



# Standardized strategy, budget participation through information technology for communication on company performance; A case study

*Estrategia estandarizada, participación presupuestaria a través de la tecnología de la información para la comunicación en el rendimiento de la empresa; un estudio de caso*

Donny Arif<sup>1\*</sup>, Slamet Riyadi<sup>2</sup>, Mulyanto Nugroho<sup>2</sup>

<sup>1</sup>Universitas Maarif Hasyim Latif, Indonesia

<sup>2</sup>Universitas 17 Agustus 1945 Surabaya, Indonesia

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## Abstract

This study analyzes the impact of standardized strategy interpretation processes on company performance and budget participation mediated by information technology for communication to drive budget performance. It uses 135 questionnaire data distributed to cross-functional managers in several hotel companies in Surabaya, East Java Province, Indonesia, using a structural equation model that produces findings that directly and indirectly affect company performance and budget participation. This study expands the literature on economic impact from the point of view of strategic performance appraisal in budgeting and some of the situations that affect firm performance. This research also reveals that correctly interpreting and implementing strategies will reduce managers' distortion in setting targets to encourage budget effectiveness, ultimately creating good company performance.

*JEL Code:* D83, L83, M41, O32

*Keywords:* standardized strategy; budget participation; information technology for communication; firm performance

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\* Corresponding author.

E-mail address: doni\_arif@dosen.umaha.ac.id (D. Arif).

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## Resumen

Este estudio analiza el impacto de los procesos estandarizados de interpretación de estrategias en el rendimiento empresarial y la participación presupuestaria, mediados por tecnologías de la información para la comunicación, para impulsar el rendimiento presupuestario. Se utilizan 135 datos de cuestionarios distribuidos a gerentes interfuncionales de varias empresas hoteleras en Surabaya, provincia de Java Oriental, Indonesia. Este estudio utiliza un modelo de ecuaciones estructurales que produce hallazgos que afectan directa e indirectamente al rendimiento empresarial y la participación presupuestaria. Este estudio amplía la literatura sobre el impacto económico desde la perspectiva de la evaluación del rendimiento estratégico en la presupuestación y algunas de las situaciones que afectan al rendimiento empresarial. Esta investigación también revela que la correcta interpretación e implementación de las estrategias reducirá la distorsión de los gerentes al establecer objetivos para fomentar la eficacia presupuestaria, lo que en última instancia generará un buen rendimiento empresarial.

*Código JEL:* D83, L83, M41, O32

*Palabras clave:* estrategia estandarizada; participación presupuestaria; tecnologías de la información para la comunicación; rendimiento empresarial

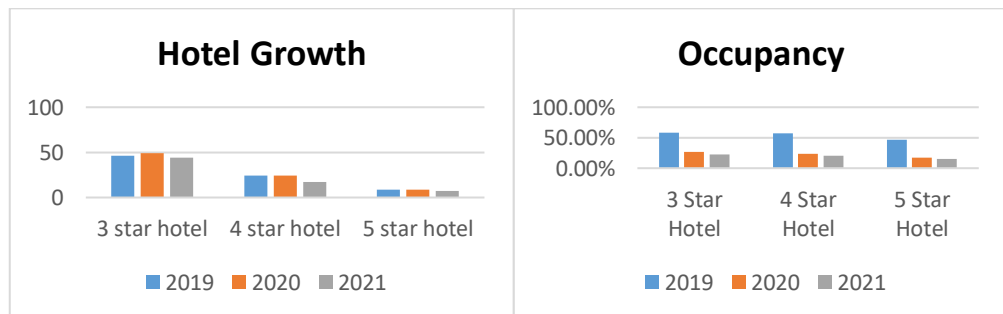
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## Introduction

The theory of the company's strategy interpretation process that is included in the company's action plan is to regulate operational activities and coordinate resources to realize strategy implementation (Eck et al., 2022). The strategy interpretation process (Wang et al., 2022) is organized into five stages: first, setting strategic topics and objectives; second, compiling performance appraisals; third, target setting; fourth, Developing an action plan; Fifth, preparing a budget. Interpreting the company's strategy is critical as a strategic measurement of organizational performance (Franco et al., 2021). The strategic measure of the performance of hotel companies is a control system carried out by managers with financial and non-financial indicators from various perspectives so that companies can change strategy into a set of performance indicators (Hidayah et al., 2020). The strategic performance appraisal system is measured using several strategic standards, such as integrating goals and operations in the long term, ensuring an interconnected strategic interpretation process, being able to provide targets and plans at each strategic level, giving performance appraisal levels, establishing a definite cause-and-effect relationship between goals and objectives. Performance assessment (Ghasemi et al., 2021). The strategic performance appraisal system, as well as the strategic interpretation process, are described in regulations at the Institution, for example, the Ministry of Finance of the Republic of Indonesia Number 22/PMK/02/2021 concerning the measurement and evaluation of budget performance on the implementation of work plans and budgets of state ministries/agencies. The Certified Management Accountant (CMA) explains that the strategy at the top level with managers planning actions must be consistent and sees the causal relationship between financial and non-financial assessments as an important action in strategic interpretation (Annisette,

2017), and has characteristics in the strategic performance appraisal system, for example, in the cause-and-effect relationship of performance appraisal (Agostinho et al., 2019). However, no research has considered the process of interpreting information technology strategy and control and its impact.

There is a need for a more in-depth study of the Standardization of the strategy interpretation process so that this process can determine the steps, objectives, performance appraisals, targets, actions, and budgets that are the foundation of the effectiveness of the hotel company's performance. Standardizing the strategy interpretation process provides an integrated communication pattern used as a source of strategic information in organizations (Englund et al., 2020). This can encourage managers to improve information and technology networks to improve future development and company performance through communication and coordination systems on strategic issues (Lee et al., 2022). The strategy interpretation process is part of a strategic performance management system which is expected to help organizations gain various views on performance and disclose cross-perspective relationships between performance appraisals, actions, and desired results (e.g., market schemes, customer needs, distribution of company assets) and synchronize the process. a more comprehensive way to improve performance (Wiredu et al., 2021). Another finding from a theory explains that when top management looks at performance appraisals for the strategy interpretation process, subsequent action plans and budgets are too focused on performance appraisals at one point, causing the administration to ignore plans to improve several vital sectors of the strategy that has been prepared, which in turn causes management to ignore plans to improve several crucial sectors of the process that has been designed. This will ultimately jeopardize the overall performance of organizations in the hospitality industry (Ali et al., 2020). For this reason, the question of how the Standardization of the interpretation process affects the performance of companies in the hotel industry has not been answered.



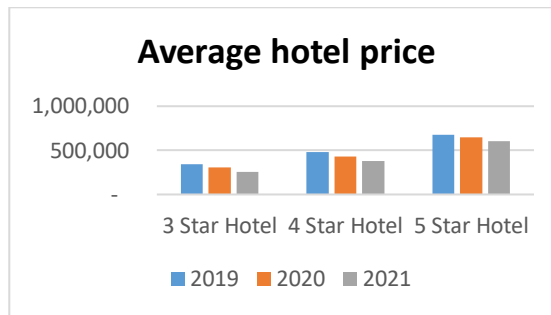


Figure 1. Hotel Growth, Occupancy, and Average hotel price (2019-2021)

Figure 1 shows that the number of three-star hotels in Surabaya increased from 2019 to 2020 but dropped in 2021, whereas the number of four- and five-star hotels climbed from 2019 to 2020 but decreased in 2021. This is possible due to the COVID-19 pandemic in 2020 and 2021, which has reduced hotel growth, occupancy rates, and income for the hospitality business. The occupancy rate for the last three years, 2019, 2020, and 2021, fell dramatically from 2019 to 2020 and continues to fall in 2021. This is a possibility for 3-star, 4-star, and 5-star hotels alike. Similarly, prices and rates for all hotel types, including 3-star, 4-star, and 5-star, have declined from 2019 to 2021.

The effect of standardizing the strategy interpretation process is significant to be studied by hotel companies in Indonesia. Companies in Indonesia, especially in the hotel sector, do not yet have a comprehensive performance appraisal system that describes company value growth due to many internal factors that influence it, such as market conditions and labor (Patil et al., 2022). For this reason, budgeting is essential in the strategic performance appraisal system (Reinking et al., 2020). Indonesia is pluralistic, so it allows management levels to influence significantly and have more power over their subordinates (Ferine et al., 2021). In the budgeting process in several Indonesian companies, it is considered that there is still very minimal involvement of assistants in participating in the process carried out. It creates a lot of doubts about procedural fairness in achieving the company's budget, which will impact decreasing performance (Genthner & Kis-Katos, 2022). With this Standardization, it is hoped that it can help subordinates understand the relationship between strategic policies and budgeting and be more actively involved in the budget, automatically increasing their perception of the fairness of budget procedures to increase organizational performance.

Budgeting is a financial management tool used in all companies in Indonesia (Hariyanti et al., 2015). In reality, the manufacturing process is not comprehensive and very chaotic (Grillos, 2017). Budget calculations can not necessarily be organically combined with corporate strategy and are only based on computing data about the process, which leads to increased confidence in the budget. Many companies in

Indonesia apply a single system in deciding budget policies, which causes management lines not to understand the concept of budgeting that has been prepared fully (Sjahrir et al., 2013). Socialization in the strategy interpretation process obtained from strategic formulation into budgeting does not only look at the relationship between strategy and budgeting. Still, it requires line management to determine implementation plans according to design and manage budgets according to their goals. Thus, line management is not only the recipient of the funding but is directly involved in the company's budgeting process. Previous research has also explained that budgetary participation will increase line management's perception of fairness (Sholihin et al., 2011). Fairness in procedural budgeting is an essential technical implementation to avoid falsified budgets (Witt et al., 2018).

The increasingly fierce and complex competition will encourage the nature of services processed in the hospitality industry, with customer satisfaction being an essential factor in the success of the hotel management system (Busulwa et al., 2022). Previous research explained that the success of hotels in providing exemplary service to customers depends on the performance of managers or leaders; this is due to active participation in budgeting and the use of information technology in communicating (Nair & Choudhary, 2016). By providing an integrated and timely information center, information technology for communication will drive the effectiveness of managers' budgets to improve their performance (Macchione et al., 2013).

Budget participation and company performance have long been discussed as critical issues in company management. This is the following reason for conducting research for a long time; for example (Winata & Mia, 2005) cites many studies on the impact of budget participation of hospitality companies that integrate information technology networks to communicate with customers. Because the hotel industry is oriented to the number of customers who come, the success of its management is very dependent on the participation of line management or managers in setting goals (Uyar & Bilgin, 2011). The budget is the responsibility to be managed in the company's operations. Still, our study will reveal that the lack of literature review influences the hotel industry's budgetary participation in company performance.

This research studies the impact of standardizing the strategy interpretation process on the performance of hotel companies, which is expected to affect company performance directly. Furthermore, using information technology for managerial communication is very important to help management make decisions and create competitive advantages with efficiency in information processing. This study contributes to the consequences of strategy interpretation to provide more literature on the overall company performance appraisal in general and the company's strategic performance appraisal in particular. And proponents of the theory of information technology for communication argue that

developing integrated communication technology will facilitate more effective decision-making and lead to better organizational management.

## Literature review

### *Strategy interpretation process on company performance*

The standard method of strategy interpretation directly encourages adjustments between managers and organizations to improve company performance. The theory of person-organization fit explains that the behavior of individuals and organizations needs to harmonize a balanced culture, values, atmosphere, goals, and habits (Ahmad et al., 2023). In principle, the standard strategy interpretation process aims to improve the suitability of the budget managers' use with their interests. In addition, setting strategic and performance targets is related to performance targets that are continuously evaluated to see gaps so that budget leakage does not occur in the future (Srivastava et al., 2024). Setting strategic goals and performance appraisals related to performance evaluation and compensation will motivate line management to build long-term relationships with the organization and foster a culture and values that align with the company (Zhang et al., 2024). The manager's budget must be prioritized for the organization's benefit; when a manager does not give priority to the organization, misunderstandings can cause each individual involved in the budget to affect work commitment and reduce company performance (Bodhi et al., 2024). Without understanding values and priorities, it will be difficult for managers to assess whether the priorities are being worked on and experience more pressure at work (Biloshapka & Osiyevskyy, 2024). The strategy interpretation process is prepared based on setting strategic objectives as the basis for performance appraisal, and the target-setting process is used as the basis for budgeting. Middle managers can develop business plans through the above goal-setting process, and subordinate managers can better understand the goals set by their superiors by confirming them through budgets that contribute to the achievement of strategic actions between superiors and subordinates (Huertas-Valdivia et al., 2021). This process emphasizes that the integration and alignment of organizational and management goals are important in strategic performance appraisal and positively impact the company (Koseoglu et al., 2022). The agreement of company managers on strategic goals will improve company performance by increasing the success rate of strategy implementation (Bartos et al., 2024; Dang & Wang, 2022). Based on the theoretical analysis above, this paper proposes the following hypotheses:

H1: Standardization of the strategy interpretation process positively impacts company performance.

### *Strategy interpretation process on budget participation*

(Namazi & Rezaei, 2024) illustrates that researchers should not only focus on the impact of budget participation but also on the implementation of the budget to be achieved. Information dysfunction, work dependence, and instability of the work environment significantly affect budgetary participation (Kim et al., 2024). In the strategy interpretation process, setting goals and targets is essential before budgeting is prepared (Biloshapka & Osiyevskyy, 2024). If the line management sector or subordinates participate in setting targets, they will understand how to adjust the performance appraisal to the company's strategy. Create a business plan with detailed budgeting over the long term (Roy, 2022). The company sets performance evaluation assessments and targets (including budgets) based on strategic objectives in standardizing strategy interpretation (Roy, 2022).

With this mechanism, budget submissions by managers and operators will be hoped to increase. When managers at the operational level submit budgets, they will get information from managers at the top level to understand the strategy and strategic goals. Budget participation is an essential method for top-level managers to obtain information regarding the work performed by their subordinates, and it was concluded that the need to share this information would increase budget participation (Hye Jeong & KWON, 2025). For this reason, interpreting the company's strategy has been in line with the Standardization set. Budget participation at all levels of managers will be more priority than in other situations. From the results of the analysis of some of this literature, the following hypotheses are proposed:

H2: Standardization of the strategy interpretation process has a positive impact on budget participation

### *Information technology for communication on budget participation*

Some literature proves information technology administratively for communication has links and relationships with budget participation and company performance. The explanation is the existence of a computer network that can increase the speed, volume, capacity, and efficiency of data managers in interpersonal communication. Therefore, the communication and information patterns are very effective (Villanthenkodath et al., 2022; Owolabi & Yekinni, 2022). Information technology for communication drives company performance by providing innovation in exchanging information across functions, locations, and time zones (Sarfraz et al., 2022). The existence of an integrated computerized network will increase the production, analysis, storage, collection, retrieval, and dissemination of information and data. In the end, it will increase its competitive advantage and expand the network and action process of budget

execution (Sepehrdoust et al., 2022). With several sources of literacy, it can be explained that using information technology for communication can improve management systems and decision-making because the strategy is formed to commit company resources (Butuzova et al., 2022). Information technology for communication can correlate with leadership style in decision-making, such as budget participation which must affect performance (Panagiotopoulos et al., 2022). Improved communication through information technology will form effective and efficient reciprocal adjustments to support participatory decision-making. And also, the use of information technology for communication will provide data in real-time so that participatory decisions can be faster (Bocoya-Maline et al., 2024). With some of this literacy, we conclude that the use of information technology for communication can increase budget participation in company performance, as evidenced by the availability of literature that budget participation positively encourages performance and that participation begins with an effective mechanism for collecting and exchanging information to help managers better understand their work. . The use of information technology for communication by managers across various functions will encourage the exchange of information in real-time so that managers' budget participation is more effective and will determine the improvement of company performance. From the results of the analysis of some of this literature, the following hypotheses are proposed:

H3: The interaction of Information technology for communication and Standardization of the strategy interpretation process has a positive impact on budget participation

### *Budget participation in company performance*

Participation in budgeting is expected to improve company performance; when goals have been planned and agreed upon in a participatory manner, employees will internalize these goals and have personal responsibility for achieving them through involvement in the budget process (Mahboub & Ghanem, 2024). the level of participation in the budget preparation will further improve the company's performance. This is stated in the following hypothesis

H4: Budget participation has a positive effect on company performance

### *Method research design*

This study uses quantitative analysis tools using a questionnaire survey to obtain hypothesis testing data. The questionnaire was created by interviewing the company's finance director to determine the process of interpreting the strategy and making improvements to the questionnaire according to the interview results. Next, we sent questionnaires to 2 company finance directors and an accounting professor for review.

This study measured budget participation, strategy interpretation, information technology adoption, and firm performance using a 1-5 Likert scale, with 1 representing “Strongly Disagree” and 5 representing “Strongly Agree.” Budget participation measures individual involvement in budget preparation, with indicators such as active contribution to budget discussions and appreciation of opinions in the decision-making process. Strategy interpretation measures how individuals understand and implement the firm’s strategy, as measured by their understanding of it and ability to relate it to their job responsibilities. Information technology adoption is measured by how effectively the technology is used to support daily tasks. In contrast, firm performance is measured by individuals’ perceptions of the firm’s success in achieving strategic goals, including innovation and financial efficiency. Information technology also serves as a mediating variable in budget participation, with indicators measuring the extent to which the technology supports budget collaboration and decision-making.

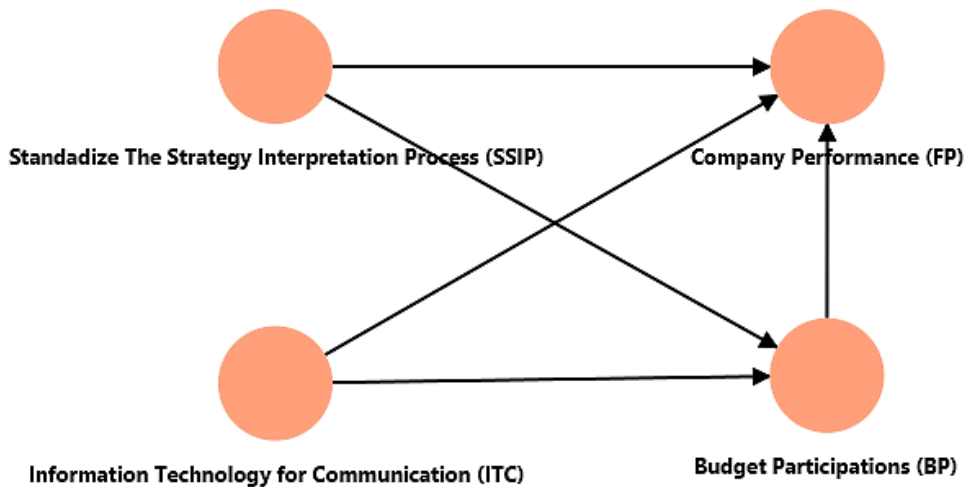


Figure 2. Conceptual Framework

The data in this study were taken from managers of finance and accounting, administration, sales, operations, F & B, and hotel maintenance with 3-5 star ratings in Surabaya, Indonesia. Questionnaires were distributed in 3 batches to hotel managers in the Surabaya area starting in January 2022. Through the campus collaboration network and research institutes, researchers contacted respondents willing to fill out the questionnaire via Whatsapp. All respondents who have filled out and completed the survey scale will re-send it via WhatsApp by uploading the document we sent earlier. There were 135 questionnaires distributed to all managers across hospitality functions, 115 questionnaires were

returned, and 98 were declared valid. The total response rate of respondents reached 85.18%, and the effective response rate was 72.59%. From the invalid data, it is stated that some managers across hotel functions are not involved or have nothing to do with the budgeting and strategy interpretation process prepared by the company's high leadership board.

Table 1  
Sample Distribution

Cross-Function Manager	Number of Valid Distributions	Ratio
Finance and Accounting	24	17.7%
Administration	21	15.5%
Sale	16	11.9%
Operational	20	14.8%
Maintenance	6	4.4%
F & B	8	5.9%
Total	98	72.59%

**Sample Selection Method** In this study, samples were taken from hotel companies located in Surabaya. Sample selection was carried out through a purposive sampling approach, where the hotels involved in this study were selected based on several specific criteria. These criteria include:

1. **Geographic Location:** Hotels located in strategic areas of Surabaya and its surroundings are considered to represent the hotel industry in this region.

2. **Company Scale:** Hotels that have a medium to large scale, based on the number of rooms and employees, so that the data obtained is more relevant to measure the impact of budget participation and information technology implementation on company performance.

3. **Technology Implementation Level:** Hotels that have adopted information technology to support communication and management processes, especially those related to participation in budget preparation.

In addition, to ensure the reliability of the data obtained, the selected hotels are members of the hotel association in Indonesia and have a minimum of 5 years of operational experience. This study involved 25 hotels that met these criteria, with the aim of obtaining relevant and in-depth data on the implementation of standard strategies, budget participation, and the role of information technology in improving company performance.

The Structural Model in this study describes the causal relationship between exogenous variables (budget participation and information technology implementation) and endogenous variables (company performance), which are mediated by the interpretation of the company's strategy. SEM provides an affirmative approach to analyzing the relationship between variables, where each relationship

is tested simultaneously in one model to evaluate how strong the influence of each variable is on the other variables.

The stages of SEM analysis in this study include:

1. Model Specification: Determining the hypothesis of the relationship between variables based on the underlying theory. The relationship between constructs is described in the form of a path diagram that describes the causal flow from the independent variable to the dependent variable, either directly or through mediating variables.

2. Measurement Model: To ensure the reliability and validity of the construct, a measurement model evaluates the relationship between latent variables and the indicators that measure them. Each construct in this study is measured using several indicators relevant to the concept being studied.

3. Model Validation: Testing is carried out to ensure that the model is a good fit with the data used. Various model fit indicators, such as Chi-Square, RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), and TLI (Tucker-Lewis Index), are used to assess whether this model is in accordance with empirical data.

4. Structural Model Estimation: After the validity of the measurement model is confirmed, the structural model is estimated to identify the influence of exogenous variables on endogenous variables. This is done to test the previously formulated hypothesis regarding how budget participation and information technology implementation affect company performance through strategy interpretation.

5. Interpretation of Results: The results of SEM show direct and indirect influences between variables. The path coefficient value measures the magnitude of the influence between variables, and statistical significance tests the research hypothesis. This explanation presents information on how budget participation, information technology implementation, and strategy interpretation can jointly improve company performance in the hospitality sector.

## **Result**

### *Measurement instrument*

The explanatory variable is the Standardization of the strategy interpretation process that refers to the paper (Guenther & Heinicke, 2019) questionnaire developed (Bisbe & Malagueño, 2012). It Provides an understanding of the performance evaluation system, which includes strategic objectives, performance appraisal, target setting, and action plans. This study also adds a budget participation variable to the strategy interpretation process, which is prepared in five steps (Yoshikuni & Albertin, 2018), Namely determining strategic objectives; designing performance appraisals, setting targets for each action;

formulating an action plan; and preparing a budget. Furthermore, information technology for communication consisting of intranet and internet focuses on using computer networks by managers, which is used for internal communication between employees. In contrast, the internet is a communication tool with customers, suppliers, creditors, and parties outside the organization. The instrument of using information technology for communication refers to the theory (Owolabi & Yekinni, 2022) That is, the use of email to communicate, computer networks to access information, external network internet to share, use of the internet to exchange information with external parties, and video conferencing.

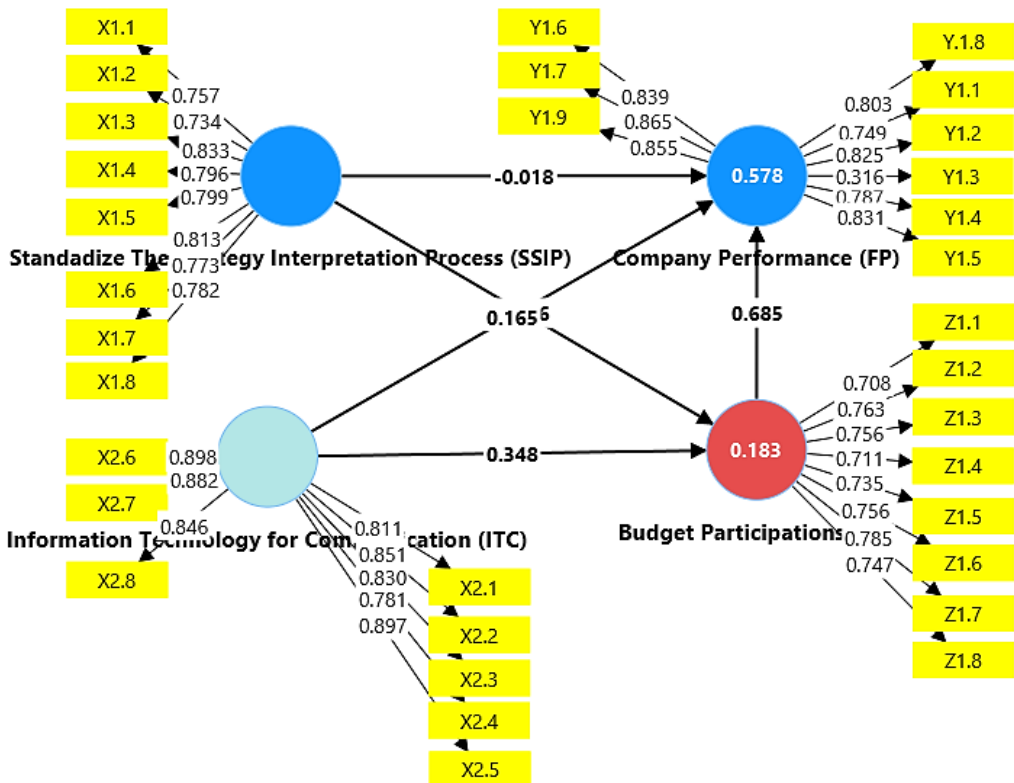


Figure 3. PLS-SEM Algorithm

### Measurement model

Performance appraisal is divided into exploration and incentive-oriented usage (Duan et al., 2022). The use of exploration describes who helps organizations learn through performance feedback and find strategic improvement opportunities; incentive-oriented performance appraisal is used as a measure of

incentive provision. The strategy interpretation process will assist managers in improving internal information and technology networks, taking into account the future of the organization and improving company performance through communication on strategic issues (Wamba-Taguimdje et al., 2020). Therefore, companies are currently adopting a strategy interpretation process with incentive performance measures because this research assessed two financial indicators: earnings before tax and return on equity.

Table 2  
 Coefficients of Latent Variables and Square Roots of AVE

	ITC	BP	SSIP	FP
Information Technology for Communication (ITC)	0.6731	0	0	0
Budget Participation (BP)	0.4223	0.6823	0	0
Standardize the strategy interpretation process (SSIP)	0.5667	0.4211	0.6889	0
Firm Performance (FP)	0.2011	0.3195	0.1914	0.7112

Values in bold indicate AVE

Several hotel companies in Indonesia confirm their move into exploration to see business growth and align budgets with non-financial performance. In the budgeting process, most companies in Indonesia directly predict the achievement of financial statement targets based on historical and past profits and then prepare budget targets and strategies for the future.

Table 3  
 Descriptive Statistics

Variable	Mean	Std. dev	Actual range		Theoret. Range	
			Min	Max	Min	Max
Information Technology for Communication (ITC)	4.11	1.05	1	5	1	5
Budget Participation (BP)	4.72	1.24	1.22	5	1	5
Standardize the strategy interpretation process (SSIP)	4.81	1.32	2.13	5	1	5
Firm Performance (FP)	4.67	1.41	1	5	1	5

In addition to measuring the Standardization of the strategy interpretation process on the budget by managers, this study also highlights budget participation by looking at the involvement of subordinates in the budget formulation process and how to implement the responsibility for implementation. (Macinati et al., 2016). They use a 5-point Likert scale of 1 representing low participation and 5 representing high participation. From the measurement value, the manager's overall score for budget participation is the manager's average score for the five instruments. The reliability test results obtained a Cronbach alpha value of 0.81, which was considered fulfilled. Table 3 shows the descriptive statistical values.

Table 4  
 Inter-correlation matrix for the variables

Variable	1	2	3	4
Firm Performance (FP)	1.00			
Budget Participation (BP)	0.36	1.00		
Standardize the strategy interpretation process (SSIP)	0.23	0.18	1.00	

Data sources that can be informed through demographics show that most hotel managers have an average age of 35 years and are dominated by women, with 65% bachelor's degrees. The most significant percentage of the sample is indicated by financial managers who have an academic degree in accounting and are certified. Table 4 shows the correlation value between variables. Budget participation, Standardization of the strategy interpretation process, and information technology for communication do not correlate with the reference value of  $r < 0.04$ , so using the regression model to test the hypothesis is considered appropriate.

Table 5  
 Goodness-of-Fit Indices for the Structural Model

Goodness-of-Fit Index	Threshold	Model Value	Interpretation
Chi-Square ( $\chi^2$ )	$p > 0.05$	145.32 ( $p = 0.001$ )	Not a good fit ( $p < 0.05$ )
Root Mean Square Error of Approximation (RMSEA)	$< 0.08$	0.047	Good fit (RMSEA $< 0.08$ )
Comparative Fit Index (CFI)	$> 0.90$	0.92	Acceptable fit (CFI $> 0.90$ )
Tucker-Lewis Index (TLI)	$> 0.90$	0.91	Acceptable fit (TLI $> 0.90$ )
Standardized Root Mean Square Residual (SRMR)	$< 0.08$	0.054	Good fit (SRMR $< 0.08$ )

The results from the goodness-of-fit indices indicate that the structural model fits the data well. The RMSEA value of 0.047 is below the threshold of 0.08, indicating a good fit. The CFI and TLI values are above 0.90, suggesting an acceptable model fit. The SRMR is 0.054, also below the 0.08 threshold, reinforcing the overall good fit of the model. Although the Chi-Square value is significant ( $p < 0.05$ ), which might suggest a poor fit, this test is sensitive to sample size and is expected to have significant Chi-Square values in larger samples. Therefore, based on other fit indices, the model is considered acceptable.

### Hypothesis test

Hypothesis testing is carried out using the structural equation model shown in table 5 and figure 3. The estimated coefficient value of the standardized strategy interpretation process (SSIP) path to Firm Performance (FP) is 0.125, with a significant level of 1%, explaining that interpretation directly affects company performance. So that it meets hypothesis 1 can be accepted. Then the SSIP variable also affects budget participation directly with an estimated coefficient value of 0.327 so that hypothesis 2 can be accepted, and indirectly also affects the company's performance of 0.472 with a significance level of 1%. Furthermore, hypothesis 3 explains that information technology for communication affects budget participation by 0.246, proving that the third hypothesis can be accepted. With the certainty of the results between budget participation and information technology for communication as a controller, it has been confirmed that the standardization process of strategy interpretation can run well so that the involvement of cross-functional managers in the budget design and implementation can function optimally.

Table 6  
 Path Analysis Model

	Estimated Coefficient	Mean Value	SD	T
SSIP → FP (H1)	0.125***	0.121	0.046	3.334
SSIP → BP (H2)	0.327***	0.312	0.043	2.978
ITC → BP (H3)	0.246***	0.245	0.031	2.856
BP → FP	0.472***	0.471	0.053	7.674

\*\*\* Indicate sig. At the 1% level

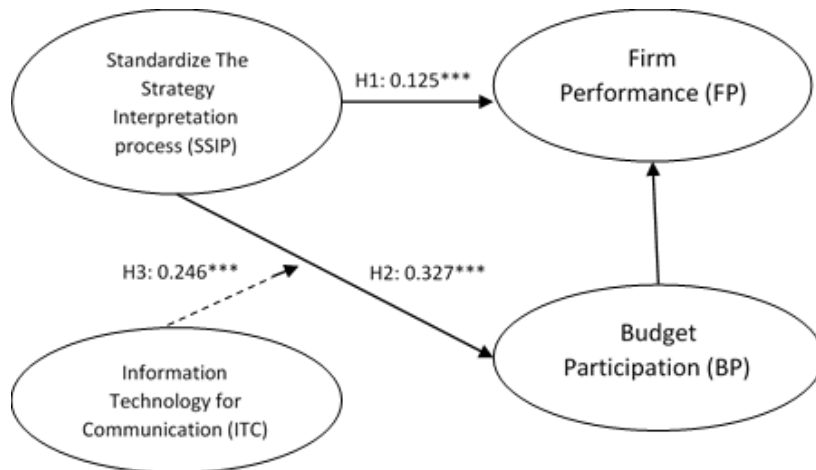


Figure 4. Result for SEM

## **Discussion**

The test results have been carried out, and we see that the strategy interpretation process carried out by several hotel companies in Indonesia has an entire strategic plan in the literature sources (Maiga & Jacobs, 2007). Explain the process of strategy interpretation is less systematic. In more detail, most companies in the hospitality sector do not yet have strategic performance measures integrated with the company's strategy and targets. For this reason, the second method proposed by (Duan et al., 2022) is Used to formulate and use the same performance appraisal strategically, and the results become an essential way for companies to implement the strategy. Another finding regarding the structure of action plans and budgets shows that most hotel companies use systems that are less effective in design and are not formulated according to the previous budget but set a budget first and then plan what is done for operations. So we conclude that this phenomenon occurs because of the incredible power of superiors who have a more remarkable ability to decide the use of the budget before listening to the plans of the managers under them.

The problem is that the budget has lost its dignity in adjusting resource plans to changes in the company's environmental situation and cannot provide the appropriate direction in the business context; therefore, we, as researchers, suggest that hotel companies in Indonesia more often adjust their action plans to changes. A strategy that occurs at any time due to many factors and uses real-time estimates with information technology-based communication technology in moving and more dynamic to improve the company's performance strategy.

The use of information technology for communication has been proven by the results of structural testing that, with the help of utilizing information in real-time, it will increase the awareness of all cross-functional managers about the operational environment. This will effectively make the Standardization of the strategy interpretation process achievable and resource management perform well. For example, managers using information technology for communication will be able to elaborate a vast network, contact, and access information about work from within and the external environment. Companies are required to actively participate in setting budgets accurately.

From the results of hypothesis testing and previous explanations, it can be seen that the company's performance is influenced by several variables, including the Standardize Strategy Interpretation process (SSIP), Budget Participation (BP), and Information Technology for Communication (ITC), this can be explained by; (1) A Greater Focus on Standardization In other words, if the Standardize process goes according to plan, the Strategy Interpretation process will benefit the organization's performance. If the Strategy Interpretation process goes up by one unit, the business's overall performance will increase by 0.125 units. (2) Raising the Level of Standardization According to

the findings of the tests conducted, the process of Strategy Interpretation will have a favorable effect on budget participation. This is based on the Standardize. After a rise of 0.327 units in employee engagement in budgeting, the Strategy Interpretation process will go up by a total of 0.327 units. This will be followed by an increase of 1 team in the Strategy Interpretation process. (3) The use of information technology for communication can operate as a moderating variable in the link between the Standardize the Strategy Interpretation process and the Budget Participation. Standardizing the Strategy Interpretation process's relationship with Information Technology for Communication's influence on budget participation is estimated to have a magnitude of 0.246 units concerning budget participation. This indicates that the Standardize the Strategy Interpretation process can be sped up with the help of Information Technology for Communication's ability to expedite its influence on budget participation. (4) The results of the hypothesis testing indicate that a high level of participation in budgeting by employees is related to an increase in the level of performance achieved by the company. This finding can be interpreted as follows: if budget participation increases or increases by one unit, the company's performance will increase by 0.472.

This study also shows that budget participation, standardized strategy interpretation, and the application of information technology significantly impact company performance in the hotel industry. This is important because it provides a deeper understanding of how employee involvement in the budgeting process can improve the company's operational effectiveness. Budget participation allows employees at various levels to contribute to the decision-making process, which can increase their commitment to achieving company targets.

In the hotel industry, which relies heavily on service quality and operational efficiency, staff involvement through budget participation provides a direct view of individuals involved in the hotel's day-to-day activities. This helps management make more realistic and implementable budget decisions, which in turn contributes to improving overall company performance.

This study contributes to the literature on hospitality and business management by highlighting the vital role of transparent and standardized strategy interpretation. When a company has a well-defined and consistently implemented strategy, it facilitates the process of participation in budgeting. It allows for more efficient use of information technology for interdepartmental communication. In the hospitality industry, where market dynamics and consumer demands can change rapidly, a solid strategy and good participation enable companies to be more adaptive and responsive to these changes.

Furthermore, the findings also confirm that information technology plays a catalyst role in accelerating the decision-making process and increasing the accuracy of information needed for budget execution. Effective use of information technology can reduce communication errors and ensure that all stakeholders quickly and accurately access strategic information.

In practice, the results of this study indicate that hotel companies need to pay more attention to the implementation of information technology that supports communication and budget management. In addition, involving staff in the budgeting process not only increases their commitment to company targets but also allows for better and more accurate budget decisions.

The relationship between budget participation, strategy interpretation, and information technology provides a guide for hotel companies to create a collaborative working environment where all parties are involved in the financial and operational planning process. Consistent implementation of this strategy can improve operational efficiency and service quality, which will ultimately have a positive impact on customer satisfaction and company profitability.

## **Conclusions**

This study uses five instruments to examine the differences in the interpretation of strategies and their impact on budget participation and company performance, supported by the role of information technology in communication. The empirical results demonstrate that the five components of the strategy interpretation process strategic objectives, performance appraisals, targets, action plans, and budgeting consistently influence company performance when structured according to a standardized framework.

Furthermore, budget participation mediated by information technology for communication significantly enhances the effectiveness of strategic and operational alignment across organizational levels. The integration of IT enables real-time information sharing and collaborative decision-making, which facilitates more effective budget participation and ultimately improves firm performance. This finding aligns with (Pulkkinen et al., 2024), who emphasize the critical role of IT capabilities in strengthening participatory budgeting and enhancing organizational outcomes.

Compared to previous studies that primarily focused on budget participation or IT adoption in isolation (Li et al., 2025), this research contributes a more comprehensive understanding by highlighting the synergistic effects of standardized strategy interpretation, participatory budgeting, and IT-enabled communication on performance. Additionally, this study provides new empirical insights from the hospitality industry in an emerging economy context (Indonesia), which has been underrepresented in prior research (Bocoya-Maline et al., 2024).

These findings suggest that managers should prioritize the integration of strategic planning processes with participatory budgeting practices, supported by advanced information systems, to achieve superior organizational performance. Future research could further explore the dynamic interactions between these elements across different industries and cultural settings.

## References

- Agostinho, F., Oliveira, M. W., Pulselli, F. M., Almeida, C. M. V. B., & Giannetti, B. F. (2019). Emergy accounting as a support for a strategic planning towards a regional sustainable milk production. *Agricultural Systems*, 176, 102647. <https://doi.org/10.1016/j.agsy.2019.102647>
- Ahmad, Z., Chan, W. M., & Oon, E. Y. N. (2023). Does congruence between a descendant entrepreneur's personality traits and family business values matter for succession? *Frontiers in Psychology*, 14, 1043270.
- Ali, S., Peters, L. D., Khan, I. U., Ali, W., & Saif, N. (2020). Organizational Learning and Hotel Performance: The Role of Capabilities' Hierarchy. *International Journal of Hospitality Management*, 85, 102349. <https://doi.org/10.1016/j.ijhm.2019.102349>
- Annisette, M. (2017). Discourse of the professions: The making, normalizing and taming of Ontario's "foreign-trained accountant." *Accounting, Organizations and Society*, 60, 37–61. <https://doi.org/10.1016/j.aos.2017.06.006>
- Bartos, L. J., Posadas, M. P., Wrapson, W., & Krägeloh, C. (2024). The CRAFT Program: Mindfulness and yoga for enhancing the well-being and academic experience of higher education student musicians. *Journal of Humanistic Psychology*, 00221678241233991.
- Biloshapka, V., & Osiyevskyy, O. (2024). Effective planning in a dynamic world: the SVEO strategic agenda framework. *Rutgers Business Review*, 9(2), 175–189.
- Bisbe, J., & Malagueño, R. (2012). Using strategic performance measurement systems for strategy formulation: Does it work in dynamic environments? *Management Accounting Research*, 23(4), 296–311. <https://doi.org/10.1016/j.mar.2012.05.002>
- Bocoya-Maline, J., Calvo-Mora, A., & Rey Moreno, M. (2024). Predictive and mediation model for decision-making in the context of dynamic capabilities and knowledge management. *Management Decision*, 62(7), 2164–2188.
- Bodhi, R., Chaturvedi, S., & Purohit, S. (2024). The influence of organizational commitment on employee green behavior: mediating role of work-related social media use. *International Journal of Manpower*.
- Busulwa, R., Pickering, M., & Mao, I. (2022). Digital transformation and hospitality management competencies: Toward an integrative framework. *International Journal of Hospitality Management*, 102, 103132. <https://doi.org/10.1016/j.ijhm.2021.103132>
- Butuzova, O., Pakudin, N., Minarsky, A., Bessonov, N., & Morozova, N. (2022). Developmental graphs comparison strategy for analysis of pattern formation and phylogeny. *Journal of Theoretical Biology*, 532, 110925. <https://doi.org/10.1016/j.jtbi.2021.110925>

- Claver-Cortés, E., Molina-Azorín, J. F., & Pereira-Moliner, J. (2006). Strategic groups in the hospitality industry: Intergroup and intragroup performance differences in Alicante, Spain. *Tourism Management*, 27(6), 1101–1116. <https://doi.org/10.1016/j.tourman.2005.11.006>
- Dang, V. T., & Wang, J. (2022). Building competitive advantage for hospitality companies: The roles of green innovation strategic orientation and green intellectual capital. *International Journal of Hospitality Management*, 102, 103161. <https://doi.org/10.1016/j.ijhm.2022.103161>
- Duan, W., Li, H., Sun, J., & Yang, G. (2022). Standardization of the strategy translation process, procedural fairness in budgeting and firm performance. *China Journal of Accounting Research*, 15(3), 100254. <https://doi.org/10.1016/j.cjar.2022.100254>
- Eck, T., Ellis, G., & Jiang, J. (2022). Effects of mindful interpretation strategies on interpretation value-during-use and interpretation value-after-use. *Journal of Outdoor Recreation and Tourism*, 39, 100527. <https://doi.org/10.1016/j.jort.2022.100527>
- El-Hindawy, M. A. M., & Alamas, A. M. S. (2014). Measurement of the Strategic Performance of Hospitality in the Kingdom of Saudi Arabia: a balanced scorecard Approach (BSC). *Arab Economic and Business Journal*, 9(1), 12–26. <https://doi.org/10.1016/j.aebj.2013.02.001>
- Englund, T. R., Hedrick, V. E., Duffey, K. J., & Kraak, V. I. (2020). Evaluation of integrated marketing communication strategies used for the Fruits & Veggies Campaign in California and Virginia. *Preventive Medicine Reports*, 18, 101062. <https://doi.org/10.1016/j.pmedr.2020.101062>
- Ferine, K. F., Aditia, R., Rahmadana, M. F., & Indri. (2021). An empirical study of leadership, organizational culture, conflict, and work ethic in determining work performance in Indonesia's education authority. *Heliyon*, 7(7), e07698. <https://doi.org/10.1016/j.heliyon.2021.e07698>
- Franco, N. G., Almeida, M. F. L., & Calili, R. F. (2021). A strategic measurement framework to monitor and evaluate circularity performance in organizations from a transition perspective. *Sustainable Production and Consumption*, 27, 1165–1182. <https://doi.org/10.1016/j.spc.2021.02.017>
- Genthner, R., & Kis-Katos, K. (2022). Foreign investment regulation and firm productivity: Granular evidence from Indonesia. *Journal of Comparative Economics*, 50(3), 668–687. <https://doi.org/10.1016/j.jce.2022.02.003>
- Ghasemi, B., Khalijian, S., Daim, T. U., & Mohammadipirlar, E. (2021). Knowledge management performance measurement based on World-Class Competitive Advantages to develop strategic-

- oriented projects: Case of Iranian oil industry. *Technology in Society*, 67, 101691.  
<https://doi.org/https://doi.org/10.1016/j.techsoc.2021.101691>
- Grillos, T. (2017). Participatory Budgeting and the Poor: Tracing Bias in a Multi-Staged Process in Solo, Indonesia. *World Development*, 96, 343–358.  
<https://doi.org/https://doi.org/10.1016/j.worlddev.2017.03.019>
- Guenther, T. W., & Heinicke, A. (2019). Relationships among types of use, levels of sophistication, and organizational outcomes of performance measurement systems: The crucial role of design choices. *Management Accounting Research*, 42(July 2018), 1–25.  
<https://doi.org/10.1016/j.mar.2018.07.002>
- Hariyanti, W., Purnamasari, P., & Magnaz Lestira O. (2015). Pluriform Motivation as Antecedent and its Relationships to Budgeting Participation and Managerial Performance (Empirical Study on Manufacturing Companies Listed on Indonesian Stock Exchange). *Procedia - Social and Behavioral Sciences*, 211, 836–843.  
<https://doi.org/https://doi.org/10.1016/j.sbspro.2015.11.110>
- Hidayah, N., Dewi, A., & Listiowati, E. (2020). Remuneration as a strategy to improve service quality, cost-effectiveness, and organizational performance of private hospitals. *Enfermería Clínica*, 30, 179–182. <https://doi.org/https://doi.org/10.1016/j.enfcli.2020.06.077>
- Huertas-Valdivia, I., Rojo Gallego-Burín, A., Castillo, A., & Ruiz, L. (2021). Why don't high-performance work systems always achieve superior service in hospitality? The key is servant leadership. *Journal of Hospitality and Tourism Management*, 49, 152–163.  
<https://doi.org/https://doi.org/10.1016/j.jhtm.2021.09.007>
- Hye Jeong, K. O. O., & KWON, K. H. (2025). A Meta-Analysis Study on the Factors Influencing Entrepreneurship Performance in the Beauty Industry. *Journal of Distribution Science*, 23(2), 77–89.
- Kim, L., Maijan, P., & Yeo, S. F. (2024). Developing customer service quality: Influences of job stress and management process alignment in banking industry. *Sustainable Futures*, 8, 100311.
- Koseoglu, M. A., Wong, A. K. F., Kim, S. (Sam), & Song, S. Y. (2022). Tracing knowledge creation and dissemination of strategic management research in hospitality scholarship from 1960 to 2020. *International Journal of Hospitality Management*, 104, 103247.  
<https://doi.org/https://doi.org/10.1016/j.ijhm.2022.103247>
- Lee, H., Ahn, H., & Park, Y. D. (2022). Performance analysis of coexistence of traditional communication system and emerging semantic communication system. *ICT Express*.  
<https://doi.org/https://doi.org/10.1016/j.icte.2022.04.001>

- Li, R., Wang, Q., & Qu, T. (2025). Transparency and citizen satisfaction: a meta-analysis and future research agenda. *Public Management Review*, 1–35.
- Macchione, N., Wooten, W., Yphantides, N., & Howell, J. R. (2013). Integrated Health and Human Services Information Systems to Enhance Population-Based and Person-Centered Service. *American Journal of Preventive Medicine*, 45(3), 373–374. <https://doi.org/https://doi.org/10.1016/j.amepre.2013.06.001>
- Macinati, M. S., Bozzi, S., & Rizzo, M. G. (2016). Budgetary participation and performance: The mediating effects of medical managers' job engagement and self-efficacy. *Health Policy*, 120(9), 1017–1028. <https://doi.org/https://doi.org/10.1016/j.healthpol.2016.08.005>
- Mahboub, R., & Ghanem, M. G. (2024). The mediating role of knowledge management practices and balanced scorecard in the association between artificial intelligence and organization performance: evidence from MENA region commercial banks. *Cogent Business & Management*, 11(1), 2404484.
- Maiga, A. S., & Jacobs, F. A. (2007). The Moderating Effect of Manager's Ethical Judgment on the Relationship between Budget Participation and Budget Slack. *Advances in Accounting*, 23, 113–145. [https://doi.org/https://doi.org/10.1016/S0882-6110\(07\)23005-6](https://doi.org/https://doi.org/10.1016/S0882-6110(07)23005-6)
- Nair, G. K., & Choudhary, N. (2016). Influence of critical success factors of total quality management on financial and non-financial performance of hospitality industry: an empirical study. *International Journal of Productivity and Quality Management*, 17(4), 409–436. <https://doi.org/10.1504/IJPM.2016.075243>
- Namazi, M., & Rezaei, G. (2024). Modelling the role of strategic planning, strategic management accounting information system, and psychological factors on the budgetary slack. *Accounting Forum*, 48(2), 279–306.
- Owolabi, A. O., & Yekinni, O. T. (2022). Utilisation of information and communication technologies for agricultural extension service delivery in public and non-public organisations in southwestern Nigeria. *Heliyon*, 8(9), e10676. <https://doi.org/https://doi.org/10.1016/j.heliyon.2022.e10676>
- Panagiotopoulos, P., Protogerou, A., & Caloghirou, Y. (2022). Dynamic capabilities and ICT utilization in public organizations: An Empirical testing in local government. *Long Range Planning*, 102251. <https://doi.org/https://doi.org/10.1016/j.lrp.2022.102251>
- Patil, A., Madaan, J., Chan, F. T. S., & Charan, P. (2022). Advancement of performance measurement system in the humanitarian supply chain. *Expert Systems with Applications*, 206, 117844. <https://doi.org/https://doi.org/10.1016/j.eswa.2022.117844>

- Pulkkinen, M., Sinervo, L.-M., & Kurkela, K. (2024). Premises for sustainability–participatory budgeting as a way to construct collaborative innovation capacity in local government. *Journal of Public Budgeting, Accounting & Financial Management*, 36(1), 40–59.
- Reinking, J., Arnold, V., & Sutton, S. G. (2020). Synthesizing enterprise data to strategically align performance: The intentionality of strategy surrogation. *International Journal of Accounting Information Systems*, 36, 100444. <https://doi.org/https://doi.org/10.1016/j.accinf.2019.100444>
- Roy, S. (2022). Optimizing safety budget allocation in process industry using risk metrics. *Journal of Loss Prevention in the Process Industries*, 79, 104832. <https://doi.org/https://doi.org/10.1016/j.jlp.2022.104832>
- Sarfraz, M., Naseem, S., & Mohsin, M. (2022). Adoption of renewable energy, natural resources with conversion information communication technologies and environmental mitigation: Evidence from G-7 countries. *Energy Reports*, 8, 11101–11111. <https://doi.org/https://doi.org/10.1016/j.egy.2022.08.248>
- Sepehrdoust, H., Ahmadvand, S., & Mirzaei, N. (2022). Impact of information, communication technology and housing industry on financial market development. *Technology in Society*, 69, 101962. <https://doi.org/https://doi.org/10.1016/j.techsoc.2022.101962>
- Sholihin, M., Pike, R., Mangena, M., & Li, J. (2011). Goal-setting participation and goal commitment: Examining the mediating roles of procedural fairness and interpersonal trust in a UK financial services organisation. *The British Accounting Review*, 43(2), 135–146. <https://doi.org/https://doi.org/10.1016/j.bar.2011.02.003>
- Sjahrir, B. S., Kis-Katos, K., & Schulze, G. G. (2013). Political budget cycles in Indonesia at the district level. *Economics Letters*, 120(2), 342–345. <https://doi.org/https://doi.org/10.1016/j.econlet.2013.05.007>
- Srivastava, R. P., Kumar, S., & Tiwari, A. (2024). Continuous emission monitoring systems (CEMS) in India: Performance evaluation, policy gaps and financial implications for effective air pollution control. *Journal of Environmental Management*, 359, 120584.
- Uyar, A., & Bilgin, N. (2011). Budgeting practices in the Turkish hospitality industry: An exploratory survey in the Antalya region. *International Journal of Hospitality Management*, 30(2), 398–408. <https://doi.org/https://doi.org/10.1016/j.ijhm.2010.07.011>
- Villanthenkodath, M. A., Ansari, M. A., Kumar, P., & Raju, Y. N. (2022). Effect of information and communication technology on the environmental sustainability: An empirical assessment for South Africa. *Telematics and Informatics Reports*, 7, 100013. <https://doi.org/https://doi.org/10.1016/j.teler.2022.100013>

- Wamba-Taguimdje, S. L., Fosso Wamba, S., Kala Kamdjoug, J. R., & Tchatchouang Wanko, C. E. (2020). Influence of artificial intelligence (AI) on firm performance: the business value of AI-based transformation projects. *Business Process Management Journal*, 26(7), 1893–1924. <https://doi.org/10.1108/BPMJ-10-2019-0411>
- Winata, L., & Mia, L. (2005). Information technology and the performance effect of managers' participation in budgeting: evidence from the hotel industry. *International Journal of Hospitality Management*, 24(1), 21–39. <https://doi.org/https://doi.org/10.1016/j.ijhm.2004.04.006>
- Wiredu, G. O., Boateng, K. A., & Effah, J. K. (2021). The platform executive: Technology shaping of executive cognition during digital service innovation. *Information & Management*, 58(4), 103469. <https://doi.org/https://doi.org/10.1016/j.im.2021.103469>
- Witt, K., Whitton, J., & Rifkin, W. (2018). Is the gas industry a good neighbour? A comparison of UK and Australia experiences in terms of procedural fairness and distributive justice. *The Extractive Industries and Society*, 5(4), 547–556. <https://doi.org/https://doi.org/10.1016/j.exis.2018.09.010>
- Yoshikuni, A. C., & Albertin, A. L. (2018). Effects of strategic information systems on competitive strategy and performance. *International Journal of Productivity and Performance Management*, 67(9), 2018–2045. <https://doi.org/10.1108/IJPPM-07-2017-0166>
- Zhang, J., Jehangir, F. N., Yang, L., Tahir, M. A., & Tabasum, S. (2024). Competitive advantage and firm performance: The role of organizational culture, organizational innovation, and knowledge sharing. *Journal of the Knowledge Economy*, 1–27.