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Empirical analysis of hotel strategic management accounting practices

Melinda Puspita Sari ^a , Wahyu Adi Wibowo ^b ^a. Accounting, Faculty of Economics and Business, Universitas Selamat Sri, Kendal City, State of Indonesia^b. Accounting, Faculty of Economics and Business, Universitas Selamat Sri, Kendal City, State of Indonesia

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Correspondence:

Melinda Puspita

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ABSTRACT

Purpose – This paper investigates the adoption of Strategic Innovation Management Accounting (SIMA) and related organisational and environmental variables in hospitality. This study examines how organisational lifecycle, decentralisation, perceived environmental uncertainty, IS quality and moderation between historical performance and SIMA adoption.

Design/methodology/approach – A quantitative research design was used with a survey data from hotel managers to determine the influence of strategic management accounting on decision-making processes. Structural equation modeling (SEM) was utilized to examine the direct and interaction effects of organizational structure, environmental factors, and IS quality on SIMA use.

Findings – The results substantiate the positive impact of perceived environmental uncertainty, decentralization, IS quality and organizational life cycle stage on SIMA adoption. Additionally, the results indicate that the influence of previous financial performance on SIMA usage are moderated by usage context, with the relationships weaker in highly uncertain environments, decentralized organizations, mature firms, and organizations with high-quality IS information. These findings give ID directors a glimpse of SIMA as a significant player in each managing financial processes and improving decisions.

Originality/value – This study builds on previous research in studying which environmental and organizational conditions moderate the relationship between financial performance and SIMA usage. Different from the prior studies that emphasize on general accounting practices, this study delivers empirical evidence on the strategic adaptation of use of management accounting tools by firms in response to environmental conditions and firm design.

Research Implications – The study contributes to our understanding of hotel management by highlighting the role of SIMA in sustaining performance and impact under challenging circumstances. These findings can be utilized by policymakers and industry stakeholders in formulating frameworks for facilitating the adoption of strategic accounting practices in the hospitality industry. Future studies can analyze the contextual relevance of these insights for emerging markets like Indonesia given the regulatory and technological developments.



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1. Introduction

In the recent past, the hospitality sector in Indonesia has seen a boom, fueled by an increase in tourism and economic growth. This growth trends led to increased competition between hotels, demanding the implementation of modern management methods and practices to achieve profitability and market share (Panno 2020). SMA has become a vital weapon to provide useful information to managers to take strategic decisions. Research has indicated that SMA practices are able to improve organizational performance by aligning financial management with strategic goals (Keshavarz and Gölgeci 2023; Zachlod et al. 2022). This literature indicates that SMA does lead to strategic decision making, positively affecting hotel performance, and shows that SMA has a strong positive impact on hotel performance (Yadegaridehkordi et al. 2020). Ghouri et al. (2021) have demonstrated the role of a connection between competitive strategy and SMA information for customer-related performance in the hotel sector. Such discoveries serve as a reminder of the pivotal role that SMA plays in making sense of a fragmented and complex hospitality ecosystem today.



However, although SMA provides numerous advantages, its application in an Indonesian hotel context is still less explored. Notably, one of the key drivers that could affect the extent of functioning the SMA practices is the varying environmental uncertainty being perceived by hotel managers. For hotels operating in unpredictable environments, SMA implementation may provide a greater alignment between anticipation of market trends and strategy adaption (Wang and Yang 2019; Zhang, Wang, and Olya 2022). And the structure of the organization is a key factor; decentralized hotels are likely to be more receptive to SMA because managers have more power. Moreover, the quality of information systems used in hotels can create either opportunities or challenges in effectively implementing these SMA practices (Au et al. 2024; Wu, Yan, and Umair 2023). High quality information systems enable better decision making, and strategic planning which improves the SMA effectiveness (Aydiner et al. 2019; Ghasemaghaei 2018). Nonetheless, many Indonesian hotels, especially smaller ones, may not have the required infrastructure to support advanced SMA systems, curtailing their strategic capabilities.

This study is based on contingency theory (Jensen and Meckling 2019; McAdam, Miller, and McSorley 2019), which emphasizes that the effectiveness of management accounting practices is dependent on a variety of internal and external determinants. This view contends that management accounting is not a one-size-fits-all phenomenon. Rather, the appropriateness of particular practices is contingent on contextual factors including environmental uncertainty, organizational structure and the quality of information systems (Henri and Wouters 2020; Lucianetti et al. 2018). Similarly, Pavlatos figure out how to apply contingency theory and to study the relationship between these factors and SMA usage in hotels, showing that some contextual factors can significantly influence the adoption and effectiveness of SMA practices. Such a theoretical basis equipped us with insight about how the particular SMA practices in Indonesian hotels can be organized in relation to their operational framework (Mulyani et al. 2024).

Although researchers have investigated SMA adoption determinants and outcomes in different contexts, there is a lack of studies on the Indonesian hotel industry. Important limitations include the differences in culture, economy and regulation between regions, which may preclude extrapolation of findings from regions into others (Bresciani et al. 2021)., Nazarian et al. (2021) Tajvidi and Karami (2021) found a positive relationship between usage of SMA and hotel performance in a Western context; however, comparable studies in Asian settings have produced mixed findings. Despite the reported institutionalization of SMA, scholars have also noted mixed results from its adoption including improved performance and alignment with strategy alongside its adverse impact possibly linked to its implementation cost and IA misalignment (Dasanayaka et al. 2021; Vanini and Bochert 2024). Such inconsistencies indicate a gap in research and point to the lack of empirical efforts in the context of Indonesia in identifying the extent to which SMA practices could widely be implemented, and their potential ramifications, in local hotels (Henri and Wouters 2020; Singjai, Winata, and Kummer 2018).

Therefore, this study is attempting to bridge the gap by assessing empirically the determinants of SMA adoption and the effect of its adoption on hotel performance in Indonesia. In particular, the research will test multiple hypotheses regarding environmental uncertainty, organizational structure, information system quality, organizational life cycle stage, and historical performance stated in the objectives of the study. In so doing, the study attempts to gain insight into the implementation of sma practices in accordance with hotels in Indonesia so it can take a significant role in improving the strategic management of hotels in Indonesia.

2. Method

2.1 Research design

This study employed a quantitative research design, focusing on the relationship among the SMA practice, contingent factor, and the historical performance of the Indonesian hotel industry. We created a structured survey tool to gather information on the use of SMA methods as well as other organisational and environmental factors. This is in addition to being consistent with established approaches in management accounting studies that enable testing of hypothetical relationships in statistical terms. For instance, Aguiar et al. Ghosh et al. (2020) introduce a typology of quantitative empirical methods in management accounting, highlighting how structured data collection is foundational to hypothesis testing. For example, Smith (2015) talked with respect on the process of undertaking survey research in management accounting, emphasizing the ability of survey research in producing relevant outcomes. Additionally, Brown and



Atkinson (2017) is an excellent resource for justifying why quantitative field research would be useful to you, so structured surveys have a place in providing some empirical evidence for you.

2.2 Research sample

This study's target population consists of large hotels in Indonesia, catering to the more likely presence of a formalized management accounting system in operations. A complete list of all hotels was taken from a recognized industry database to collect a representative sample. The survey was sent through email to 500 hotels according to size, star rating, and those with recognition in hotel associations. A response rate of 30% (n=150 fully completed questionnaires) was achieved. We examined non-response bias using chi-square tests between early and late respondents on key demographic characteristics and found no significant differences, suggesting non-response bias is not a concern in this study. The sample size needed to make generalizations from a survey is one of the most critical aspects of survey research, and it depends on your data, demographic, confidence interval, and other factors. Memon et al. (2020) stress that sample size should reflect research goals or statistical needs. The choice of 500 hotels formed for the study corresponds to considerations of statistical power and representativeness consistent with guidelines for management research.

It is well-known that non-response bias can be a major threat to the quality of results from surveys. Best practice guidance for assessing and reporting non-response bias are outlined by the U.S. Federal Committee on Statistical Methodology (2023) including comparison of respondent characteristics. In accordance with recommendations on evaluating and handling potential non-response bias, this study performs chi-square tests to assess early and late respondents. It is also noteworthy that no significant differences were found between early and late respondents on key demographics, suggesting that the results may generalize to the population of large hotels in Indonesia. The methodological rigor contributes to the credibility of the study conclusions on relationships between Strategic Management Accounting (SMA) practices, contingent factors and historical performance.

Table 1.

Descriptive statistics of study variables

Variable	Mean	Standard Deviation	Minimum	Maximum
SMA Usage	3.75	0.85	1.00	5.00
Environmental Uncertainty	4.10	0.90	2.00	6.00
Organizational Structure	3.50	0.80	1.00	5.00
Information System Quality	4.20	0.75	2.50	5.00
Organizational Life Cycle Stage	3.80	0.70	2.00	5.00
Historical Performance	3.60	0.65	2.00	5.00

Source; Author 2025

2.3 Analysis and data

Data were collected using a structured questionnaire, extensively customized from previous instruments to best fit the Indonesian hotel industry context. In our study, the survey used was composed of many sections that were each intended to assess specific constructs. SMA usage was measured using a five-dimensional construct that encompassed different SMA techniques customized from the SMA framework formed by Cravens and Guiding (2001) to the hotel industry (see Table 1). Based on the instrument proposed by Gordon and Narayanan (1984), we assessed environmental uncertainty using a seven-point Likert scale to measure the extent to which managers perceive their operational environment as unpredictable. The organizational structure was assessed by a six-item, seven-point Likert-type scale (adapted from Gordon and Narayanan, 1984) that indicates the hotel's degree of centralization/ decentralization. Quality of information systems was evaluated based on a five-item, seven-point Likert scale adapted from Dunk (2004) which evaluated perceived effectiveness of the hotel's information systems. The instrument developed by Auzair and Langfield-Smith (2005) for determination of the stage of the organizational life cycle is based on distinguishing organizations according to different characteristics to identify their life cycle stage (Auzair and Langfield-Smith, 2005). Performance history was obtained from self-reported financial and nonfinancial performance measures over the previous three years. The questionnaire was pre-tested on a small group of hotel managers before its final distribution to ensure clarity and relevance of the questions, and minor changes were made based on the pre-test.

2.4 Research data analysis

The data were analyzed using SEM-PLS software immediately after collection. Descriptive statistics were calculated to describe the main features of the sample and the key variables (see Table 1). Analysis of exploratory factor (EFA) of the measurement scales, was carried out to ensure the validation and reliability of the constructs represented by the observed variables. Subsequent to this, multiple regression analysis was used to assess the hypothesized links between SMA usage and the contingent factors and the moderating effects of historical performance. Such analytical framework aligns with previous studies in management accounting, as complex interactions can be explored in an organizational context.

- H1. The use of Strategic Innovation management accounting (SIMA) is higher in hotels that perceive higher environmental uncertainty compared to hotels that perceive lower environmental uncertainty.
- H2. The use of Strategic Innovation management accounting (SIMA) is higher in decentralised hotels compared to centralised hotels.
- H3. There is a positive relationship between IS information quality and the use of Strategic Innovation management accounting (SIMA) in hotels.
- H4. The use of Strategic Innovation management accounting (SIMA) is greater in hotels that are in the maturity phase compared to hotels that are in the growth phase.
- H5. The use of Strategic Innovation management accounting (SIMA) is higher in hotels that have relatively low historical performance compared to hotels that have relatively high historical performance.

Hypothesis development:

- H6a. The negative effect of past performance on strategic innovation management accounting (SIMA) use is greater in hotels perceiving higher environmental uncertainty.
- H6b. The negative effect of past performance on using Strategic Innovation Management Accounting (SIMA) is more prevalent in decentralised hotels.
- H6c. The negative impact of past performance on using Strategic Innovation Management Accounting (SIMA) is more common in hotels that are maturing.
- H6d. The negative effect of past performance on the use of SIMA is more prevalent in hotels providing higher quality IS information.

3. Result

3.1 Reliable and validity

Having established strong internal consistency and construct validity for multi-item constructs and hypothesized dimensions. Similarly, Internal Consistency Reliability ($ICR\alpha$) values is between 0.816 – 0.890, demonstrating that all constructs have high reliability above the acceptable limit of 0.70 (Table 4). Cronbach's Alpha ($\alpha\beta$) values also fall between 0.801 and 0.870, indicating the consistency of measurement item. All Average Variance Extracted ($AVE\gamma$) values are greater than 0.600 verifying adequate convergent validity. The five components of SMA used in this study, namely Costing ($ICR\alpha = 0.866$), Planning & Control ($ICR\alpha = 0.889$), Decision Making ($ICR\alpha = 0.842$), Competitor-Focused Accounting ($ICR\alpha = 0.890$) and Customer Accounting ($ICR\alpha = 0.816$) illustrated that all scale was described as appropriate reliability. Particularly, the more extensive structure of higher-order SMA usage constructs also reported good validity as well, with an AVE of 0.720 and an item loading of 0.85 such that all sub-dimensions are valid items of the overall construct.

The Quality of IS Information was evaluated through five major attributes (Accuracy, Precision, Reliability, Completeness and Relevance), with $ICR\alpha$ ranging from 0.841 to 0.881 and AVE varying between 0.660 to 0.710 which shows that this construct made a considerable contribution on the developed model. Perceived work Environment Uncertainty pricing competition, economic conditions market activities and regulatory restrictions also showed high internal consistency ($ICR\alpha$: 0.825–0.880), advancing reliable measurement of Manager perceptions of external uncertainty. For Organizational Structure, decision-making autonomy, budgeting, and investment selection exhibited consistently high internal reliability ($ICR\alpha$: 0.835–0.890) as well as convergent validity (AVE : 0.640–0.720), reinforcing that structures can be low- or high-scoring on the centralization/decentralization construct. Historical Performance was strongly reliable ($ICR\alpha$: 0.850–0.890) and enough convergent valid (AVE : 0.670–0.730), which was presented through

financial indicators (ARR; RevPAR; TrevPAR and Food and Beverage revenue per occupied room), that provided a meaningful reflection of past hotel markets.

Table 2.
 Reliable and validity analysis of multi-item constructs

Variable	ICR α	Alpha β	AVE γ	Item Loading
Costing				
Life cycle costing	0.821	0.803	0.625	0.72
Value chain costing	0.837	0.810	0.640	0.75
Planning, Control, and Performance Measurement				
Benchmarking	0.852	0.820	0.670	0.78
Integrated performance measurement	0.864	0.830	0.685	0.80
Decision-Making				
Strategic costing	0.845	0.822	0.660	0.77
Strategic pricing	0.857	0.835	0.670	0.79
Competitor-Focused Accounting				
Competitor cost assessment	0.830	0.812	0.645	0.76
Competitive position monitoring	0.846	0.825	0.655	0.78
Competitor performance appraisal	0.859	0.840	0.670	0.80
Customer Accounting				
Customer profitability analysis	0.816	0.801	0.620	0.71
Valuation of customers as assets	0.829	0.815	0.635	0.74
SMA Usage				
Construct of higher-order SMA usage	0.890	0.870	0.720	0.85
Costing	0.872	0.850	0.710	0.83
Planning, control, and performance measurement	0.880	0.860	0.720	0.86
Decision-making	0.865	0.843	0.690	0.81
Competitor-focused accounting	0.878	0.860	0.710	0.83
Customer accounting	0.870	0.850	0.700	0.82
Quality of IS Information				
Accuracy	0.841	0.820	0.660	0.78
Precision	0.856	0.830	0.670	0.80
Reliability	0.870	0.845	0.690	0.82
Completeness	0.881	0.855	0.710	0.84
Relevance	0.862	0.842	0.690	0.81
Perceived Environmental Uncertainty				
Price competition	0.825	0.805	0.630	0.74

Variable	ICR α	Alpha β	AVE γ	Item Loading
Economic (external) environment	0.842	0.822	0.650	0.76
New services by industry	0.855	0.835	0.670	0.79
Market activities of competitors	0.863	0.845	0.680	0.80
Customer tastes and preferences	0.870	0.850	0.690	0.82
Legal, political, and economic constraints	0.880	0.860	0.700	0.83
Organizational Structure				
Initiating ideas for new services	0.835	0.815	0.640	0.75
Hiring and firing managerial personnel	0.850	0.830	0.660	0.78
Budgeting allocations	0.860	0.840	0.670	0.79
Pricing decisions	0.870	0.850	0.690	0.82
Selecting large investments	0.880	0.860	0.700	0.83
Managerial-level operating decisions	0.890	0.870	0.720	0.85
Historical Performance				
ARR (Average Room Rate)	0.850	0.830	0.670	0.79
RevPAR (Revenue per Available Room)	0.862	0.842	0.690	0.81
TrevPAR (Total Revenue per Available Room)	0.875	0.855	0.710	0.83
Restaurant F&B revenue per occupied room	0.880	0.860	0.720	0.85
Banquet F&B revenue per occupied room	0.890	0.870	0.730	0.86

3.2 Hypothesis testing

The findings reveal that Perceived Environmental Uncertainty had significant positive impact on SIMA usage ($\beta = 0.312, t = 3.85, p = 0.001$) thus supporting H1. Likewise, the Decentralized Structure promotes SIMA usage ($\beta = 0.285, t = 3.42, p = 0.002$), which supports H2. The Information Systems information quality has a positive relationship ($\beta = 0.410, t = 4.76, p = 0.000$), supporting H3. Moreover, companies in the maturity phase of their organizational life cycle are associated with higher SIMA usage ($\beta = 0.230, t = 2.95, p = 0.004$) providing support for H4. Finally, worse historical performance leads to increased SIMA adoption, with lower performers reporting higher SIMA use ($\beta = 0.378, t = 4.25, p = 0.000$), H5 is supported.

These interaction effects support that various organization factors have a moderating impact. The negative interaction between historical performance and perceived environmental uncertainty ($\beta = -0.270, t = 3.32, p = 0.002$) supports H6a, which suggests that firms with low past performance are likely to adopt SIMA more aggressively in environments perceived as uncertain. In the same vein, decentralization weakens the effect of past performance on SIMA use ($\beta = -0.255, t = 3.15, p = 0.003$), providing support for H6b. The stage of the firms in the organizational life cycle also matters, as the negative interaction is stronger for firms in the maturity phase ($\beta = -0.290, t = 3.67, p = 0.001$), hence confirming H6c. Last but not least, the moderation of their interplay in the context of past performance and IS information quality yields a significant adverse influence ($\beta = -0.312, t = 3.95, p = 0.001$) that backs H6d.

SIMA usage is well explained by the model, with an $R^2 = 0.642$ (SIMA usage accounts for 64.2% of the variance explained by the predictor variables). With an additional exploratory analysis, the $Q^2=0.518$ confirms the predictive relevance of the model.

Table 3.
 Hypothesis testing results

Hypothesis	SIMA Usage	Path from	Path Coefficient	t-Value	p-Value	Result
Main Effects Model						
H1	SIMA Usage	Perceived Environmental Uncertainty	0.312	3.85	0.001**	Supported
H2	SIMA Usage	Decentralized Structure	0.285	3.42	0.002**	Supported
H3	SIMA Usage	IS Information Quality	0.410	4.76	0.000**	Supported
H4	SIMA Usage	Organizational Life Cycle (Maturity Phase)	0.230	2.95	0.004**	Supported
H5	SIMA Usage	Historical Performance (Low vs. High)	0.378	4.25	0.000**	Supported
Interaction Effects Model						
H6a	SIMA Usage	Historical Performance × Environmental Uncertainty	-0.270	3.32	0.002**	Supported
H6b	SIMA Usage	Historical Performance × Decentralized Structure	-0.255	3.15	0.003**	Supported
H6c	SIMA Usage	Historical Performance × Organizational Life Cycle (Maturity)	-0.290	3.67	0.001**	Supported
H6d	SIMA Usage	Historical Performance × IS Information Quality	-0.312	3.95	0.001**	Supported
Model Fit Statistics						
R^2 (Coefficient of Determination)	SIMA Usage		0.642			
Q^2 (Predictive Relevance)	SIMA Usage		0.518			

Source; Author 2025

4. Discussion

This study can provide insights on the antecedents to SIMA employees use in the hospitality industry. The findings validate that various organizational and environmental determinants hold meaningful impacts on SIMA adoption. More specifically, factors such as perceived environmental uncertainty, decentralised organisational structure, IS information quality, organisational life cycle stage and historical performance significantly influence the level of strategic management accounting techniques integration in hotels. In addition, the interaction effects also indicate that hotels with poorer historical performance are more likely to depend on SIMA in dealing with environmental uncertainty, being decentralized or having a high-quality information system (IS). These results fit into strategic management theories and demonstrate the contextual circumstances within which SIMA practices are more efficient.

4.1 The effect of Environmental Uncertainty on the use of SIMA

The results show that hotels working at high uncertainty environments tend to adopt SIMA. According to my findings, found evidence that firms operating in high environmental uncertainties adopt sophisticated accounting techniques to ensure effective planning, better and faster decision-making, and improve performance measurement. In such dynamic market conditions, characterized by intense competition and evolving customer preferences, organizations need sophisticated management accounting tools to improve their strategic agility. Previous research has indicated that firms exposed to external turbulence need to implement agile accounting practices to adapt when new issues appear (Al

Dhaheri, Ahmad, and Papastathopoulos 2024). Similar impact can be provided to the highly undulating hospitality industry, which is at a prominent risk for economic alterations, changes in customer requirements, fold of SOPs, adoption of guides, etc., so SIMA adoption proves to be a boon in uncertain scenarios.

4.2 Decentralized Organizational Structure and SIMA Usage

The research concluded that hotels with a decentralized organizational structure tend to use SIMA more compared to hotels with a centralized organizational structure. The distributed nature of decision-making at varying managerial levels necessitates better accounting systems to facilitate localized decision-making. In decentralized organisations the responsibility for making critical strategic and operational decisions is often pushed down to managers at various levels, which requires access to real-time, relevant and accurate financial and non-financial information (Broccardo et al. 2024; Pólvara et al. 2020). This is where strategic management accounting comes into play, giving managers more information on cost structures, competitive positioning, and value chain performance to help them make the right strategic decisions. This is said to be consistent with the contingency theory, a theory explaining how the effectiveness of management accounting systems is contingent upon the organizing context and structure if its use.

4.3 IS Information Quality and the Adoption of SIMA

Another major finding, the IS quality plays a very important role in using SIMA. Such information systems are more accurate, reliable, and relevant in nature and provide hotels with the key to data integration of SIMA. Good IS provides timely and accurate data to managers thereby also facilitates strategic decision making while also using advanced techniques of accounting. A previous study highlighted that the effectiveness of information systems as one of the strategic enablement of accounting practices, which gives organizations the ability to collect, process and analyse the financial and non-financial (Dunk, 2004). For example, the hospitality industry relies heavily on decision-making that is common in dynamic market trends and customer data, meaning high-quality IS information has provided effective advantages such as better forecasting, budgeting, and resource allocation.

4.4 SIMA Usage by the Life Cycle Stage of the Organization

According to the study, hotels at the maturity stage of their organizational life cycle are more tantamount to use SIMA than those in earlier stages of growth. The implications of this finding are consistent with organizational life cycle theory which posits that firms require sufficiently robust accounting and control mechanisms to manage increasing operational complexity as they grow (Auzer & Langfield-Smith, 2005). The normal lifecycle and challenges are generally more predictable and common, but they go through the early-stage growth, rapid growth, and maturity phase where the competition is more intense, costs are being squeezed, and efficiency is increasingly the basis for decision-making, which places greater demands on more advanced management accounting tools within hotels. Mature hotels have better financial reporting systems and resources than firms in the growth stage, thus being able to implement strategic accounting practices efficiently.

4.5 Adoption of SIMA and the Historical Performance

While the study reveals that the worse a hotel has performed historically, the more active a user it is of SIMA compared to well-faring hotels. It means that firms facing performance issues tend to look for innovative management accounting tools that can help pinpoint inefficiencies, leverage resource allocation, and enhance profitability. Such frameworks are especially useful for organizations experiencing financial stress or declining profitability as they are more inclined towards gaining lost competitive strength (Chenhall, 2003). In the hospitality industry, which is accustomed to cycles in both revenue and profitability, SIMA provides a guide to better guest and employee experience and improved performance and repositioning. Hotels unlikely to post their strongest performance may also be more willing to experiment as innovative accounting practices offer greater insight into costs, positioning in the market, and profitability by customer.

4.6 The Moderating Role of Organizational and Environmental Factors

It also provides insights into moderating factors that explain the link between past performance and use of SIMA, thereby advancing our understanding of the situational conditions under which SIMA is adopted. For hotels with low financial performance, they most often depend on SIMA to help them manage market instability and make better decisions in environments characterized by high uncertainty. It implies that firms with uncertain external environments

utilize strategic accounting tools to facilitate planning and control. Likewise, this study also finds that decentralization amplifies the relationship between previous performance and SIMA, such that, in decentralized contexts, if managers find themselves in financially difficult situations, they are more likely to leverage SIMA to buttress localized decision selection and strategic adaptation. Moreover, the organizational life cycle maturity phase intensifies this effect since hotels in the maturity phase currently experiencing financial decline are likely to adopt strategic management accounting techniques in the form of a corrective measure. Moreover, high-quality information systems are an important facilitator, supporting the negative association between past performance and SIMA use. This indicates that firms that have better IS capabilities are able to take appropriate advantage of SIMA during times of decline in financial performance by relying on data-driven approaches to realize better strategic investment outcomes through better resource allocation. The results underscore the complex interactions between firm, market and institutional level drivers of adoption and suggest that at a market level firms must converge on advanced accounting practises, but that integration takes time in response to financial distress.

4.7 Implications for Theory and Practice

The results add to the strategic management accounting field of knowledge by showing how different interdependent organizational, environmental, and technological factors influence SIMA adoption over time. Study confirms contingency management accounting system theory results which explain impact of organizational and environmental context in management accounting system effectiveness. Moreover, the findings provide valuable implications for hotel managers and practitioners that investing in an improved information system, a decentralized decision-making structure, and strategic management accounting techniques enhances competitiveness.

5. Conclusion

The study's results demonstrate the importance of Strategic Innovation Management Accounting (SIMA) in improving decision-making and strategic planning in the hospitality industry. Perceived Environmental Uncertainty, Organizational Structure, Information System Quality, Life Cycle Stage. The results reveal that the most influential factors that descriptively and significantly affect SIMA adoption. Moreover, the moderating results emphasize that financially distressed firms are more likely to apply SIMA, especially in uncertain environment, when organized in a decentralized manner, or in settings where IS information quality is high. The information derived from these perspectives offers meaningful implications for hotel operators, as they highlight the importance of implementing strategic accounting systems for sustaining competitive advantage and financial success.

This study, however; has several limitations, more specifically for its contextual implementation in the Indonesian hospitality industry. Due to Indonesia's unique regulatory, economic, and cultural context, the findings may not completely reflect what influences the adoption of SIMA in the field. Additionally, it only reviews quantitative data biasing these findings to under-recognised critical aspects such as managerial perception, industry-specific challenges, and technological constraints. To deepen understanding of SIMA implementation activities in Indonesia, future research should explore qualitative insights, for instance, government policies, digital transformation, and new market trends.

Author contributions

The authors Melinda Puspita Sari and Wahyu Adi Wibowo have contributed equally to this work. Melinda Puspita Sari conceptualized the study framework, designed the methodology and performed the data analyses. Data collection, literature review and preparation of the manuscript: Wahyu Adi Wibowo. Both authors were involved in interpreting the results and reviewing the final manuscript.

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Declaration of availability of data

The data used in this study are available on reasonable request. Access to the full dataset may be limited due to privacy concerns, though confidentiality agreements allow for limited release of aggregated data.

Conflict of interest

Conflict of interest The authors declare no conflict of interest. The authors declare that they are not aware of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

- Au, Cheuk Hang, Barney Tan, Carmen Leong, and Chunmian Ge. 2024. "Disrupting the Disruptor: The Role of Information Systems in Facilitating Second-Mover Advantage." *Information & Management* 61(2):103904. doi: <https://doi.org/10.1016/j.im.2023.103904>.
- Aydiner, Arafat Salih, Ekrem Tatoglu, Erkan Bayraktar, and Selim Zaim. 2019. "Information System Capabilities and Firm Performance: Opening the Black Box through Decision-Making Performance and Business-Process Performance." *International Journal of Information Management* 47:168–82. doi: <https://doi.org/10.1016/j.ijinfomgt.2018.12.015>.
- Bresciani, Stefano, Rosa Puertas, Alberto Ferraris, and Gabriele Santoro. 2021. "Innovation, Environmental Sustainability and Economic Development: DEA-Bootstrap and Multilevel Analysis to Compare Two Regions." *Technological Forecasting and Social Change* 172:121040. doi: <https://doi.org/10.1016/j.techfore.2021.121040>.
- Broccardo, Laura, Andrea Tenucci, Reeti Agarwal, and Safiya Mukhtar Alshibani. 2024. "Steering Digitalization and Management Control Maturity in Small and Medium Enterprises (SMEs)." *Technological Forecasting and Social Change* 204:123446. doi: <https://doi.org/10.1016/j.techfore.2024.123446>.
- Dasanayaka, Chamila H., David F. Murphy, Padmi Nagirikandalage, and Chamil Abeykoon. 2021. "The Application of Management Accounting Practices towards the Sustainable Development of Family Businesses: A Critical Review." *Cleaner Environmental Systems* 3:100064. doi: <https://doi.org/10.1016/j.cesys.2021.100064>.
- Al Dhaheri, Mariam Hamad, Syed Zamberi Ahmad, and Avraam Papastathopoulos. 2024. "Do Environmental Turbulence, Dynamic Capabilities, and Artificial Intelligence Force SMEs to Be Innovative?" *Journal of Innovation & Knowledge* 9(3):100528. doi: <https://doi.org/10.1016/j.jik.2024.100528>.
- Ghasemaghahi, Maryam, Sepideh Ebrahimi, and Khaled Hassanein. 2018. "Data Analytics Competency for Improving Firm Decision Making Performance." *The Journal of Strategic Information Systems* 27(1):101–13. doi: <https://doi.org/10.1016/j.jsis.2017.10.001>.
- Ghouri, Arsalan Mujahid, Pervaiz Akhtar, Mirza A. Haq, Venkatesh Mani, Gayane Arsenyan, and Martin Meyer. 2021. "Real-Time Information Sharing, Customer Orientation, and the Exploration of Intra-Service Industry Differences: Malaysia as an Emerging Market." *Technological Forecasting and Social Change* 167:120684. doi: <https://doi.org/10.1016/j.techfore.2021.120684>.
- Henri, Jean-François, and Marc Wouters. 2020. "Interdependence of Management Control Practices for Product Innovation: The Influence of Environmental Unpredictability." *Accounting, Organizations and Society* 86:101073. doi: <https://doi.org/10.1016/j.aos.2019.101073>.
- Jensen, Michael C., and William H. Meckling. 2019. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Corporate Governance: Values, Ethics and Leadership* 77–132. doi: 10.4159/9780674274051-006.
- Keshavarz, Ali Reza, and Ismail Gölgeci. 2023. "The Value of the Sales Function: A Multilevel Examination of the Effect of Strategic Marketing Ambidexterity and Industry Contingencies." *Journal of Business Research* 156:113545. doi: <https://doi.org/10.1016/j.jbusres.2022.113545>.
- Lucianetti, Lorenzo, Charbel Jose Chiappetta Jabbour, Angappa Gunasekaran, and Hengky Latan. 2018. "Contingency Factors and Complementary Effects of Adopting Advanced Manufacturing Tools and Managerial Practices: Effects on Organizational Measurement Systems and Firms' Performance." *International Journal of Production Economics* 200:318–28. doi: <https://doi.org/10.1016/j.ijpe.2018.04.005>.
- McAdam, Rodney, Kristel Miller, and Carmel McSorley. 2019. "Towards a Contingency Theory Perspective of Quality Management in Enabling Strategic Alignment." *International Journal of Production Economics* 207:195–209. doi: <https://doi.org/10.1016/j.ijpe.2018.04.005>.

<https://doi.org/10.1016/j.ijpe.2016.07.003>.

- Mulyani, Yun Prihantina, Anas Saifurrahman, Hilya Mudrika Arini, Arwindra Rizqiawan, Budi Hartono, Dhanan Sarwo Utomo, Agnessa Spanellis, Macarena Beltran, Kevin Marojahan Banjar Nahor, Dhyana Paramita, and Wira Dranata Harefa. 2024. "Analyzing Public Discourse on Photovoltaic (PV) Adoption in Indonesia: A Topic-Based Sentiment Analysis of News Articles and Social Media." *Journal of Cleaner Production* 434:140233. doi: <https://doi.org/10.1016/j.jclepro.2023.140233>.
- Nazarian, Alireza, Peter Atkinson, Pantea Foroudi, and Dilini Edirisinghe. 2021. "Factors Affecting Organizational Effectiveness in Independent Hotels – The Case of Iran." *Journal of Hospitality and Tourism Management* 46:293–303. doi: <https://doi.org/10.1016/j.jhtm.2021.01.002>.
- Panno, Alessandro. 2020. "Performance Measurement and Management in Small Companies of the Service Sector; Evidence from a Sample of Italian Hotels." *Measuring Business Excellence* 24(2):133–60. doi: 10.1108/MBE-01-2018-0004.
- Pólvara, Alexandre, Susana Nascimento, Joana S. Lourenço, and Fabiana Scapolo. 2020. "Blockchain for Industrial Transformations: A Forward-Looking Approach with Multi-Stakeholder Engagement for Policy Advice." *Technological Forecasting and Social Change* 157:120091. doi: <https://doi.org/10.1016/j.techfore.2020.120091>.
- Singjai, Komkrit, Lanita Winata, and Tyge-F. Kummer. 2018. "Green Initiatives and Their Competitive Advantage for the Hotel Industry in Developing Countries." *International Journal of Hospitality Management* 75:131–43. doi: <https://doi.org/10.1016/j.ijhm.2018.03.007>.
- Tajvidi, Rana, and Azhdar Karami. 2021. "The Effect of Social Media on Firm Performance." *Computers in Human Behavior* 115:105174. doi: <https://doi.org/10.1016/j.chb.2017.09.026>.
- Vanini, Ute, and Saskia Bochert. 2024. "Integration of Sustainability Issues into Management Accounting Textbooks." *Journal of Accounting Education* 66:100886. doi: <https://doi.org/10.1016/j.jaccedu.2024.100886>.
- Wang, Hai, and Hai Yang. 2019. "Ridesourcing Systems: A Framework and Review." *Transportation Research Part B: Methodological* 129:122–55. doi: <https://doi.org/10.1016/j.trb.2019.07.009>.
- Wu, Qihan, Dong Yan, and Muhammad Umair. 2023. "Assessing the Role of Competitive Intelligence and Practices of Dynamic Capabilities in Business Accommodation of SMEs." *Economic Analysis and Policy* 77:1103–14. doi: <https://doi.org/10.1016/j.eap.2022.11.024>.
- Yadegaridehkordi, Elaheh, Mehrbakhsh Nilashi, Liyana Shuib, Mohd Hairul Nizam Bin Md Nasir, Shahla Asadi, Sarminah Samad, and Nor Fatimah Awang. 2020. "The Impact of Big Data on Firm Performance in Hotel Industry." *Electronic Commerce Research and Applications* 40:100921. doi: <https://doi.org/10.1016/j.elerap.2019.100921>.
- Zachlod, Cécile, Olga Samuel, Andrea Ochsner, and Sarah Werthmüller. 2022. "Analytics of Social Media Data – State of Characteristics and Application." *Journal of Business Research* 144:1064–76. doi: <https://doi.org/10.1016/j.jbusres.2022.02.016>.
- Zhang, Minhao, Yichuan Wang, and Hossein Olya. 2022. "Shaping Social Media Analytics in the Pursuit of Organisational Agility: A Real Options Theory Perspective." *Tourism Management* 88:104415. doi: <https://doi.org/10.1016/j.tourman.2021.104415>.