

Exploring Key Industry Attributes from Online Customer Reviews: A Systematic Literature Review and Network Analysis

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ABSTRACT

Various key industry attributes have been identified through customer feedback in online customer reviews, offering valuable insights for both industry practitioners and academics. However, no prior study has synthesized these findings to provide a comprehensive overview of what has been discovered and what remains unexplored. To address this gap, the present study reviews recent literature on the textual analysis of online customer reviews, synthesizes key industry attributes, and employs network analysis to identify those that are common across industries. It also highlights research gaps and proposes directions for future investigation. Following the PRISMA protocol, this review focuses on studies that applied textual analysis to online customer reviews for identifying key industry attributes. A total of 34 relevant papers were included, yielding 163 attributes across eight industries: 36 for hotels, 46 for tourism, 19 for restaurants, 20 for airlines, and 42 for other sectors. At the individual industry level, staff were found to be crucial in the hotel sector; tour, recommend, and experience were significant in tourism; food emerged as a critical attribute in restaurants; and flight and staff were essential in the airline industry. To explore cross-industry patterns, network analysis was conducted using Gephi (version 0.10.1), which identified 23 common key industry attributes. The most prominent among these were service, experience, staff, food, price, and location. This study is among the first to systematically review recent research on the textual analysis of online customer reviews while integrating network analysis as part of the synthesis process. The findings offer practical insights for enhancing strategic business performance and provide a valuable foundation for future research in this area.

KEYWORDS: Key industry attributes, Online customer reviews, Systematic literature review, Network analysis, Customer satisfaction

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1. INTRODUCTION

Understanding customer preferences is crucial for businesses to remain competitive, enhance service quality, improve customer satisfaction, and foster long-term loyalty (Phillips et al., 2017; Harun et al., 2020; Susskind & Chan, 2000). To achieve these goals, both practitioners and researchers focus on identifying key industry attributes based on customer feedback to support informed decision-making (Jang et al., 2018). These attributes are essential for refining business strategies and sustaining a competitive advantage. Harun et al. (2020) define a key attribute as a critical factor that enhances service quality and contributes to business sustainability. It plays a vital role in determining success in competitive markets and serves as a driver

of customer satisfaction and firm profitability (Kim et al., 2016; Susskind & Chan, 2000). From the customer's perspective, a key attribute is an essential criterion used to evaluate products or services before making a purchase decision (Jang et al., 2018). Hence, identifying these attributes enables businesses to better meet customer expectations and align their strategies with market needs.

The advancement of digital technology has led businesses to increasingly rely on online customer reviews (OCRs) as a crucial source of customer feedback (Miao et al., 2021; Sangpikul, 2022). Platforms like TripAdvisor.com provide valuable insights into product and service quality, particularly for travelers. OCRs offer a space for customers to share their experiences, reflecting their

satisfaction levels (Chen et al., 2022). For prospective buyers, these reviews serve as an essential reference, helping them make informed decisions (Kang et al., 2022; Yang et al., 2023). At the same time, OCRs enhance a retailer's online presence and visibility in the digital landscape (Pham et al., 2023). Businesses can also monitor public sentiment, assess customer perceptions, and respond accordingly (Garner & Kim, 2022). By analyzing OCRs, firms can identify strengths and weaknesses and implement strategic improvements.

Past research on OCRs, primarily utilizing secondary data, can be categorized into three main types: quantitative, qualitative, and mixed-methods studies. Quantitative studies primarily focus on analyzing the impact of OCRs on sales performance (De Maeyer, 2012; Lee et al., 2017; Kaur & Singh, 2021; Ishak & Harun, 2023) or review helpfulness (Siering et al., 2018; Li et al., 2019; Xu et al., 2023). In contrast, qualitative research aims to gain valuable insights from the textual content of OCRs, examining factors such as customer sentiment (Rasool & Pathania, 2021; Kumar & Reddy, 2022), service quality dimensions (Leutwiler-Lee et al., 2023; Lee et al., 2023), product design (Miao et al., 2023), and other relevant aspects. Mixed-method approaches integrate qualitative analysis first, followed by quantitative analysis to assess impacts or relationships (Qiao et al., 2022; Xue et al., 2022; Kim et al., 2023). This implies the diverse methodological approaches used in the literature to examine OCRs.

Among various methodologies, qualitative textual analysis has gained significant attention for identifying key attributes from OCRs within specific industries (Shahhosseini & Khalili Nasr, 2024; Lee et al., 2023). Textual analysis involves transforming unstructured text data into a structured format that can be analyzed by either computers or humans to extract meaningful insights (Creswell, 2012). It is a qualitative method that focuses on analyzing the content and meaning of text (Macnamara, 2018). Today, a range of sophisticated text analysis tools is available to help researchers interpret and derive insights from textual data, including Atlas.ti, MAXQDA, Leximancer, and others. Recent studies have adopted textual analysis to identify key industry attributes from OCRs. For example, Olorunsola et al. (2023a) used Leximancer to identify key attributes of capsule hotels based on OCRs from Booking.com. Similarly, Shahhosseini and Khalili Nasr (2024) employed sentiment analysis, a form of textual analysis, to extract key green attributes of restaurants on TripAdvisor that contribute to customer satisfaction. Lee et al. (2023) applied topic modeling techniques to Airbnb reviews to explore key service attributes influencing customer loyalty. This growing body of research highlights the increasing adoption of textual analysis as a valuable approach for extracting actionable insights from OCRs to support informed business decisions.

Although numerous studies have employed textual analysis to identify key industry attributes from OCRs (Lang et al., 2021; Dastane et al., 2024; Saydam et al., 2023; Brochado et al., 2024), to the best of our knowledge, a synthesis of these findings has not yet been conducted. Such a synthesis is essential for providing a comprehensive overview and enhancing our understanding of the key industry attributes revealed through customer feedback in OCRs. While individual studies have shed light on specific attributes, broader reviews have focused on other aspects of OCRs. Previous systematic literature reviews (SLRs) on OCRs have explored a range of themes, including their use in academic research (Trenz & Berger, 2013), impact on sales (De Maeyer, 2013), structural features (Kwok et al., 2017; Zheng, 2021; Pham et al., 2023), role in new product development (Nasrabadi et al., 2024), and fake review detection (Walther et al., 2023). However, none have addressed the key industry attributes derived from OCRs. This highlights a gap in the literature pertaining to OCRs and key industry attributes.

Synthesizing key industry attributes through a systematic literature review (SLR) provides a comprehensive overview of existing research (Ahmad et al., 2022), while examining common attributes across industries is also critical for businesses aiming to enhance performance (Phillips et al., 2017; Susskind & Chan, 2000; Harun et al., 2020). However, no effort has been made to examine which attributes are common across industries and which ones are crucial for individual industries. To achieve this, we integrate our SLR with a network analysis approach. Network analysis is a research method used to explore the relationships and connections between entities (e.g., people, concepts, organizations, or keywords) within a network (Bruns & Snee, 2022). It focuses on how these entities, known as nodes, are connected through links or edges, and how the structure of these connections reveals patterns, influence, or central elements within a system (Bastian et al., 2009; Liu et al., 2024). In the context of the current study, network analysis was conducted to identify key attributes common across industries that should be prioritized. Finally, a network map is presented to illustrate the identified attributes across industries.

Hence, based on the above discussion, this study aims to review recent research on the identification of key industry attributes from OCRs, with a focus on synthesizing these attributes and mapping them across various industries. The research questions guiding this study are as follows:

- RQ1: What is the current status of research on key industry attributes identified from OCRs, including the regional focus, publication field, industry distribution, methodology, and data sources?
- RQ2: What key industry attributes have been identified

from OCRs, and which ones are crucial within individual industries?

RQ3: Which key industry attributes are common across industries based on the network analysis approach?

RQ4: What are the research gaps and future directions in this area?

The originality of this research is threefold. First, it provides a comprehensive synthesis of current findings on key industry attributes identified from OCRs and highlights those that should be prioritized in business strategies. Second, it applies network analysis to uncover attributes that are common across different industries and can be generalized for strategic decision-making. Third, the study presents up-to-date insights based on recent literature and offers directions for future research. Overall, the findings benefit academics, industry professionals, and policymakers by offering a structured framework for leveraging OCR insights in strategic decision-making.

This paper is organized as follows: The next section describes the techniques used in the systematic literature review (SLR). This is followed by a presentation of the review's findings in two parts: a descriptive quantitative analysis and a qualitative synthesis of the literature. Section four discusses the theoretical and practical implications of this study. The following section identifies knowledge gaps and offers suggestions for a future research agenda. Finally, the paper discusses the limitations of this study and concludes with a summary.

2. METHODOLOGY

We employed the SLR method, drawing on guidance from several prior studies (Ahmad et al., 2022; Pham et al., 2023; Zhang et al., 2023; Nguyen & Veer, 2024; Nasrabadi et al., 2024). In this study, the choice of the SLR method over other common approaches, such as bibliometric analysis and meta-analysis, was based on several key considerations. First, the SLR method offers deeper qualitative insights by emphasizing content and context, rather than focusing solely on quantitative aspects such as citation patterns, author counts, and statistical data (Rojas-Sánchez et al., 2023; Nikseresht et al., 2024). The SLR approach makes a meaningful contribution to theory development by synthesizing qualitative insights that may be overlooked by quantitative methods (Marzi et al., 2024). As Paul and Criado (2020) noted in their comprehensive explanation of the SLR method, it provides substantial value by synthesizing previous research within a particular field. This qualitative synthesis is crucial for advancing knowledge, as it adds both depth and contextual understanding to the findings. Second, the SLR method provides a more systematic and rigorous approach than other methods for addressing specific research questions (Ahmad et al., 2022; Angioi & Hiller,

2023). It involves clearly defining research objectives and establishing structured procedures for database selection, including the identification, evaluation, and synthesis of all relevant studies (Nasrabadi et al., 2024). This organized process enhances both the reliability and depth of the research findings. For these reasons, this study adopted the SLR method instead of alternative approaches to explore key industry attributes from OCRs. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline, adapted from Pham et al. (2023), was followed to conduct the review. The process consists of three essential stages: identification, screening, and inclusion, as illustrated in **Figure 1**.

2.1 Identification

The search for relevant papers was conducted in the Elsevier Scopus database based on specific inclusion and exclusion criteria. The Scopus database was selected because it is more comprehensive than other available databases (Carrera-rivera et al., 2022; Nikseresht et al., 2024). Since the current study aims to review recent literature, only papers published within the last four years, specifically from 2021 to 2024, were selected (Muslim & Harun, 2022). This selection aligns with Snyder (2019), who states that recent studies should be less than five years old; therefore, the four-year period is appropriate. Specifically, the literature search was conducted from July 2024 to September 2024. The list of search keywords included terms such as "online customer reviews," "content analysis of online reviews," and "content analysis of online customer reviews." These keywords were used to obtain relevant studies related to the aims of the current study. In this identification stage, a total of 334 potentially relevant papers were identified.

2.2 Screening

Firstly, papers categorized as reviews ($n = 18$), book chapters ($n = 16$), and conference papers ($n = 88$) were excluded (Muslim & Harun, 2022; Ahmad et al., 2022). As a result, 122 papers were removed from the list. Secondly, the included papers had to be related to the textual analysis of OCR. To achieve this, the title and abstract of each paper were meticulously reviewed by the researcher (Ahmad et al., 2022; Pham et al., 2023). Consequently, 149 papers were deemed irrelevant and were excluded. Thirdly, since this study focuses on qualitative studies related to the textual analysis of OCR, any mixed-methods studies were excluded ($n = 25$). Lastly, papers without full access to the text were excluded, as this limitation can hinder our understanding of the details of the studies (Ahmad et al., 2022). The number of eligible papers after this screening stage was 28.

2.3 Inclusion

An additional search was performed on Google Scholar using the exact terms to find any relevant papers to

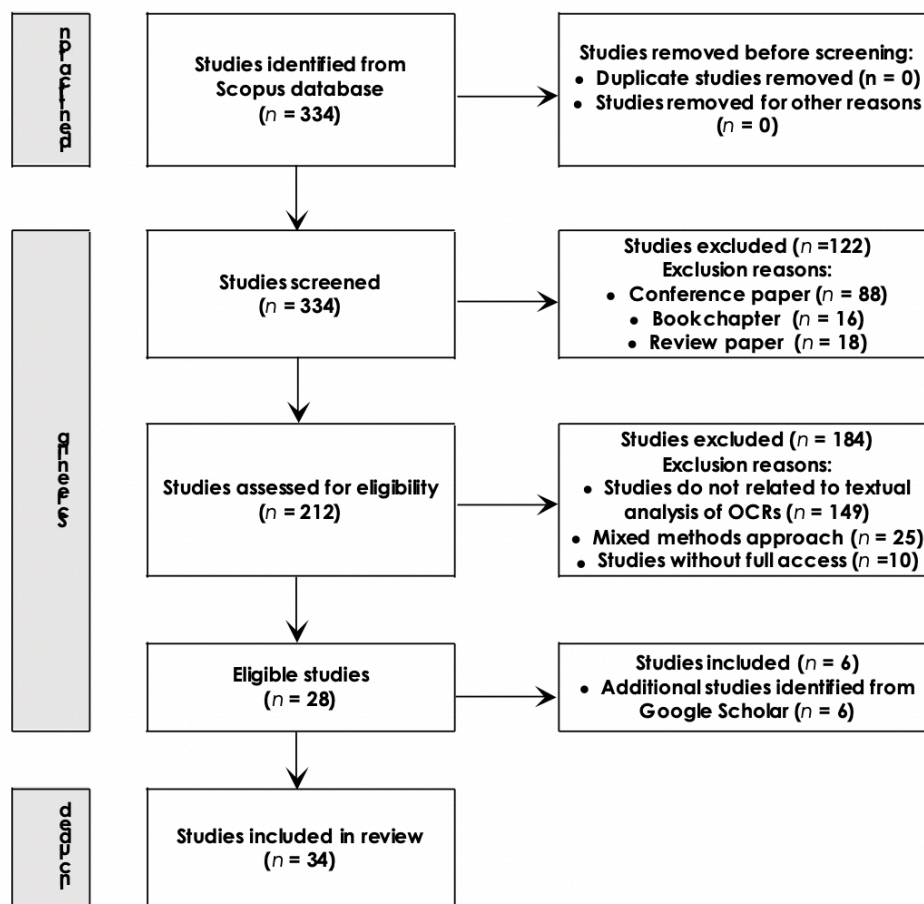


Figure 1: Literature search process following the PRISMA guidelines

be included (Ahmad et al., 2022; Pham et al., 2023). This resulted in six relevant papers being added to the list. These papers were also cross-checked to ensure they were indexed in the Scopus database, and we found that all six papers were indeed indexed. At the end of this stage, 34 papers were eligible for the next review process. In the last step of this stage, a table was created to document and analyze all included papers, containing essential information such as authors, titles, year, journals, industry, data, findings, publishers, etc. (see **Appendix A**).

2.4 Network Analysis

For this purpose, we used Gephi, an open-source network analysis software commonly employed in bibliometric and textual analysis studies (Lang et al., 2021; Zhong et al., 2023; Leutwiler-Lee et al., 2023; Nikseresht et al., 2024). Gephi offers better visualization capabilities compared to other network analysis software (Kawabata, 2024). The step-by-step process for conducting this network analysis was based on previous studies (Bastian et al., 2009; Bruns & Snee, 2022; Liu et al., 2024; Galalizadeh et al., 2024; Kawabata, 2024). In Gephi, data is visualized as a network graph or map, consisting of nodes and edges. Nodes represent the entities or objects in the study, which can include

people, companies, concepts, or other elements (Bruns & Snee, 2022). In this study, the nodes represent industries and key attributes, while the edges indicate the connections between them. The results provide insights into the structural interactions and interconnections among the key attributes and industries studied.

To generate the network map, the data were first prepared in Excel (WPS Office) and then imported into Gephi using two separate CSV files: one for nodes and another for edges. The ForceAtlas algorithm was selected to identify common key attributes across industries by simulating forces of attraction and repulsion between nodes (Galalizadeh et al., 2024). This algorithm is one of the most popular layout options in Gephi (Bruns & Snee, 2022). The repulsion strength was set to 10,000 to ensure that nodes within a cluster were more densely connected than those outside the cluster, as adapted from Galalizadeh et al. (2024). Next, modularity analysis was conducted in Gephi to detect clusters within the network (Kawabata, 2024). The default configuration for modularity in Gephi was used, with 'Randomize' and 'Use Weight' selected, and the resolution set to 2.0. As a result, eight clusters representing different industries were identified, each assigned a distinct color in the network map (see **Figure 4** in Subsection 3.2.6). A

modularity value of 0.585, which falls between 0.3 and 0.7, indicates accurate clustering (Galalizadeh et al., 2024). Finally, degree analysis was performed to obtain statistics on the common key industry attributes within the network (Bruns & Snee, 2022). In total, the network analysis conducted in Gephi for this study involved 137 nodes and 220 edges. Eight of the nodes represented industries, while the remaining 129 corresponded to key industry attributes.

3. RESULTS

In this section, we primarily examine the descriptive quantitative statistics of the reviewed papers to summarize the academic studies on the recent textual analysis of OCR. In the next section, we present a qualitative synthesis of the findings related to key industry attributes both within and across industries.

3.1 Descriptive Statistics

This analysis helps identify trends in the field, including regional context, publication outlets, industry context, methodologies, and data sources.

3.1.1 Regional Focus

Figure 2 presents the country-level focus of the reviewed studies. We found that most studies on the textual analysis of OCR were conducted on a global scale ($n = 9$) (Lang et al., 2021; Sulu et al., 2021; Arasli et al., 2021; Dastane et al., 2024; Leutwiler-Lee et al., 2023; Olorunsola et al., 2023a; Arici et al., 2023; Saydam et al., 2023; Brochado et al., 2024), followed by studies focusing on the United States ($n = 6$) and India ($n = 3$). For instance, a study by Lang et al. (2021) analyzed 394 reviews of the Vans brand on Twitter, highlighting the international reach of customer feedback. Similarly, Arici et al. (2023) examined 121,780 reviews from 87 green hotels in the top ten tourism countries on TripAdvisor. Next, when we categorized the studies by regional context, excluding those conducted on a global scale ($n = 9$), we found

that most were carried out in Western countries ($n = 13$), followed by Asian countries ($n = 9$) and Eastern countries ($n = 3$). These details are presented in **Table 1**.

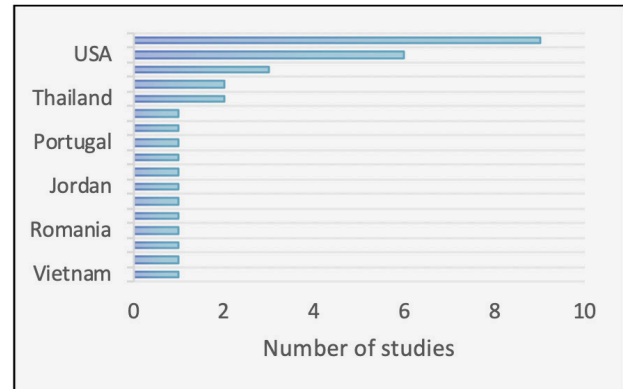


Figure 2: Country-level focus of reviewed studies

3.1.2 Publication Field

Table 2 presents the list of journals in which the selected studies have been published, along with their frequencies and citation counts recorded in Scopus, as updated on October 5, 2024. A total of 30 journals have been identified. We found that most of the journals were in the fields of hospitality and tourism ($n = 11$), followed by marketing ($n = 5$), management ($n = 4$), information and technology ($n = 4$), interdisciplinary studies ($n = 2$), and others ($n = 4$). This indicates that the majority of studies were conducted predominantly in the fields of hospitality, tourism, and marketing. In terms of citations, the highest count is 35 for the Sustainability journal, followed by the Journal of Islamic Marketing (31) and Current Issues in Tourism (30).

3.1.3 Industry Distribution

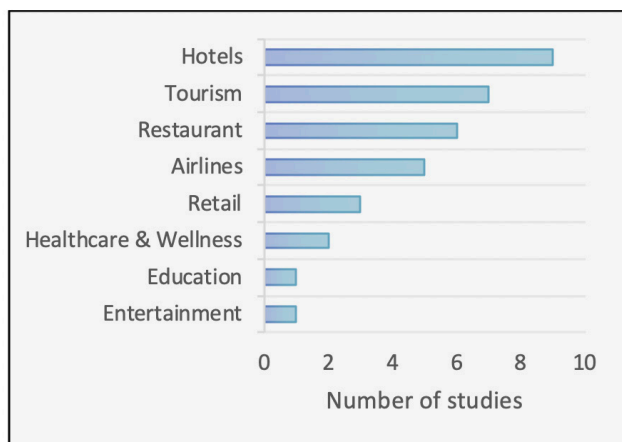
Eight different industries were revealed in the reviewed studies, as shown in **Figure 3**. Most studies focused on the hotel industry ($n = 9$, 26.47%) (Arasli et al., 2021; Kumar & Reddy, 2022; Nguyen et al., 2023; Leutwiler-Lee et al., 2023; Catir, 2023; Olorunsola et al., 2023a; Arici et

Table 1: Regional context of reviewed studies

Region	Country	No. of Studies	Studies
Western	USA	6	Manchaiah et al. (2021), Park et al. (2021), Garner and Kim (2022), Costa et al. (2023), Liu et al. (2024), Shahhosseini and Khalili Nasr (2024)
	New York	1	Koytak (2024)
	Portugal	1	Meneses et al. (2023)
	Europe	1	Brochado et al. (2021)
	Norway	1	Ali et al. (2023)
	Romania	1	Harba et al. (2021)
	United Kingdom	1	Saydam and Altun (2023)
	London	1	Lee et al. (2023)
	India	3	Rasool and Pathania (2021), Tripathi and Wasan (2021), Kumar and Reddy (2022)
	China	2	Miao et al. (2023), Wang et al. (2024)
Asian	Thailand	2	Sangpikul (2022), Low (2024)
	Korea	1	Racatham et al. (2021)
	Vietnam	1	Nguyen et al. (2023)
	Cyprus	1	Öztüren et al. (2021)
Eastern	Jordan	1	Olorunsola et al. (2023b)
	Turkey	1	Catir (2023)

Table 2: List of journals along with their frequency and citation counts

Journal Field	Journal Name	No. of Studies	No. of Citations
Hospitality and Tourism Management	<i>International Journal of Event and Festival Management</i>	1	0
	<i>Consumer Behavior in Tourism and Hospitality</i>	2	18
	<i>Worldwide Hospitality and Tourism attributes</i>	2	9
	<i>International Journal of Contemporary Hospitality Management</i>	1	16
	<i>Journal of Hospitality and Tourism Insights</i>	1	15
	<i>Current Issues in Tourism</i>	1	30
	<i>Journal of Travel & Tourism Marketing</i>	1	4
	<i>Tourism Management Perspectives</i>	1	5
	<i>Tourism and Hospitality Research</i>	1	2
	<i>Academica Turistica-Tourism and Innovation Journal</i>	1	1
Marketing	<i>Turyzm</i>	1	1
	<i>Journal of Fashion Marketing and Management</i>	1	17
	<i>Journal of Research in Interactive Marketing</i>	1	24
	<i>Journal of Islamic Marketing</i>	1	31
	<i>Journal of Marketing Analytics</i>	1	0
Management	<i>Journal of Asia Business Studies</i>	1	4
	<i>International Journal of Technology Marketing</i>	1	1
	<i>Management Decision</i>	1	5
	<i>Journal of Asia Business Studies</i>	1	4
	<i>British Food Journal</i>	1	4
Information and Technology	<i>Journal of Retailing and Consumer Services</i>	1	6
	<i>Information</i>	1	2
	<i>Asia pacific Journal of Information Systems</i>	1	1
Interdisciplinary	<i>International Journal on Recent and Innovation Trends in Computing and Communication</i>	1	0
	<i>Sage Open</i>	1	11
Others	<i>Sustainability</i>	3	35
	<i>TQM Journal</i>	1	5
	<i>Sociology Compass</i>	1	0
	<i>TEM Journal</i>	1	0
	<i>American Journal of Audiology</i>	1	7

**Figure 3:** Distribution of selected studies across industries

al., 2023; Ali et al., 2023; Lee et al., 2023), followed by the tourism industry ($n = 7$, 20.59%) (Tripathi & Wasan, 2021; Öztüren et al., 2021; Brochado et al., 2021; Garner & Kim, 2022; Meneses et al., 2023; Olorunsola et al., 2023b; Costa et al., 2023), the restaurant industry ($n = 6$, 17.65%) (Harba et al., 2021; Park et al., 2021; Saydam & Altun, 2023; Shahhosseini & Khalili Nasr, 2024; Koytak, 2024; Low, 2024), and the airline industry ($n = 5$, 14.71%) (Ractham et al., 2021; Rasool & Pathania, 2021; Sulu et al., 2021; Saydam et al., 2023; Brochado et al., 2024). Three studies focused on the retail industry ($n = 3$, 8.82%) (Lang et al., 2021; Miao et al., 2023; Wang et al., 2024). Meanwhile, other less-examined industries included healthcare ($n = 2$, 5.88%) (Bennett et al., 2021; Sangpikul,

2022), education ($n = 1$, 2.94%) (Dastane et al., 2024), and entertainment ($n = 1$, 2.94%) (Liu et al., 2024).

3.1.4 Methodology Analysis

An overview of the methods of textual analysis of OCR revealed that the majority of recent studies utilized computerized methods ($n = 26$, or 76.47 percent) over traditional manual analysis ($n = 7$, or 20.59 percent), while one study employed a combination of manual and computerized analysis (Kumar & Reddy, 2022). Computerized methods can be performed with various tools, including Leximancer ($n = 11$) (Arasli et al., 2021; Öztüren et al., 2021; Brochado et al., 2021; Sulu et al., 2021; Saydam & Altun, 2023; Olorunsola et al., 2023a; Arici et al., 2023; Ali et al., 2023; Olorunsola et al., 2023b; Meneses et al., 2023; Saydam et al., 2023), Python ($n = 3$) (Miao et al., 2023; Wang et al., 2024; Shahhosseini & Khalili Nasr, 2024), machine learning ($n = 1$) (Koytak, 2024), KH Coder ($n = 1$) (Low, 2024), Gephi ($n = 2$) (Lang et al., 2021; Leutwiler-Lee et al., 2023), ATLAS.ti ($n = 1$) (Dastane et al., 2024), RapidMiner ($n = 1$) (Costa et al., 2023), NVivo ($n = 1$) (Liu et al., 2024), Gavagai ($n = 1$) (Rasool & Pathania, 2021), QDA Miner ($n = 1$) (Lee et al., 2023), R software ($n = 1$) (Harba et al., 2021), and IRaMuTeQ ($n = 1$) (Bennett et al., 2021). This shows a variety of tools for the textual analysis of OCR that could benefit future researchers in this area.

3.1.5 Data Sources

Table 3 presents the sources of OCR data for the

reviewed studies. The analysis of the selected studies revealed that TripAdvisor is the most prominent source of OCR data, with 19 studies utilizing this platform (Harba et al., 2021; Park et al., 2021; Brochado et al., 2021; Tripathi & Wasan, 2021; Öztüren et al., 2021; Rasool & Pathania, 2021; Sulu et al., 2021; Sangpikul, 2022; Leutwiler-Lee et al., 2023; Saydam & Altun, 2023; Catir, 2023; Arici et al., 2023; Ali et al., 2023; Meneses et al., 2023; Costa et al., 2023; Olorunsola et al., 2023b; Saydam et al., 2023; Shahhosseini & Khalili Nasr, 2024; Low, 2024;). Specifically, the studies analyzing OCR from TripAdvisor focused primarily on the tourism industry (n = 6), followed by the restaurant industry (n = 5) and the hotel industry (n = 4). In total, we identified ten different sources of OCR data across the selected studies, with a combined total of 1,955,541 OCR analyzed.

Table 3: Sources of OCR data in reviewed studies

Data Sources	No. of Studies	Number of OCR analyzed
TripAdvisor	19	1,403,005
Booking.com	3	5,054
Skytrax	2	138,848
Google reviews	2	51,274
JD.com	2	140,480
Twitter	1	394
Google play	1	13,147
Airbnb.com	1	201,321
Mixed: Meta & Yelp	1	739
Mixed: TripAdvisor & Yelp	1	848
Mixed: Booking.com & TripAdvisor	1	431

3.2 Qualitative Synthesis

In this section, we address the second research question by presenting the key industry attributes identified in the selected studies, categorized by industries such as hotels, tourism, restaurants, airlines, retail, and others. Additionally, we highlight several top key attributes for each industry based on our analysis of the reviewed studies, providing deeper contextual insights.

3.2.1 Hotel Industry

Based on our review of selected papers in this industry, we identified 36 key hotel attributes across nine studies, as shown in **Table 4**. Our findings reveal that most of the selected studies discovered 'staff' as the key hotel attribute (n = 6 or 75 percent) (Arasli et al., 2021; Nguyen et al., 2023; Leutwiler-Lee et al., 2023; Olorunsola et al., 2023a; Arici et al., 2023; Ali et al., 2023). We reviewed selected studies and found several descriptions of the 'staff' attribute. For instance, Nguyen et al. (2023) examined OCR of hotels in Vietnam and indicated that customers preferred staff with positive attitudes and good behavior. Another study by Leutwiler-Lee et al. (2023) that analyzed OCR of quarantine hotels during the pandemic shows that caring and attentive service from hotel staff was crucial for customers. The analysis of OCR of capsule hotels shows that customers preferred friendly and helpful staff during their stays (Olorunsola

et al., 2023a). These findings suggest that the quality of hotel staff's service is crucial in shaping customers' perceptions of the hotel.

The second most frequently identified key hotel attribute was 'room,' highlighted in five studies (n = 5) (Arasli et al., 2021; Kumar & Reddy, 2022; Leutwiler-Lee et al., 2023; Arici et al., 2023; Ali et al., 2023), followed by 'location,' which was also found in five studies (n = 5) (Arasli et al., 2021; Nguyen et al., 2023; Olorunsola et al., 2023a; Ali et al., 2023; Lee et al., 2023). Several descriptions of the 'room' attribute were revealed. For example, Leutwiler-Lee et al. (2023) found that customers want their rooms comfortable, and this is vital in shaping their perceptions of hotels. Similarly, Kumar and Reddy (2022) found that customers preferred rooms to be fully equipped with all essential amenities, which contributed to their satisfaction with the hotel. Another study by Arici et al. (2023) reported that implementing environmentally friendly practices in hotel rooms could enhance customer satisfaction. These findings show the importance customers place on the condition and atmosphere of their rooms, which can enhance their overall satisfaction with the hotel experience.

As for the 'location' attribute, Nguyen et al. (2023), in their analysis of OCRs from high-class hotels, found that customers prefer hotels located near entertainment venues, with easy access to transportation and a pleasant surrounding environment. Likewise, Olorunsola et al. (2023a), in their study on capsule hotels, emphasized that an ideal location allows guests to walk to shops and restaurants without relying on transport. These findings indicate the importance for hotels to make informed decisions regarding their location to meet customer expectations.

3.2.2 Tourism Industry

We uncovered 46 key tourism attributes across seven studies (Tripathi & Wasan, 2021; Öztüren et al., 2021; Brochado et al., 2021; Garner & Kim, 2022; Meneses et al., 2023; Olorunsola et al., 2023b; Costa et al., 2023), as shown in **Table 5**. We identified three key tourism attributes that were crucial: "tour" (n = 2) (Brochado et al., 2021; Meneses et al., 2023), "recommend" (n = 2) (Meneses et al., 2023; Brochado et al., 2021), and "experience" (n = 2) (Meneses et al., 2023; Costa et al., 2023). Several descriptions of the 'tour,' 'recommend,' and 'experience' attributes were found. For the 'tour' attribute, Meneses et al. (2023), in their study of wine tourism, observed that tour descriptions were consistently related to guides and historical information. This emphasizes the crucial role of guides who possess knowledge about the history of the locations being visited. Another study by Brochado et al. (2021), which examined football stadium tours, found that the 'tour' attribute was consistently associated with audio and virtual reality tours. This highlights the importance

Table 4: Key hotel attributes in selected studies

Key Attributes	No. of Studies	Authors
Staff	6	Arasli et al. (2021), Nguyen et al. (2023), Leutwiler-Lee et al. (2023), Olorunsola et al. (2023a), Arici et al. (2023), Ali et al. (2023)
Room	5	Arasli et al. (2021), Kumar and Reddy, (2022), Leutwiler-Lee et al. (2023), Arici et al. (2023), Ali et al. (2023)
Location	5	Arasli et al. (2021), Nguyen et al. (2023), Olorunsola et al. (2023a), Ali et al. (2023), Lee et al., 2023
Food	4	Arasli et al. (2021), Kumar and Reddy, (2022), Arici et al. (2023), Ali et al. (2023)
Facility	2	Arasli et al. (2021), Nguyen et al. (2023)
Cleanliness	2	Arasli et al. (2021), Nguyen et al. (2023)
Value	2	Nguyen et al. (2023), Ali et al. (2023)
Wifi	2	Arasli et al. (2021), Nguyen et al. (2023)
Service	2	Leutwiler-Lee et al. (2023), Ali et al. (2023)
Friendliness	2	Kumar and Reddy (2022), Leutwiler-Lee et al. (2023)
Experience	2	Arici et al. (2023); Ali et al. (2023)
Meal	1	Leutwiler-Lee et al. (2023)
Comfort	1	Nguyen et al. (2023)
Music	1	Catir (2023)
Area	1	Olorunsola et al. (2023a)
Bed	1	Olorunsola et al. (2023a)
Capsule	1	Olorunsola et al. (2023a)
Check-in	1	Olorunsola et al. (2023a)
Noisy	1	Olorunsola et al. (2023a)
Luggage	1	Olorunsola et al. (2023a)
Hospitality	1	Kumar and Reddy (2022)
People	1	Kumar and Reddy (2022)
Relax	1	Kumar and Reddy (2022)
Feeling	1	Kumar and Reddy (2022)
Holiday	1	Kumar and Reddy (2022)
Pool	1	Arasli et al. (2021)
Daily	1	Arici et al. (2023)
Front	1	Arici et al. (2023)
Coffee	1	Arici et al. (2023)
Amazing	1	Arici et al. (2023)
Trip	1	Arici et al. (2023)
Stay	1	Ali et al. (2023)
Recommend	1	Ali et al. (2023)
Information	1	Lee et al., 2023
Host	1	Lee et al., 2023
Amenity	1	Lee et al., 2023

of incorporating technology to enhance tourists' experiences.

Together, these findings suggest that knowledgeable tour guides, especially those well-versed in the history of the visited locations, along with the adoption of technology, are crucial factors in shaping customer satisfaction with the tour experience. In terms of the 'recommend' attribute, Meneses et al. (2023) emphasized its importance, noting that recommendations reflect high levels of customer satisfaction and signal the quality of services provided by travel companies. Similarly, Brochado et al. (2021) emphasized that

recommendations reflect customer satisfaction, noting that in their study, the 'recommend' attribute was often related to topics such as experiences, local providers, trips, and menus. These findings suggest the importance of the 'recommend' attribute in the tourism industry, as it serves as an indicator of customer satisfaction and the service quality of travel companies.

With respect to the 'experience' attribute, which refers to tourists' overall evaluation of their visit, Meneses et al. (2023) found that the 'experience' attribute was closely linked to customer satisfaction. They noted that customer experiences could be evoked for various reasons: before the visit (e.g., the planning or scheduling phase), during the visit (e.g., through content or activities), or after the visit (e.g., when tourists evaluate whether their expectations were met). Another study found that customer experience improved due to the activities or content of the visit (Costa et al., 2023). Costa et al. (2023) found that customer experience increases when they enjoy activities related to water, dolphins, swimming, and rides in the context of theme park tourism. These findings highlight the importance of the 'experience' attribute in shaping customer satisfaction in tourism.

3.2.3 Restaurant Industry

In our review of selected papers, we identified 19 key restaurant attributes across six studies, as presented in **Table 6**. We found that 'food' was the most frequently identified attribute of restaurants ($n = 5$) (Harba et al., 2021; Park et al., 2021; Saydam & Altun, 2023; Shahhosseini & Khalili Nasr, 2024; Low, 2024). Several descriptions of the 'food' attribute were uncovered. For instance, Low (2024) studied the OCR of street food restaurants and found that high-quality food, determined by the ingredients, is essential. Another study by Park et al. (2021) established that the good flavor and taste of food lead to customer satisfaction and increase their willingness to return. Meanwhile, Saydam and Altun (2023) discovered that innovative and creative food enhances the guest experience in restaurants. These findings indicate that the 'food' attribute, particularly its quality, flavor, taste, and creativity, is crucial for customer satisfaction in restaurants.

The next most frequently identified key restaurant attribute was 'service' ($n = 4$) (Harba et al., 2021; Park et al., 2021; Shahhosseini & Khalili Nasr, 2024; Koytak, 2024). The study by Koytak (2024), which examined OCR of restaurants in Syracuse, found that the 'service' attribute is a critical and essential factor in the context of Italian restaurants. The study indicates that customers prefer service that provides a sense of familiarity, making them feel at home (Koytak, 2024). Meanwhile, Harba et al. (2021), who explored OCR of restaurants in Bucharest, found that positive sentiment in restaurant reviews is associated with high-quality service. Similarly, Park

Table 5: Key tourism attributes in selected studies

Key Attributes	No. of Studies	Authors
Tour	2	Brochado et al. (2021), Meneses et al. (2023)
Recommend	2	Brochado et al. (2021), Meneses et al. (2023)
Experience	2	Meneses et al. (2023), Costa et al. (2023)
Scenery	1	Garner and Kim (2022)
Atmosphere	1	Garner and Kim (2022)
Service	1	Garner and Kim (2022)
Product	1	Garner and Kim (2022)
Wine	1	Meneses et al. (2023)
Taste	1	Meneses et al. (2023)
Family	1	Meneses et al. (2023)
Beautiful	1	Meneses et al. (2023)
Worth	1	Meneses et al. (2023)
Amazing	1	Meneses et al. (2023)
Price	1	Tripathi and Wasan (2021)
Distraction	1	Tripathi and Wasan (2021)
Expectation	1	Tripathi and Wasan (2021)
Entrance	1	Olorunsola et al. (2023b)
Trip	1	Olorunsola et al. (2023b)
Monastery	1	Olorunsola et al. (2023b)
Building	1	Olorunsola et al. (2023b)
Animal	1	Olorunsola et al. (2023b)
Carriage	1	Olorunsola et al. (2023b)
Safe	1	Olorunsola et al. (2023b)
Environment	1	Öztüren et al. (2021)
Infrastructure	1	Öztüren et al. (2021)
Location	1	Öztüren et al. (2021)
Activity	1	Öztüren et al. (2021)
Visitor	1	Öztüren et al. (2021)
Local	1	Öztüren et al. (2021)
Fan	1	Brochado et al. (2021)
Stadium	1	Brochado et al. (2021)
Team	1	Brochado et al. (2021)
Museum	1	Brochado et al. (2021)
Room	1	Brochado et al. (2021)
Staff	1	Brochado et al. (2021)
Game	1	Brochado et al. (2021)
Place	1	Brochado et al. (2021)
Ticket	1	Brochado et al. (2021)
Seating	1	Brochado et al. (2021)
Food	1	Brochado et al. (2021)
Shop	1	Brochado et al. (2021)
Attraction	1	Brochado et al. (2021)
Ride	1	Costa et al. (2023)
Water	1	Costa et al. (2023)
Dolphin	1	Costa et al. (2023)
Show	1	Costa et al. (2023)

et al. (2021) found in their study of green restaurants in the United States that customers preferred friendly service. Overall, these findings highlight 'service' as one of the key restaurant attributes that shape customers' perceptions.

3.2.4 Airlines Industry

Based on our review of the selected papers, we identified 20 key airline attributes from five studies (n = 5) (Ractham et al., 2021; Rasool & Pathania, 2021; Sulu et al., 2021; Saydam et al., 2023; Brochado et al., 2024). This information can be found in **Table 7**.

We found that 'flight' (n = 4) and 'staff' (n = 4) were the

Table 6: Key restaurants attributes in selected studies

Key Attributes	No. of Studies	Authors
Food	5	Harba et al. (2021), Park et al. (2021), Saydam and Altun (2023), Shahhosseini and Khalili Nasr (2024), Low (2024)
Service	4	Harba et al. (2021), Park et al. (2021), Shahhosseini and Khalili Nasr (2024), Koytak (2024)
Value	2	Park et al. (2021), Shahhosseini and Khalili Nasr (2024)
Time	2	Saydam and Altun (2023), Low (2024)
Experience	2	Harba et al. (2021), Park et al. (2021)
Reservation	2	Saydam and Altun (2023), Low (2024)
Wine	2	Harba et al. (2021), Saydam and Altun (2023)
Pet-friendly	1	Shahhosseini and Khalili Nasr (2024)
Taste	1	Koytak (2024)
Ambience	1	Koytak (2024)
Price	1	Koytak (2024)
Dishes	1	Low (2024)
Innovation	1	Saydam and Altun (2023)
Menu	1	Harba et al. (2021)
Excellent	1	Harba et al. (2021)
Atmosphere	1	Park et al. (2021)
Organic	1	Park et al. (2021)
Vegetarian	1	Park et al. (2021)
Behavior	1	Park et al. (2021)

Table 7: Key airlines attributes in selected studies

Key Attributes	No. of Studies	Authors
Flight	4	Ractham et al. (2021), Rasool and Pathania (2021), Sulu et al. (2021), Saydam et al. (2023)
Staff	4	Rasool and Pathania (2021), Sulu et al. (2021), Saydam et al. (2023), Brochado et al. (2024)
Service	3	Ractham et al. (2021), Sulu et al. (2021), Saydam et al. (2023)
Luggage	3	Ractham et al. (2021), Rasool and Pathania (2021), Sulu et al. (2021)
Food	3	Sulu et al. (2021), Ractham et al. (2021), Brochado et al. (2024)
Time	2	Rasool and Pathania (2021), Brochado et al. (2024)
Beverage	2	Ractham et al. (2021), Brochado et al. (2024)
Cancellation	2	Sulu et al. (2021), Saydam et al. (2023)
Hygiene	1	Saydam et al. (2023)
Legroom	1	Saydam et al. (2023)
Test	1	Saydam et al. (2023)
Experience	1	Rasool and Pathania (2021)
Crew	1	Rasool and Pathania (2021)
Check-in	1	Sulu et al. (2021)
Airport	1	Sulu et al. (2021)
Class	1	Sulu et al. (2021)
Cleanliness	1	Ractham et al. (2021)
Seating	1	Ractham et al. (2021)
Upgrade	1	Ractham et al. (2021)
Application	1	Ractham et al. (2021)

most frequently identified attributes of the airline industry. We explored the descriptions of the 'flight' attribute in detail from the studies (Rachtham et al., 2021; Rasool & Pathania, 2021; Sulu et al., 2021; Saydam et al., 2023) and found several key descriptions of 'flight.' For instance, the study by Saydam et al. (2023) examined OCR of low-cost airlines, showing that the description of 'flight' primarily focuses on baggage. They concluded that the airline baggage handling system is the most important aspect for airline customers (Saydam et al., 2023). Rachtham et al. (2021) studied OCR of Korean airlines and found that the descriptions of 'flight' were associated with flight timeliness and in-flight entertainment. Similarly, Rasool and Pathania (2021) found that the 'flight' description is often related to flight timing and is primarily associated with customer satisfaction. This suggests that flights must be on time and offer an enjoyable experience throughout the journey. Additionally, airlines that have a good system for handling their baggage increase their customer experience. For the 'staff' attribute in the airline industry, several descriptions were found in the selected studies. For instance, the study by Saydam et al. (2023) shows that customers preferred pleasant airline staff. This is because staff, such as flight attendants, are an integral part of the flight experience, and their interactions throughout the flight are crucial in enhancing customer satisfaction (Saydam et al.,

2023). Another study by Rasool and Pathania (2021) highlighted that customers preferred staff who handle reservations and ticketing efficiently and without errors. While Brochado et al. (2024) discovered that customers favored staff who are consistently willing to help, which can lead to increased passenger satisfaction. Overall, these findings emphasize the crucial role of staff in the airline industry.

3.2.5 Other Industries

Based on our review, we identified four less-examined industries: the retail industry (n = 3) (Lang et al., 2021; Miao et al., 2023; Wang et al., 2024), the healthcare and wellness industry (n = 2) (Sangpikul, 2022; Bennett et al., 2021), the entertainment industry (n = 1) (Liu et al., 2024), and the education industry (n = 1) (Dastane et al., 2024), as shown in **Table 8**.

a. Retail Industry

Three papers were identified in the retail industry. For instance, Miao et al. (2023) analyzed OCR from JingDong.com and highlighted three key attributes of electronic products: 'experience,' 'evaluation,' and 'feature.' 'Experience' refers to the user's engagement with the electronic product, while 'evaluation' and 'feature' relate to the product's assessment and specific characteristics (Miao et al., 2023).

Table 8: Key attributes of other industries

Industries	Key Attributes	No. of Studies	Authors
Retail	Quality	1	Wang et al. (2024)
	Appearance	1	Wang et al. (2024)
	Transportation	1	Wang et al. (2024)
	Price	1	Wang et al. (2024)
	Service	1	Wang et al. (2024)
	Brand	1	Wang et al. (2024)
	Experience	1	Miao et al. (2023)
	Evaluation	1	Miao et al. (2023)
	Feature	1	Miao et al. (2023)
	Functional	1	Lang et al. (2021)
Healthcare & Wellness	Ease	1	Lang et al. (2021)
	Emotional	1	Lang et al. (2021)
	Reliability	1	Sangpikul (2022)
	Empathy	1	Sangpikul (2022)
	Responsiveness	1	Sangpikul (2022)
	Courtesy	1	Sangpikul (2022)
	Communication	1	Sangpikul (2022)
	Tangible	1	Sangpikul (2022)
	Assurance	1	Sangpikul (2022)
	Service	2	Bennett et al. (2021), Sangpikul (2022)
	Administration	1	Bennett et al. (2021)
	Benefit	1	Bennett et al. (2021)
	Device	1	Bennett et al. (2021)
	Communication	1	Bennett et al. (2021)
	Staff	1	Bennett et al. (2021)
Entertainment	Satisfaction	1	Bennett et al. (2021)
	Ambience	1	Liu et al. (2024)
	Space	1	Liu et al. (2024)
	Customer	1	Liu et al. (2024)
	Service	1	Liu et al. (2024)
	Product	1	Liu et al. (2024)
	Sign	1	Liu et al. (2024)
	Symbol	1	Liu et al. (2024)
	Density	1	Liu et al. (2024)
	Emotional	1	Liu et al. (2024)
Education	Motivation	1	Liu et al. (2024)
	Behavior	1	Liu et al. (2024)
	Technical	1	Dastane et al. (2024)
	Content	1	Dastane et al. (2024)
	Pedagogical	1	Dastane et al. (2024)
	Gamification	1	Dastane et al. (2024)
	Learning	1	Dastane et al. (2024)

Another study by Wang et al. (2024) examined OCR of green products sold on JingDong.com and identified six key attributes contributing to customer satisfaction: 'quality,' 'appearance,' 'transportation,' 'price,' 'service,' and 'brand.' Lang et al. (2021) explored OCR of the Sumissura brand for apparel and the Vans brand for footwear. They identified three key attributes: 'functionality,' 'ease,' and 'emotion.' They found that 'functionality' was the most prominent attribute for the Sumissura brand, where comfort, quality, and fit are essential for the apparel's functionality. For Vans, 'emotion' dominated, with customers expressing excitement when given the opportunity to customize their own designs. The identified attributes are then utilized as strategies to develop products that meet customer needs and wants (Lang et al., 2021; Miao et al., 2023; Wang et al., 2024). These findings reveal that key attributes identified from OCR are leveraged not only to improve service quality but also to inform product development.

b. Healthcare & Wellness Industry

Two studies were conducted in this industry. Sangpikul (2022) conducted a study analyzing OCR of spa services and identified eight key attributes: 'reliability,' 'empathy,' 'responsiveness,' 'courtesy,' 'communication,' 'tangibles,' 'physical assurance,' and 'service.' The study revealed, for example, that spa customers value reliability, particularly in terms of skilled or experienced therapists who can deliver the promised services. The 'empathy' attribute suggests that customers prefer therapists who are attentive and capable of providing personalized services (Sangpikul, 2022). Additionally, the 'responsiveness' attribute highlights the importance of prompt service and helpful staff in ensuring customer satisfaction. A study by Bennett et al. (2021) revealed seven key attributes related to the context of hearing devices: 'administration,' 'benefits,' 'device,' 'communication,' 'staff,' 'service,' and 'satisfaction.' Specifically, 'administration' refers to the administrative processes within the clinical setting, 'benefits' refers to the perceived advantages of the clinical process from the consumer's perspective, and 'device' refers to the acquisition of medical devices (Bennett et al., 2021). 'Communication' pertains to clinician-patient communication, 'staff' refers to the professionalism of healthcare staff, 'service' refers to the quality of customer service, and 'satisfaction' refers to the overall satisfaction with the healthcare provider. Overall, the studies provide valuable insights for enhancing customer satisfaction in the healthcare and wellness industry.

c. Entertainment Industry

Only one paper was identified that examined the entertainment industry, particularly in the context of anime conventions. Liu et al. (2024) highlighted 11 key attributes of these conventions, focusing specifically on the United States. The most prominent of these

include 'ambience' and 'space,' followed by 'customer service,' 'product,' 'signs,' 'symbols,' 'density,' 'emotion,' 'motivation,' and 'behavior.' Upon further exploration, the study revealed that 'ambience' and 'space' were the most significant attributes. These refer to aspects such as facilities, surroundings, location, transportation, parking, indoor and outdoor environments, safety, security, and opportunities for photos during the convention (Liu et al., 2024). This reveals that 'ambience' and 'space' are the most critical factors in the entertainment industry, particularly for anime conventions.

d. Education Industry

A single paper examined the education industry, focusing specifically on educational applications. The study by Dastane et al. (2024) identified five key attributes from OCR of educational applications on Google Play: 'technical,' 'content,' 'pedagogical,' 'gamification,' and 'learning.' According to Dastane et al. (2024), the 'technical' attribute refers to users' perceived benefits regarding the application's interface, features, and functionality. Meanwhile, 'content' pertains to users' preference for updated and relevant materials rather than outdated information. For 'pedagogy,' the study found that users favored applications employing effective teaching methods that made topics easier to understand. The teaching style was also deemed crucial, with users preferring original, participatory, and distinctive techniques. For 'gamification,' elements of fun and surprise were identified as essential. Lastly, in terms of 'value,' users preferred applications that provided motivation, gratification, and confidence. Overall, this highlights the key attributes preferred by users of educational applications, providing valuable guidance for stakeholders in the industry.

e. Network Analysis

The results of the network analysis are presented in **Table 9** and illustrated in **Figure 4**. A total of 23 common attributes were identified, with the top six highlighted in **Table 9**. Among these, 'service' emerged as the most common attribute, appearing in seven out of eight industries: tourism, hotels, entertainment, retail, healthcare and wellness, airlines, and restaurants. The next attribute was 'experience,' which appeared in five industries: tourism, hotels, retail, airlines, and restaurants. 'Food' followed as another common attribute, found in four industries: tourism, hotels, airlines, and restaurants. 'Staff' was also present in four industries: tourism, hotels, airlines, and healthcare and wellness. Other shared attributes include 'price,' which appeared in tourism, restaurants, and retail, and 'location,' identified in both tourism and hotels. The remaining common industry attributes are listed in **Table 9**.

Based on the network map in **Figure 4**, common attributes are positioned between the industries they are associated with. In contrast, attributes linked to only one

Table 8: Key attributes of other industries

Key Attributes	No. of Industries	Percentage %	Connected Industries
Service	7	88	Tourism, Hotels, Entertainment, Retail, Healthcare & Wellness, Airlines, Restaurant
Experience	5	63	Tourism, Hotels, Retail, Airlines, Restaurant
Food	4	50	Tourism, Hotels, Airlines, Restaurant
Staff	4	50	Tourism, Hotels, Airlines, Healthcare & Wellness
Price	3	38	Tourism, Restaurant, Retail
Location	2	25	Tourism, Hotels
Luggage	2	25	Hotels, Airlines
Check-in	2	25	Hotels, Airlines
Cleanliness	2	25	Hotels, Airlines
Behavior	2	25	Entertainment, Restaurant
Time	2	25	Restaurant, Airlines
Ambience	2	25	Entertainment, Restaurant
Value	2	25	Hotels, Restaurant
Seating	2	25	Tourism, Airlines
Room	2	25	Hotels, Tourism
Trip	2	25	Hotels, Tourism
Amazing	2	25	Hotels, Tourism
Recommend	2	25	Hotels, Tourism
Taste	2	25	Restaurant, Tourism
Wine	2	25	Restaurant, Tourism
Product	2	25	Entertainment, Tourism
Atmosphere	2	25	Restaurant, Tourism
Emotional	2	25	Entertainment, Retail

industry appear closer to that specific industry, without connections to others (Galalizadeh et al., 2024). This spatial arrangement facilitates the visual identification of shared attributes across industries. Additionally, the color of each node, which is determined through clustering analysis, indicates the industry with which the attribute is most closely associated (Bruns & Snee, 2022). For example, although the 'service' attribute is connected to seven industries (as shown in **Table 9**), its node color in **Figure 4** corresponds to that of the restaurant industry. This suggests that 'service' is most strongly associated with the restaurant industry, highlighting its greater importance in that context compared to others.

4. DISCUSSION

This study reviewed recent literature that employed textual analysis of OCRs to reveal key industry attributes. While previous studies have explored these attributes using textual analysis of OCRs, they have not explicitly synthesized the findings to examine how such attributes are common across industries. Moreover, existing systematic literature reviews on OCRs have focused on other themes, without directly addressing the key industry attributes derived from customer feedback. Building on this gap, our SLR systematically mapped these attributes across various sectors to uncover patterns and overlaps. We identified 163 unique key attributes across eight industries: 36 for hotels, 46 for tourism, 19 for restaurants, 20 for airlines, 13 for healthcare and wellness, 12 each for retail and entertainment, and 5 for education. Among these, service emerged as the most commonly identified attribute across industries, highlighting customers' consistent emphasis on service

quality as a key factor in their satisfaction.

To delve deeper into these findings, the following section focuses on the four industries most frequently examined in the selected studies, as they provide richer and more comprehensive insights. Specifically, we highlight hotels, tourism, restaurants, and airlines. In the theoretical implications, the top key attributes of these industries are highlighted and compared with findings from previous studies. The most common key attribute across industries, as revealed through network analysis, is also discussed. Therefore, industry players are encouraged to consider these key attributes within their respective sectors to enhance business performance and inform strategic decision-making.

4.1 Theoretical Implications

Our SLR revealed that staff is the most salient attribute in the hotel industry. Specifically, customers consistently expressed a preference for staff who are caring and attentive (Leutwiler-Lee et al., 2023) as well as friendly and helpful (Olorunsola et al., 2023a). These findings align with earlier hotel research that underscores the pivotal role of service personnel in shaping the overall guest experience and satisfaction. For example, Kattara et al. (2008) emphasized that staff behavior significantly influences customer satisfaction, regardless of gender or nationality. Similarly, Kim et al. (2015) found that courteous and responsive staff play a crucial role in fostering guest satisfaction and loyalty. While these studies relied primarily on surveys and interviews, our analysis adds value by drawing on original customer review data, offering a more immediate and authentic reflection of what guests truly value during their stay.

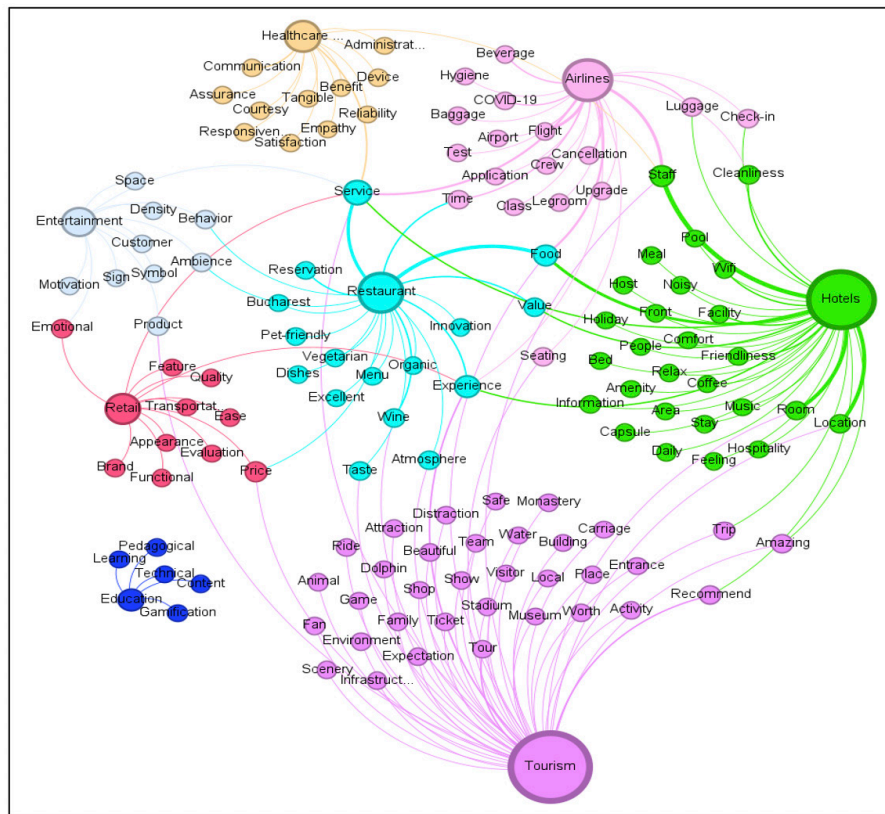


Figure 4: Network Map Visualization of Identified Key Industry Attributes

Given that customer reviews are considered more reliable and accurate (Kaur & Singh, 2021), our findings suggest that staff who consistently deliver empathetic, responsive, and personable service remain a key differentiator for hotels operating in an increasingly competitive landscape.

Shifting from hotels to tourism, our analysis reveals a more balanced distribution of important attributes. Here, no single attribute emerged as the most dominant. Instead, three key attributes, namely tour, recommend, and experience, were found to hold equal importance. The tour attribute highlights the value of knowledgeable tour guides, as emphasized in several studies (e.g., Meneses et al., 2023; Zorlu et al., 2023). It also reflects the added benefit of incorporating technology, such as virtual reality, to enhance tourist engagement (Brochado et al., 2021). Similarly, recommend emerged as a critical factor, reflecting customer satisfaction and influencing future tourist decisions. While past studies linked recommendations to positive experiences, our findings further reveal that tourists are more inclined to recommend visits they perceive as worthwhile, particularly those offering good value for money (Brochado et al., 2021; Meneses et al., 2023). Moreover, experience was strongly associated with satisfaction and loyalty. Prior research shows that positive experiences before, during, and after a visit significantly influence tourist perceptions (Costa et al., 2023; Jain et al., 2024). Our study builds on this by revealing that meaningful

experiences are essential not only in industrial tourism but also in various other settings, such as wine and theme park tourism. This highlights the need to deliver well-rounded, personalized, and engaging services throughout the tourist journey.

Extending this exploration to the restaurant industry, we observed a distinct shift in customer priorities. Here, food emerged as the most crucial attribute. Customers consistently value high-quality food, which is influenced by factors such as the ingredients used (Low, 2024) and the overall flavor and taste (Park et al., 2021). Additionally, innovativeness and creativity in food presentation and preparation contribute to positive customer perceptions (Saydam & Altun, 2023), further emphasizing the importance of this attribute. These findings align with previous research in the restaurant sector. For instance, Ideris et al. (2021) conducted a survey and found a positive relationship between food quality, particularly freshness and taste, and customer satisfaction. Similarly, Rai et al. (2023) reported comparable results in the context of fine dining restaurants. While both studies offer valuable insights into the link between food quality and customer satisfaction, our analysis provides a broader perspective by drawing on customer reviews across various types of restaurants. For example, Low (2024) highlights the crucial role of food quality in street food establishments, whereas Saydam and Altun (2023) show its significance in luxury dining experiences. Taken together, these findings suggest that

customers hold consistent expectations regarding food quality, regardless of the type of restaurant. Therefore, it is essential for restaurants to consistently monitor and maintain food quality, especially in terms of ingredients and taste, to meet customer expectations and enhance satisfaction.

In the airline industry, a similar pattern of consistent customer expectations is evident, as two key attributes, namely flight and staff, emerged as particularly important for customer satisfaction. The flight attribute encompasses several elements, including baggage handling (Saydam et al., 2023), flight timing (Rachtham et al., 2021; Rasool & Pathania, 2021), and in-flight entertainment (Rachtham et al., 2021), all of which reflect passengers' expectations for a smooth, timely, and enjoyable travel experience. Studies in the airline industry have reinforced the importance of these components. For instance, Noviantoro and Huang (2022) and Fathurrachman (2023) identified baggage handling as a top factor influencing satisfaction, while Oliveira, Oliveira, and Vassallo (2023) emphasized the negative impact of flight delays on passenger experiences. In-flight entertainment, particularly internet access, has also been highlighted as a critical feature (Jin & Kim, 2022). While these findings align with previous research, our study differs by establishing flight as a key attribute based on large-scale OCR data, including a dataset of 103,710 reviews (Rachtham et al., 2021), which enhances the reliability of these insights. Similarly, staff plays a vital role, as passengers consistently value courteous, competent, and helpful airline personnel, especially cabin crew and reservation staff (Rasool & Pathania, 2021; Saydam et al., 2023; Brochado et al., 2024). Prior studies, such as those by Bellizzi et al. (2022) and Law et al. (2022), confirm that service interaction significantly influences customer satisfaction. By drawing on secondary OCR data, our study reaffirms and extends this understanding, offering practical implications by identifying both flight and staff as central to the airline customer experience.

Across all these industries, one attribute stands out for its universal relevance: service. This study identified service as the most common key attribute, appearing in seven out of nine industries, including tourism, hotels, entertainment, retail, healthcare & wellness, airlines, and restaurants, highlighting its broad importance across sectors. This finding aligns with existing literature. Dabholkar et al. (2000) emphasized that service quality is crucial for customer retention, business growth, and long-term survival. Similarly, Ghobadian et al. (1994) stressed the need for continuous improvement to avoid rising business costs, especially in service-based industries. While previous studies underscore the theoretical importance of service quality, our study stands out by establishing service as a key cross-industry attribute based on actual OCR data. This approach not

only captures recent real customer experiences but also offers practical insights. By analyzing how service is described in customer feedback, our study provides a deeper and more actionable understanding, supporting better decision-making for industry practitioners.

4.2 Practical Implications

This study offers several practical implications. First, it provides valuable insights for a range of major industries, particularly hotels, tourism, restaurants, and airlines, regarding key industry attributes that can be prioritized and leveraged to enhance business performance or support strategic planning. By understanding which attributes matter most to customers, businesses can tailor their services, allocate resources more effectively, and improve customer satisfaction and loyalty. These attributes were identified from recent academic research that utilized real market data, specifically OCRs, which reflect genuine customer experiences and expectations. Such data enables businesses to make well-informed, evidence-based decisions, helping them stay competitive in a dynamic market environment. This is especially important in the current era of big data, where the ability to extract meaningful insights from large volumes of unstructured customer feedback is increasingly seen as a strategic advantage. Therefore, the findings of this study can support decision-makers in designing customer-centered strategies, refining service offerings, and benchmarking their performance against industry standards.

Second, the systematic review in this study provides both academicians and industry practitioners with valuable guidance on how to utilize the textual data they possess, such as OCRs, and the appropriate methods for doing so. By presenting an overview of the analytical techniques used in recent research, this study introduces practical tools and approaches for textual analysis, ranging from basic word frequency analysis to more advanced methods such as sentiment analysis, topic modeling, and network analysis. We also include references for further reading to support deeper exploration and application of these techniques. This contribution is particularly relevant given that many businesses today accumulate vast amounts of customer-generated content through review platforms, surveys, and social media, yet often lack the technical expertise or methodological knowledge to analyze it effectively. As a result, valuable insights remain untapped. By shedding light on how OCR data can be systematically analyzed to reveal customer priorities and emerging patterns, this study empowers businesses to transform raw textual data into actionable intelligence that can inform strategic decision-making and improve customer experience.

Third, the identified key industry attributes can assist marketers in each industry in better understanding

and exploring the drivers of customer satisfaction. By leveraging OCR data from review platforms such as TripAdvisor, Google Reviews, or Yelp, companies can identify how these attributes are described by their actual customers. This allows for targeted and evidence-based improvements. For example, in the hotel industry, where staff has been identified as a critical attribute, hotel managers should analyze reviews to pinpoint specific aspects of staff performance that customers frequently mention, such as friendliness, responsiveness, professionalism, or problem-solving abilities. Gaining this deeper insight into customer expectations and experiences allows businesses to tailor training programs, improve service delivery, and enhance guest satisfaction and foster long-term loyalty. Furthermore, given the volume and complexity of OCR data, it is advisable for companies to employ or consult with data analysts or customer experience specialists who are skilled in textual analysis. These professionals can systematically analyze the data, uncover meaningful patterns, and transform qualitative feedback into actionable strategies. In doing so, companies can move beyond informal assumptions and adopt a more data-driven approach to understanding and meeting customer needs.

4.3 Research Gaps and Future Research Agenda

Systematic literature reviews (SLRs) are valuable for identifying under-researched areas and offering insights that inform future research directions (Nasrabadi et al., 2024). Based on our analysis, several industry-specific gaps have emerged, pointing to opportunities for further investigation into key customer experience attributes across different sectors.

Starting with the hotel industry, our review confirms that OCR-based textual analysis is more frequently applied here than in other sectors, and many key hotel attributes have been well documented. However, one area that remains insufficiently addressed is the context of Muslim-friendly hotels. Although some studies have explored this niche (for example, Arasli et al., 2021; Kumar & Reddy, 2022), they do not explicitly address the religious needs of Muslim travelers. Essential attributes such as qibla direction, halal food, prayer facilities, and gender-segregated amenities are rarely mentioned. Given the growing demand for Shariah-compliant services in hospitality (El-Gohary, 2016), future research should explore these aspects further to support more inclusive service design.

A similar gap is evident in the tourism industry. Although many key attributes have been identified, they tend to vary depending on the type of tourism, such as heritage, wine, or nature tourism. This variation makes it challenging to identify shared attributes that are consistently valued across different contexts. Future research should therefore aim to determine common

tourism attributes that apply across various settings, facilitating broader generalization and more effective strategic planning.

In the restaurant industry, while the identification of key attributes is relatively well-established, a notable research gap exists in the context of green restaurants. Despite growing consumer interest in sustainability, few studies have identified attributes related to environmentally responsible practices. For instance, Shahhosseini and Khalili Nasr (2024) identified only pet-friendly as a green restaurant attribute, while Park et al. (2021) did not report any specific environmental features. This suggests a need for further studies to explore how customers perceive and value sustainability in dining experiences.

Turning to the airline industry, several important attributes have been documented, but limited attention has been paid to the low-cost airline segment. Although price is a major factor influencing satisfaction in this category (Sezgen et al., 2019), studies focusing on low-cost carriers (such as Rasool & Pathania, 2021; Saydam et al., 2023) did not highlight pricing as a key attribute. This signals a gap in the literature and presents an opportunity to examine what matters most to budget-conscious travelers through OCR analysis. Finally, our review shows that some industries, including retail, healthcare and wellness, entertainment, and education, are underrepresented in OCR-based research. These sectors play important roles in economic and social development but have received relatively little attention in studies using textual customer feedback. Future research should focus on these areas to uncover their unique key attributes and enhance both theoretical and practical understanding.

4.4 Limitations

Although this study provides valuable insights into key industry attributes that benefit both industry and academia, it is important to acknowledge its limitations. The first limitation relates to the keywords used to search for relevant papers. The selected keywords may have excluded studies that used different or unrelated terms. To enhance search coverage, a combination of broader keywords related to "online customer reviews" and "textual analysis of online customer reviews" could be applied.

Second, this study relied solely on the Scopus database, which may have excluded relevant studies available in other databases. Although Scopus is one of the most prominent and comprehensive academic databases (Nikseresht et al., 2024) and provides a free preview of listed papers, future studies could expand data collection to other databases (e.g., Web of Science, Taylor & Francis, and Science Direct) to facilitate the discovery of more relevant articles.

Third, this study adopts a four-year time frame (2021–2024) to synthesize recent findings. The emerging methods and tools utilized for the textual analysis of OCR have been identified and highlighted. The relevance of this topic to both industry and academic discussions has also been established. However, using this time frame may exclude foundational studies published earlier. As a result, relevant earlier findings that could provide additional context may be overlooked. Thus, future studies are encouraged to apply different time frames to offer varied insights into the key industry attributes identified from OCR.

Finally, several limitations were observed across the OCR-based studies included in this SLR. While many recent studies employed computerized methods such as automated text mining or sentiment analysis, which help reduce human bias and enhance scalability, these methods may still overlook contextual nuances and implicit meanings in customer reviews. Additionally, online reviews inherently carry the risk of self-selection bias, as individuals with extreme experiences are more likely to leave feedback. Moreover, most studies focused on a single platform, such as TripAdvisor, which may limit the generalizability of the findings. Some also analyzed reviews written in only one language, restricting the applicability of their findings to multilingual or cross-cultural contexts. These limitations highlight the need for more standardized, transparent, and context-aware approaches in future OCR-based research.

5. CONCLUSION

The current study is the first systematic literature review (SLR) to synthesize key industry attributes identified from online customer reviews (OCR) in previous research. By analyzing studies published between 2021 and 2024, we present recent findings on key industry attributes, the textual analysis methods used, and the industries most frequently examined. Using a systematic review methodology, we searched for relevant papers in a leading academic database with defined keywords. Our analysis identified 163 key industry attributes across eight industries and determined the top attribute for each. The integration of network analysis further revealed common attributes across industries, helping to identify those with universal relevance. This study also highlights the hotel industry and the TripAdvisor platform as the most frequently studied areas. In addition, we provide an overview of the research methodologies employed in prior studies, offering useful guidance for academics and practitioners aiming to refine their approaches or adopt new techniques. Finally, we identify several research gaps and propose directions for future inquiry. In sum, this study serves as a valuable resource for businesses seeking to understand key industry attributes in order to improve service quality, enhance performance, and better align with customer

preferences and expectations.

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Appendix A. List of Selected Papers

No.	Authors	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
1	Shahhosseini and Khalili Nasr (2024)	What attributes affect customer satisfaction in green restaurants? An aspect-based sentiment analysis approach	To understand the determinants of satisfaction in green restaurants and identify the impact of green attributes on customer satisfaction.	Computerized content analysis using Python-based topic modelling techniques, specifically BERTopic, along with aspect-based sentiment analysis.	Green attributes positively affect customer satisfaction, often surpassing atmosphere. Previously unidentified subtopics, such as 'pet-friendly,' have emerged.	Food, value, service, and pet-friendly.	Green restaurant	85,337 TripAdvisor reviews of green restaurants in the US.	Journal of Travel & Tourism Marketing
2	Nguyen, Le, Phan and Hoang (2023)	A multi-perspective approach of international tourist satisfaction in hospitality services and how to improve these factors using online customer reviews.	To identify key drivers of international tourist satisfaction in hospitality services and how to improve these factors using online customer reviews.	Manual content analysis combined with in-depth interviews with managers of 5-star hotels.	Staff were the most crucial service factor affecting customer satisfaction.	Staff, facility, cleanliness, comfort, value, location, and Wifi.	High-class hotels	2,500 online reviews of 21 high-class hotels in Vietnam on Booking.com	Journal of Asia Business Studies
3	Lee, Tse, Zhang and Wang (2023)	What have hosts overlooked for improving stay experience in accommodation -sharing? Empirical evidence from Airbnb customer reviews	To investigate the service dimensions highlighted by accommodation-sharing platforms and their relationship with customer loyalty.	Computerized content analysis using QDA Miner with the factor analysis (FA) topic modeling method, employing cluster analysis to form topic clusters based on co-occurrence patterns.	Identified "information" as a significant but underrepresented theme, and "homeliness" as a unique dimension linked to both behavioral and attitudinal loyalty.	Information, host, amenity, and location.	Airbnb	201,321 reviews on Airbnb in London.	International Journal of Contemporary Hospitality Management
4	Koytak (2023)	Ethnicity on the table: A content analysis of online reviews for Syracuse's cuisines	To explore how race, ethnicity, and immigration influence dining experiences in Syracuse, New York.	Computerized content analysis using machine learning tools, specifically BART-Large-MNLL, to classify text and identify themes.	The study revealed a contrast between themes of authenticity in immigrant cuisine and familiarity in mainstream options, highlighting the complexities of the "food social space" in American culture.	Taste, service, ambience, and price.	Restaurant	41,652 reviews of 237 restaurants from Google Map in Syracuse, New York.	Sociology Compass

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No.	Authors	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
5	Low (2024)	Automated content analysis of Tripadvisor reviews: A case study of a street food restaurant with one Michelin star	To examine changes in customer reviews of a Thai street food restaurant on TripAdvisor before and after it received a Michelin Star.	Computerized content analysis using KH Coder software for three aims: 1) word frequency, 2) co-occurrence network, and 3) keyword context.	Reviews shifted from a predominance of 4-star ratings before the award to 5-star ratings after receiving the Michelin Star. Key topics identified included the restaurant's signature dishes, food quality, reservation necessity, and waiting times.	Dishes, food, reservation, and time.	Restaurant	521 reviews of a Thai street food restaurant on TripAdvisor.	TEM Journal
6	Leutwiler-Lee, Kim, Badu-Baiden and King (2023)	Dimensionality in the service quality perceptions of quarantine hotel guests	To identify and analyze the key dimensions of service quality in quarantine hotels.	Computerized content analysis using Gephi software to identify and assess key dimensions of service quality.	Key dimensions of service quality included caring service from staff, friendliness, meal quality, room comfort, exceptional services, and service efficiency. Guests expressed high satisfaction with their experiences. Dominant themes included food, wine, restaurant, time, reservation, and innovation.	Staff, friendliness, meal, room, and service.	Quarantine hotels	3,896 online reviews of 52 quarantine hotels across five countries on TripAdvisor.	Tourism Management Perspectives
7	Saydam and Altun (2023)	An analysis of British Michelin-starred restaurants: Guests' online reviews	To explore the factors influencing luxury consumption in British Michelin-starred restaurants and identify how experiences vary by guest type.	Computerized content analysis using Leximancer to identify key themes and concepts.	Customers negatively evaluated the loudness and fast tempo of music, while the harmony between music and the hotel environment was positively perceived.	Food, wine, time, reservation, and innovation.	Restaurant	4,393 online reviews of 19 British restaurants in the UK on TripAdvisor.	British Food Journal
8	Catir (2023)	The musicscape in hotel businesses: Evidence from online reviews	To determine the effect of musicscape dimensions on customer behavior in the accommodation sector.	Manual content analysis guided by the framework proposed by Oakes (2000) to identify customer emotions related to music dimensions.	Nine key themes of customer experience management in capsule hotels were identified, including staff, hotel, area, location, bed, capsule, check-in, noise, and luggage.	Music attributes.	Hotels	2,357 online reviews of 28 hotels in Antalya, Turkey on TripAdvisor.	Turyzm
9	Olorunsola, Saydam, Lasisi, Eluwole (2023a)	Customer experience management in capsule hotels: A content analysis of guest online review	To evaluate the framework of customer experience management in capsule hotels	Computerized content analysis using Leximancer to identify key themes and concepts.		Staff, area, location, bed, capsule, check-in, noisy, and luggage.	Hotels	1,304 online reviews of the top 10 capsule hotels on Booking.com.	Journal of Hospitality and Tourism Insights

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No.	Authors	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
10	Kumar and Reddy (2022)	Modeling and sentiment analysis of online reviews in hospitality industry	To classify sentiment of hotel reviews and identify related topics to aid hotel management in forecasting demand and implementing effective strategies.	Manual sentiment analysis was applied, followed by computerized content analysis using R software, with the Latent Dirichlet Allocation (LDA) modeling algorithm implemented.	Most reviews were found to be positive, with key topics related to hospitality including food, hospitality, room, people, friendliness, relax, feelings, and holiday.	Food, hospitality, room, people, friendliness, relax, feelings, and holiday.	Muslim-friendly hotels	431 reviews of hotels in Chennai, India, on Tripadvisor and Booking.com.	International Journal on Recent and Innovation Trends in Computing and Communication
11	Bennett, Bennett, Ratnaud and Swanepoel (2021)	Experiences with hearing health care services: What can we learn from online consumer reviews?	To examine consumer experiences with hearing health care services.	Computerized content analysis was done using IRaMuTeQ software to identify key themes. Chi-square analysis was then performed to examine the association between themes and ratings.	Most consumers reported positive experiences. Seven key themes emerged across two domains: Clinical Processes and Staff and Service Interactions. Negative comments on administration processes were linked to poorer overall ratings.	Administration, benefits, device, communication, staff, service, and satisfaction.	Health care	9,622 reviews of 40 US cities on Google reviews	American Journal of Audiology
12	Harba, Tigau and Davidescu (2021)	Exploring consumer emotions in pre-pandemic and pandemic times. A sentiment analysis of perceptions in the fine-dining restaurant industry in Bucharest, Romania	To analyze how consumer emotions related to restaurant demand have evolved from the pre-pandemic period to the COVID-19 pandemic period.	Computerized content analysis, specifically sentiment analysis, was conducted using the AFINN lexicon dictionary in R software.	The pandemic has negatively impacted consumer satisfaction with fine-dining restaurants, with a noticeable decline in positive sentiment toward service quality despite overall positive sentiment.	Food, service, Bucharest, experience, menu, wine, and excellent.	Restaurant	1,106 reviews of 5 restaurants in Bucharest on TripAdvisor.	International Journal of Environmental Research and Public Health

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No.	Authors	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
13	Park, Kwon, Chae and Kim (2021)	What are the salient and memorable green-restaurant attributes? Capturing customer perceptions from user-generated content	To identify and understand the green images diners recall.	Manual content analysis for topic modeling was further supported by software for visualization, including Igraph and Gephi.	The study revealed 51 unique attributes of green restaurants, categorized into 4 main dimensions, enhancing the understanding of customer perceptions.	Value, service, atmosphere, food, organic, vegetarian, experience, and behavioral.	Restaurant	28,098 online reviews of 70 certified green restaurants in the US on TripAdvisor.	Sage Open
14	Arasli, Saydam, Gunay and Jafari (2021)	Key attributes of Muslim-friendly hotels' service quality: Voices from Booking.com	To identify the major themes encountered by tourists at Muslim-friendly hotels.	Computerized content analysis using Leximancer software to identify key themes and concepts.	Nine key themes of Muslim-friendly hotels were identified: hotel, staff, food, room, location, pool, facilities, cleanliness, and Wi-Fi. These themes were further distinguished into those associated with satisfaction and those related to dissatisfaction.	Staff, food, room, location, pool, facility, cleanliness, and Wifi	Muslim-friendly hotels	1,250 reviews of the top 10 Muslim-friendly hotels on Booking.com.	Journal of Islamic Marketing
15	Arici, Cakmakoglu Arici and Altinay (2023)	The use of big data analytics to discover customers' perceptions of and satisfaction with green hotel service quality	To identify environmentally friendly themes and concepts in green hotels.	Computerized content analysis using Leximancer to explore key themes, concepts, and customer satisfaction.	Major themes in customers' green reviews were related to aspects such as room, daily operations, hotel facilities, staff, and food. The satisfaction ratings were highest in Italy, the USA, and Turkey, and lowest in Germany and France.	Room, daily, staff, front, food, coffee, amazing, experience, and trip.	Green hotels	121,780 reviews from 87 green hotels across the top ten tourism countries on TripAdvisor	Current Issues in Tourism
16	Ali, Arasli, Arasli, Saydam, Capkiner, Aksoy and Atai (2023)	Determinants and impacts of quality attributes on guest perceptions in Norwegian green hotels	To integrate and map guests' green hotel experiences, with a focus on understanding their preferences and perspectives.	Computerized content analysis using Leximancer to explore key themes and concepts.	The study revealed that while guests were generally satisfied with most aspects of their experiences, there was notable dissatisfaction with specific elements such as green practices, booking, and check-in processes.	Room, food, location, staff, stay, service, recommend, value, and experience.	Green hotels	1,575 online reviews of green hotels in Norway on TripAdvisor.	Sustainability

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No.	Authors	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
17	Garner and Kim (2022)	Analyzing user-generated content to improve customer satisfaction at local wine tourism destinations: An analysis of Yelp and TripAdvisor reviews	To explore how wine tourism businesses can use online reviews to understand customer perceptions, improve satisfaction strategies.	Manual content analysis focused on thematic analysis.	Wine consumers focus on the hedonic aspects of their experience, such as scenery, atmosphere, service quality, and products.	Scenery, atmosphere, service, and product.	Wine tourism	848 online reviews of three wineries in the U.S. on TripAdvisor and Yelp.	Consumer Behavior in Tourism and Hospitality
18	Meneses, Brito, Lopes and Correia (2023)	Satisfaction and Dissatisfaction in Wine Tourism: A User-Generated Content Analysis	To identify determinants of satisfaction and dissatisfaction in wine tourism experiences.	Computerized content analysis using Leximancer to identify key themes and concepts.	Satisfaction and dissatisfaction are influenced by factors related to wine, visits, and circuits. Key satisfaction drivers include wine tastings and aesthetics, while dissatisfaction includes waiting time and employee performance.	Wine, tour, taste, family, beautiful, recommend, experience, worth, and amazing.	Wine tourism	400 online reviews of wine routes in Portugal on TripAdvisor	Tourism and Hospitality Research
19	Brochado, Brito, Bouchet and Oliveira (2021)	Dimensions of football stadium and museum tour experiences: The case of Europe's most valuable brands	To identify key aspects of visitors' experiences and understand how they contribute to the clubs' economic sustainability and branding.	Computerized content analysis using Leximancer to identify key themes and concepts.	15 key themes about visitors' experiences were revealed. Providing excellent customer experiences in stadium tours and museum visits is crucial for maximizing stadium use and supporting the clubs' economic sustainability.	Fan, tour, stadium, team, museum, room, staff, game, place, game, ticket, seating, recommend, food, shop, and attraction.	Stadium tourism	400 online reviews of 10 European football clubs on TripAdvisor	Sustainability
20	Costa, Moro, Rita and Alturas (2023)	Customer experience through online reviews from TripAdvisor: The case of Orlando theme parks	To analyze theme park visitors' perceptions and experiences and identify the overall sentiment.	Computerized content analysis focused on sentiment analysis using RapidMiner Studio software.	Key drivers of satisfaction included sentiments like fun, great, lovely, and amazing, while significant service attributes included rides, water, dolphins, experience, and show.	Rides, water, dolphins, experience, and show.	Theme park tourism	800 online reviews of Orlando ThemePark on TripAdvisor.	International Journal of Technology Marketing

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No.	Author	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
21	Tripathi and Wasan (2021)	Positioning of tourist destinations in the digital era: A review of online customer feedback	To identify online content features that drive consumer engagement and to uncover key factors for promoting and positioning India's tourist destinations.	Manual content analysis focused on frequency analysis.	Key factors include pricing fairness, the presence of distractions or irritants, and differing expectations between international and national tourists.	Price, distraction, and expectation.	Heritage tourism	500 online reviews of top 5 attraction in India on TripAdvisor.	Worldwide Hospitality and Tourism Themes
22	Öztüren, Kilic, Olorunsola and Osumeje (2021)	Managing natural tourism attractions based on visitor reviews: A case study of Golden Beach, Karpaz	To uncover the critical factors for enhancing a natural tourism attraction from a visitor's perspective.	Computerized content analysis using Leximancer to identify key themes and concepts.	The most widely highlighted themes related to natural tourism attraction development are environment, infrastructure, location, activities, visitors, and locals.	Environment, infrastructure, location, activity, visitor, and local.	Natural tourism	336 online reviews of Golden Beach, Cyprus on TripAdvisor.	Worldwide Hospitality and Tourism Themes
23	Olorunsola, Saydam, Lasisi and Öztüren (2023b)	Exploring tourists' experiences when visiting Petra archaeological heritage site: Voices from TripAdvisor	To identify key themes in online reviews from tourists who visited the Petra UNESCO heritage site and to determine what factors are satisfiers and dissatisfiers.	Computerized content analysis using Leximancer to identify key themes and concepts.	The satisfied tourists commonly mentioned about architecture, buildings, safety, temples, monasteries, tours, tombs, and helpfulness, while dissatisfied tourists discussed issues related to expense, animals, carriages, locals, and shops.	Entrance, trip, monastery, building, animal, carriage and safe.	Heritage tourism	1,419 online reviews of Petra historic site on TripAdvisor.	Consumer Behavior in Tourism and Hospitality
24	Liu, Liu and Lee (2024)	Attendees' experiences of anime conventions in the United States: A netnography study	To analyze user-generated content from attendees of six anime conventions in the U.S. to understand their experiences	Computerized content analysis was conducted using NVivo 12 to identify key themes and subthemes. Image analysis was performed using Gephi software to identify the top common labels.	Eight main themes emerged, and 32 subthemes including aspects such as ambiance and space, customers, and emotional status. Image analysis supported and complemented the thematic findings, creating network clusters that reflected attendee experiences.	Ambient, space, customer, service, product, sign, symbol, density, emotional, motivation, and behavior	Anime convention	739 online reviews and 1,932 photos of six anime conventions in the U.S. on Yelp and Facebook.	International Journal of Event and Festival Management

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No.	Author	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
25	Wang, Chen and Li (2024)	Research on strategies for improving green product consumption sentiment from the perspective of big data	To analyze consumer sentiment towards green products on JD.com and understand the factors influencing green consumption in the clothing, food, housing, and transportation sectors.	Computerized content analysis was conducted using Python, employing TF-IDF segmentation, word clouds, semantic network analysis, sentiment analysis, and theme word mining	Consumer sentiment towards green products has become increasingly positive. Key attributes include quality, appearance, transportation, price, service, and brand. Increased focus on green features boosts recommendations and loyalty.	Quality, appearance, transportation, price, service, and brand.	Green product	139,075 online reviews of green products on JD.com	Journal of Retailing and Consumer Services
26	Miao, Lin, Wu, Sun, Sun, Wei and Gu (2023)	How Could Consumers? Online Review Help Improve Product Design Strategy?	To explore the use of user-generated content for improving products and decision-making processes, specifically for cordless hairdryers.	Computerized content analysis focusing on topic modeling using Python software and the Latent Dirichlet Allocation (LDA) technique.	Three main topics were identified: User Experience, Product Evaluation, and Product Features, which help in developing a cordless hairdryer design index system.	Experience, evaluation, and feature.	Electronic product	1,405 online reviews of cordless hairdryers on JD.com.	Information
27	Saydam, Olorunsola and Rezapourghadam (2023)	Passengers' service perceptions emerging from user-generated content during the pandemic: The case of leading low-cost carriers	To identify key themes in online reviews of low-cost carrier (LCC) passengers during the COVID-19 outbreak and assess their impact on passenger satisfaction.	Computerized content analysis using Leximancer to identify key themes and concepts.	Eight themes emerged: flights, staff, service, hygiene, cancellations, legroom, COVID-19, and test. Negative reviews were often linked to cancellations, refunds, waiting times, and baggage handling issues.	Flight, staff, service, hygiene, cancellation, legroom, COVID-19, and test.	Low-cost airlines	2 839 online reviews of 20 low-cost carrier on TripAdvisor.	TQM Journal
28	Brochado, Veríssimo and Lupu (2024)	Airport experience assessment based on Skytrax online ratings and importance-performance analysis: A segmentation approach	To identify and analyze dimensions of Importance-Performance Analysis (IPA) maps using online reviews.	Computerized content analysis using the Artificial Neural Network (ANN) algorithm.	Staff and queuing time were identified as the most important attributes. Service quality priorities varied based on traveler type, airport experience category, and region of origin.	Staff, time, food and beverage.	Airport	35,138 online reviews of 298 airports worldwide on Skytrax website.	Journal of Marketing Analytics

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No.	Author	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
29	Rachtham, Abrahams, Gruss, Kim, Davis and Kaewkitipong (2021)	A comparative evaluation of airline service quality using online content analysis: A case study of Korean vs. International Airlines	To analyze online reviews of Korean airlines to identify service issues and improvement opportunities.	Manual content analysis conducted by 187 undergraduate student coders.	Online reviews highlight specific service issues and offer insights for enhancement. Keywords and phrases identified can assist in automating the filtering and analysis of passenger comments across different channels.	Service, flight, baggage, beverage, food, cleanliness, seating, upgrade, and application.	Korean vs International airlines	103,710 online reviews of Korean airlines on Skytrax	Asia pacific Journal of Information Systems
30	Lang, Xia and Liu (2021)	Style and fit customization: A web content mining approach to evaluate online mass customization experiences	To examine consumers' experiences with fashion customization, focusing on the benefits and costs of style and fit customization.	Computerized content analysis using Gephi software, focusing on co-occurrence analysis.	Style customization provided major emotional value, while fit customization offered functional value, ease of use, and emotional value. Costs associated with fit customization included unsatisfactory service, disappointing product performance, and financial risk.	Functional, ease, and emotional.	Fashion product	394 online reviews of the Vans brand and 510 reviews of the Sumissura brand on Twitter.	Journal of Fashion Marketing and Management
31	Dastane, Fandos-Roig and Sánchez-García (2024)	It's free! Still, would I learn? Unearthing perceived value of education apps for better entrepreneurial decisions	To identify key aspects of customer perceived value (CPV) for free mobile educational apps (EduApps) and propose a model to help digital start-ups in the circular economy.	Computerized content analysis using ATLAS.ti 9 software	Identified major CPV dimensions for EduApps include technical value, content value, pedagogical value, gamification, and learning value. Each dimension includes specific subdimensions and items.	Technical, content, pedagogical, gamification, and learning.	Educational application	13,147 online reviews of top free educational apps on Google play store.	Management Decision

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No.	Author	Title	Chief Objective	Methodology	Major Finding	Key Attributes	Specific Context	Source of Data	Journal
32	Sangpikul (2022)	Understanding dissatisfied customers? Expectations of spa service quality	To analyze customer expectations and perceptions of spa service quality, particularly focusing on dissatisfied customers.	Manual content analysis conducted by a single coder	Key issues identified include problems with reliability, empathy, and courtesy. The research highlights the importance of the people element and technology-based services in driving service innovation within the spa industry.	Reliability, empathy, responsiveness, courtesy, communication, tangible, physical assurance, and service.	Spa industry	312 online reviews of spas in Bangkok on TripAdvisor	Academica-Tourism and Innovation Journal
33	Rasool and Pathania (2021)	Reading between the lines: Untwining online user-generated content using sentiment analysis	To explore passenger sentiment and identify critical attributes of airline service quality.	Computerized content analysis focused on sentiment analysis using an API-based tool, namely Gavagai.	Satisfied attributes included the flight, staff, experience, and cabin crew, whereas time and luggage were related to the dissatisfaction of airline passengers.	Flight, staff, experience, cabin crew, time and luggage.	Low-cost airlines	1,777 online reviews of Indigo Airlines of India on TripAdvisor	Journal of Research in Interactive Marketing
34	Sulu, Arasli and Saydam (2021)	Air-travelers' perceptions of service quality during the covid-19 pandemic: Evidence from Tripadvisor sites	To identify the main themes in airline travelers' online reviews during the COVID-19 pandemic and find out which themes associated with passenger satisfaction.	Computerized content analysis using Leximancer to identify key themes and concepts.	Ten themes were revealed. Dissatisfaction among airline passengers during the COVID-19 pandemic is particularly related to cancellation, check-in, refund, and airport.	Flight, service, staff, food, check-in, cancellation, COVID-19, airport, class, and luggage.	Top 10 airlines worldwide	498 online reviews of top 10 airlines on TripAdvisor	Sustainability