

## **Do Repeat Customers Effectively Attract New Customers? Reconsidering Customer Influence Value of Repeat Customers**

### **Authors**

Seunghun Shin (Corresponding author)

School of Hotel and Tourism Management

The Hong Kong Polytechnic University

17 Science Museum Road, Tsim Sha Tsui East

Kowloon, Hong Kong

Phone: +852-3400-2262

e-mail: seung-hun.shin@polyu.edu.hk

ORCID: 0000-0001-7022-6732

Hyejo Hailey Shin

School of Hotel and Tourism Management

The Hong Kong Polytechnic University

17 Science Museum Road, Tsim Sha Tsui East

Kowloon, Hong Kong

Phone: +852-3400-2177

e-mail: hailey.shin@polyu.edu.hk

ORCID: 0000-0002-8273-9719

Eunji Lee

Smart Tourism Research Center (STRC)

Kyung Hee University

Kyung Hee Dearo 26

Seoul, Republic of Korea

Phone: +82-2-961-2349

e-mail: edreamerj@khu.ac.kr

ORCID: 0000-0003-2451-560X

Yerin Yhee

Smart Tourism Education Platform (STEP)

Kyung Hee University

Kyung Hee Dearo 26

Seoul, Republic of Korea

Phone: +82-2-961-2349

e-mail: rin95923@khu.ac.kr

ORCID: 0000-0002-8826-3563

### **Acknowledgements**

The work described in this paper was partially supported by The Hong Kong Polytechnic University (Project Account Code: 1-BE7D).

## **Highlights**

- Online reviews of repeat customers are compared to those of first-visit customers
- The quality, usefulness, and attracting effect of the reviews are compared.
- Reviews of repeat customers as not necessarily better than that of first-visit customers.
- Both quality and quantity of WOM are critical factors in measuring customers' CIV

## **Do Repeat Customers Effectively Attract New Customers? Reconsidering Customer Influence Value of Repeat Customers**

### **Abstract**

In the hospitality industry, repeat customers are recognized for their significant contributions, not just because they visit a business again but also because they generate strong word-of-mouth impacts on potential customers' decisions. However, the quality of repeat customers' word-of-mouth should be reconsidered for its pivotal role in influencing new customers. This research examines the effectiveness of repeat customers' word-of-mouth compared to first-time customers. Employing a multi-study, multi-method approach, the study examines whether the quality and usefulness of online reviews written by repeat customers is indeed superior to those of first-time customers through text analysis (Study 1), an experiment (Study 2), and a regression analysis utilizing secondary data (Study 3). Contrary to common belief, the results of three studies reveal that repeat customers' reviews do not surpass those of first-time customers in terms of quality, usefulness, or attracting new customers, highlighting the importance of considering quality when assessing customers' indirect contributions.

*Keywords:* Repeat customers; Customer influence value; Customer loyalty; Online reviews; Multi-study approach

## **Introduction**

Repeat customers are valuable for any business as they bring significant benefits to the firm (Reichheld & Teal, 2001). On one hand, repeat customers are a more stable source of revenue than first-time customers because the former tend to make repeated or additional purchases, even when prices are high (Umashankar et al., 2017). On the other hand, repeat customers generate more positive word-of-mouth (WOM), thus making more indirect financial contributions by attracting new customers. This is called customer influence value (CIV) (Kumar, 2018). The CIV of repeat customers is beneficial, especially for a hospitality business, because consumers rely on WOM while considering whether to purchase experiential products (Kumari & Sangeetha, 2022). Recently, repeat customers were found to generate more positive electronic WOM (eWOM) than first-time customers, indicating a higher CIV for repeat customers (Ismagilova et al., 2020).

While the amount of positive online reviews created by a customer is an important aspect for assessing the customer's CIV, the volume of positive online reviews cannot be the sole criterion for assessing a customer's CIV. While volume would be indicative of a customer's CIV, the quality of positive online reviews also plays a key role in determining its effects on potential customers' choice of hospitality business (Muralidharan et al., 2017). As a huge number of online reviews are low quality and often disregarded (Mariani & Borghi, 2020), it is important to consider the quality of reviews rather than their quantity when assessing the CIV of repeat customers. If the positive online reviews shared by repeat customers are not more valuable than those of first-time customers, repeat customers may not be more influential in attracting new customers to a hospitality business (Lee & Shin, 2014). Although repeat customers have been found to give more online reviews than first-time customers (Ismagilova et al., 2020), we must further explore whether repeat customers create higher-quality reviews and thus have stronger effects on the decisions of potential customers.

This research aims to investigate whether repeat customers are more desirable than first-time customers in terms of eWOM publicity through the following research questions: 1) *Do repeat customers produce higher-quality reviews than first-time customers?* 2) *How influential are the positive online reviews of repeat customers in attracting new customers to a hospitality business compared to the reviews of first-time customers?* Drawing on social exchange theory and information processing theory of customer choice, we hypothesized that positive online reviews by repeat customers are not of better quality, more useful, or more influential to potential customers than those of their counterparts. To test the hypotheses, we conducted a multi-study in restaurants. In Study 1, we utilized text analysis to investigate the differences in the quality of online restaurant reviews between repeat and first-time customers. In Study 2, we conducted an experiment to determine if there were perceived differences in the usefulness of restaurant reviews between repeat and first-time customers. Finally, in Study 3, we evaluated the impact of these reviews on restaurant sales and the acquisition of new customers by merging review data with actual transaction records from restaurants.

The findings of this research demonstrate that although repeat customers are a stable source of revenue, they may not be the most effective advocates for a business. Therefore, this research offers valuable insights into how a hospitality business can increase its CIV from repeat customers. For researchers, these findings fill a gap in the existing research by highlighting the importance of considering the quality of WOM in determining a customer's CIV. Additionally, since previous studies have often relied on survey methodologies to assess a customer's CIV (Pereira et al., 2017), this research suggests alternative methodologies and a multi-study approach for assessment. Considering that existing literature on repeat customers' behavior has primarily focused on their spending habits (e.g., additional purchases) (Umashankar et al., 2017), this research contributes to the field by exploring

customers' eWOM-providing behavior. Lastly, this research aids online review researchers in developing a better understanding of the reviews' impact on customers' decision-making by providing empirical evidence of the revisiting behavior of the review writers as a relevant factor (El-Said, 2020; Qin et al., 2022).

## **Literature Review**

### *Customer influence value (CIV): Quantity and quality of WOM*

Customer Valuation Theory (CVT) introduces the assessment of customers' financial contributions through two distinct avenues: direct and indirect (Kumar, 2018). Direct contributions encompass purchases or visits, such as dining at a restaurant, visiting a theme park, or lodging at a hotel (Petersen et al., 2022). Conversely, indirect contributions involve WOM actions, both online and offline, including activities such as posting positive reviews on the internet (Song & Kim, 2022). CVT strongly advocates for the strategic importance of nurturing and retaining repeat customers due to their heightened impact on both direct and indirect contributions, setting them apart from their first-time counterparts (Huang et al., 2023).

Within the realm of hospitality and tourism literature, there has been an extensive exploration of the enhanced direct and indirect contributions exhibited by repeat customers, particularly. Concerning direct contributions, Teichmann (2021) emphasized how devoted patrons of a restaurant often exceed their intended budgets, driven by their tendency to heed server recommendations for additional items. Additionally, Huarng and Yu (2020) divulged that repeat users of the ride-sharing platform Uber display a greater level of tolerance toward surge pricing. Regarding indirect contributions, it has been shown that repeat patrons are more inclined to engage in positive WOM behaviors (Siddiqui & Sharma, 2022). In a comprehensive meta-analysis, Ismagilova et al. (2020) established a positive correlation

between a customer's revisit and their inclination to participate in eWOM activities, spanning diverse services, including restaurants and hotels. The examined relationship between a customer's revisit and the frequency of sharing positive online reviews has led researchers to argue for a higher CIV for repeat customers compared to first-time visitors.

However, the CIV of a customer cannot be determined solely by the number of positive online reviews they have shared. The content of a positive online review is also critical in influencing potential customers' decision-making. Even reviews from social media friends, perceived as more credible than those from strangers, may fail to persuade potential customers if they only contain positive feedback about a product (Wang et al., 2022). With the vast number of online reviews being generated, low-quality reviews are likely to become noise for customers (Huang et al., 2023; Mariani & Borghi, 2020; Shin et al., 2024). One high-quality positive review could be more effective in convincing potential customers than ten low-quality positive reviews. Even if repeat customers are active in creating positive online reviews, they may not be more influential in attracting new customers to a hospitality business if reviews are not more informative than those of first-time customers (Lee & Shin, 2014). Other than the quantity of an online review, its quality has to be considered to correctly estimate a customer's CIV (Li et al., 2023).

This research aims to delve into the significance of considering the quality of eWOM, specifically focusing on online reviews, when evaluating a customer's CIV. Given that online platforms have emerged as the primary medium for WOM communication (Marinova, 2024), this study will meticulously investigate the quality of eWOM-providing behavior.



### *Effects of repeat customers' online reviews on potential customers' decisions*

Though we believe that repeat customers' positive online reviews would be more effective in attracting potential customers than those of first-time customers (Han, 2021), reviews from repeat customers may not be more influential than those from first-time customers. This aligns with the social exchange theory (Blau, 1964), which asserts that individuals' value-alignment perceptions, also known as the norm of reciprocity, are crucial in understanding behavior in the customer–business exchange process. Customers determine whether to contribute further to a business by comparing the value they have given to that which they have received (Gouldner, 1960; Kumar & Reinartz, 2016). Repeat customers, perceiving a balance in the customer–business relationship due to repeated purchases, retention, and increased spending, may be less motivated to make additional contributions (Huppertz et al., 1978; Ko & Song, 2024). Previous research has examined the diminished enthusiasm among repeat customers, often attributing it to awareness of prior contributions. Teichmann (2021) identified a non-linear relationship between customers' revisits and spending in a restaurant, with spending decreasing after a certain point. Umashankar et al. (2017) found that repeat airline customers tend to spend less than first-time customers, citing perceptions of value alignment. Alegre and Juaneda (2006) supported the social exchange theory, showing that destination revisitors spend less than first-time customers. Petrick (2004) compared spending by first-time and repeat cruise visitors and found that the former spend more. According to the social exchange theory and relevant previous research, repeat customers consider what they have already done for a business through their multiple visits. This consideration leads them to invest less time or effort in making an additional contribution to the business, such as paying for additional products or services or spreading positive. Specifically, we anticipate that repeat customers' reduced motivation to contribute to a business might be manifested in their online review behaviors. Compared to first-time

customers, repeat customers may be less willing to invest time and effort into writing a positive online review. Considering that an online review could be useful information when a reviewer writes it carefully with much time and effort, repeat customers' positive reviews may not be perceived as more useful by potential customers and may not be more influential than those of first-time customers in attracting new customers to a hospitality business.

The expectation regarding the quality of repeat customers' reviews compared to that of first-time customers can also be explained by the information processing theory of customer choice (Bettman, 1970). This theory explains how customers use information to make decisions and focuses on how customers' previous experiences influence their decision-making process (Alba & Hutchinson, 1987; Bettman, 1970). According to the theory, repeat customers tend to rely on their previous experiences when making decisions, but the amount of information they recall depends on the task at hand (Bettman, 1986). When comparing different products (selecting a product), repeat customers tend to recall only the information relevant to the comparison (the selection) and use it as their main reference (Johnson & Russo, 1984). This selective information processing leads repeat customers to consider a limited range of information compared to potential customers. Kim and Gupta (2009) demonstrated that potential customers for online shopping considered less information than repeat customers, especially regarding the value and risk of the online transaction. Reibstein (2002) also explored what potential and repeat customers consider for online shopping and found that the dominant factor, such as price, was not as seriously considered by repeat customers. The information processing theory and subsequent empirical findings suggest a negative impact of previous shopping experiences on the amount of information considered. If this negative impact applies to the review-writing behavior of revisit and first-time customers, the reviews written by repeat customers tend to include less information about a

focal business than those by first-time customers. Consequently, repeat customers' reviews may be perceived as less useful than those of first-time customers.

Studies on online reviews have identified several dimensions of review quality centered around information quality (Chakraborty et al., 2022). These investigations underscore the pivotal role of the review text in gauging overall quality and introduce metrics such as information depth, straightforward recommendations, and topic diversity to assess content quality. Information depth pertains to the comprehensiveness of information included in the review, with prior research indicating that greater information correlates with higher content quality (Son et al., 2020). Simple recommendations encompass concise and abstract expressions of customers' positive evaluations, such as "I recommend this restaurant," which are less informative and consequently indicative of lower-quality content (Dissanayake and Malkanthie, 2018). On the other hand, topic diversity gauges how comprehensively various attributes of the hospitality business are addressed in an online review and has been proven to positively influence content quality (Lee & Zhao, 2020). Given the insights from existing literature, we posit the hypothesis that positive reviews from repeat customers will not exceed those from first-time customers in terms of information depth, simplicity of recommendations, and topic diversity.

*Hypothesis 1 (H1). Positive online reviews written by repeat customers are not higher quality than those written by first-visit customers. Specifically, reviews from repeat customers are not more comprehensive, do include more simple recommendations, and do not cover more topics than reviews from first-time customers.*

The perceived usefulness of an online review is directly linked to its content quality. Thomas et al. (2019) illustrated that comprehensive, relevant, and timely information about a

restaurant significantly elevates the content quality of an online review, thereby enhancing its utility in aiding potential consumers' decision-making. Similarly, Chong et al. (2018) highlighted the positive correlation between content quality and the perceived usefulness of online reviews for travel package products. Expanding on these insights and taking into account our previously proposed H1, which posits that repeat customers' reviews do not demonstrate superior content quality, we anticipate that reviews from repeat customers will not be perceived as more useful compared to those from first-time customers.

*Hypothesis 2 (H2). In the scenario where H1 is supported (or rejected), positive online reviews written by repeat customers are not (or are) perceived as more useful in assisting potential consumers' decision-making compared to reviews from first-time customers.*

Once an online review is recognized as useful, it often becomes a crucial factor in decision-making for readers (Zeng et al., 2020). Previous research has extensively studied the impact of perceived usefulness in online reviews on consumer adoption. For example, Hsu (2022) highlighted the significant influence of product evaluations in online reviews on consumer purchasing decisions, specifically in the beauty product context. Additionally, the role of usefulness in shaping consumer adoption of online reviews has been extensively examined in the hotel industry (Huiyue et al., 2022). Building on our earlier hypothesis (H2) that suggests no difference in perceived usefulness between positive reviews written by repeat customers and those by first-time customers, we can infer that potential customers are not more inclined to consider positive reviews from repeat customers as guiding cues for their decisions compared to reviews from first-time customers.

*Hypothesis 3 (H3). In the scenario where H2 is supported (or rejected), positive online reviews written by repeat customers do not prove (or prove) more effective in attracting new customers to a hospitality business compared to reviews written by first-time customers.*

## **Methodology**

We utilized a multi-study methodology consisting of three investigations focused on restaurant settings. In Study 1, we conducted text analysis to evaluate H1, comparing the quality of positive restaurant reviews authored by repeat customers and first-time customers. Specifically, we assessed positive online reviews from these customer segments across three quality dimensions: 1) review length, which indicates information depth; 2) the proportion of simple recommendations in the reviews; and 3) the range of topics covered related to the restaurant's attributes. Moving on to Study 2, we conducted an experiment to investigate H2. We measured and compared the perceived usefulness of hypothetical positive restaurant reviews written by repeat customers and first-time customers. Lastly, Study 3 aimed to assess the impact of reviews on customer behavior, employing regression analysis to examine H3. Our analysis integrated transaction and online review data from the selected restaurants. We explored whether a surge in repeat customer reviews during a specific month would correlate with subsequent increases in restaurant sales and the influx of new customers in the following month.

### **Study 1**

#### *Data collection*

We collected positive restaurant reviews written by both repeat and first-time customers from Naver, South Korea's most prominent search engine (<https://www.naver.com>). Naver's review system requires users to submit receipts from

visited restaurants for verification before writing an online review. Additionally, Naver conveniently indicates whether a review is written by a first-time customer or a repeat customer based on a user's upload history. This feature allowed us to gather restaurant reviews from both repeat and first-time customers.

Jeju Island is the largest island in the region and South Korea's only natural World Heritage site. It is also a highly sought-after destination for both domestic and international tourists. For our study, we have selected all the restaurants located in Aewol, Jeju Island. Aewol is renowned for its vibrant dining scene and had the highest number of restaurants on Jeju Island at the time of data collection, totaling 411 restaurants.

To gather the necessary data, we developed a web crawler programmed to collect reviews for the selected restaurants in Aewol, Jeju Island from Naver. In total, we collected 93,114 reviews. Our research focused on positive reviews from both repeat and first-time customers, so we systematically excluded all negative reviews. We then used Repustate IQ, an online tool capable of analyzing text sentiment in various languages, including Korean, English, and Spanish (Repustate, n.d.), to calculate the sentiment score for each review. The sentiment score ranged from 0 (negative) to 100 (positive). This tool has been validated in numerous studies and specifically designed for assessing text sentiment in social media posts (Dale, 2018). We filtered out reviews with a sentiment score below 50. As a result, our dataset consisted of 78,389 positive restaurant reviews, including 6,226 from repeat customers and 72,163 from first-time customers, for further analysis.

### *Measurement and analysis*

To gauge the depth of information within each review, we employed a character count, a methodology used in prior research (Hong et al., 2020).

To determine the proportion of simple recommendations, we first removed special characters and stop words from the review text. We then manually compiled a list of straightforward recommendation words. From there, we calculated the ratio of the frequency of these simple recommendation words (e.g., "I recommend it": 추천; "Thank you": 감사합니다; "Good": 좋습니다) to the total word count within each review category (i.e., repeat and first-time customers' reviews).

Furthermore, we assessed topic diversity by employing the term frequency-inverse document frequency (TF-IDF) scoring approach. This technique assigns weights to words based on their prevalence within a specific document (term frequency) and their presence across multiple documents (inverse document frequency) (Mishra & Urolagin, 2019). Using each online review as a unit of analysis, we calculated TF-IDF values for every keyword. We then extracted the top 15 keywords with the highest TF-IDF values from the reviews of repeat customers and first-time customers, respectively. By comparing the top 15 keywords between the reviews of repeat customers and first-time customers, we explored how various attributes of a restaurant were prominently mentioned in both groups of reviews.

### *Discussions*

Table 1 displays the results of the comparison of information depth between positive restaurant reviews written by repeat customers and those by first-time customers. We conducted this comparison using an independent t-test to measure the character count in each review. The results indicated a significant difference, with the character count in reviews written by first-time customers (Mean = 33.45) being significantly higher than that in reviews written by repeat customers (Mean = 27.79,  $t = -5.968$ ,  $p < 0.001$ ). To further explore this difference, we categorized the reviews of repeat customers based on the number of visits they had made to the restaurant, ranging from their second visit to their third visit or more. The

findings revealed an interesting pattern: the more visits a repeat customer had made, the shorter their reviews tended to be. These findings suggest that reviews written by repeat customers generally have less detailed information compared to those written by first-time customers.

Table 1. Comparing repeat and first-time customers' reviews: Information depth

| Groups                                                        | N      | Mean  | SD     | Mean difference <sup>1</sup> | t <sup>1</sup> |
|---------------------------------------------------------------|--------|-------|--------|------------------------------|----------------|
| First-time customers' reviews                                 | 72,163 | 33.45 | 35.882 | -                            | -              |
| Repeat customers' reviews (Total)                             | 6,226  | 27.79 | 34.929 | -2.667                       | -5.968***      |
| Repeat customers' reviews (2 <sup>nd</sup> visit)             | 4,676  | 30.69 | 34.740 | -2.761                       | -5.256***      |
| Repeat customers' reviews (the 3 <sup>rd</sup> visit or more) | 1,281  | 29.73 | 35.529 | -3.720                       | -2.677*        |

<sup>1</sup>Against first-time customers' reviews; \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Figure 1 displays the breakdown of simple recommendations in online reviews, with separate bars representing reviews by repeat customers categorized by their visit frequency. The graph visually represents a noticeable trend: as the number of visits by repeat customers increases, the proportion of simple recommendations within their reviews also increases. Specifically, simple recommendations make up less than 7% of a first-time customer's review but account for almost 30% of a repeat customer's review. These findings suggest that repeat customers are more inclined to include simple recommendations in their reviews compared to first-time customers.



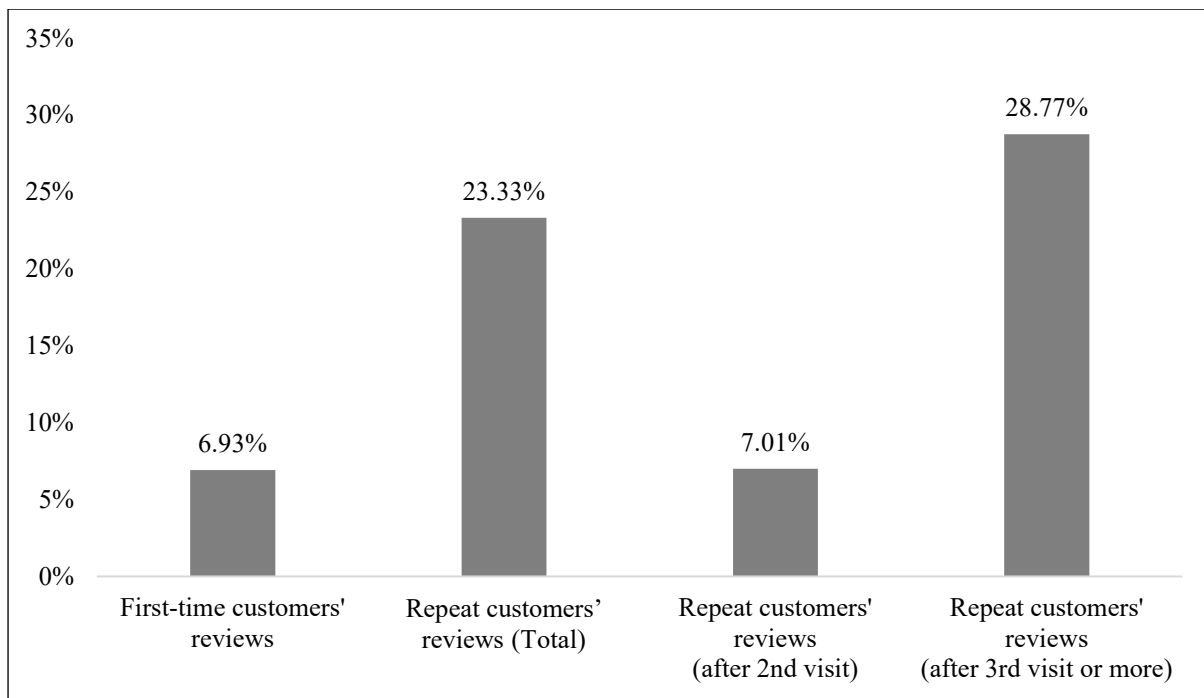


Figure 1. Comparing repeat and first-time customers' reviews: Proportion of simple recommendations

Table 2 and Figure 2 present the results of our analysis on the comparison of topic diversity. We categorized the reviews of repeat customers based on their visit frequency. To evaluate topic diversity, we identified the top 15 words with the highest TF-IDF scores for each review group and determined the number of restaurant attributes these words represented. To account for variations in the number of reviews in each group (72,163 reviews for first-time customers, 4,676 reviews for repeat customers after the 2nd visit, and 1,281 reviews for repeat customers after the 3rd visit or more), we normalized the TF-IDF values. The analysis revealed that first-time customers' reviews were characterized by 15 words representing six restaurant attributes (food, staff, interior, convenience or cleanliness, atmosphere, and price) (Table 2). In contrast, repeat customers' reviews typically featured an average of three restaurant attributes represented by their top 15 words (food, staff, and convenience or cleanliness). Figure 2 further highlights these disparities in attribute

distribution. In first-time customers' reviews, the 15 words evenly represented each of the six attributes. However, in repeat customers' reviews, this representation was not evenly distributed. Intriguingly, we observed that words related to revisiting behavior (e.g., "revisit": 재방문; "loyal customers": 단골) emerged as significant in repeat customers' reviews. These findings suggest that repeat customers' reviews tend to exhibit lower topic diversity compared to those of first-time customers.

Table 2. Comparing repeat and first-time customers' reviews: Topic diversity 1

| First-time customers' reviews |        |        | Repeat customers' reviews (2 <sup>nd</sup> visit) |        |        | Repeat customers' reviews (the 3 <sup>rd</sup> visit or more) |        |        |
|-------------------------------|--------|--------|---------------------------------------------------|--------|--------|---------------------------------------------------------------|--------|--------|
| Words                         | TF-IDF | Attr.* | Words                                             | TF-IDF | Attr.* | Words                                                         | TF-IDF | Attr.* |
| Kind                          | 0.035  | S      | Kind                                              | 0.039  | S      | Kind                                                          | 0.036  | S      |
| Clean                         | 0.011  | C      | Rib                                               | 0.021  | F      | <i>Revisit</i>                                                | 0.024  | -      |
| Value for money               | 0.011  | P      | Coffee                                            | 0.021  | F      | Coffee                                                        | 0.022  | F      |
| Atmosphere                    | 0.010  | A      | Cake                                              | 0.017  | F      | Cookie                                                        | 0.022  | F      |
| Types of menu                 | 0.010  | F      | Clean                                             | 0.014  | C      | Homemade food                                                 | 0.022  | F      |
| Parking                       | 0.008  | C      | Cookie                                            | 0.013  | F      | Reservation                                                   | 0.019  | C      |
| Dessert                       | 0.008  | F      | Parking                                           | 0.013  | C      | Beverage                                                      | 0.018  | F      |
| Beverage                      | 0.008  | F      | Carrot bread                                      | 0.013  | F      | Tea                                                           | 0.018  | F      |
| Table d'hote                  | 0.007  | F      | Pollack Soup                                      | 0.012  | F      | Clean                                                         | 0.018  | C      |

|             |       |   |          |       |   |              |       |   |
|-------------|-------|---|----------|-------|---|--------------|-------|---|
| Noodle      | 0.007 | F | Revisit  | 0.012 | - | Dessert      | 0.018 | F |
| Eat alone   | 0.007 | C | Bread    | 0.012 | F | Carrot bread | 0.013 | F |
| Reservation | 0.006 | C | Sandwich | 0.012 | F | Cutlassfish  | 0.012 | F |
| Interior    | 0.006 | I | Macaroon | 0.010 | F | Lunch        | 0.011 | F |
| Price       | 0.005 | P | Toast    | 0.010 | F | Brunch       | 0.011 | F |

\*Attributes: A = Atmosphere; C = Convenience or Cleanliness; F = Food; I = Interior; P =

Price; S = Staff; \*\*Simple recommendation words were not included.

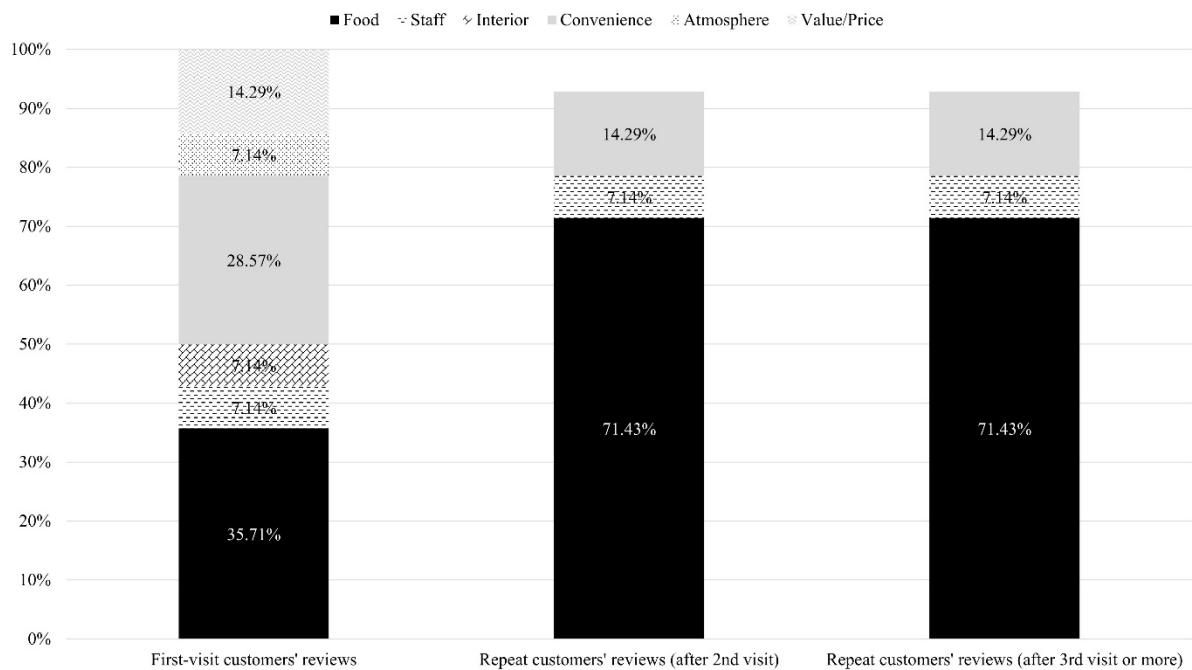


Figure 2. Comparing repeat and first-time customers' reviews: Topic diversity 2

The findings from Study 1 highlight several noteworthy distinctions: repeat customers tend to compose shorter reviews, provide simple recommendations more frequently, and cover fewer restaurant attributes compared to their first-time counterparts that we examined. These disparities lend support to H1, which suggests that repeat customers' reviews do not exhibit superior quality compared to those authored by first-time customers.

### *Additional analyses for robust check*

It is important to note that the skewed sample size used in Study 1 may have impacted our findings. To address this concern and ensure the robustness of our conclusions, we conducted a post-hoc analysis. In this analysis, we randomly selected 100 reviews from each of the following categories: reviews from first-time customers, reviews from customers on their second visit, and reviews from customers on their third visit or more. To do this, we assigned numerical identifiers to all reviews within each category, generated 100 random numbers using Excel, and then selected the corresponding reviews. These supplementary analyses produced consistent results, even with the smaller sample sizes, further supporting our initial findings (Appendix A).

While Jeju Island is a renowned destination for Koreans, frequent visits to the destination may pose challenges. It is difficult for Koreans to be repeat customers of restaurants in Jeju Island. The distinction between repeat and first-time customers, based on whether they are residents or tourists, could influence our findings. Therefore, we conducted an additional round of analysis as a robust check, using reviews from restaurants located in Seoul, South Korea. Since Seoul is a popular and accessible city for both tourists and residents, the aforementioned difference between repeat and first-time customers is less likely. We collected all the reviews posted for the top 5-ranked restaurants in terms of the number of reviews in Seoul (6,424 reviews) and repeated the process of Study 1. Similar to the first robust check analysis, consistent findings were observed (Appendix B).

## **Study 2**

### *Procedure*

We recruited a total of 300 participants via Micromill Embrain, a survey company based in South Korea, in April 2024. Our participant pool consisted of Korean citizens aged 18 and above who were familiar with using the Naver app. Participants were asked to imagine themselves traveling on Jeju Island with their friends, using the Naver app to search for a restaurant serving a famous dish of Jeju Island, specifically pork noodle soup. They were then asked to imagine finding a good option and reading online reviews about the restaurant in order to make a final decision on whether to visit it. Participants were exposed to a hypothetical positive review of the restaurant and were randomly assigned to one of two experimental conditions with a between-subjects design: reading a positive review written by a repeat customer or reading a positive review written by a first-time customer.

We created one hypothetical positive review and using the findings of Study 1 in terms of text length (31 characters on average), proportion of simple recommendations (24% on average), topic diversity (4 attributes on average). We manipulated only the number of visits a reviewer had made. Following Naver's interface, the number of visits a reviewer had made to the restaurant was displayed in each hypothetical review to differentiate a repeat and first-time customer's review (review written after the third visit vs. after the first visit). In other words, the participants were exposed to the exact same review content (first-time customer review in Appendix C), except for the number of visits a reviewer had made (third visit vs. first visit). Three hundred people participated in the experiment, and 266 valid responses were analyzed (134 in the repeat customer's review condition).

### *Measurement and analysis*

The perceived usefulness of the online review was assessed using three questions adapted from prior research (Lopes et al., 2020). The three items were rated on a 5-point scale and combined into a single scale ( $\alpha = 0.96$ ). The items' convergent and discriminant validities were confirmed. The three criteria for convergent validity were met: (1) each item had a standardized loading of over 0.5; (2) the composite reliability of the items was over 0.7; (3) Cronbach's  $\alpha$  was over 0.7. The criterion for discriminant validity was also met: the average variance extracted was over 0.5.

### *Discussions*

We assessed the perceptions of the manipulated review by asking participants about the number of visits the reviewer had made. Results showed that participants recognized that the number of visits the reviewer made was manipulated. Our analysis revealed that there was no significant difference in the perceived usefulness of a repeat customer's review compared to that of a first-time customer's review ( $M_{\text{repeat}} = 3.51$ ,  $SD = 0.79$ ;  $M_{\text{first-visit}} = 3.39$ ,  $SD = 0.74$ ;  $t = 1.65$ ,  $p = 0.12$ ). H2 was supported. This result indicates that, if the content is the same, the number of visits a reviewer had made to a restaurant might not be critical in increasing the review's usefulness, supporting H2.

## **Study 3**

### *Data collection*

We procured sales data for the sample restaurants from Study 1 through our research project collaborations with the Jeju Tourism Organization. Additionally, we collected information about the sample restaurants, including details such as their name, address, latitude and longitude coordinates, and cuisine. The sales data we obtained covered the

months of October and November 2021. In compliance with South Korea's data security policy, all sales figures were transformed into percentages relative to the highest sales value recorded in September 2021. We used Naver to collect online review data.

### *Measurement and analysis*

This research used a comprehensive set of variables to investigate the impact of repeat and first-time customer reviews on attracting new patrons to a restaurant (see Appendix D). These variables, collected at the restaurant level, were classified into two independent, two dependent, and eight control categories. The independent variables consisted of the number of repeat and first-time customer reviews, collected up until October 2021, with the assumption that these reviews would influence restaurant visits in November 2021, as evident from Naver reviews from October 2021. The dependent variables were the restaurant's sales and the number of online reviews written by first-time customers in November 2021. It is intuitive that an increase in new customers typically correlates with higher sales, and logically, a rise in reviews from first-time customers.

Additionally, we considered eight control variables that were measured at the restaurant level and found to have significant roles in determining a restaurant's performance. First, we examined the number of nearby restaurants, which provided insights into the density of dining options within a 100-meter radius of the focal restaurant, offering a measure of local competition. Next, we assessed the proximity to a nearby beach in kilometers, which indicated the accessibility of the restaurant to a popular recreational area. Similarly, we evaluated the proximity to the airport, also measured in kilometers, which revealed the convenience of the restaurant for travelers using Jeju International Airport. Furthermore, we took into account the overall rating based on online reviews until October 2021, which provided a measure of customer satisfaction on a scale from 1 (negative) to 5 (positive). In

addition, we delved deeper into the restaurant's intrinsic qualities by exploring the quality of functional, social, and ambiance attributes. For this, we utilized a unique Naver function where reviewers selected the best attribute from 15 predefined options for each restaurant. To streamline the analysis, we conducted exploratory factor analysis (EFA), which helped us identify three factors with eight attributes. The first factor, functional attributes, included attributes such as tasty food, kind staff, value for money, and generous portion size. The second factor, social attributes, encompassed attributes related to being suitable for social gatherings and offering a spacious environment. The third factor, ambiance attributes, comprised attributes such as great views and a pleasing interior (Appendix E). Finally, after careful review, we did not find any major or global events that occurred in Jeju Island from October to November 2021, eliminating potential confounding factors.

We developed two ordinary least squares (OLS) regression models, with Model 1 focusing on sales as the dependent variable and Model 2 incorporating the number of first-time customer reviews.

### *Discussions*

Appendix F presents the descriptive statistics of the restaurants included in our study, while Appendix G displays the results of the correlation analysis. We did not find any significant issues in our data in terms of correlations.

Table 3 presents the results of two OLS regressions. In Model 1, the number of first-visit customers' reviews had a significant positive effect ( $\beta = 0.1754, p < 0.001$ ), whereas the number of reviews from repeat customers did not have a significant effect ( $\beta = 0.0192, p = 0.737$ ). Similar results were found in Model 2, where only first-time customers' reviews had a significant positive effect ( $\beta = 0.1659, p < 0.001$ ).



Table 3. OLS Regressions

| Models<br>(Dependent variable)             | Model 1<br>(Sales) | Model 2<br>(Number of first-timefirst-visit customers'<br>reviews) |
|--------------------------------------------|--------------------|--------------------------------------------------------------------|
| Intercept                                  | 0.1598***          | 0.1954***                                                          |
| 1. Number of repeat customers' reviews     | 0.0192             | 0.0061                                                             |
| 2. Number of first-time customers' reviews | 0.1754***          | 0.1659***                                                          |
| 5. Number of nearby restaurants            | 0.0072             | 0.6462                                                             |
| 6. Proximity to a nearby beach             | -0.0213            | -0.4488                                                            |
| 7. Proximity to the airport                | -0.0043            | -0.2024                                                            |
| 8. Overall rating                          | -0.0398***         | -0.0359***                                                         |
| 9. Quality of functional attributes        | -0.0081            | 0.7399                                                             |
| 10. Quality of social attributes           | 0.0140             | 0.5141                                                             |
| 11. Quality of ambiance attributes         | -0.0003            | 0.7613                                                             |
| Cuisine 1: Korean (Reference)              | -                  | -                                                                  |
| Cuisine 2: Western                         | 0.0374             | -0.9850                                                            |
| Cuisine 3: Japanese                        | 0.0449             | -0.0386                                                            |
| Cuisine 4: Chinese                         | -0.0297            | -0.1746                                                            |
| Cuisine 5: Fast-food                       | -0.0508            | -0.2074                                                            |
| Cuisine 6: Café, Dessert, and Bakery       | 0.0269             | 0.6422*                                                            |
| Cuisine 7: Miscellaneous                   | -0.0234            | -0.1891                                                            |
| R <sup>2</sup> (Adjusted R <sup>2</sup> )  | 0.5775<br>(0.5604) | 0.5997 (0.5954)                                                    |

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

The study found that the number of first-time customers' reviews had a positive relationship with sales, but this was not the case for repeat customers' reviews. These findings suggest that repeat customers' reviews are not more effective than first-time customers' reviews in attracting new customers to a restaurant. H3 was supported.

## **Implications**

### *Theoretical contributions*

This research contributes to the literature on CIV in the hospitality industry by highlighting the limitations of existing methods for estimating customers' CIV. Previous studies have typically assumed that repeat customers' CIV would be higher than that of first-time customers, based on the idea that repeat customers generate more positive WOM (Gremler & Brown, 1999; Sheng et al., 2019). However, our findings show that repeat customers' positive WOM may not be more effective in attracting new customers compared to that of first-time customers, as repeat customers may not provide quality information. This research emphasizes the need to consider both the quantity and quality aspects of customers' WOM in measuring their CIV. While the importance of considering the quality aspects of customers' WOM has been discussed in previous research (Lee & Shin, 2014; Muralidharan et al., 2017), this study contributes empirical evidence to support this notion and highlights the limitations of solely assessing CIV based on the quantity of customers' WOM. In addition, this research contributes to the field of CVT by suggesting ways to extend the boundaries of measuring customers' CIV (Kumar, 2018; Lopes et al., 2020). Furthermore, it proposes alternative methodological approaches for measuring this specific category of customer value, as most existing research on CIV has relied heavily on surveys (Pereira et al., 2017).

The research validates the application of social exchange theory and information processing theory of customer choice in the hospitality and tourism literature, particularly regarding the impact of tourists' previous experiences on their behavior. In terms of social exchange theory, hospitality studies have focused on customers' financial contributions and examined the impact of repeat customers' value-alignment perceptions on their financial contributions to a service provider (Alegre & Juaneda, 2006; Teichmann, 2021; Umashankar et al., 2017). However, it has been unclear how customers' value-alignment perceptions, driven by their revisits, affect their non-financial contributions, such as spreading WOM. This research fills this knowledge gap by examining the impact of customers' revisits on their eWOM writing and confirms that social exchange theory can explain not only repeat customers' financial contributions but also their non-financial contributions (Gouldner, 1960; Kumar & Reinartz, 2016). Regarding the information processing theory of customer choice, while the impact of tourists' previous experiences on their travel behavior has been discussed in the tourism literature (Liu et al., 2017; Nerhagen, 2003; Sönmez & Graefe, 1998), the theory has been less applied. By demonstrating that the theory's argument is valid in explaining the impact of tourists' previous visits on their eWOM writing, this research serves as an empirical reference for using the information processing theory of customer choice to explain how tourists' previous experiences affect their travel behavior. This research contributes to future studies on the impact of customers' revisit on their behavior by suggesting two theoretical frameworks to further understand the impact.

Furthermore, this research contributes to the field of online review studies by examining how a reviewer's previous visit to a hospitality business can impact their review-writing behavior and the subsequent influence of the review on readers' perceptions. Previous studies in this area have looked at various reviewer characteristics that affect the helpfulness of online reviews and how they are perceived by readers, including the reviewer's identity,

expertise (Wu et al., 2021), popularity (Li et al., 2021), and previous rating trend (Xu & Xu, 2023). However, little attention has been given to the reviewer's previous visit to the business in question in the hospitality and other business domains. This research demonstrates that a reviewer's revisit not only shapes their review-writing behavior but also influences how readers perceive the review, underscoring the importance of considering a reviewer's previous visit as a potential factor in understanding how customers create and engage with online reviews.

### *Practical contributions*

This research reveals that positive online reviews of a restaurant, authored by repeat customers, do not necessarily exhibit superior content quality, perceived usefulness, or greater effectiveness in attracting new customers compared to reviews written by first-time customers.

The findings of this research offer valuable insights for restaurants concerning their eWOM marketing strategies. They also prompt restaurants to reassess certain factors that may have been overlooked when determining which customers to request online reviews from. While it is common for restaurants to send review invitations randomly via email and include links to platforms such as TripAdvisor or Yelp, our findings indicate that restaurants may improve their review invitation strategies by taking into account the customers' past visit history when selecting the target audience. It is advised to exercise caution when sending invitations to repeat customers.

Conversely, when inviting repeat customers to write online reviews, a restaurant could take a more proactive approach. Recognizing that repeat customers may have a lower willingness to craft high-quality reviews, a restaurant could simplify and streamline the writing process. For example, the invitation email could include specific questions to guide

customers in providing more informative reviews. These questions could cover various aspects, such as the dining experience, food quality, freshness of ingredients, server demeanor, and more. Additionally, including an example of a useful review in the invitation email can demonstrate how to create effective eWOM, encouraging repeat customers to contribute valuable and detailed feedback. This approach can greatly enhance the restaurant's eWOM marketing efforts.

Moreover, although not the primary focus, this research has found that the value of an online review is influenced by the proportion of simple recommendations it contains. This insight can assist restaurants in making better decisions about which reviews to use for promotional purposes. Many restaurants leverage positive online reviews as a marketing tool, such as featuring testimonials on their websites or designating specific reviews as "Restaurant's Favorites" on platforms like TripAdvisor. While previous studies on online reviews have suggested factors such as review length and diversity of topics when selecting positive reviews for display (Reich & Maglio, 2020), our research proposes that the proportion of simple recommendations should also be considered.

Finally, building on previous research that suggests repeat customers perceive their own contributions as higher and consequently spend less compared to first-time customers (Petrick, 2004; Umashankar et al., 2017), our findings indicate a similar trend may occur for repeat customers' non-financial contributions, particularly in terms of eWOM. This insight can help restaurants develop more informed and realistic expectations regarding the contributions of repeat customers.

While these practical contributions are suggested within a restaurant context, they can be extended to other hospitality business sectors, where eWOM marketing and profiling of repeat customers are also prevalent.

### *Limitations and future research directions*

One limitation is that the research focused solely on restaurants in Jeju Island, South Korea. Although another study was conducted to ensure robustness, future research should broaden its scope to other business domains and geographic locations to enhance the generalizability of the findings. Second, the research did not encompass all facets that contribute to the content quality assessment of online reviews in Study 1. Additionally, the demographic attributes of reviewers, such as age, gender, and cultural background, were not considered despite their potential to significantly influence their eWOM behavior (Fam et al., 2023; Sharipudin et al., 2023). Also, although there are established methods for measuring topic diversity (e.g., topic dispersion) (Shannon, 2001), we took an alternative approach because the existing approaches cannot be applied to Korea. In order to enhance the generalizability of the findings, future research should expand its scope beyond restaurants in Jeju Island, South Korea and include other business domains and geographic locations. Additionally, the research should consider including demographic attributes of reviewers, such as age, gender, and cultural background, which may significantly influence their eWOM behavior. Furthermore, future research should control for various aspects that could affect the quality of online reviews and utilize more valid measurements when they become available. Third, alternative explanations, such as participants' previous experience of traveling to Jeju Island and their overall attitude toward the review website, should also be further controlled for in order to provide more accurate results. Adopting a stricter experimental design would address this concern.

### **Conclusion**

The purpose of this study is to investigate whether repeat customers have a higher CIV than first-time customers, as proposed in previous literature. To investigate this, we

conducted a comparison between online reviews posted by repeat customers and those posted by first-time customers. We examined factors such as the quality of content, perceived usefulness, and effectiveness in attracting new customers. Based on the social exchange theory and information processing theory of customer choice, our hypothesis was that repeat customers' reviews would not demonstrate superior quality of content, usefulness, or effectiveness in attracting new customers compared to first-time customers' reviews. Our findings support this hypothesis, which is consistent with previous research suggesting that repeat customers do not necessarily contribute more to a business than first-time customers (Alegre & Juaneda, 2006; Petrick, 2004; Teichmann, 2021; Umashankar et al., 2017). The findings also highlight the importance of considering both the quality and quantity of customers' WOM behavior when accurately evaluating their CIV (Mariani & Borghi, 2020; Muralidharan et al., 2017).

## References

- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 13(4), 411-454. <https://doi.org/10.1086/209080>
- Alegre, J., & Juaneda, C. (2006). Destination loyalty: Consumers' economic behavior. *Annals of Tourism Research*, 33(3), 684-706. <https://doi.org/10.1016/j.annals.2006.03.014>
- Bettman, J. R. (1970). Information processing models of consumer behavior. *Journal of Marketing Research*, 7(3), 370-376. <https://doi.org/10.1177/002224377000700314>
- Bettman, J. R. (1986). Consumer psychology. *Annual Review of Psychology*, 37(1), 257-289. <https://doi.org/10.1146/annurev.ps.37.020186.001353>
- Blau, P. M. (1964). *Exchange and power in social life*. John Wiley and Sons.

- Chakraborty, I., Kim, M., & Sudhir, K. (2022). Attribute sentiment scoring with online text reviews: Accounting for language structure and missing attributes. *Journal of Marketing Research*, 59(3), 600-622. <https://doi.org/10.1177/00222437211052500>
- Chong, A. Y. L., Khong, K. W., Ma, T., McCabe, S., & Wang, Y. (2018). Analyzing key influences of tourists' acceptance of online reviews in travel decisions. *Internet Research*, 28(3), 564-586. <https://doi.org/10.1108/IntR-05-2017-0212>
- Dale, R. (2018). Text analytics APIs, part 2: The smaller players. *Natural Language Engineering*, 24(5), 797-803. <https://doi.org/10.1017/S135132491800027X>
- Dissanayake, D., & Malkanthie, M. (2018). The impact of content characteristics of online reviews on travellers' hotel booking intention. *Journal of Management and Tourism Research*, 1(1), 41-56. [https://www.uwu.ac.lk/wp-content/uploads/2018/JMTR\\_cH3.PDF](https://www.uwu.ac.lk/wp-content/uploads/2018/JMTR_cH3.PDF)
- El-Said, O. A. (2020). Impact of online reviews on hotel booking intention: The moderating role of brand image, star category, and price. *Tourism Management Perspectives*, 33, 100604. <https://doi.org/10.1016/j.tmp.2019.100604>
- Fam, K. S., Liat Cheng, B., Cham, T. H., Tan Chia Yi, M., & Ting, H. (2023). The role of cultural differences in customer retention: evidence from the high-contact service industry. *Journal of Hospitality & Tourism Research*, 47(1), 257-288. <https://doi.org/10.1177/10963480211014944>
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25(2), 161-178. <https://doi.org/10.2307/2092623>
- Gremler, D. D., & Brown, S. W. (1999). The loyalty ripple effect: Appreciating the full value of customers. *International Journal of Service Industry Management*, 10(3), 271-293. <https://doi.org/10.1108/09564239910276872>



- Han, J. (2021). The influences of COVID-19 on Korean fashion consumption. *Asian Social Science*, 17(3), 1-49. <https://doi.org/10.5539/ASS.V17N3P49>
- Hong, W., Yu, Z., Wu, L., & Pu, X. (2020). Influencing factors of the persuasiveness of online reviews considering persuasion methods. *Electronic Commerce Research and Applications*, 39, 100912. <https://doi.org/10.1016/j.elerap.2019.100912>
- Hsu, L. C. (2022). Effect of eWOM review on beauty enterprise: A new interpretation of the attitude contagion theory and information adoption model. *Journal of Enterprise Information Management*, 35(2), 376-413. <https://doi.org/10.1108/JEIM-07-2020-0261>
- Huang, H., Liu, S. Q., & Lu, Z. (2023). When and why language assertiveness affects online review persuasion. *Journal of Hospitality & Tourism Research*, 47(6), 988-1016. <https://doi.org/10.1177/10963480221074280>
- Huang, L., Liu, M. T., Song, X., & Yen, J. (2023). A method of customer valuation score and implementation for marketing strategy. *Asia Pacific Journal of Marketing and Logistics*, 35(2), 344-363. <https://doi.org/10.1108/APJML-05-2021-0299>
- Huang, K. H., & Yu, T. H. K. (2020). The impact of surge pricing on customer retention. *Journal of Business Research*, 120, 175-180. <https://doi.org/10.1016/j.jbusres.2020.07.043>
- Huiyue, L., Peihan, G., & Haiwen, Y. (2022). Consistent comments and vivid comments in hotels' online information adoption: Which matters more? *International Journal of Hospitality Management*, 107, 103329. <https://doi.org/10.1016/j.ijhm.2022.103329>
- Huppertz, J. W., Arenson, S. J., & Evans, R. H. (1978). An application of equity theory to buyer-seller exchange situations. *Journal of Marketing Research*, 15(2), 250-260. <https://doi.org/10.1177/002224377801500208>

- Ismagilova, E., Rana, N. P., Slade, E. L., & Dwivedi, Y. K. (2020). A meta-analysis of the factors affecting eWOM providing behaviour. *European Journal of Marketing*, 55(4), 1067-1102. <https://doi.org/10.1108/EJM-07-2018-0472>
- Johnson, E. J., & Russo, J. E. (1984). Product familiarity and learning new information. *Journal of Consumer Research*, 11(1), 542-550. <https://doi.org/10.1086/208990>
- Kim, H. W., & Gupta, S. (2009). A comparison of purchase decision calculus between potential and repeat customers of an online store. *Decision Support Systems*, 47(4), 477-487. <https://doi.org/10.1016/j.dss.2009.04.014>
- Ko, W. L., & Song, T. H. (2024). Nonlinear Reward Gradient Behavior in Customer Reward and Loyalty Programs: Evidence From the Restaurant Industry. *Journal of Hospitality & Tourism Research*, 10963480231226083. <https://doi.org/10.1177/10963480231226083>
- Kumar, V. (2018). A theory of customer valuation: Concepts, metrics, strategy, and implementation. *Journal of Marketing*, 82(1), 1-19. <https://doi.org/10.1509/jm.17.0208>
- Kumar, V., & Reinartz, W. (2016). Creating enduring customer value. *Journal of Marketing*, 80(6), 36-68. <https://doi.org/10.1509/jm.15.0414>
- Kumari, P., & Sangeetha, R. (2022). How does electronic word of mouth impact green hotel booking intention? *Services Marketing Quarterly*, 43(2), 146-165. <https://doi.org/10.1080/15332969.2021.1987609>
- Lee, E. J., & Shin, S. Y. (2014). When do consumers buy online product reviews? Effects of review quality, product type, and reviewer's photo. *Computers in Human Behavior*, 31, 356-366. <https://doi.org/10.1016/j.chb.2013.10.050>

- Lee, E., & Zhao, H. (2020). Deriving topic-related and interaction features to predict top attractive reviews for a specific business entity. *Journal of Business Analytics*, 3(1), 17-31. <https://doi.org/10.1080/2573234X.2020.1768808>
- Li, J., Xu, X., & Ngai, E. W. (2021). Does certainty tone matter? Effects of review certainty, reviewer characteristics, and organizational niche width on review usefulness. *Information & Management*, 58(8), 103549. <https://doi.org/10.1016/j.im.2021.103549>
- Li, X., Ma, S. D., & Wu, M. (2023). What makes social media branding more effective in shaping pre-visit image: Information quality or source credibility? *Tourism Management Perspectives*, 46, 101084. <https://doi.org/10.1016/j.tmp.2023.101084>
- Liu, X., Li, J., & Kim, W. G. (2017). The role of travel experience in the structural relationships among tourists' perceived image, satisfaction, and behavioral intentions. *Tourism and Hospitality Research*, 17(2), 135-146. <https://doi.org/10.1177/1467358415610371>
- Lopes, A. I., Dens, N., De Pelsmacker, P., & De Keyser, F. (2020). Which cues influence the perceived usefulness and credibility of an online review? A conjoint analysis. *Online Information Review*, 45(1), 1-20. <https://doi.org/10.1108/OIR-09-2019-0287>
- Mariani, M. M., & Borghi, M. (2020). Online review helpfulness and firms' financial performance: An empirical study in a service industry. *International Journal of Electronic Commerce*, 24(4), 421-449. <https://doi.org/10.1080/10864415.2020.1806464>
- Marinova, I. (2024, February 13). *Word of mouth marketing statistics, fun facts and tips in 2022*. Review42. <https://review42.com/resources/word-of-mouth-marketing-statistics/>
- Mishra, R. K., & Urolagin, S. (2019). A sentiment analysis-based hotel recommendation using TF-IDF approach. In *Proceedings of 2019 International Conference on*

*Computational Intelligence and Knowledge Economy (ICCIKE)* (pp. 811-815). IEEE.

<https://doi.org/10.1109/ICCIKE47802.2019.9004385>

Muralidharan, S., Yoon, H. J., Sung, Y., Miller, J., & Lee, A. (2017). Following the breadcrumbs: An analysis of online product review characteristics by online shoppers. *Journal of Marketing Communications*, 23(2), 113-134.

<https://doi.org/10.1080/13527266.2014.949824>

Nerhagen, L. (2003). Travel mode choice: effects of previous experience on choice behaviour and valuation. *Tourism Economics*, 9(1), 5-30.

<https://doi.org/10.5367/000000003101298240>

Pereira, H. G., Cardoso, M., & Dionísio, P. (2017). The determinants of website purchases: The role of e-customer loyalty and word-of-mouth. *International Journal of Electronic Marketing and Retailing*, 8(2), 136-156.

<https://doi.org/10.1504/IJEMR.2017.085705>

Petersen, J. A., Paulich, B. J., Khodakarami, F., Spyropoulou, S., & Kumar, V. (2022). Customer-based execution strategy in a global digital economy. *International Journal of Research in Marketing*, 39(2), 566-582.

<https://doi.org/10.1016/j.ijresmar.2021.09.010>

Petrick, J. F. (2004). Are loyal visitors desired visitors? *Tourism Management*, 25(4), 463-470. [https://doi.org/10.1016/S0261-5177\(03\)00116-X](https://doi.org/10.1016/S0261-5177(03)00116-X)

Qin, J., Zheng, P., & Wang, X. (2022). Comprehensive helpfulness of online reviews: A dynamic strategy for ranking reviews by intrinsic and extrinsic helpfulness. *Decision Support Systems*, 163, 13859. <https://doi.org/10.1016/j.dss.2022.113859>

Reibstein, D. J. (2002). What attracts customers to online stores, and what keeps them coming back?. *Journal of the Academy of Marketing Science*, 30, 465-473.

<https://doi.org/10.1177/009207002236918>

- Reich, T., & Maglio, S. J. (2020). Featuring mistakes: The persuasive impact of purchase mistakes in online reviews. *Journal of Marketing*, 84(1), 52-65.  
<https://doi.org/10.1177/0022242919882428>
- Reichheld, F. F., & Teal, T. (2001). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Harvard Business School Press.
- Repustate. (n.d.). *Aspect based sentiment analysis driven by machine learning and AI*.  
<https://www.repustate.com/aspect-based-sentiment-analysis/>
- Shannon, C. E. (2001). A mathematical theory of communication. *Mobile Computing and Communications Review*, 5(1), 3-55. <https://doi.org/10.1145/584091.584093>
- Sharipudin, M. N. S., Cheung, M. L., De Oliveira, M. J., & Solyom, A. (2023). The role of post-stay evaluation on eWOM and hotel revisit intention among Gen Y. *Journal of Hospitality & Tourism Research*, 47(1), 57-83.  
<https://doi.org/10.1177/10963480211019847>
- Sheng, J., Amankwah-Amoah, J., Wang, X., & Khan, Z. (2019). Managerial responses to online reviews: A text analytics approach. *British Journal of Management*, 30(2), 315-327. <https://doi.org/10.1111/1467-8551.12329>
- Shin, H. W., Fan, A., & Wu, L. (2024). Trust the Facts: The Impact of Reviews' Written Style and Subject-Focus on Peer-to-Peer Accommodation Consumption. *Journal of Hospitality & Tourism Research*, 48(2), 249-276.  
<https://doi.org/10.1177/10963480221100244>
- Siddiqui, M. H., & Sharma, T. G. (2022). Investigating smartphone brand loyalty for Millennials and Gen Z: A customer value perspective. *International Journal of Technology and Human Interaction*, 18(1), 1-19.  
<https://doi.org/10.4018/IJTHI.302664>

- Son, J., Negahban, A., Lee, Y., Connolly, J., & Chiang, D. (2020). When more is more and less is more: Depth and breadth of product reviews and their effects on review helpfulness. In *Proceedings of the 53rd Hawaii International Conference on System Sciences* (pp. 4144-4153). Association for Information Systems.  
<https://doi.org/10.24251/HICSS.2020.507>
- Song, S., & Kim, H. Y. (2022). Is social media marketing worth it for luxury brands? The dual impact of brand page satisfaction and brand love on word-of-mouth and attitudinal loyalty intentions. *Journal of Product & Brand Management*, 31(7), 1033-1046. <https://doi.org/10.1108/JPBM-06-2020-2936>
- Sönmez, S. F., & Graefe, A. R. (1998). Determining future travel behavior from past travel experience and perceptions of risk and safety. *Journal of Travel Research*, 37(2), 171-177. <https://doi.org/10.1177/004728759803700209>
- Teichmann, K. (2021). Loyal customers' tipping points of spending for services: A reciprocity perspective. *European Journal of Marketing*, 55(13), 202-229.  
<https://doi.org/10.1108/EJM-10-2019-0781>
- Thomas, M. J., Wirtz, B. W., & Weyerer, J. C. (2019). Influencing factors of online reviews: An empirical analysis of determinants of purchase intention. *International Journal of Electronic Business*, 15(1), 43-71. <https://doi.org/10.1504/IJEB.2019.099062>
- Umashankar, N., Bhagwat, Y., & Kumar, V. (2017). Do loyal customers really pay more for services? *Journal of the Academy of Marketing Science*, 45(6), 807-826.  
<https://doi.org/10.1007/s11747-016-0491-8>
- Wang, X., Xu, F., Luo, X. R., & Peng, L. (2022). Effect of sponsorship disclosure on online consumer responses to positive reviews: The moderating role of emotional intensity and tie strength. *Decision Support Systems*, 156, 113741.  
<https://doi.org/10.1016/j.dss.2022.113741>

- Wu, X., Jin, L., & Xu, Q. (2021). Expertise makes perfect: How the variance of a reviewer's historical ratings influences the persuasiveness of online reviews. *Journal of Retailing*, 97(2), 238-250. <https://doi.org/10.1016/j.jretai.2020.05.006>
- Xu, Y., & Xu, X. (2023). Rating deviation and manipulated reviews on the Internet—A multi-method study. *Information & Management*, 60(6), 103829. <https://doi.org/10.1016/j.im.2023.103829>
- Zeng, G., Cao, X., Lin, Z., & Xiao, S. H. (2020). When online reviews meet virtual reality: Effects on consumer hotel booking. *Annals of Tourism Research*, 81, 102860. <https://doi.org/10.1016/j.annals.2020.102860>

## Appendices

### Appendix A. Results of the first robust check analysis for Study 1

| Groups                                                    | Information depth |       |        |                 |           |
|-----------------------------------------------------------|-------------------|-------|--------|-----------------|-----------|
|                                                           | N                 | Mean  | SD     | Mean difference | t         |
| First-visit customers' reviews                            | 100               | 36.40 | 39.991 | -               | -         |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 100               | 22.81 | 24.774 | -13.590         | -2.889**  |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 100               | 13.42 | 18.37  | -22.98          | -5.209*** |

| Groups                                                    | N   | The proportion of simple recommendations |
|-----------------------------------------------------------|-----|------------------------------------------|
| First-visit customers' reviews                            | 100 | 7.90%                                    |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 100 | 8.27%                                    |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 100 | 31.88%                                   |

| Groups                                                    | N   | Topic diversity |       |       |       |      |      |
|-----------------------------------------------------------|-----|-----------------|-------|-------|-------|------|------|
|                                                           |     | F               | S     | C     | P     | A    | I    |
| First-visit customers' reviews                            | 100 | 32.3%           | 19.2% | 22.8% | 17.3% | 1.1% | 7.5% |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 100 | 71.6%           | 19.1% | 9.2%  | -     | -    | -    |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 100 | 86.0%           | 8.6%  | 14.0% | -     | -    | -    |

\*Attributes: A = Atmosphere; C = Convenience or Cleanliness; F = Food; I = Interior; P =

Price; S = Staff



Appendix B. Results of the second robust check analysis for Study 1

| Groups                                                    | Information depth |       |       |                 |         |
|-----------------------------------------------------------|-------------------|-------|-------|-----------------|---------|
|                                                           | N                 | Mean  | SD    | Mean difference | t       |
| First-visit customers' reviews                            | 4,593             | 39.17 | 36.28 |                 |         |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 1,375             | 37.98 | 35.51 | -1.859          | -1.936* |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 456               | 33.75 | 35.87 | -5.420          | -2.245* |

| Groups                                                    | N     | The proportion of simple recommendations |
|-----------------------------------------------------------|-------|------------------------------------------|
| First-visit customers' reviews                            | 4,593 | 8.12%                                    |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 1,375 | 14.10%                                   |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 456   | 27.71%                                   |

| Groups                                                    | N     | Topic diversity |       |       |      |       |      |
|-----------------------------------------------------------|-------|-----------------|-------|-------|------|-------|------|
|                                                           |       | F               | S     | C     | P    | A     | I    |
| First-visit customers' reviews                            | 4,593 | 32.0%           | 21.1% | 23.5% | 6.3% | 13.1% | 4.0% |
| Repeat customers' reviews (2 <sup>nd</sup> visit)         | 1,375 | 67.0%           | 32.8% | 0.2%  | -    | -     | -    |
| Repeat customers' reviews (3 <sup>rd</sup> visit or more) | 456   | 72.8%           | 19.0% | 8.2%  |      |       |      |

\*Attributes: A = Atmosphere; C = Convenience or Cleanliness; F = Food; I = Interior; P =

Price; S = Staff

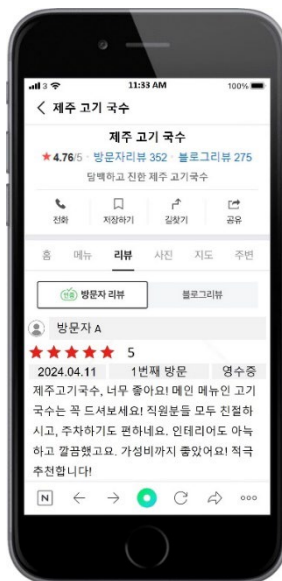
## Appendix C. Scenario and stimulus used in the experiment used in Study 2

Please imagine that you are in the following situation

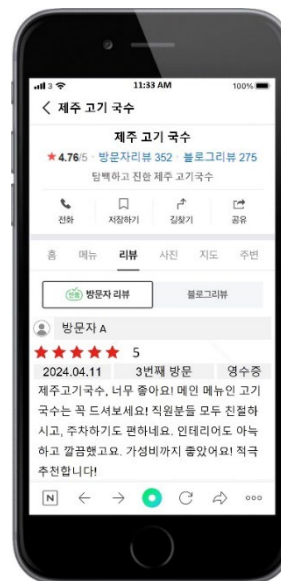
- You are traveling to Jeju Island, South Korea.
- You are searching for a restaurant to have lunch at, via the Naver application.
- You found a pork noodle soup restaurant that looks good (See the below image).
- You are about to read the most up-to-date review to make a decision.



Please read the most up-to-date review about the restaurant



First-visit customer review



Repeat customer review

## Appendix D. Measurements of variables

| Variables (Restaurant-level) |                                             | Measurements                                                                                                                                                                                             |
|------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Independent                  | 1. Number of repeat customers' reviews      | Number of repeat customers' reviews uploaded until October 2021                                                                                                                                          |
|                              | 2. Number of first-visit customers' reviews | Number of first-visit customers' reviews uploaded until October 2021                                                                                                                                     |
| Dependent                    | 3. Sales                                    | Sales in November 2021                                                                                                                                                                                   |
|                              | 4. Number of new customers                  | Number of first-visit customers' reviews uploaded in November 2021                                                                                                                                       |
| Control                      | 5. Number of nearby restaurants             | Number of restaurants within a 100-meter radius of the focal restaurant                                                                                                                                  |
|                              | 6. Proximity to a nearby beach              | The straight-line distance from the focal restaurant to the closest beach (kilometers)                                                                                                                   |
|                              | 7. Proximity to the airport                 | The straight-line distance from the focal restaurant to the Jeju International airport (kilometers)                                                                                                      |
|                              | 8. Overall rating                           | Average rating of online reviews uploaded until October 2021 (1: negative, ~ 5: positive)                                                                                                                |
|                              | 9. Quality of functional attributes         | Number of times the following attributes are selected as best for a restaurant/number of total attribute counts (as of October 2021): tasty food, kind staff, value for money, and great amounts of food |
|                              | 10. Quality of social attributes            | Number of times the following attributes are selected as best for a restaurant/number of total attribute counts (as of October 2021): spacious store and good for social gatherings                      |

|  |                                       |                                                                                                                                                                            |
|--|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 11. Quality of<br>ambiance attributes | Number of times the following attributes are selected as the best one for a restaurant/number of total attribute counts (as of October 2021): great view and nice interior |
|  | Cuisine                               | 1: Korean, 2: Western, 3: Japanese, 4: Chinese, 5: Fastfood, 6: Café & Bakery, 7: Miscellaneous                                                                            |

Appendix E. Exploratory factor analysis

| Observed sub-attributes    | Extracted component  |                  |                    |
|----------------------------|----------------------|------------------|--------------------|
|                            | Functional attribute | Social attribute | Ambiance attribute |
| Value for money            | 0.923                |                  |                    |
| Tasty food                 | 0.833                |                  |                    |
| Great amount of food       | 0.836                |                  |                    |
| Kind staff                 | 0.802                |                  |                    |
| Good for social gatherings |                      | 0.917            |                    |
| Spacious facilities        |                      | 0.833            |                    |
| Great view                 |                      |                  | 0.791              |
| Nice interior              |                      |                  | 0.732              |

- *Note:* Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy: 0.746; Bartlett’s test of sphericity:  $p < 0.001$ .

## Appendix F. Descriptive statistics

| Variables (Restaurant-level)                | Min.      | Max.  | Mean       | SD    |
|---------------------------------------------|-----------|-------|------------|-------|
| 1. Number of repeat customers' reviews      | 0         | 83    | 1.22       | 38.55 |
| 2. Number of first-visit customers' reviews | 0         | 448   | 12.78      | 4.83  |
| 3. Sales                                    | 0         | 2.37  | 0.16       | 0.27  |
| 4. Number of new customers                  | 0         | 388   | 11.00      | 33.18 |
| 5. Number of nearby restaurants             | 0         | 25    | 5.092      | 5.41  |
| 6. Proximity to a nearby beach              | 0.25      | 14.37 | 6.757      | 4.20  |
| 7. Proximity to the airport                 | 6.60      | 20.24 | 13.51      | 4.14  |
| 8. Overall rating                           | 3.86      | 5.00  | 4.50       | 0.23  |
| 9. Quality of functional attributes         | -1.26     | 9.41  | 0.00       | 1.00  |
| 10. Quality of social attributes            | -1.79     | 12.21 | 0.00       | 1.00  |
| 11. Quality of ambiance attributes          | -3.19     | 8.26  | 0.00       | 1.00  |
| Cuisine                                     | Frequency |       | Percentage |       |
| (1) Korean                                  | 287       |       | 69.8%      |       |
| (2) Western                                 | 19        |       | 4.6%       |       |
| (3) Japanese                                | 27        |       | 6.6%       |       |
| (4) Chinese                                 | 16        |       | 3.9%       |       |
| (5) Fastfood                                | 19        |       | 4.6%       |       |
| (6) Café & Bakery                           | 41        |       | 10.0%      |       |
| (7) Miscellaneous                           | 2         |       | 0.5%       |       |
| (8) Korean                                  | 287       |       | 69.8%      |       |

## Appendix G. Correlation analysis

|                                             | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9    | 10   | 11   |
|---------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1. Number of repeat customers' reviews      | 1.00  |       |       |       |       |       |       |       |      |      |      |
| 2. Number of first-visit customers' reviews | 0.78  | 1.00  |       |       |       |       |       |       |      |      |      |
| 3. Sales                                    | 0.59  | 0.73  | 1.00  |       |       |       |       |       |      |      |      |
| 4. Number of new customers                  | 0.78  | 0.64  | 0.72  | 1.00  |       |       |       |       |      |      |      |
| 5. Number of nearby restaurants             | 0.06  | 0.09  | 0.12  | 0.11  | 1.00  |       |       |       |      |      |      |
| 6. Proximity to a nearby beach              | -0.02 | -0.07 | -0.12 | -0.09 | -0.15 | 1.00  |       |       |      |      |      |
| 7. Proximity to the airport                 | 0.03  | 0.08  | 0.15  | 0.09  | 0.08  | -0.54 | 1.00  |       |      |      |      |
| 8. Overall rating                           | 0.09  | 0.11  | -0.09 | 0.07  | -0.14 | -0.02 | 0.02  | 1.00  |      |      |      |
| 9. Quality of functional attributes         | 0.01  | 0.00  | -0.06 | 0.01  | -0.05 | 0.04  | -0.02 | 0.21  | 1.00 |      |      |
| 10. Quality of social attributes            | 0.04  | 0.10  | 0.13  | 0.10  | 0.03  | -0.04 | 0.04  | -0.06 | 0.00 | 1.00 |      |
| 11. Quality of ambiance attributes          | 0.05  | 0.06  | 0.04  | 0.08  | -0.09 | -0.13 | 0.14  | 0.13  | 0.00 | 0.00 | 1.00 |