Persuasive Communications, Online Reviews and Service Performances – A Study on Hotel Industry of New Zealand

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Abstract

This study examines the relationship between external service quality and hotel performance in New Zealand. Utilising samples consisting of 719 customer reviews from 53 hotels operating under five large hotel chains in major New Zealand tourist cities, it explores how persuasive communication can be linked with the credibility and trustworthiness of online customer feedback and affect the performance of the hotel industry. The SERVQUAL model along with the persuasive communication theory ethos (credibility), logos (reason), and pathos (emotion) are used to measure customer perceptions of the service they receive from top hotel chains, assess the linkage between service performance and profitability, and make suggestions for future research. Customer feedback and ratings from the *Trivago* website were analysed using a content analysis approach to identify key factors important to customers. This study identifies eleven attributes that are essential to customers as well as to the industry in the service sector, namely, location, rooms, service, cleanliness, value for money, comfort, facilities, buildings, food, WIFI, and parking. The study suggests that there is a significant mediator effect of customer service quality on the interconnected relationship between customer loyalty and hotel performance. The finding provides important information for hotel retail chains that need to promote customer service quality as a vital practice for attracting new customers, as well as for retaining existing customers.

1. Background

Consumers play an important role in obtaining their desired combination of attributes, in terms of the price and quality of the products and services they wish to purchase (Ogden, 1997). Social media provide consumers with a platform for interactivity that leads to consumer empowerment by providing the ability to make consumer voices heard (Duan et al., 2016; Prabowo et al., 2018). Social media has received much attention in recent years (Gu and Ye, 2014; Prabowo et al., 2018; Reimer and Benkenstein, 2016; Duan et al., 2016; He et al., 2017). Consumers spend an average of 22% of online time on social media sites, and their purchase decisions are heavily influenced as a result (see Gu and Ye, 2014). Vinod and Sharma (2021) advise that organisations need to focus on customers' safety and well-being, as these are correlated positively with service performances. Sumarto et al. (2020) suggest that the government, tourism industry, higher education institutions, media, society, and the environment need to work together to improve the quality of tourism management. Given its growing influence, businesses take an active role increasingly in online social media (Reimer and Benkenstein, 2016; Sumarto et al., 2020; Xie et al., 2014).

Consumer online reviews provide a source of open and extensive data for generating insights into customer perceptions of companies' service quality, especially in the hotel industry. Such information is not only useful for identifying consumer service preferences, but it may also be useful for predicting companies' financial performance (Rust et al., 1995). Through online reviews, customers express their opinion about a variety of products and services. It is argued that online review has an important impact on individuals' decision-making processes (Yao et al., 2009). Customers prefer to read peer-generated opinions posted online, which facilitate their decision-making. Research shows that online consumer reviews may be more accurate than traditional surveys since their main contributors are expert consumers (Öğüt and Taş, 2012; Xie et al., 2014). Using online consumer reviews to provide reliable information on consumer feedback on service quality, companies could realize large savings and timely information (Yao et al., 2009). Whereas a growing body of studies has shown that the influence of user reviews is important for different products, consumer-generated reviews of travel and hospitality services have been found to be a particularly critical information resource for travellers (Choi and Chu, 2000; Lee and Cheng, 2018). The rapid growth of hotel room bookings through online booking systems has produced many online reviews. O'Connor (2010) suggested that hotels must embrace social networks and user-generated content in order to monitor reviews and manage online reputations, as faceless reviewers are rapidly becoming the travel opinion leaders of the electronic age.

The growing use of online social media, however, brings challenges to hotel service providers. Although positive customer comments are encouraging, negative comments are often more influential than positive ones (Chevalier and Mayzlin, 2006). Customers with strong negative views are more motivated to post their opinions on online social media, than are customers with average views (Yao et al., 2009). Moreover, customers increasingly express their dissatisfaction by posting negative comments on online social media without interacting with management. However, the public nature of the online recovery effort requires the service providers to consider, not only how their responses influence the complaining customers, but also how they influence customers who observe both complaints and management responses (Hu et al., 2012).

The existing literature suggests that higher customer satisfaction improves financial performance by increasing the loyalty of existing customers, reducing price elasticities, lowering marketing costs through positive word-of-mouth advertising, reducing transaction costs, and enhancing firm reputation(Anderson, 1998; Chevalier and Mayzlin, 2006; Dellarocas, 2003; Liu and Lee, 2016). However, achieving higher customer satisfaction is not without cost. Ittner and Larcker (1998) argue that increasing customer loyalty and satisfaction requires additional cost. Furthermore, Anderson et al. (2004) found positive contemporaneous associations between customer satisfaction and return on investment in Swedish manufacturing firms, but weaker or negative associations in service firms. Mixed evidence also exists on the extent to which customer satisfaction measures provide value-relevant information beyond that contained in current accounting statements. In summary, prior empirical studies provide mixed evidence on the relationship between customer satisfaction indexes and financial performance, and no evidence on whether there are diminishing or negative returns for customer satisfaction (Ittner and Larcker, 1998; Reimer and Benkenstein, 2016).

Researchers find that online reviews influence decision-making processes and affect individual performance (Dellarocas, 2003; Reimer and Benkenstein, 2016; Yao et al., 2009). Therefore, assessing the service quality of management accounting (MA) output is essential for the continuous improvement of MA information. The presence of a high-quality MA service satisfies the needs of service users, assures good communication, justifies the costs of MA, promotes improved decision-making, and helps improve organizational performance (Fleischman et al., 2017). To better understand MA service quality, user perception needs to be understandable, timely, relevant, and useful for decision support. These assessments can lead to the design of useful reports that management accountants can use to monitor user satisfaction. Service quality is an antecedent to customer satisfaction (Allan, 2016; Lu et al., 2015) and therefore necessary, if management accountants wish to maintain or improve their standing within the organizations they serve.

Researches also focus on how persuasive online reviews influence the individual decision-making process and behaviour (Lee and Shin, 2014). A well-structured review argument favours decisions more positively than vague arguments, and affects emotions and behavioural intentions (He et al., 2017). Review quality also interacts with review usefulness and increases behavioural intention. The effectiveness of the review mediates the effect of regulatory mode orientation and the effect of cognitive personalization on behavioural intention. A positively balanced set – where most reviews are positive, increases behavioural intention (Kwon et al., 2015; Reimer and Benkenstein, 2016). On the other hand, when the reviews are negatively expressed, individuals perceive a lower information overload because they ignore some information and focus on the negative reviews. As a result, the intention changes in the direction implied by the message (Kwon et al., 2015). A high level of customer loyalty has been linked to firms' positive profitability (Liang, 2008; Heskett et al., 1994). When firms retain their customers and build new relationships, they have more organisational capability to meet customer needs and preferences. This newly built relationship affects purchasing behaviours positively and retains customers committed to repurchasing.

There has been substantial growth in the tourism industry in New Zealand since 2000. The number increased from 2.40 million international visitors in 2005 to 3.50 million at the

year-end, 2016 (MBIE, 2017). The average growth rate was 3.2% per year and grew more rapidly from 2010 to 2016. In 2016, there were 3.5 million international visitors to New Zealand from all over the world. An ongoing growth of 4.9 million is expected by the year-end, 2023 (MBIE, 2017). The hospitality industry is proliferating along with the tourism industry that provides service and goods to travellers worldwide. In the service sector, guests' satisfaction depends strongly on the service quality of hotels (Li et al., 2020; Lu et al., 2015). Service quality also determines the retention and repurchase rate of customers. Thus, improving service quality leads to higher customer satisfaction and repurchase intentions (Anderson et al., 2004). This relationship also exists in the service profit-value chain; good external service helps develop a deep connection with customers and drives revenue and profit growth (Heskett et al., 1994; Li et al., 2020; Lu et al., 2015).

Previously, accommodation options were limited to global hotel chains, such as Marriott, Hilton, Starwood, Intercontinental and similar hotel chains. Now, people can choose budget Inns, backpackers, bed and breakfast, motels and even Airbnb. This much stronger competition has led to a change in the traditional hotel industry, and resulted in more focus on improving customer experience and hotel profitability. In a service-profit-value chain, external service quality is essential for enhancing customer satisfaction, increasing customer loyalty and, eventually, growth in revenue and profitability (Heskett et al., 1994). External customer satisfaction depends on five dimensions according to the SERVQUAL model: reliability, assurance, tangibles, empathy, and responsiveness (Parasuraman et al., 1988). Thus, a better external service quality gives hotels competitive advantages in gaining market share and expanding their business map. External service quality is also, potentially, a way of word-of-mouth marketing, serving high-quality customers (Liang, 2008; Mohsin and Lockyer, 2010). External service quality in the service-profit chain is proven value-relevant in some service industries like restaurants (Kim, 2014), retail banking (Gelade and Young, 2005), and the mobile industry (Negi, 2009). Furthermore, exceptional external service supports hotel performance in two aspects. One is customer retention and word-of-mouth marketing, which contributes to companies' profitability; the other is lowered hotel expenditure on service and marketing to loyal customers and, thus, cost savings (Anderson, 1998).

This study aims to identify external service value factors to offer unique and valuable services to customers. Thus, it can differentiate itself and gain competitive advantages against others, which is a significant issue for management . The result is expected to have a positive relationship between the factors under measurement and the hotel's profitability and probably implies the hotels to improve their external service to drive their revenue growth. To achieve the objective and goal, three research questions needed to be answered: (a) What external service qualities have been identified as value relevant in hotel chains? and (b) How persuasive these attributes to consumers in making their decisions?

This study has several theoretical implications. First, it extends our understanding of online review persuasiveness, and offers an improved theoretical framework. According to persuasive communication theory, it is important to put the audience in a specific emotional state, in order to achieve the goal of persuasion. The online review literature focuses on the characteristics of the reader, understood as an individual who responds to communication. Particular characteristics of the reader change their perception of a message and the way online

reviews persuade them. External service value is an important segment of the theory, that enables relevant research. Thus, the theoretical contribution of this study is the integration of these theories to explain the relationship between external service quality and profitability in the hospitality industry in New Zealand. Previous studies have shown that service quality is relevant to profitability. Some of them even research the hotel industry (Mohsin and Lockyer, 2010). However, those papers have been conducted in markets like India, Philippines, Ghana, etc., or have studied specific types of hotel, such as Green hotels and luxury hotels.

The remainder of the paper is structured thus. Section Two discusses the key theoretical concepts. Section Three describes the research methods. Section Four discusses the major findings of the study, and the last section summarises the conclusion and suggests avenues for future research.

2. Theoretical Frameworks

Persuasion is the process of changing individuals' mental states – attitudes and beliefs (O'Keefe, 2002). Recently, online persuasive communication has evolved significantly and considered an important communication tool (O'Keefe, 2002). The concept of persuasion was introduced by Aristotle as a main objective of rhetoric, by use of which one would employ all possible modes of persuasion to convince others of his/her arguments (Aristotle, 2006). To achieve this goal, one must be aware of the three fundamental elements of persuasion. They are logos or logic, ethos or ethic, and pathos or emotion. *Logos* refers to the logic, words, and strength of the arguments. *Ethos* refers to the personal character, ethics, and credibility of the speaker. *Pathos* is the emotional content of the presentation, and is likely the most important. It is important to put the audience in a certain emotional frame, such that it is emotionally ready to follow the speaker's thoughts and yield to persuasion (Higgins and Walker, 2012).

Aristotle's concept of persuasion can be linked with credibility and trustworthiness as a source of communication (Hovland and Weiss, 1951). It stresses the importance of the ancient ethos and shows that persuasion depends mostly on the messenger. Other researchers highlight the importance of the message receiver and the strength of the message in the process of persuasion. In such cases, the persuasive effect will either increase or decrease, depending on both the level of involvement and the strength of the argument. People who are highly involved in a topic are more focused on the quality of arguments, while those who show lower involvement tend to pay more attention to the number of arguments.

The development of computers and interactive technologies has brought new ways of communication and persuasion. Nowadays, communication is very often supported by technology, and may differ from traditional face-to-face communication. Online technology now acts as an agent of persuasion that may change a person's attitudes or behaviour. Online review is a particular kind of communication, which takes place in virtual reality. Reviewers publish their messages on a website and, in this way, they communicate with other people who read their text. This kind of web-mediated communication is understood as an exchange process of social interaction between firms and customers. McKenna and Bargh (2000) identified four aspects that are important when designing persuasive content online. First, the *greater anonymity* on the internet gives an opportunity for individuals to behave in an unusual way so that they can participate in topics not available to them in real life. Second, the *physical*

appearance of participants is far less important than in face-to-face communication. Third, *physical distance* is no longer a barrier for interacting with others, so the audience to be persuaded may be wider than in face-to-face communication. Finally, individuals have greater *control over the time and place of interactions*, which means that they, not the agent of persuasion, can decide when they receive the message.

While some others accepted the concept of service quality as the degree to which a service provider meets the needs and expectations of customers (Mauri and Minazzi, 2013; Öğüt and Taş, 2012), or the customer's evaluation of the excellence or superiority of a service (Zeithaml, 1988), it is often defined as the difference between perceived expectations of service and perceived performance (Mohsin and Lockyer, 2010; Oliver et al., 1994). Service quality has also been identified as an important component that affects customer satisfaction directly, influences repurchase behaviour or customer retention, and results in more sustainable development and long-term profitability (Lee and Cheng, 2018; Wilkins et al., 2007).

As Lee and Cheng (2018) argued, service quality is intangible and, thus, unlike other measurements, it is hard to measure numerically. Liu and Lee (2016) also suggested that value perception depends on what customers have sacrificed on monetary and non-monetary items. Previous studies identified ten dimensions of service quality. They are tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing the customer, and accessibility (Berry et al., 1988). Further studies classified those factors into five dimensions as tangibles, reliability, responsiveness, assurance, and empathy, and developed a SERVQUAL model to measure the service quality (Parasuraman et al., 1988). This model is accepted worldwide as a standard for measuring service quality throughout all industries. Although Berry et al. (1988) suggested that reliability is the most important element, for the hotel industry, Allan (2016) claimed that the most critical measurements could be those of tangibles and reliability, rather than reliability alone. Allan (2016) also found that good services in hotels might lead to customer satisfaction, but will not influence customer retention significantly.

On the contrary, other dimensions such as 'convenience', 'responsiveness' and 'empathy' are very relevant to customer satisfaction for five star hotels (Liang, 2008). Researchers find that customer loyalty drives revenue and business growth (Kim, 2014; Liang, 2008; Wilkins et al., 2007; Yee et al., 2011). Loyalty comes from customer satisfaction but customer satisfaction is determined mainly by the service provided by hotels, which is the external service quality (Heskett et al., 1994). It is also found that high external service quality has a positive relationship with profitability and market share, and a negative relationship with cost (Thompson et al., 1985). This study uses the SERVQUAL model and persuasive communication theory to explore the attributes that are value relevant for the hotel industry.

3. Research Methods

This study chooses online customer reviews of fifty-nine hotels operating in New Zealand. These hotels are part of five hotel chains: Accor Hotel, Hilton Worldwide, Intercontinental Hotels Group, Choice Hotels International Inc. and Millennium Hotels and Resorts. These are globally operated hotel chains that provide hospitality services and have

similar hierarchies. There are a total of 63 hotel brands operating in New Zealand, and these five chains cover 35 brands (Hotel Chains in New Zealand): over 55% of the brand population, with 98 hotels being operated by the 5 chains. Among all these 98 hotels, only those that are operated in the five major tourist cities are considered. These five cities are Auckland, Rotorua, Wellington, Christchurch, and Queenstown. These cities have the highest tourist flow and their occupancy rate is also high and stable compared with the other cities (MBIE, 2017). In these five cities, there are fifty-nine hotels in total run by the selected hotel chains. A summary of the sample is shown in Table 1.

[Insert Table 1 around here]

For customer experiences information, we used a hotel booking website Trivago (www.*trivago.co.nz)*. On this website, customers commented about their experiences and rated each hotel. When travellers find and select a hotel deal on Trivago, they are directed to the advertiser of that deal, usually a third-party booking site or hotel website, where they complete the booking process. After guests stay at a property, they are asked to rate it by the booking site through which they made their reservations. All reviews and ratings relating to the property on Trivago are collected from those booking sites and third-party sources. A total 719 comments were collected from 53 available hotels. Initially, 59 hotels were selected; however, during the data collection period, the comments and ratings of four hotels were not available for collection. There were also another two hotels that were not open in the financial year, 2016, or opened in late 2016; thus, 53 were considered for data analysis. Customers rated nine standardised external service attributes, including *Location, Rooms, Service, Cleanliness, Value for money, Comfort, Facilities, Building and Food*. From the data analysis, two more attributes, WIFI and parking, were added, as they were frequently found from the feedback. The total eleven attributes were classified into five dimensions in the SERVQUAL model (Lee and Cheng, 2018). Customers' comments for each hotel in the year 2016 were collected and used to determine which external service attributes affected customers' perception most. Under each attribute, the number of different attitudes were summed separately to show the customers' attitudes towards the service, and to illustrate how well the hotels did in each aspect and, thus, identifying the hotel's external service quality. To ensure the quality and authenticity of online customer reviews, hotels listed with Trivago allow customers who booked through their website to post only one review for each stay, after a short period of that stay. To encourage customer reviews, hotels email customers a reminder after each stay, and those who submit reviews are eligible to win substantial prizes from the company. This promotion motivates a large number of their customers to post reviews online. For each hotel in our data set, we collected customer review information for each posting, including the name of hotel chain and hotel, location, review contents, review ratings (from 1 to 10), and the management response to the review (if any).

Content analysis was applied to find out what external service qualities had been identified in hotel chains. All the comments collected from the website were analysed and allocated to one or more of the eleven key attributes and/or synonymous terms, and other comments referring to something else specifically were also included in the analysis. The comments on each attribute were marked as either positive (with numeric 1), negative (with -1) and neutral (with 0). This allowed the researchers to identify the attribute(s) mentioned most frequently and, therefore, the most critical in influencing customers' attitude related to essential external service quality.

The study also extends to determining which external service attributes are more value-relevant. We determined the correlations between customer experiences and financial information, using profitability ratios, such as profit margin, return on assets and return on equity, based on Net profit, revenue, total assets, and shareholders' equity, which is available from the 2016 financial reports of all five hotel groups. The continuum range between -1 and +1 was used to interpret whether the attribute had either a positive or negative correlation with profitability. The same method was adopted to find out if external service quality is value-relevant by replacing the average attribute ratings with the average overall score for each hotel group. Then hotels that belong to the same hotel group were categorised, scores were averaged for each hotel group, and the mean value for each hotel group was calculated. As financial information for each hotel was not available, the relationship between service quality and financial profitably could be calculated at hotel group level only.

4. Findings

4.1   *Attributes that influencing hotel customers' satisfaction.*
From the content analysis, 11 attributes related to external service quality were identified in the 719 customer comments. The summary of these comments is shown in table 2.

[Insert Table around 2 here]

Of 719 comments, 368 mentioned location and 97% of those were positive. The second highest attribute was service: 319 customers mentioned this, and around 91% were positive. Clients also gave their opinions on rooms (176), cleanliness (151) and comfort (151), with 84.8% and 87.4% respectively being positive for cleanliness and comfort, while only 44.3% (78 out of 176) of comments on rooms were positive. In addition, 51 customers thought the hotel was worth the money paid, whereas 31 thought otherwise, and 22 held a neutral point of view, giving a total of 104 comments for value for money. The remaining attributes mentioned by clients were facilities, buildings, food, WIFI and parking. These all received less than 100 comments, but facilities, WIFI, and parking elicited many more negative than positive comments. Among those attributes, customers valued location and service most, and commented more on these two issues than on others, since they give customers their first impression of the hotel. Rooms, cleanliness, comfort, and value for money are in the second tier, as they all have more than 100 comments; these features give the customers a direct impression once they settle in. Facilities, food, WIFI, buildings, and parking received less than 100 comments from customers, which suggests that they are the least concerning for consumers.

As service quality depends on perceived expectations and perceived performance (Oliver et al., 1994), if the positive comments exceed the negative and neutral comments in an attribute, then perceived performance is highly likely to exceed perceived expectations and, hence, give customers a positive impression of service quality. Wyckoff (1984) also commented that service quality is a controlling variable when pursuing higher standards. Although the distribution of comments suggests that some attributes are less important than others, if hotels could have their outstanding service under control while improving those standards, they might draw customers and stimulate business. For example, because of the heavy reliance on social

media and the internet, customers prefer free high-speed WIFI facilities in the hotels. Therefore, when any hotel charges for the internet, or internet speed is not good, hotel ratings are affected. If hotels provided free internet services, they might meet or even exceed the needs and expectations of customers and improve external service quality (Dellarocas, 2003; Öğüt and Taş, 2012) which, in turn, determines the level of customer satisfaction and repurchase intent (Lee and Cheng, 2018; Wilkins et al., 2007).

Moreover, it is proven that satisfied customers are more willing to engage in word of mouth (Anderson, 1998; Berger, 2014). Those factors are highly relevant to the performance of the company. Even for different customers, the most important factors could be varied. Choi and Chu (2000) suggest that Asian visitors consider value as the key to their satisfaction, whereas Western country travellers care about service and rooms' overall qualities. This finding also in accordance with our research. Though the data cannot distinguish where the customer is from, we note that, except for location, the top 4 concerns for them are services, rooms, cleanliness, comfort, and value for money. Cleanliness and comfort are features of the overall room quality.

4.2 Hotel performance: different star-ratings, global chains and reputation

Overall customer satisfaction for the high star-rated hotels has been found to be higher compared to that of the low star-rated hotels. Previous research find the star-rating system beneficial, as it allows customers to compare hotels, reduces information asymmetry, and provides a basis for service expectations (Martin-Fuentes, 2016; Nunkoo et al., 2020). Researchers also find a positive relationship between star-rating and customer satisfaction (Martin-Fuentes, 2016; Li et al., 2020). Our studies find the similar relationship between hotel star-rating and customer satisfaction levels. Guests' level of satisfaction with three-star hotels was 7.83 compared with that of four-star rated (8.18) and five-star rated (8.61) hotels. Our finding is in accordance with similar previous findings, i.e., that customers have very high service expectations from higher star-rated accommodation than from the lower star-rated range (Liang, 2008; Martin-Fuentes, 2016; Mohsin and Lockyer, 2010).

[Insert Table 3 around here]

High customer ratings may indicate that customers are happy with the sellers for the services they offered (Öğüt and Taş, 2012) and create a price premium for making online transactions less risky (Martin-Fuentes, 2016). Thus, online customer ratings complement star features by considering different dimensions of SERVQUAL such as the hotel's location, the courteousness of hotel staff, the comfort and cleanliness of the hotel room, the facilities/services offered to customers and the value provided versus the price of the hotel.

4.3 Hotel performance: Customer satisfaction and SERVQUAL

Among the sample of 53 hotels, 41 hotels had ratings on food. In other words, 12 hotels had no rating on this attribute (around 25% of the sample). Possible reasons could be that these hotels do not provide food services, or that customers are not interested in this section. Moreover, when giving a comment or rating for food, it is usually impossible to consider this aspect. For

example, the food quality may be moderate, but if the price is surprisingly low, then consumers could have a positive perception and give an excellent rating, considering the value for money. In such circumstances, people cannot isolate one attribute from the others, and this could affect the results. Eventually, the most value-relevant external service qualities are service, location, and value for money, which partly justifies Choi and Chu's (2000) arguments that customer satisfaction comes mainly from value for money, services, and rooms. However, the aspect of service can be divided into several components: comfort, cleanliness, and rooms. This diversifies the choice of one attribute for customers and reduces the significance levels of the correlation between them. This explains why both rooms and comfort have positive and negative correlations with profitability, and why that relation is not tight. Although customers mention WIFI and parking, these do not have customer ratings on the website. Thus, the analysis is conducted on the other nine attributes.

Our findings are consistent with the SERVQUAL model (Parasuraman et al., 1988). The model indicates that reliability is the most important quality for customers, followed by responsiveness, assurance, empathy, and tangibles. And according to the Lee and Cheng (2018) classification, service could be classified into both reliability and responsiveness. Cleanliness and comfort belong to assurance, value for money is categorised into empathy, and rooms, buildings, food, and facilities are tangibles. As the research indicates, service is the most value-relevant attribute, followed by value for money and comfort.

On the contrary, facilities, buildings and rooms are of much lower value-relevance, and also of the least importance to customers in the SERVQUAL model. However, this finding also varies from those of Allan (2016) and Liang (2008), which indicates that tangibles are just as important as reliability, and other dimensions are very relevant to customers' satisfaction. The difference comes mainly from the chosen samples. They conducted their research on the upper-scale and luxury hotels, where consumers require customization and a higher standard of service. They also found that all aspects, such as facilities and the hotel appearance, matter to customers. But the five hotel chains selected in this study contain all level of hotels, from budget to five-star. As a result, the outcome is more general than that of Allan and Liang.

4.4 Correlation analysis on overall external service quality & profitability
Online platforms can serve as a valuable source of information for firms' profitability. This study contributes to the understanding of how a firm's online rating relates to its financial performance, particularly in the areas of return on assets, net income growth and return on equity (see table 4).

[Insert Table around 4 here]

Table 4 shows the correlation between average rating for overall external service for each hotel chain and its profitability. The average score is computed by taking the overall rating of all the hotels under the same hotel chain and calculating the average. It represents the overall external service quality for each hotel chain. Accor Group is the largest hotel chain operator among those five but has the second-lowest rating, only slightly better than Millennium Hotel Group. The correlation between the overall external service quality and profitability ratios are all positive. The relationship with profit margins is not high, at 0.052, but is significant for return

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on assets and return on equity, at 0.298 and 0.414, respectively. That means every unit increase in external service quality will result in a 0.052 unit growth in profit margins, a 0.298 unit increase in return on assets, and a 0.414 unit increase in return on equity (and vice versa when the external service quality drops).

The result indicates that external service quality has a positive impact on the company's profitability and, thus, it is value relevant and will affect the company's growth. It also supports the other research findings that the company's financial performance is driven by customer loyalty which, in turn, comes from customer satisfaction (Heskett et al., 1994; Yee et al., 2011; Kim, 2014; Gelade and Young, 2005). Although Hogreve et al. (2017) find that external service quality has a negative correlation with profitability, it could be interpreted as meaning the organisation is not efficient enough to control the costs effectively (Rust et al., 1995). The finding of this study could allow a positive interpretation that the sampled hotels have an effective budgeting and internal management system, with a positive margin on improving external service quality. However, further study is needed in this area.

4.5 Nature of reviews and Persuasion

The order of the information on a website affects individuals' decision-making. The effect of primacy, or the order of presenting information, is found to be important, as the items seen first are more persuasive. However, the primacy effect in the context of online reviews is weak, and has less influence on behavioural intention than other factors, e.g. trust or source type. What matters more is the time frame of the review publication. It affects reviewers' decisions, especially when considered together with valence. For example, recent negative reviews are stronger than old negative reviews. When customers were dissatisfied with the services they expected from the hotels, they tended to post negative reviews, or gave lower ratings of the hotels, suggesting that negative reviews reduce the average rating: an undesirable consequence leading to poor financial performance. Thus, it is imperative for marketers to pre-empt the posting by addressing customer dissatisfaction or complaints early.

The study finds a relationship between valence and volume. As the number of reviews increases, the valence becomes more balanced, and the negative effect is eased. Moreover, the study agrees with other findings that positive comments are more common than negative reviews (Melián-González et al., 2013). Whether or not hotels actively respond to negative reviews, one implication of this study is that hoteliers should try to increase the number of reviews they receive to balance the positive and negative representations of their property (in addition to investigating and correcting the causes of negative comments). Those promoting tourist destinations should follow a similar strategy of facilitating access to customer review sites to balance negative and favourable ratings.

Online reviews can be found persuasive. Previous studies confirmed that different elements of the presentation of online reviews interact with other elements of the framework and affect behavioural intentions. For example, many online review systems include a response from the manager as a credibility assurance element. However, there is no clear evidence that a response from managers increases credibility or affects behavioural intentions as there is a negative correlation between the two (see Mauri and Minazzi, 2013), regardless of whether the

content of the response is financial or another form of compensation. On the contrary, the reviewer's personal identification information changes the way readers perceive online reviews and, in this way, affects their decisions. For example, the photo of a reviewer makes the judgment more systematic, but it is not known why this happens (see Lee and Shin, 2014). It is also found that there is use of ethos, logos and pathos in the narratives of the comments. By using ethos, the reviews attempt to appear credible and trustworthy. Only the customers who stayed at the hotels are allowed to comment about their experiences. The hotel brands tend to be more frequently selected because they appear more credible. In addition, because having more host reviews implies more experience, guests are more likely to choose the hosts with relatively more reviews. By using logos, the service providers create templates for reviews and, therefore, often reviewers are compelled to comment on certain attributes rather than on their full experiences. It is argued that the organisations attempt to impress the stakeholders with their sense of clarity and integrity (Han et al., 2019). By using pathos, the reviewers attempt to portray themselves as sympathetic to the other users. The reviewers use social and emotional words to describe the hotels and their different attributes. However, it is hard to relate emotional words to users' decision-making processes. Having more negative reviews has an impact on the service performance, which supports other research findings that negative information tends to be perceived as more persuasive than positive information (Han et al., 2019; Li et al., 2020).

5. Summary and conclusion

This study aims to examine customers' experiences with the service quality of the New Zealand Hotel industry. More specifically, the study examines whether the services customers receive are value-relevant and affect hotels' profitability. The correlation analysis shows that service, location, and value for money are the most value-relevant, while food is the least value-relevant. Also, the study finds that, potentially, rooms, cleanliness, and comfort could affect each other in the analysis. Utilising samples consisting of 719 customer reviews from five large hotel chains operating in New Zeeland's major tourist cities, the study suggests that there is a significant mediator effect of customer service quality in the interconnected relationship between customer loyalty and hotel profitability.

The main methodological contribution of this study is the approach and techniques applied for data collection. Though it has its own limitation, collecting the comments from the website simplifies the interview process, enabling the research to be conducted more effectively and efficiently. In addition, this method could be useful for other studies on service industries. Another contribution is the adoption of the SERVQUAL model in the research. Despite the extensive use of the model in the world, it has not been used in the New Zealand hospitality industry, and rarely used in service industries.

There are some limitations of this study. One limitation of this study has to do with the generalization issue as the study is anchored in the hotel industry. In a future study, researchers could conduct a more comprehensive tool for measuring and evaluating service quality by mining social media content and performing multiple tests across various industries. The second limitation is the financial data from hotel groups. The financial statements are consolidated, but not for the New Zealand market particularly. The hotel brands in the hotel groups have the same

positioning worldwide, and all the hotel groups of such scale have similar structures in the market. To some extent, the ratio can still reflect the financial performance in the New Zealand market, but not very strictly. Moreover, it is observed that the ratings and comments given by customers might not be consistent. Sometimes, consumers highlight the features, provide a low rating or many complaints in the comments, but end up with an acceptable rating.

There are avenues for future research. First of all, authors of future research should rethink the unit of analysis. The same review characteristic may have a different effect when applied to an individual review rather than to a set of them. The effect may be strengthened or weakened by different configurations of the persuasive characteristics. The configuration of characteristics might explain why some features of online reviews are more influential than others, and why there are different results between studies. Thus, scholars ought to focus on both individual and aggregated levels of review persuasiveness when introducing new concepts. Future research may harness these two levels of online review persuasiveness to present a complete view of the phenomena. In New Zealand, several hotels are privately owned, and the financial data is not readily accessible. Promoting 'rural tourism' (Wijijayanti et al., 2020) and community-based platforms (Vinod and Sharma, 2021) has been advocated for environment-friendly and sustainable tourism businesses. In future research, researchers could take a larger sample and include all types of hotels, both in urban and rural areas, to reflect what role the external service quality plays in the service profit chain of the hotel industry in New Zealand. Moreover, the service profit chain shows how external service value leads to customer satisfaction and customer loyalty, and eventually affects revenue and profitability. Yet, this research does not conduct research on loyalty, and shows only the relation between external service value and profitability. Hence, future research could analyse whether external service quality is relevant to customer loyalty, and whether customer loyalty influences revenue and business growth.

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Table 1: Hotels sample size

Hotel Chains	Auckland	Wellington	Rotorua	Christchurch	Queenstown	Total
Accor	11	6	2	2	4	25
Hilton Worldwide	1	1	0	1	2	5
Intercontinental Hotels Group	2	1	1	1	2	7
Choice Hotels International Inc	5	3	1	3	1	13
Millennium Hotels and Resorts	3	1	2	0	3	9
Total	23	12	6	8	11	59

Table 2: Comments on attributes

Overall 719 comments	Location	Rooms	Service	Cleanliness	Value for money	Comfort	Facilities	Buildings	Food	WIFI	Parking
Positive	358	78	289	128	51	132	36	39	69	8	14
Negative	3	68	22	19	31	15	41	19	16	52	16
Neutral	7	30	7	4	22	4	8	5	9	0	8
Total	368	176	319	151	104	151	85	63	94	60	38

Table 3: Hotel star-rating and overall satisfaction

Total Hotels	No. of hotels		No. of comments		Overall satisfaction
3-Star	15	28%	214	30%	7.825
4-Star	30	57%	400	56%	8.184
5-Star	8	15%	105	15%	8.613
Total	53	100%	719	100%	

Table 4: Correlation between Average rating and profitability

	Average rating	Profit margins	Return on assets	Return on equity
Accor Hotel	7.882	0.187	0.025	5.28%
Hilton Worldwide	8.689	0.031	0.014	6.17%
Choice Hotels International Inn	8.110	0.151	0.163	44.76%
International Hotel Group	8.530	0.345	0.202	77.05%
Millennium Hotels and Resorts	7.759	0.117	0.023	4.05%
Correlation coefficient		0.052	0.298	0.414