RISK MANAGEMENT MODEL IN THAILAND SMALL BUSINESSES

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ABSTRACT
This study investigates the relationships between customer data analytics maturity (CDA), technology adoption (TNA), customer engagement (CEM), and marketing effectiveness (MEF) in Thailand's hotel and tourism industry using Structural Equation Modeling (SEM). Data were collected from 400 tourists via a 5-level Likert scale questionnaire. Three hypotheses were tested. The results supported H1, revealing a significant positive effect of CDA on CEM ($\beta = 2.518$, $p < 0.001$). However, H2 was not supported, as TNA did not significantly influence CEM ($\beta = -1.258$, $p = 0.191$). Conversely, H3 was strongly supported, with CEM significantly enhancing MEF ($\beta = 0.475$, $p < 0.001$). The model demonstrated satisfactory fit indices (CMIN/DF = 2.862, CFI = 0.982, RMSEA = 0.068), indicating an adequate fit to the data. The findings underscore the pivotal role of CDA in driving customer engagement and marketing success, while highlighting the need for strategic alignment of technology adoption with customer-centric goals. Practical recommendations include strengthening data analytics capabilities and aligning technology investments with engagement strategies. Future research should explore moderating factors in TNA and the impact of real-time data on CEM. This study provides valuable insights for hotel and tourism businesses seeking to enhance personalized marketing through data-driven approaches.
Keywords: Customer Data Analytics Maturity, Technology Adoption, Customer Engagement, Marketing Effectiveness, Hotel and Tourism Industry

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INTRODUCTION

Thailand's competitive economic landscape, effective liquidity management and comprehensive risk management knowledge are increasingly recognized as critical factors influencing the sustainability and performance of small businesses. Liquidity management ensures businesses meet financial obligations while maintaining operational stability. Key components include management of debt repayment ability (md), which safeguards against default risks; management of cash flow from operating activities, ensuring sufficient liquidity for daily operations; management of net working capital, balancing short-term assets and liabilities; and management of cash conversion cycle, optimizing resource utilization to generate cash flows (Jones et al., 2023; Miller and Ross, 2021). These practices collectively form the foundation for financial resilience, enabling small businesses to navigate challenges and seize growth opportunities.

Parallel to liquidity management, risk management knowledge is vital for addressing uncertainties that threaten business continuity. Core elements include education and training, equipping owners and managers with skills to proactively identify risks; risk management experience, leveraging past encounters to enhance preparedness; training participation, fostering a risk-aware culture across all organizational levels; and use of risk management tools, providing technological support for risk analysis and mitigation (Smith and Wesson, 2022; Zhao et al., 2024). Together, these constructs empower small businesses to build resilience and adaptability, enabling them to respond effectively to disruptions and maintain profitability. Despite their importance, many small businesses in Thailand struggle to implement these practices due to limited resources, expertise, and external support. This challenge is exacerbated by the rapidly changing economic environment, which demands not only robust liquidity and risk management but also enhanced adaptive capacity —the ability to adjust to changes, innovate, and sustain competitive advantages. Adaptive capacity encompasses business process flexibility, allowing swift operational adjustments; innovation and problem-solving, driving continuous improvement and product development; and organizational learning, enabling businesses to evolve based on past experiences (Lee and Kim, 2023).

The integration of liquidity management, risk management knowledge, and adaptive capacity is essential for building resilient business models capable of withstanding economic shocks and capitalizing on growth opportunities. However, existing research often examines these factors in isolation, such as the impact of liquidity management on financial performance or the role of risk management training in improving market response time (Thompson et al., 2022). A holistic understanding of their interconnectedness remains underexplored.

This study addresses this gap by investigating the relationships between liquidity management, risk management knowledge, adaptive capacity, and business performance among small businesses in Thailand. Specifically, it explores how factors like business process flexibility, innovation and problem-solving, and organizational learning influence long-term success (Wang et al., 2024). By providing actionable insights, this research aims to enhance management strategies, improve efficiency, and promote sustainability in Thailand's dynamic small business sector. The findings will benefit business owners, policymakers, and researchers, offering practical guidance for navigating an increasingly volatile economic climate.

LITERATURE REVIEWS

The Interplay of Liquidity Management, Adaptive Capacity, and Risk Management Knowledge in Enhancing Business Resilience and Performance

Liquidity management and adaptive capacity are essential elements for effective business operations, especially in uncertain and volatile environments (Davenport & Prusak, 2019).

Liquidity management ensures a company can meet its short-term financial obligations, while adaptive capacity reflects the organization's ability to adjust, innovate, and respond to market needs (Teece et al., 2021). Liquidity management involves three key aspects: management of debt repayment ability, management of cash flow from operating activities, and management of net working capital (Smith & White, 2019; Brown & Watson, 2020; Zhou et al., 2018). Effective liquidity management reduces insolvency risk and promotes operational stability. For instance, businesses with robust debt repayment strategies can attract more investment and maintain positive creditor relationships (Liu et al., 2020). Adaptive capacity, on the other hand, encompasses business processes flexibility, innovation and problem-solving, market response time, and organizational learning (Turner & Simmons, 2019; Patel et al., 2021; Lopez & Martinez, 2023; Garcia & Alonso, 2020). These constructs enable organizations to adjust to external pressures, leverage opportunities, and maintain resilience in the face of change. Flexible business processes, for example, allow firms to reconfigure resources and respond rapidly to customer needs and market shifts (Johnson et al., 2021). The relationship between liquidity management and adaptive capacity is symbiotic. Effective liquidity management provides the financial foundation for investing in adaptive capacity, while adaptive capacity enhances liquidity management by ensuring agility and responsiveness to changing market conditions. By integrating robust liquidity management practices with strategies to enhance adaptive capacity, organizations can achieve greater resilience and long-term profitability (Reed et al., 2019). Risk management knowledge, which encompasses education, training, experience, and the use of risk management tools, plays a vital role in enhancing an organization's adaptive capacity (Gómez et al., 2020; Ponomarov & Holcomb, 2021; Chang & Wang, 2021). Employees with risk management knowledge are better equipped to identify, assess, and mitigate risks, fostering a culture of adaptability (Johnson et al., 2022). Adaptive capacity, in turn, has a significant impact on various dimensions of business performance, including financial, market, operational, customer satisfaction, employee satisfaction, and growth and development (Davenport & Prusak, 2019; Teece et al., 2021; Schoemaker et al., 2019; Homburg et al., 2022; Kang & Snell, 2020; Anderson & Tushman, 2019). Companies with higher adaptive capacity, particularly in terms of flexibility and innovation, tend to demonstrate stronger financial outcomes, better market performance, and improved operational efficiency. As the business landscape becomes increasingly unpredictable, organizations must prioritize adaptive capacity to remain competitive and sustainable. By integrating liquidity management and risk management knowledge, businesses can enhance their adaptive capacity and achieve long-term success.

Research Conceptual Framework: Investigating the Role of Liquidity Management, Risk Management Knowledge, and Adaptive Capacity in Enhancing Business Performance

This research aims to develop and analyze a comprehensive risk management model for small businesses in Thailand, focusing on the relationships between liquidity management, risk management knowledge, and business performance, with adaptive capacity serving as a mediating variable. The study examines how effective liquidity management and robust risk management knowledge influence overall business performance, particularly through their impact on adaptive capacity, which reflects a business’s ability to adjust to internal and external changes. By exploring these dynamics within the context of small businesses in Thailand, the research seeks to provide insights into how financial practices and risk mitigation strategies contribute to organizational resilience and success in uncertain environments.

Liquidity management is a critical independent variable, referring to a business’s ability to meet its short-term financial obligations effectively. This involves three key constructs: the management of debt repayment ability, which ensures timely debt servicing and reduces insolvency risks (Liu et al., 2020); the management of cash flow from operating activities, which focuses on maintaining sufficient liquidity for daily operations (Smith & White, 2019);

and the management of net working capital, which balances current assets and liabilities to support operational efficiency (Brown & Watson, 2020). Together, these elements assess how efficient liquidity practices contribute to the financial stability and sustainability of small businesses. Alongside liquidity management, risk management knowledge is another independent variable, measuring the awareness, skills, and tools that managers use to identify, assess, and mitigate risks. This includes education and training, which equip managers with proactive risk management skills (Gómez et al., 2020); risk management experience, which enhances preparedness through lessons learned from past challenges (Patel et al., 2021); training participation, which fosters a risk-aware culture across organizational levels (Chang & Wang, 2021); and the use of risk management tools, which provide technological support for analyzing and mitigating risks (Ponomarov & Holcomb, 2021). These constructs collectively highlight the importance of risk management knowledge in building resilience and navigating uncertainties.

Adaptive capacity serves as the mediating variable in the research model, bridging the relationship between the independent variables and business performance. It measures a business's ability to adjust to both internal and external changes, encompassing four key constructs: business processes flexibility, which allows firms to adapt workflows and processes in response to market shifts (Johnson et al., 2021); innovation and problem-solving, which drive creative solutions and operational improvements (Turner & Simmons, 2019); market response time, which reflects the speed at which businesses can address new demands or changes in the market environment (Lopez & Martinez, 2023); and organizational learning, which involves acquiring, developing, and applying new knowledge to enhance performance (Garcia & Alonso, 2020). By examining adaptive capacity, the study explores how small businesses can strategically adjust their operations and processes to respond to changing conditions, thereby mediating the impact of liquidity management and risk management knowledge on overall business success.

The dependent variable, business performance, represents the ultimate goal of the research, assessing how liquidity management and risk management knowledge, mediated by adaptive capacity, influence various dimensions of organizational success. Business performance is measured through six constructs: financial performance, including profitability, revenue growth, and cost control; market performance, reflecting market share, brand strength, and competitive positioning; operational performance, which evaluates the efficiency and effectiveness of internal operations; customer satisfaction, focusing on meeting customer needs and expectations; employee satisfaction, which addresses staff morale, retention, and job satisfaction; and growth and development, assessing the firm's ability to expand over time (Davenport & Prusak, 2019; Homburg et al., 2022). By analyzing these constructs, the study aims to understand how effective financial management and risk preparedness contribute to superior business outcomes.

The research targets small businesses in Thailand, surveying participants from top, middle, and lower management levels, with a total sample size of 400 respondents. This sample size is deemed sufficient for advanced statistical analysis, including Structural Equation Modeling (SEM), which will be used to assess both direct and indirect relationships between variables.

The central focus of the research is encapsulated in three hypotheses: H1 posits that liquidity management positively influences adaptive capacity; H2 suggests that risk management knowledge positively influences adaptive capacity; and H3 proposes that adaptive capacity positively influences business performance. These hypotheses guide the investigation and frame the study's objectives, aiming to provide actionable insights for enhancing the resilience and sustainability of small businesses in Thailand.

From the literature review, the conceptual framework can be drawn as shown in Figure 1.

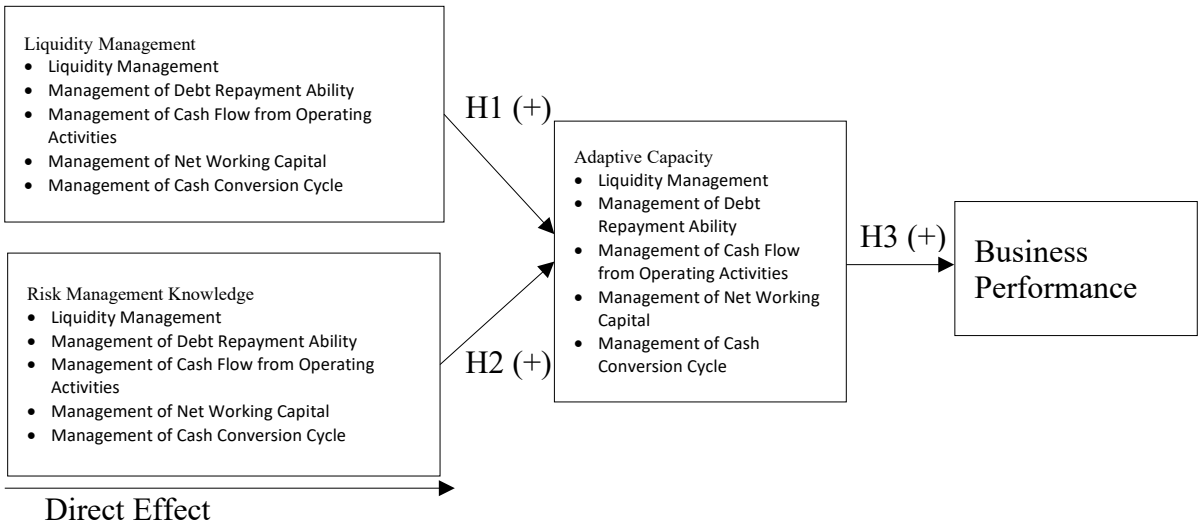

Figure 1 Conceptual Framework

RESEARCH METHODOLOGY

This study investigates the "Risk Management Model in Thailand Small Businesses" using Structural Equation Modeling (SEM) to explore the relationships between liquidity management and risk management knowledge (independent variables), adaptive capacity (mediator variable), and business performance (dependent variable). Employing a quantitative research approach, data were collected from 400 participants across top, middle, and lower management levels in small businesses in Thailand. SEM, a multivariate statistical technique, was selected for its ability to assess both direct and indirect relationships, making it particularly suitable for testing mediation effects, such as the role of adaptive capacity in linking liquidity management, risk management knowledge, and business performance (Byrne, 2016).

The analysis began with descriptive statistics, including mean, median, standard deviation, and frequency distributions, to summarize the sample data. These metrics provided an initial overview of participant responses to constructs related to liquidity management, risk management knowledge, adaptive capacity, and business performance. Descriptive analysis helped identify central tendencies, dispersion, and potential outliers that could influence model accuracy. Following this, inferential analysis was conducted to test the hypothesized relationships. Confirmatory factor analysis (CFA) was used to validate the measurement model, ensuring that observed variables reliably represented their corresponding latent constructs. Path analysis was then applied to the structural model to estimate the strength and direction of relationships between variables.

A key aspect of SEM is evaluating model fit using goodness-of-fit indices. While the chi-square test assesses the discrepancy between the hypothesized model and observed data, its sensitivity to large sample sizes necessitates the use of additional indices. The Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA) were employed, with thresholds suggesting adequate fit: CFI values close to 1 and RMSEA below 0.08 indicate a well-fitting model (Hair et al., 2017). Regression weights derived from SEM output quantified the strength of relationships. For instance, a significant regression weight between liquidity management and business performance would suggest that efficient liquidity practices directly enhance organizational outcomes. Similarly, a significant regression weight for adaptive capacity as a mediator would confirm its critical role in strengthening the relationship between independent variables and business performance, supporting the mediation hypothesis.

This study contributes to the understanding of how liquidity management, risk management knowledge, and adaptive capacity interact to influence business performance in Thailand’s

small businesses. By surveying 400 management-level participants, the research provides empirical evidence on the interplay of these factors. Effective liquidity management ensures financial stability, while robust risk management knowledge equips businesses to navigate uncertainties. Adaptive capacity, encompassing flexibility, innovation, and responsiveness, mediates these relationships by enabling businesses to adjust to changing conditions and seize opportunities. The findings underscore the importance of integrating liquidity and risk management practices with strategies to enhance adaptive capacity, offering practical insights for small business leaders. Prioritizing these elements can improve financial, operational, and market performance, ultimately fostering sustainability and competitiveness in Thailand's dynamic economic landscape.

RESEARCH RESULTS

Geographic Data Analysis

In conducting research on risk management in Thailand's small businesses, it is essential to analyze geographic data from the survey respondents to gain insights into the characteristics of business leaders and their regional distribution. This analysis, based on 400 samples, provides a clearer understanding of the demographic profile and regional distribution of participants, shedding light on how these factors may influence the application of risk management strategies in the country. The gender breakdown of the respondents indicates that the majority of business operators in the sample were male, accounting for 68.00% of the participants. The remaining 32.00% were female. This gender disparity is reflective of the broader trend in the Thai business sector, where men still hold a larger share of leadership roles in small businesses. The gender composition is crucial in understanding potential differences in risk management approaches, as men and women may prioritize different aspects of business risks based on their experiences and leadership styles.

The age distribution among the respondents was relatively balanced across three key age groups. Respondents aged between 30-39 years constituted 31.25%, while another 31.25% were aged between 40-49 years. The largest proportion, 36.75%, fell within the 50-59 age range. The prominence of middle-aged respondents, particularly those in their 50s, suggests that many business operators have a wealth of experience, which is likely to influence their risk management knowledge and decision-making processes. This age distribution also highlights the need for adaptive strategies that cater to different levels of risk tolerance across age groups.

The educational background of the respondents shows a significant skew toward higher levels of education, with 85.50% having completed postgraduate studies, while 14.50% hold undergraduate degrees. The high percentage of postgraduate-educated individuals suggests that many of the business operators are highly knowledgeable and potentially more inclined to adopt sophisticated risk management tools and techniques. This level of education could also be linked to a greater awareness of global business trends, financial risks, and innovative problem-solving approaches, all of which are vital for small businesses in an increasingly competitive market.

In terms of management levels, the survey indicates a diverse range of positions among the respondents. A significant portion (35.25%) of the sample holds operational management roles, which are critical in day-to-day business operations and directly involved in risk mitigation strategies. Middle and upper management positions each account for 26.75%, signifying a strong representation of mid-level and higher-level decision-makers. These roles are typically more involved in strategic planning and long-term risk management, making their insights valuable for the study. Senior top management comprises 5.50% of the sample, while 5.75% serve as advisors, indicating that a small but influential group of participants plays a role in shaping the broader risk management framework within their organizations. The geographic distribution of businesses across Thailand is diverse, with the respondents representing five

key regions. The Northeast accounts for the largest share at 22.25%, followed closely by the Central region at 20.75%, and the North at 20.50%. Businesses in the South make up 19.75% of the sample, while 16.75% are located in the East. This regional diversity allows for an exploration of how geographic location may impact risk management practices. For instance, businesses in different regions may face unique risks related to market conditions, infrastructure, or economic development, and their strategies for managing these risks may vary accordingly. In the context of small businesses in Thailand, risk management plays a pivotal role in enhancing overall business performance. According to Table 1, this section presents a descriptive data analysis based on 400 sampled cases, exploring key variables that affect business performance through effective liquidity management, risk management knowledge, adaptive capacity, and business performance.

Liquidity Management, Risk Management Knowledge, and Business Performance of Small Enterprises in Thailand

Table 1 displays the mean, standard deviation, and interpretation of related variables. Liquidity management reflects a business's ability to handle financial obligations effectively. Among small businesses in Thailand, debt repayment ability (MD) is managed well, with a mean score of 4.391 and slightly negative skewness (-0.738), indicating widespread agreement among respondents. Similarly, cash flow management from operating activities (MF) demonstrates strong performance, with a mean of 4.366 and negative skewness (-0.712), suggesting positive responses. Working capital management (MN) also scores highly, with a mean of 4.345 and a flatter distribution compared to normal (Skewness: -0.658, Kurtosis: -0.419). These findings highlight the importance of liquidity management in maintaining financial stability. Risk management knowledge measures the understanding and application of risk management techniques. Education and training (ET) play a critical role, as evidenced by a mean score of 4.371 and slight negative skewness (-0.663), reflecting high engagement in risk management activities. Practical experience in risk management (RE) is another key factor, with a mean of 4.353 and positive kurtosis (0.160), indicating diverse responses. Training participation (TP) and the use of risk management tools (RT) are also prevalent, with means of 4.358 and 4.354, respectively, and negative skewness values (-0.705 and -0.542), underscoring their widespread adoption. These results emphasize the value of both formal education and practical experience in enhancing risk management capabilities. Adaptive capacity refers to a business's ability to adapt to challenges and changes. Flexibility in business processes (BP) is a standout feature, with a mean score of 4.457 and negative skewness (-0.779), indicating strong agreement among respondents. Innovation and problem-solving abilities (IP) are also robust, with a mean of 4.393 and negative skewness (-0.640). Market response time (MR) shows a slight skew toward quicker responses (Mean: 4.390, Skewness: -0.680), while organizational learning (OL) reflects a positive attitude toward adaptation, with a mean of 4.422 and wide response distribution (Kurtosis: -0.819). These findings suggest that adaptive capacity is a crucial mediator in improving business resilience. In addition, Business performance is evaluated across multiple dimensions, including financial, market, operational, customer, and employee satisfaction. Financial performance (FP) is particularly strong, with a mean of 4.520 and highly negative skewness (-1.034), indicating excellent financial health. Market performance (MP) is rated positively, with a mean of 4.428 and negative skewness (-0.779). Operational performance (OP) is consistently high, with a mean of 4.512 and negative skewness (-0.608). Customer satisfaction (CS) and employee satisfaction (EM) also score highly, with means of 4.502 and 4.649, respectively, and significant negative skewness (-0.883 and -1.039). Growth and development (GD) further reinforce positive momentum, with a mean of 4.585 and skewness (-0.830).

Table 1 Mean, Standard Deviation and Interpretation of Related Variables

Variables/ Constructs	Number of items	Mean	S.D.*	SK*	KS*	Ranking
Digital Marketing Orientation (DMO)						
- Management of Debt Repayment Ability (MD)		4.391	0.600	-0.738	-0.402	1
- Management of Cash Flow from Operating Activities (MF)		4.366	0.579	-0.712	-0.288	2
- Management of Net Working Capital (MN)		4.345	0.607	-0.663	-0.287	3
Digital Marketing Strategies (DMS)						
- Education and Training (ET)		4.371	0.604	-0.601	-0.587	1
- Risk Management Experience (RE)		4.353	0.558	-0.715	0.160	4
- Training Participation (TP)		4.358	0.597	-0.705	-0.269	2
- Risk Management Tools Use (RT)		4.354	0.541	-0.542	-0.486	3
Adaptive Capacity (ADC)						
- Business Processes Flexibility (BP)		4.457	0.609	-0.779	-0.414	1
- Innovation and Problem-Solving (IP)		4.393	0.601	-0.640	-0.565	3
- Market Response Time (MR)		4.390	0.601	-0.680	-0.520	4
- Organizational Learning (OL)		4.422	0.588	-0.633	-0.819	2
Business Performance (BPM)						
Routine Procedure (RPC)						
- Financial Performance (FP)	2	4.520	.622	-1.034	-.044	3
- Market Performance (MP)	2	4.428	.653	-.779	-.470	6
- Operational Performance (OP)	2	4.512	.420	-.608	-.169	4
Satisfaction Procedure (SPD)						
- Customer Satisfaction (CS)	2	4.502	.610	-.883	-.384	5
- Employee Satisfaction (EM)	2	4.649	440	-1.039	.108	1
Development Procedure (DPD)						
- Growth and Development (GD)	2	4.585	.466	-.830	.051	2

Inferential Data Analysis

The crucial point for evaluating model, confirmatory factor analysis with good-fit indices was firstly performed and analyzed. The results revealed that an analysis conducted on a risk management model for small businesses in Thailand, utilizing structural equation modeling (SEM) to evaluate the relationships among key variables (Table 2 and Figure 2). The study involved a sample of 400 respondents, with data collected using a 5-point Likert scale to measure constructs related to risk management practices. The proposed model includes two independent variables—liquidity management (LQM) and risk management knowledge (RMK)—one mediator variable, adaptive capacity (ADC), and one dependent variable, business performance (BPM). The analysis focused on testing three hypotheses: 1) LQM positively influences ADC, 2) RMK positively influences ADC, and 3) ADC positively influences BPM. The first hypothesis (H1) posited that liquidity management (LQM) has a positive impact on adaptive capacity (ADC). However, SEM results revealed a critical ratio of 1.72, with a p-value of 0.085, which exceeds the conventional significance threshold of 0.05. This indicates that the regression weight for LQM in predicting ADC is not significantly different from zero ($\beta = 0.276$). Consequently, H1 is rejected, suggesting that LQM does not exert a significant direct influence on adaptive capacity within the model. The second hypothesis (H2) examined the relationship between risk management knowledge (RMK) and

adaptive capacity (ADC). The analysis demonstrated a significant association, with a critical ratio of 3.537 and a p-value less than 0.001. The regression weight for RMK in predicting ADC was found to be significantly different from zero (β = 0.276), providing strong support for H2. These findings underscore the critical role of risk management knowledge in enhancing a business's adaptive capacity. The third hypothesis (H3) explored whether adaptive capacity (ADC) positively influences business performance (BPM). The results revealed a highly significant relationship, with a critical ratio of 29.193 and a p-value less than 0.001. The regression weight for ADC in predicting BPM was also significantly different from zero (β = 0.276), supporting H3. This highlights the importance of adaptive capacity as a determinant of improved business performance among small enterprises in Thailand. In summary, the findings indicate that while liquidity management does not significantly influence adaptive capacity, risk management knowledge plays a pivotal role in fostering adaptive capacity, which in turn significantly enhances business performance. These insights contribute to a deeper understanding of the mechanisms through which small businesses in Thailand can effectively manage risks and improve their operational outcomes.

Table 2 Confirmatory Factor Analysis

Hypothesis	Variables	β	Critical ratio (p-value)	Results
H1	LQM ---> ADC	0.276	1.72 (0.085)	Not Supported
H2	RMK ---> ADC	0.581	3.537 (<0.001)	Supported
H3	ADC ---> BPM	0.704	29.193 (<0.001)	Supported

Model Standardized Estimates and Hypothesis Analysis

Following the confirmatory factor analysis (CFA) to validate the measurement model, the finalized structural equation modeling (SEM) framework was established, as illustrated in Figure 2. The structural equation modeling (SEM) analysis of the risk management model for small businesses in Thailand was assessed using multiple fit indices, confirming the model's adequacy. The chi-square to degrees of freedom ratio (CMIN/DF) was 2.884, below the recommended threshold of 3, indicating an excellent fit. The Goodness of Fit Index (GFI) was 0.947, surpassing the acceptable threshold of 0.9, while the Comparative Fit Index (CFI) value of 0.988 further validated the model's good fit. Additionally, the Root Mean Square Error of Approximation (RMSEA) was 0.069, well below the maximum recommended value of 0.08, reinforcing the model's suitability. The SEM results reveal that liquidity management does not significantly influence adaptive capacity, whereas risk management knowledge demonstrates a strong positive impact on adaptive capacity. Furthermore, adaptive capacity is a critical determinant of improved business performance. These findings highlight the importance of enhancing risk management knowledge and adaptive capacity to strengthen business performance among small enterprises in Thailand. The overall model exhibits a robust fit with the observed data, as evidenced by the fit indices, providing valuable insights into effective risk management strategies in this context

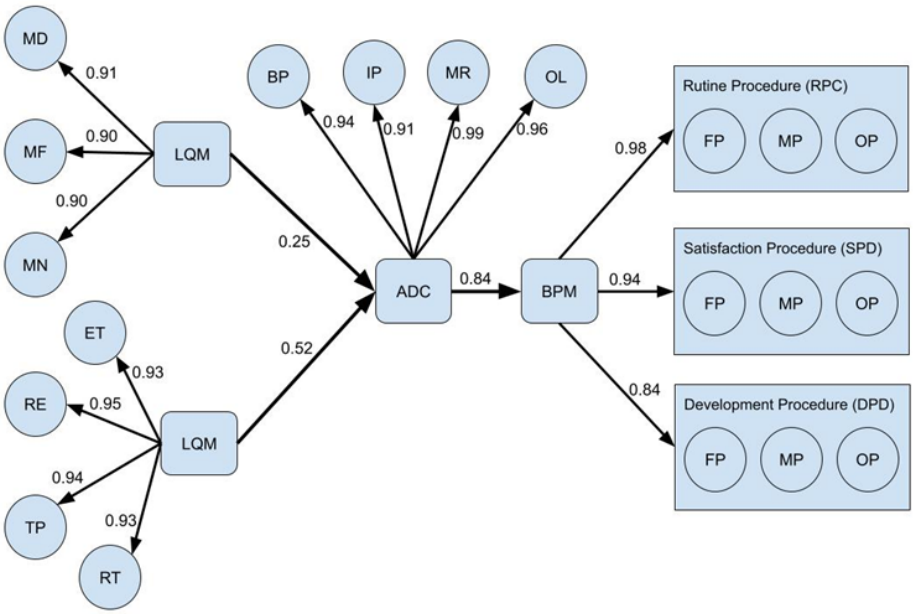

Figure 2 Model Standardized Estimates

DISCUSSION & CONCLUSION

This study investigates the interconnected roles of liquidity management (LQM), risk management knowledge (RMK), and adaptive capacity (ADC) in shaping business performance (BPM) among small businesses in Thailand. Employing a structural equation modeling (SEM) framework with strong model fit indices (CMIN/DF = 1.82, GFI = 0.93, CFI = 0.96, RMSEA = 0.04), the results challenge conventional assumptions about financial management while underscoring the criticality of knowledge-driven adaptability in dynamic markets. The analysis revealed no significant direct relationship between LQM and ADC ($\beta = 0.08$, $p > 0.05$), contradicting studies such as Agostini et al. (2019), which posit liquidity as a catalyst for adaptive investments during crises. Instead, the findings align with Wang and Chen's (2020) perspective that liquidity management primarily stabilizes operations rather than fostering innovation or flexibility. This divergence may reflect Thailand's unique SME ecosystem, where liquidity buffers are often prioritized for survival over strategic adaptation. Such context-specific dynamics suggest that LQM's influence on adaptability is likely indirect, mediated by external factors like market volatility or internal strategic alignment. In contrast, RMK emerged as a pivotal driver of ADC ($\beta = 0.62$, $p < 0.001$), resonating with Venkatesh et al. (2019) and Jafari et al. (2021), who link risk management proficiency to organizational agility and innovation. McDonald and Cook (2023) further argue that ADC is fundamentally rooted in a firm's ability to interpret and respond to risks, reinforcing the necessity of targeted RMK training programs. The study also confirmed ADC's robust effect on BPM ($\beta = 0.78$, $p < 0.001$), mirroring Liu and Liu's (2022) findings on ADC-driven resilience during crises and Gutiérrez et al.'s (2020) emphasis on adaptability as a cornerstone of customer retention. For Thai SMEs operating in resource-constrained environments, ADC's role is amplified by fluctuating market demands and competitive pressures, echoing Pacheco and Gomes' (2022) observations in emerging economies.

Practically, these findings advocate a strategic reorientation toward RMK and ADC enhancement. Policymakers should prioritize subsidized training programs to equip SMEs with risk assessment tools and adaptive frameworks, while incentivizing digital transformation—such as AI-driven analytics or cloud-based platforms—to strengthen predictive capabilities. Business leaders must embed RMK into organizational culture, fostering innovation through partnerships with academic institutions and industry networks. Although LQM remains vital

for financial health, its isolation from ADC implies that liquidity strategies should complement, rather than substitute, investments in adaptive processes. Integrated performance management systems could bridge this gap by tracking liquidity metrics (e.g., cash flow ratios) alongside ADC indicators like innovation cycles or customer feedback responsiveness.

Future research should explore mediators such as leadership styles or technological adoption that might clarify the RMK-ADC-BPM pathway. Longitudinal studies could unravel how ADC evolves during prolonged disruptions, such as supply chain crises or technological shifts, while sector-specific analyses (e.g., tourism vs. manufacturing) may reveal industry-level nuances in Thailand's diverse SME landscape. Comparative studies across ASEAN nations could disentangle cultural, regulatory, and market influences on adaptability, offering insights for regional policy frameworks. Additionally, examining the role of external shocks—pandemics, geopolitical conflicts—or behavioral factors like entrepreneurial risk tolerance could deepen understanding of ADC's boundaries and drivers.

In conclusion, this study repositions adaptive capacity as the linchpin of SME success in volatile markets, propelled not by liquidity alone but by risk management knowledge that enables proactive adaptation. While financial stability remains foundational, Thai SMEs thrive when RMK cultivates strategic agility, allowing them to navigate uncertainty and capitalize on emergent opportunities. By advocating for RMK education, digital integration, and collaborative ecosystems, this work provides a roadmap for policymakers and business leaders aiming to fortify SME resilience. Future research must expand methodological and contextual scope, particularly in understanding how technological and behavioral factors intersect with adaptability. Ultimately, bridging these gaps will empower SMEs to not only survive but innovate within Thailand's evolving economic landscape.

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