Revenue Management Practices in Hospitality Industry: A Research on Hotels in Konya, Turkey

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Abstract: Revenue management might be considered as one of the important decision-making areas for accommodation facilities. Due to the perishable nature and time-related restrictions of services provided by the tourism industry, enterprises are striving for better management of capacity and price to maximize their revenue. While serving as a managerial decision-making tool, revenue management needs to be tailored according to the market demographics and conditions. Major aim of this study is to reveal the financial and competitive contribution of revenue management applications. A survey questionnaire was directed to the participants. Findings revealed that revenue management applications contributed to the hotels financially and competitively with varying proportions. The findings can be helpful for the managers in applying better strategies to increase revenue.

INTRODUCTION

Conceptual and theoretical framework for revenue management

Revenue management might be defined as the combination of information system applications and pricing strategies which are designed to offer the right price to the right customer at the right time (Kimes, 2000). Another definition describes the revenue management as the efficient utilization of various techniques in order to maximize the profits as a result of revenue maximization (Jerenz, 2008). Lee-Ross and Johns (1997) ddefine revenue management as the profit maximization procedure by means capacity control and pricing optimization which are based on information related to purchasing and selling behaviours. In their studies Harris and Pinder (1995); Kimes (1989); Peacock et al. (1995); Weatherford and Bodily (1992) ssignify that service industry operations need to have the following features in order to utilize revenue management efficiently:

Perishability

Almost all kind of services could be evaluated as perishable due to potential losses caused by unsold or unused capacity. For example, every room unsold for a certain day and every seat unsold for a certain flight is considered as revenue loss because the potential revenue possible from these capacities is lost forever. Use of these capacities later will not be possible.

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Limited Capacity

Revenue management is applicable for the businesses with capacity restrictions. While the organizations with storable stocks use their stocks during the times of increased demand, other organizations with limited capacity have to operate within the limits of their capacity even if they find themselves in a flourishing business environment (Cleophas, Yeoman, McMahon-Beattie, & Veral, 2011).

High Costs of Capacity Increase

In case of increased demand, increasing the capacity might be evaluated as a solution. Increasing the capacity in the short run seems to be impossible. On the other hand, capacity increase in the short run is possible but needs to be financed heavily. For this reason, increasing the capacity is not evaluated in most cases. This situation is effective, especially for the accommodation industry in most cases. As a result, increasing the capacity is not considered as a solution to increased demand due to the high costs of additional investment associated with this plan. In such situations, accommodation facilities or other businesses facing capacity increase problems in the short run do not prefer increasing capacity by means of additional investment. Businesses facing high costs of capacity increase prefer employing revenue management applications instead of increasing their capacity for the sake of higher revenues.

Market Segmentation

Besides the expectations and needs of customers or guests, particular factors, such as price, destination, and timing of the consumption or travel, might cause fluctuations on demand. While the destination and timing of travel are major determinants of decisions for the supply and demand sides, price might be a major determinant solely for accommodation industry (Harris & Pinder, 1995). In this sense, businesses need to segment their markets based on some factors, such as timing, destination, customer profiles, etc. Market segmentation facilitates offering the right product to the right consumer, and pricing decisions might become easier and efficient.

Overbooking

Efficient use of capacity constitutes a major part of revenue management due to the dependence of revenue on capacity and price components. In service industry, it is possible to observe overbooking policies that rely on no shows and cancellations. Mentioned circumstances mean irretrievable losses. Decision makers calculate a certain percentage of total demand and prefer accepting additional amount of booking corresponding to the percentage of expected or possible no shows and cancellations (Sfodera, 2006). Overbooking ratios are determined precisely based on capacity and demand. Airline companies apply an overbooking policy about 5-10% of their capacities corresponding to no shows and cancellations (Harris & Pinder, 1995).

Demand Estimations

Some of the service industries face demand fluctuations depending on the season, economic cycles or other factors. As an example, tourism industry experiences fluctuations depending on seasonality which is embedded in its nature. Demand fluctuations caused by predictable reasons, such as seasons, might be incorporated into demand estimations but it is inevitable that any kind of fluctuation brings particular uncertainties that might blur demand estimations (Kimes, 1989).

Historical data on sales and Forecasting: In order to use revenue management tools, managers need historical data on sales, customer demographics, and preferences. This information is useful and valuable both for demand estimations and reservation and price sensitivity decisions (Harris & Pinder, 1995). Successful and attainable forecasts not only depend on the competencies and knowledge of actors but also depend on the forecasting framework and consideration of restrictions by these actors (Yeoman & Watson, 1997).

USE OF REVENUE MANAGEMENT IN ACCOMMODATION INDUSTRY

WWhile employing and managing revenue management, internal and external factors, such as goals, financial position, demand, legal framework, competition that affect ongoing operations should always be considered and revised by revenue managers (Ivanov, 2014). Accommodation industry demonstrates typical features of competitiveness and dynamic pricing. In this sense, revenue management serves as an adjusting agent of demand level and price level with respect to capacity (Kimes, 2000; Kurniawati & MeilianaIntani, 2016; Widilestariningtyas & Karo, 2016). In other

words prices are increased during the times of increased demand and decreaseIn other words, prices are increased during the times of increased demand and decreased during the times of decreased demand. In essence, revenue management applications contribute to the organization and serve efficiently during the times of increased demand (Poelt, 2011).

Accommodation industry has two basic features; one having high fixed costs and the other capacity restrictions in the short run. Due to these features, increasing the total revenue beyond attaining the revenue goals is critically important (Boahen, Quansah, & Sarpong, 2013). In this respect, application of revenue management policies and tools contributes to the competitiveness and revenue increases. Literature reviews reveal that revenue management applications are intensely used in front office department and tend to be interacting with accounting and finance departments of contemporary organizations (Burgess & Bryant, 2001; Niesing, Merwe, & Potgieter, 2016). It might be stated that finance and accounting are key departments with respect to providing and presenting reliable information which is vital for the decision-making process of revenue management (Burgess & Bryant, 2001). Regarding the accommodation facilities, organization and management finance and accounting departments serve as information organizers and directly contribute to the decision process and affect the results of decisions.

RESEARCH METHODOLOGY

Within the scope of this research, a survey questionnaire formed of 10 questions was directed to the participants. Research questionnaire is constituted of three major parts which are general information and awareness level about revenue management, competitive contribution of revenue management, and financial contribution of revenue management, respectively. Nine hotels, which have more than hundred rooms and located in Konya, were subjected to research and questionnaire participants were chosen from three departments as to be accounting, sales and marketing, and front office which are known as the most interested departments with revenue management and its applications. In order to measure and reveal the evaluation of all revenue management, related department managers regardless of their managerial responsibilities on revenue management. Logic behind the distribution of research questionnaire to all three departments highly interested in revenue management is to overcome the surpassing possibility of department managers who are in charge of revenue management directly. Major reason for the sample choice of hotels having more than hundred rooms is to gather responses from the hotel managers who are able to apply revenue management physically, meaning that hotels that meet the capacity allocation possibility with a degree of freedom. Research questions are compiled from previous academic studies published in sciencedirect electronic database. Responses gathered are tested for their validity and analyzed by means of SPSS v.21.

FINDINGS

As it is explained previously, hotels with capacities of more than hundred rooms and applying revenue management were subjected to research in order to reveal the contribution of revenue management competitively and financially. As it is shown in Table 1, a small majority of the participants corresponding to 11 out of 27 (41%) reported that they are applying revenue management at most for 5 years. This might be due to the nature of revenue management applications that this is a fairly new issue or area of interest in Turkish accommodation industry. On the other hand, five respondents reported that they are applying revenue management for more than 15 years. With respect to these responses, it might be claimed that revenue management has an application history of more than 15 years in Turkish hotel industry.

Table 1 *DURATION OF REVENUE MANAGEMENT APPLICATION*

		Frequency	Percent
For how many years have you been applying revenue management?	1-5	11	40.7
	5-10	7	25.9
	10-15	4	14.8
	15 and more	5	18.5
	Total	27	100.0

All the respondents reported that there is not a separate department or manager in charge of revenue management. This might be due to the cost benefit analysis performed by top managers or due to the revenue increase potentials falling behind the affordability of an additional department in charge of revenue management. One of the questions was designed to determine the departments in charge of revenue management. As it is summarized in Table 2 in one hotel general manager, in two hotels sales and marketing managers, and in three hotels accounting managers are in charge of revenue management. It is apparent from the findings that accounting managers are evaluated as highly relevant in revenue management applications. This evaluation and designation choice might be associated with quantitative skills of accounting professionals. Additionally, accounting departments in hotel organizations have access to many of the departmental modules and have improved skills about overseeing and monitoring the activities performed by other departments. This might be another reason for the designation of accounting professional in revenue management.

Table 2 *DEPARTMENT OR MANAGER IN CHARGE OF REVENUE MANAGEMENT*

		Frequency	Percent
Which department or who is in charge of revenue management?	Hotel manager	3	11.1
	Sales and marketing manager	6	22.2
	Accounting manager	18	66.7
	Total	27	100.0

Respondents were asked if they believed that they have adequate knowledge on revenue management and indicate their knowledge level on a 5-grade Likert scales ranging from completely disagree to completely agree. Responses summarized in Table 3 revealed that approximately three quarters of the participants believed that they have adequate knowledge on revenue management.

Table 3 *ADEQUACY OF KNOWLEDGE ON REVENUE MANAGEMENT*

		Frequency	Percent
"We have adequate knowledge on revenue management"	Neither agree nor disagree	7	25.9
	Agree	9	33.3
	Completely agree	11	40.7
	Total	27	100.0

Respondents were asked if they monitored and adopted new technologies and recent applications on revenue management. A big majority of the respondents, approximately 80%, reported that they agreed or completely agreed to this statement.

This might be interpreted as the results of efforts made in order to improve revenue management applications. As a result of changing market conditions, customer preferences and other variables effective on revenue management tools and applications need to be revised or modified. In this respect, monitoring emerging issues and adopting recent technologies, such as various computer or internet applications, become inescapable routines.

Regarding the contribution of revenue management to competitiveness, participants were asked if the revenue management applications contributed to develop efficient competition strategies and contributed to the development of efficient competition strategies in two separate questions. Approximately 75% of the respondents agreed with differentiating strengths that revenue management affects gaining and improving competitive advantage.

Regarding the contribution of revenue management about the development of efficient competition strategies, approximately 70% of the participants agreed and completely agreed to the questionnaire proposition. It is apparent from the findings that there is a slight decrease in agreement proportions when the issue shifts from competitive

advantage to competition strategy. This might be interpreted as revenue management is believed to be more beneficial at the operational level instead of strategic level. Table 5 and Table 6 demonstrate a quick view of responses for competitive advantage and competition strategy.

Table 4 *MONITORING AND ADOPTING REVENUE MANAGEMENT TECHNOLOGIES AND APPLICATIONS*

		Frequency	Percent
"We are monitoring and adopting recent applications and Technologies about revenue management"	Disagree	2	7.4
	Neither agree nor disagree	3	11.1
	Agree	5	18.5
	Completely agree	17	63.0
	Total	27	100.0

Table 5 *CONTRIBUTION OF REVENUE MANAGEMENT ABOUT DEVELOPMENT OF EFFICIENT COMPETITION ADVANTAGE*

		Frequency	Percent
"Revenue management contributes about gaining and improvement of competitive advantage"	Neither agree nor disagree	7	25.9
	Agree	7	25.9
	Completely agree	13	48.1
	Total	27	100.0

Table 6 *CONTRIBUTION OF REVENUE MANAGEMENT ABOUT DEVELOPMENT OF EFFICIENT COMPETITION STRATEGIES*

		Frequency	Percent
"Revenue management contributes about developing efficient competition strategies"	Neither agree nor disagree	8	29.6
	Agree	4	14.8
	Completely agree	15	55.6
	Total	27	100.0

One of the research questions was designed to evaluate the participants' judgements on revenue management if it relieved to decrease the idle capacity. Major aim of this question was to reveal the financial indirect contribution of revenue management accommodation facilities. Slightly more than 75% of the participants agreed or completely agreed that revenue management relieved the burdens arousing from idle capacity. It might be inferred that by decreasing the idle capacity, it is recognized that revenue management indirectly contributes to the organization financially.

Four questions in survey questionnaire were designed to evaluate the financial contribution of revenue management. Participants were asked to indicate their judgement on revenue management such that it increased the total revenue. As it is depicted in Table 8, nearly all of the participants, 93%, agreed or completely agreed that revenue management application increased their total revenues.

Table 7 *PARTICIPANTS JUDGEMENTS ON REVENUE MANAGEMENT FOR DECREASING IDLE CAPACITY*

		Frequency	Percent
"Revenue management assists decreasing idle capacity"	Disagree	1	3.7
	Neither agree nor disagree	5	18.5
	Agree	5	18.5
	Completely agree	16	59.3
	Total	27	100.0

Table 8 *REVENUE MANAGEMENT APPLICATIONS INCREASED OUR TOTAL REVENUE*

		Frequency	Percent
"Revenue management applications increased our total revenue"	Neither agree nor disagree	2	7.4
	Agree	6	22.2
	Completely agree	19	70.4
	Total	27	100.0

With respect to the amount of increases provided by revenue management applications, participants were asked to indicate official or unofficial percentages of increase provided by revenue management applications. As it is apparent from Table 9, slightly more than half of the participants, 52%, reported a contribution of 5-10%, 4% reported a contribution of 1- 5%, 7% reported a contribution of 10-15%, and 37% reported a contribution of 15% and over of the total revenues. One of the implications of this question is that it proves all participants implicit acceptance of revenue management that it contributes to the financial performance of facility. This might be inferred from the affirmative responses that all the participants indicated a degree of contribution regarding the financial contribution of revenue management. Additionally, it might be claimed that all participants accept the financial contribution of revenue management but some of them might not have particular idea regarding the contribution margin.

Table 9 *PERCENTAGE OF ADDITIONAL REVENUE PROVIDED BY REVENUE MANAGEMENT APPLICATIONS*

	Frequency	Percent
% 1-5	1	3.7
% 5-10	14	51.9
% 10-15	2	7.4
% 15 and above	10	37.0
Total	27	100.0

Final question of the survey questionnaire is designed to reveal the participants evaluation regarding the costs attributable to the application and administration of revenue management. As it is shown in Table 10, it is possible to observe a decrease in the agreement rates of participants that revenues attributable to revenue management applications exceed the costs attributable to revenue management applications. The decrease might be attributable to the fact that revenue management effort and applications bring managerial and operational costs. However, it might be claimed that even though there are fixed and variable costs of revenue management, applications benefits from these applications make these applications practical and efficacious regarding revenue maximization.

Table 10 *COST BENEFIT COMPARISON FOR REVENUE MANAGEMENT*

		Frequency	Percent
"Revenues attributable to revenue management applications exceed the costs attributable to revenue management applications"	Neither agree nor disagree	9	33.3
	Agree	10	37.0
	Completely agree	8	29.6
	Total	27	100.0

CONCLUSION AND RECOMMENDATIONS

With respect to the findings, it might be concluded that department managers responses indicate revenue management is an emerging field of application regarding the durations being applied in participating hotels. It is apparent that accounting department or accounting professionals are generally assigned as the decision makers about revenue management tools and applications. This assignment might be attributable to the information gathering and processing ability of accounting department and skill of accounting professionals on quantitative analysis. Regarding the knowledge levels of participants, it is possible to state that they evaluate themselves not completely knowledgeable. In other terms, some of the participants need to be developed about revenue management knowledge and skills. One of the ways of overcoming the lack of knowledge might be tracking and adopting the developments related to revenue management. With respect to the contribution of revenue management to competition, a big majority of the respondents agreed or completely agreed that these applications increase the efficaciousness of organization regarding gaining or developing competitiveness. On the other hand, findings revealed that while revenue management is used or evaluated as a revenue maximization agent, it does not have much to do about competition strategies. Majority of the participants reported that revenue management assists decreasing idle capacity and finally contributes to the financial strength of facility as a result. This conclusion is supported by the responses given to the direct propositions related to the additional revenue gathered by revenue management applications. It might be concluded that revenue management applications contribute to the accommodation facilities competitive and financial performance as a whole. On the other hand, certain degree of monitoring and training or various programs in order to develop the competencies of related personnel need to be employed for the sake of attaining better results.

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