

Rebranding Hotel Services During and After COVID-19 Pandemic: A highlight for the Baton Rouge Metropolitan Area

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Overview

The recent report by the American Hotel & Lodging Association identifies the leisure and hospitality industry as the hardest hit by the COVID-19 pandemic in the U.S. (O.E., 2020a, 2020b). The industry has lost as many jobs as construction, government, manufacturing, retail, education, and health services combined. Between March and May, about 70 percent of hotel employees were either laid off or furloughed, and eight in 10 hotel rooms across the U.S. remained empty. The impact of the COVID-19 on the travel industry is nine times worse than New York terrorist attack on September 11, 2001. The hotel occupancy rate for 2020 is low, worse than the rates during the Great Depression. The industry was one of the first affected by the pandemic and will be one of the last to recover (O.E., 2020b). Prediction from a study commissioned by the U.S. Travel Association (MMGY, 2020) is also gruesome. About six in ten leisure travelers have canceled a planned vacation, one in three travelers has postponed vacation plans, and future travel intent continues to decline for both leisure and business. Willingness to travel both domestically and internationally remains dependent on the slowing and passing of the COVID-19. Although the economy begins to slowly open-up, travelers expect to travel less. By rebranding their hotels, managers can build locally based loyal customers by providing consistent quality services.

The first step in branding is understanding the customers by collecting and analyzing their views. With the internet and social media explosion, online-generated reviews are crucial to the purchase decision-making process and a source of consumers' feedback to managers. This report highlights the main results of the study that examine how perceived service quality influences customers' satisfaction and online hotel rating. Oliver (1980) and Nickson, Warhurst & Dutton (2005) define the perceived service quality as the overall difference between a customer's expectations and perceptions of the services experienced. We focus on the Baton Rouge Metropolitan Area because of the leisure and hospitality industry dependent on localized experience. The main conjecture is that emotions manifest the perceived service quality, embodied in the reviews. The aim is to identify localized service qualities that customer wants and are critical for hotel rebranding during and after the COVID-19 pandemic.

Materials and Methods

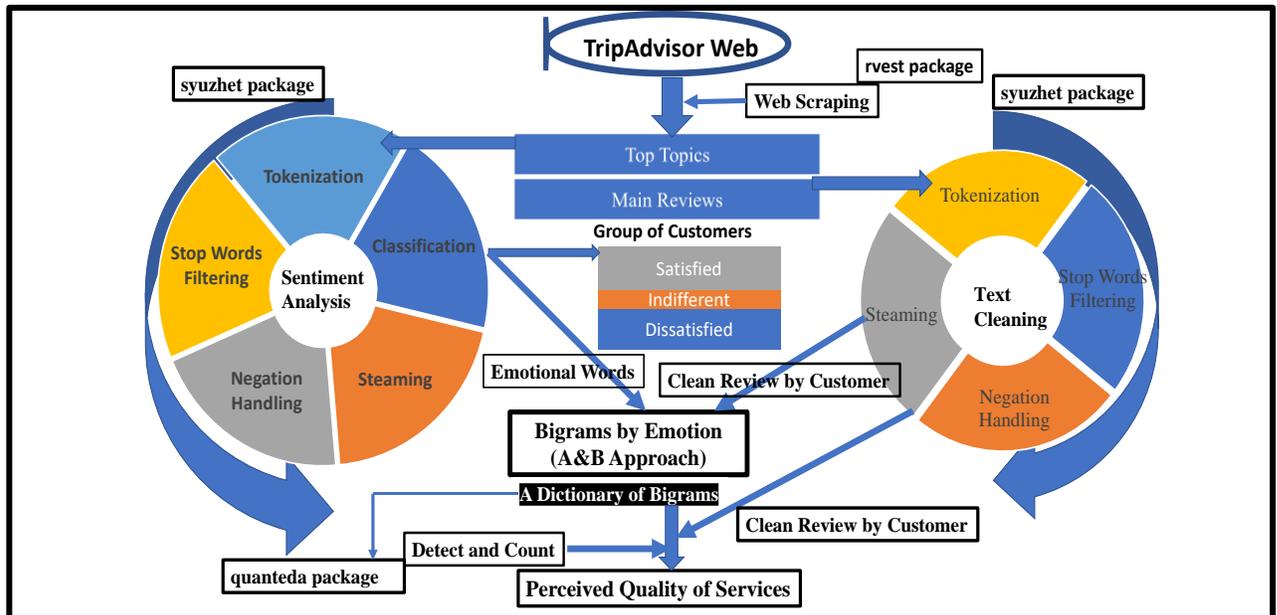
The first research question is, what services are essential to hotel customers in the Baton Rouge Metropolitan Area? To answer this question, we scraped 18,670 reviews² from TripAdvisor's

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² The reviewer usually post two texts: a short headline summarizing the reviewer's sentiment and emotion (top topic); and, a lengthy review that put into perspective the opinion and feeling of the reviewer (the central review).The top

website covering 61 hotels in the Baton Rouge Metropolitan Area. The second step involved determining the valence or polarity and emotion of each review through sentiment analysis. The textbook definition of sentiment analysis or opinion mining is the process of finding the emotional tone behind a series of words used to understand the attitudes and opinions expressed by the customer (Thelwall et al., 2010). Positive reviews express customer satisfaction, and negative review represents dissatisfaction. We then created a dictionary by emotion to extract the perceived service quality embodied in the reviews. Figure 1 illustrates the phases followed in data analysis. The creation of the valence of customers was by scoring the top quotes. A concise short sentence consisting of opinionated phrases that help convey critical information about the services, thus facilitating decision making by customers and information dissemination through social media. In-text analysis, long documents poorly represent irrelevant relationships hidden in masses of shifters and may draw the wrong conclusions regarding word relationships.

Figure I: Steps for text data analysis



Taking these limitations in mind, we used the syuzhet package (Jockers, 2015) in the R software environment (R Core Team, 2019) for valence and emotion analyses. The syuzhet package (Jockers, 2015) uses the NRC lexicon to directly estimate the reviewer’s emotion (i.e., anger, anticipation, disgust, fear, joy, sadness, surprise, and trust) from the review. The third step involves grouping the top topics by emotion and, identifying key unigrams in each group, and creating bigrams by using the words that either came before or after the key unigrams (B-A approach). These bigrams created a foundation for a dictionary used to quantify the perceived service quality in the central reviews.

After identifying the perceived service quality, a natural next step is to explain them. The second question is, therefore, how much of the difference in hotel rating by satisfied, dissatisfied,

topic is a heading of the review that usually summarize the sentiment and emotion of the customer. The long or the central review just put into context the cause of satisfaction and dissatisfaction or perceived quality of services.

and indifferent customers is attributable to hotel amenities and the perceived service quality? A combination of a generalized ordered regression analysis (Williams, 2016), Double bounded Tobit regression (Tobin, 1958), and the Blinder-Oaxaca decomposition method (Blinder, 1973; Oaxaca 1973) revealed how these variables could explain differences in hotel rating. The three techniques allow the estimation of causal effects, identifying key factors that generate both satisfaction and dissatisfaction, and explaining the gap in the means of hotel rating between satisfied and dissatisfied customers.

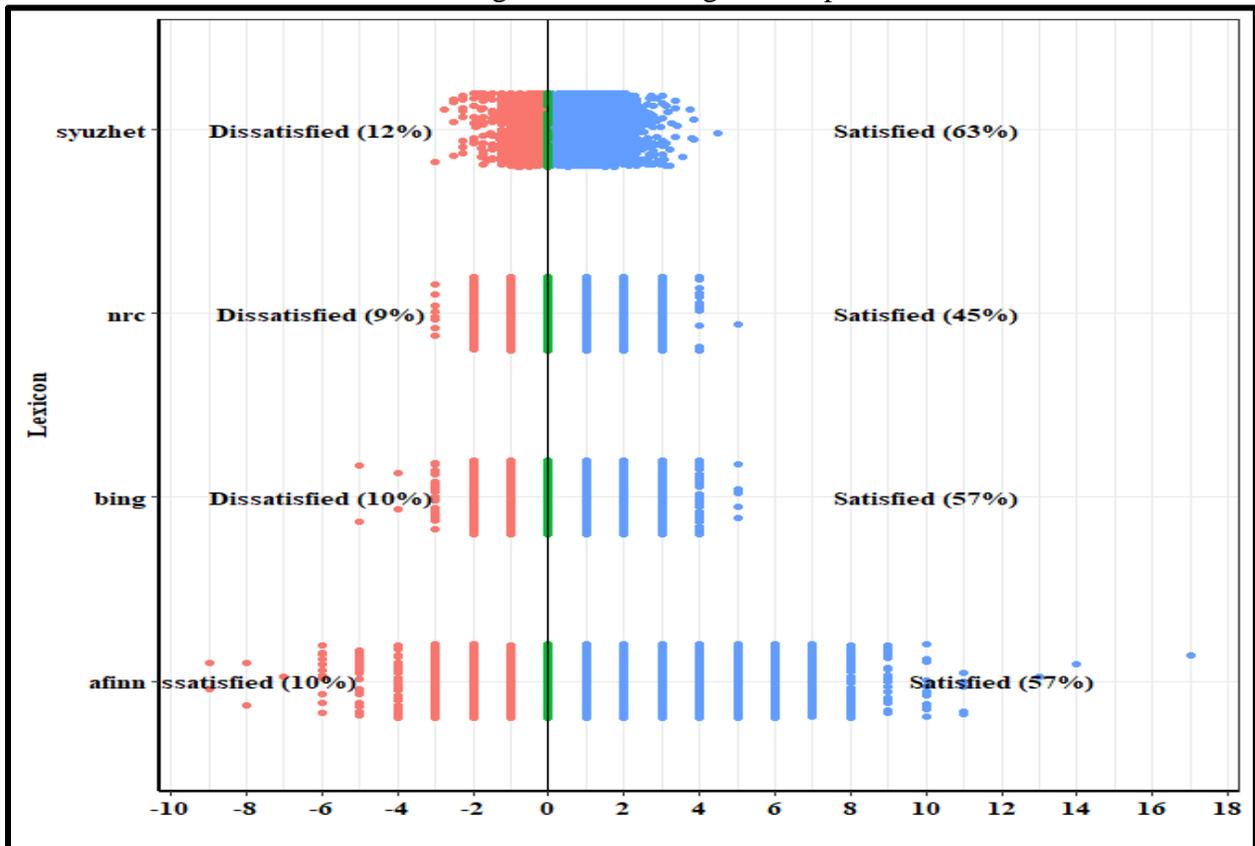
Main Results

Sentiment analysis results

For comparison purposes, Figure 2 presents the results from valence analysis using different lexicons. Each dictionary produced slightly different results because they use varied scales. All lexicons use a negative number as unfavorable valence, a positive number as favorable valence, and zero as neutral valence. The distribution of the valence estimated using AFINN lexicon, however, was far more spread compared to other lexicons.

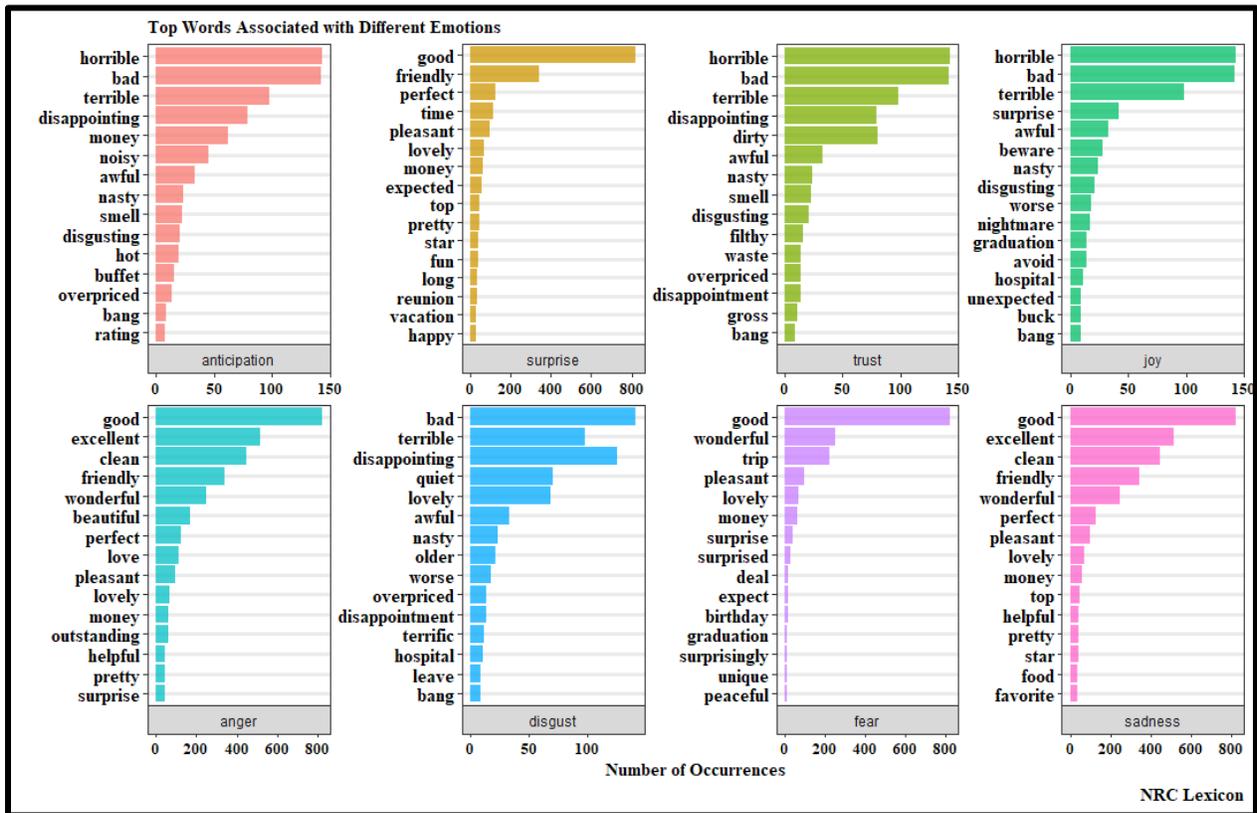
Figure 2: The Distribution of Positive and Negative Reviews by Lexicon

In Figure 2, while the SYUZHET lexicon classified 63 percent of the reviews as positive, analogous values for BING and AFINN lexicons were 57 percent, and for NRC lexicon was 45 percent. Although BING and AFINN had a similar classification in terms of positive and negative reviews, the results from the AFFIN lexicon was more spread due to differences in scoring scale. The AFFIN lexicon attaches more weights for some negative or positive words.



Presented in Figure 3 are common unigrams expressing positive and negative valence and emotions based on the NRC lexicon. The four most frequent words associated with positive valence were good, excellent, clean, and friendly. Similar words for negative valence were horrible, bad, disappointing, and small. Regarding emotions, the words horrible and bad were associated with anger, disgust, and fear. Words identified with sadness were bad and disappointing. In contrast, the words good and excellent linked joy and trust emotions. The words good and wonderful associated with trust emotion. The words good and wonderful associated with trust emotion. The results in Figure 3 are from the unigram model that tags a word independent of the other words as it does not take the ordering of the words into account. The order of words does not influence the tagging of words or words split up (Broder et al., 1997). The second step is applying the bigram model that accounts for co-occurring words and considers the context of each word pairs. The assumption is that whereas the arrangement of the words might not matter at all, pairs of consecutive words might capture structure that isn't present when one is just counting single words and may provide context that makes these words more understandable (Mohamed, 2011).

Figure 3: Top Unigrams Associated with Different Emotions

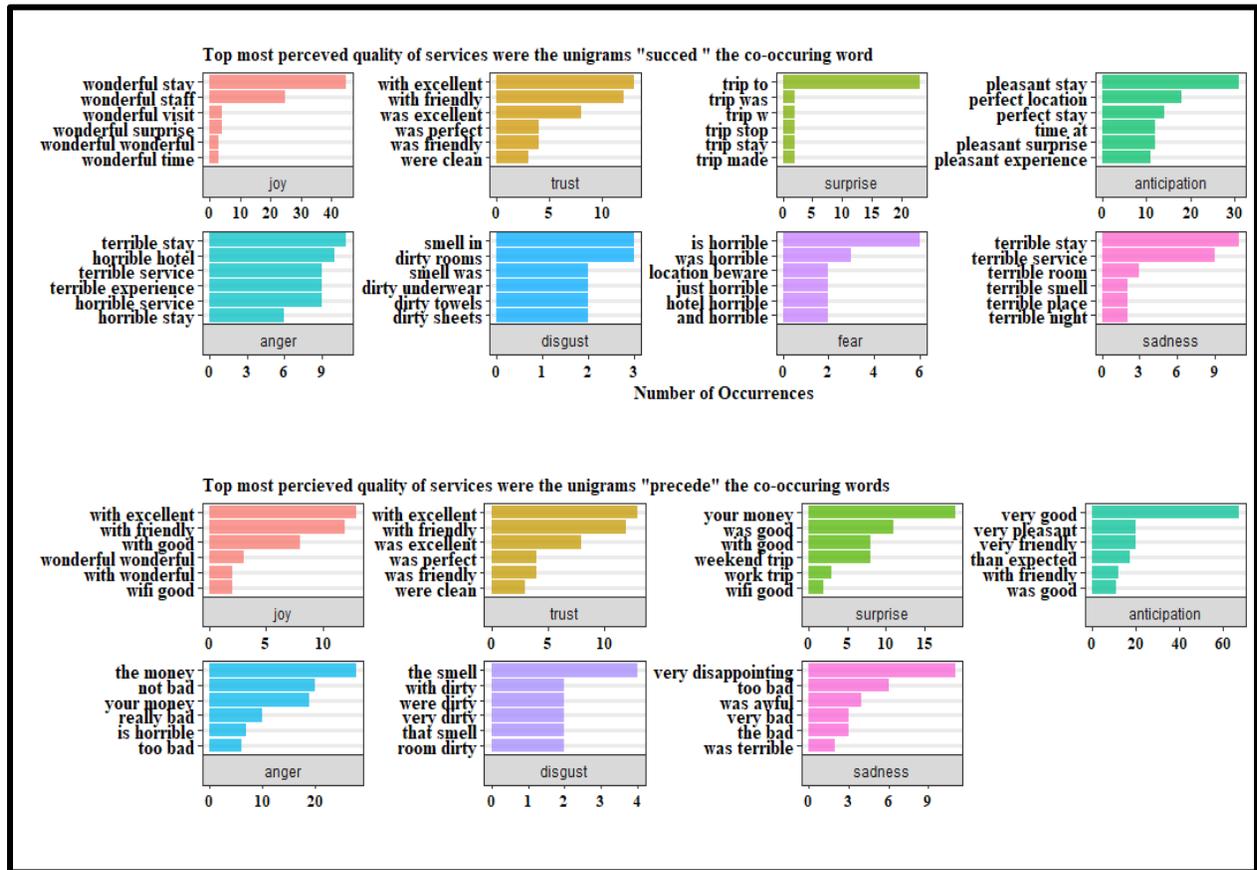


Instead of directly using the bigram model, we first group the customers by their emotions and identified the words before or after (Before and After approach – B & A approach) key emotional words as listed in Figure 3, and the results are in Figure 4. From figure 4, words such as wonderful stay, pleasant stay, with excellent, and with friendly dominate joy and trust. Apart from the B & A approach improving the identification of perceived service quality, the visibility is also evident. The approach also correctly assigned similar vocabularies to the perceived service quality (e.g., joy-trust, anger - disgust, fear - sadness). In the case of surprise, results relate both to

positive as well as negative surprises. Therefore, there is a similarity in the vocabulary employed in these two classes (Basiri & Kabiri, 2017).

The results in Figure 4 also show that joy and trust were due to wonderful and pleasant customers, and cumulative experience with hotel employees. Joy is the emotional dimension of a pleasant experience, and trust is, therefore, the willingness to rely on the actions of another person (Berezina & Bilgihana, 2015). Establishing trust through competence, honesty, fairness, or human relationships between customers and customer service employees forge trustworthiness as perceived by the customer. Surprise and anticipation are emotion involving pleasure, excitement, or anxiety resulting from an unexpected event (Michael et al., 2016). As shown in Figure 4, the common bigrams under surprise and anticipation were on pleasant surprise, reasonable price, and waste money (a negative surprise). Positive surprise at the end of the experience yields the most substantial effect (Michael et al., 2016), which is vital as customers write reviews towards the end of their trip. Remembered experience of an extraordinary event or gesture positively affects customer perceptions compared to an anticipated service regardless of the temporal placement of the services received. Infusion of a surprise towards the end of the customer services would have a lasting effect and amplifies remembered positive experiences. Achieved anticipation and pleasant surprises reinforce royalty and the likelihood of promoting an excellent opportunity for eWOM during and after the COVID-19 pandemic.

Figure 4: Identified Perceived Quality Services by Emotions



In Figure 4, anger and disgust are negative and forceful emotions. Anger involves distress and hostile response to perceived service quality. Mainly, disgust is an emotional response of

rejection or revulsion to services that are potentially contagious, or services considered offensive, distasteful, or unpleasant. When combined, anger and disgust result in contempt (Plutchik, 1980). Based on the results in Figure 4, the customers expressed their anger based on overall negative experiences. The customers complained about dirty and smelly rooms, dirty towels and bedsheets, and inadequate services not worth for money. Angry and disgusted customers are detractors (Izard, 1977; Ye et al., 2012) who can damage the brand of the hotel and impede future growth through negative eWOM (Chiosa & Anastasiei, 2018). Elements inducing anger and disgust, such as cleanness issues, are controllable by management, eased through staff training. Understanding the customers, their context, and their mood minimize the violation of expectation, and pleasant surprises would ameliorate the cause and inspire returning customers.

While fear is a negative and not in control emotion, sadness is also negative and passive. Also related to fear, sadness is an emotional pain associated with feelings of loss, despair, grief, disappointment, and sorrow (Savolainen, 2015). Results in Figure 4 indicate that the fear and sadness was associated with horrible, terrible, or bad services and fearful background around the hotel; therefore, very disappointing. Emotions such as fear and sadness create complain-behavior and a propensity to communicate negative feelings regarding a product or service. Moreover, when a service encounter is below expectations, it is also easy to envisage its causes and judge these events to be more likely, especially by customers experiencing fear and sadness (Tversky & Kahneman, 1996). By the same logic, fearful and sad customers should find it easier to imagine horrible services and judge them as relatively more probable in the future. Fear and sadness, therefore, drive out current and potential customers through eWOM and bad reviews. Going beyond and being helpful would build the brand reputation. Training all hotel staff on how to be friendly to customers, providing exceptional care, and creating an excellent first impression on customers by demonstrating exceptional customer services need not be overemphasized. Clear and consistent lines of communication among management, staff, and customers could ensure consistent and quality services during and after the COVID-19 pandemic.

Regression and Decomposition results

The main results from the partial proportional odds model (Brant, 1990, Long & Freese, 2006) indicated that customers who observe dirty bedsheets are less likely to be satisfied customers and dissatisfied customers report dirty sheets more often. Bed comfort was associated with the likelihood of being in a higher satisfaction level. However, the effect was less potent when comparing customers moving from dissatisfaction to indifferent or satisfaction and when moving the dissatisfied and indifferent customer to satisfaction. Pleasant housekeeping staff and value for money had a positive impact on customer satisfaction. Hotel amenities with positive effects on customer satisfaction included the availability of free and fast internet and smoke-free rooms. A combination of unsatisfactory services and rude front desk staff pushed customers to dissatisfaction categories. All types of customers like the friendly staff. They dislike smelly and noisy environments that might trigger negative disconfirmation.

Based on these results, managers should first address those variables that make the customer happy. The comfortable bed, pleasant housekeeping staff, and value for money were the perceived service quality with far-reaching effects in increasing satisfaction. Equivalent variables representing the lack of or presence of amenities and emotions are a smoke-free hotel, and indoor activities, and joy, and trust. Joy has the highest positive ramification in increasing customer satisfaction levels. Variables with compelling opposite effects are dirty bedsheets and a

combination of low services among perceived service quality variables, lack of outdoor activities, and lack of transport services among regarding.

We also used the double bounded Tobit model (Amemiya, 1984) in determining the influence of satisfaction level on hotel rating. Friendly front desk staff, room view, and availability of free and fast internet were statistically significant and positively influence hotel ratings among satisfied, indifferent, and dissatisfied customers. Dirty bedsheets and lack of transportation services were also statistically significant across the three models but negatively influenced hotel rating. The negative influence of dirty bedsheets on hotel rating was even higher among dissatisfied and indifferent customers. For satisfied customers, pleasant housekeeping staff, and onsite restaurant and food services were statistically significant covariates with positive effects on hotel rating. Regarding indifferent customers, covariates with positive marginal effects include room view and onsite restaurants and services. Lax in handling complaints was a critical covariate that negatively influenced hotel rating.

The results from the Blinder-Oaxaca decomposition between satisfied and indifferent customers indicated that about 36.31 percent of the hotel rating gap among satisfied and indifferent customers is due to differences in characteristics. In other words, if all customers were satisfied, the hotel rating could improve by 63.69 percent. The Blinder-Oaxaca decomposition results for satisfied and dissatisfied customers show that about 41.49 percent of the hotel rating gap among satisfied and dissatisfied customers is due to differences in their experience. The remaining part (58.51%) is a percent change in hotel rating when applying satisfied customers' experience to dissatisfied customers' characteristics.

Summary and Implications for Policy

Currently, Louisiana is an epicenter of the COVID-19 pandemic. Hotels are forced to close due to a lack of customers. With a population of more than 830,000 people, the Baton Rouge Metropolitan economy depends on the Leisure and Hospitality Industry. The main objective of the study was to quantify the influence of perceived service quality on customer satisfaction and hotel rating. Customer satisfaction increases customer loyalty and influences repurchase intentions (returning customers). With the explosion of social networks, it also leads to positive electronic-word-of-mouth, an essential aspect of hotel branding based on consistent and quality of services.

The study is critical because the success of the Leisure and Hospitality Industry depends on localized experience. Moreover, the most prominent present-day challenges in the hotel industry are providing and maintaining customer satisfaction. Providing consistent quality of service is, therefore, a fundamental factor that determines customer loyalty. Results from the study provide valuable information to hotel managers during and after the COVID-19 pandemic. Hotel managers could brand their hotels by providing consistent and quality services valued by customers the most. The delivery of consistent quality services lends the customers to attain positive emotions, which encourages customers to seek the same positive experience in the future. The knowledge is also useful to policymakers and tourist boards who plan to revitalize the Baton Rouge Metropolitan during and after the pandemic.

The models used in this study account for customers' self-selection and endogeneity bias. Satisfied customers likely have systematically distinctive characteristics from dissatisfied customers, thereby creating a subsample heterogeneity. We used the partial proportional and double bounded Tobit model to estimate the impact of perceived service quality on satisfaction levels and hotel rating. The Blinder-Oaxaca decomposition model determined the hotel rating gaps explained by the difference in customers' characteristics and other unobservable variables. Bed

comfort, customer services from the front desk staff, and housekeeping personal were the principal factors influencing customers' satisfaction; therefore, hotel rating.

The availability of fast internet connection was a universal amenity requested by all customers. Dirty room and dirty bedsheets had the highest propensity in inducing customers' dissatisfaction. Indifferences in handling complaints by managers and the lack of transportation from and to the airports had adverse effects on customer satisfaction. During and after the COVID-19 pandemic, hotel managers in the study should focus on training front desk staff and housekeeping personal on customer services. Front desk staff are the face of the hotel, and their performance is central to customers' satisfaction. They are the initial strategic branding to offer consistent quality services as they affect customers' first impression, through check-in experience and the entire stay at the hotel. They need training on how to be friendly to customers, how to provide exceptional care, and creating an excellent first impression on customers by demonstrating exceptional customer services.

With thinning markets during and after the COVID-19 pandemic, exceptional services by front desk staff could help the hotel have a more positive reputation and more repeated customers. Satisfied customers are likely to write complimentary reviews and good ratings by marketing the hotel through the electronic-words-mouth. Front desk staff must be competent with problem-solving skills and treat customers with professionalism and dedication. They should have hotel-specific knowledge and skills to provide consistent quality services with the patience, conscientiousness, and empathy, as well as with enthusiasm, grace, politeness, and kindness.

Training is also crucial to improving housekeeping job performance. The main results of this study show that cleanliness is a critical factor in customer satisfaction and is an unwavering top priority for customers. Cleanliness would also generate positive praise via electronic word of mouth. It is, therefore, essential for managers to implement smart strategies to bolster their housekeeping activities during and after the COVID-19 pandemic. The white glove test on every corner ensures the housekeeping personnel operates at the highest possible standards. Investment in attractions that boost tourist experience can boost the competitiveness of Baton Rouge Hotels, expand economic opportunity to other businesses, and provide a pathway to prosperous and sustainable businesses in the City.

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