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## **Analyzing the Financial Performance Indicators of Front Office Management in Five-Star Hotels in Cairo**

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### **Abstract:**

This research aims to analyze the financial performance indicators in a convenience sample of 12 five-star hotels in Cairo applying to the front office management department using the quantitative method. The data collection includes the hotels' financial reports, which include financial and operational performance indicators in the form of historical data. The results of this research revealed that the coefficient of variance for the performance indicators is high among the sample hotels as follows; total room revenues (75.35 %), average daily rate (70.11%), revenue per available rooms (61.01%), total rooms sold (45.52%), daily rooms (45.21%), annual rooms (45.21%) and occupancy rate (13.3%). In addition, there are significant differences for daily rooms (DR), annual rooms (AR), total rooms sold (TRS), revenue per available rooms (RevPAR), average daily rate (ADR) and total rooms revenues (TRR) among the sample hotels. Moreover, there is a strong positive correlation between total room revenues and daily rooms ( $r = 0.733$ ) at the 0.01 significance level; a strong positive correlation between total room revenues and average daily revenue ( $r = 0.613$ ); and a strong positive correlation between total room revenues and

revenue per available rooms ( $r = 0.651$ ) at the 0.05 significance level. Finally, there is a positive relationship between average daily rate and revenue per available rooms ( $r = 0.984$ ) at the 0.01 level; a positive relationship between daily rooms and total rooms sold ( $r = 0.975$ ) at the 0.05 level. Consequently, hotels managers need to make more effort to improve the financial and operational performance through enhancing the levels of revenue per available rooms, average daily rate and room occupancy rate to the highest possible levels for maximizing the total rooms revenues of five-star hotels in Egypt.

**Keywords:** Performance Indicators, Average Daily Rate, Revenue per Available Rooms, Total Room Sold, Total Room Revenues.

### **1. Introduction:**

When quality management is seen holistically as a commonality of its interrelated activities, including top management leadership, staff management, customer focus, supplier management, process management, and quality data and reporting, financial performance can be enhanced (Augustyn *et al.*, 2019). Management indicators and tools are more crucial in the current

environment of intense global competitiveness for managers who must make decisions. Revenue per available room and occupancy rate are the most prevalent operational metrics (RevPAR). Any hotel's primary objective is to maximize profitability, thus they must focus on raising revenues and cutting expenses. As a result, managers primarily aim to boost hotel revenue (Santos *et al.*, 2020).

Clearly, revenue management helps hotels develop by reducing the time and expenses associated with traditional pricing 75%, improving employee performance 79%, improving revenue streams accountability 69%, offering the best hotel management techniques 82%, and improving the assessment of new products and services 58%. Performance indicators commonly used by hotels include length of stay, RevPAR, GOPPAR, occupancy rate, number of overnights, ADR, ProfPAR, NRevPAR, and TRevPEC (Adegboyega *et al.*, 2021).

In the literature on hotel management, revenue management (RM) has grown in popularity (Vives *et al.*, 2018), and value-based management significantly influences the improvement of room

occupancy rates, the improvement of profits, the improvement of creditor confidence, and the improvement of investor and potential investor confidence (Diatmika & Yuniarta, 2019). The lodging sector employs common revenue management indicators, such as capital market performance, as a comparison (Demydyuk, 2021).

It is common practice to utilize revenue per available room (RevPAR) as the benchmark performance indicator for the hotel sector (Lee *et al.*, 2019). A more complete statistic that considers all of the hotels' revenue streams is the total revenue per available room (TRevPAR). Total revenue per available room is influenced by location, size, and the number of ratings, as are most services (Santos *et al.*, 2020). Net profits, profitability ratios like return on investment and return on sales, revenues for available rooms, occupancy rates, and some cost efficiency ratios are among the traditional financial indicators that are found to be relevant. In contrast, non-financial metrics like customer satisfaction, the number of complaints, the number of new and repeat customers, employee competencies, and staff abilities are heavily used (Panno, 2020). The potential of the hotel to be a source of competitive

advantage and profitability is improved by integrating human resource management (HRM), quality management (QM), and sustainability (Moliner *et al.*, 2021).

The financial success of hotels is impacted by a variety of operational and financial factors. A mixed strategy is linked to the highest RevPAR index (Sharma & Upneja, 2006); intellectual capital has a good effect on hotel financial performance; and minimal investments in fixed assets and technology also contribute to inefficiencies. According to Sardo *et al.*, (2018), the foundation of service quality in the hotel industry is human capital and relational capital. In addition, hotel use of Twitter is positively correlated with RevPAR (Kim & Chae, 2018).

Additionally, the costs associated with loyalty programs significantly and favorably affect the three operational performance indicators of RevPAR, ADR, and occupancy rate. Additionally, it affects gross operational profit (Hua *et al.*, 2018). The four main elements influencing hotel financial performance in Taiwan are domestic guests, occupancy rate, operating year, and joining a chain system (Shieh *et al.*, 2018). The primary predictors

of profitability in hotels were discovered to be their size, capacity, star rating, kind, managers' experience, and sustainability aspects (Zaki & Qoura, 2019).

The financial success of hotels is impacted by a number of operational factors, both directly and indirectly. One of these elements is service time, which is seen as a powerful competitive tool in the hospitality sector. As a result, managers must manage service time using scientific tools. One of these useful techniques for effectively analyzing service time characteristics in hospitality businesses is queuing theory (Moussa *et al.*, 2015). In particular, waiting times in Cairo's five-star hotels have a highly substantial impact on customer satisfaction (Abdelmawgoud *et al.*, 2016). As a result, hotel managers must consider strategies to reduce how long customers must wait (Abdelmawgoud, 2016). Marketing also plays a role because online advertising works well for promoting hospitality businesses. For instance, Cairo's five-star hotel customers estimate that online advertising is effective by 78.10% of the time (Abdelmawgoud *et al.*, 2018).



Customers also evaluate hotels on review websites. According to the study of Abdelmawgoud (2019), the majority of customers in Hurghada city rate their hotels at a very good level, giving them an average rating of 4.18, for hotel location, service quality, value for money, hotel cleanliness, and room quality respectively (Abdelmawgoud, 2019a). In North Upper Egypt hotels, over 95% of customers thought that relationship marketing was an effective method. According to them, 81.2% of relationship marketing methods are implemented, and interacting with hotels for the right price is one of the key reasons (Abdelmawgoud *et al.*, 2020).

Additionally, a hotel's capacity has an impact on its financial performance. In the Egyptian hospitality sector, a major issue is the loss in hotel capacity brought on by regional and global crises. The growth rate of hotels, rooms, and beds is negative, declining by 24.79, 5.48, and 7.65%, respectively, according to the study of Abdelmawgoud (2019), the lack of one fixed hotel leads to a shortage of 19 rooms and 50 beds. In addition, most hotels are distributed in the cities of Sharm El Sheikh 20.04 %, Cairo 17.26 %, Hurghada 16.26 %, Marsa Alam 5.46 % and

Alexandria 4.9 % (Abdelmawgoud, 2019b). Pricing for meals is a crucial consideration. However, the significant pricing variation between hotels is a serious problem. The variance coefficient for Egyptian hotels is 0.66 for breakfast, 0.58 for lunch, and 0.59 for dinner. The results of the binary regression showed that the high level of meal prices in hotels are statistically significantly predicted by Cairo hotels, hotels with a high room numbers, five-star hotels, and hotels managed by companies. Therefore, altering meal prices is an essential step in maximizing hotel revenue (Abdelmawgoud, 2020).

The quality of the food plays a significant role in performance. In several Egyptian hotels, the overall evaluation of customer's trust in the safety of foods served at the hotels of Cairo, Luxor and Aswan came at a high level (4.04) and SD= 0.14. Therefore, the coefficient of variance is 0.03 %. Moreover, the customer's trust is significant correlated with the perceived quality ( $r = 0.794$ ), behavioral attitudes ( $r = 0.104$ ), subjective norms ( $r = 0.426$ ) and perceived behavioral control ( $r = 0.192$ ). In Egyptian hotels, using organic food is recommended (Abdelmawgoud & Abdelnaby, 2020). Finally, it is believed that a company's

flexibility, market orientation, resource utilization, and service quality are important factors that improve a service company's or hotel's profitability-based performance (Phan *et al.*, 2021).

The analysis of performance indicators is regarded as one of the crucial aspects for management to constantly be able to identify strengths, weaknesses, opportunities, and threats in order to choose the appropriate strategy that maximizes levels of revenue and profitability. This is due to the increasing intensity of competition in the hotel industry. As a result, one of the key research points is the analysis of performance indicators. Additionally, there are no studies that examined the financial performance indicators in Cairo's five-star hotels. The financial performance metrics in the front-office management department of Cairo's five-star hotels will therefore be examined in this study.

## **2. Literature Review:**

This part shows the most important studied that dealt with the financial and operational performance and its main indicators in hotels and other institutions.

## 2.1. Financial Performance:

According to a Chadha's study that more accurately assessed the financial performance of institutions, on average, 39.46% of the companies were safe, 25.94% of the companies were in financial distress, 15.90% of the companies were operating in a grey area, and 18.71% of the companies had no available data. It was discovered that the severity of the financial crisis indicates that businesses must make significant changes and that business operations need improvement (Chadha, 2016). When quality management is considered holistically as a commonality of its interconnected activities, financial performance can be improved (top management leadership; employee management; customer focus; supplier management; process management; quality data and reporting). Therefore, managers must involve stakeholders in the creation and execution of successful quality management systems (Augustyn *et al.*, 2019).

Value-based Management significantly affects the improvement of room occupancy rates, the improvement of profits, the improvement of creditor confidence, and the improvement of

investor and potential investor confidence from the perspective of financial performance assessment (Diatmika & Yuniarta, 2019). Performance indicators fairly represent each of the balanced scorecard's (BSC) four viewpoints, demonstrating its applicability as a tool for strategic management (Ribeiro *et al.*, 2019).

## **2.2. Financial Performance Determinants:**

The degree of performance in small and large-sized firms is influenced by a number of financial and operational factors. Recent evaluations of financial success have focused on non-financial performance measures. Standard Revenue Management criteria are used by the hospitality sector as a benchmark for financial success, including the capital market. The success of the stock market was found to be strongly positively correlated with size and consumer traffic (Demydyuk, 2021).

Non-financial elements are recognized as important characteristics that improve a service company's or hotel's profitability-based performance. These include the quality of services, a company's flexibility, resource use, and market

orientation. For instance, service quality ( $\beta = 0.118$ ,  $p < 0.05$ ), the flexibility of a company ( $\beta = 0.173$ ,  $p < 0.05$ ) and resource utilization ( $\beta = 0.172$ ,  $p < 0.05$ ) positively affected the performance of Vietnam's hospitality companies. Meanwhile, market orientation did not impact the performance ( $p = 0.076$ ) but it positively affected both innovation ( $\beta = 0.322$ ,  $p < 0.05$ ) and service quality ( $\beta = 0.146$ ,  $p < 0.05$ ) (Phan *et al.*, 2021).

Small hotels may experience low profitability due to factors such as employee inefficiency brought on by inadequate training, low investments in fixed assets and technology, and government policies that place insufficient emphasis on ensuring safety and security and swift processing of licenses and permits (Sharma & Upneja, 2006). Additionally, innovativeness and proactiveness are important factors that explain performance, and the micro business size had a negative impact on the proactiveness-performance relationship (Kallmuenzer & Peters, 2017). Theodoulidis' research offers helpful theoretical explanations of how corporate social responsibility (CSR) interacts with firm strategy and corporate financial performance (CFP), as well as managerial explanations of how tourism industry professionals

can determine which CSR-related activities may have an impact on CFP (Theodoulidis *et al.*, 2017).

By reducing the time and expenses associated with traditional pricing by 75%, improving employee performance by 79%, increasing the accountability of revenue streams by 69%, supplying the best methods for hotel management by 82%, and improving the assessment of new goods and services by 58%, revenue management contributes to the development of hotels. Performance indicators used by hotels include length of stay, RevPAR, GOPPAR, occupancy rate, number of overnights, ADR, ProfPAR, NRevPAR, and TRevPEC (Adegboyega *et al.*, 2021).

The hotel business should completely adopt RM applications in order to realize and maximize benefits related to RM techniques, such as forecasting hotel growth, lowering operating costs, enhancing yields, and generating income (Murimi & Wadongo, 2021). A study of Murimi *et al.*, (2021) suggested a theoretical framework describing how revenue management methods and their factors affect the financial performance of Kenyan hotels (Murimi *et al.*, 2021). Hotel

performance, sustainability, and differentiating competitive advantage are all fully mediated by quality management (Moliner *et al.*, 2021).

The industry-standard performance metric for the hotel sector has been extensively adopted as revenue per available room (RevPAR). However, hotels have also created various substitute performance measures after realizing the limits of RevPAR. Because it addresses the shortcomings of RevPAR, gross operating profit per available room (GOPPAR) has gained popularity as a significant alternative performance measure. At the company level, Revenue per Available Room (RevPAR) is typically a more relevant metric than GOPPAR, with inconsistent results at the property level (Lee *et al.*, 2019).

Over the years analyzed (2010-2017), Total Revenue per Available Room (TRevPAR) has increased globally. Additionally, as with other services, the location, size, and number of stars affect TRevPAR (Santos *et al.*, 2020). In the Hotel Wisata Palu as a case study, the room occupancy rate increased. Consequently, Hotel management maintains occupancy rates and understands market demands supported by a good marketing strategy. Hotel Wisata Palu, as a service company, can



implement a service marketing strategy and see the realities of business in Palu City (Sutari *et al.*, 2020). Due to an increase in the ambiance, the hotel occupancy rate was specifically favorably correlated with the general guest experience at low occupancy levels. The hotel occupancy rate, on the other hand, was negatively correlated with the overall guest experience at high occupancy levels, since high occupancy lowered the quality of the customer experience during service interactions (Liu *et al.*, 2022).

The size and scope of the hotel have an impact on where the revenue management (RM) activity is carried out. More significantly, the hotel's success relative to its competitors is impacted by strategic implementation choices: corporate and centralized RM functions outperform in-house and third-party. It's interesting to note that the strategy with the greatest RevPAR index is a mixed strategy, which includes different execution methodologies (Altin *et al.*, 2017). Additionally, efficiency measurement can be used to pinpoint elements that affect profitability. Hotels located in major cities do not exhibit higher profitability levels than hotels located in outlying regions. The primary predictors of profitability in hotels were discovered to be their

size, capacity, star rating, kind, managers' experience, and sustainability aspects (Zaki & Qoura, 2019). When it comes to maximizing revenue, the role of the employees and the facilities stands out (Garcia *et al.*, 2019).

The performance of hotels is impacted by technology. For instance, e-commerce costs have a beneficial effect on a company's profitability, and the size of the company moderates this link (DeFranco *et al.*, 2017). Additionally, there is a correlation between a hotel's resources and its use of Twitter as well as between hotels' usage of Twitter and their RevPAR. Hotels should therefore see Twitter as a possible strategic business tool and work to improve their capacity to use Twitter for organizational goals (such as sales, promotion, and customer service) (Kim & Chae, 2018). Additionally, when reviewer expertise rises, the impact of average ratings and review volume on hotels' future financial performance is lessened. When responding to internet evaluations, hotels will gain more from doing business with reviewers with more experience. Practitioners should use strategic ways that leverage the power of reviewer expertise when controlling electronic word-of-mouth (Xie & So, 2018). The valence of the

reviews' favorable impact on financial performance is positively moderated by the degree of online review helpfulness (Mariani & Borghi, 2020).

Human capital, structural capital, and relational capital are examples of intellectual capital components that have a favorable effect on hotel financial performance. Given that they form the foundation of the industry's standard of service, human capital and relational capital appeared to be crucial factors in hotels' performance. Furthermore, building and maintaining long-term connections with important stakeholders helps capitalize on human and structural capital. As a result, the interplay between the elements of intellectual capital improves the financial performance of the hotel (Sardo *et al.*, 2018).

Knowledge assets (KA) in particular reinforce the link between intellectual capital (IC) and firm performance (FP), suggesting that IC and KA can work together to increase the value of Australian listed companies. Additionally, the financial performance of businesses is positively correlated with IC and its constituent parts. Similar to this, KA is favorably linked to enhanced company performance. Knowledge assets (KA) are a

moderating variable in assessing the effect of intellectual capital on the financial performance of the company as a result (Amin *et al.*, 2018).

In the long run, intellectual capital (IC) is reported to have a greater impact on corporate financial performance (FP) than in the short run. Size and asset turnover are two additional crucial drivers of (FP). On the other hand, leverage is seen to have a negative impact on (FP). Additionally, FP of the hotels is a major predictor of intellectual capital, indicating the possibility of reverse causal effects. Additionally, there is proof that intellectual capital is positively impacted by size (Babajee *et al.*, 2020).

All three operational performance measures, RevPAR, ADR, and occupancy, as well as the financial performance indicator, gross operating profit, are significantly and favorably impacted by loyalty programs spending. A fair set of controllable factors, including e-commerce, franchise, advertising, other marketing expenses, hotel size, and hotel chain scales, should be included when analyzing the advantages of loyalty programs (Hua *et al.*, 2018). The performance of hotels is more affected by various pricing practices

than by effects of competition. This is mostly because hotels can lessen the pressure of a competitive environment through differentiation techniques and specialized rules (Vives *et al.*, 2018). The four main criteria influencing hotel financial performance are domestic guests, occupancy rate, operating year, and joining a chain system (Shieh *et al.*, 2018).

Customer focus turns out to be a crucial leading indication of organizational performance that isn't financial. Net profits, profitability ratios like return on investment and return on sales, revenues for available rooms, occupancy rates, and some cost efficiency ratios are among the traditional financial indicators that are found to be relevant. In contrast, non-financial metrics like customer satisfaction, the number of complaints, the number of new and repeat customers, employee competencies, and staff abilities are heavily used (Panno, 2020). The financial performance of hotels along the Kenyan Coast was the dependent variable, and the independent variables included control activities, risk assessment, information system, and control activities. The financial performance of hotels is also significantly impacted by control activities,

risk assessment, information systems, and control activities (Mumba & Wekesa 2020).

Return on assets is significantly influenced by board size, board diligence, audit committee size, and institutional ownership (ROA). Also significantly affecting profits per share (EPS) are board size, board composition, board diligence, audit committee makeup, and firm age (Al-Homaidi *et al.*, 2019). The publication of a stand-alone sustainable report, the use of quality principles like total quality management (TQM), lean, six sigma, and a better degree of environmental performance (as measured by an aggregate environmental index) all have a favorable impact on financial performance (Partalidou *et al.*, 2020).

### **3. Methodology:**

This research aims to analyze the basic performance indicators of front office management in the five-star hotels in Cairo. Therefore, this research depends on the descriptive methodology using quantitative data in the analysis. The research population is the five-star hotels in Cairo, and the sample consists of 12 hotels, where it is a

non-statistical sample (convenience sample). The research data is represented in the financial reporting of performance indicators in the front office department of the sample hotels in the form of historical data. Also, this research relied on the Egyptian Hotels Guide, version 34 (2015-2016) in determining the characteristics of the sample hotels. The following table (1) includes the hotels sample:

**Table (1): The Research Hotels Sample**

No.	Hotel Name
1	Safir Cairo Hotel
2	Sonesta Hotel Tower & Casino Cairo
3	Semiramis Intercontinental Cairo
4	Concorde El Salam Hotel Cairo
5	Le Meridien Heliopolis Hotel
6	Ramsis Hilton Hotel
7	Le Meridien Pyramids Hotel
8	Four Season Cairo Hotel
9	Movenpick Resort Cairo Pyramids
10	Sofitel El Gezira Hotel
11	Pyramisa Hotel
12	Mena House Hotel

According to the equation of Steven K. Thompson, the size of the sample is calculated by the next formula: 
$$n = \frac{N \times \rho (1-\rho)}{[(N-1) \times (d^2+z^2)] + \rho (1-\rho)}$$

**Where:**

- N = Population Size (29)
- z = Confidence Level of 95 % (1.96)
- d = Error Proportion (0.05)
- $\rho$  = Probability (50 %).
- n = Sample Size (29)

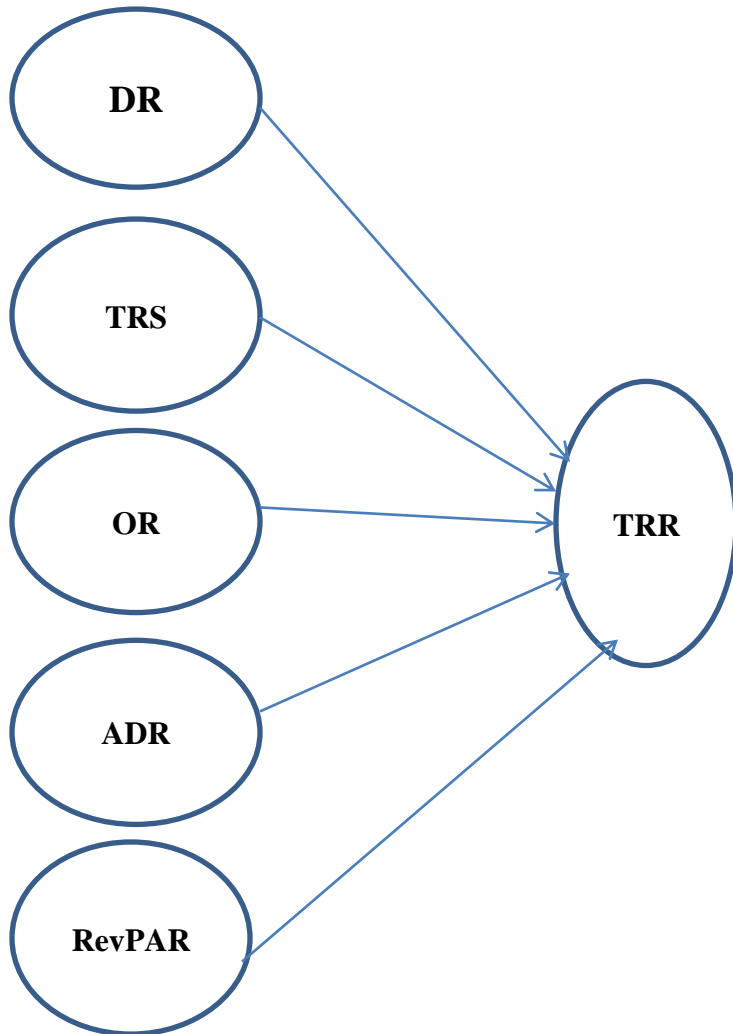
This means 29 hotels' historical data reports are needed to have a confidence level of 95% that the real value is within  $\pm 5\%$  of the measured value. Since the expected rate of the population's response to the reports is 50%. The following table (2) shows the research variables:

**Table (2): The Research Variables**

No.	Research Variables
1	Average Daily Rate (ADR)
2	Revenue Per Available Rooms (RevPAR)
3	Occupancy Rate (OR)
4	Total Rooms Sold (TRS)
5	Annual Rooms (AR)
6	Daily Rooms (DR)
7	Total Rooms Revenues (TRR)



This research proposes the following conceptual framework:



**Figure (1): The Conceptual Framework of the Research**

## 4. Data Analysis and Results Discussion:

### 4.1. Key Performance Indicators:

The Key Performance Indicators (KPIs) in the front office department for about 12 five-star hotels in Cairo have been analyzed based on the historical data of financial reports for these hotels. The following table (3) shows the status of Statistical distribution for the research variables.

**Table (3): The Statistical Distributions of Research Variables**

<b>Variables</b>	<b>Test Statistic</b>	<b>Sig (2-tailed)</b>	<b>Distribution Type</b>
Daily Rooms (DR)	0.220	0.112	Normal
Annual Rooms (AR)	0.220	0.112	Normal
Total Rooms Sold (TRS)	0.185	0.200	Normal
Revenue Per Available Rooms (RevPAR)	0.261	0.024	Non-Normal
Occupancy Rate (OR)	0.253	0.033	Non-Normal
Total Rooms Revenues (TRR)	0.282	0.009	Non-Normal
Average Daily Rate (ADR)	0.241	0.052	Non-Normal

Table (3) shows the status of the statistical distribution of the research variables using one-sample kolmogorov-smirnov test, where the results showed that the variables of daily rooms, annual rooms, and total rooms sold are normal distributed, while the variables of revenue per available rooms, occupancy rate, total rooms revenues and average daily rate are non-normal distributed.

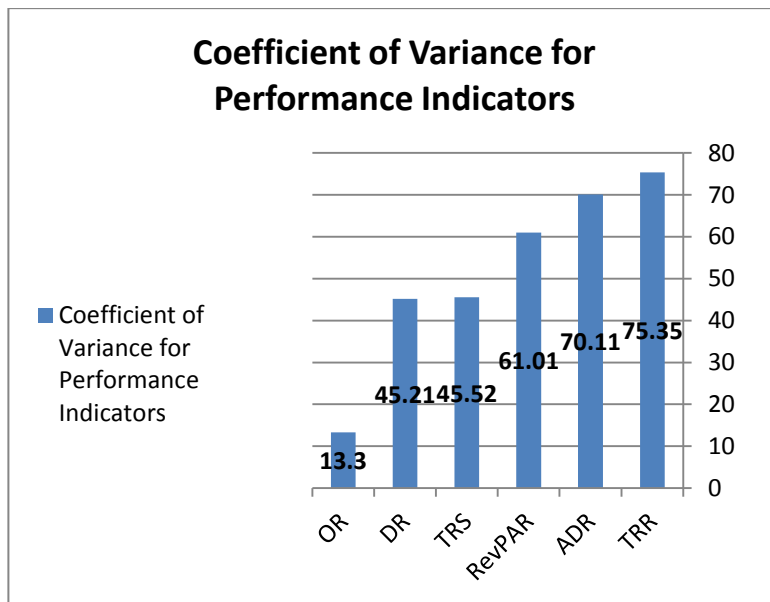
**Table (4): The Descriptive Statistics of the Research Variables**

Variables	Mean (Annually)		Std. Deviation	CV %
	Statistic	Std. Error		
Total Rooms Revenues (TRR) LE	46557583.34	10126555.9	35079418.6	75.4
Average Daily Revenues (ADR) LE	465.21	94.16	326.2	70.1
Revenue Per Available Rooms (RevPAR) LE	287.75	50.68	175.6	61.0
Total Rooms Sold	102875	13518.04	46827.9	45.5

(TRS)				
Daily Rooms (DR)	441	57.57	199.4	45.2
Annual Rooms (AR)	160995	21011.43	72785.7	45.2
Occupancy Rate (OR) %	64.28	2.47	8.6	13.3

Table (4) presents the descriptive statistics of the study variables, where the average total room revenue is about 46557583.34 pounds annually, the average daily revenue is 465.21 pounds, the average revenue for the available rooms is about 287.75 pounds, the total available rooms is 12875.5 rooms, and the average daily rooms for hotels in the study sample is about 441 rooms. While the average annual room is about 160995.42 rooms, in addition, the average occupancy rate is estimated at about 64%. It is also evident from this table that the coefficient of variation for the performance indicators is high among the hotels under study. The variable of total room revenues came with the ratio (75.35 %) as a coefficient of variance, followed by the variables of average daily revenues (70.11%), revenue per

available rooms (61.01%), total rooms sold (45.52%), daily rooms (45.21%), annual rooms (45.21%) and occupancy rate (13.3%). The following figure (2) shows the coefficient of variance for performance indicators.



**Figure (2): The Coefficient of Variance for Performance Indicators.**

The great discrepancy between hotels in performance indicators reflects that there are hotels with high performance and other hotels with low performance as shown in figure (2). The highest

percentage difference was in the total rooms revenues (75.35 %) followed by the average daily rate (70.11 %), while the lowest difference was in the room occupancy rate index (13.3 %). Consequently, hotels need to make more effort in order to improve performance and operational levels to achieve strategic goals.

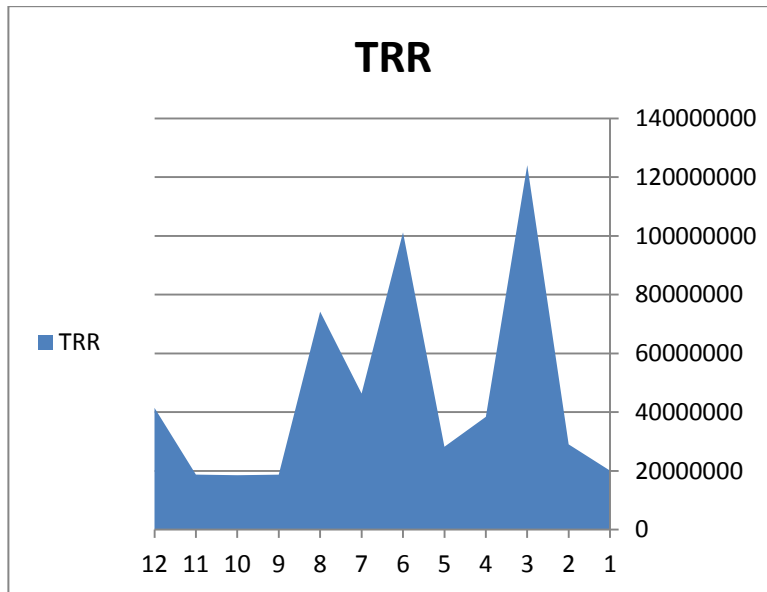
#### 4.1.1. Total Rooms Revenues (TRR):

**Table (5): The Mean of Total Rooms Revenues (TRR)  
among Sample Hotels**

No.	Hotel Name	Total Rooms Revenues (TRR) LE	Rank
1	Safir Cairo Hotel	20042006.86	9
2	Sonesta Hotel Tower & Casino Cairo	29000000.00	7
3	Semiramis Intercontinental Cairo	124060142.90	1
4	Concorde El Salam Hotel Cairo	38377560.00	6
5	Le Meridien Heliopolis Hotel	28191142.86	8
6	Ramsis Hilton Hotel	101188285.70	2
7	Le Meridien Pyramids Hotel	46303531.57	4
8	Four Season Cairo Hotel	74193799.43	3
9	Movenpick Resort	18689314.00	11

	Cairo Pyramids		
10	Sofitel El Gezira Hotel	18498820.00	12
11	Pyramisa Hotel	18709915.50	10
12	Mena House Hotel	41436481.29	5

Table (5) displays Total Rooms Revenues (TRR) for the sample hotels. It was found that the TRR for Semiramis Intercontinental Cairo hotel came in the first level by 124060142.90 LE, followed by Ramsis Hilton Hotel about 101188285.70 LE, and then Four Season Cairo hotel about 74193799.43 LE, while Sofitel El Gezira hotel came in the last level by 18498820 LE, as is clear in the figure (3).



**Figure (3): The Mean of Total Rooms Revenues (TRR) among Sample Hotels**

#### 4.1.2. Average Daily Rate (ADR):

**Table (6): Average Daily Rate (ADR) among Sample Hotels**

No.	Hotel Name	ADR (LE)	Rank
1	Safir Cairo Hotel	271.20	11
2	Sonesta Hotel Tower & Casino Cairo	301.69	9
3	Semiramis Intercontinental Cairo	753.78	2



4	Concorde El Salam Hotel Cairo	438.87	4
5	Le Meridien Heliopolis Hotel	430.81	5
6	Ramsis Hilton Hotel	521.33	3
7	Le Meridien Pyramids Hotel	307.51	8
8	Four Season Cairo Hotel	1389.08	1
9	Movenpick Resort Cairo Pyramids	296.63	10
10	Sofitel El Gezira Hotel	182.06	12
11	Pyramisa Hotel	316.90	7
12	Mena House Hotel	372.61	6

Table (6) displays the average daily rate for the sample hotels. It was found that the average daily rate for Four Season Cairo hotel came in the first level by 1389.08 LE, followed by Semiramis Intercontinental Cairo hotel (753.78 LE), and then Ramsis Hilton hotel (521.33 LE), while Sofitel El Gezira hotel came in the last level by (182.06 LE), as is clear in the figure (4).

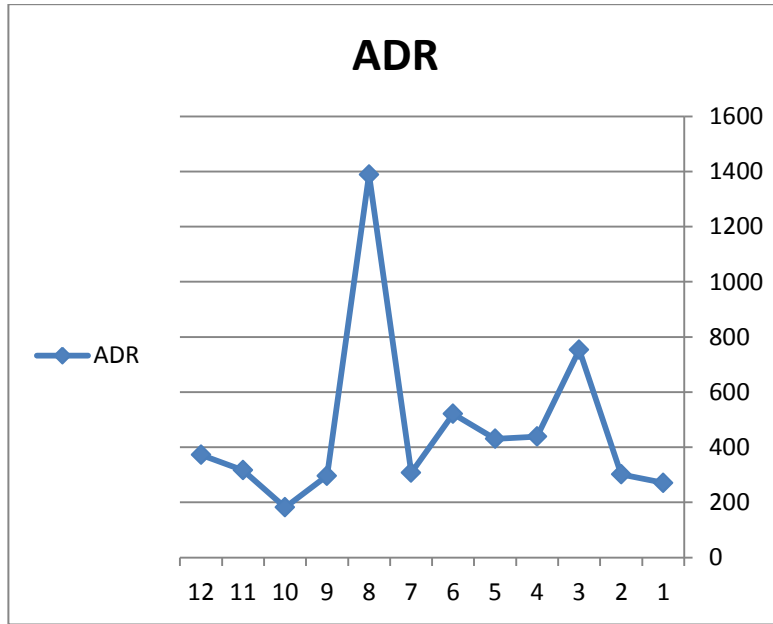


Figure (4): Average Daily Rate (ADR) among Sample Hotels

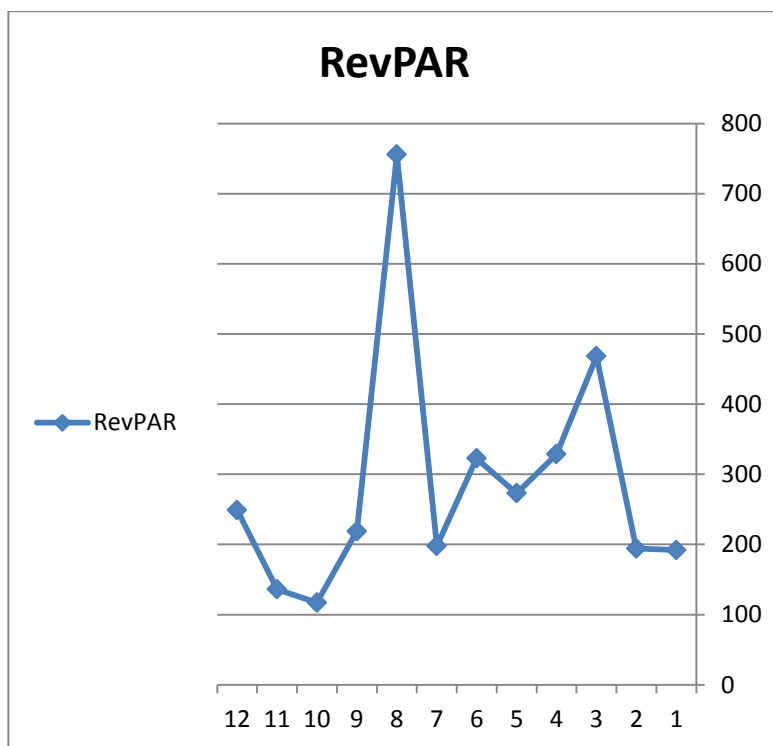
#### 4.1.3. Revenue Per Available Room (RevPAR):

**Table (7): The Mean of Revenue per Available Room (RevPAR) among Sample Hotels**

No.	Hotel Name	RevPAR (LE)	Rank
1	Safir Cairo Hotel	191.99	10
2	Sonesta Hotel Tower & Casino Cairo	194.26	9
3	Semiramis Intercontinental Cairo	468.17	2
4	Concorde El Salam Hotel Cairo	328.58	3
5	Le Meridien Heliopolis Hotel	272.92	5
6	Ramsis Hilton Hotel	322.73	4
7	Le Meridien Pyramids Hotel	197.91	8
8	Four Season Cairo Hotel	755.65	1
9	Movenpick Resort Cairo Pyramids	218.82	7
10	Sofitel El Gezirah Hotel	117.05	12
11	Pyramisa Hotel	135.97	11
12	Mena House Hotel	248.96	6

Table (7) displays the revenue per available room (RevPAR) for the sample hotels. It was found that the RevPAR for Four Season Cairo hotel came in the first level by 755.65 LE, followed by Semiramis

Intercontinental Cairo hotel (468.17 LE), and then Concorde El Salam hotel (328.58 LE), while Sofitel El Gezirah hotel came in the last level by (117.05 LE), as is clear in the figure (5).



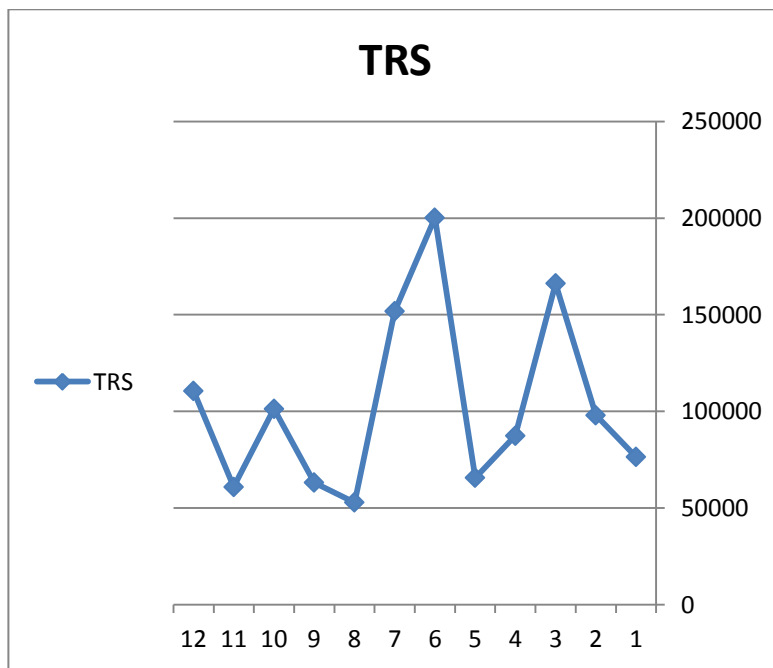
**Figure (5): Revenue per Available Room (RevPAR)  
among Sample Hotels**

#### 4.1.4. Total Room Sold (TRS):

**Table (8): The Total Room Sold (TRS) among Sample Hotels**

No.	Hotel Name	TRS	Rank
1	Safir Cairo Hotel	76503	8
2	Sonesta Hotel Tower & Casino Cairo	98038	6
3	Semiramis Intercontinental Cairo	166187	2
4	Concorde El Salam Hotel Cairo	87405	7
5	Le Meridien Heliopolis Hotel	65622	9
6	Ramsis Hilton Hotel	200215	1
7	Le Meridien Pyramids Hotel	151766	3
8	Four Season Cairo Hotel	52880	12
9	Movenpick Resort Cairo Pyramids	63118	10
10	Sofitel El Gezirah Hotel	101352	5
11	Pyramisa Hotel	60911	11
12	Mena House Hotel	110509	4

Table (8) displays the Total Room Sold (TRS) for the sample hotels. It was found that the TRS for Ramsis Hilton hotel came in the first level by 76503 rooms, followed by Semiramis Intercontinental Cairo hotel about 166187 rooms, and then Le Meridien Pyramids hotel 151766 rooms, while Four Season Cairo hotel came in the last level by 52880 rooms, as is clear in the figure (6).



**Figure (6): The Total Room Sold (TRS) among Sample Hotels**

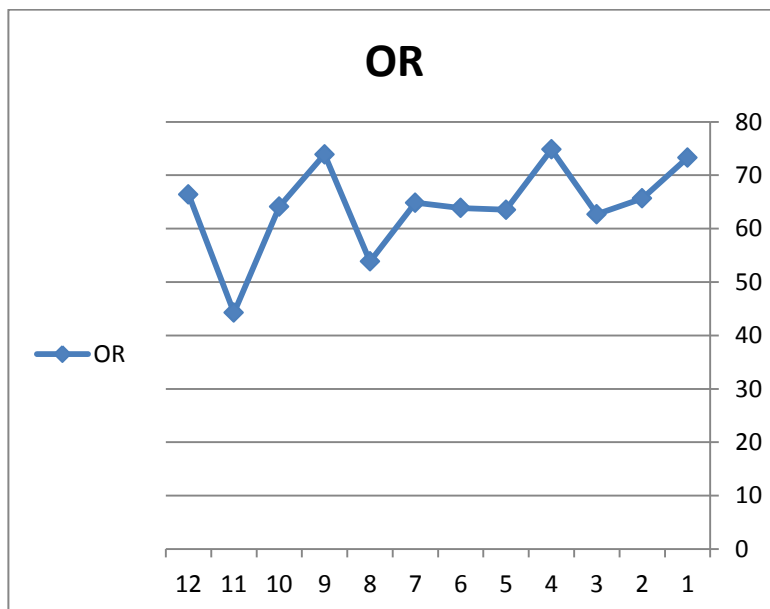
#### 4.1.5. Occupancy Rate (OR):

**Table (9): The Mean of Occupancy Rate (OR) among Sample Hotels**

No.	Hotel Name	Occupancy Rate (OR) %	Rank
1	Safir Cairo Hotel	73.29	3
2	Sonesta Hotel Tower & Casino Cairo	65.67	5
3	Semiramis Intercontinental Cairo	62.71	10
4	Concorde El Salam Hotel Cairo	74.83	1
5	Le Meridien Heliopolis Hotel	63.53	9
6	Ramsis Hilton Hotel	63.86	8
7	Le Meridien Pyramids Hotel	64.87	6
8	Four Season Cairo Hotel	53.86	11
9	Movenpick Resort Cairo Pyramids	73.90	2
10	Sofitel El Gezirah Hotel	64.13	7
11	Pyramisa Hotel	44.27	12
12	Mena House Hotel	66.40	4

Table (9) displays the occupancy rate (OR) for the sample hotels. It was found that the OR for Concorde El Salam hotel came in the first level by 74.83 %,

followed by Movenpick Resort Cairo Pyramids about 73.90 %, and then Safir Cairo hotel about 73.29 %, while Pyramisa hotel came in the last level by 44.27 %, as is clear in the figure (7).



**Figure (7): The Mean of Occupancy Rate (OR) among Sample Hotels**



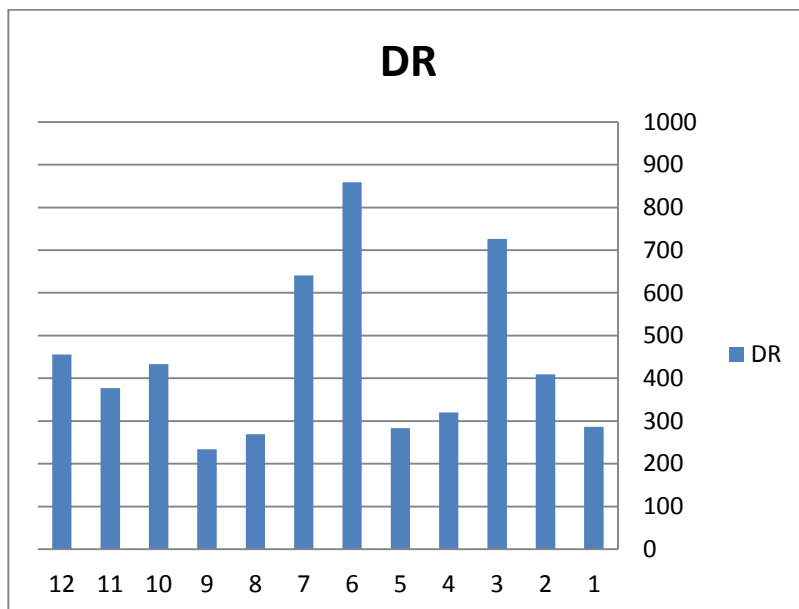
#### 4.1.6. Daily Room (DR):

**Table (10): The Number of Daily Room (DR) among Sample Hotels**

No.	Hotel Name	Daily Rooms (DR)	Rank
1	Safir Cairo Hotel	286	9
2	Sonesta Hotel Tower & Casino Cairo	409	6
3	Semiramis Intercontinental Cairo	726	2
4	Concorde El Salam Hotel Cairo	320	8
5	Le Meridien Heliopolis Hotel	283	10
6	Ramsis Hilton Hotel	859	1
7	Le Meridien Pyramids Hotel	641	3
8	Four Season Cairo Hotel	269	11
9	Movenpick Resort Cairo Pyramids	234	12
10	Sofitel El Gezirah Hotel	433	5
11	Pyramisa Hotel	377	7
12	Mena House Hotel	456	4

Table (10) displays the number of daily rooms (DR) for the sample hotels. It was found that the DR for Ramsis Hilton hotel came in the first level by 859 rooms, followed by Semiramis Intercontinental Cairo hotel about 726 rooms, and then Le Meridien Pyramids hotel about 641 rooms, while Movenpick

Resort Cairo Pyramids came in the last level by 234 rooms, as is clear in the figure (8).



**Figure (8): The Number of Daily Room (DR) among Sample Hotels**

## 4.2. Homogeneity Analysis for Performance Indicators:

**Table (11): The Homogeneity Level of Performance Indicators among Sample Hotels.**

No.	Variables	Chi-Square	DF	Sig. (2-tailed)
1	Daily Rooms (DR)	991.697	11	0.000
2	Annual Rooms (AR)	361969.32	11	0.000
3	Total Rooms Sold (TRS)	234471.2747	11	0.014
4	Occupancy Rate (OR)	12.601	11	0.320
5	Revenue Per Available Rooms (RevPAR)	1178.924	11	0.000
6	Average Daily Rate (ADR)	2513.894	11	0.000
7	Total Rooms Revenues (TRR)	290741502.5	11	0.000

It is evident from the table (11) that there are significant differences for daily rooms (DR), annual rooms (AR), total rooms sold (TRS), revenue per available rooms (RevPAR), average daily rate (ADR), and total rooms revenues (TRR) between the study sample hotels. In contrast, there is a not

significant difference for the occupancy rate between the study sample hotels.

### 4.3. Correlations Analysis for Performance Indicators:

**Table (12): Correlations among Research Variables**

No.	Variables		R	Sig.
	Independent	Dependent		
1	Daily Rooms (DR)	Total Rooms Revenues (TRR)	0.733 <sup>**</sup>	0.007
2	Annual Rooms (AR)		0.733 <sup>**</sup>	0.007
3	Total Rooms Sold (TRS)		0.703 <sup>*</sup>	0.011
4	Average Daily Revenues (ADR)		0.613 <sup>*</sup>	0.034
5	Revenue Per Available Rooms (RevPAR)		0.651 <sup>*</sup>	0.022

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

This table (12) shows the nature of the relationship between the total room revenues and performance indicators. There is a strong direct correlation with the daily total rooms ( $r = 0.733$ ) at a level of

significance of 0.01, and there is also a strong direct correlation with the average daily revenue ( $r = 0.613$ ) and with Average revenue per available rooms ( $r = 0.651$ ) at a significance level of 0.05. These results are supported by the literature review, as revenue per available room (RevPAR) is the most prevalent operational metrics, and the benchmark performance indicator for hotels (Lee *et al.*, 2019; Santos *et al.*, 2020; Adegboyega *et al.*, 2021). In addition, ADR is a main indicator (Adegboyega *et al.*, 2021). Consequently, to enhance the financial performance level (RevPAR, ADR, OR), hotels must develop loyalty programs (Hua *et al.*, 2018), maintain best pricing practices (Vives *et al.*, 2018), and improve service quality (Augustyn *et al.*, 2019).

In the results of this study, Occupancy rate (OR) not significantly correlated with total rooms revenues (TRR). This is because the size of study sample is small. This result is disagreed with the literature review as occupancy rate influences hotel financial performance (Shieh *et al.*, 2018). Consequently, it is the main indicators of financial performance (Adegboyega *et al.*, 2021).

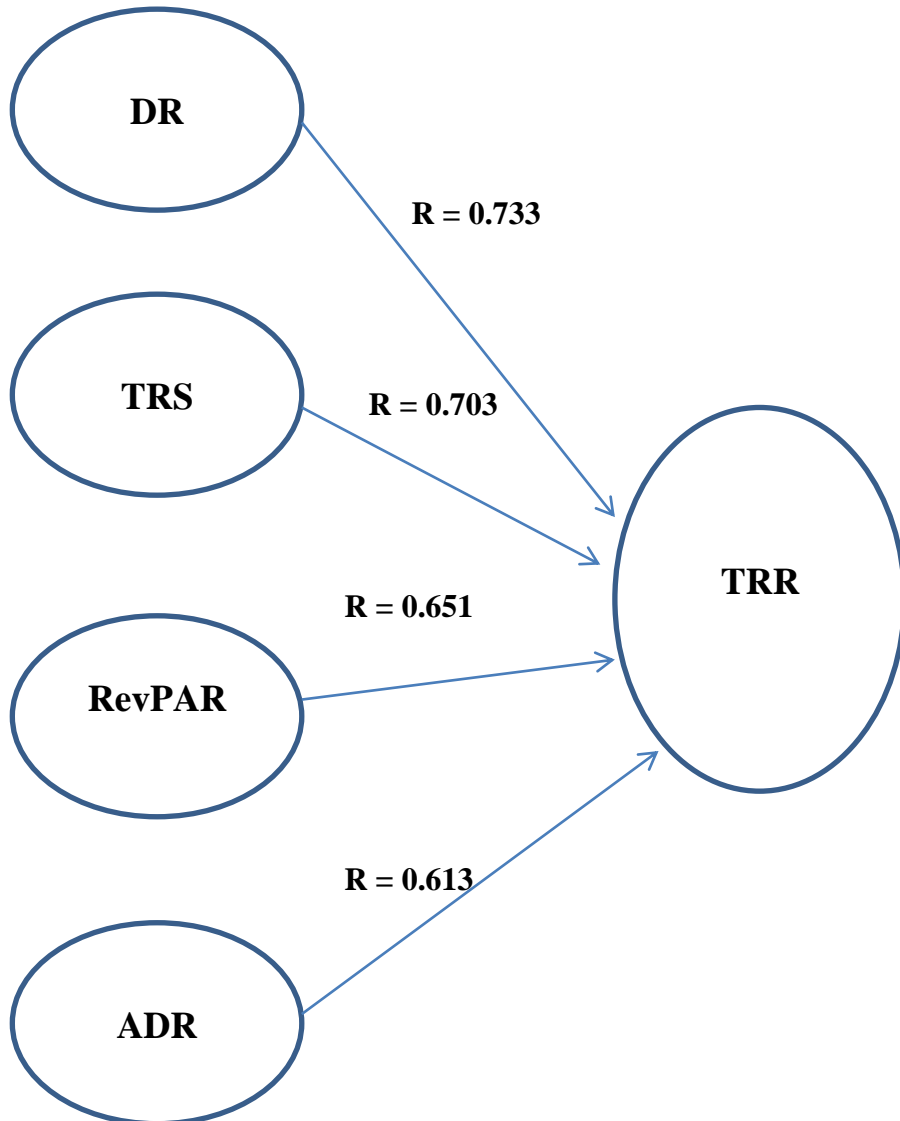
**Table (13): Correlations among Research Variables**

Variables		R	Sig.
Independent	Dependent		
Average Daily Rate	Revenue Per Available Rooms	0.984**	0.000
Daily Rooms	Total Rooms Sold	0.975**	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

According to table (13), there are a positive relationship between the average daily rate and revenue per available rooms ( $r = 0.984$ ) at the 0.01 level, and a positive relationship between the daily rooms and the total rooms sold ( $r = 0.975$ ) at the 0.05 level. Depending on the results of the correlation analysis, this research revealed the following empirical model of key performance indicators (KPIS) in five-star hotels in Cairo as shown in figure (9).



**Figure (9): The Empirical Model of Key Performance Indicators (KPIs) in Five-Star Hotels in Cairo**

## **5. Conclusion:**

This research aims to analyze the basic performance indicators of front office management in the five-star hotels in Cairo. Therefore, this research depends on the descriptive methodology using quantitative data in the analysis. The research population is the five-star hotels in Cairo, and the sample consists of 12 hotels, where it is a non-statistical sample (convenience sample). The research data is represented in the financial reporting of performance indicators in the front office department of the sample hotels in the form of historical data. The variables of daily rooms, annual rooms, and total rooms sold are normal distributed, while the variables of revenue per available rooms, occupancy rate, total rooms revenues and average daily rate are non-normal distributed.

The average total room revenue is about 46557583.34 LE annually, the average daily revenue is 465.21 LE, the average revenue for the available rooms is about 287.75 LE, the total available rooms is 12875.5 rooms, and the average daily rooms for hotels in the study sample is about 441 rooms. While the average annual room is about 160995 rooms, in addition, the average



occupancy rate is estimated at about 64%. It is also evident that the coefficient of variation for the performance indicators is high among the hotels under study. The variable of total room revenues came with the ratio (75.35 %) as a coefficient of variance, followed by the variables of average daily revenues (70.11%), revenue per available rooms (61.01%), total rooms sold (45.52%), daily rooms (45.21%), annual rooms (45.21%) and occupancy rate (13.3%). This great discrepancy between hotels in performance indicators reflects that there are hotels with high performance and other hotels with low performance. Consequently, hotels need to make more effort in order to improve performance and operational levels to achieve strategic goals.

There are significant differences for daily rooms (DR), annual rooms (AR), total rooms sold (TRS), revenue per available rooms (RevPAR), average daily rate (ADR), and total rooms revenues (TRR) among the study sample hotels. In contrast, there is a not significant difference for the occupancy rate between the study sample hotels. In addition, there are significant differences for the total daily rooms, total annual rooms, total rooms sold, RevPAR, ADR and TRR

among the study sample hotels. In addition, there is a not significant difference for the occupancy rate between the study sample hotels. For relationships, there is a strong direct correlation with the daily total rooms and the annual total rooms ( $r = 0.733$ ) at a level of significance of 0.01, and there is also a strong direct correlation with the average daily revenue ( $r = 0.613$ ) and with Average revenue per available rooms ( $r = 0.651$ ) at a significance level of 0.05. Moreover, there are a positive relationship between the average daily rate and revenue per available rooms ( $r = 0.984$ ) at the 0.01 level, and a positive relationship between the daily rooms and the total rooms sold ( $r = 0.975$ ) at the 0.05 level.

## **6. Recommendations:**

Based on the results of this research, the recommendations include the following points:

- It is necessary to enhance the levels of revenue for available rooms, average daily revenue and room occupancy rate to the highest possible levels in order to maximize the total revenues of five-star hotels in Egypt.

- It is necessary to work on increasing the prices of rooms in five-star hotels at the level acceptable to customers.
- It is necessary to increase hotel occupancy rates.

## 7. Limitations and Future Researches:

The main determinant of this research is the small size of the sample, which includes 12 hotels, focusing on five-star hotels in Cairo. Therefore, researchers are recommended to study the main performance indicators based on a larger sample size in different hotel categories.

## 8. References:

- Abdelmawgoud, M. & Abdelnaby, W. (2020) "**What is the Level of Customers' Trust in the Safety of Food and Beverage Labels at Egyptian Hotels?**", International Journal of Heritage, Tourism and Hospitality, Vol. 14, No. 1.
- Abdelmawgoud, M. (2016) "**Waiting Time Management: An Analytic Approach**", Lambert Academic Publishing, Germany.
- Abdelmawgoud, M. (2019b) "**Analyzing the Egyptian Hotel Capacity: An Exploratory Study**", International Journal of Tourism and Hospitality Management, Vol. 2, No.2.
- Abdelmawgoud, M. (2019a) "**How Do the Customers Rate the Hotels on Review Sites: Evidence from Hurghada**

- Hotels in Egypt?", International Journal of Tourism and Hospitality Management, Vol. 2, No. 2.**
- Abdelmawgoud, M. (2020) **"Meals Pricing Strategies in The Egyptian Hotels: An Analytical Study"**, Journal of the Faculty of Tourism and Hotels-University of Sadat City, Vol. 4, No. (1/2).
  - Abdelmawgoud, M., Ali, M. & Sayed, N. (2018) **"Measuring the Effectiveness of Online Advertising in Five Star Hotels in Egypt"**, Minia Journal of Tourism and Hospitality Research, Vol. 2, special Issue.
  - Abdelmawgoud, M., Ali, M. & Zaki, M. (2020) **"The Implementation Level of Relationship Marketing Strategies in North Upper Egypt Hotels"**, Journal of the Faculty of Tourism and Hotels-University of Sadat City, Vol. 4, No. (2/2).
  - Abdelmawgoud, M., Dawood, A. & Moussa, M., (2016) **"The Impact of Prolonged Waiting Time of Food Service on Customers' Satisfaction"**, Minia Journal of Tourism and Hospitality Research, Vol. 1, No. 1.
  - Adegboyega, O., Iortimbir, A., Boye, O., Ndidi, M. (2021) **"Assessment Of Revenue Management Practices Among Hotels In Abuja, Nigeria Assessment Of Revenue Management Practices Among Hotels In Abuja, Nigeria"**, Ilorin Journal Of Human Resource Management (IJHRM) Vol.5, No.2.
  - Al-Homaidi, E., Almaqtari, F., Ahmad, A., & Tabash, M. (2019) **"Impact of Corporate Governance Mechanisms on Financial Performance of Hotel Companies: Empirical Evidence from India"**, African Journal of Hospitality, Tourism and Leisure, Vol. 8, No. 2.
  - Altin, M., Schwartz, Z., & Uysal, M. (2017) **"Where you do it" matters: The impact of hotels' revenue-management implementation strategies on performance**, International Journal of Hospitality Management, Vol. 67.

- Amin, S., Usman, M., Sohail, N., & Aslam, S. (2018) **"Relationship between Intellectual Capital and Financial Performance: The Moderating Role of Knowledge Assets"**, Pakistan Journal of Commerce and Social Sciences, Vol. 12, No. 2.
- Augustyn, M., Elshaer, I., & Akamavi, R. (2019) **"Competing models of quality management and financial performance improvement"**, The Service Industries Journal, DOI: 10.1080/02642069.2019.1601706
- Babajee, R., Seetana, B., & Nunkoo, R. (2020) **"The determinants of hotel financial performance: An intellectual capital perspective"**, Journal of Hospitality Marketing & Management, DOI: 10.1080/19368623.2020.1703870
- Chadha, P. (2016) **"Exploring the Financial Performance of the Listed Companies in Kuwait Stock Exchange Using Altman's Z-Score Model"**, International Journal of Economics & Management Sciences, Vol. 5, No. 3.
- DeFranco, A., Morosan, C., & Hua, N. (2017) **"Moderating the impact of e-commerce expenses on financial performance in US upper upscale hotels: The role of property size"**, Tourism Economics, Vol. 23, No. 2.
- Demydyuk, G. (2021) **"Does RevPAR really move U.S. Hotel Industry Stock? Analysis of revenue drivers: a Market's Perspective from 2004-2013"**, Annual ICHRIE Summer Conference (Virtual) iPoster Presentation, 26th – 30th July 2021, Washington DC, Available at <https://ichrie2021.ipostersessions.com/default.aspx?s=A7-8E-CF-84-48-8D-54-CB-0D-BE-C7-DB-3E-6B-CE-CF>
- Diatmika, P., & Yuniarta, G. (2019) **"The Significant Impact of Financial Performance Assessment Value-based Management at Star Hotels in Bali"**, International Conference on Economics, Education, Business and

- Accounting, KnE Social Sciences, pp. 586–594. DOI 10.18502/kss.v3i11.4037
- Garcia, M., Resce, G., Ishizaka, A., & Occhiocupo, N. (2019) "**The dimensions of hotel customer ratings that boost RevPAR**", International Journal of Hospitality Management, Vol. 77.
  - Hua, N., Wei, W., DeFranco, A., & Wang, D. (2018) "**Do loyalty programs really matter for hotel operational and financial performance?**", International Journal of Contemporary Hospitality Management, Vol. 30, No. 5.
  - Kallmuenzer, A., & Peters, M. (2017) "**Entrepreneurial behaviour, firm size and financial performance: the case of rural tourism family firms**", Tourism Recreation Research, DOI: 10.1080/02508281.2017.1357782
  - Kim, W., & Chae, B., (2018) "**Understanding the relationship among resources, social media use and hotel performance: The case of Twitter use by hotels**", International Journal of Contemporary Hospitality Management, Vol. 30, No. 9.
  - Lee, S., Pan, B., & Park, S. (2019) "**RevPAR vs. GOPPAR: Property- and firm-level analysis**", Annals of Tourism Research, Vol. 76.
  - Liu, P., Wu, L., & Li, X. (2022) "**What can hotels learn from the last recovery? Examining hotel occupancy rate and the guest experience**", International Journal of Hospitality Management, Vol. 103.
  - Mariani, M., & Borghi, M. (2020) "**Online Review Helpfulness and Firms' Financial Performance: An Empirical Study in A Service Industry**", International Journal of Electronic Commerce, Vol. 24, No. 4.
  - Mariani, M., & Borghi, M. (2020) "**Online Review Helpfulness and Firms' Financial Performance: An Empirical Study in a Service Industry**", International Journal of Electronic Commerce, Vol. 24, No. 4.

- Moliner, J., Azorín, J., Tarí, J., Gamero, M., & Ortega, E. (2021) **"How do dynamic capabilities explain hotel performance?"**, International Journal of Hospitality Management, Vol. 98.
- Moussa, M., Abdelmawgoud, M., & Elias, A. (2015) **"Measuring Service Time Characteristics in Fast Food Restaurants in Cairo: A Case Study"**, Tourism Today, No. 15, Autumn 2015.
- Mumba, F., & Wekesa, M. (2020) **"Effect Of Internal Control on Financial Performance of Star Rated Hotels at the Kenyan Coast"**, International Journal of Advanced Research and Review, IJARR, Vol. 5, No. 5.
- Murimi, M., & Wadongo, B. (2021) **"Application of Revenue Management Practices in Star-Rated Hotels in Kenya"**, African Journal of Hospitality, Tourism and Leisure, Vol. 10, No 2.
- Murimi, M., Wadongo, B., & Olielo, T. (2021) **"Determinants of revenue management practices and their impacts on the financial performance of hotels in Kenya: a proposed theoretical framework"**, Future Business Journal, Vol. 7, No. 2.
- Panno, A. (2020) **"Performance measurement and management in small companies of the service sector; evidence from a sample of Italian hotels"**, Measuring Business Excellence, Vol. 24, No. 2.
- Partalidou, X., Zafeiriou, E., Giannarakis, G., & Sariannidis, N. (2020) **"The effect of corporate social responsibility performance on financial performance: the case of food industry"**, Benchmarking: An International Journal, Vol. 27, No. 10.
- Phan, T., Nguyen, T., Dang, T., Tran, V., & Le, K. (2021) **"Non-financial factors affecting the operational performance of hospitality companies: Evidence from**

- Vietnam”, Problems and Perspectives in Management, Vol. 19, No. 4.
- Ribeiro, M., Vasconcelos, M., & Rocha, F. (2019) **"Monitoring performance indicators in the Portuguese hospitality sector"**, International Journal of Contemporary Hospitality Management, Vol. 31, No. 2.
  - Santos, L., Malheiros, C., Gomes, C., & Guerra, T. (2020) **"TReVPAR as Hotels Performance Evaluation Indicator and Influencing Factors in Portugal"**, Euro-Asia Tourism Studies Journal, Vol. 1.
  - Sardo, F., Serrasqueiro, z., & Alves, H. (2018) **"On the relationship between intellectual capital and financial performance: A panel data analysis on SME hotels"**, International Journal of Hospitality Management, Vol. 75.
  - Sharma, A. & Upneja, A. (2006) **"Factors influencing financial Performance of small hotels in Tanzania"**, International Journal of Contemporary Hospitality Management", Vol. 17, No. 6.
  - Shieh, H., Hu, J., & Chang (2018) **"An Investigation of Factors Affecting Financial Performance of Taiwanese International Tourist Hotels"**, Journal of Hospitality Financial Management, Vol. 26, No. 1.
  - Sutari, N., Kadir, H., & Rahman, A. (2020) **"Analysis of Occupancy Rates at Hotel Wisata Palu"**, International Journal of Health, Economics, and Social Sciences, Vol. 2, No. 1.
  - Theodoulidis, B., Diaz, D., Crotto, F., & Rancati, E. (2017) **"Exploring corporate social responsibility and financial performance through stakeholder theory in the tourism industries"**, Tourism Management, Vol. 62.
  - Vives, V., Jacob, M., & Payeras, M. (2018) **"Revenue management and price optimization techniques in the hotel sector: A critical literature review"**, Tourism Economics, Vol. 24, No. 6.



- Xie, K., & So, K. (2018) "**The Effects of Reviewer Expertise on Future Reputation, Popularity, and Financial Performance of Hotels: Insights from Data-Analytics**", Journal of Hospitality & Tourism Research, Vol. 42, No. 8.
- Zaki, K., & Qoura, O. (2019) "**Profitability in Egyptian hotels: business model and sustainability impact**", Research in Hospitality Management, Vol. 9, No. 2.