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AN EMPIRICAL INVESTIGATION ON DECISIVENESS AND USAGE OF REVENUE MANAGEMENT TECHNIQUES IN HOTEL INDUSTRY IN SRI LANKA

Mrs. Chandi Karunarathne

Lecturer, Uva Wellassa University

Abstract

Revenue Management is an integrated systematic approach widely accepted in the global hotel industry to achieve optimum revenue of service organizations through the manipulation of various strategies. Based on the industry specific characteristics, location, and availability of resources the applications of revenue management in different setups are profoundly varied. The solicitation of revenue management has more strategic and technologically driven practice and hence selecting a most appropriate display for the hotel revenue management in competitive business environment is controverted over the years. This study was conducted to understand and critically evaluate the revenue management practices and techniques, comparative to the hotel demographics and use of pricing and non-pricing revenue management tools in star graded hotels in Sri Lanka to deliver an overview of the application of this global concept in the local context. A self-administered questionnaire consisted with seven sections was distributed among the top managers responsible for revenue decisions of each star graded hotel in Colombo district and collected responses from 27 hotels (represented 82% of intended population). Descriptive statistics was used to identify the level of application of diverse practices while t-Test and ANOVA were used to identify the differences. The results were congregated the demographic data of the sample, various revenue-generating services in in each hotels, revenue management tools applied at the hotel, revenue management team, RM software and distribution channel management, revenue management process, level of knowledge and application of different metrics and forecasting methods used for revenue management. The findings of the study provide ample indications for policy makers and hoteliers to intensify the importance of different revenue management tools and techniques in the hotel industry to meet the expected revenue hallucinations.

Key words: hotel, revenue management, star graded, Sri Lanka

Introduction

Revenue management is a widely discussed strategic approach in various industries which integrates a systematic approach to maximize the revenue of service organizations through the manipulation of the rates offered to customers. The strategic importance of Revenue Management (RM) has made it an essential instrument for matching supply and demand by

dividing customers into different segments based on their purchase intentions and allocating capacity to the different segments in a way that maximizes a particular firm's revenues (Haddad, Roper & Jones, 2008). Kimes (1989) and Kimes & Wirtz (2003) has defined RM as the application of information systems and pricing strategies to allocate the right capacity to the right customer at the right price at the right time. This puts RM practice into the realm of marketing management where it plays a key role in demand creation (Cross, Higbie & Cross, 2009) and managing consumer behaviour (Anderson & Xie, 2010). RM theory has also benefited strongly not only from marketing management research, but more profoundly from operations (e.g. Talluri & van Ryzin, 2005) and pricing research (Shy, 2008).

Kimes (2003) underlined that RM can have a necessary contribution for a businesses that share several characteristics such as: perishable inventory, restricted capacity, volatile demand, micro segmented markets, availability of advanced reservation, and low variable to fixed cost ratio (although Schwartz (1998) shows that these do not need to be necessarily fulfilled in order RM to be successfully implemented). Further, Revenue Management research have been divided generally into three streams as; (1) descriptive (application of revenue management concepts to various industries), (2) pricing control (development and improved management of pricing strategies), and (3) inventory control (improved management of customer arrivals and use patterns) (Kims, 2003).

Revenue management provides core competencies to the hotel industry as a business process designed to maximize revenue at all levels of demand and allows to strategically managing that demand throughout the year. With technological and management support, revenue management must be and is being integrated into all aspects of hotel management marketing and operating strategies (Cross, Higbie and Cross, 2009). During the past several decades, the lodging industry has used RevPAR (revenue per available room) as a key indicator to evaluate a firm's performance and to make investment decisions (Chen, Koh and Lee, 2011; Cross, Higbie and Cross, 2009). However, selecting the most appropriate display for the hotel revenue management in various departmental operations is controverted over the years.

Background

However, application of RM techniques in hospitality sector was started before three decades and there are number of implications given by past researches in room revenue management, restaurant, and function space revenue management, etc. In a more comprehensive approach, RM will consider total revenue contributions, including group business and its ancillary revenues whereas hotels will need to consider customer price elasticity and not simply match competitors' prices, with a goal of optimizing prices since prices are essentially transparent (Cross, Higbie and Cross, 2009).

Average Daily Rate (ADR) and RevPAR were used over years and Revenue Generating Index (RGI) and Revenue Optimization Model (ROM) were developed gradually overcoming the issues of performance measurement at transient room revenue generation and did not take into consideration yet that could be generated from groups, public space, catering, and other sources of the hotel (Cross, Higbie and Cross, 2009) and Gross Operating Profit Per Available Room, (GOPPAR) was emerged in the industry.

However, the price a customer has to pay for the accommodation in hotels has a considerable deviation. Guests also probably do not possess the precise and sufficient insights on these diverge. In this context, Thrane (2007) emphasized the importance of a multidimensional concept of quality to be associated with hotel prices in a more or less linear fashion: a higher quality equals a higher price. Simply, the price differences are used to indicate the quality differences among hotels. In the real situation, the existence or non-existence of different hotel elements (eg, a spa, a restaurant, a central location etc.) will be among the dynamics that most people will anticipate to stimulus hotel room prices. In addition, it stands to reason that lodging in hotels possessing many desirable attributes will be more expensive than lodging in hotels in which few or no such attributes are presented. Accordingly, the amount charged from the guest and also the amount ready to pay by the guest will be functionally determined. Hence, it is an essential to examine how number of different hotel attributes will clearly disclose the variation in room rates for different room categories in a given period of time.

Moreover, the application of RM in the hotel industry has developed a paradigm in the hotel performance as it deals with segmentation, demand forecasting, revenue strategy, operational forecasting, interdepartmental integration, strategic pricing, inventory control strategies, and internal performance analysis (Tse and Poon 2012).

With respect to the rapid progress of revenue management research in the global hotel industry, either practicing the theoretical approaches and techniques or carrying out domestic research on hotel revenue management in Sri Lanka is relatively much more fall behind. Hence, it is important to explore the level of usage and awareness on revenue management applications in the Sri Lankan context.

Since start graded hotels are having comparatively more standard well organized operational practices compared to other sectors, researcher has limited the scope of the study to the star graded hotels. Accordingly, this study was intended to investigate the room revenue management practices currently available in the star graded hotels in Sri Lanka?

Literature Review

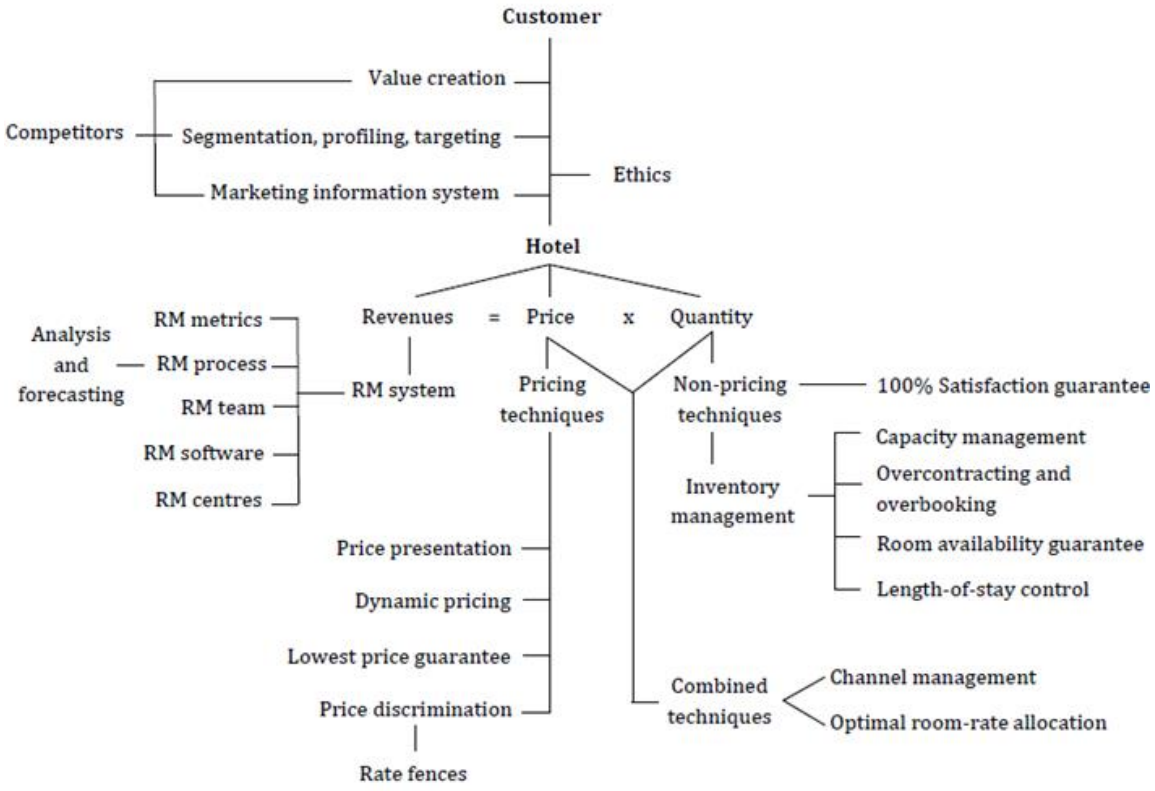
Revenue management is a prolonged concept originated from the airline industry. For the better understanding on the concept, the researcher has discussed several definitions on revenue management grounded by previous researchers.

The fundamentals of revenue management were evolved based on the economic theory of supply and demand. A room for sleeping is the primary item to sell in the lodging industry and revenue management techniques seek to optimize the revenue of the property through the aggressive management of their unique products—the guest rooms that make up the hotels' rooms inventory (Hayes & Miller, 2011). Accordingly, a hotel can alter the rates to get more incremental revenue, since different guests are willing to pay a different price for using the same amount of resources. There are number of concepts and metrics that are used to show the effectiveness and the efficiency of hotel revenue performances (Mauri, 2012).

Evolution of Revenue Management in Hotel Industry

The application of revenue management in the hotel industry has mainly been on optimizing room revenue potential from existing demand. Supported by technological developments, revenue management decision-making has been started to incorporate the offerings from other revenue streams of the hotel operation (Cross, Higbie, & Cross, 2009). The fitness of products for the application of revenue management is determined by a combination of the characteristics of customers and product features that include a relatively fixed and perishable capacity of the product, and customers who have a diverse willingness to pay (Kimes & Wirtz, 2003). As the revenue management originally initiated by the airline industry, this has developed and applied into several other service sector businesses such as golf courses, shopping malls, telephone operators, conference centres, tourism and hospitality and other companies (Heo & Lee, 2009; Chiang, Chen & Xu, 2007; Cross, 1997; Ng, 2009). However, the theories and practices of revenue management have not widely accepted yet in the hospitality industry (Ivanov & Zhechev, 2012) .

Figure 01- Revenue Management Constellation Concept Map



Source: Ivanov (2014)

The hotel industry however has realized that the revenue management is no longer approaching only to room pricing management; it also has been integrated into all the aspects of marketing and operational strategies that explains the total hotel revenue contributions in a wider perspective.

Revenue Management Tools Applied in Hotel Industry

In the room revenue management in hotel industry, there are two major revenue management tools are utilized as pricing and non-pricing revenue management tools. Non-pricing revenue management tools mainly focus on inventory management of the hotel (i.e. the quantity of supply) and it include the strategies such as capacity management, over-contracting and overbookings, room availability guarantee, length-of-stay control, and 100% satisfaction guarantee (Ivanov, 2014). Aziz, Saleha, Rasmya & ElShishiny (2011) also pointed out that the revenue management has three main decisions, as structural decisions, pricing decisions, and quantity decisions, where structural and quantity decisions fall under the non-pricing revenue

management decisions. Consequently, capacity management and overbookings are considered as the two most influential non-pricing revenue management techniques and, at the same time, the most controversial issues in revenue management (Ivanov, 2014).

Accordingly, the revenue management contributes to an organization in making profitability by determining the optimal inventory sharing and price setting for different services. The complexity and distribution of pricing and non-pricing revenue management tools and techniques in a hotel have been summarized by Ivanov (2014) as given in the figure 01.

Methodology

All the official star graded hotels in Colombo district were identified using the Sri Lanka Tourism Accommodation Guide (May-October 2018) published by SLTDA. It included all 33 star graded hotels (One Star, Two Star, Three Star, Four Star and Five Star) in Colombo district.

Survey method was adopted by the researcher and questionnaire was developed based on the literature. Face validation of the questionnaire was completed using a sample of 10 representing different fields to assure the understandability of the questionnaire as two persons from academia, two persons from sales and marketing in hotel industry, two chefs, two persons employed in travel agency operations, and two undergraduates. The comments and feedbacks given by the selected sample for the face validation were useful in fine-tuning the questionnaire for better communication of the questions using more relevant terms, correct the grammatical mistakes, and avoid unnecessary wordings, etc. Data collection of the study was completed during August to December 2018. Both face to face discussions and telephone survey were occupied by the researcher based on the availability of managers and time allocation from the manager. Each hotel was given only one questionnaire to be filled by the revenue manager or a senior manager responsible for revenue decisions. However, questionnaires were received only from 27 hotels reporting 81.8% respond rate and it included 04 five star hotels, 04 four star hotels, 09 three star hotels, 03 two star hotels and 07 one star hotels.

A structured questionnaire was adopted from Ivanov (2014) and consisted of several sections focused on hotel demographics, different revenue management tools applied at the hotel, s revenue management team, RM software, distribution channel management of the hotels revenue management process based on RM metrics and forecasting methods respectively. All the hotels which did not apply a particular tool or its impact on sales was not measured were excluded from the analysis of a tool's impact on sales.

Contemporary room revenue management practices of the hotels were investigated using descriptive statistics. Further to that, the impact of category, size, location and chain affiliation on the application of different revenue management practices of star graded hotels in Colombo

district also were examined. Researcher has occupied the parametric test ANOVA and independent sample t-test in the study (Ivanov, 2014; Baggio & Klobas, 2011), as well as chi square test to identify the differences of hotel demographic variables over the usage of various revenue management tactics and strategies used in the hotels.

Results and Discussion

The sample in this study was comprised of all the star graded hotels in Colombo District. Study samples for the first three objectives are explained in this section. Currently practicing room revenue management tools and their usage were examined and elaborated in this chapter. Profile of the sample was analyzed to understand the context and then the room revenue management practices are discussed.

Profile of the Sample

Table 1 - Profile of the sample

Factor	Indicators	Number of respondents	Percentage
Category	1 Star	7	25.9
	2 Star	3	11.1
	3 Star	9	33.4
	4 Star	4	14.8
	5 Star	4	14.8
Size	1-50 Rooms	6	22.2
	51-100 Rooms	9	33.3
	101-150 Rooms	1	3.7
	151-200 Rooms	2	7.4
	201-250 Rooms	1	3.7
	Over 250 Rooms	8	29.6
Type of ownership	Chain affiliated	13	48.1
	Independent ownership	14	51.9
Location	Sea View	11	40.7
	City View	16	59.3

Source: SPSS output on survey data, 2019

This table (Table 1) provides an overview of the study sample used in the study. Accordingly, majority of the hotels are independent with less than 100 rooms, located with city view and fall under the Three Star and below categories.

Average length of stay, proportion of foreign guests in the hotel and the average growth rate of the occupancy for last five years were investigated to get a further idea on the sample and descriptive results are given in Table 2.

Table 2 - Detail on Occupancy in the Sample

	Mean	SD
Average length of stay (Number of nights)	2.811	1.6992
Average growth of occupancy for last five years	0.0304	0.0194
Average occupancy of foreign guests	0.58	0.1026

Source: SPSS output on survey data, 2019

Average occupancy rate of the foreign tourists in the star grade hotels in Colombo district accounts 58 per cent and the rest is occupied by the local guests. It also showed 0.3 per cent growth of occupancy for the last five years. This can be a result of the increasing number of arrivals of foreign tourists to the country for last few years. Colombo hotels are more recognized as business hotels by its meaning and operation. Hence, having 2.8 nights of average length of stay can be accepted and it can also be reported as a fairly good enough for the business hotels located in a capital city.

Application of Pricing Room Revenue Management Tools in Star Graded Hotels

Respondents were asked to specify the level of agreement on usage of different revenue management tools in day-to-day operations of the hotel using a scale from 5- completely agree to 1- completely disagree. These tools were identified under two categories as pricing and non-pricing room revenue management tools. The revenue management tools were identified under two categories as pricing and non-pricing. Usage of the pricing tools in room revenue management was examined and showed in the table 3, and the non-pricing revenue management tools are described in table 3.

Table 3- Application of pricing room revenue management tools

Pricing Revenue Management Tools	Mean	SD
Price Discrimination		
Frequency of application	2.96	1.427
Importance for the industry	3.41	1.448
Impact on property sales	4.56	0.506
Price Parity		
Frequency of application	4.41	0.636
Importance for the industry	5.00	0.000
Impact on property sales	4.44	0.577
Use of Last Minute Offers		
Frequency of application	3.78	0.974
Importance for the industry	4.30	0.724
Impact on property sales	4.52	0.802
Early Bird rates		
Frequency of application	3.30	1.382
Importance for the industry	4.63	0.629
Impact on property sales	3.07	1.567

Source: SPSS output on survey data, 2019

Price is one of the key elements in the hotel's marketing mix which is the only one directly linked with hotel's revenues. Hence, scholars have acknowledged the prominence of pricing as an extensively used revenue management tool that includes price discrimination, dynamic pricing, lowest price guarantee, price presentation and, price parity (Choi & Kimes, 2002; Hanks, Cross & Noland, 2002; Koenig & Meissner, 2010; Lieberman, 2011; Mauri, 2012; Noone & Mattila, 2009; Schwartz, 2006, 2008; Steed & Gu, 2005; Tranter, Stuart-Hill & Parker, 2008; Tse & Poon, 2012; as cited in Ivanov, 2014)

Amongst them, price parity and the last minute offers are the most frequently used pricing room revenue management tools in the star graded hotels in Colombo district. Price discrimination has not been utilized as a pricing revenue management tool and respondents have accepted that the price discrimination has a high impact over the property sales. However, they have not perceived it as an appropriate strategy in the industry. Moreover, price parity and last minute pricing too make a high impact over the property revenue. Early bird rates have been indicated as an important tool for the hotel industry, but the impact over the revenue and the frequency of usage were not in the accepted level.

Application of the Non-pricing Room Revenue Management Tools

How The frequency of different non-pricing revenue management tools are used, whether they are important for the hotel industry and the managers' perception on the importance of each tool on the property sales were examined and explained in table 4.

Table 4 – Usage of Non-pricing Revenue Management Tools

Non-pricing Revenue Management tools	Mean	SD
Over-contracting		
Frequency of application	1.67	0.679
Importance for the industry	2.41	0.844
Impact on property sales	3.11	1.396
Overbooking		
Frequency of application	3.70	1.203
Importance for the industry	2.89	1.311
Impact on property sales	3.67	0.920
Minimum Length of Stay Control		
Frequency of application	2.33	1.359
Importance for the industry	1.96	1.018
Maximum Length of Stay Control		
Frequency of application	1.63	0.742
Importance for the industry	3.48	1.369
Length of Stay Control		
Impact on property sales	3.30	1.436
Lowest price guarantee		
Frequency of application	4.30	1.305
Importance for the industry	3.04	1.531
Impact on property sales	2.74	1.509
Cross Selling		
Frequency of application	4.59	0.501
Importance for the industry	4.56	0.506
Impact on property sales	4.59	0.572
Up Selling		
Frequency of application	4.63	0.492
Importance for the industry	4.74	0.447
Impact on property sales	4.67	0.480
Room Availability Guarantee		

Frequency of application	5.00	0.000
Importance for the industry	4.33	0.784
Impact on property sales	4.67	0.480

Source: SPSS output on survey data, 2019

According to the descriptive statistics, overbooking and length of stay control were not occupied in the start graded hotels in Colombo as revenue management tools whereas Room Availability Guarantee, Upselling, Cross Selling, and Lowest Price Guarantee are the mostly applied strategies respectively. Although overbooking is in practice, respondents have not perceived it as an important strategy. Over-contracting, and length of stay control were totally rejected by the respondents. These findings are little different from the findings of some of the international contexts. Ivanov (2014) studied on Bulgarian hotel market and found that price discrimination and price parity were the mostly used strategies in the particular destination.

Capacity management and overbookings have been introduced as two of most influential techniques as well as the most controversial issues in revenue management (Karaesmen & van Ryzin, 2004; cited in Ivanov, 2014). Apparently, overbooking, confirming more rooms than the available capacity of the hotel (Ivanov, 2006), is a well-recognized practice in the hotel industry to face uncertainties such as no-shows and last minute cancellation. Hoteliers may be worried on the possible conflicts triggered by overbooking such as; destroying the longstanding relationships with guests and travel agencies (Kotler, Bowen and Makens, 1996; cited in Ivanov, 2014), perceived unfairness or change in the nature of the service, perceived lack of customer appreciation, potential of future lost business, and poor word-of-mouth on the property (Wirtz et al, 2003).

Analysis on the Usage of Revenue Management Tools

Researcher further analyzed whether there was any difference of the responds based on the demographic characteristics using Analysis of Variance (ANOVA) and independent sample t-test.

Results of the one sample ANOVA test (table 4.5) indicated a significant difference in applying price discrimination strategy ($p=0.000 < 0.05$), between star grades of the hotels as well as hotel size in terms of number hotel rooms ($p=0.031<0.05$). In practice, hotels may charge various room rates based on the type of room, room standard, food board, room view, period of accommodation, time of booking, booking terms (cancellation, amendment and payment terms), length-of-stay, distribution channel, guests' characteristics, their loyalty, group size, etc. (Ivanov, 2014) and obviously this might vary on the size of hotel or hotel grade.

Table 5 – Usage of Revenue Management Tools

Revenue Management Tools	ANOVA				t-test			
	Star Grade		Number of Rooms		Type of ownership		Location	
	F	Sig.	F	Sig.	T	Sig.	T	Sig.
Price Discrimination								
Frequency of application	9.150	0.000	3.187	0.031	-0.294	0.771	0.449	0.658
Importance for the industry	1.723	0.186	0.984	0.455	1.291	0.210	0.642	0.530
Impact on property sales	0.665	0.624	1.123	0.384	1.216	0.237	-0.332	0.743
Price Parity								
Frequency of application	1.661	0.200	0.800	0.564	-0.309	0.760	0.157	0.877
Importance for the industry	0.561	0.694	0.343	0.880	1.000	0.339	0.840	0.410
Impact on property sales	1.992	0.137	1.772	0.170	0.340	0.737	0.997	0.330
Use of last minute offers								
Frequency of application	1.022	0.421	0.479	0.787	1.836	0.082	0.184	0.856
Importance for the industry	3.198	0.035	0.537	0.746	-0.672	0.508	0.799	0.433
Impact on property sales	0.843	0.515	0.590	0.708	-2.419	0.030	-0.512	0.614
Early Baird rates								
Frequency of application	0.509	0.730	0.827	0.547	-0.714	0.483	0.263	0.795
Importance for the industry	0.486	0.746	0.620	0.687	-1.076	0.300	0.177	0.861
Impact on property sales	1.021	0.422	1.305	0.305	0.652	0.521	0.894	0.386
Over-contracting								
Frequency of application	2.738	0.059	0.544	0.740	-1.265	0.219	0.103	0.919
Importance for the industry	0.541	0.707	0.377	0.858	2.532	0.021	-1.073	0.295
Impact on property sales	1.322	0.298	0.332	0.887	-1.710	0.101	0.725	0.476
Overbooking								
Frequency of application	2.476	0.079	2.171	0.103	1.715	0.105	0.838	0.411
Importance for the industry	1.842	0.162	1.730	0.179	1.406	0.174	1.399	0.176
Impact on property sales	3.193	0.036	1.544	0.226	0.959	0.348	1.428	0.167
Minimum Length of Stay Control								
Frequency of application								
Importance for the industry	0.803	0.538	1.186	0.355	-0.506	0.618	-1.137	0.268
	1.397	0.273	0.899	0.503	2.180	0.042	-1.590	0.135
Maximum Length of Stay Control								
Frequency of application								
Importance for the industry	0.587	0.676	0.640	0.672	0.907	0.374	0.684	0.501
	1.513	0.238	1.884	0.147	-1.750	0.094	-0.918	0.369

Length of Stay Control								
Impact on property sales	1.884	0.155	0.750	0.597	1.023	0.317	-1.495	0.149
Lowest price guarantee								
Frequency of application	2.269	0.100	3.991	0.013	-0.528	0.603	-1.416	0.188
Importance for the industry	7.254	0.001	0.631	0.679	0.133	0.896	0.233	0.819
Impact on property sales	2.394	0.087	0.756	0.593	1.350	0.191	-0.939	0.358
Cross Selling								
Frequency of application	0.735	0.580	1.151	0.371	-0.842	0.409	1.194	0.245
Importance for the industry	1.011	0.426	1.246	0.329	0.804	0.430	-0.677	0.505
Impact on property sales	1.758	0.179	2.160	0.105	0.842	0.409	-0.565	0.578
Up Selling								
Frequency of application	1.283	0.311	0.701	0.371	1.254	0.223	0.619-	0.542
Importance for the industry	1.572	0.222	2.118	0.110	0.920	0.368	1.354	0.196
Impact on property sales	0.805	0.537	1.212	0.343	1.254	0.223	-1.049	0.306
Room Availability Guarantee								
Frequency of application	1.950	0.143	0.974	0.460	-0.920	0.368	-1.354	0.196
Importance for the industry	3.422	0.029	3.600	0.020	0.886	0.385	0.147	0.884
Impact on property sales	1.436	0.261	3.176	0.031	0.000	1.000	4.163	0.001

Source: SPSS output on survey data, 2019

However, the price differentiation strategy may have different useful remunerations for the hotel whereas some criteria such as nationality, is illegal (eg. in Bulgaria) or recognized as unethical in practice. Revenue manager's perception on the importance of last minute offers indicated a significant difference between star grade ($p=0.035<0.05$), as well as the perception on the impact of last minute offers on the property sales had a significance difference between the ownership of the hotel ($p=0.030<0.05$). Based on the ownership type, a significant difference designated by the perception on the importance of over-contracting strategy ($p=0.021<0.05$), and importance of minimum length of stay control ($p=0.042<0.05$). Impact of overbooking over the property sales indicated a significance difference between star grades ($p=0.036<0.05$). According to the test results, usage of lowest price guarantee indicates a difference between hotel size ($p=0.013<0.05$). Perception on the importance of lowest price guarantee strategy in the industry implied a significant difference between star grades of the hotel ($p=0.001<0.05$). Further to that, perception on the level of importance of room availability guarantee as a non-pricing room revenue management strategy in the industry has a significant difference between star grades ($p=0.029<0.05$), and hotel size ($p=0.020<0.05$). Moreover, managers' perception on the level of impact of room availability guarantee strategy on the property sales indicates a significant difference between hotel size ($p=0.031<0.05$), and location of the hotel ($p=0.001<0.05$).

Revenue Management System

Researcher examined the revenue management systems practiced in the star graded hotels in terms of three major areas

- Revenue management team and responsibility
- Usage of revenue management software
- Revenue management process, metrics and forecasting methods

Revenue management team and responsibility

Revenue management responsibility of star graded hotels in Colombo was headed by different designated positions.

Although the revenue management is one of the important functions in a hotel, only 26 per cent of hotels have occupied a specialized team or a revenue manager for this task. Majority of the hotels have given this responsibility to the sales and marketing managers/s (29.6%). Around 26 per cent of hotels have allocated this responsibility for the general manager or the owner of the hotel. Ivanov (2014) has reported that only 6% of the accommodation establishments in Bulgaria have employed a revenue manager or a revenue management team and two-thirds of the cases, revenue management was the responsibility of the general manager and the marketing manager. This is very much similar to the Sri Lankan context as identified in the current study as 67 percent (precisely two-third of the hotels) have given this responsibility to the general manager, front office manager, sales and marketing manager/s, or the owner. However, Colombo hotels have clearly identified the importance of a specialized person/ persons for this task.

Moreover, researcher asked that '*If your hotel does not have a revenue manager or revenue management department/team, would you consider hiring a revenue manager?*' and all respondents answered positively.

Around 58 per cent of the respondents mentioned that they have recognized the importance of hiring a revenue manager/ team, and 42 per cent reported that they are still not ready but may consider hiring a separate person for this task in the future. However, recruiting a separate position for revenue manager may financially be feasible only larger properties, not for the smaller properties.

More than 33 per cent of hotels have occupied specialized software such as IDEAS and Protel for Revenue Management function and a great majority (nearly 42%) of the hotels have not used any type of software at least do not utilize the PMS for this task. However, when researcher asked '*Do you think a specialized software helps (would help) to manage better revenue of your hotel?*', all respondents positively agreed (100%).

Revenue Management Metrics and Forecasting Methods

Estimating or forecasting the future revenue trends is one of the important tasks carrying on by the managers to formulate for future period. Researchers tested the types of methods they use for this purpose and are given in table 4.9.

Accordingly, all the hotels (100%) were using passed data for the forecasting and a very few of them (only 29%) were using personal experiences. Statistical method was fairly a popular method occupied by 54 per cent of the hotels in the sample. However, since a great majority was not using specialized software, they may be unable to practice a systematic method to maintain their database and practice statistic methods for the forecasting. One, two and three star hotels were using personal experience where none of the four and five star hotels have occupied this method.

Revenue Management Metrics Used in the Hotels

Different revenue management metrics most commonly used by hotel managers in Colombo district are reported in Table 6. According to the respondents, all the hotels were using one or more metrics for the day today operation.

Table 6 - Revenue Management Metrics Used in the Hotels

Description	Percentage (%)
Occupancy Rate (OCC)	100
Average Daily Rate (ADR)	100
Revenue Per Available Room (RevPAR)	79.2
Gross Operational Profit per Available Room (GOPPAR)	62.5

Source: SPSS output on survey data, 2019

Occupancy and average daily rate are the most popular and often applied due to their simple calculation, while RevPAR and GOPPAR have been reported to be used by majority of the respondents.

Table 7- Identifying Association between Hotel Demographics and Usage of Revenue Management Metrics

Description	Chi square test statistics					
	Star grade		Size		Owners-hip	
	$\chi 2$	P	$\chi 2$	P	$\chi 2$	p
Use of a software for RM	18.426*	0.018	16.908	0.076	0.900	0.638
Use of personal experience for forecasting	4.178	0.382	8.471	0.132	1.815	0.178
Use of statistical methods for forecasting	3.477	0.481	2.517	0.774	4.196*	0.041
Calculating RevPAR	9.564*	0.048	10.611	0.060	0.253	0.615
Calculating GOPPAR	2.921	0.571	5.511	0.357	0.178	0.673
How often calculating metrics	15.826*	0.045	19.361*	0.036	3.818	0.148

$\alpha=0.05$

Source: SPSS output on survey data, 2019

Using a software for revenue management indicated a significant association between the star categories ($\chi 2=18.426$, p=0.0.018<0.05). All the 4 and 5 star graded hotels use a specialized software or at least PMS for the revenue management purpose while there was no specialized RM software usage in 1 and 2 star hotels. However, very few of them have occupied the PMS for RM purpose whereas majority of them are not using any. Some of the three star hotels also have the specialized RM software while some are using the general hotel PMS. Calculation of RevPAR as a revenue management metrics in day-to-day operation was popular among higher star grades. All the three four and five star graded hotels have calculated the RevPAR whereas only some of one and two star graded hotels practice it. Accordingly, there was a statistically significant association reported between star category and calculating RevPAR in day-to-day operation ($\chi 2=9.564$, p=0.048<0.05).

Use of statistical methods for forecasting has reported a significant association with type of ownership ($\chi 2=$. 4.196, p=0.041<0.05). Majority of the chain affiliated hotels reported that they were using statistical methods for forecasting while a few of independently owned hotels have used such methods. Moreover, frequency of calculating different metrics (daily, weekly, or, monthly) has reported a significant association with star grade ($\chi 2=15.826$, p=0.045<0.05) as well as hotel size (in terms of number of rooms) ($\chi 2=19.361$, p=0.036<0.05). Larger hotels with more than 100 rooms have calculated the metrics at least daily or weekly. Hotels more than 250 rooms reported that calculations of metrics were done daily. However, smaller hotels were mostly calculated them weekly or monthly.

Overlooking the results, it is not an astonishment to see that, the chain affiliated and larger hotels with higher star grades are typically practicing a robust revenue management practice compared to the smaller and lower star graded hotels. These hotels may have a common procedure and

well-established management process with virtuous SOPs to maintain an operational streamline in all properties under their brand. Further, they can invest more on business development due to the higher profit. However, the smaller hotels, precisely the independently owned smaller hotels with lower star grade may have less significant capacity of recruiting more advanced technology or labor due to the limited business dimensions.

Usage of Rate Fences (Different Rates for Different Segments) in the Hotels

Rate fences or the Rate restrictions can be defined as "logical, rational rules or restrictions that are designed to allow customers to segment themselves into appropriate rate categories based on their needs, behaviour, or willingness to pay" (Hanks et al., 1992). It is not a surprise to see that many hoteliers are currently progressing rate fences by segmenting customers and charge different prices to different segments based on demand (Wei, Guillet, & Law, 2014).

Researcher investigated the types of rate fences used by all the star graded hotels considered in the study and presented in table 8. Rate fences were identified under three categories as product related characteristics (guest room type, room board, room category, and room view), consumption related characteristics (length of stay, individual/ group booking, customer loyalty, period of stay/ seasonality of the reservation, day of the week of the reservation, and nationality of the booking guest), and supply related characteristics (lead period restrictions, distributor, cancellation and amendment terms).

Table 8 - Usage of rate fences (N=27)

Category	Item	Percentage
Product related	Room type	100
	Room board	100
	Room category	100
	Room view	45.8
Consumption related	Length of stay	83.3
	Individual/ group booking	100
	Customer loyalty	100
	Period of stay (seasonality)	100
	Day of the week	45.8
	Nationality	54.2
Supply related	Lead period restriction	100
	Distributor	83.3
	Cancellation and amendment terms	45.8

Source: SPSS output on survey data, 2019

All the product related characteristics were commonly applied by all the hotels as rate fences. Accordingly, different market segments were given different prices based on mostly the product related characteristics. Type of booking (individual/ group), customer loyalty, and period of stay had a greatest adoption and were used by all the hotels. Day of the week (consumption related) and cancellation and amendment terms (supply related) were adopted by less than half of the respondents whereas, all the other consumption and supplier related fences were reported being applied by more than half of the respondents.

Generally, the published room rates for a given date or period of time are not constant and these rates are subject to change due to various reasons. Most popular methods of rate fences in the current study were Room type Room board, Room category, Individual/ Group booking, Customer loyalty, Period of stay (seasonality), and Lead period restriction. Generally, there are no universally accepted rate fences in the hotel industry and they are imposed as the situation occurred based on the industry norms. However, in practice, hotels execute such rate fences to safeguard a certain rate from certain patrons when two or more rates are existent to customers at the same time (Wei, Guillet, & Law, 2014). Nevertheless, revenue managers and marketing professionals in the hotel industry should be vigilant and brainy when setting the appropriate rate fences as poorly designed restrictions might lose the customer base turning some guests away.

Table 9 - Frequency of Changing Published Room Rates, (N=27)

Period of changing the rates	Percentage
Daily	16.7
Two or more times a week	45.8
Once a week	8.3
Once/ twice a month	8.3
Less often than once a month	4.2
Price kept constant	16.7

Source: SPSS output on survey data, 2019

Hence, respondents were asked to report the frequency of changing their prices for a particular date once they were published in their web sites or any other sources (Table 4.13). Accordingly, majority of the hotels reported that they change their prices published for different segments were more towards changing at least once or more times within a week. Accordingly, it demands

that accommodation sector, particularly the star graded hotels do not follow a conservative price strategy and they are more active and aggressively divergent over the risk with often price changes.

Distribution Channel Management

Although the distribution channel management was paid very less attention in academic literature, it covers a very important part in revenue management that might significantly influence the ADR, RevPAR and the entire revenue management system of the hotel (Ivanov, 2014). Respondents reported the types of distribution channels that they use for the room sales and the importance of each for their day-to-day operation and described in table 4.14.

GDSs, and Direct sales (regardless of whether offline or via the website of the hotel/hotel chain) were appeared as the most important distribution channels for the hoteliers and OTAs and Travel Agents also were strongly accepted as the more important distribution channels.

Table 10– Use of different distribution channels

Description	Mean	SD	ANOVA		t-test	
			Star (F)	Size (F)	Ownership (t)	Location (t)
Global Distribution Systems (GDSs)	5.00	0.000	-	-	-	-
Online Travel Agents (OTAs)	4.75	0.676	4.051**	3.488**	-0.596	-1.964*
Tour Operators	3.92	0.830	0.936	0.609	-0.983	-0.081
Travel Agents	4.29	0.806	0.622	0.811	-0.752	-0.983
Group Buying Websites	2.83	1.274	2.412*	0.730	-0.632	0.533
Hotel Website	5.00	0.000	-	-	-	-
Other Direct sales	5.00	0.000	-	-	-	-

***= P<0.05, *=P<0.1*

Source: SPSS output on survey data, 2019

Test results of the ANOVA indicated that means are statistically significantly different among the star categories ($p=0.015<0.05$) and hotel size ($p=0.022<0.05$) for the importance of OTAs as a distribution channel. One to three star hotels indicated higher mean values for the importance of OTAs. Recent growth and popularity of OTAs (like Booking.com, Agoda.com, Expedia.com, etc.) in the country especially during the last few years, with their convenient agency model may have definitely influenced for the growth of room revenue in the sector for recent years. Moreover, the hotels with less than 100 rooms and more than 150 rooms were more striking towards OTAs. Accordingly, the lower star graded hotels with less number of rooms were more attractive for the OTAs. Myung, Li & Bai (2009) also has highlighted the positive performance and satisfied relationship of hotels with e-wholesalers regardless of the conflicts with them.

Booking through the GDSs are guaranteed bookings which charge the room rate at the booking time itself by authenticating credit card details. Although managers have reported it as the most important channel, they may have to pay a higher commissions and fees to maintain them. But, it has a wider accessibility in the market since any hotel gets the ability of reaching thousands of intermediaries who use the GDS which has signed the contract with particular hotel without signing separate contracts with thousands of other intermediaries. Hence, this may not an appropriate channel for the smaller operations with fewer rooms, but, will work for bigger hotels such as higher star graded with larger number of rooms or chain affiliated hotels.

An OTA is a platform available in both agency and merchant model which has a greater flexibility in operation. They generally work with a commission-based model that might charge a set percentage on each reservation made through the particular platform. For an instance, the commission percentage of Booking.com, selected OTA by the researcher in this study, varies between 10% - 25%, depending on the type of property and location (country and region), and even on whether it should be appeared on top of the search results (booking.com partner hub, 2019). However, this is very popular among all types and sizes of accommodation establishments since the commissions are charged on the guests show up (commissions are not charged for the cancellations and no-shows).

However, the results are contradictory with the results of Ivanov (2014) where he found that higher star categories with higher number of rooms were more attractive towards OTAs, as well as GDSs indicated the lowest contribution in Bulgarian hotels.

General Revenue Management Tactics Used in the Hotels

During the revenue management process, different tactics were used in the hotel industry and researcher investigated the level of agreement for the usage of these tactics by respondents by rating from 1- completely disagree to 5- completely agree and results are presented in table 4.15.

Accordingly, respondents agreed that each customer is important for the property sales without any discrimination, and selling additional services other than merely the rooms to increase the sales revenue with the highest mean values. Respondents believed that, if the occupancy for a particular date is low, decreasing the room rate will work worthy to increase the revenue of the property.

Table 11 - Usage of General RM Tactics

Item	Mean	SD
If occupancy is low it is best to lower the prices	4.71	0.464
Each customer is equally important for the hotel	5.00	0.000
We try to attract every potential customer	4.33	1.523
If competitor decrease prices we decrease our prices too	2.79	1.215
If competitor increase prices we increase our prices too	2.50	1.063
Customers prefer lower prices than higher quality	3.83	1.239
Maintaining good relations with the distributors is important for property's revenues	4.67	0.482
Selling additional services is important for property's revenues	5.00	0.000
When we set the prices and booking terms we consider customers' perception of these	3.46	0.884
In general, the application of the RM tools contributes positively to the revenues of our property	4.71	0.464

Source: SPSS output on survey data, 2019

Hoteliers were always trying to attract every potential customer for the property and they have to strategically work on this since it may cause segmentation barriers. Similar to the customer relationship, maintaining a strong relationship with the distributors also is very important factor for the property's revenue. Moreover, respondents agreed to the fact that customers are more price-concerned than the quality. Hence, the managers should be very careful when they develop the value proposition since the guests are being more price sensitive. On the other hand, it is a challenge for the hoteliers to maintain high quality for a lower price. If hoteliers start to compete over price neglecting the quality, that may create industry turmoil. Considering the customer perception when deciding the booking terms and prices was at the moderate level and customer may agree with the given prices and terms. However, competitors' price was not a determinant factor for deciding the prices of the property. Generally, respondents agreed that the application of RM tools were progressively contributing towards increasing the property revenue.

Moreover, importance of each RM tactics identified in table 4.15 has been tested with the hotel demographics for further analysis to identify any significant differences and results are presented in table 16.

Table 12 - Hotel Demographics Vs. RM Tactics

Item	ANOVA				t-test			
	Star		Size		Ownership		Location	
	F	Sig.	F	Sig.	T	Sig.	t	Sig.
If occupancy is low it is best to lower the prices	8.989	0.000	4.050	0.012	-0.432	0.670	-0.965	0.345
Each customer is equally important for the hotel	-	-	-	-	-	-	-	-
We try to attract every potential customer	2.478	0.079	0.635	0.676	-2.345	0.039	-1.488	0.198
If competitor decreases prices we decrease prices too	0.955	0.454	0.220	0.949	-0.164	0.871	0.028	0.978
If competitor increases prices we increase prices too	4.201	0.013	0.929	0.485	-2.049	0.053	-1.611	0.121
Customers prefer lower prices than higher quality	2.785	0.056	0.476	0.789	-3.688	0.002	0.218	0.829
Maintaining good relations with the distributors is important for property's revenues	3.341	0.031	0.372	0.861	-1.773	0.091	-0.565	0.578
Selling additional services is important for property's revenues	-	-	-	-	-	-	-	-

When we set the prices and booking terms we consider customers' perception on these	1.182	0.351	1.714	0.182	-0.685	0.501	1.140	0.267
In general, the application of the RM tools contributes positively to the property revenues	1.300	0.305	0.642	0.671	0.432	0.670	-2.966	0.011

Source: SPSS output on survey data, 2019

According to the test statistics of ANOVA (Table-16), a statistically significant difference indicated in the star category for the usage of lower prices when the occupancy is low ($p=0.000<0.05$), increasing the prices when the competitors increase their prices ($p=0.013<0.05$), and maintaining good relation with distributors ($p=0.031<0.05$). One, two, and five star graded hotels have indicated higher mean values for the decreasing prices when the occupancy is lower. Higher graded hotels have strongly rejected the increasing prices following the competitors. Hotel size indicated a statistically significant difference over the decreasing room rated whenever the occupancy is lower ($p=0.012<0.05$) and small and large hotels had more tendency to practice this tactic compared to the medium sized hotels. Type of ownership indicated a statistically significant difference for trying to attract every potential customer ($p=0.039<0.05$), and customer preference for lower prices compared to the higher quality ($p=0.002<0.05$). However, independent hotels were keen on attracting every potential customer and think that customers are more price sensitive than the quality.

Determinants of Room Rates

The key determinants that might be considered by revenue managers when they decide the room rates were also investigated by the researcher during the survey (Table 13). These determinants were examined under three categories as; Hotel demographics; In-room amenities and; Property.

Table 13 - Revenue Managers' Perception on the Importance of Various Determinants on Room Rate Decision

Description	Mean	SD
Availability of in room amenities	4.21	0.884
Room size	3.79	1.285
Star category	5.00	0.000
Distance from the city center	4.38	0.824
Distance from the international airport	4.29	0.859
Availability of facilities and services (i.e. Gym, Spa, free Wi-Fi, etc.)	5.00	0.000
Proximity to the beach	3.25	1.511
View from the hotel room	4.71	0.464
Number of restaurants/ bars available	3.79	1.318
Proportion of foreign guests to the hotel	2.04	1.367
Number of employees	2.46	1.351
Availability of banquet/ function facilities	3.58	1.816
Availability of differently abled facilities	4.92	0.408
Average length of stay	4.08	0.776
Room category	4.96	0.204

Source: SPSS output on survey data, 2019

Table 13 explains the managers' perception on the importance of various determinants on deciding the room rate of star graded hotels in Colombo District. Accordingly, star category, availability of various facilities in the hotels, availability of differently abled facilities, and room category were rated as the most important contributing factors with highest mean values nearly 5.00. Moreover, availability of in-room amenities, distance to the hotel from the city center and international airport, view from the hotel room, and average length of stay also were demanded elements (M>4.00). However, proportion of foreign guests, and number of employees working in the hotel were not important determinants of pricing decisions.

Table 14 - Hotel Demographics Vs. Room Rate Determinants

Item	ANOVA				t-test			
	Star Grade		Size		Ownership		Location	
	F	Sig.	F	Sig.	T	Sig.	T	Sig.
Availability of in room amenities	0.662	0.626	0.279	0.919	-0.226	0.823	0.422	0.677
Room size	1.279	0.313	6.132	0.002	-0.155	0.878	2.539	0.019
Star category	-	-	-	-	-	-	-	-
Distance from the city center	2.116	0.119	1.653	0.197	1.254	0.228	0.619	0.542
Distance from the international airport	3.552	0.025	0.908	0.497	-0.705	0.488	1.529	0.140
Availability of facilities and services (i.e. Gym, Spa, etc.)	-	-	-	-	-	-	-	-
Proximity to the beach	1.561	0.225	1.010	0.440	-1.377	0.182	-0.134	0.895
View from the hotel room	1.156	0.361	2.991	0.039	-0.432	0.670	0.811	0.426
Number of restaurants/ bars available	1.289	0.309	3.460	0.023	0.767	0.451	2.038	0.054
Proportion of foreign guests to the hotel	0.555	0.698	1.577	0.217	-1.048	0.306	1.419	0.170
Number of employees	1.114	0.379	1.204	0.433	0.445	0.660	-0.477	0.638
Availability of banquet/ function facilities	0.916	0.475	1.379	0.279	1.131	0.270	0.486	0.632
Availability of differently abled facilities	1.319	0.299	-	-	1.000	0.339	-1.000	0.343
Average length of stay	3.997	0.016	2.038	0.122	1.055	0.303	0.614	0.545
Room category	1.319	0.299	-	-	1.000	0.339	-1.000	0.343

Source: SPSS output on survey data, 2019

Test results of the ANOVA (Table 14) revealed a significant difference of star categories for the usage of distance to the hotel from international airport as a room rate determinant ($p=0.025<0.05$). Three and above star grades have considered it as an important determinant of room rate. Hotel size indicated a significant difference of using room size ($p=0.002<0.05$), view from the hotel ($p=0.039<0.05$), and number of bars/ restaurants available in the hotel ($p=0.023<0.05$) as important pricing determinants and hotels with more than 150 rooms have mostly agreed as they were important elements in room rate decisions. Independent sample t-test results (Table 14) indicated that the location of the hotel has also a significant difference of using room size as a pricing element ($p=0.019<0.05$) and mostly the sea view hotels have used it.

Conclusion and Recommendations

This study contributed to the comprehension of currently available room revenue management practices and identifying whether and how different hotel attributes are associated with room rate in star graded hotels in Colombo district. All the hotels graded from one to five stars located in Colombo district were studied to meet the study objectives.

Although there are number of revenue centers available in a star graded hotel, the researcher has limited the scope only to the room revenue management. Results proposed the lesser understanding and attention of hoteliers on systematic revenue management process in the hotel industry. Number of pricing and non-pricing revenue management tools was in practice with or without proper understanding on the substantial importance and effective usage of them. For an instance, length of stay control, overbooking management, and price discrimination are very popular room revenue management practices in some other countries (Karaesmen & van Ryzin, 2004; Ivanov, 2014) even though they are in less use in Sri Lanka.

Surprisingly, some of the hotels have not yet identified the importance of allocated resources and technical importance of revenue management strategies as they have paid a very less attention on it. For an instance, room pricing decisions are still at the scope of front office manager, sales and marketing department, or general manager or owner. Hence, calculation of revenue metrics and other important statistical analysis are not properly implemented which may lead to lose a considerable amount of short term and long term revenue. The overall conclusion of this study is that the existing knowledge and practical implementation of revenue management strategies is still limited and poorly understood. Therefore, scholars and practitioners should work on this area for the development of revenue management in the hospitality sector. Hence, there is a strong need on the vast ground of industry level strategic development. The hotels should invest on necessary resources that might be helpful in applying healthy revenue management practices such as necessary staff development, technical and technological applications, etc. more importantly, they should identify different revenue centers in the hotel and should develop

appropriate revenue strategies for each center. Further, the contribution to the revenues and profit of the property by each revenue center should be identified and analyzed.

The hoteliers should identify the right type of customer or the right target market/s in the hotel since that might important in increasing revenue. They should develop a long lasting relationship with the customer to ensure healthy revenue generation. Further, the right value proposition should be developed and it should be properly communicated to the right customer through a most identical value chain. Hence, the healthy relationship with all the channels is very much important. This might be helpful in increasing length of stay, and number of bookings during a given period of time which leads to increase the life time value.

References

Accommodation Guide Book (May- October, 2018), Sri Lanka Tourism Development Authority

Anderson, C. K., & Xie, X., (2010). Improving Hospitality Industry Sales: Twenty-Five Years of Revenue Management. *Cornell Hospitality Quarterly*, 51(1)

Aziz, H.A., Saleh, M, Rasmy, M.H., & ElShishiny, H, (2011), Dynamic Room Pricing Model for Hotel Revenue Management Systems, *Egyptian Informatics Journal*, Elsevier

Baggio, R., & Klobas, J., (2011). *Quantitative methods in tourism. A handbook*. Bristol: Channel View Publications.

Chen, J., Koh, Y., & Lee, S., (2011), Does the Market Care About RevPAR? A Case Study of Five Large U.S. Lodging Chains, *Journal of Hospitality & Tourism Research,* Sage Publications

Chiang, W.C, Chen, J.C.H., & Xu, X., (2007). An Overview of Research on Revenue Management: Current Issues and Future Research. 1. 97-128.

Choi, S., & Kimes, S. E., (2002), Electronic Distribution Channels' Effect on Hotel Revenue Management [Electronic Version], *Cornell Hotel and Restaurant Administration Quarterly*, 43(3), Cornell University

Cross, R. (1997). Revenue management: Hard-core Tactics for Market Domination. New York: Broadway.

Cross, R., Higbie, J. & Cross, D. (2009). Revenue Management's Renaissance: a Rebirth of the Art and Science of Profitable Revenue Generation. *Cornell Hospitality Quarterly*, 50(1), 56-81

El Haddad, R., Roper, A. & Jones, P., (2008). The Impact of Revenue Management Decisions on Customers Attitudes and Behaviours: A Case Study of a Leading UK Budget Hotel Chain.

EuroCHRIE 2008 Congress, Emirates Hotel School, Dubai, UAE, 11th-14th October. Available online at: http://pc.parnu.ee/~htooman/EuroChrie/Welcome%20to%20EuroCHRIE%20Dubai%202008/pappers/The%20Impact%20of%20Revenue%20Management.pdf (Accessed on 06th July, 2018)

Karaesmen, I., & van Ryzin, G. (2004). Overbooking with Substitutable Inventory Classes. Operations Research. 52. 83-104. 10.1287/opre.1030.0079.

Hanks, R. D., Cross, R. G., & Noland, R. P., (2002). Discounting in the Hotel Industry. A New Approach. *Cornell Hotel and Restaurant Administration Quarterly*, 43(4), 94-103.

Hanks, R. D., Noland, R. P. and Cross, R. G. (1992). Discounting in the hotel industry: A new approach, Cornell Hotel and Restaurant Administration Quarterly, Vol. 33

Hayes, D.K., Miller, A., (2011). Revenue Management for the Hospitality Industry, John Wiley & Sons, ISBN 1118136926

Heo, C. Y. and Lee, S. (2009). Application of Revenue Management Practices to the Theme Park Industry. *International Journal of Hospitality Management*, Vol. 28 No. 3, pp. 446-453.

Heo, C., & Lee, S., (2009). Application of Revenue Management Practices to the Theme Park Industry, *International Journal of Hospitality Management*. 28. 446-453. 10.1016/j.ijhm.2009.02.001.

https://partner.booking.com/en-gb/help/commission-invoices-tax/how-much-commission-do-i-pay

Ivanov, S., & Zhechev, V., (2012), Hotel Revenue Management – a Critical Literature Review, *Journal of Tourism*, Vol. 60

Ivanov, S.H., (2014), *Hotel Revenue Management: From Theory to Practice*, Zangador Ltd. Varna, Bulgaria

Kimes, S. E. & Wirtz, J. (2003). Has Revenue Management Become Acceptable? Findings from an International Study on the Perceived Fairness of Rate Fences. *Journal of Service Research*, 6(2), 125-135.

Kimes, S. E. (2003). Revenue Management: A Retrospective. *Cornell Hotel and Restaurant Administration Quarterly*, 44(5/6), 131-138.

Kimes, S. E., (1989). The Basics of Yield Management. *The Cornell Hotel and Restaurant Administration Quarterly*, 30: 14-19

Mauri, A. G., (2012). Hotel revenue management: Principles and practices. Milan-Torino: Pearson Italia.

Myung, E., Li, L. & Bai, B. (2009). Managing the Distribution Channel Relationship with e-wholesalers: Hotel Operators' Perspective. *Journal of Hospitality Marketing & Management*, 18(8), 811-828.

Ng, I. C. L. (2009). The pricing and revenue management of services: A strategic approach. London:

Shy, O. (2008). How to Price. A Guide to Pricing Techniques and Yield Management. Cambridge University Press.

Talluri, K. T. & van Ryzin, G. (2005). The Theory and Practice of Revenue Management. New York: Springer Science+Business Media.

Thrane, C., (2007), Examining the Determinants of Room Rates for Hotels in Capital Cities: The Oslo Experience, *Journal of Revenue & Pricing Management*

Tourism Growth Trends - 1970 to 2018, SLTDA, 2019

Tse, T.S.M., & Poon, Y.T., (2012), Revenue Management: Resolving a Revenue Optimization Paradox, *International Journal of Contemporary Hospitality Management*, Vol. 24, Emerald Group Publishing Limited

Wei, L., Guillet, B.D., & Law,R., (2014). Can Setting Hotel Rate Restrictions Help Balance the Interest of Hotels and Customers?, *International Journal of Contemporary Hospitality Management*

Wirtz, J., Kimes, S. E., Theng, J. H., & Patterson, P., (2003). Yield Management: Resolving Potential Customer Conflicts. *Journal of Revenue and Pricing Management* 2(3), 216-226.