



*Original Article*

**SPECIFIC KEY PERFORMANCE INDICATORS AND COMPETITIVE SET DATA FOR HOTELS: A CASE STUDY IN IZMIR**

**OTELLERE ÖZGÜ ANAHTAR BAŞARI GÖSTERGELERİ VE RAKİP KÜME VERİLERİ: İZMİR'DE BİR VAKA ANALİZİ**

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**ABSTRACT**

Hotels in competitive markets need to understand what the numerical results mean to put next strategies and targets efficiently. In accordance with hotel management, managers and investors require more detailed information for an exact analysis. Therefore, they have to focus on reliable and critical performance indicators and also competitive metrics particular for hotels. This research aims to identify the key performance indicators in the hospitality industry of Izmir and to review how performance indicators influence the managerial and financial decisions. Data were collected with qualitative research techniques based on case study and face to face semi-structured interviewing technique in a ten days period. The criterion sampling was adopted to this study. Interviews have been realized with eight hotel managers from four international five-stars hotels in major tourist location of Izmir (Turkey). Findings indicate that these indicators are still fundamental and most preferred key performance indicators but service performance comes first always in the international managerial segment of all hotel organizations. The study recommends that hotel managers and investors should realize what kind of actions are really important to take by using these figures but they should firstly have a service culture in the entire hotel.

**ÖZET**

Rekabetin yüksek olduğu pazarlarda faaliyet gösteren otel işletmelerinin sayısal verileri yorumlaması, bir sonraki stratejileri ve hedefleri verimli bir şekilde belirlemeleri açısından anlamları ve analiz etmeleri önem arz etmektedir. Otel işletmeciliğinde gerçekçi bir analiz için yöneticiler ve yatırımcılar daha detaylı bilgilere ihtiyaç duyarlar. Dolayısıyla, yöneticiler ve yatırımcılar otelciliğe özgü olan güvenilir ve önem arz eden performans ve rekabet göstergelerini dikkate almalıdırlar. Bu araştırmada, İzmir'de bulunan otellerde kullanılan anahtar başarı göstergeleri ve bu göstergelerin yönetsel ve finansal kararları nasıl ve ne yönde etkilediğini tespit etmek amaçlanmıştır. Veriler, nitel araştırma yöntemi kullanılarak, vaka analizi şeklinde, ölçüt örneklem tekniği ve yüzyüze yarı yapılandırılmış mülakat tekniği ile toplanmıştır. Araştırma alanı olarak Türkiye'nin turizm kentlerinden biri olan İzmir'in en fazla turist çeken bölgesinde faaliyet gösteren dört tane beş yıldızlı uluslararası otel seçilmiştir. Mülakatlar sekiz yöneticiliye görüşülerek on günde tamamlanmıştır. Bulgular, finansal göstergelerin başarı değerlendirmesi için hala çok kritik olduğunu, ancak hizmet performansının uluslararası otel işletmeciliğinde her zaman önde geldiğini göstermiştir. Bu araştırma, yöneticilerin ve yatırımcıların, bu göstergeleri kullanarak hangi önlemlerin alınması gerektiğini anlamalarını ancak öncelikle tüm otelde geçerli olan bir servis kültürüne sahip olmalarını önermektedir.

## 1 | INTRODUCTION

Hotel's business environment is traditionally very complex and based on the fast-paced work field. The major increases in the number of hotels have caused the hotel business to be more competitive. As a matter of fact, several external factors affecting financial success like the coming up of new tourist destinations, the volatility of demand, increasing of hotel rooms supply in the market, sharp rise in costs thus going down profitability have become very strict to control and foreseen by hotel administration. In contrast, internal factors like proper pricing strategies, cost-cutting methods, controlling revenue and gross operating profit could be controlled easily to keep the business stable by using specific hotel performance measurements in right place and in the right time.

For a hotel, KPIs to measure the results of their operational efforts and generally applicable for internal control as already mentioned. While there are three basic data inside the KPIs which are used for benchmarking purposes in the market. These basic data are called 'competitive set data', the figures are ARI (Average Rate Index,) MPI (Market Penetration Index), RGI (Revenue Generation Index) at all. Additionally, the competitive set is a cluster of hotels and competitors that have parallel target market and organizational structure.

Harris and Mongiello (2006) suggested that performance measurement is a fundamental stage of decision-making. Ryan and Trahan (1999) defined a few of main performance figures, profit margin, total assets turnover, and equity multiplier for financial decisions. Hoque and James (2000) also utilized similar figures to ask managers to indicate performance ratings on various financial indicators. On the other hand, Kaplan and Norton (1992) maintained that financial measurements are not sufficient to explain the tendencies of an organization or decision-making effectiveness. Nevertheless, an organization is affected by a variety of different causes, such as competitiveness, quality of products and services, employees engagement.

This study adopts the view of Kaplan and Norton (1992) not only financial measures are traditionally performance measure metrics but also non-financial measurements must be considered to remain competitive in the market. The basic purpose of this study is in spite of large research and findings on key performance indicators, the literature has a lack of more extensive measure metrics and different perspectives to improve them. In this paper, finding out the influence of KPIs on the managerial decision is pointed out.

Briefly organizing of this paper starts with a literature review discussing former researches of performance measurement and competitiveness. Subsequently,

summarizes the methodology of research and interview questions which are mainly about how they manage these metrics and how they use them in pricing. Then findings summarises by KPIs key figures in the sense of definitions and formulations which were collected from the data sample and describing different managerial responds and perspectives. Consequently, the paper presents the results of research and suggests the limitations and recommendations.

## 2 | LITERATURE REVIEW

Walsh (1996) maintained that key performance indicators provide vital information to the management for following and predicting real business performance against strategic objectives in a way that complements financial measures. The indicator that each department or section evaluates as the most representative to successfully describe its need for measuring performance constitutes the key performance indicators.

Harris and Mongiello (2001) argued that even though a hotel is known in a service context, in reality, it conducts three different types of industrial activity (rooms, beverage, and food) that represents different business orientations. These three revenue centers call for a diverse set of performance indicators.

Collins and Parsa (2006) claimed that pricing decisions are not just based on demand and supply correlation. The cost-based pricing related to the cost of products and service and the competition-driving pricing based on a compared relative quality of the other competitors is useful for maximizing the revenue and profitability. Yet, there is another strategy, price ending (psychological pricing) works differently than others. For example, if a 300-room hotel is running 65% annual occupancy and 1 dollar per room night increase can be achieved in the Average Daily Rate due to a change in price ending strategy, this change will add 75,175 dollars in additional profitability to the hotel's earnings before taxes (EBIT), the most common measure of profitability.

Maria et al. (2008) expressed that tourism is a sector which is inelastic with supply and very volatile with demand. People travel for many reasons and spend many so that they create a demand for tourism services and products. Staying in a hotel is just one of these services. When there is more than one room supplier in a tourist destination, naturally a competition race exists. The competition first appears among the destinations. And after, the competition occurs between the suppliers, products, and services at the related destination. The hospitality firms increasingly confronted wide competitiveness at a global level. The rapid advance of technology, higher expectations of clients, fast employee turnover are

the most highlighted factors that influence the hospitality industry.

Wadongo et al. (2010) pointed out that it is difficult to choose performance measurements. The selection of performance measurements always depends on new reviews because it is a dynamic process. Measurements may be appropriate today, but the system needs to be continually re-assessed as strategies and competitive environments evolve. The management is responsible for making a strategic decision on adoption and use of various performance measurements.

Warner (2010) claimed that financial performance indicators are used for measuring the firm's performance. But, these indicators do not make sense if they are not compared to anything like a competitor, budget or past year. The firm should compare itself with other firms which have a similar capacity, targets, and concept. Furthermore, comparing period must be considered too because these indicators could have fluctuated in the short term. Then, it will be more reliable when it is compared in both short and long terms.

Micheli and Manzoni (2010) indicated that non-financial figures are useful with regard to meeting and exceeding customer expectations as well as gaining and maintaining a competitive advantage over competitors. Thus, they are fundamental in achieving profitability and other long term strategic goals.

Parmenter (2010) stated that key performance indicators are the results figures of an organization. KPIs tell the management what they have done until today and what to be done after today to increase performance. KPIs give a clear picture and direction to the business. It could be reviewed daily, weekly, monthly and at least annually.

Marr (2011) reported that KPIs has five perspectives for a complete review of an organization's achievement. The financial perspective is a set of some monetary success indicators such as Net Profit (a calculation of sales revenue-total costs), EBITDA (means that earnings before interests, tax, depreciation and amortization), Revenue Growth Rate (it is the result of current revenue compared to previous revenue), Return On Investment (calculated by profit dividing to cost), Price/Earnings Ratio (the current price per share dividing to earnings per share). Customer perspective is a set of non-financial measurements which is able to manage the organization's external environment by customers relationship. Some indicators are Customer Retention Rate (it is a number of a certain customer at the beginning of the period/ dividing to the number of those customers who still remained at the end of the period), Customer Satisfaction Index (managed by online or hands-on surveys), Customer Profitability Score (means that profit per customer), Customer

Turnover Rate (a simple way to calculate the customer turnover rate is to take the number of customers who end their relationship with the company over a given period and divide by the total number of customers at the end of the period). Marketing and Sales perspective is for understanding the size of the market in which a company is operating and the rate at which this market is shrinking or growing is a key indicator to assess future revenue growth potential. Some indicators are Market Growth Rate (calculated total sales for current year dividing to total sales for last year), Search Engine Rankings (by keyword) and Click-through Rate (it is search engine ranking is simply a website's position on the search engine ranking), Customer Online Engagement Level (a frequency of the company's e-products by its customers). Employee perspective is for understanding how employees make a difference in an organization. Financial success and customer satisfaction of business are dependent on employees satisfaction. Some measurements to follow employees are Employee Satisfaction Index which is normally captured through an annual survey. Corporate Social Responsibility Perspective is a stage of being environment-friendly organization. Some metrics are Carbon Footprint (a carbon footprint is the measure of the amount of greenhouse gases, measured in units of carbon dioxide, produced by human activities), The Water Footprint (an individual, community or business is defined as the total volume of freshwater that is used to produce the goods and services consumed by the individual or community or produced by the business), Energy Consumption (the total amount of energy purchased in a given time period), Waste Reduction Rate (a measure of reducing the amount of wasting things like food and operating materials).

Annual Report of PPHE Hotel Group (2012) stated that the hotel group used the metrics below to measure their annual performance:

- Total Revenue: It is all operating revenue generated by the group's owned and leased hotels, management fees, franchise fees, and marketing fees.
- EBITDAR: It is earnings before interest, tax, depreciation, amortization and rental expenses.
- EBITDA: It is earnings before interest, tax, depreciation, and amortization.
- Normalized Profit Before Tax: It is profit before tax adjusted to remove rare or one-time influences.
- Normalized Earnings Per Share: Earnings for the year, adjusted to remove any rare or one-time influences, divided by the weighted average number of ordinary shares outstanding during the year.

- Dividend Per Share: The total dividends paid out over a whole year divided by the number of outstanding ordinary shares issued.
- Occupancy: Total rooms occupied divided by the available rooms.
- Average Room Rate: Total room revenue divided by the number of rooms sold.
- RevPAR: Revenue per available room; total room revenue divided by the number of available rooms.
- Employee Engagement: Measured through annual surveys. Team members are encouraged to share feedback about our company, their jobs, their teams, and the manager.
- Guest Satisfaction: Guest satisfaction is paramount to our long-term success. Guests are approached via electronic surveys and are encouraged to rate various elements of their stay.

- Service Performance: A consistent delivery of exemplary service is a core objective. Service performance is measured through electronic surveys, with guests encouraged to rate various service elements.

Failte (2013) claimed that running any business needs proper decision making that is related to good and on-time management information. All businesses must control profitability and cash flow carefully. But there is a case that if an organization want to enhance its profitability, it needs to understand key ‘drivers’ of its business. A driver that has a great impact on business performance. KPIs are the key drivers of the hotel business and they indicate the progress and performance of the hotel’s business. KPIs give a number that is a result and relationship of two figures. KPIs in the industry as follows:

**Table 1.** Failte Performance Figures

<b>Accommodation</b>	<b>Food and Beverage</b>	<b>Labor Cost</b>	<b>Profitability</b>
<b>Average Room Rate</b>	<b>Food Cost of Sales Ratio</b>	<b>Total Labor Cost</b>	<b>Operating Profit Ratio</b>
<b>Bedroom Occupancy Rate</b>	<b>Food Average Sends</b>		<b>Net Profit Ratio</b>
<b>Revenue per Available Room</b>	<b>Beverage Cost of Sales Ratio</b>		
<b>Occupancy Percentage Rate</b>	<b>Beverage Average Spends</b>		
<b>Cost per Occupied Room</b>			

(Source: Failte, 2013)

Srivastava and Maitra (2016) reflected that KPIs must be correlated to the strategy of the organization and after setting the hotel’s strategy, KPIs can be adopted to the follow progress to manage and improve performance. KPIs should be firstly designed to empower employees by providing information to enable them to learn. It helps to improve decision making and results in improved performance. The process of designing KPIs begins with outlining the Key Performance questions for each strategic purpose. While designing and assessing the KPIs, the steps should be considered: (1) identify factors critical to performance (2) collect and report required data (3) analyze the data for improving and measuring performance.

It is very certain that the literature review of performance measurement in the hospitality industry has a plenty of research. However, more extensive metrics and competitive set data figures still suffer some insufficiency. The present study is an attempt to take an overview of using KPIs in Izmir and define some new figures collected from hotels. This study is also an attempt to present some suggestions to hoteliers to pricing and competing properly.

### 3 | METHODOLOGY

#### 3.1 | The Purpose of Study

Managers and investors need some success indicators in order to review if they achieve financial targets, to make predictions about the future of the hotel and to observe how the hotel is ranked in the cluster of competitors.

This research conducts a qualitative study and aims to identify the key performance indicators in the hospitality industry and to see how performance indicators influence the managerial and financial decisions. Based on qualitative research, the study is formed in case study. The study also takes advantage of criterion sampling and face to face semi-structured interview techniques. According to Tripadvisor Travel Portal (2019) data, there are 45 downtown and business hotels in Izmir. Four five-stars international hotels are located in same town, Konak. These four hotel have similar guest profile and operated as downtown and business hotels. Most of the guests who visit these hotels are coming for business and international fairs in Izmir. Moreover, these hotels work more international than other types of hotels. Another reason, they report to the head office of their chain groups about all activities of

the hotel, the market, and competitors in the cluster. So, they utilize more professional finance and measurement tools when they make decisions.

In this research, three questions have been asked to gather data from the sample. These are; (1) Please explain how you make competition check in your competitive set. (2) Key Performance Indicators (KPI's) such as Occupancy, ADR, RevPASH, GOPPAR, and non-financial indicators, etc. are used to measure the results of the hotel revenue management strategy. Which KPI is the best to measure the 'Performance' of your hotel? (3) Hotels use a few methods to determine prices. Please explain which one(s) are best suited for your Revenue Management and why.

### 3.2 | The Method of Study

Stake (2010) stated that qualitative researches involve analyzing and interpreting of the papers and interviews. Besides, it aims to disclose the discussed phenomenon in order to reveal meaningful relationships. Moreover, it means that the researchers investigate in natural settings, attempting to phenomena and society perception. Ritchie and Lewis (2003) defined some assumptions of qualitative researches as follows:

- Qualitative researchers pay attention firstly to process, more than outcomes.
- Qualitative researchers are interested in meaning how people review of their lives, experiences, and their structures of the world.
- The qualitative researcher is the first step for data gathering and interpreting.
- Qualitative research is based on fieldwork. The researcher physically goes to the people, setting, site, or institution to observe or record behavior in its natural setting.
- Qualitative research is descriptive in that the researcher is interested in process, meaning, and understanding gained through words or pictures.
- Data are very comprehensive and detailed.
- The samples have generally number of small participants.

The case study design has been conducted for this research. Gomm, Hammersley, and Foster (2000) explained that the word 'case' means 'an instance of' and the central future of the case study research design is the investigation of the one or more specific 'instances of' something that comprise the cases in the study. A case can be an organization, a group or an individual, or something more abstract such as an event, a management decision or a change program. In this paper, to identify the effects of KPIs on managerial and financial decisions has been selected

as a case. Moreover, five stars international hotels have been selected to study the case.

### 3.3 | Data Sample

This research has consisted of eight managers from five-stars hotels. In order to gather data criterion sampling method, which is a subtype of purposive sampling, has been utilized. Participants were recruited through purposive sampling. Patton (2002) defined that purposive sampling is sampling according to preselected criteria such as age, gender, job, qualifications, etc... Participants were eligible if they were: (1) working in one of four five-stars hotels in Izmir (2) working in general manager or director of finance positions. Criterion sampling includes selecting cases that meet some predetermined criterion of importance.

Four of them are general managers and others are directors of finance. Two managers hold Master degree, others have a Bachelor diploma. Two of them have experience between 10-19 years, five of them 20-30 years, and one of them have more than 30 years of experience.

### 3.4 | Data Collection

This research is based on face-to-face semi-structured interview technique. Because of providing flexibility, this method is suitable for this research. Before preparing interview questions, has been reviews the literature in-depth. Bernard (1988) defined this method as follows:

Characteristics of Semi-structured interviews;

- The researcher and participants engage in a formal interview.
- The researcher improves and utilizes an interview guide. This is a list of questions and topics that need to be covered during the conversation, usually in a particular order.
- The researcher follows the guide, but allows to researchers to ask another questions related with topic.
- The semi-structured interview guide provides a clear set of instructions for researchers and can provide reliable, comparable qualitative data.
- Semi-structured interviews also allow participants the freedom to express their views in their own terms.

Data for this research has been collected between the dates of 20-30 March 2019. Before starting to interviews, each participant has been called and requested allowance to visit them in their work places. An allowance form has been presented in order to let participants know about topic of the study and interview questions. During the interviews, the participants have been informed clearly about this

research. Each interview has been completed in one hour. In order to keep the data safe, a recording device has been used. A proper interview room has been used for the participant's relaxation. After interviews, notes and tape recording have been reviewed. Participants have been informed that they were eligible if they would like to listen to records. Also, they have been informed that they could change and/or add to their expressions related to research. The final state of the paper has been sent participants and asked for their confirmations. After their confirmations, the study has been reported. All of these were for an effective communication environment and to get the most suitable data.

### 3.5 | Reliability and Validity of The Study

The study has been completed based on the measurements which provide reliability and validity in qualitative researches have been listed as follows (Gruba and Lincoln, 1985):

- **Dependability:** Participants participated in interviews on a voluntariness basis. It is a proof that they have signed the acceptance form in advance. Interviews have been completed when and where participants wanted. Recordings, notes, and findings have been shared with participants. Thus, the study has been completed based on participants' perspectives, experiences, and confirmations. Findings are completely related with their statements.
- **Confidentiality:** Participants' name, title, duty have been determined during the interviews but personal information with details have not been requested. Findings and recordings from interviews have been kept safe by the researcher and not shared with irrelevant persons.

### 3.6 | Data Analysis and Limitations

Throughout qualitative research approach, narrative analysis method has been conducted to this study. Jahn (2005) defined that this method involves the reformulation of stories presented by respondents taking into account the context of each case and different experiences of each respondent. In other words, the narrative analysis is the revision of primary qualitative data by the researcher.

In this study, open-ended questions have been asked to participants. Data were collected with face-to-face dialogues and findings have been converted as a paper in computer. Research questions are edited based on former literature reviews and current market conditions of the hotels. Answers and findings have been interpreted and transmitted on this paper. Each manager has been identified with a code number like Participant 1, Participant 2, Participant 3, etc.

Qualitative researches have some limitations. These limitations involve limits of the study and external factors that can effect the results of this study;

- This study approaches to just one case. The study does not involve other types of the hotels in Izmir. It takes over KPIs effects on managerial decisions. The study is not related with multiple or compared case analysis.
- This research is restricted to eight managers from four five-stars hotels in Izmir. It may not be generalized out of Izmir. A future study could take place in a larger sample, in a different location, with different data gathering methods.

## 4 | FINDINGS

Eight participants from four five-stars hotels in Izmir have completely participated in the interview. In this part of the research, the responses from the sample have been evaluated. First, the KPIs figures that are used in Izmir by the sample hotels were given. Second, the interview question has been highlighted as a title, and then the responses of participants have been transmitted.

### 4.1 | KPIs and Competitive Set Data Key Figures from Research Sample

This study adopted the figures that were collected from the sample hotels during the interview period. It is found that the hotels in the sample use these figures for financial measurement in Izmir. Definitions of KPI figures were taken from the sample hotels and Revenue Management Glossary (2019) by the Internet. It can be divided into two groups as financial figures and non-financial figures. Firstly, financial KPIs figures were determined, eventually, non-financial figures were evaluated.

#### 4.1.1 | Financial KPIs Figures

KPIs include a set of ratios and formulas that support to calculate and indicate the performance and progress of a hotel accordingly to their plans and actions. The figures are given in details below;

##### Supply

It is the number of available rooms to sell in a period.

##### Demand

It is the number of rooms sold by a hotel. Does not include complimentary room and/or no-show room.

##### Revenue

Total hotel revenue generated from the sale of rooms, food, beverage, and spa includes service charges.

##### OCC (Occupancy)

It is a percentage of available rooms that were sold during a specific time period. Occupancy is calculated by dividing the demand (number of rooms sold) by

the supply (number of rooms available). The result is a percentage.

#### **Occ Rate For Beds**

Another metric that is calculated dividing the number of guests by bed capacity.

#### **Occ Rate For Restaurants**

It is a metric which is useful for food and beverage venues, calculated dividing the number of covers by restaurant capacity.

#### **ADR (Average Daily Rate)**

It is a measure of the average rate paid for rooms sold during a specific time period. ADR is calculated by dividing the room revenue by the demand (rooms sold). This is a currency (dollar, euro, etc.) amount.

#### **ACP (Average Check Price)**

It is a measure of the average check price paid in restaurants. It is calculated dividing total venue revenue by the number of guests served.

#### **REVPAR (Revenue Per Available Room)**

It is a measure of the revenue that is generated by a hotel related with each room available. This is different from ADR because RevPAR is affected by the number of unoccupied rooms, but ADR only shows the average rate of rooms actually sold. RevPAR is calculated by dividing the room revenue by the total number of rooms available. This is a currency amount. It should be noted that out of service rooms are not considered in this calculation.

#### **BAR (Best Available Rate)**

The minimum rate of the day that is applicable for guests to make a reservation. The BAR rates are available to the local people, does not ask for pre-payment and does not impose cancellation or change penalties and/or fees, other than those imposed as a result of a hotel property's normal cancellation policy.

#### **Departmental Revenue**

Departmental revenue is found from dividing the department's revenue by total hotel revenue.

#### **GOP (Gross Operating Profit)**

It is the hotel's profits after excluding all of their operating expenses. It illustrates the level of the operational profitability of a hotel. It is calculated as follows: Gross Operating Revenue - Gross Operating Expenses.

#### **NOP (Net Operating Profit)**

It is a calculation of net operating income after excluding all of the operating expenses from the revenues generated by a hotel. This is used to evaluate whether a hotel is making more than it

spends or is operating at a loss. It is calculated as follows: Revenue generated - Operating expenses.

#### **RevPATH (Revenue Per Available Treatment Hour)**

RevPath is a calculation for Spa operations that take measure to a more detailed level, given the need to "turn over" of rooms during the day. It helps the spa operation to manage time effectively. REVPATH formula is Spa occupancy / Average treatment rate.

#### **RevPOR (Revenue Per Occupied Room)**

RevPOR, unlike RevPAR, considers revenue per occupied room which gives a better understanding of how much profit to make from the guests who actually stay at the hotel. The formula as follows: Rooms revenue / Total occupied rooms.

#### **SpendPAR (Spend Per Available Room)**

The SpendPAR formula helps to calculate the average cost per available room in the hotel.

#### **GopPAR (Gross Operating Profit Per Available Room)**

From an ownership perspective, GOPPAR allows the manager to see what the value of a hotel's asset is at any given time. A hotel has really two assets in one: a real estate asset and an operating business. The formula as follows: Gross operating profit / Available rooms.

#### **TrevPAR (Total Revenue Per Available Room)**

It gives a preview of the total revenue from all departments which the room can generate. This calculation is preferable for the management to have a broad and more generic view of the hotel's potential and its actual performance. The formula as follows: Total revenue\* / Total available rooms.

\*Total Revenue = Accommodation + Food and Beverage + Spa [Any other extra revenue]

#### **TrevVPEC (Total Revenue Per Client)**

It is the total revenue generated per customer. The formula as follows: Total revenue / Total number of guests.

#### **RevPAM (Revenue Per Available Square Meter)**

It is the hotel's rent out space for conferences and banquets. The utilization efficiency of the sales department is calculated on the revenue per available square meter of the banquet space. The formula as follows: Revenue / Available square meter of banquet space (m<sup>2</sup>)

#### **RevPASH (Revenue Per Available Seat Hour)**

This calculation is useful to measure the usage and revenue of a seat per hour and it allows a better understanding and planning for the food and beverage department. The formula as follows: Total outlet revenue / (Available seats x Opening hours). It can be calculated hourly, daily, weekly and monthly.

It is also used to support restaurants to plan labor scheduling, food purchasing, marketing tools, and budgeting during the lowest occupancy.

#### **Allocation**

Allocation is the number of rooms a hotel has available for sales.

#### **Allotment**

The term Allotment is used in the hotel industry to designate a certain block of pre-negotiated rooms which have been bought out and held by a third party (such as a travel organizer, wholesaler, tour operator, hotel consolidator, travel agent).

#### **ALOS (Average Length of Stay)**

It is the average amount of days guests stay at the hotel during a particular period.

#### **ARR (Average Room Rate)**

It measures the average rate per available room, not sold. (similarly to ADR)

#### **ATR (Average Treatment Rate)**

It is mainly used for Spa Operation. It calculates the average rate and it is varied on different treatment packages as well as on the demand/occupancy of the spa booking rate.

#### **SpendPOR (Spend Per Occupied Room)**

The SpendPOR formula helps to calculate the average cost per occupied room in the hotel. This is another KPI to measure and analyze if the operating cost for each room is reasonable.

#### **NrevPAR (Net Revenue Per Available Room)**

It is the deduction of distribution costs, transaction fees and travel agency commissions from GOP dividing to available rooms. The formula as follows (Room Revenue - Distribution Costs)/Available Rooms.

#### **4.1.2 | Financial Competitive Set Figures**

A competitive set is a group of other hotel brands and competitors that have a similar target market and concept in the market. Hotels will often compare their performance against competitive set hotels in order to find ways to make their own offering more competitive. Competitive sets are used for benchmarking purposes, market penetration analyses and to help develop positioning strategies.

Many hotels use rate index tool to compare their current pricing with the ones of their competitors in order to make proper pricing decisions. The components of competitive set are given in details below:

#### **MPI (Market Penetration Index)**

MPI is a calculation to measure the hotel's occupancy compared to the average market occupancy levels (also referred to as market share). This tool supports the hotel to see its position and performance in proportion to the competitors and the market in general. MPI formula as follows: Hotel occupancy % / Market occupancy %

#### **RGI (Revenue Generation Index)**

It compares the hotel's RevPar to the average RevPar in the market. It is used to determine if a hotel is gaining a fair share of revenue compared to its competitive set. The formula as follows: Your Hotel's REVPAR / Hotel Market REVPAR.

When RGI is equal to 1, the hotel RevPar is equal to the average RevPar of their cluster. RGI is bigger than 1, the hotel RevPar is higher than the average RevPar of their cluster. RGI is smaller than 1, the hotel RevPar is less than the average RevPar of their cluster.

#### **ARI (Average Rate Index)**

It measures the performance of their Average Daily Rate (ADR) compared to their competitive set during the same period. The formula as follows: Hotel ADR dividing to Aggregated group of hotel's ADR.

Calculation:

$\$180 / \$150 = 1.20$  (this means that your ADR is 20% better than the average of your competitive set).

When ARI Index is equal to 1.00, the hotel ADR is equal to the average ADR of their cluster. ARI Index is bigger than 1.00, the hotel ADR is more expensive than the average ADR of their cluster. ARI Index is smaller than 1.00, the hotel ADR is less expensive than the average ADR of their cluster.



**Table 2.** Competitive Set Data: An Example Result Table of One Competitor

COMPETITOR 1		COMPETITOR 2			COMPETITOR 3			COMPETITOR 4					
THE DATA RESULTS OF COMPETITOR 1 COMPARING TO OTHER THREE COMPETITORS													
		Score	? %	Rank									
Score Full Year 2018	MPI	1,05	40,0%	3									
	ARI	0,87	6,0%	4									
	RGI	0,91	51,0%	4									
Trend		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MPI		0,98	1,15	1,08	0,97	0,95	1,20	1,99	1,99	1,16	1,16	1,88	0,98
ARI		0,88	0,85	0,92	0,88	0,83	0,88	0,83	0,80	0,81	0,93	0,92	0,92
RGI		0,59	0,91	0,91	0,78	0,72	0,84	0,83	0,79	0,81	0,89	0,84	0,87
Rank MPI		4	3	2	3	3	3	3	2	3	3	3	3
Rank ARI		3	2	4	1	4	2	4	3	4	4	4	2
Rank RGI		4	4	3	4	2	1	2	1	4	2	1	4

The findings reveal that;

(1) Table 2 represents competition results of one hotel’s MPI, RGI, ARI performance figures against other competitors in the competitive set. Competitive set is applied to 4 hotels.

(2) Score Full Year 2018 part indicates the results of average scores of the whole year. For instance, MPI 1,05 means that when sum up the MPI results of each month in 2018 and divide to 12 (months), will be obtained the average 1.05. The same calculation applies to ARI and RGI too.

(3) ?% is the changes comparing to the previous year. For example, MPI increased %40 in 2018 against 2017, ARI %6, RGI %51.

(4) Rank means the place of one hotel versus other competitors in the competitive set. For example, the hotel ranked 3<sup>rd</sup> among four hotels by the result of MPI performance in 2018. Another case that the hotel ranked 4<sup>th</sup> by MPI result in January of 2018 among competitive set.

**4.1.3 | Non-Financial KPIs Figures**

Wadongo et al. (2010) stated that decision makers pay no attention and utilize less the evaluations of attitude, behavior, and expertise of employees, guest evaluation of design facilities renovation and maintenance, and guest evaluations of benefits gained such as relaxation, exercise, and refreshment. Hence, it is likely that a number of customers do not visit such a business.

Unlike, there is a positive relationship between the level of guest satisfaction and the number of repeat guests. This research indicates that hotel managers should pay attention to these metrics to survive in the market.

- On-time Delivery of Service
- Brand Recognition
- Position in Favorable Markets
- High Product Quality

- Innovation in Hotel Technology
- Yield and Reduction in Waste (food and energy)
- Morale and Firmwide Culture
- Market Share Percentage
- Sales Growth Percentage
- Guest Satisfaction
- Guest Evaluation of Facilities
- Number of Repeat Guests
- Value For Money
- Room Cleanliness
- Staff and Service Quality
- Number of Employee Training and Development Programmes
- Employee Engagement
- Employee Turnover Rate

Atkinson and Brown (2001) claimed that the hotel performance significantly depends on how senior management evaluates the value of people (both guests and employees) in hotel service delivery process. This orientation has led to suggestions that hotels need to develop better performance information related to key areas such as employee engagement and customer satisfaction.

**5 | DISCUSSION**

**Findings of Question 1; Please explain how you make competition check in your competitive set.**

In order to understand how the hotels make competition checks and what kind of tools they use, the first question was asked to the participants. Participants 1, 2, 3 and 4 expressed that they mostly care of average room prices per night and rank of the hotel among other competitors in guest comments portals. Additionally, contributing to social activities is also a competition indicator for these participants

since they think that will have more reputation in the market. These participants agree that the hotel will always survive as long as it is promoted in local media and give credits to familiarization trips to guests from all around the world. These participants keep tracking average rate index (ARI) and brand recognition indicators. They evaluate these indicators monthly and annually. For ARI, they use a tracking module in their business plans. For brand recognition, they follow their social media accounts and e-surveys about their facilities.

Participant 5 and 6 told that the hotel would stay competitive if the management took care of guest satisfaction and the hotel's technological transformation. Investment in smart technology always contributes to the hotel's revenue with respect to delivering a rapid service to the guest. Participant 6 briefly explained that every hotel can provide a nice stay and a good breakfast but the quick service and more technological guest facilities always matter. One example is they have put a payment method to their food and beverage information systems. This system works with a guest's identity card. When a staff uses his/her identity card in a POS device, the staff will be able to see the guest's discount privileges and membership data. This method provides an easy way of payment. These participants widely use the guest's feedback about their services and reshape their service philosophy based on this feedback.

Participant 7 and 8 said that they mostly pay attention to food and beverage promotions that the hotel provides to guest in house and local people. They focus on food and beverage products more than room sales. One comment is that Izmir is a small market for hotels. Whatever an issue may come up with tourism in Izmir, it will always host the guests because there are not too many quality hotels to stay like them in their location. So, the hotel's occupancy will be always high. Therefore, the hotel should make a difference in another line which is able to boost up the revenue and the hotel's prominence.

**Findings of Question 2; Key Performance Indicators (KPI's) such as Occupancy, ADR, RevPASH, GOPPAR, and non-financial indicators, etc. are used to measure the results of the hotel revenue management strategy. Which KPI is the best to measure the 'Performance' of your hotel?**

In order to point out which indicator the managers utilize to evaluate the hotel's performance, the second question was adopted. Participant 1, 2, 7 and 8 expressed that the rooms are always ready to sell out and make positive contributions to the hotel's revenue. On the other hand, they endeavor to generate their food and beverage revenue higher since they have various food and beverage outlets and

meeting/events facilities. They have selected two indicators and try to increase them by various methods. REVPAM and REVPASH are very fundamental for these participants. They try to draw more hotel's guest to their restaurants and sale more meeting rooms to the local companies, weddings, graduation, gala dinners as well.

Participant 5 and 6 have also the same opinion as others. One thing that they use REVPATH since their hotels have very large Spa and fitness facilities. These facilities are not only open for hotel guest, but also open for local people.

Unlike others, Participant 3, 4 told that they have more focus on rooms because they do not want to promote other hotel facilities as much as others do. So, they effort to make higher REVPOR for rooms.

**Findings of Question 3; Hotels use a few methods to determine prices. Please explain which one(s) are best suited for your Revenue Management and why.**

In this question, found that all participants use the same pricing methods. The details are given below;

- Competitive pricing is the hotel determines approximate prices among its competitors.
- Single-rate pricing is the hotel determines just one type of room rate, it is like a fixed price.
- Cost-based pricing is total costs divided to per client.
- GOPPAR-based pricing is expected GOPPAR divided to an expected guest number and tries to find an average room rate.
- Demand-based pricing is the hotel do not sell rooms with discounted rates during peak periods.
- REVPOR-based pricing is expected REVPOR divided to expected room sales.

It is found that all participants agreed with the best is to take advantage of a combination of competitive pricing where the hotel determines approximate prices among its competitors. So, a hotel is supposed to price in sense of competition with the competitive set of the hotel. The hotel ought not to put a pricing method to itself out of the market.

**Table 3.** Competitive Pricing Analyze Among Competitors

	COMPETITOR 1		COMPETITOR 2		COMPETITOR 3		COMPETITOR 4	
<b>General Rate Information</b>								
Value Added Tax in Rates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Service Charge in Rates	No	No	No	No	No	No	No	No
Buffet Breakfast Rate in Dollars	14,42	14,42	16,28	16,28	6,98	6,98	18,14	18,14
Breakfast Inclusive in Rates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Best Available Rate in Dollars</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	124	145	140	195	90	125	165	250
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	150	165	160	218	130	200	180	250
Senior Suite Room	160	185	180	258	150	220	240	400
<b>Local Corporate Rates in Dollar</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	98	118	70	135	55	100	115	140
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	150	165	160	218	130	200	180	250
Senior Suite Room	160	185	180	258	150	220	240	400
<b>FIT Rates in Dollars</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	105	120	110	130	63	105	135	160
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	150	165	160	218	130	200	180	250
Senior Suite Room	160	185	180	258	150	220	240	400
<b>WholeSale Rates in Dollars</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	120	150	125	150	63	105	145	160
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	160	180	160	218	130	200	180	250
Senior Suite Room	180	195	180	258	150	220	240	400
<b>GIT Rates in Dollars</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	85	105	56	56	77	174	107	230
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	170	190	160	218	130	200	180	250
Senior Suite Room	180	210	180	258	150	220	240	400
<b>MICE Rates in Dollars</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
Superior Room Category	98	118	100	120	77	174	107	230
Executive Room Supplement	30	30	45	45	50	50	50	50
Junior Suite	170	190	160	218	130	200	180	250
Senior Suite Room	180	210	180	258	150	220	240	400

Table explanation;

- The table indicates the pricing methods of four competitors in low and high seasons.
- All of the hotels have four room categories; Superior room, Executive room, Junior suite, Senior suite. Pricing depends on season and room types.
- Best Available Rates is the minimum rate of the day that is applicable for guests to make a reservation.
- Local Corporate Rates is the special rate which has been agreed with local companies.
- FIT (Free Independent Traveler) Rates is an individual (or small group of <10) traveling himself by making his/her reservations.
- Wholesale Rates is the group reservations by a travel agency or a tour operator.
- GIT (Group Inclusive Tours) Rates is a special package price for group reservations.

- MICE (Meeting, Incentive, Congress, Events) Rate is special price offers for these groups who do not stay in the hotel.

The opinions of the participants have been stated in the interviews. These opinions will be transmitted in the conclusion part of this research.

### 6 | CONCLUSION

This research aimed to identify the key performance indicators in the hospitality industry, Izmir, and to analysis how performance indicators influence the managerial and financial decisions. During the interview, it is clearly stated that all hotels in the sample are not very strict to sell out the rooms. The participants claimed that there are not too many five-star hotels in the location so there will always be a chance to generate room revenue. The participants from the sample are more concentrated to promote other facilities of the hotel such as restaurants and Spa. They endeavor to host local people in their outlets.

Participants maintained that they all agree with these figures are so useful for short term goals. They use these metrics when they make a decision about how

they can enhance revenue. One matter is that if participants review that total revenue per client (TrevPEC) is decreasing, then they offer special discounts for a specific period to the repeat guests to make them use the hotel's restaurant. These figures also indicate which department is more profitable and which one is operated with high costs. All these figures are determined as expected/actual in their business plans.

Participants agreed with one issue for the long term; it is very certain that these financial figures restore their plans more reliable. However, if there is no service quality, the hotel will not generate revenue, so there will be no monetary gains to measure. After implementing a good service culture in the entire hotel, these indicators will just assist how to enhance revenue and competitiveness.

According to the comments of Participants, they all have similar purposes for a successful hotel management. These objectives are employee engagement, service quality, profitability of the hotel, hotel hygiene standardization, and innovation in information systems. Participants indicated that they hosted 'Mystery Guest' two times in a year. This is an application that the hotel evaluates itself by measuring the hotel's service quality. They call this application Leading Quality Assurance (LQA). Moreover, the hotel evaluates itself in hygiene audit once in a year. The hotels make sure that their food and beverage products are appropriate to serve the guests. The hotels also evaluate employee engagement with a survey which is called 'Opinion'. Human resources department takes charge of this duty. All employees score the questions about the hotel and management practices once in a year. The results are directly reported to the head office of the hotel.

In this point, the study adopts the similar view of Kaplan and Norton (1992). In the research paper 'The Balanced Scorecard: Measures That Drive Performance', Kaplan and Norton (1992) noticed that not only financial measures are traditionally performance measure metrics but also non-financial measurements must be considered to remain competitive in the market. They used three basic criterias; innovative production, customer perspective, product quality. In this research, it is certain that beside these criterias, three other criterias which are specific for these hotels have been found; these are hygiene standardization, technological development, employee engagement. Measurements of these criterias have been listed in Findings part.

Besides its contribution to the current literature review, this study provides useful information to decision makers. In terms of the limitations of this research is restricted to eight managers from four five-stars hotels in Izmir. It may not be generalized

out of Izmir. A future study could take place in a larger sample, in a different location, with different data gathering methods. The literature review indicates that there is a severe lack of Izmir-based research in tourism and hospitality industries that investigates factors effecting performance measurement practices.

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