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Enhancing Pricing Accuracy through Activity-Based Costing: A Case Study of Patra Bandung Hotel in Post-Pandemic Indonesia

Nasywa Jenia Putri [1], Evi Octavia [2]
[1,2] Universitas Widyatama, Bandung, Indonesia.
[1]nasywa.jenia@widyatama.ac.id, [2]evi.octavia@widyatama.ac.id.

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ABSTRACT

This study aims to examine the application of the Activity-Based Costing method in determining room rental prices at Patra Bandung Hotel. This research employed a descriptive analysis approach, utilizing semi-structured interviews with hotel finance personnel and collecting quantitative data from financial records covering overhead, operational, and maintenance costs from the fiscal year 2024. Furthermore, cost calculations based on the Activity-Based Costing method were applied to a sample of five room types, and the results were systematically compared to pricing structures previously established by the hotel management using traditional costing methods. The results showed that the application of Activity-Based Costing led to more accurate and generally lower cost allocations for several room categories, highlighting inefficiencies in the conventional pricing system. These findings have broader implications for cost control and pricing strategy in the hospitality industry, particularly for mid-sized hotels in developing economies seeking competitive advantage through financial efficiency.

INTRODUCTION

The tourism industry is one of the sectors that experiencing rapid growth and making a significant contribution to the global economy (Li et al., 2022; Yang & Arthur, 2021). The Central Statistics Agency (BPS) recorded a cumulative total of 11.68 million international tourist visits to Indonesia during the January-December 2023 period, representing a 98.30 percent increase compared to 2022 (BPS, 2024b). With its diverse range of tourist destinations, tourism acts as a catalyst for growth in other supporting sectors, one of which is the hospitality sector (Savastano et al., 2022; Tsolakis et al., 2022). The hospitality sector is an integral part of the tourism industry. Hotels play a crucial role in providing accommodation facilities for both domestic and international tourists (Mahadevan & Schmitz, 2020; N. Malik et al., 2022). There are 4,129 star-rated hotels in Indonesia. BPS states that 60% of these star-rated hotels are located on Java and Bali islands, with Java having 598 star-rated hotels (BPS, 2024a). This situation indicates that competition in the hotel industry is very intense, especially in major cities and key tourist destinations, one of which is Bandung, which ranks third on the list of Indonesia's favorite tourist cities, with a percentage of 52.4%. This indicates that the demand for hotels is also increasing (Arias-Pérez et al., 2020; Peng et al., 2023). Data shows that there are currently over 300 hotels operating in Bandung (Data, 2022), making it one of the cities with the highest concentration of hotels. This growth has intensified competition among hotel industries.

Service, quality, and price are some of the factors that affect performance in winning the competition (Nguyen & Pham, 2020; Umeh et al., 2023). Therefore, a strategy is needed in the hospitality industry that is able to excel in competition, one way is to emphasize room prices (Putri & Tukino, 2023). The cost of goods plays an important role in determining the room rental/sales price because it is included in the component of determining the room rental/sales price (Schislyaeva & Plis, 2021; Wang et al., 2023). More accurate costing will result in a more appropriate cost of goods (De Masi et al., 2021; Martinez-Sanchez et al., 2020). There are two types of costing systems known,

namely conventional (traditional costing) and activity-based costing (ABC) methods. However, according to theory and previous research, the conventional method is considered to be less reflective of the specific activities used in the operation of each room, because it does not reflect the overhead costs that are actually consumed by the product. As a result, it has the potential to cause inaccurate costs (under/overcost) in determining room rental prices (Ni Wayan Septya, 2022). According to Nawangwulan, (2024), errors in setting product or service prices are often caused by inaccuracies in calculating overhead costs (K.E.K et al., 2022; Xiao & Zheng, 2022). These inaccuracies can lead to various problems, such as uncompetitive prices and an inability to compete in the market. As a result, this directly impacts the accuracy of price setting, reduces competitiveness, and decreases the company's profitability.

One of the hotels that still uses conventional methods is Patra Bandung Hotel (Grobelna, 2019; A. Malik et al., 2023). Based on the results of an interview with Mr. Jar as Front Office Manager, it was conveyed that the room rental price set by Patra Bandung Hotel was quite high (expensive) when compared to the standard price of a three-star hotel, it was also said, this condition made it difficult for the hotel to compete with other competitors who offered lower prices (Kovynyov & Mikut, 2019; Sarfraz et al., 2022). The inability of a hotel to compete with competitors can have an impact on the decline in occupancy rates, which in turn will affect overall hotel revenue. This condition is reflected in the data for 2022-2023, where Patra Bandung Hotel experienced a decrease of around 15% in total guests, and 2% in total revenue from room sales (Interview, February 10, 2025). One of the factors contributing to this condition is the inaccuracy in the calculation of the cost of rooms which plays a role in determining the rental/sale price of room (Tania & Asmawi, 2021). The conventional method used by hotels, according to research (Hidayat et al., 2023), (Taslim & Purwanto, 2021), (Tumiwa et al., 2021), to be unable to accurately describe the cost consumption of each room type, because overhead costs are charged evenly without considering actual activities which can result in distortions in room prices (Meijerink et al., 2021; Stankevičiūtė & Savanevičienė, 2019). Therefore, a more appropriate alternative approach is needed, to produce more competitive room pricing.

The Activity Based Costing (ABC) method is emerging as a more appropriate alternative in allocating costs, especially for industries that have a variety of operational activities such as hospitality (Kumar et al., 2021; Lassoued & Khanchel, 2023). ABC helps reduce distortions resulting from product costing using conventional methods (Barus et al., 2019). The ABC method assigns overhead costs according to the activities that consume resources, not just based on average sharing (Devlin, 2020; Hsu et al., 2022). The ABC method sets the cost of goods based on the activities consumed to produce a product, so that it can provide very useful information for managers in making the right decisions for the sustainability and ability of the company to compete with competitors (Nurcahyo et al., 2021). This research is also supported by research (Matheos et al., 2024), (Tumiwa et al., 2021), (Danuarta & Prijanto, 2023), (Pesoth et al., 2022), which shows that the use of the ABC method in determining hotel room prices is more accurate than conventional methods.

However, previous studies have generally focused on large-scale hospitality businesses or chains in metropolitan areas, with limited empirical focus on mid-tier hotels in secondary tourism cities such as Bandung. There remains a lack of context-specific evidence on how the ABC method affects room pricing strategy and competitive positioning in such settings.

This study aims to address that gap by applying the ABC method in a three-star hotel context—Patra Bandung Hotel—which is currently facing competitive and financial challenges. The study investigates the following research question: How does the implementation of Activity-Based Costing impact pricing accuracy and competitiveness for a mid-sized hotel in Bandung?

By providing contextualized evidence from a hotel that still uses conventional methods, this research offers practical implications for pricing reform in the hospitality industry. The study's novelty lies in bridging methodological precision (through ABC) with real-world pricing challenges faced by independent hotels in saturated local markets.

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RESEARCH METHODS

This type of research is a descriptive analysis method with a case study approach. The research was conducted at Patra Bandung Hotel (Bednarek-Gilland, 2015; Gibton, 2015). The research period was from November 2024 until completion. This research used two main types of data, namely qualitative and quantitative data. Qualitative data was obtained from a general description of the company. Meanwhile, quantitative data includes concrete figures such as cost reports related to room pricing and other data. Data sources consist of primary data obtained through direct observation and interviews with management and relevant staff at Patra Bandung Hotel, as well as secondary data obtained from company documents and archives (Borcsa & Rober, 2015; McNabb, 2015). Data collection methods include literature review to study relevant literature, as well as field research involving direct observation and interviews with relevant parties at the hotel. The data analysis techniques used are descriptive analysis to explain and analyze the collected data, as well as room rental price calculation analysis using the Activity Based Costing (ABC) method. The initial stage of analysis was carried out by collecting data through interviews, observations, and documentation from the hotel. After the data was collected, the ABC method was applied based on the theory of Hansen & Mowen in (Gayatri & Windasari, 2019), namely: (1) Identifying and classifying costs into various activities. (2) Classifying cost activities into various activity levels. (3) Identifying and determining Cost Drivers (Hillman & Radel, 2018; Lutz & Knox, 2014). (4) Determining the rate per unit of Cost Driver. (5) Allocating costs to products based on the consumption of each product activity. After that, a comparison was made with the method used by the hotel. This method is expected to provide a deeper understanding of hotel operational costs and facilitate the determination of more accurate and efficient room rates. To ensure the validity of the data in this study, the researcher used triangulation of techniques and sources.

RESULTS AND DISCUSSION

Calculations using Activity Based Costing (ABC) to determine the cost price of rooms at Patra Bandung Hotel can be done by following these steps:

a. Identify and Classify Costs Into Various Activities

The first step is to identify the activities at Patra Bandung Hotel, which will be separated based on the activities performed at the hotel, and link the various costs associated with each hotel activity through direct tracking (source drivers), as shown in the following table:

Table 1. Classification of Activity-Related Costs at Patra Bandung Hotel Tahun 2023

Activities	Costs
Lodging Activities	Cost of Guest Supplies Room Amenities Cleaning Supplies Cost
Laundry Activity	Laundry & Dry Cleaning Fee
Electrical Activity	Electricity Cost Generator Fuel Cost
Water Activity	Water Cost
Breakfast Activity	Full breakfast Cost
Marketing Activities	Advertising & Promotion Cost
Maintenance Activities	Bulbs & lamps Vehicle Maintenance AC Maintenance Repair & Maintenance
Depreciation Activity	Building Depreciation Hotel Equipment Depreciation
Payroll Activities	Employee Salary Employee Uniform

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Source: Processed Data, 2025.

b. Classify Cost Activities Into Various Activity Levels.

The next step is to classify costs based on activities into various activity levels, such as unit level, product level, and facility level.

Table 2. Classification of Activities Based on Activity Levels at Patra Bandung Hotel 2023

Activities	Activity Levels
Lodging Activities	Unit-level activity cost
Laundry Activity	Unit-level activity cost
Breakfast Activity	Unit-level activity cost
Electrical Activity	Unit-level activity cost
Water Activity	Unit-level activity cost
Payroll Activities	Unit-level activity cost
Marketing Activities	Product-sustaining activity cost
Maintenance Activities	Facility-sustaining activity cost
Depreciation Activity	Facility-sustaining activity cost

Source: Processed Data, 2025.

c. Identifying and Determining Cost Drivers

Identification and determination of appropriate cost drivers for each cost associated with each activity. Cost drivers are used to assign costs to each activity. The identification process is carried out as follows:

a. For lodging activities, cost allocation is based on the number of guests staying or the number of rooms sold. However, since the cost will increase as the number of rooms sold increases, the number of rooms sold is chosen as the most suitable cost driver.
b. Laundry activities, which include the washing of towels, bed linen, and blankets, can be allocated based on the number of rooms available or rooms sold. Since the washing process is carried out only after the rooms are used by guests, the number of rooms sold is the most relevant cost driver.
c. Breakfast activities, the full breakfast buffet price is set at IDR 75,000 per person, because the increase in breakfast costs depends on the number of guests staying, the cost trigger used depends on the number of guests staying.
d. Marketing activities, distributed according to the number of rooms sold or available. The number of available rooms was chosen as the cost driver because the marketing objective is to sell every room.
e. For electricity and water usage activities, the basis of allocation that can be used is the number of rooms sold. This is because the consumption of electricity and water increases along with the use of rooms by guests. Therefore, the cost driver chosen for these two activities is the number of rooms sold.
f. For payroll activities, the basis of allocation can also use the number of rooms sold, but since labor costs depend on the number of man-hours required, the appropriate cost driver is the number of man-hours.
g. Maintenance activities, which include building maintenance and maintenance of hotel facilities and rooms, can be allocated based on the floor area of the building. Therefore, the cost driver used is the floor area of the building, given that maintenance costs are affected by the size of the area that needs to be maintained.
h. Depreciation activities, since fixed assets and other facilities are used for all rooms, the appropriate cost driver is the floor area of available rooms.

Table 1. Classification of Cost Pool and Cost Driver at Patra Bandung Hotel Tahun 2023

Cost Pool Homogeeneous	Activities	Cost Driver	Level Activities
Pool 1	Lodging Activities	Number of rooms sold	Unit-level
	Laundry Activity	Number of rooms sold	Unit-level
	Electrical Activity	Number of rooms sold	Unit-level

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	Water Activity	Number of rooms sold	Unit-level
Pool 2	Breakfast Activity	Number of overnight guests	Unit-level
Pool 3	Marketing Activities	Number of rooms available	Product-level
Pool 4	Maintenance Activities	Total floor area	Facility-level
	Depreciation Activity	Total floor area	Facility-level
Pool 5	Payroll Activities	Total floor area	Unit-level

Source: Processed Data, 2025.

Based on the table, there are several activities that have the same consumption ratio and activity level so that they can be grouped into homogeneous costs. The costs of the grouped activities are summed up to determine homogeneous cost groups. After the activity grouping is done, then the costs of the grouped activities are summed up. The calculation of costs per activity cost pool I-V that have been grouped can be seen in the table below:

Table 2. Details of Cost Pool I Patra Bandung Hotel in 2023

Activities	**Cost**	
Lodging Activities:		
- Cost of Guest Supplies	Rp	34.622.650
- Room Amenities	Rp	116.500.000
- Cleaning Supplies Cost	Rp	2.354.700
Laundry Activity:		
- Laundry & Dry Cleaning Fee	Rp	14.350.000
Electrical Activity:		
- Electricity Cost	Rp	833.837.157
- Generator Fuel Cost	Rp	10.890.000
Water Activity:	Rp	49.353.873
Total	**Rp**	**1.061.908.380**

Source: Processed Data, 2025.

Table 3. Details of Cost Pool II Patra Bandung Hotel in 2023

Activities	**Cost**	
Breakfast Activity:		
(Rp 35.000 x 32.550 guest)	Rp	1.139.250.000
Total	**Rp**	**1.139.250.000**

Source: Processed Data, 2025.

Table 4. Details of Cost Pool III Patra Bandung Hotel in 2023

Activities	**Cost**	
Marketing Activities:		
Advertising & Promotion	Rp	29.757.650
Total	**Rp**	**29.757.650**

Source: Processed Data, 2025.

Table 5. Details of Cost Pool IV Patra Bandung Hotel in 2023

Activities	**Cost**	
Maintenance Activities:		
- *Bulbs & lamps* (11.256.786 x 65%)	Rp	7.316.911
- Vehicle Maintenance (25.000.000 x 65%)	Rp	16.250.000
- AC Maintenance (8.000.000 x 65%)	Rp	5.200.000
- Repair & Maintenance (24.256.500 x 65%)	Rp	15.766.725
Depreciation Activity:		
- Building Depreciation (330.500.000 x 65%)	Rp	214.825.000

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- Hotel Equipment Depreciation (176.415.273 x 65%)	Rp	114.669.927
Total	**Rp**	**374.028.563**

Source: Processed Data, 2025.

Table 6. Details of Cost Pool V Patra Bandung Hotel in 2023

Activities		Cost
Employee Salary: ((50.000 x 6 x 52) (30)) x 65%)	Rp	304.200.000
Employee Uniform: ((130.000 x (30)) x 65%)	Rp	2.535.000
Total	**Rp**	**306.735.000**

Source: Processed Data, 2025.

Table 7. Cost Driver Usage at Patra Bandung Hotel in 2023

No	Cost Driver	Total
1.	Number of Rooms Sold:	
	Deluxe	10.317
	Deluxe Suite	2.856
	Premier	1.879
	Junior Suite	877
	Executive Suite	166
	Grand Suite	218
	Total	**16.313**

No	Cost Driver	Total
2.	Number of overnight guests:	
	Deluxe	20.309
	Deluxe Suite	5.799
	Premier	3.865
	Junior Suite	1.773
	Executive Suite	332
	Grand Suite	472
	Total	**32.550**
3.	Number of rooms available:	
	Deluxe	18.980
	Deluxe Suite	5.475
	Premier	3.650
	Junior Suite	1.825
	Executive Suite	365
	Grand Suite	730
	Total	**31.025**
4.	Total floor area:	
	Deluxe	1.196
	Deluxe Suite	420
	Premier	320
	Junior Suite	170
	Executive Suite	44
	Grand Suite	120
	Total	**2.270 m^2**
5.	Number of working hour:	
	Deluxe	76.348
	Deluxe Suite	22.024
	Premier	14.682
	Junior Suite	7.341
	Executive Suite	1.468
	Grand Suite	2.936

Total	**124.800 Jam**

Source: Patra Bandung Hotel, 2025.

a. Calculating Per Unit Cost Driver Rates (Cost Pool)

After identifying the cost drivers, the next step is to calculate the rate per unit cost driver. This calculation is done by dividing the total cost by the number of cost drivers, considering that each activity has different cost drivers. To include activities in a cost pool, overhead costs must be logically related and have the same consumption ratio, which reflects the existence of a cost driver. Cost pools can be calculated using the following formula:

$$\boldsymbol{Cost\ Pool = \frac{Total\ Cost}{Cost\ Driver}}$$

Table 8. *Cost Pool* Rates at Patra Bandung Hotel in 2023

Activities	*Total Cost Pool* (1)		*Cost Driver* (2)		*Cost Pool* (1):(2)
Cost Pool I	Rp	1.061.908.380	16.313	Rp	65.096
Cost Pool II	Rp	1.139.250.000	32.550	Rp	35.000
Cost Pool III	Rp	29.757.650	31.025	Rp	959
Cost Pool IV	Rp	374.028.563	2.270	Rp	164.770
Cost Pool V	Rp	306.735.000	124.800	Rp	2.458

Source: Result of the Processed Data, 2025.

b. Allocated Costs to Products Using Cost Driver Rates and Activity Measures

this stage, in accordance with the opinion of Hansen and Mowen in (Gayatri & Windasari, 2019), activity costs are charged to products based on the level of activity consumption by each product, namely by applying the cost driver rates that have been calculated previously, using the formula:

BOP allocated =Rate per unit Cost Driver × Selected Cost Driver

The next step is to calculate the cost of goods for each type of room, where the cost of goods per room is obtained by dividing the rate per unit cost driver by the number of cost drivers used. Since indirect costs have been obtained through calculations using the BOP formula, Table 11. presents the details of direct costs contained in Patra Bandung Hotel. After the total cost per room type is known, the analysis is focused on the Room Department only. The costs of the department were then multiplied by the appropriate allocation percentage, resulting in total direct costs. Next, the total direct costs were divided by the number of rooms available to obtain the direct costs per room unit.

Table 9. Breakdown of Direct Costs Allocated to Each Room Type Patra Bandung Hotel in 2023

Direct Costs Room Dept.	**Deluxe**		**Deluxe Suite**		**Premier**	
	% Allocation	**Unit**	**% Allocation**	**Unit**	**% Allocation**	**Unit**
	61%	**52**	**18%**	**15**	**12%**	**10**
Employee Salary	285.480.000	5.490.000	82.588.235	5.505.882	55.058.824	5.505.882
Employee Uniform	2.379.000	45.750	688.235	45.882	458.824	45.882
Total Direct Cost	**287.859.000**	**5.535.750**	**83.276.471**	**5.551.765**	**55.517.647**	**5.551.765**
Direct Costs Room Dept.	**Junior**		**Executive**		**Grand Suite**	
	% Allocation	**Unit**	**% Allocation**	**Unit**	**% Allocation**	**Unit**
	6%	**5**	**1%**	**1**	**2%**	**2**
Employee Salary	27.529.412	5.505.882	5.505.882	5.505.882	11.011.765	5.505.882

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Employee Uniform	229.412	45.882	45.882	45.882	91.765	45.882
Total Direct Cost	**27.758.824**	**5.551.765**	**5.551.765**	**5.551.765**	**11.103.529**	**5.551.765**

Source: Result of the Processed Data, 2025.

After the direct costs at Patra Bandung Hotel have been obtained, the next step is to allocate the activity costs contained in the cost pool to each room type using cost drivers. This process will be explained in detail in Table 12-17 for each room type. This step aims to calculate the total indirect costs comprehensively. Subsequently, these indirect costs are added to the direct costs to obtain the total costs, which are then divided by the number of rooms sold. From this calculation, the Production Cost (Room) per unit of room is obtained based on each room type.

Table 10. ABC Price of Patra Bandung Deluxe Room Type in 2023

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	10317	Rp	671.593.744
Cost Pool II	Rp	35.000	20309	Rp	710.815.000
Cost Pool III	Rp	959	18.980	Rp	18.204.680
Cost Pool IV	Rp	164.770	1.196	Rp	197.065.270
Cost Pool V	Rp	2.458	76.348	Rp	187.649.647
			Total Indirect Cost	Rp	1.785.328.341
			Total Direct Cost	Rp	5.535.750
			Total Cost for Deluxe Room Type	Rp	1.790.864.091
			Number of Rooms Sold		10317
			Base Price of Deluxe Rooms	**Rp**	**173.584**

Source: Result of the Processed Data, 2025.

Table 11. ABC Price of Patra Bandung Deluxe Suite Room Type in 2023

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	2856	Rp	185.913.709
Cost Pool II	Rp	35.000	5799	Rp	202.965.000
Cost Pool III	Rp	959	5.475	Rp	5.251.350
Cost Pool IV	Rp	164.770	420	Rp	69.203.523
Cost Pool V	Rp	2.458	22024	Rp	54.129.706
			Total Indirect Cost	Rp	517.463.287
			Total Direct Cost	Rp	5.551.765
			Total Cost for Deluxe Suite Room Type	Rp	523.015.052
			Number of Rooms Sold		2856
			Base Price of Deluxe Suite Rooms	**Rp**	**183.129**

Source: Result of the Processed Data, 2025.

Table 12. ABC Price of Patra Bandung Premier Room Type in 2023

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	1879	Rp	122.315.077
Cost Pool II	Rp	75.000	3.865	Rp	289.875.000
Cost Pool III	Rp	959	3.650	Rp	3.500.900
Cost Pool IV	Rp	164.770	320	Rp	52.726.494
Cost Pool V	Rp	2.458	14682	Rp	36.086.471
			Total Indirect Cost	Rp	349.903.941
			Total Direct Cost	Rp	5.551.765

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Total Cost for Premier Room Type	Rp	355.455.705
Number of Rooms Sold		1879
Base Price of Premier Rooms	**Rp**	**189.173**

Source: Result of the Processed Data, 2025.

Table 13. ABC Price of Patra Bandung Junior Suite Room Type in 2023

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	877	Rp	57.089.049
Cost Pool II	Rp	35.000	1773	Rp	62.055.000
Cost Pool III	Rp	959	1.825	Rp	1.750.450
Cost Pool IV	Rp	164.770	170	Rp	28.010.950
Cost Pool V	Rp	2.458	7341	Rp	18.043.235
			Total Indirect Cost	Rp	166.948.684
			Total Direct Cost	Rp	5.551.765
			Total Cost for Junior Suite Room Type	Rp	172.500.448
			Number of Rooms Sold		877
			Base Price of Junior Suite Rooms	**Rp**	**196.694**

Source: Result of the Processed Data, 2025.

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	166	Rp	10.805.909
Cost Pool II	Rp	35.000	332	Rp	11.620.000
Cost Pool III	Rp	959	365	Rp	350.090
Cost Pool IV	Rp	164.770	44	Rp	7.249.893
Cost Pool V	Rp	2.458	1468	Rp	3.608.647
			Total Indirect Cost	Rp	33.634.539
			Total Direct Cost	Rp	5.551.765
			Total Cost for Executive Room Type	Rp	39.186.303
			Number of Rooms Sold		166
			Base Price of Executive Rooms	**Rp**	**236.062**

Source: Result of the Processed Data, 2025.

Table 14 ABC Price of Patra Bandung Grand Suite Room Type in 2023

Activities		***Cost Pool* (1)**	**Total *Cost Driver* (2)**		**Total (1) x (2)**
Cost Pool I	Rp	65.096	218	Rp	14.190.892
Cost Pool II	Rp	35.000	472	Rp	16.520.000
Cost Pool III	Rp	959	730	Rp	700.180
Cost Pool IV	Rp	164.770	120	Rp	19.772.435
Cost Pool V	Rp	2.458	2936	Rp	7.217.294
			Total Indirect Cost	Rp	58.400.802
			Total Direct Cost	Rp	5.551.765
			Total Cost for Grand Suite Room Type	Rp	63.952.566
			Number of Rooms Sold		218
			Base Price of Grand Suite Rooms	**Rp**	**293.360**

Source: Result of the Processed Data, 2025.

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Based on the results of the Room Cost Price (HPK) calculation in determining the rental/sale price of rooms, there are differences between the conventional method and the Activity-Based Costing (ABC) method. These differences can be seen in the following table:

Table 15. Results of Comparison of Methods at Patra Bandung Hotel (in Rp.)

Room Type	Hotel Calculation	ABC Method	Difference	Description
Deluxe	260.000	173.584	86.416	*Overcosting*
Deluxe Suite	280.000	183.129	96.871	*Overcosting*
Premier	300.000	189.173	110.827	*Overcosting*
Junior Suite	400.000	196.694	203.306	*Overcosting*
Executive Suite	500.000	236.062	263.938	*Overcosting*
Grand Suite	700.000	293.360	406.640	*Overcosting*

Source: Patra Bandung Hotel, Result of the Processed Data, 2025.

The differences that occur are due to: (a) Costs calculated as the cost of goods with the ABC method are calculated based on activities that occur in the hotel so that the cost of goods can be calculated in detail. (b) In the conventional method used by hotel management in calculating the cost of goods does not include depreciation costs as an element of the cost of goods. Whereas in the ABC method, depreciation costs are calculated as the cost of goods and charged to consumers who use these room services. (c) The ABC method calculates electricity costs based on the amount of costs for a full year that are actually used in the room, as long as the room is used by consumers, not based on an estimated percentage of uncertain use in each room (Hauff et al., 2020; Weight et al., 2021). This means that differences in overhead charging can result in differences in the room base price results. The calculation of room base price using the method used by hotel management shows an overcosting or higher costing in all room types compared to the ABC method

The following is a further explanation of the difference between the two methods referring to the theory of Garrison et al., in (Tran Thị, 2023) and Kaplan & Cooper in (Chouhan et al., 2017), and examples in research calculations, as follows:

1. The conventional approach to determining room costs typically only accounts for expenses directly related to the operational aspects of the room, such as housekeeping and laundry. In contrast, non-production costs, including marketing activities, are often excluded from the calculation of the cost of goods because they are viewed as period costs not directly linked to room production (Batat, 2022; Todisco et al., 2023). However, promotional efforts, such as advertisements on platforms like Traveloka, Agoda, or social media, significantly contribute to attracting guests. If these costs are omitted from the overall cost of goods, management risks making pricing decisions that do not reflect the full range of efforts and expenditures involved in generating room sales.

   On the other hand, the Activity-Based Costing (ABC) method is regarded as an improvement over the conventional approach. A crucial initial step in implementing the ABC method involves classifying costs into various activities. This classification is essential because ABC's foundational philosophy is that products or services consume activities, not just costs, and that it is these activities that utilize resources (costs). Once the costs are grouped into activities, each can be linked to a specific cost driver; typically, each activity will have a distinct cost driver. ABC encompasses all costs incurred by the product, which includes direct production costs (housekeeping, laundry), overhead costs (electricity, water, maintenance), and also non-production costs (marketing), as long as a clear cause-and-effect relationship can be established between the activity and the product (in this case, the hotel room). For instance, a suite-type room booked through an Online Travel Agent (OTA) like Traveloka will incur costs for housekeeping and laundry, digital promotion that drives bookings, and utility expenses based on both the number of rooms sold and the number of rooms available.

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2. Conventional cost allocation methods tend to inaccurately distribute production expenses uniformly, regardless of whether those costs are incurred through actual product usage. This simplistic approach, based on a single cost driver, often results in significant cost distortions (Oosthuizen et al., 2019; Zacher & Rudolph, 2022). For example, costs associated with maintaining air conditioning in a ballroom or meeting room are incorrectly allocated to hotel rooms as part of the building's overall expenses. Since hotel rooms do not benefit from the ballroom, this practice results in unnecessarily inflated room costs.

   Activity-Based Costing (ABC) effectively addresses this issue by assigning costs solely based on the activities genuinely consumed by the product, rather than on the total capacity available. This strategic approach eliminates the problem of charging products for unused capacity. Consider the Patra Bandung Hotel, which has 31,025 rooms available for sale but only sold 16,313 rooms in 2023. Under ABC, activity costs—such as electricity—are charged only to the 16,313 rooms that were occupied, not the entire 31,025 rooms. This leads to more accurate and stable room costs that truly reflect actual usage, rather than being burdened by an inflated allocation model based on total hotel capacity.

3. Conventional methods generally use a single cost driver, such as the number of rooms sold, to allocate all overhead costs. This causes the costs of various complex activities to be allocated equally across rooms or products, without considering differences in activity consumption. For example, all electricity, water and maintenance costs are charged to rooms based on the number of rooms available, even though grand suites require more electricity and maintenance than standard rooms (Barclay et al., 2022; Cucino et al., 2024). Conventional methods do not make that distinction, so standard rooms may be overcharged, and grand suites overcharged. This happens because of the philosophy and purpose of the method. The conventional method was born at a time when companies were simple and the majority of production costs came from direct labor or direct raw materials. Under these conditions, one cost driver was considered sufficient to represent the overhead consumption by the product. According to Panda in (Chouhan et al., 2017), "The traditional cost accounting methods were designed around 1870-1920 and when industry was labor intensive, less automotive and less varied in terms of the product variety with low overhead costs."

ABC uses multiple cost drivers to reflect activities more accurately. Each activity has a relevant cost driver, for example: Lodging activity, cost driver: number of rooms sold. Maintenance activity, cost driver: room area (m2), (Table 4.4). The use of many triggers makes costs allocated more accurately, and avoids cost distortions such as those that occur in conventional methods (Laiho et al., 2022; A. Malik et al., 2022). This is because the ABC method was developed because conditions began to change, the company began to create new products and services, the company's cost structure has changed, overhead costs have increased and become more complex. Therefore, more than one cost driver is needed to produce a representative cost allocation. According to Kaplan & Cooper in (Chouhan et al., 2017) , "ABC emerged as a response to the limitations of traditional costing in environments with high overhead and product diversity.".

CONCLUSION

Based on the results of research conducted by the author at Patra Bandung Hotel, the authors draw the following conclusions:

1. Calculation of room cost based on Activity Based Costing (ABC) is done by classifying costs based on unit level, product/service, facility sustaining level.
2. A comparison between the conventional method and the Activity Based Costing (ABC) method shows a difference in the calculation of the cost of a room. Based on the ABC method, the cost of a Deluxe type room is recorded at Rp173,584 , which is lower Rp86,461 than the conventional method. Similar differences are also seen in other room types, namely: Deluxe Suite Rp96,871 , Premier Rp110,827, Junior Suite Rp203,306, Executive Suite

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Rp263,938, and Grand Suite Rp406,640 - all lower than the conventional method. These differences reflect the distortion of costs in the conventional method, where the cost of services tends to be overcosted. This happens because the ABC method allocates overhead costs based on the activities actually consumed by each room through various cost drivers, resulting in a more accurate cost calculation.

CONFLICT OF INTEREST

The author(s) declare(s) that there is no conflict of interest.

REFERENCES

Arias-Pérez, J., Velez-Ocampo, J., & Cepeda-Cardona, J. (2020). Strategic orientation toward digitalization to improve innovation capability: Why knowledge acquisition and exploitation through external embeddedness matter. *Journal of Knowledge Management*, *25*(5), 1319–1335. Scopus. https://doi.org/10.1108/JKM-03-2020-0231

Barclay, L. J., Kiefer, T., & El Mansouri, M. (2022). Navigating the era of disruption: How emotions can prompt job crafting behaviors. *Human Resource Management*, *61*(3), 335–353. Scopus. https://doi.org/10.1002/hrm.22095

Batat, W. (2022). The employee experience (EMX) framework for well-being: An agenda for the future. *Employee Relations*, *44*(5), 993–1013. Scopus. https://doi.org/10.1108/ER-03-2022-0133

Bednarek-Gilland, A. (2015). *Researching values with qualitative methods: Empathy, moral boundaries and the politics of research* (p. 122). Ashgate Publishing Ltd; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84938280606&partnerID=40&md5=9fe04cec3f08b662639e63bdf2de404d

Borcsa, M., & Rober, P. (2015). *Research perspectives in couple therapy: Discursive qualitative methods* (p. 176). Springer International Publishing; Scopus. https://doi.org/10.1007/978-3-319-23306-2

Cucino, V., Del Sarto, N., Ferrigno, G., Piccaluga, A. M. C., & Di Minin, A. (2024). Not just numbers! Improving TTO performance by balancing the soft sides of the TQM. *TQM Journal*, *36*(3), 900–919. Scopus. https://doi.org/10.1108/TQM-01-2022-0034

De Masi, S., Słomka-Gołębiowska, A., Becagli, C., & Paci, A. (2021). Toward sustainable corporate behavior: The effect of the critical mass of female directors on environmental, social, and governance disclosure. *Business Strategy and the Environment*, *30*(4), 1865–1878. Scopus. https://doi.org/10.1002/bse.2721

Devlin, C. (2020). Digital social innovation and the adoption of #plantech: The case of coventry city council. *Urban Planning*, *5*(4), 59–67. Scopus. https://doi.org/10.17645/up.v5i4.3214

Gibton, D. (2015). *Researching education policy, public policy, and policymakers: Qualitative methods and ethical issues* (p. 226). Taylor and Francis; Scopus. https://doi.org/10.4324/9781315775722

Grobelna, A. (2019). Effects of individual and job characteristics on hotel contact employees' work engagement and their performance outcomes: A case study from Poland. *International Journal of Contemporary Hospitality Management*, *31*(1), 349–369. Scopus. https://doi.org/10.1108/IJCHM-08-2017-0501

Hauff, S., Guerci, M., & Gilardi, S. (2020). Well-being-oriented HRM configurations: Diffusion, contingencies and outcomes. *Evidence-Based HRM*, *8*(3), 253–271. Scopus. https://doi.org/10.1108/EBHRM-09-2019-0080

.

Hillman, W., & Radel, K. (2018). *Qualitative methods in tourism research: Theory and practice* (p. 294). Channel View Publications; Scopus. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85050434848&partnerID=40&md5=7ea1e3f0b2027993b53f6a795804ee51

Hsu, C.-H., Zeng, J.-Y., Chang, A.-Y., & Cai, S.-Q. (2022). Deploying Industry 4.0 Enablers to Strengthen Supply Chain Resilience to Mitigate Ripple Effects: An Empirical Study of Top Relay Manufacturer in China. *IEEE Access*, *10*, 114829–114855. Scopus. https://doi.org/10.1109/ACCESS.2022.3215620

K.E.K, V., Nadeem, S. P., Meledathu Sunil, S., Suresh, G., Sanjeev, N., & Kandasamy, J. (2022). Modelling the strategies for improving maturity and resilience in medical oxygen supply chain through digital technologies. *Journal of Global Operations and Strategic Sourcing*, *15*(4), 566–595. Scopus. https://doi.org/10.1108/JGOSS-10-2021-0088

Kovynyov, I., & Mikut, R. (2019). Digital technologies in airport ground operations. *NETNOMICS: Economic Research and Electronic Networking*, *20*(1), 1–30. Scopus. https://doi.org/10.1007/s11066-019-09132-5

Kumar, S., Sureka, R., Lim, W. M., Kumar Mangla, S., & Goyal, N. (2021). What do we know about business strategy and environmental research? Insights from Business Strategy and the Environment. *Business Strategy and the Environment*, *30*(8), 3454–3469. Scopus. https://doi.org/10.1002/bse.2813

Laiho, M., Saru, E., & Seeck, H. (2022). "It's the work climate that keeps me here": The interplay between the HRM process and emergent factors in the construction of employee experiences. *Personnel Review*, *51*(2), 444–463. Scopus. https://doi.org/10.1108/PR-09-2020-0663

Lassoued, N., & Khanchel, I. (2023). Voluntary CSR disclosure and CEO narcissism: The moderating role of CEO duality and board gender diversity. *Review of Managerial Science*, *17*(3), 1075–1123. Scopus. https://doi.org/10.1007/s11846-022-00555-3

Li, Y., Soomro, M. A., Khan, A. N., Han, Y., & Xue, R. (2022). Impact of Ethical Leadership on Employee Turnover Intentions in the Construction Industry. *Journal of Construction Engineering and Management*, *148*(7). Scopus. https://doi.org/10.1061/(ASCE)CO.1943-7862.0002303

Lutz, W., & Knox, S. (2014). *Quantitative and qualitative methods in psychotherapy research* (p. 448). Taylor and Francis; Scopus. https://doi.org/10.4324/9780203386071

Mahadevan, J., & Schmitz, A. P. (2020). HRM as an ongoing struggle for legitimacy: A critical discourse analysis of HR managers as "employee-experience designers." *Baltic Journal of Management*, *15*(4), 515–532. Scopus. https://doi.org/10.1108/BJM-10-2018-0368

Malik, A., Budhwar, P., Mohan, H., & Srikanth, N. R. (2023). Employee experience –the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management*, *62*(1), 97–115. Scopus. https://doi.org/10.1002/hrm.22133

Malik, A., Budhwar, P., Patel, C., & Srikanth, N. R. (2022). May the bots be with you! Delivering HR cost-effectiveness and individualised employee experiences in an MNE. *International Journal of Human Resource Management*, *33*(6), 1148–1178. Scopus. https://doi.org/10.1080/09585192.2020.1859582

Malik, N., Tripathi, S. N., Kar, A. K., & Gupta, S. (2022). Impact of artificial intelligence on employees working in industry 4.0 led organizations. *International Journal of Manpower*, *43*(2), 334–354. Scopus. https://doi.org/10.1108/IJM-03-2021-0173

.

Martinez-Sanchez, A., Vicente-Oliva, S., & Pérez-Pérez, M. (2020). The strategy of human resource flexibility versus absorptive capacity of knowledge: An integrative framework in industrial firms. *European Journal of Innovation Management*, *24*(2), 315–337. Scopus. https://doi.org/10.1108/EJIM-10-2019-0314

McNabb, D. E. (2015). *Research methods for political science: Quantitative and qualitative methods: Second edition* (p. 426). Taylor and Francis; Scopus. https://doi.org/10.4324/9781315701141

Meijerink, J. G., Beijer, S. E., & Bos-Nehles, A. C. (2021). A meta-analysis of mediating mechanisms between employee reports of human resource management and employee performance: Different pathways for descriptive and evaluative reports? *International Journal of Human Resource Management*, *32*(2), 394–442. Scopus. https://doi.org/10.1080/09585192.2020.1810737

Nguyen, L. G. T., & Pham, H. T. (2020). Factors affecting employee engagement at not-for-profit organizations: A case in Vietnam. *Journal of Asian Finance, Economics and Business*, *7*(8), 495–507. Scopus. https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.495

Oosthuizen, R. M., Tonelli, L., & Mayer, C.-H. (2019). Subjective experiences of employment equity in South African organisations. *SA Journal of Human Resource Management*, *17*. Scopus. https://doi.org/10.4102/sajhrm.v17i0.1074

Peng, Y., Chen, H., & Li, T. (2023). The Impact of Digital Transformation on ESG: A Case Study of Chinese-Listed Companies. *Sustainability (Switzerland)*, *15*(20). Scopus. https://doi.org/10.3390/su152015072

Sarfraz, M., Ye, Z., Dragan, F., Ivascu, L., & Artene, A. (2022). Digital Transformation Strategy and Environmental Performance: A Case Study. *International Journal of Computers, Communications and Control*, *17*(6). Scopus. https://doi.org/10.15837/ijccc.2022.6.5029

Savastano, M., Angelici, D., Fiorentino, S., & Amendola, C. (2022). The role of 4.0 technologies in supporting strategic decisions: An empirical analysis in the Precision Agriculture sector. *Industrie Alimentari*, *61*, 5–20. Scopus.

Schislyaeva, E. R., & Plis, K. S. (2021). Personnel management innovations in the digital era: Case of Russia in covid-19 pandemic. *Academy of Strategic Management Journal*, *20*(SpecialIssue2), 1–16. Scopus.

Stankevičiūtė, Ž., & Savanevičienė, A. (2019). Can Sustainable HRM Reduce Work-Related Stress, Work-Family Conflict, and Burnout? *International Studies of Management and Organization*, *49*(1), 79–98. Scopus. https://doi.org/10.1080/00208825.2019.1565095

Todisco, L., Tomo, A., Canonico, P., & Mangia, G. (2023). The bright and dark side of smart working in the public sector: Employees' experiences before and during COVID-19. *Management Decision*, *61*(13), 85–102. Scopus. https://doi.org/10.1108/MD-02-2022-0164

Tsolakis, N., Zissis, D., Papaefthimiou, S., & Korfiatis, N. (2022). Towards AI driven environmental sustainability: An application of automated logistics in container port terminals. *International Journal of Production Research*, *60*(14), 4508–4528. Scopus. https://doi.org/10.1080/00207543.2021.1914355

Umeh, C., Cornelius, N., & Wallace, J. (2023). Exploring equality, diversity, and inclusion in multiethnic settings: A context-sensitive approach. *Human Resource Management Journal*, *33*(1), 148–169. Scopus. https://doi.org/10.1111/1748-8583.12441

Wang, G., Liu, Z., Zhang, D., & Chu, M. (2023). Steel Enterprise Innovation Infrastructure(SEII) and its research development. *Kang T'ieh/Iron and Steel*, *58*(9), 2–14. Scopus. https://doi.org/10.13228/j.boyuan.issn0449-749x.20230268

.

Weight, E. A., Huml, M. R., Taylor, E., & Dixon, M. A. (2021). Working in the sport industry: A classification of human capital archetypes. *Journal of Sport Management*, *35*(4), 364–378. Scopus. https://doi.org/10.1123/JSM.2020-0070

Xiao, X., & Zheng, Z. (2022). New Power Systems Dominated by Renewable Energy Towards the Goal of Emission Peak & Carbon Neutrality: Contribution, Key Techniques, and Challenges. *Gongcheng Kexue Yu Jishu/Advanced Engineering Sciences*, *54*(1), 47–59. Scopus. https://doi.org/10.15961/j.jsuese.202100656

Yang, J., & Arthur, J. B. (2021). Implementing commitment HR practices: Line manager attributions and employee reactions. *International Journal of Human Resource Management*, *32*(16), 3339–3369. Scopus. https://doi.org/10.1080/09585192.2019.1629986

Zacher, H., & Rudolph, C. W. (2022). Researching employee experiences and behavior in times of crisis: Theoretical and methodological considerations and implications for human resource management. *German Journal of Human Resource Management*, *36*(1), 6–31. Scopus. https://doi.org/10.1177/23970022211058812