"ALBERGO DIFFUSO" AND CUSTOMER SATISFACTION: A QUALITY SERVICES ANALYSIS

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Abstract

The continuous development of the Italian tourism sector and the deep knowledge of tourists lead entrepreneurs to extend the supply of tourism services and increase their quality. Planning in advance marketing actions become essential for satisfying customers desire trough the launch of new products 'market oriented' achieving customer satisfactions. In order to accomplish these new market needs a new form of sustainable hospitality called "Albergo Diffuso1" (AD) was development in the market. AD satisfy the tourists' require of stays in renowned and famous areas and towns, of contact with residents and local people rather than only with other tourists, and of the traditional comforts offered in hotels, such as room service or a restaurant. This fact represents a real throwback compare to the globalization logics. In addition, the AD demand is increasing in today's competitive landscape. The main aim of this research is to identify the level of customers satisfaction related to the quality of the services promoted by AD. Special attention is paid on the services mostly required by customers, which can represent key drivers in rising the quality of AD. A qualitative cases study approach based on an mining analysis of the customer reviews gathered on web site from 2012 to 2013 is developed in this research in order to detect which services could improve the quality of Ads and group of customers with homogeneous satisfaction purchase opinions.

1. Introduction

In the current negative economic trends, the tourism sector highlights their potential useful to boost the country 's economy. The tourism sector, in fact, is able to enhancing the territorial specificities, innovating the receptivity-hospitality concept.

¹ Albergo Diffuso is an integrated multi building accommodation, made in Italy concept.

The demand for tourism services has rapidly evolved in the recent years, altering the tourism industry. A new generation of tourists has emerged, characterized by greater experience, culture, critical skills. The classic forms of "Mass tourism" and of "Luxury travel" are now evolving towards new forms of responsible tourism oriented to the original values and to the custom experience [Fabris, 2010, Canestrini 2004]. New tourists are wary of anything that is artifact or ordinary; they seek authenticity [Kidd, 2011; Peterson, 2005; Rickly-Boyd, 2012] and they perceive the holidays as an opportunity to learn and increase their knowledge in the culture of the places, in order to be considered not simply as tourists, but as temporary residents [Dall'Ara and Esposito, 2005]. In addition, the tourist, today, shows an increasing sensitivity and great interest in the environment and the territory, which become the drivers that influence the choices [Niccolini, 2004].

The rapid evolution of demand pushes the tourism sector to innovate to meet the demands of the most demanding customers, generating innovative and highest quality services [Orlandini *et all*, 2012], sustainability-oriented [Costa, 2001].

In addition to the traditional accommodations, arise new forms of hospitality careful about appreciation of the territory and the enhancement of typicality. This is the philosophy of innovative business called Albergo Diffuso, ie a structure that offers its guests rooms and/or apartments not located in the same building, as in the classic hotels, but in different buildings within a hamlet. This way, tourists (temporary residents) can fully immerse themselves in the culture of the territory they are visiting.

The Albergo Diffuso (AD) is an original model of hospitality characterized by being deeply tied to the land and local culture at a such extent that the element s of the local culture and of the territory become a part of the offered services. The AD is presented as a model of sustainable development, aiming at the exploitation of tangible local resources (such as the cultural heritage, agriculture, hand crafts, and small businesses) and intangible local resources like traditions, history, and social network [Dall'Ara, 2005].

2. Albergo Diffuso origin and characteristics

The concept of Albergo Diffuso came from Italy; as well as the early experiences and the legislative system. The first idea of a AD originated in the late 70s. There was a need to restructure and redevelop for residential purposes the villages become uninhabited as a consequence of an earthquake happened in Carnia in 1976. The term, Albergo Diffuso, appears for the first time in 1982, within a project planned by Leonardo Zanier, "Comeglians Pilot Project." In the 80s, after the term "Albergo Diffuso" came out, it was followed by other attempts of conversion of buildings, such as in Friuli (Sauri in 1982) and in other parts of the country; in Emilia Romagna, in Cal d'Enza around 1984, and in the small town of Vitulano, in the province of Benevento in 1987.

In these first attempts to create "Albergo Diffuso," the main objective was to use empty buildings and abandoned homes, to animate city centres, and to enhance tourist sites with the marketing logic of an oriented product related to the spirit of the place. Despite these early attempts, the AD was still no different than traditional hotels. Only in 1989 there was a big step forward in defining AD.

A feasibility plan connected to the "Tourism Project," in St Leo, which introduced for the first time the concept of a horizontal hotel. Designed as a facility unit that caters to people interested in staying an urban context of value, in contact with the residents, and having the luxury of normal hotel services. The concept was developed in Montefeltro and completed in Sardinia; it was called: The Tourism Development Plan of the Mountain Community Marghine Planargia (Nuoro, 1995). This model was decisive enough to become the reference for Albergo Diffuso model. This form of

innovative tourism was interpreted as a developments system for apartments and houses instead of a unified management of hotel services deeply rooted in local tradition.

Today, AD is a model of hospitality, characterized by an unitary management, which offers hospitality to its "temporary residents" in several separated buildings, located in a small village or hamlet. This is a horizontal hotel, i.e. an integrated system of touristic offer linked to the local community that addresses the new generation of tourists eager to immerse themselves in the culture, share and participate in local traditions, tastes, trades, and other events [Colbert, 1994]. The model is based on the following requirements:

- Unitary Management;
- Private hotel accommodation professionally managed;
- Housing units located in several buildings close together near a town centre, or in a small village; adding to the cultural perspective of the community;
- Presence of local crafts/services near the guests;
- Presence of a living community;
- Style and integrated professional management in the territory;
- Distance between living units and common areas are contained within 200 meters;
- Presence of an authentic environment;
- Recognition of services of offered.
- Integrated management; having the style of the territory and culture [Dall'Ara 2010].

The innovation lies in the involvement of different subjects which, under a single coordinated management, develop a form of hospitality intended to valorize the potentialities of the area in question, such as culture, history, traditions, food products, and the scenic beauty, which must be considered and implemented with little impact to the environment. Despite having different owners, the unified management must also promote an integrated service. The distinctive features and differences between a traditional hotel and a Albergo Diffuso are obvious.

The role of the hotelier in the Albergo Diffuso clearly overlap with his role in the traditional structures, as he is required to provide the same services to his guests, even though operating in accommodation units located in several buildings, but what is changing is the style of the management and the importance attributed to the qualifying performance. In fact, in the Albergo Diffuso instrumental benefits are not incidental to the main service, but become essential and distinctive elements of the reception system.

The common areas must be located in a central position relative to the structure of the village and the rooms. This way it is accessible to all. The inner lobby, a gathering area dedicated to reception and other technical aspects, should be aimed at informing customers about activities in the territory. There must be furnishings of local art and traditions near the site. Instead the outer lobby is represented by the local urban center. The urban center must be distinguished not only as a strong vocation, but also a lively welcoming community; promoting local events related to traditions, quality local products, the environment, and easily and accessible transport services. Ultimately, AD allow customers to feel part of the community.

The first experiments confirm the advantages to this Albergo Diffuso model. First of all to be a model of sustainable development that can revitalize deprived areas and to redevelop the area; it has the ability to be an innovative business model, consistent with the environment and cultural interest. The AD is a tool for developing tourism that is sustainable. It has the careful touch for preserving artistic heritages using tangible and intangible resources in the area [Vignali, 2011].

3. Quality and sustainability in tourism services

The tourist, more demanding, requires a service characterized by a high level of quality [Orlandini et all, 2012] and an efficient and sustainable use of resources [Berardi, 2007]. The tourist is looking for a new type of accommodation that respects the principles of environmentally sustainable development within which having authentic experiences.

Sustainability and tourism are two concepts that need to be interconnected in order to obtain an efficient territorial organization, covering the needs of tourists, of the existing community, of professionals, individuals in general, in a generations approach [Vallone *et all*, 2013].

Talk about sustainability in tourism sector means to assume that tourism makes intensive use of the area, which modifies its authenticity. It also means redevelop the tourism sector according to management and development approach that can give new competition to the domestic market. In tourism field sustainability requires a triple bottom approach, i.e. based on several dimensions:

- 1. economics dimension,
- 2. social dimension;
- **3.** environmental dimension.

The sustainable approach allows us to contain the negative impacts while maximizing the positive ones, as shown in Table 1.

Table n. 1.: touristic sector impacts on sustainability dimensions

	NEGATIVE IMPACT	POSITIVE IMPACT		
- Destabilization of the local economy - Inflationary effects - crowding out - leakages and/or spillovers		 Increase in local activity and employment Strengthening infrastructure Economic incentive to preserve natura resources, artistic and cultural Stimulate the cultural and economic exchange with the outside 		
Social Dimension	 Commodification, loss of authenticity of the rituals and traditions Deterioration of the artistic and cultural heritage Conflicts between tourists and residents, because of the difficulty of access to services, due to the concentration of tourism 	 The recovery of the local traditions, thanks to sustainable tourism Conservation actions of the local heritage as a resource for tourism development; Improvement of public services and infrastructure Greater openness 		
Environmental dimension	 Risk of compromise biodiversity Increased pollution Environmental degradation Excessive use of limited resources 	 Preservation of historical and natural sites Improving environmental quality Awareness of the importance of natural resources of the territory. 		

Fonte.: nostra elaborazione

1. Economics dimension

The Sustainable development of a place means the adoption the "balance of interests" approach that aims to combine the creation of economic value, the protection and enhancement of the natural, cultural and social heritage [Sapienza, 2004]. A non-sustainability-oriented tourism may cause the following negative impacts:

- a. the destabilization of the local economy due to the seasonality of tourist flows;
- b. inflationary effects, caused by the presence of tourists which altering the economic indicators, with negative implications on the resident population;
- c. the tendency to "monoculture" based on tourism, i.e., when the touristic development generates the end of other industrial activities, so called effect of "crowding out". Specialization Tourism generates a distortion in the local economy, and removes resources to other economic activities, with the risk associated with dependence on a single economic activity, which is very unstable and variable.
- d. The prevalence of leakages on positive spillovers, that limit the fulfilment of a independent system of inside touristic relationship. The leakages origin from the non-return of tourist spending on the local economy which is instead directed towards other countries.

Instead, if there is a tourism activity sustainability oriented, It can produce the following positive effects:

- a. The increase of employment in sectors directly and indirectly related to tourism, with positive effects on the local economy.
- b. The Strengthening of infrastructure and all services aimed at improving the internal mobility.
- c. The economic incentive to preserve natural, artistic and cultural resources;
- d. The incentive to the cultural and economic exchange with the outside.

2. Social dimension

The social effects of tourism concern the changes produced on the social functions that can be negative if the tourist industry is not oriented to sustainability:

- The "commodification", that is the potential loss of authenticity of local rituals and traditions in commercial activities, emptied of their original symbolic meaning;
- The artistic and cultural degradation, caused by the improper use of resources;
- The conflicts between tourists and residents, caused by the difficulty of access to services and infrastructure, which residents share with tourists in periods of greatest concentration of tourism.

The impacts of tourism, instead, may be positive if the tourism industry uses a sustainable approach:

- The recovery of the local traditions, thanks to sustainable tourism, witch respects local traditions and values;
- Conservation actions of the local heritage as a resource for tourism development;
- improvement of public services and infrastructure to support tourism but also the residents;
- greater openness, resulting in the exchange of different cultures.

3.Evironmental Dimension

The environmental effects of tourism are definitely more evident in terms of sustainability. The environmental heritage is the main attraction of a tourist resort, and it is a resource to be used, but at the same time it is a treasure to be preserved. The impacts of tourism may be negative if the tourism industry do not uses a sustainable approach, as:

- ➤ The risk of compromise biodiversity due to the reduction or extinction of some species;
- > The increase in pollution and the problems related to the disposal of waste;
- > Environmental degradation, caused by an unbalanced management of tourist flows.
- The problems related to the excessive use of limited resources such as water, energy, raw materials, etc.

Instead, according to a sustainable approach can achieve positive impacts by contributing to:

- The preservation of historical and natural sites;
- > The strengthening of the local environmental quality by local Government
- > The acquisition of awareness about relevance of natural resources in own territory.

Ultimately, the sustainable approach if adopted properly can boost the competitiveness of the tourism sector, increase economic development, protecting the identity of places.

4. Theoretical Framework

Research regarding opinion mining is still relatively novel [Knotghon, Angkawattanawit, Sangkeettrakarm, Palingoon, and Haruechaiyasak 2010]. Many previously studies in this field evaluating reviews as being positive or negative by looking for occurrences of specific sentiment words or phrases. This type of sentiment classification is performed either at the document level [Feldman 2013; Dave, Lawrence, Pennock 2003; Pang, Lee, and Vaithyanathan 2002; Turney 2002] or sentence level [Feldman 2013; Wiebe and Riloff 2005; Hu and Liu 2004]. Also, customer satisfaction research is a growing research area which takes significant attention in the recent years. Choosing customer satisfaction as the main performance indicator is a good and popular way of reinforcing customer satisfaction, while a Voice of Customer (VOC) analysis helps design engineers avoid making costly product output changes that will later not satisfy customer expectations. With the emergence of Web 2.0, customers can freely write reviews about different entities, such as digital products or hotels using various Web 2.0 platforms [Xu, Cheng, Tan, Liu, Shen 2013]. Electronic customer management systems have allowed for detailed submission information of customer feedback on services and products [Aguwa, Montplasir, and Turgut 2012]. To be competitive in global markets, it is imperative that a firm meets its customer's expectations. In fact, poor understanding of customer requirements may have significant negative implications on companies business performance, especially on services in terms of quality and cost-customer satisfaction management [Jiao 2006]. Analyzing the VOC companies can prioritize the service outputs that are most important to customers and minimize all negative services. Remembers that Qualitative VOC is usually what customers need and want, whilst Quantitative VOC generally shows how customers prioritize their needs and wants [Shen, Xie, and Tan 2001]. Once customer requirements are achieved customer satisfaction and customer loyalty are attained. Previously studies observe and discuss the strong relationship between customer satisfaction and customer loyalty [Boulding, Kaira, Staelin, and Zeithaml 1993; Sullivan, Anderson, and Mary 1993]. The first study on VOC was conducted by Parasuraman's, Zaithaml, and Barry in the last 1988. Customer feedback is not only vital for design engineering but also for decision makers to make targeted interventions to pricing policies [Bradlow 2010]. In light of this, it is fundamental for organizations that marketers and data miner experts collaborate together for understanding and responding to VOC data. Bae, Ha, and Park [2005] underline the necessity for distilling all kinds of customer reviews by organizing them into 5W1H format (who, when, where, what, why, and how). In this study, the author provides two types of analysis: one-dimensional analysis in order to determine occurrence patterns of customer complaint types and a two-dimensional analysis for determining relationships when there are several complaints in many different areas. On the other hand, Pyon, Woo, and Sang [2010] used data mining to manipulate the raw customer data on which most of market planning relies. Then, they emphasized the necessity for an intelligent decision support system that can handle raw data, analyze, and derive key improvement point from VOC.

Online customer reviews have become a convenient and increasing important source of information about customer requirements, product features, and market responses that is used by product developers, customers, and researchers alike [Hui and Liu 2004; Wei et. al. 2006]. A research study related to the impact of professional and amateur reviews on the box office performance of movies shows that star rating of online reviews may be associated with an increase of over 4% in the company's revenues [Zhang and Dellarocas 2006]. The decision-making process of people is affected by the opinions formed by through leaders and ordinary people. When people want to reserve a room online they typically start by searching for reviews and opinions written by other people on the various offerings. Understanding qualitative data is the biggest challenge for decision makers especially if the data are gathered without adhering to certain data gathering format. These snippets of text are a gold mine for organizations to improve the level of the customer satisfaction so as raise business performance. Utilization of opinion mining techniques in stock picking can lead to superior returns. In fact, the success of organizations is guaranteed by only the ability of the companies to discover uncover knowledge collected in huge unstructured databases. Often, the content analysis provide competitive strategic knowledge helpful to getting business decisions. According to Feldman [2013], decision makers are the directly beneficiaries of opinion analysis technology in today's competitive global business. Remarks that opinion mining is the most finegrained analysis of review article and websites snippets with respect to specific objects and their aspects. Finally, opinion miners through this approaches must be able to provide a sentiment score for the whole customer review as well as analyze the sentiment of each individual aspect of ADs. Once again this methodology became fundamental within companies in order to get strategic business decisions aimed to greatly increase both the level of customer satisfaction and experience.

5. Methodology

A qualitative single case study analysis based on an opinion mining analysis is developed in this research. This methodology is widely used and very effective in management research [Cooper and Schindler 2005] and it is suitable for exploratory and descriptive studies. Yin [1989] defines a case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context. An important advice is that we have considered acceptable to analyze only a single case study due to the originality of our research. This innovative model of hospitality is a made in Italy concept and it is mainly diffused in Italy. Opinion mining is a qualitative research methods allowing for in-depth investigation. It is defined as the task of finding the opinion for authors about specific entities [Feldman 2013]. In our case, the data analyzed are qualitative in nature. In fact, customer surveys give rise unstructured data in a text format [Aguwa, Monplaisir and Turgut 2012]. The interpretation of customer review is often based on content analysis [Gabauer, Tang, and Baimai 2007]. In the current literature, two basic approaches are used for this objective: non-automated coding by humans and automated coding that is performed partially of fully by computer software. Therefore, due to the limited resources available and the limited number of observations, a nonautomated coding by humans is developed in this research. A human-coded schema, coder classify text according to a specific set of classification category [Tong 2001]. In manual approaches, human annotators manually tag words or phrases as positive, neutral or negative sentiments to form lexicon. With this approaches, the constructed lexicon is domain specific (for instance: hotel and/or product). Validity and reliability of text classification need to be demonstrated based on the consistency of the coding results. Research studies have shown that computerized methods did not perform more accurate in coding the symbolic meaning of a text than manual methods [Morris 1994; Rosemberg et al. 1990; Weber 1990]. On the other hand, computerized methods based on artificial intelligence systems can result in higher stability and reliability of the coding scheme, formal comparability of the findings, and higher efficiency and easy with which large volume of qualitative data can be processed [Gabauer, Tang, and Baimai 2007]. Corpus-based approached rely on syntactic or co-occurring patterns of words contained in large databases to automatically classify sentiments [Turney 2002; Yu, and Hatzivassiloglou, 2003]. So, these methods can be consider as complementary insofar as automated coding relies on output generated by non-automated coding. Finally, this approach may be effective if decision makers merely wish to obtain a general overview of customer satisfaction. Organizations' ability to determine the specific aspects upon which customers base their general like or dislike may allow them to develop specific improvements to their services.

6. Data Collection

The database analyzed contains a hundred customer review published on Booking.com. related to a an "Albergo Diffuso" located in the North Italy. The main reason to choose Booking.com as a data source for the analysis refers to the quality of the data collected inside. Customers can write an hotel opinion only after have made the payments and/or after having effective stayed in the hotel. The latter guaranteed a good level of the quality of the information gathered in Booking.com for researchers. Remarks that many booking accommodation website given inaccurate information with

low quality of the information. Instead, Booking.com is defined as world leader website in booking accommodation online. Each day, over 475,000 room nights are reserved on Booking.com from all over the world. It attracts visitors from both the leisure and business sectors worldwide.

The current research study is explorative in nature. Rather than using a predefined survey with questions that where formulated based on previous research, we applied an inductive approach that relied on the interpretation of online customer reviews. Since the customer reviews were essentially unsolicited, it may be assumed that the customer opinions are particularly helpful to identify which services are key drivers in terms of quality for improving the quality of the AD studied. This work provide an accurate interpretation of the customer review related to a given AD located in the North Italy in order to understand which services might be key drivers for improving the services quality of the AD. Then, it shows the strategic importance of the opinion mining analysis in raising the accuracy of business performance identifying the status of the service polarity (positive, neutral, and negative) of the AD. Finally, a future-based opinion mining and summarization approach is implemented in this research [Hu and Liu 2004; Popescu, and Etzioni 2005; Carenini, Ng, and Zwart 2005]. Firstly, we have identified and extracted features from each customer review in which customers expressed their opinion. Secondly, we have determinate whether the opinions regarding the features are positive, neutral or negative. In conclusion, an overall qualitative evaluation of the each opinion is given by researchers. Table 2 shows a sample of the customer reviews analyzed in this research.

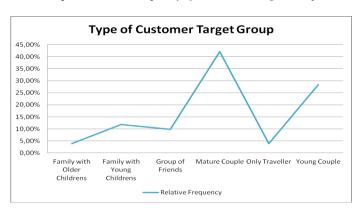
Table 2: Sample of the customer' reviews database

Id Review	Target Group	Nationality	Customer Review
1	Family with young Children	Belgium	Magic location: restored stone buildings in the middle of a medieval little village amongst stunningly beautiful hills. Breakfast facilities are a bit crowded (but still acceptable, especially keeping in mind that they are in a renovated medieval building). Being perched on the top of a hill and designed at a time when most people walked and only the privileged rode a donkey or a horse, everything is cobbled, narrow, hilly and windy. We were fine with that (especially since our kids are big enough to walk and they do provide a luggage carrying service from the only place where you can park your car to the room), but would have rather been warned about it in advance, since a pram (not to mention a wheelchair) would not have been easy to use.
2	Mature Couple	Switzerland	The uniqueness of the place and the friendly habitants. Different Locations: reception room, breakfast
3	Young Couple	USA	Everything was perfect. The hotel consists of several apartments throughout the medieval town - our suite was overlooking the countryside and was very thoughtfully designed and decorated with a well-equipped kitchenette. We originally intended to stay for only one night but ended up staying for three, using the apartment as a base for day-trips to Cannes/Nice/Juan-les-Pins/Monaco as well as for a hike around the countryside and up to the next town. Breakfast was great and all of the staff was extremely helpful.

7. Empirical Findings

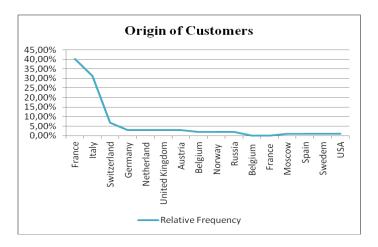
Before introducing the service's polarity analysis some general descriptive statistics are following provided. The first part of the analysis underlines the demographic features of customers, whilst in the second step we have identified the services which could considered as key drivers by the owner of the AD in order to improve both the customer satisfaction and the quality of the hotel.

Graph 1 shows the value of the relative frequencies related to the customer target group, while Graph 2 provides information about their origin (where customers come from). Remarks that this findings are based on the customer reviews gathered in Booking.com from 2012 to 2013.



Graph 1: Relative Frequency of Customers Target Group

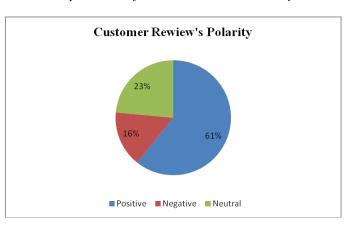
From a first exploratory analysis appears that 42,16% of customers belong to the group called mature couple. This reasult seem to be coeherent due to the typology of the hotel. Families with youger and/or older children hardly will book a room in an AD as well group of friends. One of the main reason of this statement it could be the morphological characteristiques of the historical village in the North Italy.



Graph 2: Relative Frequencies of Customer's Origins

Graph 2 provides the relative frequencies regarding the origin of customers. 40,20% of customers come from France followed by a 31,27% who come from Italy, and a 6,86% from Switzerland. Insignificant the percentage of customers who come from Spain, Swedem and United States. Based on these first outcomes seem to be very difficult to draw homogenous geographical clusters of

customers. Paticular attention must paid on the results underlined in Graph 3. It shows the value of the relative frequencies related to the polarity of the customer reviews. 61% of customers are satisfied of the services provide by the AD against the 16% of customers who expressed a negative opinion of the services promoted by an AD. Finally, 23% of customers reimaned neutral in their opinion. Remarks that, due to the structural features of the AD, we have considered neutral reviews such as: medieval village, traditional mountain village architecture, uncomfortable location, fantastic village uncomfortable for people with an age more than 58 years old, quite hotel, particular hotel, exceptional place, and scattered rooms.



Graph 3: Status of the Customer Review's Polarity

Table 3 and Table 3 identifie the main service with both high and low quality percepited by customers after being in the AD at least once.

Table 3: Services with Positive Polarity within Customer Reviews

Services with Positive Polarity	Relative Frequency		
Friendly Staff	19,43%		
Beautiful Rooms	12,57%		
Good Breakfast	6,86%		
Comfortable Rooms (negative services facilities)	6,29%		
Excellent Breakfast	5,71%		
Magnificent Location	5,14%		
Beautiful Village	5,14%		
Original Rooms	4,57%		
Cleaned Rooms	4,00%		
Gorgeous Foods	4,00%		
Good Rooms	3,43%		
Nice Hotel	3,43%		
Good Location	1,71%		
Ratio Quality/Price	1,71%		

Good Restaurant	1,71%	
Original Hotel	1,71%	
Friendly Habitants	1,14%	
Magnificent Buildings	1,14%	
Qualified Staff	1,14%	
High Quality of the Food	1,14%	
Romantic Place	0,57%	
Magnificent Rooms	0,57%	
Quite Rooms	0,57%	
Traditional Hotel	0,57%	
Surprising Hotel	0,57%	
Great Location	0,57%	
Original Management	0,57%	

Table 4: Services with Negative Polarity within Customer Reviews

Negative Services	Relative Frequency		
Bad Rooms Facility	21,05%		
Bad Breakfast Facility	10,53%		
Administrative Problems	9,21%		
Expensive Hotel	5,26%		
Small Room	5,26%		
Ratio Quality/Price	5,26%		
Noisy Rooms	5,26%		
General Bad Smell	5,26%		
Uncomfortable Parking	3,95%		
Inefficient Internet Connection	2,63%		
Service Transportation	2,63%		
Inefficient Hotel Maps	2,63%		
Impolite Staff	2,63%		
Negative Hotel	2,63%		
English Knowledge	1,32%		
Bad Quality of the Dinner	1,32%		
Expensive Dinner	1,32%		
Small Suite	1,32%		
Rooms Cleaning	1,32%		
Inefficient Staff Organization	1,32%		
Inefficient Mobile Connection	1,32%		
Expensive Transportation Services	1,32%		
Uncomfortable Common Area	1,32%		
Bad Quality of the Breakfast	1,32%		
Bad Quality of the Restaurants	1,32%		
High Pets Fees	1,32%		

Customers define rooms as beautiful even if the service facilities inside are bad. In addition, the breakfast is good in terms of both quality and variety of the foods, while is definitely negative in terms of service facilities such as size of the room and internet facilities. In addition, customers consider the staff very friendly and qualified but identify some administrative problems as well underlined in the following table.

Table 5: Negative Services Details

Negative Services	Relative Frequency	Example of Services with Negative Customer Perceptions				
Bad Rooms	21,05%	Lack of Natural Light	Ventilation	Damp	Mostly Smell	Small
Facility	21,0370	inside the Room	Ventuation	Dump	Wostry Smen	Bathroom
Bad Breakfast	10.53%	Small Breakfast Room	Spread	Homemade Foods		
Facility	10,55%	Siliali Breaklast Roolli	Location	Homemade Foods		1
Administrative	9.21%	Long check-in	Booking	Different	Misleading Web	Previously
Problems	9,21%	Long check-in	Problems	Reservation Rooms	Advertising	Payment

Table 5 provides details about the negative services detected from an analysis of the customer's reviews. Just these services must be improve by the owner of the hotel in order to improve the customer satisfaction and the quality of AD. This fact is especially true in today's global business in which the survival of companies is only guaranteed by a continuous monitoring of the competitors.

Table 6: Modal Value of Service

Services	Modal Value	
Friendly Staff	34	
Bad Rooms Facility	16	

Finally, Table 6 shows the modal value² for both positive and negative services perceived by customers. In other words, the service related to the friendly of the staff was cited 34 times in the sample analyzed, while the service that refers to the bad rooms facilities 16 times.

8. Conclusions

This paper provides a single case study analysis based on opinion mining methodology in order to discover unknown knowledge in huge qualitative databases. From a managerial standpoint, to adopt an opinion mining methodology made possible to better understand which quality level is accepted by customers when choose an AD rather than traditional hotel, which services are considerate of high quality for customers, and which services can change the perception of high quality of service offered. Opinion mining is important for both businesses and organizations. For instance, it is critical for decision makers to know how customers perceive their services and those of their competitors. This research focused the attention on the analysis of 102 customer review related to the customer experience from 2012 to 2013 of an AD located in the North Italy. The empirical

² The modal value is the value with the highest frequency in the sample studied [Giudici 2010].

findings are very promising and interesting. Mining customer reviews with a manual method can be defined as one of the main approach helpful for organizations in today's global business. The analysis of customer's reviews achieves decision makers to identify in a deep way the level of the customer's satisfaction in order to detect new services indicators of the quality of AD. Our results show that the service's excellence for an AD is complete different from a traditional hotel. In fact, the high quality of an AD is given from innovative services such as friendly staff, the integration between tourists and local community, cultural and artistic events, original management, traditional rooms, and local wine and food. The main strength of AD are the following. First of all, the model of AD is designed for encouraging contacts not only with tourists, but between them and the resident community, so as to become "temporary" residents. Secondly, the AD is distinguished from traditional hotel for the original management such as the original atmosphere of hospitability and the original idea of being tied to the territory. Thirdly, the AD is characterized by the elasticity of the proposal because the tourist has full availability of variety of options from local products to cultural events. Finally, the physicality and authenticity features of the place in which is located an AD represent the main drivers characterizing the quality of the AD studied. Also, tourists are more willing to accept some negative aspects, like (steep stairs, small rooms and bathroom, no internet connection, musty smell, and no windows within rooms) when they booked rooms in a specific traditional context as AD than hotel. In conclusion, this research shows how this innovative model of hospitality is leading a reversal of the current business logics in the tourism sectors, especially towards the concept of the hotel in which traditional indicators of the quality (comfort, location, and room's facilities) dominated. Future research activities of this work could concern the development of some machine learning techniques, such as Bayesian Network or Support Vector Machine to automatically extract the customer opinion and identify their associated polar words in new data. In addition, we can try to combine hotel data review from multiple sources with the main to compare which services determine high standard of the quality for an AD. Finally, an automatic approach could be used to simplify the manual construction of the training lexicon in the AD business domain.

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