The pricing for same-day arrival guests in the hotel industry

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ABSTRACT

The objective of this study was to recognize the impact on pricing dynamics that elements such as reservation channels, price decision makers, and pricing for same-day and very late (after 11 PM) same-day arrival guests. The data was collected via a random sample from a list of 3,000 hotels provided by Smith Travel Research, with 283 responses being analyzed. Though this is an exploratory study, it fills a need in the hospitality literature for empirical research, as it reveals hotels' pricing patterns for same-day arrival guests. This study enables managers and scholars to form a better understanding of hotels' actual pricing for same-day arrival guests. Researchers can thus have a starting point for developing models that can empirically demonstrate what pricing strategies are effective for same-day arrival guests.

Keywords: **Revenue Management, Room Pricing, Same-day Arrival Guest, Reservation Channels, Pricing Decision Maker**

INTRODUCTION

According to the IBIS World Industry Report (2017), the U.S. hotel industry generated of the total revenue of $182.4 billion, and it will increase at an annualized rate of 2.5% to $206.5 billion over the five years to 2022. The average room rate was $123.97 in 2016, an increase from $106.23 in 2012 and $101.70 in 2011(Smith Travel Research, 2017). Effective hotel room pricing is crucial to the success of hotel's ability to maximize revenue; hotels have unique product characteristics: perishable inventory, relatively fixed capacity, time-varied demand, and relatively high fixed costs (Kimes,1989). A hotel's price is indeed one of the main impacts on customers'

hotel selection and perceptions of service quality (Hung, Shang, & Wang, 2010; Talluri &Van Ryzin,2004).

Hotels offer unsold rooms to same-day arrival guests using various distribution channels (e.g., walk-in, hotel websites, and mobile channels).Hotel companies have also changed how they dispose of perishable inventory, leading to potentially higher revenues (Merl,2014).Hotels are confronted with the challenges of how to control room inventory and price optimization. Such a challenge is rooted in a more competitive environment made possible by the price transparency afforded by the Internet. Customers now can easily compare the prices

anywhere using their mobile devices, and veteran customers develop strategies to find the best deals based on their observation of room rates over time (Carrington,2013; Chen & Schwartz, 2008; Lee, Bai,&Murphy,2012).

A common topic of concern in the hotel industry has become the last-minute booking, as the need for more knowledge about late booking travelers becomes more significant. Several researchers have examined subjects related to travelers' last-minute information search, booking, and decision behaviors (e.g.,Chen &Freimer,2004; Chen & Schwartz,2013; Jerath, Netessine, &Veeraraghavan,2010). However, little is known about hotels' pricing decision policies and practices for a last-minute booking, although there has been a pressing need for extensive empirical research about the impact of timing on revenue management systems (Schwartz,2008).

Recognizing these gaps in the hospitality revenue management literature on last-minute booking, this study attempted to understand the dynamics between reservation channels and pricing decision makers, and the actual pricing of same-day and very late (after 11 PM) same-day arrival guests for weekdays, weekends, high-season and low-season. Further, this study attempted to investigate the pricing differences of same-day and very late (after 11 PM) same-day arrival guests among different market segments (i.e., small, medium, vs. largely sized hotels and brand affiliated vs. independent operation hotels).Finally, this study focused on the practices and policies of the hotel's revenue leaders in terms of last minute bookings.

The results of this study will enable scholars and managers to gain a better understanding of hotels' pricing practices for same-day arrival guests, thus providing researchers with a starting point by providing information for developing further models or theories that could empirically demonstrate pricing strategies for same-day arrival guests. While the results should be useful for hotel chains, the independent hotel owner, and management team will most greatly benefit from this information to implementing pricing policies and practices to optimize revenue and profitability.

LITERATURE REVIEW
Revenue Management in the Hotel Industry

Revenue management, also known as yield management, is defined as "the application of information systems and pricing strategies to allocate the right capacity to the right customer at the right price at the right time" (Kimes,1989; Kimes & Wirtz,2003).Beck, Knutson, Kim, and Cha,(2010), emphasized that managing the daily activity of information systems to align with property strategies is a critical function of the revenue manager/ general manager. As defined by El Haddad, Roper, and Jones(2008), revenue management is the bridge between supply and demand. Berman(2005) adds that "revenue management is an efficient mechanism to allocate a service provider's relatively fixed capacity and to provide discounts on a much broader scale."

How hotels manage, their revenue is likely to vary widely because of the fragmented nature of the industry (Talluri & van Ryzin,2004). Travelers seek out the best deal and consider such features as price, time, quality, availability, and hotel alternatives (Chen&Schwartz,2008). According to the generic advanced-booking decision model by Schwartz (2000;2006;2008), when selecting a room, travelers can do one of four things. First, they can book the hotel room (i.e., book) and be done; or they can book a room and keep searching for a better deal offered in the future (i.e., book and search); or they cannot book and keep waiting for a better deal to be offered (i.e., search); finally, they can disregard the first hotel choice and consider alternatives, such as another hotel(i.e.,others). Customers make their decision hoping to maximize their expected utility. The customers' utility is the difference between their reservation price (the highest price they are willing to pay) and the expected cost associated with the strategic booking decision (Schwartz,2008). The hotel wants to optimize the consumers booking decision. In how it markets and prices a room, the hotel is trying to raise the likelihood of a traveler booking the room (Schwartz,2008).

Various techniques are used to set prices. These techniques can include cost-based pricing, competition-driven pricing, customer-driven pricing, demand-based pricing, value-based pricing, and dynamic pricing.
Because of their relative ease of implementation, cost-based pricing and competition-driven pricing are popular. However, the chief shortcoming of cost-

based pricing lies in that the unit costs are not so easy to calculate, which in turn leads to an overpricing or under pricing problem(Collins &Parsa,2006). One of the disadvantages of competition-driven pricing is the fact that it assumes the competitors' understanding of the value consumers place on offerings (Danziger,Israeli,&Bekerman,2006).

Accordingly, this approach tends to lead to inappropriate price-cutting because a hotel seeks to gain market-share (Collins, & Parsa,2006). Alternatively, customer-driven pricing can encounter the problems caused by consumers' unwillingness to reveal their reservation price, especially when the market price is lower than the reservation price (Danziger et al.,2006).

Demand-based pricing takes reservation volume as the main measuring tool customer demand. The main idea of this method is to rely on the volume of possible customers. However, if the customers perceive the pricing to be unfair, they will certainly refuse to pay for the products (Kimes&Wirtz2002). Thus, it is significant to be able to capture the level of fairness in price from the customer's view to increasing the demand among the consumers.

Value-based pricing is designed to set the price according to the customer's perceived value. Business owners create the price based on how customers weigh the benefit of the products against the price they pay (Ingenbleek,2007). Ingenbleek(2014) considered price as the reward for value creation and value-based pricing. In this method, then, the key element is value. The basis of the value-based pricing approach is to possess a full understanding of the perceived customer value. What makes this strategy stand out among the numerous pricing techniques is the ability to directly link to the needs of the customers. What keeps this strategy from being more prevalent are the high costs associated with the method as well as the difficulty in evaluating customers' willingness to pay for the products (Hinterhuber &Liozu2012).

Dynamic pricing is similar to demand-based pricing but more sophisticated. To maximize profit, dynamic pricing takes price discrimination as an approach to figure out the maximum price one specific customer is willing to pay for one specific period. This method of pricing approach covers aspects including demand, supply, and other factors, which may influence the price decision making. Therefore, while innovative this pricing technique is fairly-complex to put fully into practice (Viglia,Mauri,&Carricano,2016; Sato & Sawaki 2013). For example, Sen (2013) compared the dynamic pricing policy and fixed pricing policy during a selling period and concluded that the former could play an important role in revenue improvements. However, Sato and Sawaki (2013) argued that in a competitive market dynamic pricing is not always preferred to static pricing, finding that dynamic pricing performs optimally when competitors adopt a constant pricing strategy.

Kimes(2002) suggests the concept of rational pricing, which includes physical (room type, view, room location, amenities) and non-physical (customer characteristics, such as membership and company affiliation) rate fences. According to Kimes(2002), pricing factors involve transaction characteristics, including restrictions at the time of purchase such as advance-purchase restrictions and helping a prospective guest understand a pricing strategy and allowing for a rational decision.

Scarcity Theory

In the marketplace, scarcity means having limited availability of certain resources caused by the disequilibrium between supply and demand (Heo, Lee, Mattila, & Hu,2013). Limited resources may give rise to a sense of exclusivity, especially if those resources are desired by a large group of the population. Thus, the price of the resource will accordingly keep increasing, and it may lead to a different strategy in marketing the products (Balachander, Liu, & Stock,2009).

Well-known as a model in psychology and marketing literature, scarcity theory suggests that a product's scarcity affects consumers' perceptions and evaluations of the attractiveness, price, and quality of a product (Aggarwal, Jun, & Huh, 2011; Heo et al.,2013). Studies have also shown that suppliers apply this theory with the idea that scarcity increases the desirability of the products by consumers and manipulating the price of products in their pricing strategy (Balachander et al.,2009; Heo et al.,2013; Gierl&Huettl,2010). For example, Aggarwal et al.(2011)examined the relative impact of two different kinds of scarcity messages such as limited-quantity and limited-time on customers' purchase intentions.

The authors showed that the limited-quantity messages had a more significant influence on the purchase intentions of the consumer than did limited-time messages. Balachander et al.(2009) studied the application of scarcity theory in their pricing strategy in the automobile industry and proved that deliberately causing items to be scarce can be effective in pricing strategy (Balachander et al.2009). Suri et al.(2007) tested the influences of perceived scarcity on consumers' processing of pricing and showed that during times of scarcity all of the following increased: price along with motivation, perceived quality and value as well as purchase The authors suggested that customers perceive an increase in the value of an offer if the pricing plays a significant role in their evaluation of perceived sacrifice or perceived quality.

This theory has also been applied in the hospitality industry including hotels, restaurants, and airlines(e.g., Zhou, Brown, Dev, &Agarwal,2007; Heo et al.,2013).Zhou et al.(2007) used contingency theory to examine the role of customer and competitor orientations in the global hotel markets. They found that customer and competitor orientations had their respective competitive advantages. Customer orientation had a positive relationship with the resource availability while competitor orientation had a negative relationship(Zhou et al.2007).

To study whether the perceived scarcity will affect the perceived value by the customer, Heo et al. (2013)studied the revenue management in a restaurant setting. The findings indicated that customers' perceptions of a restaurant's offering or whether it was fairly priced were not influenced by a perception of capacity scarcity.

Last-minute Booking

Timing is critical not only for prospective guests who seek to reserve a hotel room but also for the hotel they book because hotel room booking decisions and pricing are very much time dependent (Lynch & Zauberman,2006).With the ubiquity of the Internet, timing figures importantly in travelers' decisions (Schwartz, 2008). The Internet and mobile devices allow customers to wait until the last minute to find the best available price (Christou,2011; Leposa,2013).Yelkur and DaCosta(2001) emphasized that when products are similar, Internet marketing toward segmented targets can lead to extreme price competition. Therefore, price decision makers must take into account prospective same day arrival guest booking practices as they consider same day pricing strategy.

Hotels can now have access to direct communication with segmented target markets. Furthermore, the Internet offers the opportunity to utilize price as a means to meet the demands of the specific segments (Nagle et al.,2010; Yelkur & DaCosta,2001) and to maximize profit by using dynamic pricing policies, adjusting room rates according to observed daily demand changes (Chen & Schwartz, 2008).

Wingfield(2012) reported in the New York Times that discounts for last-minute room booking could appeal to price-sensitive travelers. However, it could be risky for hotels if customers come to rely on the lower rates and thus drive down profits(Levere,2001). Furthermore, the last-minute reduced rate offerings could-should they become aware of it-upset loyal customers (Vivion,2012).

Given these considerations, the following research questions are explored in this study:
Research Question 1: What reservation channels are used to book same-day reservations?
Research Question 2: Who are the decision makers establishing the prices of same-day arrivals and very late (after 11 PM) same-day arrival guests?

As their arrival date approaches, customers lower their expectations of better rates. As demand goes up, customers understand that hotels are more likely to be sold out. Although f the hotel is not sold-out during the off-season and the date of the stay is quite near, then customers expect better rates (Chen & Schwartz, 2013). Hotels are characterized by market segmentation-business, resort, or a combination thereof. They are also categorized by size(small, medium, and large), by class(luxury, upper upscale, upscale, upper midscale, midscale, and economy), and by location(airport, urban, interstate, small metro/town, and highway). Some hotels are independently owned and operated, while hotel brands can own, manage, or franchise properties under a variety of configurations. Due to these varieties of categories and operational styles, hotel revenue management practices may also vary considerably (Talluri & van Ryzin,2004). The power

and prestige of a well-known brand have many positive attributes when compared to independently owned hotels. Certainties include a more consistent flow of clients even when the market is slow, which in turn ensures a higher occupancy level year round. Loyalty reward programs are an envied part of being a brand. As for those operated independently, the power of flexibility and adaptation are priceless in the world of hospitality, business, and profit. Being able to make a hotel unique is a valuable quality of such hotels (O'Neill & Carlbäck, 2011).

Israeli (2002) investigated whether and how brand affiliation and star rating affected pricing decisions. The data for the study was gathered from 215 Israeli hotels in nine locations. That the impact of brand affiliation on hotel room prices was significant, while the star rating was a stable and consistent predictor of room prices. Espinet, Saez, Coenders, and Fluvià(2003) also examined the different kinds of factors that affect room pricing-hotel size, location, and services available to guests. They analyzed three hotels using the database of 82,000 tour operators' prices, recorded daily from1992 to1998. The results showed that prices were significantly affected by the hotel size, especially during the low season. Larger hotel operators were more keenly aware of the principles of revenue management and often applied differential pricing to stimulate demand for their products.

Based on the previous discussion, the following research questions are put forward:

Research Question 3: Are there differences in prices for same-day and very late (after 11 PM) same-day arrival guests (after 11 PM) during weekdays, weekends, high-season and low-season?

Research Question 4: Are there price differences for same-day and very late(after 11 PM) same-day arrival guests among different types of hotel size(small, medium, and large) and hotel brand affiliation(brand affiliated vs. independent operation).

METHOD

Survey Development

A mail questionnaire consisting of two parts was prepared by the researchers. The first part requested hotel information including position title of the respondent, ownership, brand and management affiliation, number of rooms, general location(airport, urban, suburban,etc.), a region of the United States, and the service quality of the hotel as reported by Trip Advisor.

The second part of the questionnaire asked respondents to address the pricing policies and practices of the hotel and its pricing decision makers. Specifically, the reservation channels used, the amount of influence by various executives and staff of the hotel on pricing practices, trends in same day arrivals, the average daily rate for same day arrivals, and pricing policies by the hotel for same day arrival guests.

Prior to the primary data collection, a pilot study(n=50) was conducted to test the questionnaire instrument with hotel owners and managers who were randomly selected from the total sample. After this pilot study, the questionnaire instrument was revised to facilitate clarity and readability. The final draft of the survey sent to respondents is presented in Appendix 1.

Sampling and Data Collection

The survey was addressed to the owners and/or managers(e.g., general managers, revenue manager) managing hotels in the U.S. A random sample of 3,000 hotels brand-affiliated hotels and independent hotels was drawn from the STR Global United States database of hotels by the staff of STR Global and provided to the researchers. Because STR Global does not offer hotel e-mail addresses, a self-administered U.S. Postal Service-mailed survey was employed to solicit the research questions. The survey envelope included a survey questionnaire, transmittal letter, and a pre-paid return envelope. The hotels included in the sample were urban, airport, suburban, resort, interstate, and small metro town with various types of service qualities across the U.S.A second mailing of the survey was sent to those who did not respond. Of the 3,000 mail surveys sent out, five undeliverable surveys were returned to researchers. A total of 286 participants responded to the survey and of the 286 respondents, three respondents were eliminated when the data was analyzed because their responses provided little information. Thus, 283 respondents completed the survey, yielding a 9.4% response rate.

ANALYSIS AND RESULTS

Profile of Survey Hotels and Reservation Characteristics from Same-day Arrival Guests

Data were analyzed using SPSS 17.0 software. The ADR of the same-day and very late same-day arrival guests were asked along with overall ADR rate based on different time periods (i.e., weekdays, weekends, high-season, and off-season). Then the following were measured: the ADR of the same-day and very late same-day arrival guests among different market segments(i.e., small, medium, vs. large size hotels; brand affiliated vs. independent operation hotels) for weekdays, weekends, high-season, and off-season along with overall ADR.

The majority of hotels examined were brand affiliated (82%) (see Table 1). Approximately 53% of the hotels were independently managed, followed by those managed by a management company (35%).The average number of rooms was 191, and a little less than half of the hotels (44%) had a quality rating of very good according to Trip Advisor, followed by those with an excellent service quality rating (30%) and an average service quality rating(23%). Since a number of the survey population failed to respond to the survey, non-response bias can occur (Dillman,2000). Thus, some demographic information of the U.S. hotels was compared to that of the sample hotels of this study regarding hotel brand affiliation and location. While there were more brand affiliated hotels in our study sample compared to that of U.S. hotels based on the American Hotel & Lodging Association(AHLA) report (Kwok, 2016), it seems to be comparable (82% for our sample vs. 75% from the AHLA report).

The location of hotels appears comparable between these two groups although there were more hotels in urban area and fewer hotels were from small metro and suburban areas compared to those of the U.S. hotels from the AHLA report(urban:32 %, small metro:18%:suburban:15%, interstate:14%, resort:10% for our sample vs. urban:13%, small metro:31%, suburban:34%, interstate:14%, resort:7% for the AHLA report). Thus, overall results show that the sample was fairly representative of the population.

Approximately 41% of the hotels were located in the central part of the U.S., followed by the eastern part of the U.S.(34%), and the western part of the U.S.(25%). The majority of the respondents were general managers(72%). Others were owners (10%), directors of sales and marketing(7%), and revenue managers(4%).Respondents reported that reservations made same-day arrival guests were about 19% of the total reservations received for a particular day. Other same day reservation percentages according to different time periods were during weekday per day (18%), during weekend per day (20%), during high-season (21%), and during the off-season (16%).

Table 1. Profile of Survey Hotels and Respondents

Characteristics[a]	Categories	Survey Hotels (n=285)	
		Frequency	%
Brand affiliation	Brand affiliated	234	82%
	Independent operation	51	18%
	Total	285	100%
Average room size of the hotels of respondents	191		
A hotel quality rating	Very good quality	126	44%
according to TripAdvisor	Excellent quality	86	30%
	Average quality	73	26%
	Total	285	100%

Plurality of hotels	Urban area	91	32%
	Small metro towns	51	18%
	Suburban	43	15%
	Interstate	40	14%
	Resort	29	10%
	Others	31	11%
	Total	285	100%
Location of hotels	Central part of the U.S.	117	41%
	Eastern part of the U.S.	97	34%
	Western part of the U.S.	71	25%
	Total	285	100%
Position of the respondents	General managers	205	72%
	Owners	29	10%
	Directors of sales and marketing	20	7%
	Revenue managers	11	4%
	Others	20	7%
	Total	285	100%

As shown in Table 2, this study examined seven different reservation channels used for same-day arrival guests: call the hotel directly (29.5%); walk-in (18.9%); use a hotel-owned website (13.8%); use OTA (13.0%); call the hotel 800 number (12.3%); use global distribution system (11.3.%); and others (e.g., email/text, travel agent; 1.2%).

The decision makers who influence the pricing for same-day arrival guests: general manager (39.6%), revenue manager on site(14.7%), owner (14.3%), front office manager(9.7%), revenue manager from a regional office(8.3%), director of sales and marketing(7.9%), and night auditor front desk associate(5.5%).In the same manner as above, the decision makers who influence the pricing of very late (after 11 PM) same-day arrival guests: night audit or front desk associate(28.4%), general manager (27.2%), front office manager(15.7%), owner (10.6%), revenue manager on site(8.6%), revenue manager from a regional office(4.1%),and the director of sales and marketing (2.4%).

Table 2. Reservation Channels for Same Day Arrival Guests and Decision Makers for the Pricing of Sam Day and Very Late (after 11 PM) Same Day Arrival Guests

Reservation channels for same day arrival guests	
Call the hotel directly	29.5%
Walk-in	18.9
Use a hotel owned website	13.8
Use OTA (i.e. retail, merchant, opaque)	13.0
Call the hotel 800 number	12.3
Use global distribution system	11.3
Others (e.g., email/text, travel agent)	1.2

Total	100%
Decision makers for the pricing of same day arrival guests	
General manager	39.6%
Revenue manager on site	14.7
Owner	14.3
Front office manager	9.7
Revenue manager from a regional office	8.3
Director of sales and marketing	7.9
Night audit front desk associate	5.5
Total	100%
Decision makers for the pricing of very late (i.e., 11 pm) same day arrival guests	
Night audit or front desk associate	28.4%
General manager	27.2
Front office manager	15.7
Owner	10.6
Revenue manager on site	8.6
Revenue manager from a regional office	4.1
Director of sales and marketing	2.4
Others	3.0
Total	100%

Pricing for same-day and Very Late (after 11 PM) Same-day arrival Guests

The ADR of same-day and very late (after 11 PM) same-day arrival guests from overall ADR were compared(see Table 3). First, different times of overall ADR, ADR for same-day arrival and very late (after 11 PM)same-day arrival guests were examined: overall ADR for weekday ($113.4)/weekday for same-day arrival ($113.2)/weekday for very late same-day arrival($112.3),overall ADR for weekend($117.2)/weekend for same-day arrival($121.2)/weekend for very late same-day arrival($114.5), overall ADR for high-season ($144.5)/high-season for same-day arrival($147.6)/high-season for very late same-day arrival($143.6), overall ADR for low-season ($101.0)/low-season for same-day arrival ($98.7)/low-season for very late same-day arrival($97.3)(see Table 3).

Table 3. Pricing for Same Day Arrival and Very Late(after 11 PM) Same Day Arrival Guests from Overall ADR

	ADR difference rates of same day arrival and very late (after 11 PM) same day arrival guests from overall ADR		
	Estimated Overall ADR	Estimated ADR for Same Day Arrival	Estimated ADR for Very Late Same Day Arrival (i.e., 11 pm)
Weekday	$113.4	$113.2	$112.3
Weekday ADR difference rate from overall ADR[a]		-0.2%	-0.9%

Weekend	$117.2	$121.2	$114.5
Weekend ADR difference rate from overall ADR		3.4%	-2.3%
High-season	$144.5	$147.6	$143.6
High-season ADR difference rate from overall ADR		2.1%	-0.6%
Low-season	$101.0	$98.7	$97.3
Low-season ADR difference rate from overall ADR		-2.2%	-3.7%

[a]:DR difference rates of same day arrival/very late same day arrival from overall ADR = ((ADR of same day arrival/very late same day arrival-overall ADR)/overall ADR)

e.g., Weekday ADR difference rate of same day arrival from overall ADR = ($113.2-$113.4)/$113.4=-0.2%

Pricing Differences of Same-day and Very Late (after 11 PM) Same-day Arrival Guests Among Different Hotel Size Categories

The ADR difference of same-day arrival/very late same-day arrival guests from overall ADR were then compared among different hotel sizes by using ANOVA analysis (see Table 4). First, various times of ADR for overall average/same-day arrival/very late same-day arrival guests were examined for each size category (small, medium, large size hotels): weekday, weekend, high-season, low-season and then obtained the rate difference by subtracting each different time of ADR for same-day arrival/very late same-day arrival from overall ADR. Last, ADR difference rates were calculated by dividing overall ADR by the difference between overall ADR and ADR of same-day arrival/very late same-day arrival for each different time (see the formula in Table 4).

The ADR difference of same-day arrival guests from overall ADR during weekdays was found to have a significant difference:$F(2,187)=3.075$, $p=.049$. Post hoc comparisons using the Tukey HSD test indicated that the mean score of the ADR difference for medium size hotels(M (ADR difference rates of same-day arrivals from overall ADR): 1%) was significantly different from that of large size hotels (M: -3%). However, the mean score of ADR difference rate for small size hotels(M: -2%) was not significantly different from those for medium(M:1%) and large hotels(M:-3%). There was no significant ADR difference of very late same-day arrival guests for weekdays. Also, there was no significant ADR difference of same-day and very late same-day arrival guests for weekends, high-season, and low-season.

Table 4. Pricing for Same Day and Very Late (after 11 PM) Arrival Guests among Different Hotel Size Groups

	Small Size Hotels (Under 100 rooms)	Medium Size Hotels (Between 100 and 300 rooms)	Large Size Hotels (Over 300 rooms)	One-way ANOVA Test	
				F-value	p-value
Weekday					
Overall ADR	$93.6	$106.8	$178.8		
ADR for same day arrival	$91.9	$108.2	$174.3		
ADR difference rate of same day arrival from overall ADR[a]	-1.8%	1.3%	-2.5%	3.075	.049*
ADR for very late same day arrival					

(i.e., 11 pm)	$86.6	$110.1	$175.0		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR[b]	-7.5%	3.1%	-2.1%	1.054	.351
Weekend					
Overall ADR	$105.9	$111.5	$162.6		
ADR for same day arrival	103.4	120.7	156.5		
ADR difference rate of same day arrival from overall ADR	-2.4%	8.3%	-3.8%	.484	.617
ADR for very late same day arrival (i.e., 11 pm)	$96.6	$112.7	$156.9		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	-8.8%	1.1%	-3.5%	.503	.605
High-season					
Overall ADR	$118.6	$142.8	$223.0		
ADR for same day arrival	$119.9	$148.7	$216.4		
ADR difference rate of same day arrival from overall ADR	1.1%	4.1%	-3.0%	.474	.624
ADR for very late same day arrival (i.e., 11 pm)	$103.6	$148.0	$223.8		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	-12.6%	3.6%	0.4%	1.199	.305
Low-season					
Overall ADR	$86.1	$96.0	$163.5		
ADR for same day arrival	$82.6	$96.2	$154.3		
ADR difference rate of same day arrival from overall ADR	-4.1%	0.2%	-5.6%	.925	.399
ADR for very late same day arrival (i.e., 11 pm)	$81.5	$95.2	$154.0		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	-5.3%	-0.8%	-5.8%	.446	.641

[a]: ADR difference rates of same day arrivals from overall ADR = ((ADR of same day arrival-overall ADR)/overall ADR)
[b]: ADR difference rates of very late same day arrivals (i.e., 11 pm)from overall ADR = ((ADR of very late same day arrival after 11 pm-overall ADR-)/overall ADR)
*$p \le .05$

An independent t-test was used to compare the differences in ADR difference between same-day and very late same-day arrival guests for weekends, high-season, and low-season between brand-affiliated and independently operated hotels. Overall, independently operated hotels had higher ADR differences between overall ADR and ADR for same-day/very late same-day arrival guests than those of brand-affiliated hotels. However, the differences were not statistically significant (see Table 5).

Table 5. Pricing for Same Day and Very Late (after 11 PM) Arrival Guests between a Brand Affiliated Hotel Group and an Independent Operation Hotel Group

	Brand Affiliated Hotels	Independent Operation Hotels	Independent Samples t-test	
			t-value	p-value
Weekday				
Overall ADR	$114.0	$113.2		
ADR for same day arrival	$114.9	$108.4		
ADR difference rate of same day arrival from overall ADR[a]	1%	-4%	2.64	.009
ADR for very late same day arrival (i.e., 11 pm)	$114.0	$107.6		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR[b]	0%	-5%	1.24	.217
Weekend				
Overall ADR	$114.2	$130.6		
ADR for same day arrival	$120.2	$126.8		
ADR difference rate of same day arrival from overall ADR	5%	-3%	1.13	.262
ADR for very late same day arrival (i.e., 11 pm)	$112.6	$120.4		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	-1%	-8%	.80	.424
High-season				
Overall ADR	$140.8	$158.6		
ADR for same day arrival	$143.5	$162.3		
ADR difference rate of same day arrival from overall ADR	2%	2%	.62	.540
ADR for very late same day arrival (i.e., 11 pm)	$142.8	$146.9		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	1%	-7%	1.58	.116
Low-season				
Overall ADR	$99.5	$108.6		
ADR for same day arrival	$97.8	$102.9		
ADR difference rate of same day arrival from overall ADR	-2%	-5%	.835	.405
ADR for very late same day arrival (i.e., 11 pm)	$95.9	$102.9		
ADR difference rate of very late same day arrival (i.e., 11 pm) from overall ADR	-4%	-5%	.415	.679

[a]: ADR difference rates of same day arrivals from overall ADR = ((ADR of same day arrival-overall ADR)/overall ADR)

[b]: ADR difference rates of very late same day arrivals (i.e., 11 pm)from overall ADR = ((ADR of very late same day arrival after 11 pm-overall ADR-)/overall ADR)

DISCUSSION AND IMPLICATIONS

This study attempted to investigate the pricing of same-day and very late (after 11 PM) same-day arrival guests under different time periods: weekdays, weekends, high-season, and low-season and to examine the pricing differences of same-day and very late same-day arrival guests among different hotel types (i.e., small, medium, vs. large size hotels; brand-affiliated vs. independent operation hotels). The major findings and implications of the current study are discussed below.

Researchers have seldom explored hotels' pricing policies and practices of same-day arrival guests although a strong need exists for empirical research on the effect of timing regarding revenue management systems and travelers' hotel booking behavior (Schwartz,2008). Today, travelers can use their mobile devices to secure better deals at the last minute, so this type of booking has recently gained significant attention. Indeed, research has shown that the Internet and mobile devices and their potential to narrow the information gap between hotels and customers have changed the culture of hotel booking(Bai et al.2004; Carvell& Quan2005; Carroll&Siguaw,2003).To maximize their revenue then, hotels need to employ strategic pricing(Chen & Schwartz,2006).In the hotel room pricing literature, however, little can be found concerning this issue, despite several studies having investigated travelers' last-minute booking behaviors (e.g., Chen&Schwartz,2008;Schwartz,2008;chwartz&Cohen,2004). Though this study is exploratory, it helps meet the hospitality literature's need for empirical research by uncovering hotels' actual pricing patterns for same-day arrival guests. It contributes to the field's existing knowledge of hospitality pricing by reporting the pricing of hotel rooms for same-day booking and very late(after 11 PM) same-day arrival. Therefore, for academics seeking a basis for exploring pricing models, this study provides a perspective on hotels' pricing for same-day arrival guests. The models can demonstrate which pricing strategies for same-day arrival guests exert the maximum impact on revenue and profitability.

The findings of this study indicate that pricing for same-day arrival guests is more stationary than anticipated. It shows that hotels do not offer significantly different prices for same-day arrival guests from overall ADR of each period of weekdays, weekends, high-season, and low-season. However, the ADR for very late (after 11 PM) same-day arrivals for weekdays, weekends, high-season and low-season were discounted slightly more than the overall ADR of each of these periods. In the high-season, hotels tend to save rooms for same-day arrivals to increase profits because a customer is willing to pay a higher price when room availability is limited (DeGraba,1995). However, this study showed that the ADR for very late same-day arrivals for high-season was discounted, albeit minimally. This discount is usually due to the increased likelihood of hotels—as the day's end nears-wanting to reduce the remaining daily inventory. It is also crucial to recognize the impact of night audit and front desk associates on pricing (and therefore revenue) for very late arrival guests. Pricing decision makers may be sending a mixed message to these associates; the importance of the 'sell-out' versus the maximization of room revenue. It may be that revenue is being lost at the expense of the "sell-out."

Both hotels and consumers are well aware of the impact of time on prices. Indeed, hotels' pricing and consumers' booking decision behavior is an interrelated dynamic (Schwartz,2008). These insignificant price differences for same-day and very late(after 11 PM) same-day arrival guests from overall ADR might occur because hotels carefully consider the quality and price integrity, knowing that last-minute deals may impact customers' propensity to book the next purchase (Boger, Lin, & Heinemann,2000; Chen & Schwartz,2006; 2013). Or, the slight discounts might be related to travelers' increased willingness to book as the date of hotel arrival nears (Schwartz,1998; 2000).

AppendixThe theory of product scarcity suggests that travelers' perceived risk of a sellout increases as the date of stay approaches. Customers' chances of finding a better deal decrease, and when demand is high, customers risk not obtaining the desired product (Jerath, Netessine, & Veeraraghavan,2010).As a result, these customers tend to overvalue the products. They are more likely to reserve the same room for the same rate rather than risk non-availability (Bhatnagar &Ghose,2004; Lynch &Zauberman,2006; Schwartz,1998;2000).Business travelers, for example, tend to book closer to their

date of travel and are less price sensitive. At the last minute, they are more willing to pay for immediate availability. Leisure travelers are more price sensitive and are willing to book earlier if they think it will help secure a better (lower) price(Capiez &Kaya,2004; Greenberg,1985; Orkin,1990; Relihan,1989; Schwartz,2008).

Hotels do offer discounted rates through mobile applications for the last-minute booking, such as DOSH and Hotel Tonight. Nevertheless, this study shows that the traditional distribution reservation channels (e.g., call the hotel directly or 800 number, walk-in) are still prevalent(over 70%) for same-day arrival guests. That is, hotels may employ different pricing strategies for last-minute bookings not only to maximize revenues but also to maintain the perception of value for price paid. Such strategies are deployed through various types of reservation channels, competition, and time sensitivity by offering additional value(e. g., room upgrade, free breakfast) (Chen & Schwartz, 2013; Jayaraman & Baker,2003).

This research also explored the differences in ADR of same-day and very late (after 11 PM) same-day arrival guests and evaluated them in relation to different hotel categories(i.e., small, medium, vs. large size hotels; brand affiliated vs. independent operation hotels). Among the various categories, no significant differences were found in pricing for same-day and very late same-day arrival guests. The only significant difference found was for weekday same-day arrivals between medium and large size hotels. For a large size hotel, lowering the price may create a higher overall occupancy rate but significant supplemental income may be required to generate an equal profit, and the use of auxiliary services such as food & beverage and spa as a means of supporting revenue can be a delicate balancing act(O'Neill & Carlbäck,2011).Compared to how independent operation hotels conduct pricing, large size hotels are able, based on demand, to easily adjust pricing, operations, and management. These attributes may explain why independent operation hotels tend to have higher ADR and RevPAR than brand-affiliated hotels. Indeed, during times of quick and drastic changes in supply and demand, brand-affiliated hotels enjoy the security of sophisticated and reliable revenue management offers. Such security

notwithstanding, hotels operating independently can navigate such unstable time in a far more practical and profitable manner (O'Neill & Carlbäck,2011).

Finally, the findings of this study may help hotel general managers and revenue managers as they strive to effectively develop pricing strategies and practices for same day arrival reservations. To deal with uncertain demand and inflexible capacity, hotels have implemented various pricing strategies, with a notable one being last-minute bookings. Hotels must, of course, try to adopt revenue management policies and techniques that increase revenue opportunities.

LIMITATIONS AND FUTURE RESEARCH

Thesample size of this study is large enough to provide useful insights into pricing research. However, due to a low response rate (approximately 10%), some limitationsexist in interpreting the results of this study. A second mailing of the survey was sent to those who did not respond to ensure an appropriate response rate-20-30% for a mail survey to a large sample of firms (Henderson, 1990). Whenquestionnaires are mailed to representatives of firms such as general managers of hotels, the response rate is typically lower than that from populations of individuals(Baruch,1999).Organizational representatives may decline to respond for a variety of reasons-too busy, a company policy to decline surveys, considered relevance, and so forth (Baruch,1999).

To provide a deeper understanding of room pricing of same-day arrivals, future research may investigate certain factors not covered in this study. These could includemore specific information of the reservation channels used (mobile applications),continent location (e.g., Europe, US, etc.), and specific urban locations with supply/ demand inequities (New York, Los Angeles, Chicago, etc.) all of which affectthe pricing of same-day arrival guests.Because hotels offer last-minute sales at lower prices through their own websites, mobile applications, and opaque selling (the technique where the buyer does not know what hotel is being offered until after purchase) , it is important to understand how reservation channels offer different prices for same-day arrival guests.

This research focused on same day hotel pricing policies and practices, which is a unique issue within the are of revenue management and the lodging industry. Further study of pricing policies

(especially of independent hotels), cancellation strategies(as they relate to last minute reservations) and the impact of ratings (ie: Star and Trip Advisor) will add to the last minute booking literature in hospitality. Using a methodological approach similar to this study, independent restaurants could be investigated for last minute booking policies. Finally, this study focused on decision making during a period of time when revenue leaders give responsibility to front line staff. This foreshadows a discussion of management policy versus staff practice during the nontraditional business hours.

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