

Factors Affecting Hotels Occupancy Rate

(An Empirical Study on Some Hotels in Amman)

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Abstract

The study aimed to investigate the factors that affect occupancy rate hotels in Amman. For the sake of meeting these objective a questionnaire was developed and distributed over a sample of 180 employees in different four and five stars hotels in Amman. The study concluded that hotels characteristics, internal factors and external factors impact the occupancy rate in Amman.

Keywords: Hotels, Occupancy Rate, Internal and External Factors.

Introduction:

Hotels in the modern form emerged a long time ago. In 1794 the first hotel (City Hotel) was constructed in New York City and it contained 73 rooms. In 1829, Tremont Hotel, the largest and most luxurious hotel in the world, was also created in the United States in Boston, where hotel specialists at that time considered that the interior design, building design and the equipments of a hotel the evolution of a the modern hotel industry in America and spread out to the rest of the world. Ever since, hotels have begun growing and constantly changing from all aspects and in a gradual form. Professional theoretical references suggest that hotels are considered one of the key elements that underpin tourism industry and the transport of all forms, as well as other activities. (Ali 1998, p 7)

Research problem:

Not making a full use of the hotel's absorptive capacity results in the depletion of that hotel's profit, since ideal profitability rate is reached when the occupancy rates is equal to the hotel's absorptive capacity. The main problem for the hotels'

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managements is the lack of knowledge of the key factors that control the occupancy rates. So the research problem is to handle this issue in details.

Research Objectives:

The research aims to achieve the following objectives:

- 1- Identifying the factors that affect hotel occupancy rates.
- 2- Analyzing the factors that affect hotel occupancy rates.
- 3- Classifying the affecting factors according to their importance.
- 4- Providing recommendations to assist employees in determining factors that affect the occupancy rates and suggesting some solutions.

Research importance:

Hotels industry is one of the modern industries in Arab countries because hotel chains started paying more attention to it because, just like any other industry, it is subject to quality standards in service, efficiency and continued development to maintain a competitive status. This forces hotels to think seriously to exploit their full potential and absorption capacity due to the high competitive activity of the market. Therefore, the research importance comes from the study and analysis of the most important factors that affect the occupancy rates in hotels which positively or negatively affect hotels profitability rates in order to diagnose them and find appropriate solutions.

Research hypotheses:

Ho-1 Hotels Characteristics have no impact on occupancy rates in four and five - stars hotels in Jordan.

Ho-2 Hotels internal factors have no impact on occupancy rates in four and five - stars hotels in Jordan.

Ho-3 Hotels external factors have no impact on four and five - stars hotels occupancy rate in Jordan.

Hotel: Definition:

A question should be asked in this field, which is “What do hotels mean?” and is there an agreement on hotels definition? Specialized organizations and professional researchers in the hotel management field have different views and opinions regarding the definition of a hotel. American Hotel and Motel Association defined hotel as the following: "The hotel – is an inn prepared according to law regulations in which a guest can find appropriate accommodation, food and other services for a certain fee”.

British law defined the hotel as "a place in which traveler receives accommodation and food for a specified payable price”. Webster defined hotel in his dictionary, New Collegiate Dictionary "as a building or an institution which supplies public with accommodation, food and service”.

While “Marcel Gutti”, who is a professional French researcher, has defined the hotel as "services aimed to provide suitable conditions for the public - sleep and food”. James and John defined hotel in their book (Travel and Lodging Law) as “an organization that provides accommodation and food to a guest for a certain price in return“.

Hotel occupancy rates:

Occupancy Rates are considered of utmost importance for the hotel’s management in general, and for sales department in particular. The existence of occupancy rate that are less than the hotel capacity means that there are lost selling opportunities, which leads to a depletion in the hotel revenue (Taha 2000. p 432).

Therefore, many hotels with low occupancy rates prefer to continue to function normally in non- peak times, as long as the current occupancy rate covers the variable expenses and contributes in covering the fixed costs (wages, salaries, assets depreciation, rent, power, and other expenses). On the other hand, if the demand for hotel services exceeded the hotel’s capacity, this means that the hotel occupancy rate reached its Maximum Rate, because the hotel management

would not be able to modify the supply (increasing number of bookings) on the short run to meet the demand change.

A hotel occupancy rate is measured by the following two standards:

1-Room Occupancy Rate:

According to this standard hotel occupancy rates is expressed in the form of a relationship (percentages) between the number of rooms occupied by inmates and the total number of hotel rooms that can actually be occupied. It is represented e by using the following mathematical equation:

$$(R_r = O_r + T_r) \quad (1)$$

Where

R_r = Room occupancy rate

O_r = Occupied Rooms

T_r = Total rooms that can be occupied

Room occupancy rate = Number of occupied rooms + total rooms that can be occupied:

2-Beds occupancy rate:

According to this standard hotel occupancy rates can be expressed through the relationship between the number of beds occupied by guests and hotel capacity, which is the number of beds that can be offered to hotel inmates.

The following mathematical equation is used for calculation of this ratio:

$$(R_B = O_B + T_B) \quad (2)$$

R_B = Bed occupancy rate

O_B = Number of occupied beds

T_B = Total number of beds that can be provided

Bed occupancy rate = number of occupied beds + total beds that can be provided.

The Demand Nature of Hospitality Services :

In Ideal situations, which are rare in hotel industry, the hotel manager can adapt the hotel capacity (rooms, clubs, restaurants, etc.) with the demand for these services. Any failure will lead to an imbalance in the hotel profitability equation since hotel ideal profitability is achieved when the demand is equal to hotel capacity. And due to the fact that the hotel incurs the fixed costs weather its capacity has been exploited or not, the lack of exploitation of this capacity means that the hotel suffers from losses in its usual profit (Tai 2000. P. 176).

Hotels in Jordan:

The following table indicates the current situation of hotel industry in Jordan

Table 1 No. of Hotel, Apartments & Others, Rooms, Beds & Number of Employees Distributed by Nationality & Classification 2012*

Amman	No.Of Hotel	SUIET	Room	Bed	Jordanian		Non Jordanian		TOT EL	Total
					M	F	M	F		
Five Stars	13	390	3,768	6,240	3,989	354	156	77	4,565	4,565
Four Stars	19	193	2,177	3,987	1,598	122	47	16	1,783	1,783
Three Stars	31	232	2,147	4,006	1,021	79	145	24	1,269	1,269
Two Stars	33	128	1,110	2,330	301	32	41	38	412	412
One Stars	26	28	628	1,308	81	5	16	1	103	103
TOTAL	122	971	9,830	17,871	6,990	592	405	145	8,132	8,132
Apartments B	25	606	1,056	1,935	99	18	72	1	190	190
Apartments C	85	1,641	2,553	4,899	167	24	143	8	342	342
Suites A	2	90	93	141	101	14	0	5	120	120
Suites B	11	283	364	698	152	12	24	0	188	188
Suites C	12	351	519	1,084	100	11	16	0	127	127
TOTAL	135	2,971	4,585	8,757	619	79	255	14	967	967
Unclassified Hotels	72	0	916	2,115	118	5	24	0	147	147
Total Amman	329	3,942	15,331	28,743	7,727	676	684	159	9,246	9,246

www.alghad.com/index.php/portal/sooq-wa-mal/articl

Jordan Hotels' Occupancy Rate:

Hotels occupancy rates decreased in Dead Sea area during the past to 42% compared to 55 % during the same month of 2012. Kingdom Hotels Association indicated that occupancy rate in Aqaba hotels last month was 56% approximately, while it was 47% in Petra and 49% in Amman hotels. Such decline can be attributed to a decline in the number of tourists and high cost of hotel accommodation as a result of high cost of energy, which led to a decline in Jordan competitiveness compared with other countries.

The Association added that the drop in number of tourist groups coming from Europe was due to continuing and worsening political and economic situation in the region, indicating that the reservations businessmen are raised occupancy rates of hotels. , and pointed to a range of challenges facing tourism sector , the most important challenge was the high cost of accommodation in Jordan compared with other countries , in addition to the weakness of foreign investment in Jordan and the attracting this kind of investments , and the stop of implementation of any new projects in the tourism industry. Ministry of Tourism and Antiquities estimated the total investment in the tourism sector to be about \$ 3 billion, noting that efforts are focused to raise contribution in the GDP from 13% currently to 17% in 2020. The CBJ numbers showed a rising in the Kingdom's revenues of tourism income to about 2.45 billion dinars in 2012, compared with 2.1 billion dinars in 2011. With the number of the Kingdom's classified hotels being around 319 hotels, and the number of hotel rooms about 19445 hotel rooms. Investments in hotels, according to Hotels Association are concentrated in Dead Sea, Petra, Aqaba, in addition to Amman.

Previous studies:

Anna and John (2003) study examined the relationship between hotel room prices, occupancy percentage, and guest satisfaction. They found That price was a significant predictor of overall guest satisfaction while occupancy percentage failed to be a significant predictor of guest satisfaction.

Hong (2010) study examined the hotel characteristics and their influence on the hotel room occupancy rate among super deluxe 1st class hotels in Seoul, Korea. The study used hedonic pricing method, the results indicated that the price of the room, conglomerate connection and casino facility have negative relationship with the occupancy rate, while location positively affect hotel occupancy rate, moreover the study also found that the hotel's size has a relationship with the occupancy rate.

John (2011) study analyzed the actual occupancy rates of 3,699 hotels that opened during the seven-year economic cycle of 2002 through 2008. The study evaluated the stabilization period based on hotel type, location, size, and service level. The study concluded that certain hotel types and locations stabilize more slowly or more quickly, whereas hotel size and service level are not significant determinants of the stabilization period. Also, the study found that certain hotel types stabilize at significantly higher occupancy rates than others.

Jones and Chen (2011) study reviewed the literature regarding hotel selection. Based on the obtained results, the study used an experimental design that aimed at understanding hotel consumer consideration set formation and modification, instead of the previous traditional emphasis on choice sets and attributes. The study provided an evidence and a smaller choice set. The size of the set is influenced by the size of the hotel market and the criteria used for formulating

these two sets include many of attributes mentioned in the other research. The study added that there is quite a wide range of attributes used to create the two sets; some of the criteria used to make selection were attributes of the website and its search engine, rather than attributes of hotels.

Marianna and Federico (2010) study aimed to explore how direct online booking affects the variation in hotel bed-places occupancy rate between peak and off-peak periods. The empirical analysis included 18 countries during the 1997-2007 periods, for investigating the impact of an increase in the use of the internet by consumers on the seasonal variation in the occupancy rate. The study found that the Internet actually increases the variation in occupancy.

Raymond (2001) study examined issues relating to the impact of economic factors on tourist expenditure and hotel room occupancy rate. The study used an expectations model and found that real tourism expenditure depends on expected income, expected exchange rate and price level. The results also revealed that the equilibrium hotel occupancy rate is a function of tourist flows, exchange rates, price level and length of stay.

Abdullah and Hamdan (2012) study aimed to determine the internal success factors that have the greatest impact on the hotel occupancy rate, and to suggest recommendation to improve the occupancy rate. The study sample consisted of 135. The study finding suggests that the success of hotel operation depends on how well hotel are able to fulfill and meet customers' expectation. The study provides some insights and invaluable information in the management of the hotel industry.

Methodology:

The study used a quantitative research method to examine factors that affect hotel's occupancy rate in Jordan. According to Creswell (2005) quantitative research measures variables by issuing instruments. This approach is the most appropriate approach to answer the research questions.

Population and Sampling:

The research population consists of all employees of five and four stars in Amman the capital. A random sample amounting (180) employees was selected.

Data collection:

Secondary data are collected because of their time and cost advantages. Saunders et al (2009) indicate that secondary data collection is used in order to collect basic information about the study topic. The research used books, periodicals, journals... etc to collect basic data. As for primary data collection, the study used a questionnaire. The design of the questionnaire is varied according to how it will be administrated and in particular the amount of contact with the respondents. This research used the questionnaire due to the limitations of having any interviews with hotels' managers.

Analysis Techniques:

The collected data from the research subjects was coded and then analyzed by using Statistical Package of the Social Sciences (SPSS). Descriptive statistics was used for the purpose of obtaining frequencies, percents of demographic variables, means and standard deviations for the sample's responses on the questionnaire statements. Furthermore, simple regression was used to find the factors that impact hotel's occupancy rate in Jordan.

Demographic profile of the sample:

The analysis of the data gathered through the self administered questionnaire of the responding sample revealed the following results in terms of sample, sex, age, educational level, and experience:

Table (1)

Sample's Demographic Profile

Variable	Frequency	Percentage
Sex		
<i>Male</i>	114	63.3%
<i>Female</i>	66	36.7%
<i>Total</i>	180	100%
Age		
<i>Less than 25 years</i>	10	5.6%
<i>25-to less than 35 years</i>	141	78.3%
<i>35 to less than 45 years</i>	17	9.4%
45+	12	6.7%
Total	180	100%
Educational level		
<i>Less than Bsc.</i>	25	13.9%
<i>BSc.</i>	135	75%
<i>Master</i>	20	11.1%
Total	180	100%
Experience		
<i>Less than 5 years</i>	10	5.6%
<i>5- to less than 10 years</i>	139	77.2%
10 to less than 15 years	20	11.1%
15 +	11	6.1%
Total	180	100%

Table (1) indicates that the sample distribution according to the demographic data was as follows: 63.3% of the respondents were males, while 36.7% were females. 5.6 % were less than 25 years, 78.3 % were between 25 to less than 35 years, 9.4 % were between 35 to less than 45 years, and finally 6.7 % were above the age of 45 years. 13.9 % had less than BSc. 75 % had Bachelor degrees and 11.1 % had master degrees. 5.6 % of sample had an experience of less than five years, 77.2

% had 5 to less than 10 years of experience, 11.1% had an experience from 10 to less than 15 years, 6.1 % had 15 years and more.

Data analysis: This part is related to the impact of the hotel's characteristics, internal factors and external factors on its occupancy rates. Means and standard deviations for each statement were found to give the impression of the sample regarding this impact; the following tables show the obtained results.

Table (2)

Means and Standard deviation of Sample's responses regarding the impact of Hotel's characteristics on company's performance

No.	Questions	Mean	Standard Deviation	Rank
1	Hotel Location	4.35	.590	2
2	Hotel Size	4.38	.676	1
3	Botel Rooms Number	4.25	.579	5
4	Room Facilities	4.29	.668	4
5	Rooms Look	4.34	.604	3
6	Year of opening	4.15	.754	6
7	Service and Quality	3.91	.992	8
8	Hotel chain	4.03	.819	7
9	Hotel Town	3.71	1.212	9

In terms of subjects views regarding the impact of the hotel's characteristics on its occupancy rate: The means range between 3.71- 4.38, with the standard deviations ranging from (0.676 -1.212). Means indicated that respondents view that hotel's characteristics have an impact on its occupancy rate because their means are more than (3) which is the virtual mean. Furthermore, it can be noticed that the statement no. (2) "Hotel size" was the most important statement in this respect, since it had the highest mean, while the statement no.(1) "hotel location" was the

second highest, statement no. (5) "room look " was ranked the third, and finally statement no.(9) "hotel town“ came after all other statements which also indicated that the sample's agreement on the impact of hotel's characteristics impact hotel's occupancy rate .

Table (3)

Means and Standard deviation of Sample's responses regarding hotel's internal factors impact on hotel's occupancy rate

No.	Questions	Mean	Standard Deviation	Rank
10	Propmt and courteous	4.02	.849	6
11	Security and safety	4.35	.699	2
12	Service Quality	4.25	.670	3
13	Hotle's employees	3.94	.915	8
14	Prices	4.45	.607	1
15	Personal service	3.95	.932	7
16	Personal interaction	4.05	.865	5
17	Cleaniness	4.09	1.022	4

With respect to subjects views regarding impact of hotel's internal factors on its occupancy rates: The means range between 3.94-4.45, with standard deviations ranging from (0.607 - 0.915). Means indicated that respondents view that the hotel's internal factors have an impact on its occupancy rates because their means are more than (3) the virtual mean. Furthermore, it can be noticed that the statement no. (14) "Prices" was the most important statement in this respect, as it had the highest mean, while the statement no. (11) "Security and safety" was the second highest, and the statement no. (12) "service quality" was ranked the third and finally, statement no.(13) "hotel employees“ was the last of all other

statements which also indicated the sample's agreement on the impact of the hotel's internal factors on its occupancy rate.

Table (4)

Means and Standard deviation of Sample's responses regarding the impact of external factors on hotel's occupancy rate

No.	Questions	Mean	Standard Deviation	Rank
18	Uncertainnties	4.21	1.014	3
19	Advancement of technology	3.86	1.050	6
20	Customer experience	3.80	.906	8
21	External surroundings	3.75	.854	11
22	State Legeslation	4.12	.841	5
23	Economic situation	4.23	.871	2
24	Country Demographic	3.81	1.138	7
25	Socio – cultur factors	3.79	.853	9
26	Intensive competition	4.26	.845	1
27	Transportation cost	3.78	.795	10
28	Change of government polices	4.13	.924	4

When asked about the impact of hotel's external factors on its occupancy rates, the results showed that the means ranged between (3.75- 4.26) with standard deviations ranging from (.845-854). Means indicated that the sample has different views regarding the impact of hotel's external factors, the sample agreed that one of the most important factors is (intensive competition, economic situation and uncertainties) while the lowest factor being the external surroundings.

Hypotheses Testing:**First Hypothesis:**

Hotel characteristics have no significant impact on the hotel's occupancy rates

Table (5)

First hypothesis test results

Dep Variable	R	R ²	F Calculated	DF	Sig.	Regression coefficient			
						Ind. Variable	B	T Calculated	Sig
Hotel's Characteristics	.20	0.047	21.230	1	0.000	Hotel's occupancy Rate	.20	4.23	0.000
				148					
				149					

Table (5) indicates that simple regression represents the relation between hotel's characteristics and its occupancy rate is significant since F calculated value is (21.230) at (0.000) level. The correlation coefficient value is (0.20) which indicates that there is a relation between the two variables. Furthermore R² Is 0.047, this means that hotel's characteristics variable interprets (4.7%) of the changes in hotel's occupancy rate. Moreover β value is (0.20) which represent the total impact of hotel's characteristics on its occupancy rate and is significant since T value is 4.23 at 0.05 level, therefore the null hypothesis is rejected and the alternative one is accepted, this means that the hotel's characteristics have an impact on its occupancy rate.

Second Hypothesis:

The hotel's internal factors have no significant impact on the occupancy rate.

Table (6)

Second hypothesis test results

Dep Variable	R	R ²	F Calculated	DF	Sig.	Regression coefficient			
						Ind. Variable	B	T Calculated	Sig
Hotel's internal Factors	.236	0.062	31.230	1	0.000	Hotel's occupancy Rate	.236	6.662	0.000
				148					
				149					

Table (6) indicates that simple regression represents the relation between hotel's internal factors and its occupancy rate is significant since F calculated value is (31.230) at (0.000) level. The correlation coefficient value is (0.236) which indicates that there is a relation between the two variables. Furthermore R² is 0.062, this means that the hotel's characteristics variable interprets (6.2%) of changes in its occupancy rate. Moreover β value is (0.236) which represents the total impact of hotel's internal factors on its occupancy rate and is significant since T value is 6.662 at 0.05 level, therefore the null hypothesis is rejected and the alternative one is accepted, this means that the hotel's internal factors have an impact on its occupancy rate.

Third Hypothesis:

Hotel external factors have no significant impact on its occupancy rate.

Table (7)

Third hypothesis test results

Dep .Variable	R	R ²	F Calculated	DF	Sig.	Regression coefficient			
						Ind. Variable	B	T Calculated	Sig
Hotel's external Factors	.690	0.358	320.039	1	0.000	Hotel's occupancy Rate	.690	16.861	0.000
				148					
				149					

Table (7) indicates that simple regression represents the relation between hotel's external factors and its occupancy rate is significant since F calculated value is (320.039) at (0.000) level. The correlation coefficient value is (0.690) which indicates that there is a relation between the two variables. Furthermore, R² is 0.358, this means that hotel's external factors variable interprets (35.8%) of changes in its occupancy rate. Moreover, β value is (0.690) which represents the total impact of the hotel's external factors on its occupancy rate and is significant since T value is 16.861 at 0.05 level, therefore the null hypothesis is rejected and the alternative one is accepted, this means that hotel's external factors have an impact on its occupancy rate.

Findings:**Based on above analysis the study found the following :**

- Jordan hotels' occupancy rate is influenced by many factors regardless of the seasonality and other fixed factors.
- Hotel characteristics (hotel location, size, number of rooms) have an impact on Jordan hotels' occupancy rate.
- Hotel's internal factors (service quality, room facilities, prices, employees' attitudes ,and cleanliness) have an impact on Jordan hotels' occupancy rate.
- Hotels external factors (economic status, exchange rate, political situation, intensive competition) have an impact on Jordan hotels' occupancy rate.

The study suggested that Jordan hotels have to set different strategies to raise their occupancy rate such as reducing their room's rate, in low season in particular, creating special promotional programs for local citizens to consume hotel services, and finally targeting new markets with new marketing strategies that can attract tourists.

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