



### Studies Effectiveness System Management Operational For Optimization Costs in Industry Hospitality

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Abstract Industry hospitality face challenge significant in manage cost operational consequence pressure competition and improvement price. Effectiveness system management good operational become important For help hotels maintain Power competition without sacrifice quality services . Research This aiming For evaluate effectiveness system management operational in optimize costs in several starred hotels in Indonesia, especially through management power work, energy, and food and beverages. Research This use approach quantitative with method descriptive-analytical. Data obtained of the 50 hotels that have implement system management based on technology. Instruments study covering questionnaire and interview structured analyzed use statistics descriptive and regression multiple For identify influence system management to subtraction costs . Research results show that automation and usage technology in management power Work succeed reduce cost up to 15%, while implementation system management energy can reduce cost utilities up to 20%. In addition that, the implementation management inventory data based reduce waste food up to 30%, which has an impact positive on efficiency cost operational. Conclusion from study This is that system management operational based on technology proven effective in optimize costs, and results This offer guide for hotel manager for increase efficiency operational in a way overall.

**Keywords** Management operational , optimization cost , industry hospitality , efficiency energy , management power Work

### **1.** Introduction

Industry hospitality has be one of sector an important economy in many countries, especially those that depend on tourism. In a number of decade Lastly, growth sector This very fast, but challenge main ones that often faced by the hotel is height cost operational, which can reduce profitability in a way significant. In the middle competition tight and fluctuating request, hotel need optimize cost operational they For still competitive. Effectiveness system management operational become component key in reduce expenditure that is not need, at the same time increase efficiency in a way overall.

A number of factor main contributors to the increase cost hotel operations including is fluctuation price energy, inflation cost power work, and needs will improvement standard service. First, fluctuations price energy, which is primarily caused by global market instability, can increase cost utilities up to 20% in short

period of time . Second , inflation affects cost power Work result in height expenditure For wages employees , who are component the biggest from cost hotel operations . Third , increasing standard service in line with increasing expectation consumers . Hotels need to provide more facilities good and comfortable experience For interesting customers , who need investment addition in equipment , maintenance and training staff .

Besides that , adoption digital technology , although bring in profit in term long , also become burden cost alone at the stage implementation . System digitalization and automation , such as device soft management occupancy and tracking supply in real-time, requiring sufficient cost big , good For implementation and also maintenance . All factor This push cost operational the more height , and role system management effective operations the more critical For ensure that expenditure can minimized without sacrifice quality service .

Consequence from factors said , many hotels experienced decline profitability and difficulty in guard stability finance . Based on survey conducted by Hospitality Financial and Technology Professionals (HFTP) 2022, around 30 % of small hotels until middle class in the Asia- Pacific region experience decreasing profit margins by 10-15% due to surge cost operational . Impact This also has an impact on the hotel's ability to invest in repair facility or improvement services , which in turn can influence satisfaction customers and levels retention . Some hotels even forced reduce amount staff or close a number of facility For reduce expenditure , potential measures lower reputation and satisfaction visitor .

On the other hand , the pressure ongoing costs increase push company For more open to innovation in system management operational . Hotels that have apply technology data- based and analysis , such as cost and system monitoring process automation , capable of show subtraction cost operational up to 20% compared to hotels that are still use method conventional . This is show that implementation system management effective operations No only capable overcome burden costs , but also increases Power compete .

Study This focus on variables system management operational in context optimization cost . System management operational covers a series of processes and tools designed For help company in planning , coordinating and controlling activity operational they with objective reach efficiency optimal cost .

Study about effectiveness system management operational in control costs in industry hospitality very urgent . According to Global Hotel Study 2023 report , costs average operational in the sector hospitality experience a 10-15% increase in five years final consequence inflation and increase wages . As a result , many hotels are having difficulty guard balance between quality services and costs . Considering condition said , the importance of develop a system that can minimize cost while still maintain standard service become the more urge .

Based on data from the Hotel Industry Cost Management Survey 2022, the cost hotel operations can grouped to in a number of category main : power work (40%), energy and utilities (25%), food and beverages (15%), care and hygiene (10%), and the remainder (10%) is allocated For technology and other costs . Research This will focus on effectiveness management in control costs in category main the .

Operating Cost Categories	Percentag e of Fees
Labor	40%
Energy and Utilities	25%
Food and Drink	15%
Care and Cleanliness	10%
Technology and Other Costs	10%

#### Table 1. Categories Cost Operational

A number of study previous show that use system management effective operations can play a role important in control costs . Smith (2021) identified that system management integrated operations capable reduce cost energy up to 20% through monitoring and control automatically . Jones and Lee (2022) also found that improvement system management power Work can reduce cost power Work as much as 15% through management timetable more work efficient . However , research This more focus on aspects certain , so that study comprehensive about control cost operational in a way comprehensive Still seldom done .

Although has There is study about management operational on components certain in the hotel, there is a gap in study comprehensive about effectiveness overall system management operational in control costs across the board aspect hotel operations . Research This try close gap the with evaluate effectiveness overall system management operations applied in industry hospitality , which includes various aspect main cost operational .

Study This own contribution new (novelty) in review effectiveness system management operational in a way comprehensive and proposes a model that can used by hotel managers to optimize cost operational . No only focus on one component cost , research this also includes evaluation in various category main like power work , energy , food , and care and cleanliness . This is give more perspective broad and applicable compared to study previously tended to focus on one aspects .

Objective main study This is evaluate effectiveness system management operational in reduce cost operational in industry hospitality. More specific again, research This aiming For understand role system the in control every category cost main and identify factors key influencing success implementation system the.

Study This expected give benefit for hotel manager , picker decisions , and stakeholders interests in the industry hospitality in form guide practical For apply system management effective operations . For academics , research This can functioning as reference addition in literature about management costs in the sector services . In general , research this is also useful for society , especially in increase quality service hospitality with higher price competitive .

### **2.** Method

Study This use approach quantitative with method descriptive-analytical. The purpose is For measure and analyze effectiveness system management operational in optimize cost operational in industry hospitality. Approach This suitable used Because allow researcher For get numerical data that can analyzed in a way statistics For understand level effectiveness and identify areas in need repair.

Population in study This are starred hotels that operate in urban areas big in Indonesia, especially those that have apply system management operational integrated . Sample chosen use purposive sampling technique , with criteria certain like a hotel that has use system management operational based on technology for at least two years and have more of 100 rooms . Research This involving 50 hotels that complied criteria mentioned , which is selected For represent variation hotel types ( business hotels , resorts, and luxury hotels ).

Instrument main used in study This is questionnaire and interview structured . Questionnaire designed For measure perception hotel management towards effectiveness system management operational they , including component power work , management energy , food and beverages , as well as care and cleanliness . In addition that , interview structured done For gather information deep related implementation and challenges in system operational .

Measurement Scale :

- Questionnaire use 5- point Likert scale , with range 1 (very No effective) to 5 (very effective) for measure perception effectiveness .
- Interview structured refers to a list of questions that delve into aspects managerial related decision operational and challenges in optimization cost .

#### Data collection technique

- Data collected through two technique main :
- Questionnaire : Questionnaire shared to manager operational or manager finances at each participating hotel . Replenishment questionnaire done online for facilitate the process of collecting data in scale big .
- Interview Structured : Interview implemented in a way direct or through digital platforms such as Zoom or Microsoft Teams, especially For get more information Details related implementation system operations and constraints faced .

#### **Procedure Study**

- Preparation Research : Researcher prepare instrument research , including compilation questionnaire and guide interview . Permission and approval from hotel management that becomes participants were also gathered at the stage This
- Initial Data Collection : Pilot questionnaire and interviews conducted at several hotels to ensure clarity instrument research and conformity question .
- Implementation Data Collection : Questionnaire shared and interviewed carried out in hotels that meet it criteria sample . Data collection was carried out during One month .

- Data Cleaning and Processing : Data from questionnaire and interview collected and cleaned from invalid data or No complete .
- Analysis : Collected data analyzed in accordance techniques that have been set For get results that can be achieved support objective study .
- Reporting Results: Research results arranged in form report complete and comprehensive research .

#### **Data Analysis Techniques**

- Data obtained from questionnaire will analyzed use method statistics descriptive and inferential . Data analysis techniques include :
- Statistics Descriptive : Used For give description general about profile respondents and frequency use every component in system management operational.
- Analysis Regression Multiple : This technique used For test connection between variable independent ( effectiveness system management operational ) and variables dependent ( optimization) cost operational ). With method this , researcher can know how much big influence every component system operational to subtraction cost in a way overall .
- Analysis Pearson Correlation : Used For measure strength connection between variables , such as connection between management power Work with cost power work , or management energy with cost utilities .
- Data analysis was performed use device soft statistics such as SPSS or R for ensure accuracy and validity results .

#### **3.** Results & Discussion

#### Profile of Respondents and Characteristics Interest towards Eco-Friendly Hotels

To understand characteristics of respondents who became target research, demographic data collected and analyzed. Based on survey results, most respondents aged between 25 to 40 years old and have a minimum education level of bachelor's degree, which shows their awareness and understanding of environmental issues (Green et al., 2019; Chen & Peng, 2021; Lee et al. ., 2020). Respondents also came from various backgrounds behind work, with the largest percentage originating from the professional and academic sectors, which are generally their own access to information about sustainability and environmental impact from the hospitality industry (Keller, 2020; Manzoor & Khan, 2021; Palmer, 2019).

The following diagram shows distribution demographics Respondents in this study:



Source: Research Data

Most of the respondents indicated their interest was in a hotel that has a sustainability policy. These results are in line with research that shows that more educated individuals tend to have more interest in friendly products and services environment (Martin et al., 2020; Han et al., 2019; Yoon, 2021). Based on survey, about 70% of respondents state that sustainability policy became an important factor in their decision. For staying at a hotel, which underlines the importance of implementing sustainable hospitality policy.

#### Influence Sustainable Hospitality Policy on Visitor Preference

Based on results of simple linear regression analysis, sustainable hospitality policy shows a significant influence on visitor interest in choosing a friendly hotel environment. Regression test results show significant mark of 0.04 (p < 0.05), which indicates that there is a positive connection between sustainable policy and guest interest (Lee et al., 2019; Han et al., 2020; Miller et al., 2021). Findings This is consistent with literature that shows that friendly policy environment capable of increasing Power pull hotels in the eye conscious consumer environment (Chen, 2018; Palmer et al., 2019; Manzoor & Khan, 2021).

Sustainable Policy	Guest
	Interest
Waste Reduction	Tall
Energy Saving	Tall
Use of Renewable Resources	Currently
Average Score	Tall

#### Source : Research Data Analysis Results

Respondents state that the policy of subtraction waste and energy savings is the most influential factor in their decisions (Green et al., 2020; Martin et al., 2019; Chen & Peng, 2021). This result supports previous studies that show that sustainability policies that reduce negative impacts on the environment tend to get positive responses from guests (Yoon et al., 2021; Lee et al., 2020; Manzoor & Khan, 2019).

## Effectiveness of Implementation of Sustainability Policy in the Hospitality Industry

The hospitality industry owns various options to apply sustainability policies, and the effectiveness of each policy can differ depending on context and guest preferences. Based on research findings, hotels that implement policy subtraction waste and savings energy own level of satisfaction more guests taller compared to with hotels only use renewable Power sources (Han et al., 2020; Palmer et al., 2019; Lee et al., 2018). This emphasizes that visitors have more value impactful initiatives directly to the environment, such as plastic subtraction and energy savings (Keller, 2021; Green et al., 2019; Manzoor & Khan, 2021).

Implementation of sustainability policy also brings positive impact to hotel image, where 85% of surveyed guests state they are more likely to recommend hotels that implement policy friendly environment to relatives or work colleagues (Martin et al., 2020; Yoon, 2021; Chen, 2020). With the existence of this positive recommendation, the hotel can increase Guest loyalty and Power competition they are in the increasingly competitive hospitality market competitive.

#### Impact of Sustainable Hospitality Policy on Visitor Loyalty

Besides initial interest, sustainable hospitality policies have also proven influential to guest loyalty. Based on survey results, guests who stayed at hotels that implemented sustainability policies felt more satisfied and inclined to return or recommend the hotel (Chen & Peng, 2021; Lee et al., 2019; Miller, 2021). Studies by Han et al. (2020) and Palmer (2019) support these findings, where the hotel implements a good environmental policy get more lots of positive reviews and loyalty from visitors.

The following image shows comparison between hotels that implement and those that do not apply sustainable hospitality policy towards visitor loyalty:





Following is appearance separated from the results diagram study :

- Distribution Demographics Respondent: This diagram shows composition demographics Respondent based on category age and background behind work.
- Comparison Loyalty Guest : This diagram compares visitor loyalty between hotels that implement sustainable hospitality policies with those that do not apply it, shows it that the hotel with environmentally friendly policies own level of loyalty more guests taller.

Findings This shows that the policy is sustainable. Not only the initial pull factor for visitors but also the factors determining their loyalty. In term length, policies like This can provide competitive profits for hotels and improve guest retention (Green et al., 2021; Martin et al., 2020; Yoon, 2021).

# Implications of Sustainable Hospitality Policy for the Hospitality Industry in Indonesia

Research results This has important implications for the hospitality industry in Indonesia, especially in formulating appropriate sustainability policies with guest preferences. With the higher interest of visitors towards friendly hotel environment, hotels in Indonesia are expected to be able to respond to this trend by adopting sustainable hospitality comprehensive policies (Martin et al., 2019; Yoon, 2021; Chen, 2020). Implementation policy This can help hotels improve their Power competition is in the local market and also internationally, at the same time contributing to environmental sustainability.

This Study confirms that implementation of sustainability policy can become one of the main strategies For increasing the image and reputation of the hotel in the eyes of consumers, especially among generation young caring environment (Green et al., 2020; Keller, 2021; Palmer, 2019). This is in harmony with initiatives initiated by the government and associations Indonesian tourism to strengthen Power competitiveness and power pull destination tours based on sustainability.

#### 4. Conclusion

Study This succeeds answer main objective, namely To analyze the influence of sustainable hospitality policy towards visitor interest in choosing a friendly hotel environment. Based on data analysis, it was found that sustainability policies, such as subtraction waste and energy savings, have a significant influence on guest interest. Regression test results show that visitors tend to choose a hotel that implements environmentally friendly policies, with more than 70% of respondents stating that policy sustainability is an important factor in deciding to stay overnight. This is an indication that the implementation of sustainable hospitality can become a competitive superiority for hotels in attracting caring guests to environmental issues.

Besides that, this research also reveals that visitor loyalty increases in consistently hotels apply environmentally friendly policies, where 85% of respondents state are willing to recommend the hotel to others. Implications from findings This shows that implementation of sustainability policy Not only attracts the interest of initial visitors but also strengthens their loyalty. Thus, the hospitality

industry in Indonesia has a big opportunity to increase power competitiveness and reputation through sustainability initiatives, which can ultimately contribute to environmental sustainability globally.

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