## EFFECTIVE ROOM ARRANGEMENT AND REVENUE FORECASTING IN TIMES OF CRISIS

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# ABSTRACT

The purpose of this paper is to show how the application of the outcomes of a revenue forecast will contribute to the effective planning by using various managerial techniques, in order to maximize revenues and at the same time minimize all costs involved in the daily operation of a hotel, particularly in times of crisis. In our study we will examine both the statistical and also the judgmental forecasting, since it appears that only the historic data is not sufficient for effective forecasting. There is a growing need to take into consideration all the parameters which form the volume and type of the demand within the frame of a market, which tends to change every season. Information technology is the key in this effort. The objective of this study is to analyze the importance of an accurate room and revenue forecast towards the direction of maximizing revenue, minimizing all costs involved in the daily operation of a hotel and consequently achieving higher profit margins, even during times of crisis.

Key words: reservation forecast, revenue, cost, profit margins, effective room arrangement.

# INTRODUCTION

Forecasting the occupancy of a hotel for a specific period of time remains a complicated task, particularly in times of crisis. During these times of uncertainty, the outcome of all efforts to predict the volume of the reservations and the expected total revenue becomes even more questionable. In any case forecasting has to do with the effective use of forecasts. Accurate tourism demand forecasts improve the efficiency of businesses, increase profits and strengthen economies (U.N.W.T.O., 2008). Apart from the nature of tourism itself, it is the crisis that demands more than ever to maximize revenue and at the same time minimize costs, in other words increased profitability appears to be the issue. Casual empirical evidence suggests that many managers are confused by the differences among forecasts, plans and targets. Forecasts in order to move towards its objectives. The forecast outcomes of a plan are themselves contingent on the input forecasts (such as sales and cost forecasts) and the procedures the organization proposes to implement. Targets often represent optimistic estimates of what might be achieved and should therefore be based on the corresponding forecast (Fildes, 2010).

The word crisis derives from the Greek word "krisis" (Barnhart, 1988). Despite the fact that this word brings to mind first of all our country, Greece, mainly because of the current status of the Greek economy, it is obvious that not only hotels operating here, but also hotels all around the world have faced the consequences of lower demand, lower occupancy and a growing demand for lower rates and prices, year by year. Some characterize this trend as price wars, where the efforts are concentrated on the reduction of rates and prices, in order to stay competitive. Apart from these facts the trend for reservations much closer to the arrival date or even last minute or same day reservations is apparent. Especially these trends are the ones, which are more difficult to predict and include in the reservation and revenue forecast. During these times of crisis, many situations are even more uncertain. Therefore, revenue forecasting will help to reduce uncertainty and help managers involved in the operations of the hotels come up with better and more effective decisions (Armstrong et al., 2010). In that context, professionals should take into consideration the results of the forecast and then create their business plan. The links between the forecasting and decision-making function are weak in many organizations, because decision makers and forecasters differ in their priorities (Fildes, 2010).

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### **ANALYSIS OF THE PROBLEM**

Managers make, on a daily basis, decisions affecting revenue, costs and profit. One of the crucial decisions for the management of a hotel is to define the level of prices for both the rooms and the various departments, in other words, defining pricing policies involving seasonal price structures, pricing special promotions and ad hoc competitive bids (Harris, 2011). Prices depend on numerous factors, which need to be taken into consideration, such as the demand, competition, seasonality, the economic environment, exchange rates, inflation, labour costs and others (Fyall and Garrod, 2005). A variety of pricing strategies exists and is available for the revenue managers to implement. Taken into account the title of this paper, we will only focus on the variation of prices offered according to the forecasts. During a certain period during when high demand is expected, rates should reach their highest level. An example could be a long weekend for some destinations, while for other destinations an international trade show could bring similar results, like higher average daily rates (A.D.R.).

Exactly the opposite pricing strategy is implemented, when there low demand is expected or when there are no events taking place. Needless to say, that pricing is one of managers' most difficult and challenging tasks. We can usually judge if prices were set at too high or too low at level, but we can never know in advance the absolutely right price to optimize demand and profit (Harris, 2011). Apart from maximizing revenues, equally important are the decisions towards the direction of minimizing costs involved in operating a hotel. One of the most valuable means in order to achieve that goal is the proper interpretation of forecasts. Many professionals believe that a reasonably accurate forecast will lower costs in the sense that, for example:

- payroll will be kept to the absolutely necessary level and
- quantity of supplies will not exceed the needs of the certain levels of occupancy

Needless to mention, that apart from the above mentioned examples, effective forecasting means accurate planning for all the departments involved in the operation of the hotel, which helps the achievement of higher profit margins. In other words, the effect will be better staffing, purchasing decisions and budgeting (Weatherford & Kimes, 2003). Better staffing means better guest service at lower payroll costs.

When planning and in their effort to develop business in order to increase profitability, managers should consider a number of basic options, such as :

- Raising selling prices
- Increasing sales volume
- Manipulating business mix
- Reducing costs

At least one or a combination of the above options can be considered (Harris, 2011).

Planning encompasses a wide range of topics, all of which require accurate predictions of the level of business to be achieved in the future. The process of predicting these levels of business is known as forecasting (Harris, 2011). In revenue management, forecasting refers to the detailed prediction of rooms sold and average rate, by market segment. Sometimes it is better to use expert opinions, rather than collect figures. This type of educated guesswork does not use numbers and is therefore referred to as qualitative forecasting. Qualitative methods, such as the opinions of experts are very useful to quantify risks of complicated or unpredictable events, such as changes in the global economic markets. However, in many cases, there is interest in numbers and precise predictions and because of that interest quantitative forecasting and the judgmental forecasting. Statistical forecasting recalls past in order to predict the future by using data already inserted in the system. Judgmental forecasting combines forecasts from the system with human adjustments (Armstrong, 2001).

In our study we will examine both the statistical and also the judgmental forecasting, since it appears that only the historic data is not sufficient for effective forecasting. There is a growing need to take into consideration all the parameters which form the volume and type of the demand within the frame of a market, which tends to change every season. Revenue managers need to take advantage of the Information technology, which play a key role in their efforts, but as soon as they extract any figures, they need to make the necessary adjustments, based on their experience and the knowledge for every given period. An example could be a tentative reservation of a group, which is not yet confirmed. The outcome should be as precise as possible, since

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false forecasts will lead to wrong decisions and consequently lower revenues and lower profit margins (Schwartz, 1999). The time horizon of a forecast is made up of a number of distinct components: the time to gain information (the information lead time), the time to plan and execute a course of action (the planning lead time) and the time during which the action reaps its consequences (the action lead time). The first two of these are under the control of the organization. By increasing the speed at which internal information is made available and by increasing the organization's responsiveness to a problem, the need to forecast is theoretically minimized (Fildes, 2010). However, operating in a changeable environment, accurate forecasts become more and more indispensable. Many researchers, like Lawrence, Goodwin, O'Connor and Oenkal in 2006, showed that the combination of both the statistical approach and the judgment of the professionals produces the most accurate forecasts. In that sense, the input of the human approach becomes absolutely necessary, even when the impact on the result seems to be of a lesser importance.

## CONCLUSIONS

The objective of this study was to analyze the importance of an accurate room and revenue forecast towards the direction of maximizing revenue, minimizing all costs involved in the daily operation of a hotel and consequently achieving higher profit margins, even during the current phase of economic recession. In a changing global tourism environment it is important, for both government policy development and business planning, to have reliable short-term and long term forecasts of tourism activity (Frechtling, 2001). Forecasting is especially important in tourism because it aids long term planning and is fundamental to the conduct of modern business and destination management (Dwyer, Forsyth & Papatheodorou, 2011). Effective forecasting will significantly help the productivity of a hotel, especially in times of crisis. Constantly changing trends in tourism will pose new challenges to the ways we need to "translate" the outcome of the forecasts and to follow the most suitable strategy in order to increase the profitability of our business.

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