. It ultimately aims to fill a significant gap in the existing literature on ERM and transportation businesses.

Research Objective

This study aims to explore the relationship between enterprise risk management (ERM) practices and business performance among Bao-Bao owner-operators in Pagadian City. The research specifically investigates the degree of ERM observance among bao-bao owner-operators across compliance, financial, operational, reputational, and strategic dimensions. It evaluates their perceived business performance using financial metrics, customer satisfaction, and market share. By quantitatively analyzing these factors, the study seeks to establish whether there is a significant correlation between ERM practices and business performance.

RESEARCH METHOD

Research Design

The study employed a descriptive correlational approach. According to Sumeracki (2018), it is effective for examining complex relationships among variables and predicting future events based on current knowledge. However, Stangor and Walinga (2014) noted that this methodology does not establish causal relationships, meaning researchers cannot definitively assert that one variable directly causes changes in another, as unexamined third variables may be at play. Despite this limitation, the approach remains valuable for identifying associations between variables, as discussed by Akinlua (2019). The researchers chose this method for its ability to provide objective, numerical descriptions that support their findings and for its cost-effectiveness, requiring no data manipulation and only correlation analysis by the bao-bao owner-operators to test their hypothesis.

Research Environment

The study focused on Pagadian City, Zamboanga del Sur, recognized as one of the wealthiest cities in Mindanao and ranking seventh overall, with a significant increase in



businesses providing services and a growing influx of visitors over the past decade (Top, 2023). This growth has driven population growth, leading to the emergence of various local transportation options, including an airport, a seaport, and an integrated bus terminal (Facts & Figures, 2023). Among these, tricycles known as bao-bao have become the predominant mode of transportation, with 2,850 registered units currently operating under franchise agreements (Agonoy, 2019).

Research Participants

The study's participants were Bao-Bao owners and operators in Pagadian. The initial target sample was 286 individuals. However, this number was ultimately reduced to 198 respondents due to non-participation. The selection criteria did not include details on participants' gender or educational backgrounds, and individuals outside the local area were excluded from the study. Specifically, 258 Bao-Bao owners were identified, of whom 181 participated; 28 operators were identified, of whom 17 participated in the research.

Data Gathering Techniques

The researchers initiated data collection by obtaining permission through a request letter to access information regarding Bao-Bao owner-operators from the Motorized Tricycle Franchising and Regulatory Unit (MTFRU). Upon approval, data were limited to the number of franchised Bao-Bao units, without specific contact details for owners and operators, prompting researchers to visit recommended locations for surveys independently. They approached 286 individuals but ultimately received responses from 198 participants, with reasons for non-participation including busy schedules and lack of consent. The primary instrument was a survey questionnaire adapted from a previous study, comprising 40 questions in English, Tagalog, and Bisaya, focusing on enterprise risk management (ERM) practices and business performance. The purposive sampling technique was employed to identify participants, yielding aggregated data indicating a total of 2,850 franchised Bao-Bao in Pagadian City, though it lacked specificity regarding owner-operators. The researchers conducted on-site surveys to ensure that participants met the study's criteria.

Data Analysis

The researchers employed statistical methods to analyze the data using Pearson's correlation. Initially, the respondents' answers were coded numerically using a hypothetical mean range. Subsequently, the data were entered into SPSS to calculate central tendencies (mean, median, and mode) and dispersion measures (standard deviation and variance). The relationship between the two variables was examined using Pearson's correlation, which revealed the significance of their association. This analysis also determined whether to accept or reject the null hypothesis based on a p-value threshold of 0.05. To facilitate clarity in presenting results and discussions of the indicators, the raw data were meticulously tabulated, analyzed, and interpreted in the order the indicators were introduced.

Ethical Considerations

It is essential to exercise caution and make informed decisions when conducting research. To further safeguard the public and prevent any unethical practices throughout the duration of the study. Confidentiality, informed consent, honesty, and objectivity are



the standards and ethical principles that were taken into account to ensure the integrity of the research process:

RESULTS AND DISCUSSION

Degree of Observance of Enterprise Risk Management

This study assessed the variable using the following indicators: compliance, financial, operational, reputational, and strategic practices.

Table 1.

Degree of Observance of ERM in terms of Compliance Practices

Rating Statements	Mean	SD	Interpretation
1. Drivers effectively follow compliance policies and procedures	3.78	0.51	VHO
2. Clear instructions are provided to drivers for addressing compliance issues.	3.71	0.56	VHO
3. Drivers are well-acquainted with business policies, including attendance.	3.74	0.53	VHO
4. Transportation service complies with all relevant regulations.	3.70	0.47	VHO
5. Effective policies are deemed essential for meeting passenger expectations and ensuring compliance.	3.61	0.61	VHO
Overall (Compliance Practices)	3.71	0.54	VHO

Hypothetical Mean Range: 1.00 – 1.75 Very Low Degree of Observance (VLO); 1.76 – 2.50 Low Degree of Observance (LO); 2.51 – 3.25 High Degree of Observance (HO); 3.26 – 4.00 Very High Degree of Observance (VHO);

Table 1 illustrates the degree of compliance with ERM practices, with an overall weighted mean of 3.71 and a standard deviation of 0.54, indicating a "Very High Degree of Observance." The highest mean score of 3.78 reflects a positive perception among Bao-Bao owner-operators of their compliance with policies, while the lowest mean, still classified as "Very High," is 3.61 with a standard deviation of 0.61. These findings indicate robust compliance, a vital aspect of ERM, aligning with Grafe and Wolff (2020). This suggests that most bao-bao operators and owners effectively observe the guidelines, rules, and policies relevant to their transportation services, thereby mitigating legal risks and enhancing operational efficiency. Furthermore, adherence to the COSO framework ensures robust governance structures and effective risk management practices (Yehezkiel, 2022).

Table 2

Degree of Observance of ERM in terms of Financial Practices

Rating Statements	Mean	SD	Interpretation
1 On-time payments are received from customers/clients.	3.18	0.88	HO
2 Personal expenses remain separate from business finances.	2.60	1.14	HO
3 Daily total expenses and total sales are recorded accurately.	2.67	1.05	HO
4 An emergency fund is maintained for unexpected business expenses.	2.74	1.09	HO
5 Expenditures based on personal desires that are unnecessary for the business are eliminated.	3.07	0.89	HO
Overall (Financial Practices)	2.85	1.01	HO



Table 2 outlines the financial aspects of ERM practices, revealing a weighted mean of 2.85 and a standard deviation of 1.01. Despite diverse responses, the overall evaluation of these financial practices is a "High Degree of Observance," suggesting that while respondents manage their finances rigorously, unavoidable expenditures remain. The highest mean of 3.18, with a standard deviation of 0.88, pertains to customers making timely payments, also classified as "High Degree of Observance." Conversely, the lowest mean of 2.60, with a standard deviation of 1.14, corresponds to the separation of personal and business expenses, which is still categorized as "High Degree of Observance."

These findings indicate that sound financial management is essential for effective resource allocation and, in turn, impacts operational performance, in line with Schandl and Foster (2019). A strong adherence to financial practices aids organizational decision-making, enabling adaptability to changes and leveraging associated opportunities, as noted by Kulathunga (2022). Within the COSO framework, proper financial practices mitigate risks such as accounting errors, fraud, and mismanagement, which can jeopardize financial stability and regulatory compliance.

Table 3

Degree of Observance of ERM in terms of Operational Practices

Rating Statements	Mean	SD	Interpretation
1. Ensuring vehicles are operational for timely customer service is crucial.	3.03	0.82	HO
2. Daily monitoring of the transportation business's needs is conducted.	3.35	0.90	VHO
3 Daily operations are overseen to ensure smooth functioning.	3.65	0.59	VHO
4 Budget spending and cash receipts are regularly reviewed for profitability.	3.11	0.83	HO
5 Proper maintenance of all equipment is essential for efficiency.	3.78	0.44	VHO
Overall (Operational Practices)	3.38	0.72	VHO

Table 3 illustrates the level of observance of operational practices, with an overall weighted mean of 3.38 and a standard deviation of 0.72, indicating a "Very High Degree of Observance." The highest mean rating of 3.78, also interpreted as "Very High Degree of Observance," is associated with the regular maintenance and functionality of vehicles. In contrast, the lowest mean of 3.03, classified as a "High Degree of Observance," pertains to ensuring that vehicles are fully operational and ready to provide timely customer service.

Panighari (2024) highlights the importance of operational practices on overall business performance. The findings reveal that respondents consistently adhere to these practices, aligning with Jacy's (2021) perspective. The study underscores that effective operations enhance efficiency, prevent oversights, and improve the customer experience. Furthermore, it reinforces the concept that risk management is incorporated at all operational levels, upholding the COSO framework's principles of robust governance and integrated risk management. These practices facilitate the identification and assessment of risks associated with daily business operations.



Table 4

Degree of Observance of ERM in terms of Reputational Practices Rating Statements

Rating Statements	Mean	SD	Interpretation
1 Maintain cleanliness of vehicles and equipment to uphold a positive reputation with passengers.	3.86	0.36	VHO
2 Conduct regular driver training on compliance, safety, and customer service to ensure effective representation of the service.	3.18	0.76	HO
3 Address quality issues promptly to prevent negative impacts on passenger reputation.	3.74	0.45	VHO
4 Manage driver personal issues to protect the transportation service's reputation.	3.59	0.61	VHO
5 Implement a strategy to handle potential crises that could harm the transportation service's reputation.	2.78	0.92	HO
Overall (Reputational Practices)	3.43	0.62	VHO

Table 4 illustrates the degree of ERM observance regarding reputational practices. The overall mean of 3.43, with a standard deviation of 0.62, indicates a "Very High Observance." The highest mean, 3.86 with a standard deviation of 0.36, pertains to maintaining cleanliness in vehicles and equipment to uphold a positive reputation among customers, also classified as "Very High Degree of Observance." Conversely, the lowest mean of 2.78, with a standard deviation of 0.92, reflects a deficiency in strategies for managing and mitigating potential crises that could damage the reputation of their transportation services, interpreted as a "High Degree of Observance."

The COSO framework stresses the importance of managing reputational risks within a comprehensive risk management strategy. Recent studies highlight the crucial role of reputational practices in shaping perceptions and achieving success in today's competitive market, with Nobanee et al. (2021) emphasizing that reputation has become the most valuable asset for modern businesses. Companies with a strong positive reputation are better positioned to retain customers and enhance market satisfaction. The findings suggest that respondents are committed to these reputational practices. According to McCormick (2019), a business's reputation encompasses multiple facets and extends beyond the owner to include all stakeholders. Sustaining a positive reputation not only impacts the entire industry but also cultivates favorable customer perceptions.

Table 5

Degree of Observance of ERM in terms of Strategic Practices

Rating Statements	Mean	SD	Interpretation
1 Plans are developed to address changes in passenger demand and prepare appropriate responses.	3.05	0.90	HO
2 Development strategies are formulated, including the identification of target customers and market share.	2.47	1.04	LO
3 Investment in new and innovative equipment is considered to enhance tricycle service.	2.92	1.06	HO
4 Competition is analyzed to pinpoint areas for improving service.	2.72	1.03	HO
5 Teamwork among drivers is encouraged to strategically achieve business goals.	2.76	0.96	HO
Overall (Strategic Practices)	2.78	1.00	HO



The table presented evaluates Bao-Bao Services’ observance of ERM practices, focusing on strategic practices. It provides mean scores and standard deviations for five practices, revealing variability among respondents. The highest observance score is for planning to accommodate passenger demand (mean = 3.05), indicating a strong preparedness to adjust to passenger needs. Conversely, development strategy formulation received the lowest score (mean = 2.47, SD = 1.04), reflecting limited observance and hesitance in adopting market-targeting strategies. The overall mean score is 2.78, suggesting moderate strategic engagement, with variability in responses (SDs ranging from 0.90 to 1.06). These results indicate an uneven strategic focus, with potential for improvement in development strategy.

According to Ong et al. (2023), addressing passenger needs is crucial for maintaining service quality. Their findings demonstrate that tricycle operators effectively adapt their services to changing passenger preferences, especially regarding cleanliness, driver responsiveness, and comfort. However, there is a noticeable deficiency in long-term strategic planning concerning market identification and expansion. Interest in innovative solutions like electric tricycles (e-trikes) is on the rise, which could improve sustainability and service quality, as noted by Gumasing et al. (2022). This reflects a broader trend in public transportation toward continuous service improvement, where collaboration plays a key role in achieving business goals. The COSO ERM Framework highlights the need to integrate risk management with strategic planning. The low observance of market identification in strategic risk management signifies a potential risk to long-term success. Nevertheless, strong adherence to operational practices, such as effective responses to passenger demand, indicates robust day-to-day risk management. By addressing these strategic shortcomings, tricycle operators can enhance long-term risk management and fortify their business models (COSO, 2017).

Table 6

Summary Table on the Degree of Observance of ERM Practices

	Indicators	Mean	SD	Interpretation
1.	Compliance	3.71	0.54	VHO
2.	Financial	2.85	1.01	HO
3.	Operational	3.38	0.72	VHO
4.	Reputational	3.43	0.62	VHO
5.	Strategic	2.78	1.00	HO
	Grand Mean	3.23	0.78	HO

Table 6 provides a comprehensive overview of Enterprise Risk Management (ERM) practices among bao-bao owner-operators, yielding an overall mean score of 3.23, indicating a “high degree of observance.” This score reflects the careful attention and diligence participants demonstrate in maintaining a functional business model. Notably, compliance achieved the highest mean rating of 3.71, underscoring the criticality of adhering to all requisite legal obligations for the effective operation of Bao-Bao services. Conversely, the strategic indicator received the lowest mean score of 2.78, yet it still indicates a “high degree of observance.” Respondents acknowledged their efforts in formulating future business plans; however, they exhibited inconsistencies in establishing



long-term objectives due to the time-consuming nature of the process and their preoccupation with daily operations. Additionally, respondents highlighted the importance of effective communication for remaining cognizant of emerging risks and recognizing the significance of strategic planning in addressing substantial changes, despite their constrained schedules.

Conclusively, the findings demonstrate a spectrum of ERM observance ranging from 'high' to 'very high.' This suggests that bao-bao owner-operators possess a strong potential to enhance operational efficiency while mitigating various risks. Drawing on the COSO framework, it emphasizes that implementing an integrated ERM approach can reduce organizational risks, thereby improving performance through a focus on risk mitigation strategies. This proactive approach reduces costs and enhances profitability by addressing vulnerabilities before they manifest. Furthermore, the COSO framework asserts that organizations can bolster their risk management capabilities and achieve their objectives by identifying and prioritizing significant material risks, which invariably affect overall business performance. This process includes documenting the control environment, conducting thorough risk assessments, rigorously testing control activities, and monitoring organizational operations. However, it is important to note that the COSO framework is not infallible, as it highlights the challenges posed by human factors, which can complicate implementation. Management override, human error, collusion, and fraudulent financial reporting are particularly problematic for larger organizations. Fortunately, bao-bao owner-operators benefit from a smaller workforce, which facilitates the mitigation of internal controls and allows for a more effective reduction of risks to manageable levels.

Level of Business Performance

This study measured the variable using the following indicators: financial performance, customer satisfaction, and market share.

Table 7.

Level of Financial Performance as Rated by the Owner-Operators

Rating Statements	Mean	SD	Interpretation
1. A stable financial status is maintained within the business	2.67	0.91	HBP
2. Business income is allocated exclusively for business-related purposes.	2.44	0.83	LBP
3. Funds are invested in legal and reputable financial institutions.	2.47	1.28	LBP
4. All bills are paid promptly to prevent any conflicts or issues.	3.61	0.57	VHBP
5. Additional funds are reserved for unforeseen business related circumstances.	2.99	1.05	HBP
Overall (Financial performance)	2.84	0.93	HBP

Hypothetical Mean Range: 1.00 – 1.75 Very Low Level of Business Performance (VLBP); 1.76 – 2.50 Low Level of Business Performance (LBP); 2.51 – 3.25 High Level of Business Performance (HBP); 3.26 – 4.00 Very High Level of Business Performance (VHBP)

Table 7 reveals varying financial practices among bao-bao owner-operators. A mean score of 3.61 indicates a "Very High Level of Business Performance" in timely bill payments, reflecting strong financial discipline in managing operational liabilities. In contrast, the lowest mean score of 2.44 for business income allocation indicates a "Low



Level of Business Performance," indicating a critical need for improvement in the financial management of income distribution. The overall mean score of 2.84 suggests a "High Level of Business Performance," indicating a generally positive self-assessment but highlighting areas needing enhancement. The response variability, with standard deviations ranging from 0.57 to 1.28, underscores consensus on the importance of timely payments while revealing diverse opinions on other financial practices. These findings indicate a robust commitment to timely payments and significant opportunities to enhance financial management, especially in income allocation, to support growth and sustainability.

Research emphasizes the daily financial management challenges that bao-bao owner-operators face in balancing immediate income needs with long-term stability. A study on tricycle drivers' financial management identified positive and negative financial habits, with many drivers struggling to save or invest due to limited income, yet recognizing the importance of financial education (Davin et al., 2022). Additionally, operators often prioritize short-term stability over long-term growth due to insufficient funds for investment while meeting basic operational needs (De Jesus & Villanueva, 2022). Kaplan and Norton (1996) advocate for a balanced performance assessment across financial, customer, internal processes, and learning perspectives. In this context, the high adherence to timely bill payments signifies strong financial discipline, which is crucial for short-term stability. However, the insufficient focus on income control and investment highlights deficiencies in internal processes, as operators may lack effective financial strategies for long-term growth. These areas could substantially enhance overall business performance by aligning financial strategies with long-term objectives and improving resource management.

Table 8

Level of Customer Satisfaction as Rated by the Owner-Operators

Rating Statements	Mean	SD	Interpretation
1.Passengers and customers express no complaints regarding the provided service.	3.19	0.76	HBP
2.High-quality services are offered to ensure client satisfaction.	3.39	0.76	VHBP
3.An approachable business environment is maintained to help passengers and customers feel comfortable.	3.62	0.57	VHBP
4.Fast and friendly service is delivered to exceed passengers' expectations.	3.51	0.60	VHBP
5. Throughout the service process, passengers experience happiness and satisfaction.	3.22	0.48	HBP
Overall (Customer satisfaction)	3.38	0.64	VHBP

Table 8 presents customer satisfaction ratings from Bao-Bao operators and owners, yielding an overall score of 3.38, indicating a "Very High Level of Business Performance." Respondents highlighted their business environment and service quality as strengths, achieving a mean score of 3.62. The statement regarding the absence of customer complaints had the lowest mean score of 3.19, yet still reflects a "High Level of Business Performance." While negative feedback is inevitable, its low frequency contributes to a high overall satisfaction rating.



This aligns with Ong et al. (2023), which identifies responsiveness, vehicle cleanliness, and operator empathy as key drivers of customer satisfaction. Passengers appreciate prompt service and courteous interactions, which correlate to high satisfaction levels. Although the lack of complaints and communication effectiveness received lower scores, they remain within a "High Business Performance" interpretation. Ong et al. (2023) suggest that improvements in communication and customer feedback could enhance overall satisfaction.

According to Kaplan and Norton's Balanced Scorecard (BSC) Theory, customer satisfaction is a vital performance indicator. High ratings in service quality and promptness underscore operators' dedication to exceeding customer expectations, a crucial factor for business success. However, lower complaint management and communication scores indicate areas for improvement, where enhancing service consistency and addressing issues proactively could lead to greater customer satisfaction and retention.

Table 9

Level of Market Share as Rated by the Owner-Operators

Rating Statements	Mean	SD	Interpretation
1. An increase has been observed in the number of potential customers willing to spend on a transportation service business.	2.60	1.05	HBP
2. Services are being improved, and new offerings are being introduced to attract customers and boost income.	2.48	1.00	HBP
3. Staying ahead of competitors is achieved by identifying relevant innovations and emerging trends.	2.03	0.86	LBP
4. Success has been attained in surpassing competitors in market share and strategic effectiveness.	2.02	0.86	LBP
5. Passenger feedback and suggestions are utilized to enhance market share.	3.31	0.84	VHBP
Overall (Market share)	2.49	0.92	HBP

The table assesses bao-bao owner-operators' perceptions of their market share, yielding an overall mean score of 2.49 (SD = 0.92), categorized as a "High Level of Business Performance." This reflects a generally positive but improvable view of market share. The lowest score, 2.02 (SD = 0.86), relates to surpassing competitors in market share and strategic effectiveness, classified as "Low Level of Business Performance," indicating challenges in outperforming rivals. Another low score, 2.03 (SD = 0.86), focuses on maintaining competitiveness through innovation, highlighting difficulties in leveraging innovative strategies.

In contrast, cautious optimism is reflected in the scores of 2.60 (SD = 1.05) for potential customer growth and 2.48 (SD = 1.00) for service improvements. These suggest a positive outlook on market share expansion. Similar research on e-trike operations in Metro Manila underscores the importance of customer-centric strategies, such as fare affordability and responsiveness, in preserving market share. However, tricycle operators face competition from various public transportation modes, and a lack of innovation could hinder their market position (Gumasing et al., 2022). The rising competition requires these operators to innovate and enhance service quality to remain viable (Zhang et al., 2023).



Applying Kaplan and Norton's Balanced Scorecard (BSC) theory, the data reveals weaknesses in internal processes and customer perspectives, which are critical dimensions within the BSC framework. Low service improvement and innovation scores indicate a misalignment between internal operations and strategic objectives, negatively affecting customer value. Furthermore, the inability to remain competitive reflects deficiencies in the learning-and-growth perspective, hampering adaptability and innovation (Kaplan & Norton, 1996). This misalignment may contribute to the observed decline in market share.

Table 10

Summary Table on the Level of Business Performance

Indicators	Mean	SD	Interpretation
1. Financial Performance	2.84	0.93	HBP
2. Customer Satisfaction	3.38	0.64	VHBP
3. Market Share	2.49	0.92	LBP
Grand Mean	2.90	0.83	HBP

Table 10 presents a comprehensive evaluation of business performance as assessed by Bao-Bao owner-operators, yielding an overall mean score of 2.90, indicative of a "high level of business performance." Among the three performance indicators, customer satisfaction ranked highest, with a mean of 3.38. This finding suggests that bao-bao owner-operators prioritize passenger welfare, as passengers represent their primary target market. Drawing on Balanced Scorecard (BSC) theory, it can be posited that customer satisfaction is a pivotal element in enhancing business performance, reflecting the extent to which owner-operators meet their customers' needs and expectations. Hence, sustained revenue growth and longevity depend on a satisfied customer base.

Conversely, the market share indicator registered the lowest weighted mean of 2.49, indicating a "low level of performance." The bao-bao owner-operators noted that their operational parameters limit them to fixed transportation areas, thereby restricting their ability to mobilize vehicles spontaneously. This constraint contributes to a decline in market share, as passenger numbers tend to be relatively stable and may decline, particularly during inclement weather. Nevertheless, BSC theory suggests that enhancing market presence for Bao-Bao owner-operators is achievable through a focus on innovation, process improvement, and scaling operations, especially given the numerous Bao-Bao services in Pagadian City.

Interestingly, despite the low market share, the owner-operators reported a favorable financial performance. This indicates they can sustain a consistent revenue stream irrespective of passenger volume. This observation aligns with the BSC framework, which asserts that market share alone does not determine business performance. Instead, performance is influenced by a constellation of factors, including customer satisfaction, financial outcomes, and internal processes. Therefore, notable advancements in these other dimensions can effectively offset the low performance reflected in market share, ultimately improving overall business performance.



Testing the Hypothesis

Upon compiling the overall results, the researchers assessed the null hypothesis that there is no significant relationship between enterprise risk management practices and the business performance of Bao-Bao owner-operators. The data analysis was conducted using SPSS Statistics version 2.0, with testing at the 0.05 significance level.

Table 11

Correlation Result on the Level of ERM and Business Performance

Variables	R-value	P-value	Interpretation	Decision
Enterprise Risk Management and Business Performance	+0.554	0.000	Moderate Positive Correlation	Reject H ₀

Legend: 0.00 – 0.20 Negligible; 0.21 – 0.40 Low; 0.41 – 0.60 Moderate; 0.61 – 0.80 High; 0.81 – 1.00 Very High

The analysis presented in Table 11 reveals a significant association between enterprise risk management (ERM) and business performance, evidenced by a P-value of 0.000, which is below the 0.05 significance threshold. The R-value of +0.554 indicates a moderate positive correlation, suggesting that ERM and business performance tend to increase together.

These findings support Contingency Theory, which asserts that the effectiveness of ERM practices depends on their alignment with an organization's specific internal and external conditions. Consequently, bao-bao owner-operators who tailor their ERM practices to their unique environments generally experience better business performance.

This study's results are consistent with prior research, such as Saranza et al. (2024), which identified a positive relationship between ERM implementation and overall business performance. Additionally, Syrová and Špička (2022) found that strategic and operational ERM practices positively mediate financial performance in SMEs, while Tewu et al. (2024) highlighted the beneficial impacts of compliance and IT strategy on firm performance. While respondents demonstrated strong commitment to regulatory compliance and operational efficiency, their views on strategic management and financial independence varied. Many perceived intangible goals, such as autonomy, as unimportant, aligning with Wang et al. (2024), who found a general lack of proactive strategic planning among SME owner-operators.

CONCLUSION

In conclusion, Bao-Bao owner-operators emphasize evaluating enterprise risk management, particularly in compliance, operational, and reputational areas, while placing less focus on financial and strategic practices. The findings indicate that these operators enjoy high customer satisfaction and stable financial performance; however, they face challenges in increasing their market share due to various internal and external constraints. The analysis revealed a moderate positive correlation between enterprise risk management and business performance, underscoring the need for a holistic risk management approach to enhance overall effectiveness. To drive growth, owner-operators are encouraged to reallocate resources to financial and strategic planning, leveraging high customer satisfaction to accelerate market expansion. Additionally, tackling existing challenges and



seeking new market opportunities are crucial for sustaining competitiveness and preventing obsolescence in an evolving transportation landscape.

RECOMMENDATIONS

1. Future research may focus on comparing enterprise risk management (ERM) practices across different local transportation businesses, beyond bao-bao owner-operators, to identify commonalities and differences in their approaches to risk management and their impact on business performance.
2. Future researchers may conduct quantitative studies using larger sample sizes and more varied geographical locations to validate the correlation between ERM practices and business performance, ensuring the findings are generalizable across the industry.
3. Incorporating qualitative methods such as interviews or case studies could offer richer insights into how owner-operators perceive and implement ERM practices.
4. Analyzing the influence of external factors such as economic fluctuations, regulatory changes, and competitive pressures on the efficacy of ERM practices would enrich the understanding of how businesses navigate risk in dynamic environments.
5. Comparing ERM practices and business performance across different industries, including transportation, could highlight best practices and innovative strategies that may be transferable to the transportation sector.

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