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The Study of Effect of Duration Control in Rooms Division on Break Even Room Revenue in Star Rated Hotels

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Abstract

The paper is a part of a detailed research which is been undertaken to study the effect of duration control on the break-even room revenue. The detailed research of which the paper is a part deals with various revenue management techniques used in star category hotels and check its impact on the hotel room revenue. After a detailed analysis and thorough classification there have a list of revenue management strategies which have been listed out. Duration Control is one of most important revenue management technique amongst the all listed revenue management techniques. Here the relation of duration control is studied with the break-even room revenue and a detailed analysis is put forth whether there is a relation between the both the variables. The paper is based on a pilot survey which is part of the study of revenue management techniques used in rooms division in star rated hotels. The research is done considering twenty star rated hotels in Pune district. The data collected is summarized to find out the reliability of data. Then hypothesis is tested using the two tailed test and Karl Pearson Coefficient to come to certain inference. Finally, some light has put forth on the future research prospects.

Keywords: Revenue Management, Room Revenue, Duration Control, Rooms Division, Star Rated Hotels, Break Even Room Revenue

INTRODUCTION

With the advent of technology over the past few years hotel industry has flourished in leaps and bounds. The hotel industry is currently part of tourism industry which is in the biggest sector in services industry. With increase in hotels worldwide there was an increase in the competition between hotels to get the highest share in the market. Airlines first practiced the concept of yield management in 1980's which was a major step in optimizing the revenue in coming years. This concept was further implemented in hotel industry and was later evolved in to a better version known as revenue management. Hotels now a days are using revenue management in daily revenue operations to get the highest possible share of revenue in the competitive market. Revenue management has namely five elements to set up the platform- right product or service, right price, right time, right customer and right distribution channel. When all in these five elements are defined correctly by any organization, they reach the level of earning an optimized revenue.

Hotels have namely two major areas of revenue generation-rooms and food & beverage. There are also other areas but these are the prominent ones to give the necessary revenue. In hotels the 60% room revenue is generally earned by sale of rooms. So, we can always say that room revenue forms a major part in the total hotel revenue. Now the main question amongst any hotel organization is how can we get the maximum room revenue as maximum room revenue is the key factor to achieve a good profitability. Revenue management is considered as a solution for this question. Hotels implement revenue management, but which techniques or practices of revenue management are being used or can be used or which techniques can give the best possible revenue is the primary question. Hotels are getting well educated about revenue management but are revenue management techniques giving the necessary results we are not aware.

Considering the above question, a detailed literature review has been done to put forth a new classification

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of revenue management techniques. The classification is sub divided into three major categories namely- pricing revenue management techniques which have price as a major factor in implementation, non-pricing revenue management techniques which take into consideration other factors rather than price and last one combination revenue management techniques which take into consideration price as well as other factors. So, under each main type there are various techniques which have been listed out. When we study the impact of all these techniques individually on room revenue in hotels, we can conclude whether the using of techniques to strategize the business is effective or not.

Duration control is simply putting parameters for bookings with relation to stay dates and duration. Duration control involves room availability, demand and supply chain and the unconstrained demand as a whole. These all things make it a non-pricing revenue management technique. Further if we consider room revenue, we can divide in in to two parts- first is break even room revenue which is sum of all fixed costs and variable costs involved in rooms division in hotels. Break even room revenue can also be considered as a point of no profit and no loss. It is the point of equilibrium. Second part is incremental room revenue which is the profit earned after covering of all costs. So, a higher incremental room revenue leads to higher profitability.

Duration control is such a technique where any person sells a product or service with stay parameters. So, the main aim of duration control is consolidating the base business and covering of costs. By methods of advance purchase or multiple night booking conditions hotels retain the base business to cover all the fixed costs, operating costs and variable costs. So, we can say that studying the effect of duration control on break even room revenue makes more sense.

Thus, the purpose of the paper is to study whether star category hotels are implementing the technique of duration control and if they are using it, then whether there is a relation between duration control and break-even room revenue. Here we can say that independent variable is duration control technique and dependent variable is break even room revenue.

LITERATURE REVIEW

Revenue management is process of selling the right product or service to the right customer at the right time at the right place at the right price using the right distribution channel in order to optimize the revenue (Hereter, 2017). So according to above definition, revenue management involves six major components namely product or service, customer, place, time, price and distribution channel. Revenue management can be defined as a next level of the concept of yield management which was adopted few years back. As per Varini and Sirsi (2012) revenue management is famous amongst hospitality and tourism organizations as one of the main characteristics of these firms is having a perishable inventory. This perishable inventory in turn compels organizations to do market segmentation taking into consideration customer needs, booking behavior and their willingness to pay various prices with regards to time of the booking.

From the perspective of Ivanov and Zhechev (2011), revenue management can be an important aspect for matching of demand and supply by segregating customers into various segments and strata depending on the intentions of purchase and allocating the inventory amongst these various segments in order to optimize revenue of the particular organization. Also, it can be said that revenue management is an application of pricing strategies and integrated information systems in order to allocate the right inventory to the right customer at the right time at an appropriate price. So, the inference is revenue management contributes essentially to businesses which have features like perishable inventory, a static capacity, ever changing demand, market with various sub segments, advance reservation availability and finally low variable costs and high fixed costs. Gothesson and Riman (2004) say that revenue management can be used to find out the allocation of optimal inventory and putting strategies along with price for assets perishable in nature to maximize the revenue within the planning terms.

As per Willie, Clarke and Chandra (2015) revenue management can be defined as the process of allocating the right type of inventory to the right type of guest at a price which will assist in maximizing the revenue or yield. They consider it as a science and art which mainly focus in detail on market conditions with regards to customers which include demand levels monitoring so as access the application of various price bundling, packaging, capacity allocation, pricing, forecasting, channel tactics & strategies and finally market distribution. Revenue management is also considered as an administrative science which recognizes the utility of market segmentation. Almost all organizations adopting revenue management give credit to revenue management for increase in growth of revenue between 3 to 7% without any increase in the cost levels. Simply it is said, the hospitality organization attempts to sell the right room at an appropriate price and the guest tries to book it at the right time. So, hotels must embrace revenue management culture and make it a discipline as a strategy for the firm so as to gain an advantage over the various competitors. Kimes (1999) mentions that revenue management as a part of hotel and airline industry helps in increasing the revenue by 2 to 5 percent.

As per Kimes (2017) revenue management is more of strategic and is a continuous process which will always go on and on towards progress. The focus will be more on understanding the demand segment wise and on basis of who does the booking. Compared to the past nowadays the revenue management functions are centralized to a specific organization. Revenue management goals can be defined as focusing more on profitability compared to revenue, data analytics to be considered the most important element to enhance profits and also considering non-room revenue areas as a source for enhancing the profit.

Mayer (2014) enlists the five main pillars of revenue management as segmentation and customer knowledge, capacity management, forecasting and overbooking, pricing strategies and finally channel management and distribution. According to him, revenue management can be considered as an application which is derived from information systems and pricing strategies in order to allocate the right inventory at the right time to the right customer at the right price. The focus should be on customer behavior at an individual level considering the factors of price and availability of resources to optimize your profits. Incremental revenues are earned by use of revenue management by accepting or denying reservations depending upon of the value of their reservation. If we see the components of revenue management we can consider those as understanding demand and market segmentation, customer reaction, performance indicators, pricing strategy, restrictions and controls, overbooking, duration control and distribution channels.

Revenue management can be defined as tactics and strategies adopted by enormous organizations in order to manage the capacity to various set of people having different attitude to willingness of pay over a certain time frame in order to maximize the revenue (Padhi, Aggarwal 2011). They also consider it as a systematic and holistic approach to maximize room revenue by providing a variety of rates to the customers considering the principles of demand and supply. Revenue management is applicable when the service provider has a fixed quantity perishable in nature, customers can prior book the service, the provider as a varied range of pricing and finally the provider can change pricing over the period of time. According to the authors, demand and supply management, market segmentation and pricing are the three cornerstones of revenue management.

Heo (2013) mentions that the basic rationale of revenue management is the efficient use of fixed and perishable inventories by applying various prices to different customers for the same services in order to balance the revenue per inventory unit and the demand. Revenue management generally sustains in that industry which has perishable inventories, variable demands, fixed capacity, high fixed costs and low variables costs and finally a market which can be broken down into sub segments. Revenue management generally involves segmenting of market, identifying pricing strategies, inventory control and allocating inventories in such a way that the maximum revenue is earned from a fixed capacity. Fixed service capacity can be a considered a key characteristic for the successful application of revenue management. This characteristic assists in variable pricing strategies and appropriate rate fencing.

Kimes (2013) suggests that revenue management can be viewed as a building consisting of five pillars. This building has a foundation of organization’s internal infrastructure and the pillars can be considered as traditional 4 P’s of marketing namely product, promotion, price and placement along with people which can be the fifth P. As per Erdem and Jiang (2016) revenue management is defined traditionally as a science and an art of demand forecasting while at the same time adjusting the price and availability of inventory to match the demand levels. Beneder (2015) concludes that revenue management is the best technique which will assist the hospitality professionals to achieve the maximum profits by correct identification of the right target customer group, establishing the right products and services along with setting up the optimal prices which can be offered to the customers.

Mahesh (2015) mentions that hotels using revenue management have a higher probability of having the characteristics of ownership, a number of market segments and seasonal variation. Hotels in today's date whether brands or independent properties adopt various revenue management practices like price manipulation and capacity management to optimize the room revenue. So, it can also be defined as a sophisticated form of demand and supply management which help in enhancing revenue for the organization by balancing pricing as well as duration controls. Revenue management can be a part of the service industry which can satisfy the conditions as- volatile demand, limited inventory, perishable nature of service, market segmentation and finally low variable and high fixed costs. Mahesh also discusses the concept of business intelligence which is converting data into information and then into knowledge.

Kimes and Wirtz (2015) consider revenue management as an application of information systems and pricing strategies which help in allocation of right inventory to the right customer at the right time at the right place. Saleh, Atiya and Habib (2013) describe revenue management as a science which is used for managing a limited inventory using dynamic pricing strategies to maximize revenue. This principle of revenue management thus has led to increase in its significance amongst hoteliers and high rated hotels. Thus, revenue management goes across a long way towards making sense out of the data gathered and dynamically pricing rooms to ensure maximum occupancy and optimal room revenue.

As per Himanka (2014) revenue management is a set of strategies and techniques to gain upper hand in revenue as well as operating profits. Revenue management is a set of strategic and tactical decisions that any hotel takes in order to maximize revenue and profits. It is an art of selling the right product at the right time to the right customer at the right price. In simple words it is managing capacity in a profitable manner.

Landman (2018) describes revenue management in many small ways. Firstly, it is selling the right room to the right client at right moment at a right price. Revenue management is a simple art of turning away business. Also simplified form revenue management is matching supply and demand. Revenue management is overall strategy which includes forecasting and in-depth analysis. It can also be considered as a part of price optimization.

As per Sharma (2015) revenue management was used by hotels majorly to understand the various trends and maximization of the revenue. Considering the appropriate meaning of trade, revenue management can be considered as providing the correct commodity to the appropriate customer at the most suitable time and price in order to generate the best value for money. Revenue management emphasizes on improvements in business plans, market segmentation, forecasting elasticity of demand and use of various strategic pricing methods. So, revenue management is a key tool which will help the organization to develop and understand both internally as well as externally in order to survive the competition as be an aggressor in providing the best value for money.

Li (2010) infers that revenue management is concerned more with optimum use of the resources. The main aim of revenue management is to maximize the business profits by pricing management, sales volumes, room capacity and operating costs. So, from the context of a hotel, revenue management is a technique of maximizing revenue which aims at increasing the net yield by predictions to allocate rooms to various pre-determined market segments at an optimal price. Jones (2013) on the other hand concludes that 5 to 10% increase in sales can generated by use of revenue management systems. Kimes (2010) that while he studied respondent responses, he found out that the perception of many individuals was revenue management over the years is going to be more strategic and driven by technology. The perception is also that revenue management will evolve over a period of time from a discipline used to maximize room revenue to a strategic concept aiming at interaction of various revenue streams.

Ivanov (2014) defines revenue management as an evolution of yield management helps in matching supply and demand by dividing customers into various segments depending on purchase intentions and the allocation of inventory in such a way which will optimize the revenue of the organization. Hotel revenue management can be defined as a set of actions and tools whose main aim is achieving set levels of hotel net revenue and gross operating profit by offering the right product or service at the right time to the right customer using an appropriate distribution channel with effective communication.

As per Gayar and Hendawi (2014) revenue management implies principles of economics to various variable of the system to maximize revenue. Hotels focus on maximization of room revenue. So, hotel revenue management is considered as a managerial tool which will enable room revenue maximization which includes selling of each room to customer who is willing to pay the most so as to achieve maximum revenue. Hotels have to sell rooms to highest profit generating guests but also to low profit generating guests in order to ensure that rooms do not go vacant. Optimization of room revenue by having a mix of customers is one of the main aims of revenue management. So hotel revenue management can be defined as a process of selectively accepting or denying guests by price, length of stay and arrival date to maximize revenue and also optimally matching demand and supply of rooms to ensure hotel gets a mix of profitable guests.

As per Bayoumi, Saleh, Atiya and Aziz (2014) revenue management can be considered as a science of managing a fixed quantity of supply to maximize revenue by using the dynamics of price and quantity offered. Rutherford (2002) mentions that the three main revenue management concepts which hotels can utilize easily are simplification of revenue management systems, adjust rate controls to give the strongest return revenue in the business and application of duration controls in order to shift demands from sold out period to shoulder period. Nadarajah, Lim and Ding (2015) conclude that revenue management developed from airlines but all the features are not applicable considering the hotel industry like multiple stay dates. For hotels the problem is with a fixed capacity it is difficult to lay down the revenue optimizing strategies considering the different market segments and the different situations and conditions.

Revenue management can be considered as revenue enhancement technique which is most suitable for service-oriented industry (Baker, Huyton & Bradley, 2002). Wang, Heo, Schwartz, Legoherel and Specklin (2008) consider revenue management as a mature field of study in the area of operations management research. Further, this leads to revenue integrity which in turn having price consistency over various channels till th time the final invoice is generated. The use of web technologies and smartphones is also helping revenue management organizations to control demand as well as enhance revenue compared to the past times. Revenue management can also be simply a list of procedures and techniques which can be used to change occupancy, average room rate or both together to optimize the room revenue (Woods, Ninemier, Hayes & Austin, 2007). As per Bardi (2007) revenue management has a goal with two perspectives namely- maximizing profit from guest room sales and maximizing profit from services of the hotel.

Revenue management also speaks of right customer which according to Ivanov (2014) is those guests who are profitable to hotel and should be attracted using the correct marketing techniques. Ivanov (2014) also mentions the right product or service can be determined by perspective of both guests as well the hotelier considering the ones which deliver value to the appropriate customers by satisfying their needs and requirements, which compel customers to pay and leads to profitability for the hotelier. In context of right communication, it is said that, product and prices are perceived by how the market communications influence the guest. The method by which hotels provide information, presentation of prices influences the customer perception about the value they think they will receive from the said product or service. The concept of product perishability means that customer will always check for tangible clues which will try to describe product quality like hotel description, guest reviews, photos which in turn enhances the role of marketing communication in describing the hotel's product value.

Li and Ma (2015) in their paper have mentioned that in hostel industry, Marriott corporation was the pioneer of revenue management system. As per the relevant data studied by them, Marriott hotel group achieved a huge success by use of revenue management technology in the year 1991. Hotel revenue management aims at maximizing room revenue with help of overall development strategy and is completely dependent on IT technology, at the right time to sell the appropriate product or service at the right time to the selected customer through the most effective channel. It is also found that hotel performance has an economic environment for a closed section of time. The external factors like politics, culture, society, technology, environment, competition and internal factors like influence, behavior, technology and organization together impact revenue management of the hotel. The most influential factors in term of hotel revenue management from aspect of society and technology are focusing on revenue management behavior. Revenue management behavior includes generally demand forecasting, reservation system, overbooking policy, income details and performance evaluation measures. The basic factors for revenue management success are market segmentation, inventory management, demand forecasting and performance evaluation. The financials are generally a combination of revenue per available room and revenue generation index which in turn shows the contribution of revenue management more correctly taking into consideration the quantitative research of customer satisfaction and competitive environment.

As per Noone, Enz and Glassmire (2017) the success of revenue management for Marriott largely was due to the centralized attitude of guest being the key and also helped in developing revenue management function to a more evolved customer strategy and revenue maximization team. The external environment comprises of socio-cultural, trends, economic influence, technological influence, legal, competitive, partner and vendor influence. Internal environment consists of creating and implementing certain revenue management strategies, controlling organizational processes, managing of resources as well as stakeholder relationships in order to develop competitive advantage. Hotels now a day's focus on total hotel profit optimization which reflects a movement towards future of revenue management considering the comprehensive and strategic role.

Furthermore, as per Mockerman (2018) total hotel revenue management is process of optimization of revenue taking into consideration hotel's available space, functionality, assets and products using the concept of time perishable inventory. Total hotel revenue management strategy can be devised by using the unconstrained demand for rooms, meeting rooms, restaurant reservations, spa appointments which in turn provide the advantage in the various above said sections of the hotel. It also speaks of interconnecting various revenue generation points to get a superior revenue. Kimes (2017) in his survey with revenue managers of the hotels mentions that he got 63% of responses mentioning that focus on all departments on generating revenue needs to be applied. Ivanov & Zhechev (2011) mention that various revenue centers in hotels namely- room division, function rooms, F&B, spa, wellness centers, casinos, golf courses etc are potential sources of earning revenue and they also play a key role in determining the hotel capacity to use pricing strategy as a major revenue generation tool.

If we consider the term revenue management it is selling the right product or service to the right customer at the right price at the right time at the right place using the right distribution channel to optimize the revenue. As per Oxford dictionary, the word technique is a skillful and efficient way of doing or achieving something. So, if we combine the two we can define revenue management techniques as skillful and efficient ways of optimizing revenue considering the characteristics of product or service, customer, price, time, place and distribution channel.

Revenue management techniques cannot be judged under one parameter and so they need to be classified. Ivanov (2014) helps distinguishing them in three types namely- pricing revenue management techniques, non-pricing revenue management techniques and combination revenue management techniques. Pricing techniques have price as a main factor and Ivanov has mentioned them as price discrimination, dynamic pricing, lowest price guarantee and price framing. Non-pricing techniques will consider other factors like inventory and demand supply pattern and will not be affected by price. Ivanov (2014) again has mentioned those as capacity management, overbooking and room availability guarantee.

As per Varini and Sirsi (2012) constrained demand consists of the customers which anyone serves and also those customers who are not been able to be served due to various reasons like queue, website challenges, booking conditions etc. So it is also considered as a total demand which consists of guests who are served and also guests who are not served. As per Rutherford (2002) that demand is a primary determinant which will give us the highest rate which can be charges to a particular market segment.

Wang, Heo, Schwartz and Legoherel (2015) mention that predicted demand and probability which is studied help in putting forth the decisions on various aspects of inventory allotment, rate points, distribution channels and overbooking. As per Mayer (2014) demand forecasting is a detailed procedure involving estimating, calculating and predicting customer's future demand for a specific service.

Kimes and Choi (2002) say that hotel's demand is one of important element. Demand forecasts can be directly generated at various required levels like department level, segment level or hotel level and the historical probability distributions can be studied and applied at these levels to reach the detailed goals. The final goal can be said to manage the upcoming demand in near future, targeting of certain markets and reach right customers at right time to convert every shopper in a loyal guest.

As per Oliver (2018) rate are dependent on demand which describes your dynamic pricing which has various rate tiers. It also makes the hotel to sell the last few rooms at a good premium price. Maher (2018) mentions that the competitive set is also demand driven. Using the right technology and system it is possible to select appropriate competitive set which in turn helps determining demand-based pricing and inventory decisions.

As per Ivanov and Zhechev (2011) duration control also referred to as length of stay control allows hotels to safeguard themselves from losing room revenue whenever guests book rooms for a short stay during a high demand period. These controls are also effective in terms of low demand period when by application of the same additional room revenue can be earned. The major disadvantage of the duration control is that it is static in nature and not flexible with regards to demand supply principles.

As per Hereter (2017) duration control or length of stay controls are of various. First is closed control where no activity takes place and no guest is allowed to extend, check in or do any changes in the booking. Closed to arrival control means on a specific date guest cannot check in or arrive. If last minute rooms are available first preference is given to guest who want to extend their stay by. Both the controls are effective in terms of sold out and high occupancy dates. Closed to depart control is again used in high occupancy dates or sold out position where guest is unable to depart early means under stay are not allowed. This helps in avoiding losing of room revenue at the last moment. Minimum length of stay controls help in earning incremental revenue for low occupancy dates. If there is a high occupancy date and before or after the date there are low occupancy dates, hotel puts on this control which compels the guest to stay even for the days which are on low occupancy. Maximum length of stay control again is effective for certain low period dates. If hotel has a high occupancy date and before that more than two low occupancy dates, hotel applies this control in where guest to stay for a maximum period of days stipulated by the hotel. There is also full pattern length of stay control which can be applied whenever the coming seven days are a mixture of high occupancy and low occupancy dates and the stay controls are put according to the pattern of high and low occupancy dates.

RESEARCH METHODOLOGY

The paper is based on a pilot survey which is part of the study of revenue management techniques used in rooms division in star rated hotels. A questionnaire was formed and survey was done with twenty, star rated hotels in Pune district of Maharashtra state in India. The hotels considered were three-star hotels, four hotels and five-star hotels. The ministry of tourism of India has published a document on their official website which describes the norms and parameters for various star categorization of hotels in India. The hotels who fulfill all these norms in Pune district form part of the target population.

The sampling method used was a non-probability quota sampling. The purpose of sampling was to consider the various hotels in the entire Pune district. Pune district has various areas which have a number of stars rated hotels. The district was sub divided in these areas and a quota of samples was taken from each area in order to justify the results achieved to the entire Pune district.

The sampling for resource person to fill up the questionnaire was done on judgement basis. So, non-probability judgement sampling was used to determine who will fill up the questionnaire. In hotels generally revenue management is handled by the revenue manager. Some hotels fail to have a revenue manager, so in his absence a front office manager, a sales manager or the general manager handles hotel revenue management. On basis of this judgement, the hotel used to be approached and the person in charge for hotel revenue management used to be asked to fill up the questionnaire.

Primary data consists of total of twenty star rated hotels who were approached and questionnaire were filled up. Secondary data consists of the various articles, journals, research papers, reports and articles on the internet on hotel revenue management. On basis of these total things, data was collected and a detailed analysis put forth.

HYPOTHESIS

H_O- Null hypothesis

There is no relationship between duration control and break-even room revenue.

H_1- Alternative hypothesis

There is a relationship between duration control and break-even room revenue.

DATA ANALYSIS

The study included twenty star rated hotels in Pune district which included 3-star, 4-star and 5-star hotels.

Table 1: Sample Categorization of Star Rating of Hotels

Type	Sample Size
3-star hotel	40%
4-star hotel	20%
5-star hotel	40%

The occupancy percentage is the number of rooms occupied divided by total number of rooms in the hotel for sale multiplied by hundred. The hotel average occupancy statistics include:

Table 2: Sample Categorization with Regards to Average Occupancy Percentage

Type	Average Occupancy Percentage			
	0-25%	26-50%	51-75%	76-100%
3-star hotel	0	2	4	2
4-star hotel	0	0	2	2
5-star hotel	0	0	6	2
Total	0	2	12	6

Hotels in Pune generally cater to three types of guests namely- business guests, leisure guests and groups. The statistics of hotel serving various categories of guests include:

Table 3: Sample Categorization with Regards to Catering to Various Types of Guests

Type	Type of Guests		
	Business Guest	Leisure Guest	Groups
3-star hotel	8	5	4
4-star hotel	4	3	4
5-star hotel	8	7	8
%	100	75	80

Average length of stay is defined as the average number of days any guest stays in a star category hotel. The statistics include:

Table 4: Sample Categorization with Regards to Average Length of Guest Stay

Type	Average Length of Stay			
	1-3 Days	4-6 Days	7-14 Days	14 & More Days
3-star hotel	6	2	0	0
4-star hotel	2	2	0	0
5-star hotel	6	2	0	0
Total	14	6	0	0

TEST OF RELIABILITY

We consider the two variables- independent variable which is duration control and dependent variable which is break even room revenue. First, we have to see if the data is reliable or not and hence, we have put forth the test of reliability. Test of reliability is how consistently a characteristic is measured by any test put forth. Reliability can be considered as a degree to which any assessment tool can give consistent and stable results.

Independent Variable - Duration Control

Table 5: Reliability Test for Independent Variable

Case Processing Summary			
		N	%
Cases	Valid	20	100.0
	Excludeda	0	.0
	Total	20	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	No. of Items
.912	5

Dependent Variable - Break Even Room Revenue

Table 6: Reliability Test for Dependent Variable

Case Processing Summary			
		N	*%*
Cases	Valid	20	100.0
	Excludeda	0	.0
	Total	20	100.0
a. Listwise deletion based on all variables in the procedure.			

Reliability Statistics	
Cronbach's Alpha	*No. of Items*
.842	9

In case of both variable the Cronbach alpha value is greater than 0.7. Considering this we can say that the data collected is highly reliable for analysis.

HYPOTHESIS TESTING

For hypothesis testing we have to consider a two tailed test of significance as we to the sample is greater than or less than a certain range of values. Also, the hypothesis proposes that the relation between the independent and dependent variable should be tested. In order to study this correlation, the Karl Pearson's Correlation coefficient needs to be calculated.

Table 7: Correlation between both the Variables

		Duration Control	*Break even Room Revenue*
Duration control	Pearson Correlation	1	.819**
	Sig. (2-tailed)		0.00
	N	60	60
Break even room revenue	Pearson Correlation	.819**	1
	Sig. (2-tailed)	0.00	
	N	60	60

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

The significant value of the correlation analysis between duration control and break-even room revenue is 0.00 which is less than 0.01. So, null hypothesis is rejected and alternative hypothesis is accepted. It means that there is a relationship between duration control and break-even room revenue. The Karl Pearson's correlation coefficient is 0.819, is greater than 0.7, so there is a strong positive relationship between duration control and break-even room revenue.

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The data analysis shows that there is a direct relationship between duration control and break-even room revenue so the result that can be drawn is that, implementation of duration control leads to recover the break-even room revenue. On the other hand, absence of duration control will lead to less amount of break-even room revenue and will hence directly hamper the profitability of the organization. Almost 90% hotels have an average occupancy of above 50% which shows that the hotel occupancy is helping in implementing duration control in rooms division. All hotels cater to business guests and majority of them cater to leisure guests and group segments. Considering that duration control is used proactively by hotels leads us to the inference that hotels have developed various up stay plans with duration conditions for the various segments of guests which are being implemented successfully. The average length of stay is not beyond 3 days for 70% of the hotels. So, the guests staying in the hotels prefer short stays rather than long stays. This short span of duration is also acting as an important factor in duration control. Generally, guests are ready to pay additional money for a certain short stay and hence this factor is helping hotels in implementing duration control.

CONCLUSION

We thus conclude that duration control which is a non-pricing revenue management technique has a direct effect or impact on the break-even room revenue. The picture is clear which states that use of duration control will lead to optimum break-even room revenue which in turn will enhance the hotel profitability. The current study also gives a boost for some future research in terms of revenue management techniques. The further research in the area can be study of all non-pricing revenue management techniques together on hotel room revenue.

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