Influential factors of loyalty and disloyalty of travellers toward traditional-resorts
Shabankareh, MJ, Nazarian, A., Seyyedamiri, N, Jandaghi, G and Ranjbaran, A

This is an accepted manuscript of an article published by Taylor & Francis in Anatolia (RANA), DOI: 10.1080/13032917.2021.1934882.

The final definitive version is available online:
https://doi.org/10.1080/13032917.2021.1934882

© 2021 Taylor & Francis

The WestminsterResearch online digital archive at the University of Westminster aims to make the research output of the University available to a wider audience. Copyright and Moral Rights remain with the authors and/or copyright owners.
Influential factors of loyalty and disloyalty of travellers toward traditional resorts

With emergence of digital travel platforms, traveler online reviews have become a source of rich information which has a significant role in their perception of the services that influences consumer’s demand for resorts. This study aims to identify and rank influential factors of loyalty and disloyalty of travelers through customer online reviews in traditional resorts using Latent Sentiment Analysis (LSA). Our results indicate factors that creating loyalty and disloyalty toward traditional resorts are different and some of these factors are more significant and different from previous studies in the context of other types of hotels. This study signifies the importance of travellers’ online reviews to the resorts managers and contributes to them to improve loyalty factors and alleviate disloyalty factors.

Keywords: Customer loyalty, Customer disloyalty, Traditional resorts, Online reviews, Text mining
Introduction

Tourism and Hospitality industry is one of those sectors that has been strongly being influenced by social media platform and user generated content (UGC) due to the nature of their work (Cantallops & Salvi, 2014). Online booking platforms such as tripadvisor.com and booking.com are increasingly becoming vital resources for both holiday makers and the hospitality market where customers are enabled to directly compare the prices, offers, read comments, or book accommodations using electronic devices (Xiaowei Xu & Schrier, 2019). Therefore, UGC has become an important resource for travelers to evaluate product or service quality or view usage experiences.

According to reports by Forbes (2019) it is estimated that nearly 90% of buyers before doing any purchase they do intend to read online reviews given by other buyers, and it is also estimate around 84% of them trust those online reviews and make their decision based on those positive/negative reviews (Erskine, 2017; Zhao et al., 2015). Based on previous studies, positive reviews show customers’ satisfaction toward hotels while negative reviews express dissatisfaction which could potentially have them both reputationally and financially damaging effect (Xun Xu & Li, 2016).

Therefore, it is crucial for hotels to pay attention to online reviews given by customers in order to understand what factors motivate travellers to buy or repurchase (revisit) their products or services and to gauge the impact of those comments on other people (Cantallops & Salvi, 2014). As a result, hotel managers should pay considerable attention to online reviews by analyzing them carefully in order to find factors affecting customers’ satisfaction and dissatisfaction which consequently could results in either loyalty or disloyalty of travelers.

On the other hand, the issue of loyalty is the major concern of hotels manager as it is extremely important for hotel industry in this competitive market to keep existing customers and look for acquiring new customers (Tanford et al., 2012). According to (Koo et al., 2020) majority of the hotels have different policies in place such as customer loyalty programs in order to retain their existing customers or attracting new customers. (Zhang et al., 2018) Identified two sources of recommendations influence customers loyalty and consequently their decision on whether to purchase or not. They are 1- Online product recommendation (OPR) – which refers to those recommendations by consumers that are based on their personal experience with the product
(Jabr, 2013) and 2- social shopping communities (SSCs) – which is an online shopping platform which enables consumers to connect with each other and discover, share, compare, recommend, rate, and purchase products (Olbrich & Holsing, 2011).

Moreover, Studies in marketing and tourism have shown that customer satisfaction and loyalty rooted in positive emotional experiences, particularly, in the hospitality sector which help to create and retain loyal customers (del Bosque & San Martín, 2008; Kandampully et al., 2015). In tourism, positive emotions such as excitement, pleasure, joy and happiness (Faullant et al., 2011; Grappi & Montanari, 2011) have significant effects on satisfaction and loyalty.

Hence, Positive reviews could indicate positive emotions and improve customer loyalty while negative reviews could potentially indicate negative emotions and have major influence on customer disloyalty. Therefore, it is possible to identify determinants of loyalty and disloyalty by analyzing the travellers reviews. In fact, by identifying factors affecting loyalty and disloyalty among customers and attempting to improve loyalty factors and eliminating those disloyalty factors, hoteliers could improve their customers’ retention and consequently have positive impact on both long-term financial performance as well as on the relationship between customers and brands (Berezan et al., 2017; Hutchinson et al., 2015).

Traditional resort defines as an accommodation which main aim is to maintains environmental or historical features of the place where the decoration and building reflect the characteristics of the same area and more importantly it is managed by local people (Ruhanen, 2019). These types of hotels have gained considerable popularity among travel makers in the last few years due to increase in attention and demand to visit historical place. Thus, it would worth investigating how online reviews may have an impact on customer loyalty and disloyalty of this type of hotel and also to identify influential factors of loyalty and disloyalty in this type of hotels which is one of the most growing industries with huge potential.

Despite the importance of travellers reviews in hospitality sector, few attempts have been made to identify factors affecting loyalty and disloyalty in independent hotels based on the reviews provided online. Therefore, considering the importance of independent hotels in general and traditional resorts in particular and their contributions to both local and national economy, this
study aims to investigate the factors affecting loyalty and disloyalty in traditional resorts through customer online reviews.

The contributions of this study are three folds. Firstly, the main contribution of this research is that, this is the first study in its kind that to identify the determinants of customer loyalty and disloyalty among traditional resorts. The second contribution is to rank and compare determinant factors of loyalty and disloyalty in this type of resorts. And finally, this study shows the importance of customer online reviews in the context of traditional resorts and its impact on customer’s retention. Moreover, this study contributes to the existing literature by showing the importance of loyalty and disloyalty of customers in hotel industry especially in traditional resorts.

This study adopts Latent Semantic Analysis (LSA), a text mining technique, to explore the factors of customer loyalty and disloyalty toward traditional hotels. LSA provides a more objective technique for analysis of the contexts and have a better insight into the reviews due to its mathematical characteristics (Xun Xu & Li, 2016). The rest of paper is 5 parts, including literature review, methodology and results, conclusion and implications.

**Literature review**

Our study is considering the two-factor theory (Herzberg, 1964), which states that satisfaction sources is rooted in the motivator factors that lead to a positive perception when they exist but they don’t necessarily result in dissatisfaction when they don’t exist. According to Xu study (Xun Xu & Li, 2016) customer satisfaction and dissatisfaction can coexist, but having said that, the determinants of these two components are different. On the other hand, it could be argued that what mentioned above can also be applied and generalized to loyalty and disloyalty motivator factors which it can be deduced and hypothesized that customer loyalty and disloyalty could coexist but antecedents of these two constructs are different.

**Customer loyalty toward resorts**

Oliver (Oliver, 2010) defined customer loyalty as ‘deeply held commitment to repurchase or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts
that have the potential to cause switching behavior’ (P. 392). Loyal customers suggest services and products of hotels to others using WOM or write their positive reviews in social media as eWOM. Customer loyalty has an important role in improving hotels demand which leads to financial benefit (J. J. Lee et al., 2014).

Based on previous studies satisfied customers are more likely transform into loyal customers. (Hallowell, 1996; Rasoolimanesh et al., 2020). On the other hand, intention to revisit and recommendations to others are the most commonly used measures of traveler’s loyalty (Horng et al., 2012; Rasoolimanesh et al., 2020). Many studies have shown some potential main factors that could directly or indirectly affect satisfaction and as a result influence directly customer revisit intentions (Rasoolimanesh et al., 2020) are: housekeeping, hotel image, price, food and beverage, location, transaction, safety, employee attitude, reception, room facilities and service quality (Gu & Ryan, 2008; Kandampully & Suhartanto, 2000).

Moreover, previous studies that adopted text mining and used traveler’s online reviews have discovered influential factors of satisfaction, intention to revisit and recommendations to others (loyalty) are included some main factors such as good location and view, friendly staff, nice and clean room, good restaurant, sleeping quality, sports facility, furnishing, being close to beach and hotel’s architecture (Berezina et al., 2016; Xun Xu & Li, 2016). These studies firstly expressed that there is a general agreement that travelers’ opinions are tied to customers’ emotions and secondly the reviews provided by customers have potential for extracting essential information as well as providing opportunity to evaluate factors that would lead to satisfaction and future behaviors (loyalty or recommendations to others). Additionally, there are other factors that could also influence customer satisfaction and loyalty toward resorts including corporate social responsibility, sustainable development, water conservation and waste reduction management, customer trust and brand attachment (Han et al., 2018; S. Lee & Heo, 2009; M.-W. Li et al., 2020; Rasoolimanesh et al., 2020).

**Customer disloyalty (no loyalty) toward resorts**

There are limited studies that have considered customer disloyalty as distinct variable from customer loyalty or customer dissatisfaction as distinct from customer satisfaction (Jalonen & Jussila, 2016; Xun Xu & Li, 2016). When customers feel an organization is not able to fulfill
their expectations, consequently they become dissatisfied and transform into disloyal customers and possibly share their negative reviews with other users (Jalonen & Jussila, 2016; Xun Xu & Li, 2016). Several studies have identified, negative eWOM has a significant power to affect brand loyalty and customer purchase intention (Jalonen & Jussila, 2016).

Rowley divided disloyal customers into four categories including firstly disengaged loyal, disturbed loyal, disenchanted loyal and finally disruptive loyal are those who have strong negative attitude toward a brand. According to Rowley, the last group are potentially very harmful and dangerous for the brand as they would spread their negative point of view through WOM and eWOM (Rowley & Dawes, 2000).

Therefore, following what has mentioned above and their impact both financially and non-financially (Bad reputation), it is vital for resorts managers to identify factors that could be leading to disloyalty and dissatisfaction of customers which sometimes are different from those that lead to satisfaction and loyalty (Gu & Ryan, 2008; Jalonen & Jussila, 2016; Xun Xu & Li, 2016). Based on Sanchez & Curras study (Sánchez-García & Currás-Pérez, 2011) providing low quality service or in extreme case failure in services could trigger an anger and regret in customer which could potentially lead to churn and disloyalty of customer toward in the hotel which consequently could result in spreading complaints and negative WOM and eWOM. Moreover, based on studies by Berezina et al., and Xu (Berezina et al., 2016; Xun Xu & Li, 2016) which analyzed travelers negative reviews on hotels factors, they discovered the factors that leading to dissatisfaction, not recommend to others and disloyalty are: place of business, room, noise, Wi-Fi, furnishing, air-condition, member, finance, architecture and sports. Therefore, identifying factors which lead to disloyalty is first step in order to retaining customers and stimulate them to return to resort (Xun Xu & Li, 2016).

Electronic Word of Mouth (eWOM) toward resorts

Tourism and Hospitality industry is a pioneer in using online platforms and eWOM and the importance of eWOM in this industry has been extensively overstated by both researchers and practitioners (Cantallops & Salvi, 2014; Zhou et al., 2020; Zsarnoczky, 2018). Tourism platforms that provides eWOM such as TripAdvisor facilitate sharing knowledge, experiments, emotions toward resorts and tourism destinations (Zhou et al., 2020). Previous researches have
revealed that satisfied customers show positive emotions and spread positive detailed eWOM in online platforms about their experience at a particular hotel which show their gratitude and possibly lead to loyalty (Han et al., 2018) and vice versa (Verhagen et al., 2013).

**Methodology**

**Data collection**

For the purpose of this study data were collected using TripAdvisor platform which is one of the largest online tourism and hospitality platforms (Alaimo et al., 2020). To collect the reviews from this website we programmed a web scraper using Visual studio which enabled us to extract reviews of users (see the Appendix).

According to a report from Iran Cultural Heritage, Handcrafts and Tourism Organization (ICHHTO) more than 1500 traditional resorts are active in Iranian hospitality sector (Mazaheri, 2019) which make Iran as a good context for our investigation. We took the list of traditional resorts from Hotel Owners Society, which is an association that govern and make regulations for hotel industry in Iran. Then, we separated the ones that have more than 20 rooms which comes to 198 traditional hotels in total and collected 6361 reviews from their pages on TripAdvisor. These resorts are spread out in the total of 35 historical cities in Iran. There are large of number of tangible (e.g., historical sites) and intangible (e.g., culture values) heritage in Iran which could motivate tourists to visit the country. Therefore, as a result of high demand for the traditional resorts, from both domestically and internationally there have been many traditional houses being reconstructed and converted to traditional hotels (Rasoolimanesh et al., 2020).

**Method**

For this paper we have employed Latent Sentiment Analysis (LSA) which is a text mining technique that was developed 1980s at bell laboratories by Landauer (Landauer & Dumais, 1997). This method is based on mathematical and statistical analysis technique which enables us to extract the contextual-usage meaning of words and obtain approximate estimates of meaning similarities among words the textual data which makes it to be superior to other text mining techniques (Hossain et al., 2011).
We have followed the three steps of LSA based on prior studies proposed by Xu and Li (Y. Li & Joshi, 2012; Xun Xu & Li, 2016). As mentioned before our data includes 6361 reviews from, Positive and negative reviews were integrated into two spreadsheets separately. Then these data were uploaded to RapidMiner Studio that is a leading text mining tools and in the following we implemented these three steps.

Pre-Processing and Term Reduction: In the first step spreadsheets were converted into a document object in RapidMiner 8.0 and then assigned a special document ID before they were analyzed. Then this document went through a series of pre-processing operations. 1) All the letters in these documents were converted into lower case. 2) After this, these documents were tokenized with non-letter separators. 3) We discarded stop words that are common in a language. 4) Following the tokenization, we eliminated all the tokens that are less than two letters. 5) After the discarding stop words and tokens, we also removed the words or tokens that appear only in one document because they did not indicate any particular theme. 6) Creating a single representation of the word regardless of its tense.

We utilized term stemming techniques to the documents in order to turns words into a base form. For example, “collaborate,” “collaborating,” “collaboration,” and “collaborative” will be regarded as a single token, the “collabor”. The reasons why stemming was chosen for this study are two folds: Firstly, this method has extensively been used and advised by other researchers in previous studies (Y. Li & Joshi, 2012; Xun Xu & Li, 2016) 7) Finally, by using n-grams algorithm we identified repeated phrases (e.g., prefect location, nice garden) in the documents. Eventually, these term reduction procedures resulted in a word list that included more than 1500 tokens in the positive reviews and more than 2100 tokens in the negative reviews.

Term Frequency Matrix Transformation: After “pre-Processing and term Reduction” step, the documents were converted into the term frequency by the document matrix which is a mathematical matrix that describes the frequency of terms that occur in a collection of documents. By using term frequency–inverse document frequency (TF-IDF) we have transformed the values in the matrix. This approach puts more weight on rare terms and discounts the weight of common terms so that the uniqueness, rather than the commonality, of each document emerges in the results.
**Singular Value Decomposition (SVD):** After the second step, we have applied SVD to convert the TF-IDF weighted term matrix into the production of three matrices: the term-by-factor matrix, singular value matrix (square roots of eigenvalues), and the document-by-factor matrix (Xun Xu & Li, 2016). The term-by-factor matrix showed the term loadings on a particular latent factor. The document by factor matrix presented the document loadings to a particular latent factor. The singular values (square roots of eigenvalues) represented the importance of a particular factor (Y. Li & Joshi, 2012).

**Factor interpretation**

The interpretation of LSA results is similar to the interpretation of factor analysis in a way that both are exploring the latent factors (Evangelopoulos, 2011). In this study, we have followed Xu (Xun Xu & Li, 2016) suggestions by associating each factor to its high-loading terms and documents to assist in factor interpretation. For each solution, we have created a table containing all high-loading terms and documents sorted by absolute loadings. Then, the factors were labeled by examining the terms and documents related to a particular factor, interpreting the underlying area, and determining an appropriate label. Thus, all these terms and documents were interpreted and the factors were labeled with practical meaning according to their corresponding high-loading terms (Y. Li & Joshi, 2012; Xun Xu & Li, 2016). For the purpose of this study, we have followed previous studies guidelines and recommendations on these five factors as the main points for investigation (Berezina et al., 2016; Xun Xu & Li, 2016).

**Results**

**Factors leading to customer loyalty and disloyalty toward traditional resorts**

We have used a LSA based on positive and negative reviews of customers toward customer loyalty and disloyalty in traditional resorts in order to discover the influential factors that determine customer loyalty (positive reviews) or customer disloyalty (negative reviews). Tables 1-2 exhibit the top factors identified in the LSA, each of which indicates an aspect of positive or negative reviews. In each table, each factor’s importance is shown by the SVD. According to analysis shows in table 1 and 2 each factor contains 400–2500 terms, we have selected the top 10 terms as the “high-loading terms” for demonstration targets. The LSA results indicate that these
top factors cover over 95% of all the unique terms and reviews, which means that these factors represent all aspects of customers loyalty (positive reviews) or customer disloyalty (negative reviews) toward traditional resorts.

**Summary of customer loyalty factors toward traditional resorts**

The determinants of customer loyalty toward traditional resorts are staff, traditional architecture, rooms, location, traditional food and courtyard which some were among those factors that been proposed in the previous studies (e.g., (Hanna, 2020; Wangchan & Worapishet, 2019; Wilkins et al., 2009; Xun Xu & Li, 2016) and some other including architecture, tradition food and courtyard were new. According to the results from positive reviews, SVD of five factors are: Staff: 7.313; Traditional architecture and design: 6.754; Rooms: 6.273; Location: 5.062; Traditional food and Environment: 4.683. Additionally, the significance ranking of each customer loyalty factor toward traditional resorts was different. The customer loyalty factors for traditional resorts are summarized in Table 1.

“Insert 1 Table here”

**Summary of customer disloyalty factors toward traditional resorts**

The determinants of customer disloyalty toward traditional resorts are: bathroom, internet, bed, room facilities and breakfast all of which were among the previous studies (e.g., (Hanna, 2020; Wangchan & Worapishet, 2019; Wilkins et al., 2009; Xun Xu & Li, 2016). Additionally, the significance ranking of each customer disloyalty factor toward traditional resorts was different. According to the results from negative reviews, SVD of five factors are: Bathroom: 3.365; Wifi: 3.284; Bed: 2.179; Room services: 2.078; Breakfast: 2.068. The customer disloyalty factors for traditional resorts are summarized in Table 2.

“Insert 2 Table here”

**Findings**

In this section the results of this study have been explained and justified. For the purpose of this study we have elaborated our findings based on the discovered factors of loyalty and disloyalty
in traditional resorts, in addition, we have identified and categorized them more precisely according to their high-loading terms.

**Main determinants of customer loyalty toward traditional resorts**

Table 1 indicates that staff, traditional architecture, rooms, location, traditional food and courtyard are the most important factors of loyalty toward traditional resorts which most of them are related to services provided by these hotels.

According to the results, staff behavior and performance was the most influential factor of customer loyalty in traditional resorts which is related to resort services. Moreover, employees affect resort revenue directly, as they are in front line of dealing with customers and as a result they are the most influential factor on customer loyalty or disloyalty and consequently on success or failure of the hotel in terms of increases repurchase or return intentions. Having qualified staff as well as having an effective management of employees’ performance such as being respectful, caring, good behavior, and being responsive hotels can improve customers’ loyalty and satisfaction (Shilpa, 2016; Xun Xu & Li, 2016).

Traditional resorts managers should make sure to get the best out of their employees as well as to make sure jobs that are allocated to them are achieved appropriately. Therefore, traditional resort managers should pay especial attention to internal marketing tactics which are tools for hospitality such as create a happy work environment, training, support employees, give rewards, share results and hold them responsible (Hales & Mecrate-Butcher, 1994; Varun & Indu, 2015). Moreover, our results are aligned with previous studies, including (Berezina et al., 2016) which they argue that this factor should be considered as an intangible aspect of service quality, that has indicated satisfied and loyal travellers recommend a hotel to others generally based on intangible aspects of their hotel stay, such as staff members behavior, more than those customers who are not quite satisfied.

Traditional architecture is the second-most influential factor of customer loyalty which was mentioned before in previous studies. Architecture can be considered as one of the physical evidences which affect customer’s satisfaction and loyalty (Berezina et al., 2016; Wangchan & Worapishet, 2019). Physical environment (interior and exterior design) such as accessibility and
visibility is one the most important factors which affect customer satisfaction which leads to customer loyalty (Berezina et al., 2016; Said et al., 2016; Xun Xu & Li, 2016).

The third influential factor of customer loyalty is room quality. There is no doubt that room is core of hotel services because guests spend most of the time in room. Based on Xu (Xun Xu & Li, 2016) the room quality itself is the core of hotel services and always been an influential factor of satisfaction. Wide and spacious, clean, comfortable, cozy, quiet and beautiful are the key attributes of rooms which can improve customer satisfaction and loyalty (Maroco & Maroco, 2013; Xun Xu & Li, 2016).

Location and accessibility is the fourth determinant of customer loyalty toward traditional resorts. Location of hotels has always been a major factor of customer choice which clearly has an impact on either increase or decrease of the demand for a specific hotel (Lockyer, 2005). Accessibility to tourism attraction, transportation, surrounding environment, characteristics of the property site (Aksoy & Ozbuk, 2017), traffic and safety (D. Lee et al., 2015) are main components of location which affect customer choices and eventually satisfaction and loyalty toward the hotel. Moreover, having rooms with overlook to interesting sights such as parks or mountains as well providing other services like free shuttle bus could potentially help a hotel to improve customer satisfaction and loyalty (Torres et al., 2014). Therefore, resort managers should pay more attention to these components of location if they wish to achieve high satisfaction and loyalty which lead to more demand.

Traditional food and courtyard are the fifth-most influential determinant of customer loyalty. Many studies have confirmed that there is a strong relationship between food quality with both customer satisfaction and customer loyalty e.g., (Al-Tit, 2015; Anselmsson & Johansson, 2014). As our data was from traditional resorts, customers were show an extreme interest in traditional and local foods which was not surprising. Resorts managers should pay a careful attention to their quality of food provided such as being fresh, delicious, and nutritious, as well as menu items and smell of food are also considered as influential factors that would help to reach high levels of customer loyalty. Moreover, courtyard of resorts is another factor which customers mentioned in their reviews. Hotel managers can design internal decoration of courtyard with traditional and local items depending on the climate of the place to give a more memorable and sweeter experience to customers.
Main determinants of customer disloyalty toward traditional resorts

Table 2 indicates factors that are important from customer point of view that could potentially lead to customer dissatisfaction and disloyalty such factors are bathroom, internet, bed, room facilities and breakfast. All these factors mentioned are not surprisingly related to the services provided by the resort and as can be seen are different from loyalty determinants. Generally, dirty bath, slow internet, weak signal, sharing bath, lack of showers, breakfast options, bed size, uncomfortable bed, old furniture, weak room services, waiting time for meal lead to customer dissatisfaction and disloyalty. One of the main factors of disloyalty is old furniture. By upgrading furniture of rooms managers can satisfy customers. They can use coffee makers, tea pots, plates, candle holders and traditional decoration in order to enhance the loyalty. Another factor is bathroom status which customers complained about dirtiness, water issues and lack of showers.

Thus, availability requirements of these places and traditional design of bathrooms could increase the loyalty of customers. Furthermore, weak signal and slow internet is a major determinant of customer disloyalty. Lack of quality of bed, bed size is another most influential disloyalty factor. These issues are related to facility and services and have rather consistency with (Xun Xu & Li, 2016) findings. While, presence of these factors is vital but are not enough to create a high level of satisfaction and loyalty. Therefore, resort managers should pay special attention to operational performance such as food quality and facilities in order to make more loyal customers which lead to more demand and revenue.

Conclusion and implications

Customer’s online review is a special kind of eWOM which have become one of the most important information sources affecting customers choices, decisions and purchase intention (Phillips et al., 2017). Hospitality industry is a pioneer in using social media and always been exposed to online reviews from customers (Cantallops & Salvi, 2014). Based on (Xun Xu & Li, 2016) positive reviews show customer satisfaction and negative reviews show customer dissatisfaction toward hotels which obviously affect other customers decision and enables hoteliers to discover loyalty and disloyalty factors.

This study contributes to existing literature on customer loyalty and disloyalty in the traditional resorts by using text mining. Furthermore, in this study we discovered and ranked influential
determinants of loyalty and disloyalty in the context of traditional resorts using online customer reviews of their hotel experiences. Moreover, this is the first study which was seeking to identify, rank and compare both the type and importance ranking of the determinants of customer loyalty and disloyalty among traditional hotels. Finally, this study highlights the role of customer reviews in hospitality industry and shows how hoteliers can use and find beneficial information from these reviews by text mining in order to improve their performance and services.

In addition, the data used in this study is based on customer’s reviews which have more advantages than customer rating methods such as surveys. Reviews give more detailed information about customer’s perception of products or services which could provide researcher and managers a better insight into source of influential factors of satisfaction, loyalty, dissatisfaction and disloyalty.

The main purpose of this study was to explore influential factors affecting loyalty and disloyalty of customers in traditional resorts using text mining. Our results highlighted various determinants of customer loyalty and disloyalty. Firstly, our findings indicate that factors that have major influence on loyalty in traditional resorts are Staff, Traditional architecture and design, Rooms, Location, Traditional food and Environment. On the other hand, the influential factors of disloyalty in traditional resorts in order of importance are Bathroom, Internet (Wifi), Bed, Breakfast, Room (services and facilities). Interestingly, our findings indicate that influential factors creating loyalty and disloyalty toward traditional resorts are entirely different from each other which are aligned with hypothesizes proposed for this study that also have been developed based on two factor theory by (Herzberg, 1964).

Future studies could develop this study in the following suggestions. First, our textual data was in English language. Future studies can collect and analyze the data in other languages such as: Persian. Our study determined influential factors of loyalty and disloyalty toward traditional resorts and therefore, future studies can explore whether demographic information like gender, age or travel purpose can influence customer’s loyalty and disloyalty toward resorts. In this study we used Latent Sentiment Analysis (LSA) which is a method of text mining. Future studies can analyze the data by using other methods of text mining like Latent Dirichlet Allocation (LDA) and compare the results with this study. The data of this study is collected from customer’s reviews on the pages of the traditional hotel in Iran on TripAdvisor. Future studies could collect
other types of resorts like chain hotels and after analyzing compare the results with this study. For example which factors are common in the resorts? Which type of hotels is most influenced by positive eWOM and which type of hotel is most influenced by negative eWOM? Furthermore, considering our findings it is important for future studies that consider individuals perception on making decision which require further investigation.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Mohammadjavad Shabankareh studied international marketing in university of Tehran. He is interested in data science, consumer behavior, hospitality, branding, digital marketing and IOT. He is also interested text mining, artificial intelligence. He is currently working in ‘mitramed’ which is a medical tourism company in Iran and is active in stock market.

Alireza Nazarian is a Senior Lecturer in International and Cross Cultural Management at University of Westminster. His research interests include organizational theory, leadership, national and organizational culture, organizational performance and organizational effectiveness. He has published in a number of journals including international journal of hospitality management, international journal of contemporary hospitality management and journal of business research.

Nader Seyyedamiri is Faculty Member in University of Tehran, Faculty of Entrepreneurship. He has Ph.D. of Marketing from University of Tehran and works as a Guest Researcher in Aalborg University of Denmark, Campus of Copenhagen. Nader's research area is Entrepreneurial and Digital Marketing in Tourism and Small and Medium E-Businesses.

Gholamreza Jandaghi currently works at the Faculty of Management and Accountancy, University of Tehran as Full Professor. He obtained his Ph.D. in Biostatistics from University of Toronto, Canada. His area of expertise includes Statistics, Biostatistics, Quantitative Methods, Research Methodology, Statistical Analysis, and Management Sciences.

Alireza Ranjbaran studied marketing in university of Tehran. He is interested in tourism, hospitality, branding, data science and digital marketing. He is also interested in SEM and
statistics analytics. He is working as a marketing manager in bistatech which is a company working in ICT sector.

References:


Li, Y., & Joshi, K. (2012). The state of social computing research: A literature review and synthesis using the latent semantic analysis approach.


Table 1. Determinants of customer loyalty

<table>
<thead>
<tr>
<th>Factors</th>
<th>Interpretations (Labels)</th>
<th>SVD</th>
<th>High-Loading Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Staff</td>
<td>7.313</td>
<td>staff, friendly, kind_staff, staff_assist, behavior_personnel, warmli_welcom_staff, help, personnel_nice, work_help, recept_effici</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Traditional architecture and design</td>
<td>6.754</td>
<td>architectur, histor_architecture, tradit_architectur, old_restruct_hotel, warm_decor, color_glas_window, design_exterior_interior, tradition_door, tradit_hous, hotel_design</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Rooms</td>
<td>6.273</td>
<td>room, clean_room, room_warm, room_cozi, wid_bedroom, room_comfort, room_spaciou, spaciou_clean, room_big, room_lov</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Location</td>
<td>5.062</td>
<td>locat_perfec, locat_quiet, ideal_take_walk, locat_sight_see, good_locat_old, locat_charm_tradit, access_main_attract, view_town, easi_find, locat_great</td>
</tr>
<tr>
<td>Factor 5</td>
<td>• Traditional food</td>
<td>4.683</td>
<td>nice_garden, view_countyard, iran_food, garden_quinti_excel, food_special_dinner_tasti, delici_tradit_iran, tradit_environ, courtyard_lov, courtyard_nice, iran_food_special, middl_garden, beauti_courtyard, tradit_food</td>
</tr>
<tr>
<td></td>
<td>• Environment (courtyard and garden)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Determinants of customer disloyalty

<table>
<thead>
<tr>
<th>Factors</th>
<th>Interpretations (Labels)</th>
<th>SVD</th>
<th>High-Loading Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>Bathroom</td>
<td>3.36</td>
<td>bathroom, bathroom_share, dirti_water, dirti, dirti_floor, shower_end,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>bathroom_usual, disappoint_bathroom, water_leav, lack_shower, bathroom_basic</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Internet (Wifi)</td>
<td>3.28</td>
<td>Signal_weak, slow, internet_faulti, wifi_slow, slow_even, decent_signal, wifi_connect, connect, disappoint_wifi, signal</td>
</tr>
<tr>
<td>Factor 3</td>
<td>Bed</td>
<td>2.17</td>
<td>Bed, bed_mattress, old, size_bed, squeez, bed_cushion, uncomfort, low_qualiti, uncomfort_bed, pillow</td>
</tr>
<tr>
<td>Factor 4</td>
<td>Room (services and facilities)</td>
<td>2.07</td>
<td>weak_servic, old, servic_laundri, furnitur, furnitur_simpl, slow_service, late, services, lack_servic, room_temperature</td>
</tr>
<tr>
<td>Factor 5</td>
<td>Breakfast</td>
<td>2.06</td>
<td>breakfast, wait_time, option_breakfast, simpl, decent_option, drink, menu, food, buffet, quality</td>
</tr>
</tbody>
</table>
private void fetchFromPage(string inputUrl)
{
    // For comment
    string startStr_comment = "location-review-review-list-parts-ExpandableReview__reviewText-
    gOmRC";
    string endStr_comment = "</span><q></div><div class="\_36B4Vw6t">
    
    // For rating
    string startStr_rating = "data-test-target="review-rating"">\span class="ui_bubble_rating bubble_";
    string endStr_rating = ""></span></div></div class="location-review-review-list-parts-
    ReviewTitle__reviewTitle-2GO9Z";

    byte[] raw = wc.DownloadData(inputUrl);
    string webData = System.Text.Encoding.UTF8.GetString(raw);

    // Comments
    var lines = webData.Split(new string[] { endStr_comment }, StringSplitOptions.None);
    int counter = lines.Length;
    for (int i = 0; i < counter - 1; i++)
    {
        try
        {
            int startIndex = lines[i].IndexOf(startStr_comment) + startStr_comment.Length;
            int endIndex = lines[i].IndexOf(endStr_comment);
            string currentComment = lines[i].Substring(startIndex, endIndex - startIndex);
            Comments.Add(currentComment.Replace("\"", ""));
        }
        catch (Exception ex)
        {
            Comments.Add("ERROR.");
        }
    }

    // Ratings
    lines = webData.Split(new string[] { endStr_rating }, StringSplitOptions.None);
    counter = lines.Length;
    for (int i = 0; i < counter - 1; i++)
    {
        try
        {
            int startIndex = lines[i].IndexOf(startStr_rating) + startStr_rating.Length;
            int endIndex = lines[i].IndexOf(endStr_rating);
            string currentRating = lines[i].Substring(startIndex, endIndex - startIndex);
            Ratings.Add(currentRating);
        }
        catch (Exception ex)
        {
            Ratings.Add("ERROR.");
        }
    }
}