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## United States business travelers' response to price changes and overbooking: Its effect on intentional loyalty in the hospitality industry

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US BUSINESS TRAVELERS RESPONSE TO PRICE CHANGES AND  
OVERBOOKING: IT'S EFFECT ON INTENTIONAL LOYALTY  
IN THE HOSPITALITY INDUSTRY

By

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Bachelor of Science  
University of Nevada, Las Vegas  
1995

A thesis submitted in partial fulfillment  
of the partial requirements for the

**Masters of Science Degree**  
**William H. Harrah College of Hotel Administration**

**Graduate College**  
**University of Nevada, Las Vegas**  
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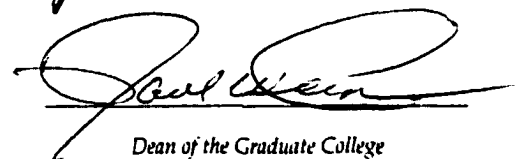
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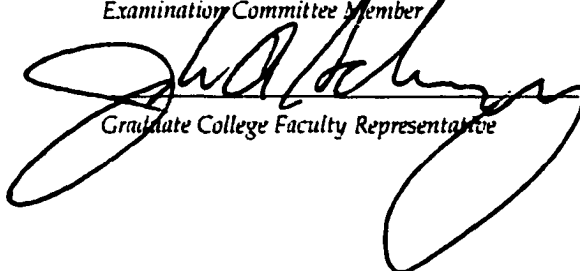
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## **ABSTRACT**

### **U's Business Travelers Response to Price Changes and Overbooking: It's Effect on Intentional Loyalty In the Hospitality Industry**

by

Nicholas Gordon

Dr. John Bowen, Examination Committee Chair  
Director of Graduate Studies and Research  
University of Nevada, Las Vegas

Companies that have highly perishable inventories have used yield management quite extensively over the past decade. The process helps to maximize revenues based on demand. The airline industry was the first to adopt the process into a business setting and has seen varying results along the way. Much of the existing research is geared towards examining the revenue producing potential of the system. There has been little research however, to examine how this process of shifting price to manipulate demand effects customer loyalty.

This research attempts to evaluate what the effects actually are when price is used as the major tool in controlling demand. This research will address consumer behavior issues associated with yield management pricing. Some examples are how yield management effects perceived value and trust. Issues like overbooking, price thresholds, reference prices, and rate increases will also be examined by creating specific scenarios to capture the attitudes of the business traveler in each case.

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## CHAPTER I

### INTRODUCTION

Companies that have highly perishable inventories have used yield management quite extensively over the past decade. The process helps to maximize revenues based on demand. The airline industry was the first to adopt the process into a business setting and has seen varying results along the way. Much of the existing research focuses examining the revenue producing potential of yield management. However, there has been little research to examine how this process of shifting price to manipulate demand effects customer loyalty.

This research attempts to evaluate what the effects actually are when price is used as the major tool in controlling demand. This research will examine the attitudes of business travelers in regards to hypothetical issues associated with yield management pricing. One examples are how yield management effects perceived value. Issues like overbooking, price thresholds, reference prices, and rate increases are examined by creating hypothetical scenarios to capture the attitudes of the business traveler in each particular setting.

## The History of Yield Management

Yield management (YM) originated as a tool for farmers to maximize the yield of their crops. Farmers tried to get the highest yield from the available piece of land. They could not control the weather variables but they could control variables such as fertilizer, soil rotation, and irrigation. Only so much wheat can be produced on one acre of land when conditions are ideal and all of the variables are right. Yield management emerged as a business practice in the early 1950's and has since slowly transformed from a model that recognizes only price, into one that in theory incorporates market segments, consumer spending trends, and booking patterns. The airline industry began using yield management in the early 1970's as a pricing strategy (Caneen, 1997). Since then, it has been adapted to conform to the special needs of the hotel industry and to maximize revenue based on demand. The hotel industry uses the system in almost the same manner as farmers, except today the theory has evolved to incorporate a multitude of ideas that are founded in serving customers rather than maximizing crops. Hoteliers cannot control weather, the economy, or another company's business plans, but they can control variables such as amenities, service, and most often, price. By shifting these variables to accommodate each situation, an optimal yield can be accomplished.

## The Yield Function Defined

Yield management may be defined theoretically in a variety of different ways and is practiced differently by almost every hotel that uses it. While the implementation may vary, the mathematics behind the yield management model is constant and represented by the following equation:

$$\text{Yield} = \frac{\text{Revenue Realized}}{\text{Revenue Potential}}$$

The mathematical model compares what was accomplished (actual sales) against the maximum potential sales. For example, in the hotel industry, YM would be represented by the actual room sales divided by the total available rooms multiplied by the rack rate (Orkin, 1988). Beyond the bare numbers of the process lies the idea that individual market segments will pay different amounts for products based on their specific needs (Kimes, 1989). By tailoring the product to meet the needs of these segments, the business can optimize sales during periods of low demand. Optimal levels are difficult to attain because even during periods of excess demand, not all rooms will be sold at the highest possible rate due to advanced group bookings (Knutson, Malk, & Schmidgall, 1995). Focusing on perfection can create a fixation on short-term maximization.

### Loyalty Defined

Loyalty has been defined in a variety of ways over the years. For many years, marketers and businesses alike, believed that loyalty was best measured by customer satisfaction. Many researchers designed statistical models to measure customer satisfaction (Fornell & Bookstein, 1982; Cronin & Taylor, 1992; and Parasuraman, Zeithaml, & Berry, 1991). The underlying theory states that by creating exceptional service, the customers would be extremely satisfied and repeat purchases. The hotel industry buzzword that came out of that ideology was “exceed expectations.” Recent research has challenged this theory on the idea that it's not in the level of guest

satisfaction, but in the measurement design. Just because someone has an exceptional stay does not highly correlate with an intention to return. In other words, satisfaction does not always equate to loyalty (Bowen & Shoemaker, 1998).

Recently, companies have begun to create loyalty programs based on the idea that loyalty is created by incentives like: product discounts, cash rebates, prizes, and frequent flier miles. The idea caught on not so much because it created loyalty, but because it became a minimum “buy in” just to compete. The key to loyalty is creating a defensible advantage that is not easily duplicated, thus creating retention.

Reichheld and Sasser (1990), leaders in the research on loyalty, developed the “zero defections” theory. This theory is based on the idea of continual improvement of the guest’s experience using customer input (positive and negative). By using this information, the company can get a better idea of what the customer wants and needs; giving them a true competitive advantage. Their model also focuses on reducing the rate of defections. Reduced defections correlate directly to higher loyalty and profits. Loyalty is a difficult concept to define in a single statement.

### **Problem Statement**

There is a great deal of confusion surrounding the definition and use of yield management (Lieberman, 1993). One of the greatest problems with yield management is the lack of a standard protocol for implementing a successful YM program. While there is no consensus on all of the components of a YM system, shifting price to manipulate demand appears as a common element in the YM literature. In a recent study, Norman

and Mayer (1998) found that many of the casinos in Las Vegas were using some form of yield management but none were using it a manner the researchers felt was optimal. A great majority of the research to date as applied to yield management focuses on examining how using such a system can increase short-term profits (Bodily & Weatherford, 1994; Caneen, 1997; Cross, 1997; Jones & Hamilton, 1992; Kimes, 1989; Lieberman, 1993; Orkin, 1988; Relihan, 1989). The yield function focuses on maximizing short-term revenues, not building long-term relationships. Because yield management relies on the idea of shifting price in order to manipulate demand, there are some inherent risks when price is involved. One of the problems is that value can be distorted when price is raised without increasing the benefits associated with the purchase of a room (Shifflet & Bhatia, 1997). Another risk involves using price as a determining factor. Focusing on price may train the consumer to believe that price is the most important factor in deciding what product to choose, thus increasing price sensitivity (Silcoff, 1997). When price is used to manipulate demand, certain segments, such as leisure travelers, are often intentionally driven out of the marketing mix. This may pose a potential problem in terms of being perceived as an opportunistic environment which is the opposite of what is necessary to create long term loyalty (Moorman, et al, 1993). The purpose of this research is to examine how the practical use of yield management through price manipulation effects loyalty. Loyalty will be measured by the customer's intention to return and refer the product; this has been shown to be a strong indicator of loyalty (Bowen & Shoemaker, 1998).



### Justifications

Past research in the area of yield management has focused primarily on justifying the revenue potential of the process or how to use it correctly. Little research has been done on yield management to measure the consumer behavior aspects and how they relate to customer loyalty. This research will provide statistical evidence as to the effects on the consumer when using a short-term revenue maximizing system. This information will be useful in assisting managers to properly evaluate whether or not yield management is appropriate for certain customer groups or market segments. This information will also help educators, software designers, and hotel marketers to factor in the importance of the loyal customer is in terms of and how price shifting effects their intentions to return and refer the hotel to others. This research may lead the way to more integrated approaches to yield management.

### Delimitations of the Study

This study will not examine the effectiveness of yield management in terms of revenue potential or profitability, nor will the study investigate how loyalty effects long-term profitability. Rather, this study focuses on how the use of yield management through price shifting and overbooking effects loyalty. Loyalty is measured with two indicators, likelihood to return to and refer the hotel. The sample was limited to business travelers in the "silicon forest" area is specific only to this region and the results are not generizable to other areas.

## Hypotheses

When a business traveler is charged more than their regular rate for the same type of room because the hotel has a shortage of rooms, how does this effect their likelihood to repeat purchase and refer the hotel to other business travelers?

**Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if regular rates are increased based on demand.

**H1:** There will be a difference in a business traveler's likelihood to return to the hotel if regular rates are increased based on demand.

**Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if regular rates are increased based on demand.

**H2:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if regular rates are increased based on demand.

When a business traveler finds another guest is paying less for the same type of room because the hotel has an excess of rooms to sell, how does this effect their likelihood to return and refer the hotel to other business travelers?

**Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.

**H3:** There will be a difference in a business traveler's likelihood to return to the hotel if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.

**Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.

**H4:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.

**When a business traveler finds another guest is paying less for the same type of room because they are receiving less amenities, how does this effect their likelihood to return and refer the hotel to other business travelers?**

**Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if they find out their rate is higher because they are receiving more amenities than another guest.

**H5:** There will be a difference in a business traveler's likelihood to return to the hotel if they find out their rate is higher because they are receiving more amenities than another guest.

**Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out their rate is higher because they are receiving more amenities than another guest.

**H6:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out their rate is higher because they are receiving more amenities than another guest.

When a business traveler with a guaranteed reservation is turned away (walked) and sent to another hotel at the expense of the first hotel, how does this effect their likelihood of returning or referring the original hotel to other business travelers?

**Ho:** There will be no difference in a business traveler's likelihood to return to the hotel when they are walked to another hotel.

**H7:** There will be a difference in a business traveler's likelihood to return to the hotel when they are walked to another hotel.

**Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers when they are walked to another hotel.

**H8:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers when they are walked to another hotel.

### **Definition of terms**

**Block of Rooms-** a group of rooms held by a company or group that normally is done under some type of tentative or validated contract.

<b>Displacement-</b>	when certain groups or customer segments are intentionally forced out of the market mix based on their forecasted value or revenue potential
<b>Guaranteed-</b>	a room held with a credit card or pre-paid cash deposit.
<b>Loyalty -</b>	within the scope of this study, loyalty is defined as the level of intention to return or refer the hotel.
<b>No Shows-</b>	when a guest does not show up to claim their reservation guaranteed or 6 p.m. hold.
<b>Non-guaranteed-</b>	an agreement to hold a room until a specified time without a deposit.
<b>Perfect Fill-</b>	when every room in the hotel is occupied and no guests have been walked.
<b>Silicon Forest-</b>	an area near Beaverton/Portland, Oregon that houses the corporate headquarters of some of the biggest technology and manufacturing companies in the world.
<b>Walking-</b>	when a customer with a guaranteed reservation is turned away because the hotel is oversold and cannot accommodate the guest; in this case the hotel pays for lodging and transportation to a comparable hotel nearby.
<b>YM-</b>	within the scope of this study, YM is defined as a forecasting method that uses price and past trends to manipulate demand on a short-term basis.

## CHAPTER 2

### REVIEW OF LITERATURE

#### The Evolution of Yield Management

Yield management is one of the most elusive concepts in the hotel industry today. The function itself is simple: maximize the total yield or revenue based on the available inventory or space (Bodily & Weatherford, 1994; Caneen, 1997; Cross, 1997; Jones & Hamilton, 1992; Kimes, 1989; Lieberman, 1993; Orkin, 1988; Relihan, 1989). Lieberman (1993) states that “Yield management has become an accepted part of the hotelier’s lexicon. Yet if you ask ten hoteliers what it is you are apt to get at least five and possibly ten different answers.” (p. 34).

Recent literature has not yet succeeded in creating a standard definition of what yield management encompasses in terms of how the customer interrelates to the mathematical function. Early literature focused heavily on the mathematical function of the equation (comparing actual sales against maximum potential sales). Jones and Hamilton (1992) refer to yield management as “manipulating room rates (through discounting) and reservations (through overbooking) to maximize sales performance.” (p.89) Eric B. Orkin has written a variety of articles pertaining to yield management. He defined it as two basic strategies based on the type of demand: 1) high demand-maximize revenue by raising rates; 2) low demand-maximize revenue by lowering rates (1988).

Relihan (1989) describes the process as, "A proven technique for maximizing revenues. It involves applying basic economic principles to pricing and controlling your rooms inventory for the purpose of maximizing revenue" (p. 40).

The previous references are premised on the idea that demand is strongly driven by price alone. Researchers have become more aware of the idea that there are other underlying factors equally as effective that affect demand (Bell & Morey, 1997).

Segmentation and value began to enter the literature in the late 1980's. In 1989, Sheryl Kimes defined yield management as, "The process of allocating the right type of capacity to the right kind of customers at the right price so as to maximize revenue or yield." (p. 15) Lieberman (1993) clearly incorporates the customer when he says "Yield management uses information about customer purchasing behavior and product sales to develop pricing and inventory controls that produce greater revenues and deliver products that are better matched to the customers' needs." (p. 35). Cross (1997) takes a similar approach when he says that "Revenue management is the application of disciplined tactics that predict consumer behavior at the micro-market level and that optimize product availability and price to maximize revenue growth" (p. 33).

The perception of yield management has definitely transformed over time. It has gone from primarily a mathematical function in which price is used to control demand to a more integrated approach in which the needs of individual customer segments are addressed. Sheryl Kimes (1994) examined the psychological aspect of using price as a major tool in manipulating demand. Her research focused on the perceived fairness of yield management. Kimes addressed using price as a leverage point to shift demand either up or down. Many hotels were offering a variety of rates for the same product with

no increase in benefits or amenities. She found that customers had an adverse view of this practice.

### The Fundamentals of Loyalty

The concept and the measurement of loyalty are by no means static, having shifted over time as marketers scramble to find the most effective way to keep customers. Early loyalty studies focused primarily on guest satisfaction and service quality as essential components in the loyalty equation (Bolton & Drew, 1991; Cronin & Taylor, 1992; Fornell & Bookstein, 1982; Parasuraman ET al., 1991). Many researchers devised models to measure guest satisfaction. Models like SERVQUAL, LISREL, and Partial Least Squares (PLS) were created to measure satisfaction in an attempt to differentiate the organization through increased customer service.

The reliability of measuring loyalty through satisfaction came into question when companies began to examine their levels of loyalty based on their level of guest satisfaction. The original belief was that high levels of satisfaction translated into high levels of loyalty. The problem is that customer satisfaction does not equate to loyalty (Bowen & Shoemaker, 1998). A customer may be completely satisfied but may not purchase again because of factors unrelated to satisfaction. These factors may include location of the property, the nature of the purchase, such as the one time purchase for a special occasion. Additionally, mitigating circumstances, for example when no other rooms are available in town may force the customer who normally stays at Crowne Plaza to use Embassy Suites. Although the customer may be completely satisfied with Embassy Suites, they may choose to return to their normal hotel in the future.



The idea of quality failed as a measurement tool because quality does not equate to value (part of the loyalty equation). Value is a subjective concept that is not effectively measured through quality (Morris & Morris, 1990). Quality only sets the minimum acceptable standard for a purchase. People often buy low quality products for their experiential or status enhancing qualities. A classic example is a Harley-Davidson motorcycle. A Harley is inferior in quality in terms of engine efficiency. The reason it runs so loud is that the engine misses a stroke and it creates a misfire. The reason people buy a Harley is that it is loud and denotes a certain type of personality (experiential quality). Harley-Davidson has attracted a high-end level of clientele, which gives the company a status quality. The average HD motorcycle costs around \$20,000. This is an example of people being extremely loyal to a lower quality product (J. Schibrowsky, personal communication, November 19, 1997).

Many industries have begun loyalty programs. Although the term “loyalty program” has become quite diluted, it is still a major focus of many companies. From airlines to bookstores to supermarkets, all have created some type of program where signing up with and using their products means some type of incentive (Power, 1998; Duffy, 1998; Raphel, 1998). Whether it was frequent flyer miles or rewards card savings, the users gained some type of benefit for using the same company on a continual basis. In the world of marketing however, one of the greatest problems lies in the idea of creating a defensible advantage. The problem is that these programs are easily duplicated and eventually no real advantage is created. Sir Collin Marshall of British Airways said, “Frequent flier miles have become a commodity, a price of entry into the market”

(Prokesch, 1995, p. 166). Essentially, today's loyalty programs are not so much an advantage, but have become a standard expectation for business.

Another group of researchers have examined loyalty but in a different light. Their idea is founded in creating an environment focused on customer retention and reducing defections (Reichheld & Sasser, 1990). Their logic goes back to the original definition of marketing which is, "to satisfy the wants and needs of the customer". Their research focused on using the customers own input in the decision-making process. Instead of using market analysis and the manager's intuition to decide what the customer wanted, why not ask them? A novel idea, so simple, that it was revolutionary. This system allowed for insight into a customer's complaints, wants, needs, dreams, and ideas. They also believed in trying to reduce the "complaint iceberg." The iceberg model was used by British Airways to analyze how many customers and potential revenues were being lost by not actively trying to handle customer complaints. This was a graphical depiction of how many people actually complain in comparison to how many never complain or the information is never properly disseminated and in both cases, they just don't return. This idea is key in terms of loyalty analysis. The idea that most customers will just walk away and never return is key in terms of how great an impact price shifting may have on overall customer loyalty. If it is found that many customers are upset with price shifting, they may never say a word and what's worse, never return.

Reichheld and Sasser were two of the first researchers to study the long-term value of the loyal customer. They found that the customers were an enormous resource for business information. Finding what the customers really wanted increased both profits and loyalty. In a previous study the authors found that by reducing defections by

only 5 percent, that profits were increased by anywhere from 25%-85% (Reichheld & Sasser, 1990).

This is an important element of validating this study of customer loyalty. If there is no financial gain then why spend the time and money to try to retain and build relationships with customers? Reichheld & Sasser have shown that increased loyalty and retention actually does increase profits. Their studies found that the loyal customer increases in value over time. This is because they spend more money, bring in more clientele through referrals, and are less price sensitive.

Indeed, Reichheld and Sasser found a great strategy to increase loyalty, but measuring defections may not give as clear a picture as to what parts are integral in creating the loyalty. The idea of loyalty should not stop with the examination of customer needs, because a strong tool with which to measure the strength of the relationship has not yet been established.

Trust is an important piece of the loyalty concept. Morgan & Hunt (1994) state that, "Because commitment entails vulnerability, parties will only seek trustworthy partners (p. 24). Achrol (1991) also believes the postulated idea that trust is a major determinant of relationship commitment. If trust is so important to commitment then one must conclude that a "lack of" trust would have a negative impact on a customer's commitment, thus reducing the perception of loyalty towards a particular company or product.

Although trust and commitment are important factors in creating a relationship, it is important to understand that there are other factors that may hinder the relationship before and during its creation. Some of the factors that are associated with yield

management are perceived value, reference prices, price thresholds, price sensitivity, opportunistic behavior and trust, displacement, reliability, and overbooking.

### **Opportunistic Behavior and Trust**

Opportunistic behavior and trust go almost hand in hand because one is partially derived from the other. Trust is fostered in the idea that the other party will not take advantage of the other if the opportunity arises. Earlier it was established that commitment was tied to the concept of trust and a lack of opportunistic behavior (Bowen & Shoemaker, 1998). These same authors also established that commitment was a key instrument in evaluating loyalty in the relationship process.

Trust is often defined in two different ways. First is the idea that trust encompasses one's honesty and second it addresses one's benevolence (Geyskens, Steenkamp, Scheer, & Kumar, 1996). Trust and honesty is defined by Morgan and Hunt (1994) who define it as "existing when one party has confidence in an exchange partner's reliability and integrity" (p. 23).

The concept of benevolence or opportunistic behavior will be addressed, since it has been introduced as an essential element in the concept of loyalty. The idea of benevolence, in terms of trust is defined as "the belief that the partner is interested in the firm's welfare and will not take unexpected actions which will negatively impact the firm" (Anderson and Narus, 1990). This idea can be reciprocated in the idea that the firm will also not take advantage of the customer in order make financial gains. An example may be shifting price upward based solely on demand without taking the customers past sales or loyalty into account.

It is important to realize that shifting price upwards to optimize profit may have negative consequences. Kahneman, Knetsch, & Thaler, (1986) state that, "Setting demand equal to supply will probably be viewed as unfair, because scarcity is not a fair reason for price increases"(p. 7). Based on recent research by Bowen & Shoemaker (1998), the authors make a similar comment when they say, "Yield management appears to be the type of opportunistic behavior that can inhibit guests' trust and loyalty" (p. 25). This study hypothesizes that the loyal guest may feel taken advantage of if they are forced to pay a higher rate than normal just because the hotel has fewer rooms to offer. Doing so may destroy trust, which is essential in the relationship process.

### Perceived Value

Value is a very subjective term and may be defined in a variety of ways. Nagle & Holden (1995) define value as "the total savings or satisfaction the customer receives from the product (p. 72). Another group of authors describes it as "Value in use is concerned with a customer's subjective estimate of a product's ability to satisfy a set of goals." (Morris & Morris, 1990, p. 6) Still another group of authors state "At it's most fundamental level it represents the perceived benefits that customers believe that they receive from ownership or consumption of a product or service" (Payne, Christopher, Clark & Peck, 1995, p. 6). In 1987 Valerie Zeithaml conducted a study in which price was compared to perceived value. She found that consumers innately put a value on everything. The perceptions were categorized into four groups:

1. Value is low price - the perceived value is based solely on paying a low price.

2. Value is getting what I want in a product - the perceived value is based on the benefits the consumer receives for the product.
3. Value is the quality I get for the price I pay - the perceived value is defined as affordable quality.
4. Value is what I get for what I give - the value is defined as the trade-off between what is received versus what is given up. Some common examples could be time or money.

Because value is based on perceptions, it is important to understand that there are other variables that drive its existence. In Ziethaml's 1987 study she found that value was defined not only by low price (monetary), but by anything that the consumer felt as being valuable to trade for the product. It could have been anything from free time to social status, or even physical product traits. It is important to note that quality does not equate to value. Many companies believe that if they build a high quality product with attention to detail than people will inherently find value in it. This mentality is similar to the pricing strategy that many hotels use in yield management. They believe that by lowering or raising price alone that value will be created and that they will attract more customers.

Much of the hospitality literature that relates to the use of yield management seems to support this idea of shifting price to manipulate demand (Bodily & Weatherford, 1994; Orkin, 1988; and Relihan, 1989). Price is the most popular method to shift demand because it is fast and easy to manipulate. It is much easier to change the price rather than change the service quality or physical amenities associated with a product. The problem with using price alone is the risk of damaging the delicate balance of price, service,

social, and physical benefits that are associated with a particular product offering. A recent study conducted by Shifflet and Bhatia (1997) found that a 10 percent increase in average daily rate (ADR) will average a five-point decrease in “value for the money” (p. 22). These results were based on the fact that all other variables were held constant. These results also help make the point that when price is shifted without adjusting any of the other physical or service attributes, the perception of value may be reduced or damaged. In fact a recent study showed that while price was an important factor in the purchase decision, amenities like last room availability also had a great impact on the purchase decision (Bell & Morey, 1997).

Practical use of yield management in the industry is founded on the idea of quickly shifting rates to meet forecasted demand. Many hotels believe in using technology to create almost a real time demand predictor and shift rates accordingly. One industry expert, Robert Cross, even recommends to clients with high market activity, that re-forecasting may be required on an hourly basis or even more frequently (Cross, 1997). Cross even goes as far as to consider re-forecasting after every consumer transaction. He claims that these real time improvements in the decision process can create increased revenues of 1 to 2 percent. The problem is that these continual shifts can create a multitude of problems in terms of the value perceptions for the guests.

Value is the starting point in the relationship process; all other elements stem from the idea that value is created (Payne et al, 1995). The perceived value is the reason that the customer purchases the first time and if this perception is not fulfilled, the customer may not return. The reason for this may be as simple as the quality of the room or the location. The idea is that value merely starts the relationship but how the company

handles the rest of the interaction decides how the relationship is built. Earlier it was discussed that shifting price upwards without adjusting levels of benefits accordingly lowered a person's perception of value. This study hypothesizes that the price shifting associated with yield management has a negative impact on perceived value, which in turn may negatively affect loyalty.

### Reference Prices

Reference prices are an important part of understanding the value perception. They interrelate simply by the fact that one's whole perception is based on a reference or past information and experiences. A reference price is the price that a consumer regards as fair or appropriate for the value received (Morris & Morris, 1990) Another definition of a reference price is "A general expectation of a price level that seems reasonable" (Nagle & Holden, 1995, p. 79). Reference prices are determined in a variety of different ways, including the last price paid, going price, fair or just price, favorite brand price, average prices of similar goods, absolute price limit, and the expected future price (Morris & Morris, 1990).

Intermingled into the reference prices are the assumed qualities that are associated with the product. For the most part people know how much a six-pack of Pepsi costs. Most people would probably say it costs around \$2.00-\$3.00 for a six-pack. This is fairly easy because there are no other tangible or service related benefits associated with the product price. Hotel rooms and other service-oriented products on the other hand are much harder to determine. The reason is that service products have an intangible element to their offering. Berry & Yadav (1996) state explicitly that "The intangibility of services



makes it more difficult for customers to compare prices." (p. 42) Price thresholds are important in understanding reference prices: the following section will examine their importance.

### Price Thresholds

Price thresholds are an important variable in understanding reference prices.

Earlier it was stated that a reference price was based on past experiences, which could be individual, culminated, or even, assumed knowledge (no experience). Thresholds are also based on experience and assumed knowledge. They give an upper and lower limit as to what price is acceptable given a certain set of circumstances. The following adaptation of the text of Morris and Morris (1990) describes the two ends of the spectrum as:

Upper limit: "The upper limit beyond which the price is perceived as too high relative to perceived value."

Lower limit: "The lower limit beyond which the quality of the product becomes suspect." (p. 61)

These upper and lower limits are important because they determine whether the product will even be included in the *consideration set*. If the price is too low or high, the consumer may just pass the product by, without even trying to get pertinent information as to why the product may be valuable to that particular customer. Thresholds tie into reference prices in the sense that anything inside the upper and lower threshold limits will be considered as comparable to the reference price, any prices falling outside the limits will not be considered. This assumes that no other new information is introduced to the customer.

## Price Sensitivity

Price sensitivity is essentially, how sensitive a customer is to price, in terms of their purchase decision. It is highly predicated on purchase experience and product knowledge. The less experience the consumer has with a product the more likely they are to use price as an indicator of quality (Nagle & Holden, 1995). The experience concept is tied directly to reference prices. As stated earlier reference prices are built through purchase experiences. These experiences create an acceptable range from which a customer will purchase a product.

Price sensitivity is not only effected by past experiences but also by the number of available options. The actual number of options available is not truly what is important. It is the perceived number of options that makes the difference. The perceived substitutes effect states that "...buyers are more price sensitive the higher the product's price relative to the prices of the buyers perceived substitutes." (Nagle & Holden, 1995, p. 78) Effectively this means that if the customer perceives there to be no viable substitutes available then they will be fairly insensitive to high prices. One example is the price of food and drinks at professional sporting events. A hot dog priced at \$3.50 at a Laker's game is reasonable given the options. On the other hand, \$3.50 for one hot dog compared to \$3.00 for ten hot dogs at the grocery store is quite different. In terms of the hospitality industry and how this concept applies to yield management, the same may be true. If there are no other rooms available in town then the normally exorbitant "convention" rate may seem reasonable when compared to sleeping in the car. The problem is not the extreme situation; the problem lies in the middle ground. Many hotel managers believe that any room filled is better than an empty one. The problem is

that it may be creating an environment that is heavily focused on price. Sean Silcoff (1997) makes an excellent point when he says, "If you tell consumers 'price, price, price' all the time, that's what they'll think is important" (p. 62). This idea of always shifting price to manipulate demand may have some dangerous consequences. One risk is that of distorting reference prices. If the discounted rates become prevalent in a highly competitive market then rates may begin to drop in order to maintain market share. It is well known that many hotels shop their competitors to make sure their prices are in line with the other hotels. Because reference prices are based on experience, if the customer has only experienced a market where heavy discounting is used then that is all they will have to refer to. A classic example is the fare wars created by the airlines. Many consumers today still think that \$99 is a fair price to pay for a flight from Boston to Orlando (Dolan & Simon, 1996). Dolan & Simon contend that this reference price has a negative effect on demand, because consumers believe that, "if they could do it once for \$99 then they can do it again" (p. 271). This distorted reference price may also cause consumers to shop around. If their previous rate is not available then they may be inclined to look elsewhere.

Another risk is that of trying to gain the sale by immediate discounting. Many hotels train agents to offer reduced rates if the customer does not take the higher rate. Based on the "perceived substitutes" effect, this may cause consumers to be inclined to look elsewhere for even lower rates and "shop around." Discounting also may have a negative impact on the overall environment. A recent article by Guy Parsons (1996) states that "Long-term price discounting has been shown not to have a positive impact on customer loyalty in the travel industry, but many hotels and airlines still persist in

discounting prices.” (p.58) Nagle and Holden (1995) make the point that price discounting in highly competitive markets will definitely bring higher levels of sales and profits. The problem is that “Price cuts that boost your sales today will invariably change the industry you compete in tomorrow.” (p. 115) They hypothesize that offering prices that are not in line with the customer’s original reference price will cause the consumer to shop around for better rates. This shopping around phenomenon could definitely have an adverse affect on loyalty, because customers have begun to look for an alternative to their existing relationship. Silcoff (1997) punctuates this idea when he says; “The surest way to kill revenue, profit, and customer loyalty is to get into a price war.” (p. 62) Many hotels believe that they must have the lowest price to get the customer, however people rarely choose the cheapest product. This insistent focus on price may be training customers to be price sensitive and not focus on quality and attributes but only price. This focus poses the potential to destroy loyalty in the sense that the customer is no longer creating a relationship with the property but rather with the price they paid.

### Displacement

Displacement analysis is a technique that many hotels use to decide whether or not to take a piece of group business. It is founded on the idea that a group of rooms has a specific value in terms of potential revenue. Any business taken that is under the potential or forecasted amount is displacing higher rated business. Eric Orkin (1988) describes the process with the following exhibit:

	Monday	Tuesday	Wednesday
Rooms in Hotel	300	300	300
Rooms Committed to Groups	150	50	200
Expected Transient Demand	100	100	100
Availability to New Groups without Displacement	50	150	0
Group Under Consideration	50	50	50
<u>Primary Transient Displacement</u>	0	0	50

Figure 1: Example of Displacement. Adapted from "Boosting Your Bottom Line with Yield Management." by E.B. Orkin. 1988. Cornell Hotel and Restaurant Administration Quarterly, 28, (4), p. 55. Copyright 1988 by Cornell University.

A more sophisticated method takes into account the overall value of the pieces of business. Instead of looking only at room revenue, the total revenue for the event is taken into account (Knutson, Malk, & Schmidgall, 1995). Some common examples are rooms, catering, restaurant, beverage, and audiovisual revenues. This total revenue is then compared to the potential revenue that the transient business will bring in. Normally the room rate is lower than the transient rate because the group has been discounted because of the volume of rooms. If the group brings in less revenue than the forecasted higher rated business then displacement will occur. This same type of mentality is also used at the individual traveler level. This is done by creating a yield management calendar. A yield management calendar is created by looking at past sales trends and current booking patterns to decide what rates will be accepted. Much of this process is now computerized and reservations agents simply look to the computer to see what rates are acceptable. The goal is still the same, whether it is done through a sophisticated algorithm, a basic

regression forecasting system, or even manually calculated by management (Relihan, 1989). No matter what method is used, the process is still founded by analyzing how much revenue will be lost by taking one group or type of customer over another. The bottom line is how to maximize revenue.

The problem comes at the individual level. At the group level, the hotel has a proposed contract with all pertinent information on the overall value of the group and this can easily be compared to forecasted room rates. At the individual level however, the true value of the guest cannot be so easily ascertained. Well-designed profiling software has not proliferated throughout the industry. This means that the value of a loyal customer may not be taken into account when the system is deciding what rates are acceptable. This can create a true problem when a loyal customer calls to make a reservation and the rate is not available. Even higher rated corporate rates are not available during high demand periods. This creates the potential for the loyal customer to find a new relationship at other competing hotels. The hotel has invested time and money to attract and retain this customer through excellent customer service and product enhancements. All will be for naught if the customer finds a more committed partner at another hotel who actually does recognize their value to the hotel. Recent research reveals that customers will not normally buy an unfamiliar product just because the price is cut (Ehrenberg, Scriven, & Barnard, 1997). However, they may switch if the rate offered is above their acceptable price threshold or even allowable per diem. This study hypothesizes that a great majority of customers have at some time, switched to a new hotel based on the pricing maximizing strategy associated with yield management.

### Overbooking

Because yield management is highly demand driven and pushes for short-term maximization at every opportunity, many hotels practice a method known as overbooking. Overbooking is essentially hedging the bet that a certain number of guests will not show up for that particular night. Much of the yield management literature actually endorses overbooking. Kimes (1989) points out that most hotels have an overbooking policy and that the allowable level of overbooking should be built into the yield management system. Lieberman (1993) speaks about a consulting job in which the issue of overbooking was addressed. Even after the realization that overbooking does in fact result in unaccommodated guests, they still chose to increase overbooking to a higher level because of increased revenues. This fixation on immediate results is in constant conflict with the notion of building a long-term customer through commitment, trust, and non-opportunistic behavior.

Normally, when guests are physically displaced because of overbooking they are "walked" to another property. The original hotel pays for that night's stay and related transportation costs. The hotel usually tries to walk a guest who has multiple nights so that they can get the guest back the next day and win their trust and continued business. Although the hotel takes every action to minimize the situation, the guest may still choose not to stay with the first hotel again. Lieberman hypothesizes that forcing a guest to try a new hotel may also have an impact on the amount of switching that occurs at the individual property level. Once hotel allegiance is broken, clients may be more inclined

to stay at another property. This practice may play an important role in determining whether or not a guest stays loyal to a certain property.

A similar scenario was used in the survey to determine the potential impact this practice has on a company's most loyal customers. Past yield management studies have not examined this issue.



## **CHAPTER 3**

### **METHODOLOGY**

The purpose of this study is to examine the effects of shifting prices and overbooking on the perception of loyal customers. This study strives to find empirical evidence of how the use of yield management programs impacts the likelihood the customer will return to the hotel and refer the property to other business customers. Finally, this research attempts to link each of these variables to the customer's overall perception of loyalty.

This chapter discusses how the study was conducted. It addresses the issues of questionnaire design, survey administration, data cleaning, data analysis, sample size determination, and sample representativeness. This chapter also addresses site selection and statistical software selection.

#### **Questionnaire Design**

The design of the survey questionnaire is based on the need to examine the relationships between loyalty as measured by the clients likelihood of returning or referring the property and the yield management strategies of price shifting and overbooking.

The questions geared towards describing travel experience, area experience, income level, and gender, were multiple choice. Gender and income level were the only

demographic variables chosen because they were some of the least intrusive in terms of personal information. In many cases the more personal the information is skipped on surveys. Travel experience was included to get an overall feel for the general depth of travel background for the entire group.

Another series of questions addressed how well the respondents could recall past and present prices paid for hotel rooms. The level of recall may be important in terms of price sensitivity and reference prices. Another subset of questions was included to see if the ability to recall or identify prices had to do with who was paying for the travel.

The last series of questions were specific scenarios geared towards identifying attitudes towards common situations seen in the hospitality setting that result from using yield management. The following example demonstrates a common situation in which the hotel raises prices in order to maximize revenue when demand is high. The question asks the respondents to rate on a scale of 1-7 how this practice effects their intention to return or refer the hotel in the future:

#### **Scenario 1**

Assume that you are returning to this area, when you call to make a reservation at this hotel you find out that they are charging you \$30 more per night than they usually do because they only have a few rooms left. *Please circle the corresponding number.*

1. Based on the above scenario, how likely are you to return to this hotel?

Will NOT  
Stay again

May or May Not  
Stay again

Definitely WILL  
stay again

1      2      3      4      5      6      7

2. Based on the above scenario, how likely are you to refer this hotel to another business traveler?

<u>Will NOT</u> Refer				May or May Not Refer				Definitely <u>WILL</u> Refer
	1	2	3	4	5	6	7	

### Sample

The sample of this study is derived from business travelers coming to an area known as the "Silicon Forest." It is located on the outskirts of Portland, Oregon, the "Silicon Forest" is home to some of the largest computer and product manufacturing companies in the world. Companies like Intel (processor chips), Tektroniks (components), Epson (printers), Hewlett Packard (printers), A-Dec (dental equipment), and Nike (corporate headquarters) are located in the "Silicon Forrest". Each of these companies brings into the area a multitude of experienced business travelers who very often have travel throughout the country and even the world. The reason that this region was selected is that this mix of clientele offers a wealth of travel experiences and insights. The three hotels used in the study are located in Portland, Beaverton, and Lake Oswego. All of the hotels are within 15-20 miles of the silicon forest. The three hotels ranged in size from 192 rooms to 300 rooms.

### Sample Selection

The population of interest for this study is U.S. business travelers that have traveled to the Beaverton/Portland area. These travelers are highly thought to be experienced travelers because of the types of companies that populate the area. The three

properties were chosen based on available cooperation by upper management and the types of travelers that these properties attract (business travelers).

### Survey Pre-test

A total of 100 pre-test surveys were distributed to the target group prior to the distribution of the final survey. The response rate was 20% with twenty surveys being returned. The pre-test helped gauge not only the response rate but also question patterns that may have caused omission. The collection of the respondent's zip code was removed based on analytical complications.

### Survey Administration

Each of the three hotels were given about 400 surveys to distribute at the front desk. The surveys were handed out at check-in and were given randomly to guests who were paying a corporate rate. This reduced the chance that a leisure traveler would be included in the population. Each survey packet included a cover letter describing the importance of the customer's participation, a brief description of the study, and a self-addressed stamped envelope for easy return. The surveys were mailed back by the individual travelers at their convenience. During the course of the survey distribution, numerous calls were made to key participating executives to remind front desk representatives to distribute surveys as response volume decreased during the summer.

### Data Analysis

The statistical software SPSS 8.0 was used for data input and analysis. In order to help reduce the variance in the distributions for each of the variables, a 7 point Likert scale was used. By using the same measurement scale for the variables, the variance was reduced. The results of the analysis will be discussed in detail in Chapter Four.

### Hypotheses

Each hypothesis is stated in terms of the difference between the business traveler's initial attitude towards a hotel and that same guest's attitude if the hotel were to act in a specific way. The questions were paired according to their appropriate counterpart.

**Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if regular rates are increased based on demand.

**H1:** There will be a difference in a business traveler's likelihood to return to the hotel if regular rates are increased based on demand.

**Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if regular rates are increased based on demand.

**H2:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if regular rates are increased based on demand.

- Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.
- H3:** There will be a difference in a business traveler's likelihood to return to the hotel if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.
- Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.
- H4:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out that the guest in front of them is paying a reduced rate because of an excess of rooms to sell.
- Ho:** There will be no difference in a business traveler's likelihood to return to the hotel if they find out their rate is higher because they are receiving more amenities than another guest.
- H5:** There will be a difference in a business traveler's likelihood to return to the hotel if they find out their rate is higher because they are receiving more amenities than another guest.

- Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out their rate is higher because they are receiving more amenities than another guest.
- H6:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers if they find out their rate is higher because they are receiving more amenities than another guest.
- Ho:** There will be no difference in a business traveler's likelihood to return to the hotel when they are walked to another hotel.
- H7:** There will be a difference in a business traveler's likelihood to return to the hotel when they are walked to another hotel.
- Ho:** There will be no difference in a business traveler's likelihood to refer the hotel to other business travelers when they are walked to another hotel.
- H8:** There will be a difference in a business traveler's likelihood to refer the hotel to other business travelers when they are walked to another hotel.

Each of the hypotheses was tested at a significance level of .05, which is common in studies of this nature. A t-test was used measure the attitudes of the respondents toward the hotel they were staying in before and after a hypothetical scenario was introduced.

### Summary

The survey instrument was designed to measure the effects of price shifting and overbooking on customer loyalty perception. The sample was drawn from business travelers coming to the Beaverton/Portland area. Most of the travelers in the area are drawn in from the large companies located in the "Silicon Forrest". The response rate ended up only at about 9% based on 109 returned surveys and 1220 surveys distributed to the participating hotels. It is unknown whether or not all of the surveys were distributed by the front desk agents. The validity of the response rate will be addressed in the limitations section of chapter five.



## **CHAPTER 4**

### **DESCRIPTIVE ANALYSIS OF THE FINDINGS**

#### **Overview of Respondents**

A total of 109 surveys were collected, of those 98 were completed and usable in the analysis. The essential relationships were measured in questions 14, 15, 16a, 17a, 16r, 17r, 18, and 19. The scenario questions allowed the examination of the respondents attitude before (questions 8-9) a specific scenario was introduced, and then after (questions 14-19) it was revealed. These comparisons allowed for the identification of a difference in attitude before and after the scenarios. Each of the questions were measured on a 7 point Likert scale (where 1 is very negative and 7 is very positive) to ensure consistent variable comparison. The results of the hypothesis test are presented in Chapter Four. The significance level for the hypotheses testing was set a significance level of .05.

The following tables 1-5 represent general demographics (Gender and income) and travel experience. The travel background is broken into three distinct experience categories. The categories looked at frequency of visits to a hotel on business, frequency to the Beaverton/Portland area, frequency to the specific hotel they are currently staying at, all in the last 12 months.

Table one examines the breakdown of the respondents in terms of gender, this information may useful in determining trends in between gender categories in terms of

attitudes towards yield management scenarios. Chart 1 shows that most of the respondents were male (70%) with only a small number of female respondents (30%) in this sample.

Table 1

Gender

<b>Group</b>	<b>Frequency</b>	<b>A</b>	<b>B</b>
		<b>Percent</b>	<b>Cumulative %</b>
<b>Male</b>	<b>71</b>	<b>70.3</b>	<b>70.3</b>
<b>Female</b>	<b>30</b>	<b>29.7</b>	<b>100.0</b>
<b>Total</b>	<b>101</b>	<b>100.0</b>	

Table 2 looked at the annual salary range of the respondents. This information may be useful in determining degrees of price sensitivity based on levels of income.

Table 2 shows that almost all (94%) earned over \$40,000 per year. The greatest majority of the respondents (33%) earned an annual income of over \$100,000, the second largest group (22%) earned \$70,001-\$85,000 per year.

Table 2

Salary Range

<b>Group</b>	<b>Frequency</b>	<b>A</b>	<b>B</b>
		<b>Percent</b>	<b>Cumulative %</b>
<b>\$0-\$25,000</b>	1	1.0	1.0
<b>\$25,001-\$40,000</b>	5	5.1	6.1
<b>\$40,001-\$55,000</b>	15	15.2	21.2
<b>\$55,001-\$70,000</b>	14	14.1	35.4
<b>\$70,001-\$85,000</b>	22	22.2	57.6
<b>\$85,001-\$100,000</b>	9	9.1	66.7
<b>More than \$100,000</b>	33	33.3	100.0
<b>Total</b>	99	100.0	

Table 3 looked at travel frequency for business purposes over the last 12 months. The question was specific as to the number of times the respondent had stayed in a hotel of the last 12 months. Travel frequency may be a useful indicator in terms of loyalty or price sensitivity. The respondents in this sample seemed to be highly experienced on an overall level, with over 57% of the group having stayed 16 or more times in a hotel on business in the last year. This high level of experience may be a great resource for further analyses.

Table 3

# of times guest has stayed in a hotel in the last 12 months

Group	Frequency	A	B
		Percent	Cumulative %
0	3	3.0	3.0
1-3	9	9.1	12.1
4-6	7	7.1	19.2
7-9	9	9.1	28.3
10-12	7	7.1	35.4
13-15	6	6.1	41.4
16+	57	57.6	99.0
N/A	1	1.0	100.0
Total	99	100.0	

Table 4 looked at the same question, but in a narrower perspective. The question looked at business travel frequency at the local level (Beaverton/Portland area). This question helps qualify the respondents local experience. Table 4 shows a quite different picture in terms of travel frequency. Although 29% of the respondents had stayed 6 or more times in the area in the last 12 months (half as many as table 3), a very large percent of the sample (53%) had only been to the area 0-3 times in the last 12 months. This factor may effect the initial level of loyalty in later questions on the survey.

Table 4

# of times guest has stayed in Beaverton/Portland area in last 12 months

Group	Frequency	A	B
		Percent	Cumulative %
0	16	16.3	16.3
1	16	16.3	32.7
2	20	20.4	53.1
3	7	7.1	60.2
4	6	6.1	66.3
5	4	4.1	70.4
6+	29	29.6	100.0
Total	98	100.0	

Table 5 narrows the previous question even more. The question looks at the respondents travel frequency to the hotel with which they are currently staying. This question may be an indicator of how strong the initial loyalty is for the group. Table 4 shows that most all of the respondents (69%) had only stayed at their current hotel 0-2 times in the past 12 months. These numbers may helpful in understanding the level of initial loyalty

Table 5

# of times guest has stayed at this hotel in past 12 months

Group	Frequency	A	B
		Percent	Cumulative %
0	33	33.7	33.7
1	17	17.3	51.0
2	18	18.4	69.4
3	5	5.1	74.5
4	3	3.1	77.6
5	4	4.1	81.7
6+	18	18.3	100.0
Total	98	100.0	

Many business travelers do not pay for their own accommodations as it can be hypothesized that because it is not their money they do not pay attention to the rate they are paying. This idea is an important piece in understanding if business travelers are in fact price sensitive. Because if they did not care about the rate because it was not their own money they probably would not be able to recall any prices and thus there would be no reference prices compare with thus creating any sensitivity.

The following tables 6-9 look at four areas, who makes the accommodations, who pays for the accommodations, could they identify their current rate, what their price threshold (upper limit) was. The upper limit indicates a price point (increased) at which the hotel will no longer be considered. It is important to understand whether or not business travelers make their own accommodations. If they do not they are probably less likely to be aware of the prices they are being charged making their price sensitivity less impactful. Table 6 shows that a great majority of the respondents (68%) did in fact choose their own accommodations, when they traveled to this area.

Table 6

How travel plans are handled

Group	Frequency	A	B
		Percent	Cumulative %
Choose own accommodations	67	68.4	68.4
Choose hotel from company list	5	5.1	73.5
My company chooses for me	12	12.2	85.7
Corporate agent chooses for me	8	8.2	93.9
Other	6	6.1	100.0
Total	98	100.0	

Whether or not the business travelers paid for their accommodations may have an effect on how important price is to the traveler. Table looks at how many of the business travelers in this study paid for their own room. The table shows that almost all (82.7%) of the respondents in this sample have their expenses handled by their company.

Table 7

How travel expenses are handled

Group	Frequency	A	B
		Percent	Cumulative %
Pay own travel expenses	9	9.2	9.2
I keep money under my per diem	4	4.1	13.3
My company pays all expenses	81	82.7	95.9
My company keeps any money under the per diem	1	1.0	96.9
Other	3	3.1	100.0
Total	98	100.0	



Table 8 shows how many of the respondents in this study were able to identify their current rate. Of the 98 valid responses 80 (81.6%) of the respondents were able to identify the rate they were paying for their current stay. This is similar to table 6 where about 68% of the respondents made their own accommodations.

Table 8

Respondents who were able to identify their current rate for this stay

Group	Frequency	A	B
		Percent	Cumulative %
Could identify current rate	80	81.6	81.6
Don't Know	17	17.3	98.9
N/A	1	1.1	100.0
Total	98	100.0	

The price threshold or upper limit plays an important role in price sensitivity because it marks the point (price) at which the hotel will no longer be considered. Table 9 shows how many of the respondents in this study were able to identify an upper limit or price threshold. In table 9, the majority of the respondents (68%) said that there was a rate at which the hotel would no longer be considered. Whether or not that rate can be quantified is yet to be determined.

Table 9

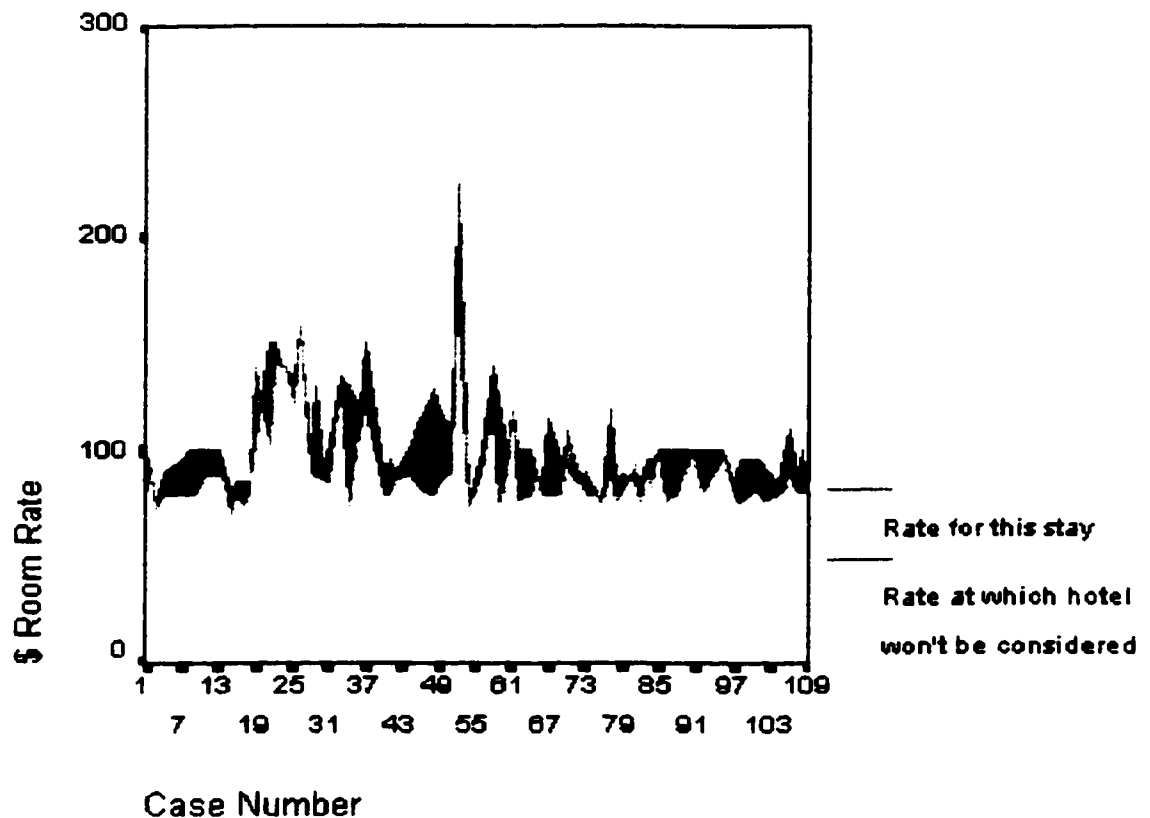
Is there a rate at which the hotel will no longer be considered

Group	Frequency	A	B
		Percent %	Cumulative %
Yes	66	68.0	68.0
No	7	7.2	75.2
Don't Know	23	23.7	98.9
N/A	1	1.1	100.0
Total	97	100.0	

One of most useful pieces of information for managers is the comparison of actual prices versus perceived thresholds. Perceived thresholds, whether they are reasonable or not, are truth in the minds of the consumer. Understanding where these points are can help managers make more informed decisions in terms of what rates to offer to specific groups. One common example is business travelers. Chart 1 reported rates ranging from \$69-\$175 per night with an average charge of \$90.75. Sixty-five travelers stated that there was an upper room price threshold at which they would no longer consider the hotel. Sixty-three of those were able to identify an actual rate, with \$104.70 as the average upper threshold rate. On average the difference between what was being paid and the upper threshold was only \$13.00.

Chart 1

Range of disparity between current rate and upper threshold



The next group of tables 10-20 look at general attitudes of loyalty on an initial basis and then after a specific scenario is introduced. Each of the tables are paired together and stem from one question. Each question allowed two separate responses in terms of the respondent's intention to return and refer the hotel with which they were currently staying. In later analyses, these initial intentions to return and refer were compared to the respondents' intentions after a specific scenario was introduced. All of the questions are listed as they were printed on the survey for reference in Appendix 1.

Table 10 addressed the business travelers initial intention to return. Although earlier tables (4-5) showed that many respondents were fairly inexperienced in terms of frequency to the area and with their current hotel, the initial intentions to return and refer were fairly high. Table 10 shows a mean score of 5.71 which correlates to a high intention to return. Over 67% of the respondents said that they probably or definitely would return the next time they were in the area, based on their initial response. Table 11 showed similar results that also had a mean score of 5.71. Over 68% of the respondents initially said that they would refer their current hotel to other business travelers. Based on these two tables (10 & 11) the results are very clear that the sample group had a very favorable outlook of the hotel in terms of loyalty.

Table 10

Initial likelihood of return

Responses	Frequency	A	B
		Percent	Cumulative %
1-Will not return	1	1.0	1.0
2-Probably will not return	1	1.0	2.0
3-Might not return	2	2.0	4.1
4-May or may not return	21	21.4	25.5
5-Might return	7	7.1	32.7
6-Probably will return	30	30.6	63.3
7-Definitely will return	36	36.7	100.0
Total	98	100.0	
Mean	5.71	Std. Deviation	1.35

Table 11

Initial likelihood of referral

Responses	Frequency	A	B
		Percent	Cumulative %
1-Will not refer	1	1.0	1.0
2-Probably will not refer	1	1.0	2.0
3-Might not refer	3	3.1	5.1
4-May or may not refer	20	20.4	25.5
5-Might refer	6	6.1	31.6
6-Probably will refer	31	31.6	63.3
7-Definitely will refer	36	36.7	100.0
Total	98	100.0	
Mean	5.71	Std. Deviation	1.37

Yield management is used in many hotels and one of the most practical uses in everyday industry is to maximize revenue by shifting rates up or down based on demand.

By doing this, the theory is that revenue will be maximized when demand is high because the rooms command a higher price. One of the scenarios in this study looks at a situation in which a guest is calling back to make a reservation return to the area. However, the business traveler notices that they are being charged \$30 more because availability is limited and rates have been raised. The following three tables, 12-14 address how the sample responded to this scenario.

The next table number 12, looked at the general attitude towards the acceptability of raising rates based on availability. This question was not paired off in terms of a likelihood to return or refer. However, it did give a general perspective of the business travelers in this sample. This sample group felt very strongly that it was not acceptable to raise rates based on demand. Table 12 illustrates this with 46% saying that it definitely was not acceptable, 20% saying it was probably not acceptable. Over 66% found this practice unacceptable.

Table 12

Acceptability of raising rates based on availability

Responses	Frequency	A	B
		Percent	Cumulative %
1-Definitely is not acceptable	46	46.5	46.5
2-Probably not acceptable	20	20.2	66.7
3-Might not be acceptable	12	12.1	78.8
4-May or may not be acceptable	8	8.1	86.9
5-Might be acceptable	9	9.1	96.0
6-Probably acceptable	1	1.0	97.0
7-Definitely is acceptable	3	3.0	100.0
Total	99	100.0	
Mean	2.28	Std. Deviation	1.61

Tables 13-14 are the actual loyalty indicators from the previous question. They also refer to the same situation in which room rates are increased based on limited availability. Instead of talking about acceptability, tables 13-14 look at how this practice effects the respondent's intention to return and refer that particular hotel. Table 13 showed that about 50% of the respondents were not willing to return because of this rate increase. Table 14 used the same scenario but looked at the intention to refer. The results were similar in the sense that 52% of business travelers were not willing to refer the hotel they were staying in based on the increase in room rates associated with high demand.

Table 13

Likelihood of return when price is raised based on availability

Responses	Frequency	A	B
		Percent	Cumulative %
1-Will not return	29	29.3	29.3
2-Probably will not return	21	21.2	50.5
3-Might not return	14	14.1	64.6
4-May or may not return	20	20.2	84.8
5-Might return	11	11.1	96.0
6-Probably will return	2	2.0	98.0
7-Definitely will return	2	2.0	100.0
Total	99	100.0	
Mean	2.77	Std. Deviation	1.58

Table 14

Likelihood of referral when price is raised based on availability

Responses	Frequency	A	B
		Percent	Cumulative %
1-Will not refer	33	33.3	33.3
2-Probably will not refer	19	19.2	52.5
3-Might not refer	6	6.1	58.6
4-May or may not refer	23	23.2	81.8
5-Might refer	10	10.1	91.9
6-Probably will refer	5	5.1	97.0
7-Definitely will refer	3	3.0	100.0
Total	99	100.0	
Mean	2.85	Std. Deviation	1.76

In many situations guests who are in line hear what rates other guests are paying, this can be a concern when there are group or discount travelers mixed in with business



travelers. In many cases one guest just had better timing and got a better rate because a block of rooms canceled and the hotel had a number of vacant rooms for the week. In other cases the guest are truly paying for more services and amenities, for example, corporate rates. The next scenario looked at both spectrums in the sense that the business traveler inevitably found out that they were paying a higher rate and the differentiating factor was how the front desk agent explained the difference in price. This scenario was split up and given as two different questions. One scenario was on one group of surveys and another on the other group of surveys. This was done in order to see if one response was more effective than the other was. This question could effect the perception of value and perhaps the business travelers intention to return and refer the hotel.

The next two tables 15-16 were based on the following scenario: While you were standing in line for check-in, you found out that the traveler in front of you paid \$30 less than you did the same type of room. When you asked the front desk agent, they stated that the previous guest was not receiving the business amenities that you were. Table 15 addressed the business traveler's likelihood to return and table 16 addressed the likelihood to refer. Table 15 gave some interesting results. Only 16.8% of the people who received this version of the survey said that they might return or definitely would return after this situation occurred. That means that over 83% of this group ranged from might not return to definitely would not return. Table 16 showed similar results in the sense that only 18.6% of the respondents with this version said that they might refer or definitely would refer the hotel to other business travelers. That means that again, based on these respondents, over 83% of this group ranged from might not or definitely would not refer the hotel to other business travelers.

Table 15

16a-Likelihood of return when another guest gets a lower rate because of less amenities

Responses	Frequency	A	B
		Percent	Cumulative %
1-Will not return	12	22.2	22.2
2-Probably will not return	11	20.4	42.6
3-Might not return	8	14.8	57.4
4-May or may not return	14	25.9	83.3
5-Might return	5	9.3	92.6
6-Probably will return	3	5.6	98.1
7-Definitely will return	1	1.9	100.0
Total	54	100.0	
Mean	3.04	Std. Deviation	1.60

Table 16

17a-Likelihood of referral when another guest gets a lower rate because of less amenities

Valid	Frequency	A	B
		Percent	Cumulative %
1-Will not refer	16	29.6	29.6
2-Probably will not refer	8	14.8	44.4
3-Might not refer	4	7.4	51.9
4-May or may not refer	16	29.6	81.5
5-Might refer	5	9.3	90.7
6-Probably will refer	3	5.6	96.3
7-Definitely will refer	2	3.7	100.0
Total	54	100.0	
Mean	3.06	Std. Deviation	1.77

Tables 17-18 looked at the same type of situation in which a business traveler found out that they were paying a higher rate (\$30) than another guest was. In the second scenario, the front desk handles the situation a little differently. In this case the question is handled in a different manner and the agent states that the hotel had a large number of rooms open up for the week so the rate was reduced in order to sell the surplus of rooms. The previous scenarios (tables 15-18) are based on personal experience both as a front desk manager and as a business traveler. These two responses are common and front desk agents are often trained to address similar situations in this manner. Table 17 showed similar results (although slightly better) to table 15, with only 15.5% of the respondents receiving this version of the survey ranging from might return to definitely will return. That means that over 84% of the group ranged from may or may not return to will not return. It seems that the type of response does not greatly influence the possible damaged perception of the value that the guest is receiving. Table 18 was similar to table 16, with only 13.3% of the respondents with this version ranging from might refer to definitely will refer. Again, that means that over 86% of the respondents ranged from may or may not refer to Definitely will not refer. This question does seem to fare a little worse when compared to table 16, although both were fairly negative.

Table 17

16r-Likelihood of return when another guest gets a lower rate because a block of rooms opens up

Response	Frequency	A	B
		Percent	Cumulative %
1-Will not return	13	28.9	28.9
2-Probably will not return	15	33.3	62.2
3-Might not return	2	4.4	66.7
4-May or may not return	8	17.8	84.4
5-Might return	3	6.7	91.1
6-Probably will return	2	4.4	95.6
7-Definitely will return	2	4.4	100.0
Total	45	100.0	
Mean	2.71	Std. Deviation	1.74

Table 18

17r-Likelihood of referral when another guest gets a lower rate because a block of rooms opens up

Valid	Frequency	A	B
		Percent	Cumulative %
1-Will not refer	14	31.1	31.1
2-Probably will not refer	14	31.1	62.2
3-Might not refer	2	4.4	66.7
4-May or may not refer	9	20.0	86.7
5-Might refer	1	2.2	88.9
6-Probably will refer	4	8.9	97.8
7-Definitely will refer	1	2.2	100.0
Total	45	100.0	
Mean	2.67	Std. Deviation	1.72

Yield management is focused on maximizing revenue at every opportunity and one way of doing this is by gambling with the number of reservation that are taken each

day. Every day a certain number of reservations are taken and in many cases a number of guest do not show up to claim their reservation leaving a vacant room. The goal of every front desk manager is to try to achieve a "perfect fill" in which all the rooms are filled and no guest were displaced because of overbooking. Many hotels overbook to try to compensate for "no shows" and end up gambling with guaranteed reservations. In some cases, the hotel loses and a guest with a guaranteed reservation is displaced. In this circumstance, the hotel normally pays for transportation and one nights lodging to another comparable hotel nearby. This is what is termed as "walking" a guest. Although a walk does not occur every day, the process may have dire effects on loyalty in terms of whether or not the guest will even return let alone refer the offending hotel in the future. Tables 19-20 look at the same scenario in a hypothetical manner by asking how likely the business traveler would be to return and also refer the hotel if this were to happen to them. Table 19 looked at likelihood to return while table 20 addressed the likelihood to refer the hotel to other business travelers in the future. Table 19 shows that 30.3% of the respondents ranged from might return to definitely will return. That means that over 69% of the respondents ranged from may or may not return to will not return. Table 20 also showed a fairly negative outlook on the practice with this group of respondents, with even less (28.3%) ranging from might refer to definitely will refer the hotel to other business travelers. That means that over 71% of this group ranged from may or may not refer to definitely will not refer.

Table 19

Likelihood of return after being walked

Response	Frequency	A	B
		Percent	Cumulative %
1-Will not return	36	36.4	36.4
2-Probably will not return	13	13.1	49.5
3-Might not return	6	6.1	55.6
4-May or may not return	14	14.1	69.7
5-Might return	8	8.1	77.8
6-Probably will return	11	11.1	88.9
7-Definitely will return	11	11.1	100.0
Total	99	100.0	
Mean	3.22	Std. Deviation	2.20

Table 20

Likelihood of referral after being walked

Valid	Frequency	A	B
		Percent	Cumulative %
1-Will not refer	42	42.4	42.4
2-Probably will not refer	10	10.1	52.5
3-Might not refer	4	4.0	56.6
4-May or may not refer	15	15.2	71.7
5-Might refer	5	5.1	76.8
6-Probably will refer	12	12.1	88.9
7-Definitely will refer	11	11.1	100.0
Total	99	100.0	
Mean	3.11	Std. Deviation	2.25

## Hypothesis Testing

The data from the surveys was used to test the hypotheses from the first chapter. The following hypotheses are based on the hypothetical scenarios from the questionnaire and each will be validated using a t-test to analyze the relationship.

Each scenario had two measurement tools to evaluate the level of loyalty after the scenario was introduced. The two measurement tools were the likelihood to return and the likelihood to refer the hotel. These results were paired with the initial likelihood to return and refer respectively. The means were then compared using an paired sample t-test to validate the relationship.

The first two hypotheses looked at a situation in which a business traveler is returning to the area and makes a reservation but must pay \$30 more per night because there are only a few rooms left to sell. This scenario is a common situation in the hotel industry because of the prevalence of yield management pricing in hotels today. It is very common for hotels to close of rate packages such as corporate rates when availability becomes limited.

Table 21 (hypothesis 1) looks at the comparison of the means before (initial likelihood to return) and the likelihood to return after the scenario was introduced. The initial mean score was 5.71 and shifted to 2.76 after the scenario was presented. Based on a 2 tailed significance of .000, the null hypothesis can be rejected at the significance level of .05.

Table 22 (hypothesis 2) looked at he same comparison but in terms of the likelihood to refer the hotel to other business travelers. The initial mean score in table 22

was 5.71 and shifted to 2.84 after the scenario was presented. Based on a 2 tailed significance of .000, the null hypothesis can be rejected at the significance level of .05

Table 21

Hypothesis 1

<u>Paired Samples Statistics</u>				
<u>Pair 1</u>	<u>Mean</u>	<u>N</u>	<u>Std. Deviation</u>	<u>Std. Error Mean</u>
Initial likelihood of return	5.71	98	1.35	0.14
Likelihood of return when price is raised based on availability	2.76	98	1.59	0.16

<u>Paired Samples Test</u>				
Pair 1-Initial likelihood of return & likelihood of return when price is raised based on availability				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.96	1.82	0.18		
<hr/>				
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.32	2.59	16.082	97	.000



Table 22

Hypothesis 2

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of referral	5.71	98	1.37	0.14
Likelihood of referral when price is raised based on availability	2.84	98	1.77	0.18

<u>Paired Samples Test</u>				
Pair 1-Initial likelihood of referral - Likelihood of referral when price is raised based on availability Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.88	1.94	.20		
<hr/>				
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.27	2.49	14.695	97	.000

The third, fourth, fifth, and sixth, hypotheses looked a situation which is a common occurrence in the hospitality industry. The scenario introduced a situation where a business traveler finds out that the customer in front of them is paying \$30 less per night. There were two different versions of the scenario distributed on the surveys. Each proposed a different way that the front desk agent would address the concern. This was done to help evaluate whether one response was more effective than another. The first response was based on explaining that the previous guest was receiving less

amenities, the second was an explanation of a lower rate because a large block of rooms opened up for the week.

Table 23 (hypothesis 3) looks at how the amenity based response effected the intention to return to the hotel. The initial mean score in table 23 was 5.81 and shifted to 2.81 after the scenario was introduced. Based on a 2 tailed significance of .000 the null hypothesis can be rejected at the significance level of .05.

Table 24 (hypothesis 4) looked at how the amenity-based response effected the intention to refer the hotel to other business travelers. The initial mean score in table 24 was 5.76 and shifted to 3.06 after the scenario was introduced. Based on a significance of .000 the null hypothesis can be rejected at the significance level of .05.

Table 23

Hypothesis 3

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of return	5.81	54	1.24	.17
Likelihood of return when another guest gets a lower rate because of less amenities	3.04	54	1.60	.22

Paired Samples Test

Pair 1-Initial likelihood of return & likelihood of return when another guest gets a lower rate because of less amenities

## Paired Differences

Mean	Std. Deviation	Std. Error Mean
2.78	1.80	.24

## 95% Confidence Interval of the Difference

Upper	Lower	t	df	Sig. (2-tailed)
3.27	2.29	11.353	53	.000

Table 24

Hypothesis 4

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of referral	5.76	54	1.27	.17
Likelihood of referral when another guest gets a lower rate because of less amenities	3.06	54	1.77	.24

<u>Paired Samples Test</u>				
Pair 1 Initial likelihood of referral & likelihood of referral when another guest gets a lower rate because of less amenities				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.70	2.01	.27		
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.25	2.16	9.905	53	.000

The next two hypotheses are from the same type scenario as before only a different version. In this instance the front desk agent's response was geared towards explaining that a large number of rooms had opened up for the week so prices were reduced to sell the surplus of rooms.

Table 25 (hypothesis 5) looked at how shifting rates downward to increase demand effected the intention to return. The initial mean score in table 25 was 5.59 and

shifted to 2.68 after the scenario was introduced. Based on a two tailed significance of .000 the null hypothesis can be rejected at the significance level of .05.

Table 26 (hypothesis 6) looked at the same scenario but in reflected the business travelers to intention to refer. The initial mean score was 5.66 and shifted to 2.64 after the scenario was introduced. Based on a two tailed significance of .000 the null hypothesis can be rejected at the significance level of .05.

**Table 25**

**Hypothesis 5**

<b><u>Paired Samples Statistics</u></b>				
<b>Pair 1</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
Initial likelihood of return	5.59	44	1.48	.22
Likelihood of return when another guest gets a lower rate because a block of rooms opens up	2.68	44	1.75	.26

<u>Paired Samples Test</u>				
Pair 1 Initial likelihood of return & likelihood of return when another guest gets a lower rate because a block of rooms opens up				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.91	2.08	.31		
<hr/>				
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.54	2.28	9.287	43	.000

Table 26

Hypothesis 6

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of referral	5.66	44	1.49	.23
likelihood of referral when another guest gets a lower rate because a block of rooms opens up	2.64	44	1.73	.26
<u>Paired Samples Test</u>				
Pair 1-Initial likelihood of referral & likelihood of referral when another guest gets a lower rate because a block of rooms opens up				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
3.02	2.17	.33		
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.68	2.36	9.229	43	.000

Overbooking is a common practice and is prevalent in many hotels using yield management. This is done to hedge against the chance that guests do not show up for their guaranteed reservations. Much of the yield management literature is in support of this practice. The last two hypotheses address this scenario which is based on a typical situation in which the hotel has overbooked and a business traveler is displaced or "walked" to another hotel at the expense of the original hotel.

Table 27 (hypothesis 7) looks at the scenario in terms of the respondents' intention to return. The initial mean score was 5.71 and shifts to 3.23 after the scenario is introduced. Based on a 2 tailed significance of .000 the null hypothesis can be rejected at the significance level of .05.

Table 28 (hypothesis 8) looks at the same scenario also, but in terms of the respondents likelihood to refer the hotel after the scenario is introduced. The initial mean score was 5.71 and shifted to 3.13 after the scenario was introduced. Based on a 2 tailed significance of .000 the null hypothesis can be rejected at the significance level of .05.

Table 27

Hypothesis 7

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of return				
	5.71	98	1.35	.14
Likelihood of return after being walked				
	3.23	98	2.20	.22

<u>Paired Samples Test</u>				
Pair 1 Initial likelihood of return & likelihood of return after being walked				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.48	2.60	.26		

95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.00	1.96	9.436	97	.000



Table 28

Hypothesis 8

<u>Paired Samples Statistics</u>				
Pair 1	Mean	N	Std. Deviation	Std. Error Mean
Initial likelihood of referral	5.71	98	1.37	.14
Likelihood of referral after being walked	3.13	98	2.25	.23
<u>Paired Samples Test</u>				
Pair 1 Initial likelihood of referral & likelihood of referral after being walked				
Paired Differences				
Mean	Std. Deviation	Std. Error Mean		
2.58	2.64	.27		
95% Confidence Interval of the Difference				
Upper	Lower	t	df	Sig. (2-tailed)
3.11	2.05	9.668	97	.000

### Summary of Survey Data and Hypothesis Testing

The results of this study were in line with the previous literature review and past industry experience. Although the sample size was small, the significance level for all of the hypotheses was at .000. Further studies are needed to determine if these results are representative of larger populations, in terms of their attitudes towards similar yield management practices

## **CHAPTER 5**

### **SUMMARY CONCLUSIONS AND RECOMMENDATIONS**

#### **Summary**

This study found that most business travelers indicated a negative response pattern towards heavy rate shifting. If these findings are even moderately accurate then we must use caution in how we use yield management. As stated earlier small shifts in customer retention can improve revenues tremendously. Conversely, small losses of a companies most loyal customer may have equally tremendous results on revenues, but in a negative manner. This study is the tip of the iceberg and further studies will help identify attitudes towards yield management on a much broader scale.

#### **Implications for the Hotel Industry**

Hotels by nature have a perishable product and any rooms not sold today cannot be resold tomorrow, the revenue has been lost. The continual focus on shifting rates to manipulate demand may have dire consequences. As this study showed, most business travelers were unlikely to return to or refer the hotel to other business travelers in the future. It seemed too that the loyal customers were very sensitive to shifting rates. The value of these loyal customers is tremendous and it is important not to lose sight of the long term while in pursuit of daily numbers. These loyal customers are a great

advertising resource through referrals and a consistent source of revenues considering that most all of the travelers in this study chose their own accommodations. The loyal customers are the ones that will produce the consistent long-term revenues. It is important that loyalty not only be a part of the marketing but also part of the infrastructure in terms of how day to day business is handled. Mechanisms must be in place to ensure that loyal business travelers are not subject to the daily fluctuation of prices and measurement techniques must be employed as to how well loyalty is being handled on a day to day business. Many companies like Ritz-Carlton have implemented technology to help identify loyal customers and make sure that their intermediate and long term values are recognized. These types of systems can help shift the focus away from short-term revenue goals towards the realization of a customers long-term value. The loyal customer has the potential to make a good company great and increase their value exponentially, companies like USAA, British Airways, and Ritz-Carlton are proof of how important loyal customers are to the success of an organization.

### Implications for Future Research

This study was only the tip of the iceberg. There is a plethora of opportunities for larger more focused studies of this nature. One exciting area alludes to how loyalty programs may effect overall loyalty, if fact, price may not be the real concern but the benefits associated with the loyalty program. Another idea addresses the idea of examining the different business travelers based on how their per-diem is structured, in terms of keeping the per-diem for themselves or the company getting it. Lastly, it may be beneficial to look at the difference in attitudes between business and leisure travelers.

Although the response rate was quite low, the findings of this study offer great potential for further research. With only 98 respondents, the results still reflected a pattern of negative response towards shifting price to accommodate demand and walking guaranteed customers, in regards to business travelers. This was especially noticeable in the customers that were highly loyal. The potential for future studies exists at a corporate level for large hotel companies. The examination of their current business practices in terms of the use of yield management and how it affects not only business travelers, but also their most loyal customers. These highly loyal customers are quite valuable and every effort should be taken to ensure that the relationship is not destroyed over short-term profits. Many other opportunities exist in this area of research. Exciting opportunities exist in this area of research. Some examples are; how primary and auxiliary frequent traveler programs may effect loyalty, convention bureaus, in terms of increased rates during large citywide conventions (e.g. COMDEX). The rates paid during conventions may ultimately effect future purchase decisions.

### Limitations

The total number of surveys distributed to the three participating hotels was 1225. These surveys were given at random to business travelers from May-August, 1999 when they checked into their rooms. An accurate response rate has been difficult to determine due to the number of undistributed surveys. Hotel executives also reported reduced business traveler volume over the summer and low occupancy rates resulting from a recent addition of rooms in the market.

This study was conducted on a limited and specialized market. Three hotels in the metropolitan area of Portland Oregon comprised the hotel base. Portland, Oregon, the “silicon forest” is home to some of the largest computer and product manufacturing companies in the world. Companies like Intel (processor chips), Tektroniks (components), Epson (printers), Hewlett Packard (printers), A-Dec (dental equipment), and Nike (corporate headquarters). The results reflect the geographics and industry of the local area and should not be generalized to other geographic areas or other types of industries without further study. Other limitations include budgetary and time constraints both of these factors interfered with a follow up mailing to achieve the proposed optimal response rate. The response rate itself was also a limitation since only 98 completed surveys were returned. The small sample size of this survey limits the generalizability of the results. For the findings for this study to be broadly applied to other situations, further study would be required. In retrospect the scenario questions should have also been switched, this may have created order bias.

The results of voluntary surveys are influenced by the type of persons who followed through, completed the survey and ultimately turned them in. It can not be assumed that the persons who returned this survey are a representative cross-section of the target population. Any characteristics common to this group are undoubtedly reflected in the results of this study.

## APPENDIX

# Customer Loyalty in the Hospitality Industry

How can we better serve your needs?

# UNLV

UNIVERSITY OF NEVADA, LAS VEGAS

Conducted by.  
University of Nevada, Las Vegas  
William F. Harrah College of Hotel Administration  
4505 Maryland Parkway Box 456023  
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**Please refer to the hotel at which you are staying when completing this  
questionnaire.**

3. Is this your first time to the area? YES \_\_\_\_\_ NO \_\_\_\_\_ If Yes, please go to questions 20 & 21
4. Are you a U.S. Resident? YES \_\_\_\_\_ NO \_\_\_\_\_ If No, please go to questions 20 & 21
5. Circle how many times in the last 12 months you have stayed in a hotel during business travel?
- 0      1-3      4-6      6-9      10-12      13-15      16+
6. Circle how many times you have stayed in the Beaverton/Portland area in the past 12 months?
- 0      1      2      3      4      5      6+
7. Circle how many times you have stayed at this hotel in the past 12 months?
- 0      1      2      3      4      5      6+
8. Approximately, what rate did you pay the last time you stayed in the Beaverton/Portland area?
- Rate:\$ \_\_\_\_\_ Don't Know \_\_\_\_\_
9. What is the nightly rate you are paying for this stay? Rate:\$ \_\_\_\_\_ Don't Know \_\_\_\_\_
10. If you returned to this area and needed a hotel room, how likely are you to return to this hotel?
- |                               |   |                              |   |                                      |
|-------------------------------|---|------------------------------|---|--------------------------------------|
| Will <u>NOT</u><br>Stay again |   | May or May Not<br>Stay again |   | Definitely <u>WILL</u><br>stay again |
| 1                             | 2 | 3                            | 4 | 5                                    |
|                               |   |                              |   | 6                                    |
|                               |   |                              |   | 7                                    |
11. How likely are you to refer this hotel to other business travelers staying in this area?
- |                          |   |                         |   |                                 |
|--------------------------|---|-------------------------|---|---------------------------------|
| Will <u>NOT</u><br>Refer |   | May or May Not<br>Refer |   | Definitely <u>WILL</u><br>Refer |
| 1                        | 2 | 3                       | 4 | 5                               |
|                          |   |                         |   | 6                               |
|                          |   |                         |   | 7                               |
12. If you called this hotel to make a future reservation, and you found the price had been raised, is there a price at which you would no longer consider this hotel?
- Yes \_\_\_\_\_ If Yes, approximately what is the rate \_\_\_\_\_
- No \_\_\_\_\_ Don't Know \_\_\_\_\_ Not applicable,  
I would not stay here again \_\_\_\_\_



13. When traveling on business, who usually determines your accommodations? **Please circle one.**

- A. I choose my own accommodations  
 B. I choose a hotel from the company provided list  
 C. My company chooses the hotel for me  
 D. A corporate agent selects and sets up travel  
 E. Other, please describe : \_\_\_\_\_

14. Which scenario best describes how your business travel expenses are handled? **Please circle one.**

- A. I pay my own travel expenses  
 B. I keep money under the company per diem  
 C. My company pays all my business expenses  
 D. The company keeps money under the per diem  
 E. Other, please describe : \_\_\_\_\_

*Some hotels, like airlines, vary their prices based on demand. In times of high demand, they increase prices and in times of low demand, they decrease prices to try to increase business. The following scenarios are situations that can occur when hotels use price to adjust demand. Please note, this survey is being conducted at a number of hotels and these questions are hypothetical and are not based on practices of any one hotel.*

***For each of the following three scenarios, please circle the corresponding number.***

#### **Scenario 1**

Assume that you are returning to this area, when you call to make a reservation at this hotel you find out that they are charging you \$30 more per night than they usually do because they only have a few rooms left. ***Please circle the corresponding number.***

15. Is it acceptable for hotels to raise their rates based on availability?

- |               |   |   |   |   |   |   |   |                      |
|---------------|---|---|---|---|---|---|---|----------------------|
| Is <u>NOT</u> |   |   |   |   |   |   |   | Definitely <u>IS</u> |
| Acceptable    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Acceptable           |

16. Based on the above scenario, how likely are you to return to this hotel?

- |                 |   |   |   |                |   |   |   |                        |
|-----------------|---|---|---|----------------|---|---|---|------------------------|
| Will <u>NOT</u> |   |   |   |                |   |   |   | Definitely <u>WILL</u> |
| Stay again      | 1 | 2 | 3 | 4              | 5 | 6 | 7 | stay again             |
|                 |   |   |   | May or May Not |   |   |   |                        |
|                 |   |   |   | Stay again     |   |   |   |                        |

17. Based on the above scenario, how likely are you to refer this hotel to another business traveler?

Will NOT  
Refer

May or May Not  
Refer

Definitely WILL  
Refer

1 2 3 4 5 6 7

**Scenario 2 (version 16a & 17a)**

While you were standing in line for check-in, you found out that the traveler in front of you paid \$30 less than you did the same type of room. When you asked the front desk agent, they stated that the previous guest was not receiving the business amenities that you were. *Please circle the corresponding number.*

16a. Based on the above scenario, how likely are you to return to this hotel?

Will NOT  
Stay again

May or May Not  
Stay again

Definitely WILL  
stay again

1 2 3 4 5 6 7

17a. Based on the above scenario, how likely are you to refer this hotel to another business traveler?

Will NOT  
Refer

May or May Not  
Refer

Definitely WILL  
Refer

1 2 3 4 5 6 7

**Scenario 2 (version 16r & 17r)**

While you were standing in line for check-in, you found out that the traveler in front of you paid \$30 less than you did the same type of room. When you asked the front desk agent, they stated that the hotel had a large number of rooms open up for the week. *Please circle the corresponding number.*

16r. Based on the above scenario, how likely are you to return to this hotel?

Will NOT  
Stay again

May or May Not  
Stay again

Definitely WILL  
stay again

1 2 3 4 5 6 7

17r. Based on the above scenario, how likely are you to refer this hotel to another business traveler?

Will NOT  
Refer

May or May Not  
Refer

Definitely WILL  
Refer

1      2      3      4      5      6      7

**PLEASE CONTINUE TO LAST PAGE**

**Scenario 3**

When you arrived to check in with your guaranteed reservation, the front desk manager tells you that no rooms are available, however, he states that he has set up comparable accommodations at an alternate hotel, including transportation at no cost to you. *Please circle the corresponding number.*

18. Based on the above scenario, how likely are you to return to the original hotel for which you had a guaranteed reservation?

Will NOT  
Stay again

May or May Not  
Stay again

Definitely WILL  
stay again

1      2      3      4      5      6      7

19. Based on the above scenario, how likely are you to refer the original hotel to another business traveler?

Will NOT  
Refer

May or May Not  
Refer

Definitely WILL  
Refer

1      2      3      4      5      6      7

*Please tell us a little about yourself.*

20. Gender:    Male \_\_\_\_\_                      Female \_\_\_\_\_

21. Which category best describes your annual salary range? Please Mark One

\_\_\_ \$0-\$25,000              \_\_\_ \$25,001-\$40,000              \_\_\_ \$40,001-\$55,000              \_\_\_ \$55,001-\$70,000  
\_\_\_ \$70,001-\$85,000              \_\_\_ \$85,001-\$100,000              \_\_\_ More than \$100,000

*Thank you for taking the time to complete this questionnaire, please enclose it in the attached self addressed stamped envelope and drop it at the front desk or at any convenient mail stop.*

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