

# ASSESSMENT OF MEASUREMENT INDICATORS FOR HOTEL PERFORMANCE

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## Abstract

*Performance measurements are unique indicators which are used by business enterprises including hotels to measure employee's and overall organizational performance inconsonant with broad and specific goals and objectives, to ensure compliance and thereby contribute to the stability of the organization in today's competitive environment. The hotel sector in Nigeria have being poorly regulated by agencies and department of government, and this accounts for why most hotels in the country fall short of international operation standards. These hotels rarely perform periodic performance measurement or selects and use appropriate performance metrics for the evolution of their products and services. Thus, this study investigates key performance indexes adopted for assessing hotel performance and factors affecting the performance assessment and evaluation within the hotel sector. Ilorin has about 245 registered out which twenty hotels were selected using quota and purposive sampling techniques. Measure of central tendency and descriptive statistics were used for analysis of data. Results revealed 80-100% usage for front office and housekeeping KPI, 60-70% usage for food and beverages, and 100% usage for profitability KPI. Only 37% shows they are aware of the profitability, 92% and 69% of the hotels confirmed their awareness of housekeeping and food and beverage KPI respectively. We advise that hotels should conduct periodic performance of all units and departments using carefully selected KPI for effective service delivery.*

**Keywords:** Hotel, Front office, Housekeeping, Food/beverages, and KPI,

## Introduction

Investment in the hospitality industry involves huge financial commitment for the design and establishment of accommodation, food and beverage division, conferences and exhibition hall among others requires consistent robust performance assessment and evaluation. Performance measurement is used as a working tool for evaluating management performance, including human and material resources, and for formulating corporative strategy. Performance indicators primarily set the framework for understanding key financial drivers in hospitality business such as accommodation, food and

beverage, profitability and liquidity. The concept of Key Performance Indicators (KPI) has become one of the most frequently used term in hospitality management, because it can help hospitality and tourism outfits measure their progress and enhance improvement in service delivery, revenue management, reduce cost and overall guest satisfaction.

Key Performance Indicators (KPI) are measurable factors that relate to an organization objectives and methods of achieving superior performance. Griffin (2004) pointed out that there should be a direct link from KPIs to goals, from goals to objectives and from objectives to strategies for an excellent performance. For instance, within the hotels sector, the Average room rate, Bed occupancy percentage rate, cost per occupied room, revenue available per room, labour and material cost ratio can be projected and determine based on facilities available and the level of patronage to the hotel and measure in relation to hotel goals, objective and strategies.

Thus, to keep the process of staff and facilities' performance improvement continuous and consistent, regular feedback from the performance assessment of the venture becomes important (Cohen, Standeven, Bordass, and Leaman, 2001). Since performance assessment involves a review of past and present performance of built facility and a comparative evaluation of its performance within and across an organization, its role in establishing strategies and making future decisions is significant. In addition, the results of performance assessment can evaluate the facility for its contribution to accomplishing organizational goals (Douglas, 1996; and Amaratunga, Baldry, and Sarshar, 2000)

Although an extensive list of performance metrics exists, this may however include indicators that are redundant and may not be measurable or applicable (Slover, 2006; Lavy, Garcia, Scinto, and Dixit 2014). But KPI approach provides the freedom to select the performance metrics of choice based on the scope of a study or user needs. According to Amaratunga et al., 2000 the process of performance assessment using KPIs must starts with the selection of measurable and quantifiable indicators which must be relevant to the study's scope, type of users, the nature of the organization, performance assessment focus, and current industry trends and demands.

The success of any business is dependent on superior decision making which must be based on good and timely management information from various investment portfolios. All businesses need to monitor profitability and cash-flow carefully and use management accounts for this purpose. But to boost

profitability and cash-flow, you also need to understand the key 'drivers' of your business which has a major impact on performance. A healthy process for identifying and implementing key performance indicators includes a requirement that the managers and other contributors regularly revisit and revise the measures.

The selection of an ineffective or inefficient metrics for KPIs evaluation can yield a misleading or misrepresentative result which can be spurious and significantly damaging to the firm. Eckerson (2007) claimed that metrics are powerful force that can drive change in an organization but only if the right metrics are developed and applied. The wrong metrics can wreak havoc on an organization processes and demoralize employees.

Few hotels in Nigeria have applied or implemented tools for measuring their performance in order to stay in business, so this account for one of the major reasons why most hotel have failed to meet investors or shareholders expectation in the face of stipe competition and uncertain in the financial system. Correspondingly, hotels in Nigeria do not keep real data and sufficient statistics of their daily operation that could be useful for periodic performance measurement.

Moreover, most hotel rarely have up to 70% of her room book on a daily bases, even during the festive seasons. There are also many infunctional and redundant bars and restaurants, hall and gymnasium across the hotel sector Nigeria. Additionally the hotels focus mostly on more demanding internal conditions, but pay less or no attention to other external conditions like the fiscal and monetary policy, dwindling international crude oil prices and current the Corona Virus (COVID-19) pandemic among others; which have significantly affected hospitality and tourism business globally. Due to these reasons, hotels should be proactive to measure performance of their portfolios and contribute to the stability of the industry in today's competitive environment. Usually, organizations try to measure performance according to the financial drivers but in the recent period top management must attempt to find new performance indicators which will guaranty competitive advantage. Selection of the wrong metrics for KPIs can significantly damage or even undermine a performance management initiative (Iveta, 2012). Eckerson (2007) claimed that metrics are powerful force that can drive change in an organization – but only if the right metrics are developed and applied. The wrong metrics can bring havoc into an organization processes and demoralize employees.

It is in view of the above that this study seeks to examine the methods for assessing hotel performance and factors affecting the performance assessment and evaluation within the hotel sector. This is expedient as it will further improve and contribute to existing knowledge on KPI study within the hospitality industry and perhaps reveal diverse approach of KPI assessment for hospitality stakeholders. The remaining sections of this report discuss the application of KPI within the hotel sector, methodology, results and conclusion.

## **Literature Review**

### **Characteristics and Criteria's for KPI Selection**

Generally, performance assessment offers necessary information for the monitor, control, evaluation, and feedback function for operations management in any given industry. Neely, Richards, Mills, Platts, and Bourne (2005) define a performance measurement as 'the set of metrics used to quantify both the efficiency and effectiveness of actions. Performance assessment is a tool for motivation and a driver for continuous improvement and that helps to achieve strategic objectives.

Parmenter (2010) divided KPIs into financial and non-financial indicators, as a set of measures focusing on factors that are most critical for the success of the organization. Both the financial and non-financial KPI measures performance relative to the critical success factors of management service. Further, KPIs can be divided into lagging and leading. Kaplan and Norton (2007) explained the difference between them. Leading indicator is a metric that mainly refers to future developments and drivers/causes. Lagging indicator is a metric that mainly refers to past developments and effects/results, e.g. reflects history and outcomes of certain actions and processes. Skibniewski and Ghosh (2009) emphasized that all KPIs should impact a business decision at some point of time, depending on the window of time available.

Parmenter (2010) gave the characteristics of effective KPIs to include some of the following: KPIs must be nonfinancial measures and should not be expressed in naira, euros, and pounds. It must clearly indicate what action is required by staff, tie responsibility down to a team, and acted on by the CEO and senior management team. KPIs must have significant impact on the organization and should be measured frequently. While Eckerson (2007)

described what characterizes “good” KPIs. According to his study effective KPIs are:

- Sparse: The fewer KPIs the better.
- Drillable: Users can drill into detail.
- Simple: Users understand the KPI.
- Actionable: Users know how to affect outcomes.
- Owned: KPIs have an owner.
- Referenced: Users can view origins and context.
- Correlated: KPIs drive desired outcomes.
- Balanced: KPIs consist of both financial and non-financial metrics.
- Aligned: KPIs don’t undermine each other.
- Validated: Workers can’t circumvent the KPIs.

On the other hand, Hursman (2010) defined next five criteria for effective KPIs selection:

- Specific • Measurable • Attainable • Relevant • Time bound using the acronym ‘S-M-A-R-T’.

Hursman (2010) briefly described the process of establishing KPIs to include: first determine your corporate goals, identify metrics to grade progress against those goals, capture actual data for the required metrics, match metrics into scorecards and then Jam scorecards down throats of employees.

In addition, Tonchia and Quagini (2010) present a bullet list of seven components describing the scope and purpose of a performance measurement system. They stated that performance measurement system can be viewed and studied at three different levels. Important to consider at this level is what measures that are being used, why they are used, what benefit the measures provide, and finally the cost of measuring each specific measure (Neely et al., 2005).

The individual performance measures are the first level in a performance measurement system. The second level can be described as the stage where the PMS is studied as an entity and Tonchia and Quagini (2010) describe this as the architecture of a PMS. The authors state that there are three architectural features, which need to be discussed. The first feature, vertical, is concerned with dividing the indicators in accordance to where they fit in the organisation i.e. if they are of a strategic, tactical, or operational nature. It also includes determining how the indicators relate to each other. The

second feature is concerned with defining what indicators that are suitable for the different organisational units and how these are shared and compared between the different functions. The last feature defines what indicators are actually able to measure and monitor organisational processes. According to Neely (2005), this level should also consider how the performance measures relate to each other and how well they cover the improvement objectives, as well as business objectives. The importance of covering internal, external, financial, and non-financial aspects is also included at this level.

## **Methodology**

The study population is about 245 hotels but only twenty hotels within Ilorin participated in the survey. The participants were selected using quota and purposive sampling technique; the sampled hotels were from 1 Star to 3 Star. This study use both primary and secondary data. The primary data were collected using questionnaire; 30 questionnaires were personally administered but only twenty were correctly completed, while the secondary data such personnel, patronage and annual reports were retrieved from the hotels and online.

A 5-point rating scale was adopted to assess the use of key performance index widely used by hotels in measuring performance in certain key areas. Measure of central tendency and descriptive statistics were used for analysis of data. The statistical test was measured at .05 level of probability.

For this study overall decision on the perception of respondents will follow the scoring design by Sarrafzadeh, Martin and Hazeri (2010) mean 1-1.44 = Never Used; mean 1.45-2.44= Used Sometimes; mean 2.45-3.44= Used regularly; mean 3.45-4.44 = Used Usually, mean 4.55-5 = Used Always. Thus the mean score of 3.45 is the cut-off point, meaning that a key performance index will be consider to be widely used and popular among hotels if it received a mean score of 3.45 or more. Conversely a mean score below 3.45 imply that the key performance index is not widely use and not popular among hotels in Ilorin.

## Results

**Table 1: Information of Selected Hotel in Ilorin**

Hotel	Location	Number of staff	Date established	Class
E-Phoenix Hotel	Adeleye Street, Off Basin Rd.	35	2006	3 star
Princess Luxury hotel	Coca Cola Rd. Ilorin	25	1996	3 star
Bovina view hotel	New Yidi Rd. Ilorin	120	2010	3 star
Kingstone Grand suite	Tanke Rd, Ilorin	55	2006	2 star
Noktel resort hotel	4 University Rd. Ilorin	20	2006	2 star
Fresh hotel	Fate Rd. Ilorin	25	2000	2 star
Rehoboth Guest Inn	No.12 University of Ilorin,Tanke	43	2001	3 star
Savannah hotel	No 17, Adelodun Flower Garden Fate	140	2013	2 star
Royalton palace	4 Station Rd. G.R.A	100	2003	3 star
Royal shekinah Suite	Ajaseipo Rd. Off NNPC mega	66	2009	3 star
Royal Rock Hotel	Airport Rd. Gaa Odota			3 star
Crystal House International Hotel	28 Sulugambarin Rd.			2 star
Purple Hill Hotel	Sodik Sulyman Rd. Fate			2 star
Whitefield Hotel Limited	Along Gerewu, Western Reservoir Rd.	45	2007	2 star
Kwara Hotel	Ahmadu Bello Way	322	1967	3 star
Candidate Hotel	Uni.Ilorin Rd. Tanke	18		2 star
Henry George Hotel	Adewole roundabout	27		2 star
De Compact Hotel& Suite	5 Success Street Flora Gargen			2 star
Davos Luxury Suite	13 Onikanga Rd GRA			2 star
Circular Hotel	5 New Yidi Rd	26		2 star

Source: Authors' Computation

Table 1 shows the bio-data of the sampled hotels within Ilorin metropolis, this include name, location date of incorporation and categories (8 three star and 12 two star hotels).

Our first objective was to identify the methods of assessing hotel performance, so we measured the performance of only units and department that can be found in every hotel. Thus we focused on three

departments which consist of housekeeping, food and beverages, front office and account.

**Table 2: Key Performance Index Used by Hotels**

Performance Metrics	1	2	3	4	5	Mean	Value range%
<b>Front office KPI</b>							
Average room rate				24.1	75.7	4.91	80-100
Suite occupancy rate				55.6	67.8	4.76	80-100
Cost per room				66.7	64.0	4.89	80-100
Average time to check-in a guest.			32.3	45.3	52.6	3.90	60-70
Rate of booking and reservation				36.9	39.2	3.78	60-70
<b>Housekeeping KPI</b>							
Average daily rate				73.1	25.9	4.87	80-100
Occupancy rate				68.2	31.8	4.65	80-100
Revenue per available room		24.7	75.3			4.32	80-100
Cost per occupied room		21.2	24.3			2.65	40-60
Labour cost ratio		22.4	20.0	16.7		3.10	40-60
Customer satisfaction rating			22.4	27.1	50.6	3.89	60-70
<b>Food and Beverages KPI</b>							
Sales cost				39.6	29.3	4.62	80-100
Profit generation index		5.9	24.7	28.2	41.2	3.57	60-70
Average spent per customer				29	26.0	3.50	60-70
Labour cost ratio				69.4	30.6	4.81	80-100
<b>Profitability KPI</b>							
Operation profit ratio				78.6	21.4	4.76	80-100
Market penetration index				81.1	31.5	4.91	80-100

\*\*Significant at .01 level (2-tail significant)

Variables coded on a 5-point scale where: 1= Never, 2= Sometimes, 3= Regularly, 4= Usually, 5= Always

Composite index score computed as the mean of index statements coded on 5-point scale where 1= Hotel never use KPI, and 5= Hotel always use KPI

Source: Authors' Computation



Table 2 shows the degree of adaptation and usage of KPI by hotels in Ilorin within the following departments housekeeping, food and beverages, front office and profitability. Result revealed that front office KPI such as Average room rate, Suite occupancy rate and Cost per room with mean scores of 4.91, 4.76 and 4.90 respectively with a value range of 80-100% are widely used by the hotels compared to average time to check-in a guest and rate of booking and reservation with mean scores of 3.90 and 3.78 and value range of 60-70% usage rate. This suggest that less attention is given to assess the amount of time a receptionist spent in attending to a guest or how long he/she take check-in, and make reservation orders. Moreover since all the front office performance metrics have mean score above 3.45; it implies popularity and wide usage among the hotels.

Similarly, result also shows that the housekeeping KPI have the following mean scores; average daily rate (4.87) and occupancy rate (4.65) indicated 80-100% always usage by the hotels. Correspondingly, revenue per available room (4.32) and customer satisfaction rating (3.89) shows 60-70% usual usage, while labour cost ratio (3.10) and cost per occupied room (2.65) shows 40-6-% regular usage. The food and beverages KPI likewise exhibited similar tendency like the housekeeping and front office performance metrics. With sales cost (4.62) and labour cost ratio (4.81) signifying 80-100 always usage, while profit generation index (3.57) and average spent per customer (3.50) signifies 60-70% usual usage. As a rule all the performance metrics for food and beverages are above 3.45 in absolute number and thus significant.

Result further reveals the operation profit ratio with a mean score of (4.76) while the market penetration index has a mean score of (4.91), both having a value range of 80-100%. Since the profitability KPI is used by the account department to measure the overall performance of the hotel. This means that the general performance of the hotels is always measured to assess the financial worth and revenue generated by the hotels.

Figure 1 shows the perceived level of awareness; usage and intention adapt any of these in future, if the hotel is unaware or not using it presently. 25% of the hotels show that they are aware of customer satisfaction rating index, while 22% also indicated that they are using it. Similarly, 24% of the hotels show that they are aware of cost per occupied room index, while 24% also indicated usage, and only 1% expressed interest to future plan to use this metric. Result for labour cost ratio index show awareness is (6%), not aware (14%), usage (19%) and not using (6%). Likewise occupancy rate index show awareness is (23%), not aware (2%), usage (22%) and not using (5%).

Whereas the revenue per available room show awareness is (11%), not aware (13%), usage (9%), not using (4%) and future plan (8%). Also average daily rate reveals that awareness is (17%), not aware (8%), usage (21%), not using (7%), future plan (12%), and not a priority (5%).

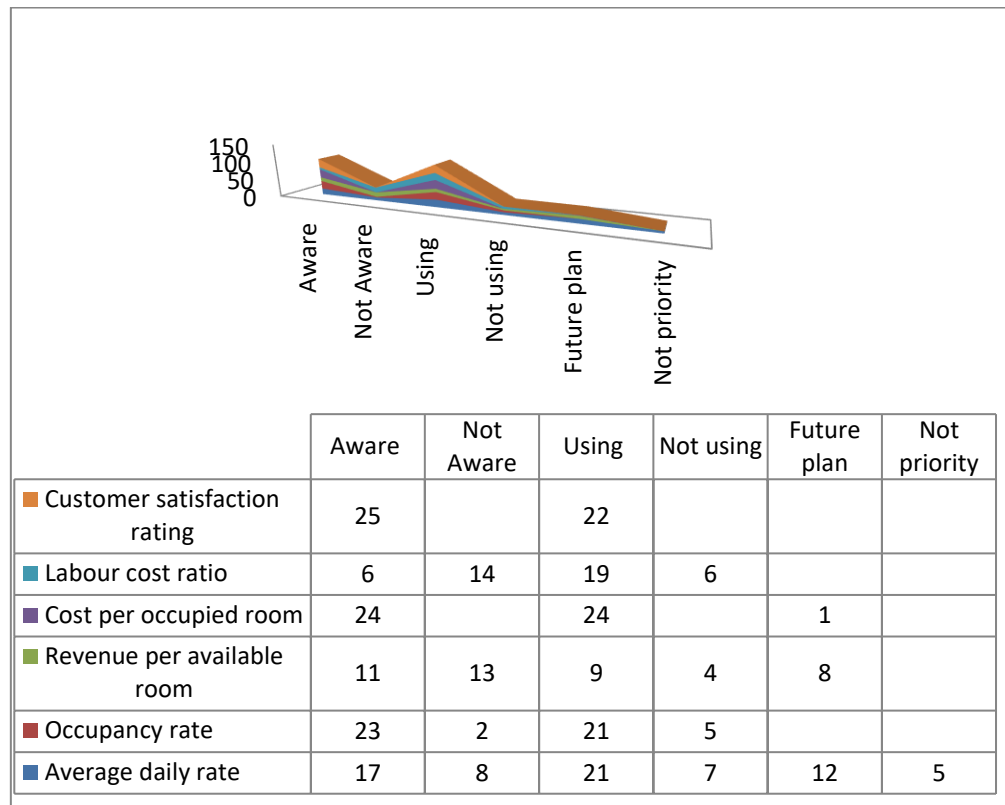


Figure 1: Awareness and Usage of Housekeeping Performance Metrics by Hotels in Ilorin

Source: Authors' Computation

Figure 2 shows the perceived level of awareness; usage and intention adapt any of these in future for food and beverages. Result revealed that 25% of the hotels show that they are aware of average amount spent per customer index, while 25% also indicated that they are using it. Similarly, 23% of the hotels show that they are aware of profit generation index, while 2% are unaware, 21% indicated usage. Result for labour cost ratio index show awareness is (17%), usage (19%), not using (5%), and future plan (13%). Likewise, sales cost show awareness (17%), not aware (8%), usage (14%), not using (9%) and not a priority (12%).

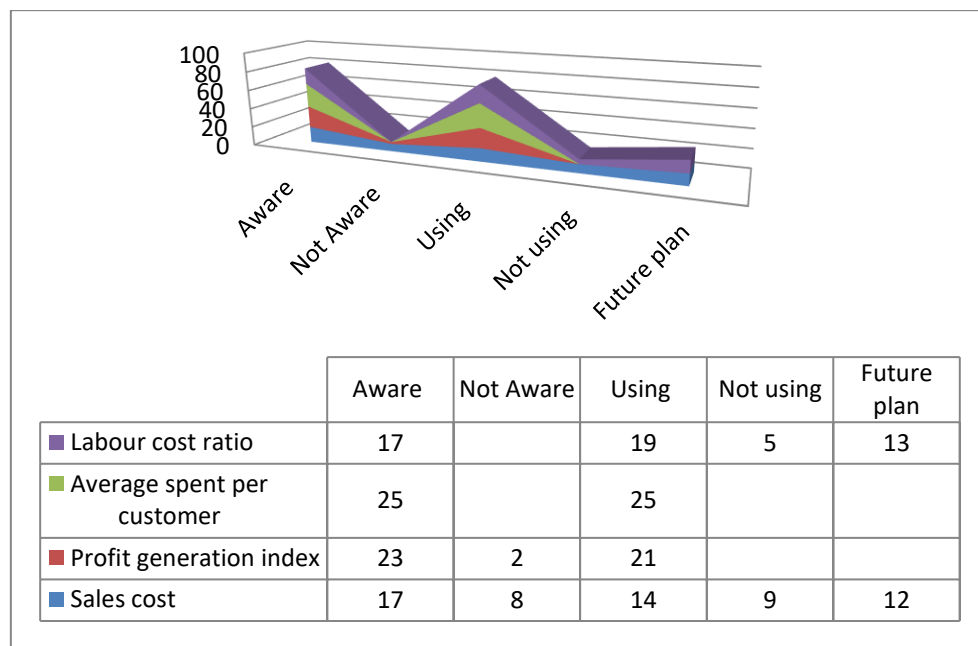


Figure 2: Awareness and Usage of Food and Beverages Performance Metric by Hotels in Ilorin

Source: Authors' Computation

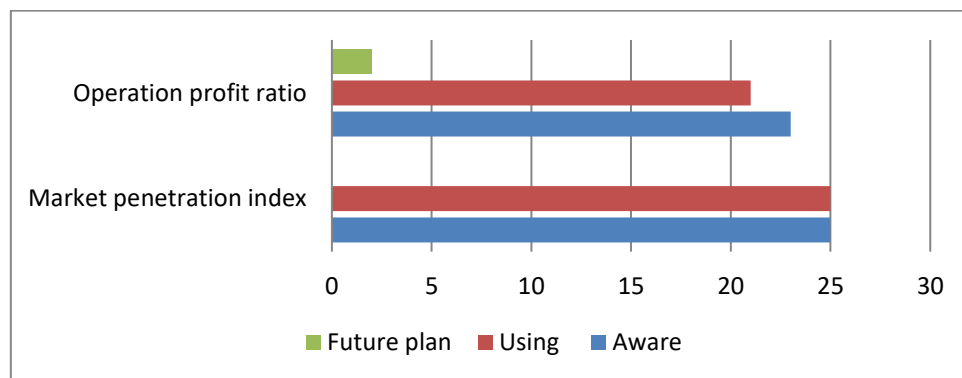


Figure 3:

Source: Authors' Computation

Figure 3 shows the perceived level of awareness; usage and intention to use profitability KPI by hotels. Result revealed that 23% of the hotels show that they are aware of the operation profit ratio, while 21% also indicated that they are using it, but 2% have intention to use it in future. Similarly, 25% of the hotels show that they are aware of market penetration index, while 25% are unaware, 21% indicated usage.

**Table 3: Factors Affecting Hotel Performance**

Variable		1	2	3	4	5	Mean	Rank
Location		73.1	25.9				4.87	2 <sup>nd</sup>
Inadequate skilled personnel		68.2	31.8				4.75	4 <sup>th</sup>
Poor organizational strategy		75.3	24.7				4.94	1 <sup>st</sup>
Government policy				22.4	50.6	27.1	4.71	5 <sup>th</sup>
Lack of coordination by NTDC			5.9	24.7	28.2	41.2	3.67	6 <sup>th</sup>
Poor institutional regulatory framework		69.4	30.6				4.81	3 <sup>rd</sup>
Security challenges		50.9	22.6	3.7	2.8		3.55	7 <sup>th</sup>

Source: Authors' Computation

From the results table 3 shows that poor organizational strategy has a very high significant effect on hotels performance with a mean score of 4.94. This is followed by location and poor institution regulatory framework with mean scores of 4.87 and 4.81 respectively. This implies that when organizational goals and objective are poorly designed and implemented, it will affect the hotel performance and standing. Similarly, the hospitality and tourism industries have poor regulatory policy framework by government department and agencies from federal to state and the local government due to lack of harmonization and the discontinuation of the tourism master plan. The inability of the National Tourism Development Cooperation to properly coordinate the industry coupled with insecurity with a mean score of 3.67 and 3.55 respectively, have significantly affect the performance of hotels.

## Conclusion

Most hotels in Ilorin are aware and familiar with key performance indices for performance assessment and valuation in the industry and the hotels consist of at least four functional departments that are features of a standard hotel. Furthermore, since a huge number of hotels seem to be aware of these performance indicators, units and departmental heads should be mandated to undertake periodic performance for their respective units and departments. Hotels who do not measure and benchmark target, would not know whether they are doing well enough or otherwise, and which areas of production or service need the most attention, and how well changes made

have improved service delivery. The study recommended that hotels identify, design and keep performance metrics to monitor her operations daily, weekly, monthly, and quarterly.

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