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Hotel Revenue Management Strategies during Fall Foliage Travel Season

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Abstract

Tourism during the fall seasons is mostly recognized during the months when changes in leaf color offer bright colors of many trees and foliage marking the end of the growing season in some regions of U.S. Hotel pricing analysts have increasingly used revenue management (RM) techniques and pricing strategies in hotels to assist in maximizing revenues during these seasons. This study examines how fall foliage tourism demand impacts hotel pricing strategies and hotel revenue management practices in areas experiencing seasonal increases in overnight travelers. The study area is the region around the Great Smoky Mountains National Park bordering both Tennessee and North Carolina. The area includes a portion of the Appalachian Mountains and is the most visited National Park in the United States. Most hotel revenue management strategies focus on one hotel property and not hotel pricing strategies in a region or area like this study.

Keywords: Revenue management; Tourism; Management practices

Introduction

In some regions of the U.S., tourism generated by changing colors of the fall foliage season has grown to be one of the most important parts of the travel season. Tourism during the fall seasons is mostly recognized during the months when changes in leaf color offer bright colors of many trees and foliage marking the end of the growing season. Depending on the area of the U.S., this change in foliage color in the United States occurs mainly during the months of September, October and November each year. Travel and tourism increases each year in key areas of the U.S where fall color changes are most dramatic. This seasonal increase in travel and tourism in these key fall foliage areas increases overnight travelers and increases in the demand for hotel rooms in these areas.

This study examines how fall foliage tourism demand impacts hotel pricing strategies and hotel revenue management practices in areas experiencing seasonal increases in overnight travelers. The study area is the region around the Great Smoky Mountains National Park bordering both Tennessee and North Carolina. The area includes a portion of the Appalachian Mountains and is the most visited National Park in the United States with 9.68 million visitors in 2013 [1]. Most hotel revenue management strategies focus on one hotel property and not hotel pricing strategies in a region or area like this study.

Objectives of the Study

The objective of this study is to examine hotel room rates in a region during the fall foliage travel season to determine the degree that revenue management pricing strategies are used by hotels in the region during this period.

Background and Literature Review

Hotel pricing analysts have increasingly used revenue management (RM) techniques and pricing strategies in hotels to assist in maximizing revenues [2,3]. RM (and earlier called yield management) has been defined by Kimes as the process of allocating the right type of capacity to the right kind of customer at the right price so as to maximize revenue or yield [4].

Studies on the fall travel market and corresponding hotel pricing strategies are limited. Spotts and Mahoney [5] used an intercept survey of tourists in Michigan's Upper Peninsula to determine if there are differences in motivations and recreation activities of summer vs. fall tourists in the area. Spencer and Holecek [6] used a telephone survey of households in the Great Lakes region of Michigan to examine if fall tourists differ from summer tourists and whether fall color viewing was an important motivator of travel as assumed and if fall tourists travel for recreational activities. This study found that fall tourists were older, less active in recreation, and less likely to travel with children. Neither study [5,6] examined the revenue management and hotel pricing strategies of hotels during the fall tourist season and associated fall demand for tourism.

Hotel Price Elasticity of Demand

The concept of price elasticity of demand explains how sensitive consumers are to changes in prices. Price elasticity of demand has been defined as "a measure of the percentage change in quantity demanded resulting from a one percent change in price along a given demand curve" (higher or lower) [7]. When examining the market for hotel guests, they are usually grouped into two submarkets: leisure travelers and business travelers [8]. In order to accommodate the demand of these different market segments from business and leisure travelers, a hotel property must have a mix of different types of hotel rooms [2]. Business travelers in general tend to not be sensitive to hotel price rate fluctuations, leading to more inelastic demand for hotel rooms. However, leisure travelers tend to be more sensitive to hotel price rate fluctuations, leading leisure travelers to be more elastic demand for hotel rooms [8].

Economic theory suggests that there are many factors that determine if a good or service has an elastic or inelastic price elasticity

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of demand. Hyman suggests there are three main factors that determine price elasticity of demand: a) the availability of substitutes, b) the proportion of the consumer's budget it takes to purchase the product, and c) the time period for consumers to adjust to price changes [7]. Based on these three factors, the demand for most good and services can be classified as being price elastic (sensitive demand) or price inelastic (not sensitive demand). Goods with many substitutes, goods that take up a large portion of the budget, and goods that have a longer time period of adjustment, tend to have more elastic demand; while goods with few substitutes, goods taking up a smaller portion of the budget, and goods that have a shorter time period of adjustment, tend to have more inelastic demand [9].

In many areas, fall foliage colors have a relatively short time horizon, sometimes lasting only a few weeks. Experienced leisure travelers seeking fall foliage color changes know there are few substitutes available for fall foliage color changes. Thus, for the few weeks of peak fall color for leisure travelers, the price elasticity of demand for hotel rooms during this limited period could be considered "price inelastic" (or not very sensitive to changes in prices). In this example, instead of business travelers having more inelastic demand, fall foliage travel during this limited season with few substitutes could see leisure travelers having more inelastic demand. To examine how hotel revenue management and pricing strategies react to this limited period of fall color, aggregate hotel rates are examined in the Great Smoky Mountains National Park area during the peak fall periods and compared to other parts of the year.

Methodology and Data Source

The area of analysis is the 21 western counties in North Carolina that border the Great Smoky Mountains National Park and are no more than 50 miles from the Great Smoky Mountains National Park as seen in Figure 1. Data from Smith Travel Research (STR) were obtained for aggregated hotels in the area that were divided into five regions [10]. The data includes monthly room demand and Average Daily Rate ($ ADR) for 2012. Hotel performance data were aggregated for each region using the following county groups.

Region 1 Counties: Cherokee, Clay, Graham, Macon

Region 2 Counties: Haywood, Jackson, Transylvania, Swain

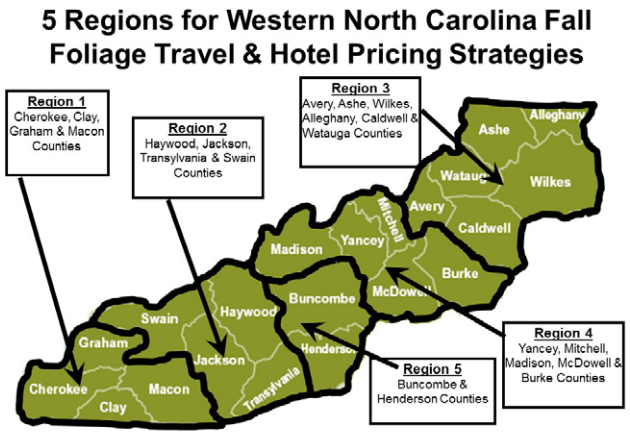

Figure 1: Regions of North Carolina County Groups examined for fall foliage travel and hotel pricing strategies.

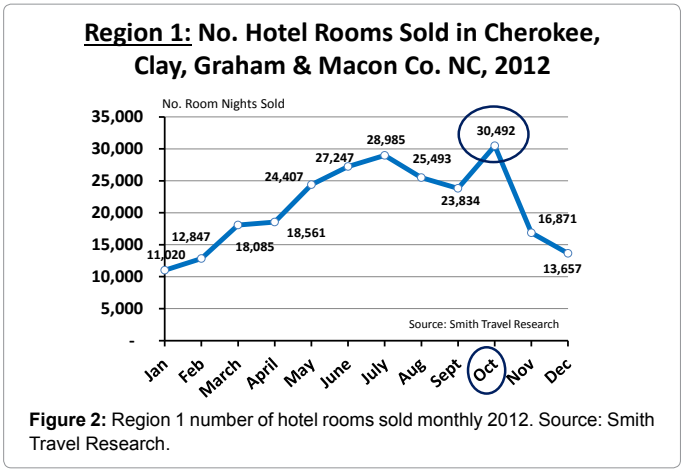

Figure 2: Region 1 number of hotel rooms sold monthly 2012. Source: Smith Travel Research.

Region 3 Counties: Avery, Ashe, Wilkes, Alleghany, Caldwell, Watauga

Region 4 Counties: Yancey, Mitchell, Madison, McDowell, Burke

Region 5 Counties: Buncombe, Henderson

The methodology used will examine each region for number of rooms sold each month for 2012. It was determined that using the number of rooms sold each month is the best measure of tourist demand instead of hotel occupancy rates that can change if the supply of rooms change in the area. By using the number of rooms sold, the importance of the fall foliage travel season can be compared on a similar basis region to region.

Also, monthly hotel average daily rate (ADR) was used to show revenue management strategies of hotels in each region and demand for hotels rooms change during the fall foliage season.

Economic theory and revenue management strategies that maximize hotel revenues suggest that hotel room rates change directly with demand. That is when the demand for hotel rooms are highest, room rates should be highest and when the demand for hotel rooms are lowest, hotel room rates should be lower. Monthly data from Smith Travel Research indicating both demand for hotel rooms (i.e. number of rooms sold), and average daily rates charges by area hotels each month allows us to examine if seasonal hotel revenue management practices and strategies are being executed.

Results

The importance of the fall foliage season on tourism demand during 2012 is shown for each region in Figures 2-6. The results show that in each region, October is the highest month for number of hotel rooms sold. In this area, October is the peak color month for fall foliage and thus the most popular month of travel out of all 12 months of the year.

Since October was the highest month of hotel room sales, hotel revenue management price strategies were reflected when hotel average daily rates are analyzed monthly for 2012. Figures 7-11 show the ADR for each region and indicate that October has the highest ADR's out of each month of the year.

When demand and ADR data are combined, it show that in October, the hotel sector uses revenue management strategies to maximize revenues during the fall foliage travel season in this area of the U.S.

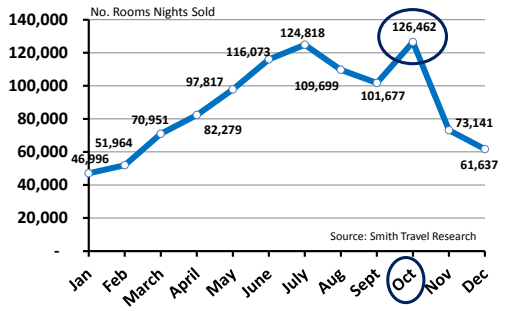

Figure 3: Region 2 number of hotel rooms sold monthly 2012. Source: Smith Travel Research.

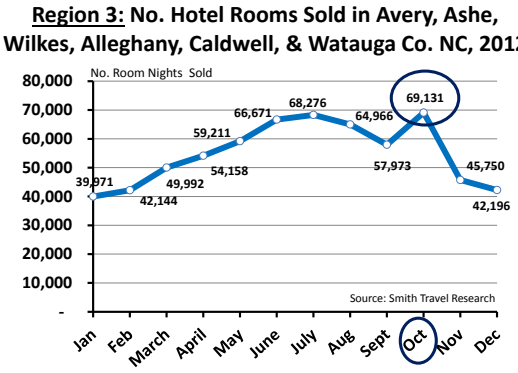

Figure 4: Region 3 number of hotel rooms sold monthly 2012. Source: Smith Travel Research.

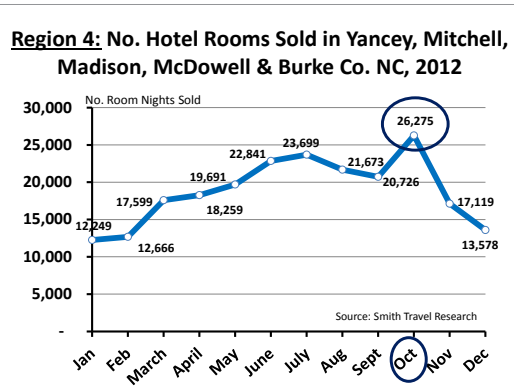

Figure 5: Region 4 number of hotel rooms sold monthly 2012. Source: Smith Travel Research.

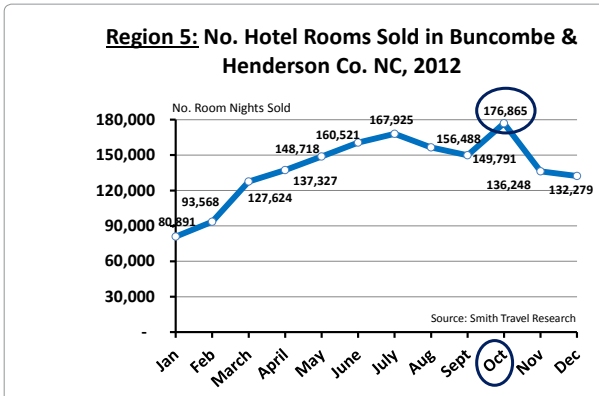

Figure 6: Region 5 number of hotel rooms sold monthly 2012. Source: Smith Travel Research.

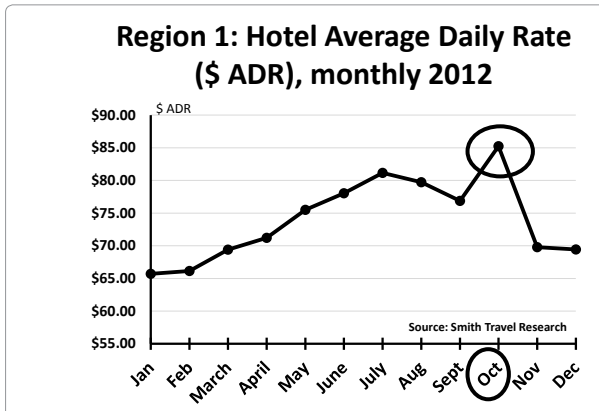

Figure 7: Region 1 hotel average daily rates, monthly 2012. Source: Smith Travel Research.

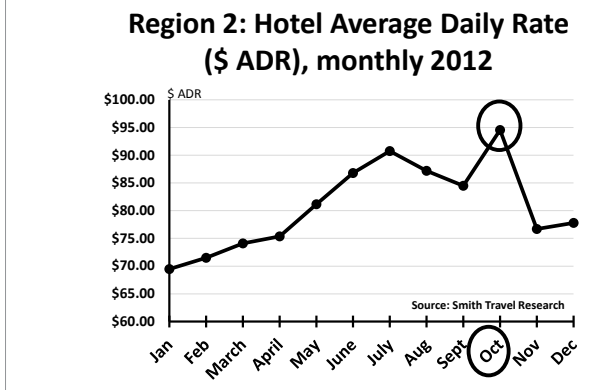

Figure 8: Average daily rates, monthly 2012. Source: Smith Travel Research.

Discussion

Economic theory and revenue management maximization strategies conclude that hotel room rates should be increased during periods of consumer inelastic demand. In these data, fall foliage tourist travel during limited peak viewing times suggest that tourists have few substitutes during the fall foliage color period and thus have more inelastic demand (less sensitive to prices) for travel and hotel rooms and are willing to pay higher room rates during this period.

It should be pointed out that this special case of fall foliage travel goes against conventional wisdom and experiences of most hotel revenue pricing strategies where in general, most business travelers are considered to have more inelastic demand (less sensitive to higher prices) for hotel rooms, while in general most leisure travelers have more elastic demand (more sensitive to higher prices) for hotel rooms. Thus is this study of fall foliage travelers where few substitutes exist because of the short time frame and window of peak fall colors, most

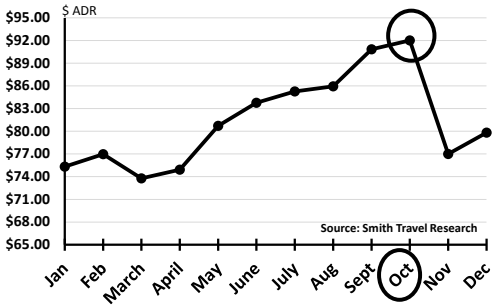

Figure 9: Region 3 hotel average daily rates, monthly 2012. Source: Smith Travel Research.

Figure 10: Region 4 hotel average daily rates, monthly 2012. Source: Smith Travel Research.

Figure 11: Region 5 hotel average daily rates, monthly 2012. Source: Smith Travel Research.

leisure travelers have more inelastic demand for hotel rooms and hoteliers use appropriate revenue management strategies to increase hotel room rates during the period of increased leisure travelers having inelastic demand during the short fall foliage travel season.

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