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The Impact of E-Commerce on Hotel Management: Evidences from a Sample of Tuscan Hotels (I)

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ABSTRACT

Presenting the results of a survey conducted in 2013 on a sample of 17 Tuscan hotels, this article analyses the impact of e-commerce on hotel management. It focuses on turnover, profitability and organization. The collected information suggests that the share of OTA related sales has become undoubtedly significant to the point to influence commercial policy and investment choices. The level of commissions applied by the new travel intermediaries is excessive according to hotels, which try to react by adopting directly controlled online booking systems. While profitability decreases, turnover and employment seem to be growing.

Keywords Hospitality, Hotels, E-commerce, Online, Internet.

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Introduction

Over a quarter of a century ago, David Wardell (1987) described the lodging industry on the Economist as “the most underautomated segment of the international travel industry. Reservations are often still dealt with by hand [...]”. Today the situation has deeply changed. Since its birth, the Internet has given a decisive contribution to the technological modernization of the hospitality sector and the same happened for e-commerce.

Electronic trade has revolutionized distribution, sales and marketing. Scholars and experts analyzed in a comprehensive way these changes introduced into the industry (Law, Leung, & Buhalis, 2009; Line & Runyan, 2012). However, still today, a comprehensive assessment of internet operated commercial transactions and of their impact on hospitality industry is far from being available.

A first reason for the ongoing debate over many aspects of electronic trade (“Does it increase competition or opportunities?”; “Does it strengthen the brand or does it damage hotel identity?”) is connected to the complex and changing nature of e-commerce. This is such a “broad phenomenon that”, in order to understand it, “a multidisciplinary perspective is required” (Turban, King, & Lang, 2010). Studying e-commerce from the point of view of tourism and of the hotel industry in particular makes the task even harder (O’Connor & Murphy, 2004).

A second reason of uncertainty originate from data sources. In fact, public sources like Eurostat (which monitors the number of orders placed by individuals) and official statistics do not provide adequate measurements of value transactions. On the other hand, data from private sources depend on varying methodologies and have often limited geographical coverage (Fredriksson, 2013).

In this context, studying behavioral patterns of hoteliers on the operational level can provide useful insights and fill some knowledge gaps. The research we are going to present has been conducted in 2013 through a survey that collected hotel management views about the ongoing processes at industry level. Surveyed hotels are members of EBIT Toscana, a regional organization with representatives of both trade unions and the employers’ association, especially concerned with the training of employees of tourism companies (hotels and travel agencies; www.ebit.toscana.it). EBIT Toscana has an interest in the maintenance of both the employment rate and the industrial basis. It is also worth to recall that Tuscany is the second region in Italy for visitor overnight stays (more than 40 million in 2012; Osservatorio Nazionale del Turismo, 2014).

In order to have statistically significant results the sample should be enlarged and the survey refined. However, even the collected information as it is might have strategic importance to the experts as well as to the industry. In fact, it is worth to recall that 1) we are dealing with information not otherwise obtainable from companies’ balance sheets, and 2) this kind of information is usually considered sensitive at company level and therefore not made available externally.

1. Research framework

Looking at e-commerce in the hospitality industry, we decided to focus our attention on two emerging trends: first, the growing influence of Online Travel Agencies (OTAs) and of other travel portals in intermediating and orienting the demand for accommodation; and second, the large increase of online booking systems by hotels.

In both cases we are dealing with electronic trade, according to OECD's narrow definition of "internet transaction"¹. However, they represent two separate channels: the OTAs and other travel portals being indirect sales for the hotels as opposed to the direct sales hotels make through their online booking systems. Hence, for the research purposes, all distinctions (based on their different business model) between OTAs and other travel portals are not considered relevant (Zott, Amit, & Massa, 2010). Equally, we considered hotels booking systems as a whole, even though they can be centralized (as it is in the case of the majority of chains), property owned, leased or even rented.

Having limited our field of research to these two macro-categories, we have to deal with a number of questions, that neither academic nor industry studies have yet answered in a definitive way. 1) How big a share of hotel turnover has come under control of OTAs and travel portals? 2) Do these new intermediaries represent a competitor for hotels or do they provide instead additional reservations and hotel promotion? 3) What kind of influence OTAs have on hotel profitability? 4) Is the development of online booking systems a response to this influence? And, finally, 5) Has the growth of the online market favored a reduction of hotel workforce, for example by standardizing and reducing the number of services offered?

At the time of the survey design, no precedent of similar survey was detected. However, during the writing of this paper it has been possible to consult a work by Schegg, Stangle, Fux, and Inversini (2012), based on a survey among Swiss hotels, which can be considered a useful reference. Despite its partly different scope (the study of all existing distribution channels), this survey highlights the question of OTAs' growing influence, by attributing to this channel an average share of 16.4% of hotel turnover and the fastest growth rate among all other channels in 2011.

2. Methodological remarks

The following survey has been conducted by EBIT Toscana, guarantor for privacy and source anonymity, under the Author's supervision. Data gathering took place from September the 1st to December the 5th 2013.

For the selection of variables, we referred to existing literature, interviews with EBIT Toscana top management and previous works of the author (Ginanneschi, 2014).

The questionnaire (Appendix) has been tested on a pilot hotel, whose suggestions allowed the fine tuning of queries (Brancato et al., 2005). In particular the pilot hotel confirmed: 1) the questions' intelligibility; 2) the classification system of the economic activity (e.g. options for class of turnover); 3) the anchoring of scales for ordinal response options (e.g.: 3-4 points itemized rating scales; Brace, 2013); and it proposed the inclusion of question 3 ("Number of workers providing externalized services").

The SAQ type questionnaire is articulated in 22 questions (7 of them open-ended, 15 closed-ended). Answers are here presented in sequence, grouped by quality labeled

sections: i) companies' profile; ii) OTAs' impact on turnover; iii) travel portals: value judgments; iv) online market and hotel management; v) corporate performance.

The questionnaire has been sent by mail to the hotel managers (General Directors/CEOs/Owners), leaving to them the responsibility to gather the requested information from the competent company functions (administration, sales/marketing, IT and human resources).

The survey collected data from 17 hotels, corresponding to 15.45% of the local units adhering to EBIT Toscana (110)². The lack of information regarding the whole population did not allow to measure the representativeness of the sample (ISTAT 2012). However, its size is relevant, especially taking into account that it refers to 1,231 employees (36.2%) on total 3,400 workers for the considered hotel population.

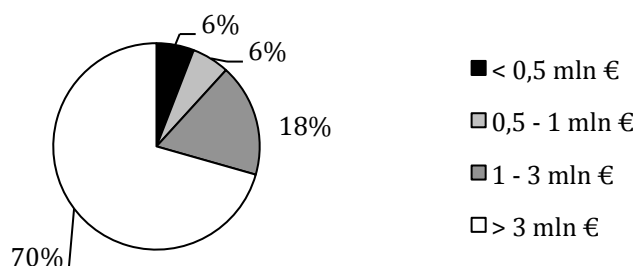
From a statistical point of view, the analysis is strictly descriptive of the random sample.

3. Results

3.1 Companies' profile

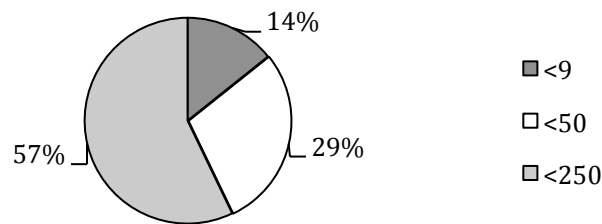
The subset, just as the total population of EBIT Toscana member hotels, is characterized by 3 fundamental aspects: affiliation to the employers' association Confindustria/Federturismo, adoption of the national collective contract of employment of Tourism Industry, and location in the territory of the Tuscan Region. More specifically, the sample is composed by a prevailing share of large companies. Data describe it as a reality made up for 70% by companies with a turnover exceeding 3 million euro and for 18% by hotels whose turnover goes from 1 to 3 million euro (Fig. 1).

Fig. 1 - Distribution by turnover class



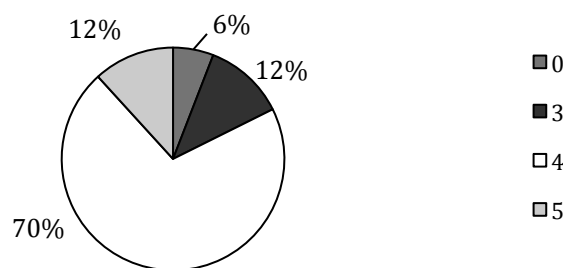
Hotels with more than 50 employees are 86% of total (Fig. 2).

Fig. 2 - Distribution by number of employees



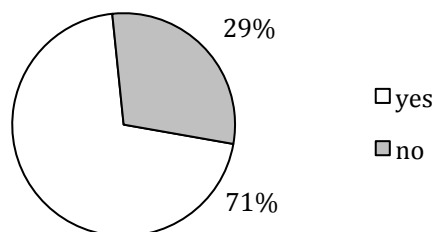
This initial section included a query on the number of externalized workers. Because of the low number of answers to this question, the collected data has been omitted³. The distribution by stars⁴ shows a predominance of 4 stars hotels (Fig. 3).

Fig. 3 - Distribution by number of stars



71% of respondents declare to be part of a chain (Fig. 4).

Fig. 4 - Affiliation to a chain



3.2 OTAs' impact on turnover

The second section of the survey deals with OTAs' impact on hotels' turnover. We decided to ask the first question of the series referring to "OTAs related turnover", a concept which includes all main categories of online intermediation.

Fig. 5 - % OTA related turnover by class

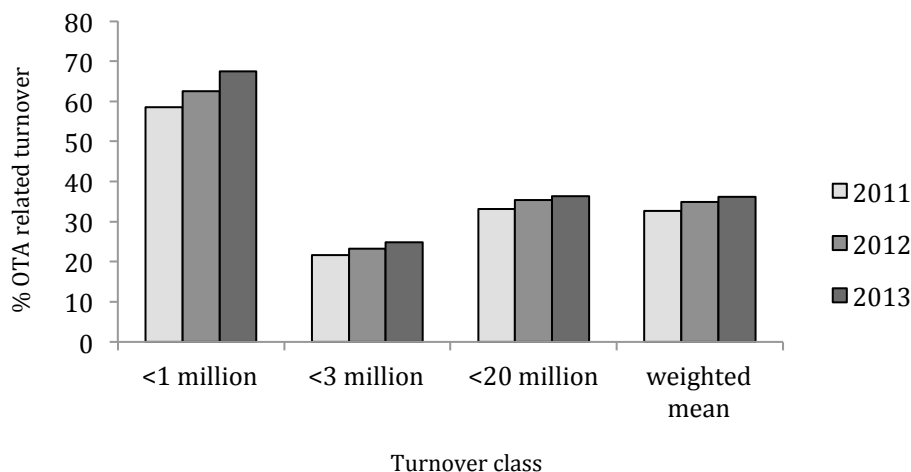
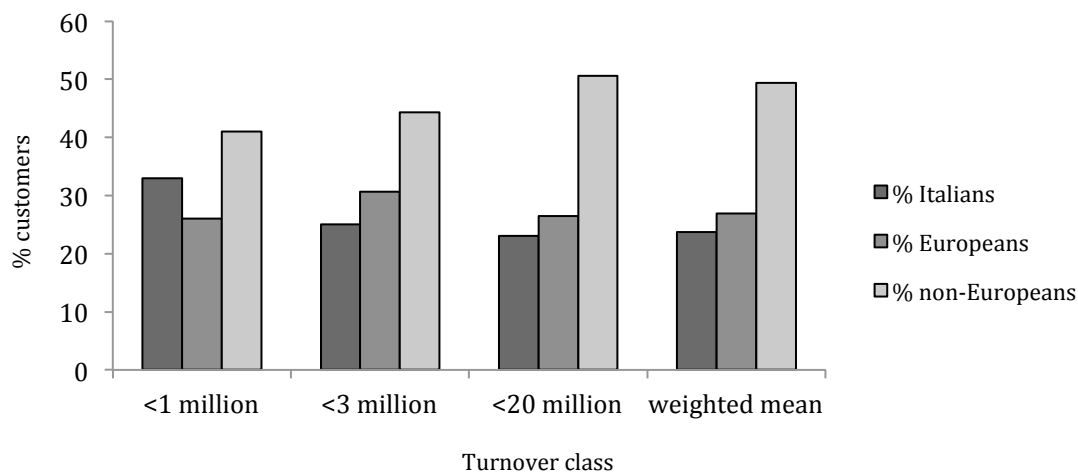


Fig. 5 shows how, in 2013, 67.5% (58.5 in 2011) of turnover in small hotels (< 1 million) derives from OTAs, 24.8% in hotels with sales below 3 million and 36.3% in the largest hotels (more frequently part of chains).

Smaller hotels seem to be more dependent on OTAs for sales generation, while medium hotels are relatively more autonomous, that is resistant to competition by the new travel intermediaries. The weighted mean⁵ - an approximated figure, compiled from available data based solely on value classes – shows to what extent the role of OTAs has become fundamental in the process of sales generation (36.2% of total 2013 turnover has been intermediated by them against 32.7% of 2011).

Fig. 6 focuses on the distribution of the customer base, segmented by turnover classes and split into Italians, Europeans (Italian excluded) and non-Europeans. Answers help to clarify even the next question. For the moment, it is important to underline how, in the weighted mean, non-European customers are slightly less than European + Italians and how Italians have been decisively overrun by foreigners (76.4% of total). Italian customers are relatively more numerous (33% of total) in hotels under 1 million turnover.

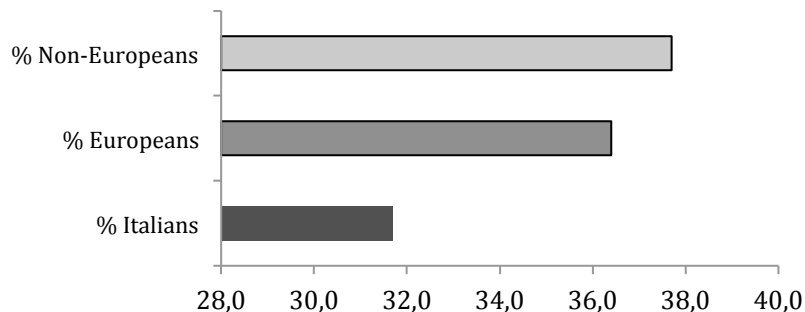
Fig. 6 - Customer base distribution



Within the sample, non-Europeans (37.7%) are using Internet more extensively to purchase accommodation, with Italians at the bottom line (31.7%). At this regard, it is useful to recall that even according to EUROSTAT the propensity to online purchases by Italians is lower than European average (17% against 45%; Ginanneschi, 2013).

In this way, Internet appears to favor the acquisition of foreign customers by the hotels in the sample.

Fig. 7 - % online purchases by customer origin

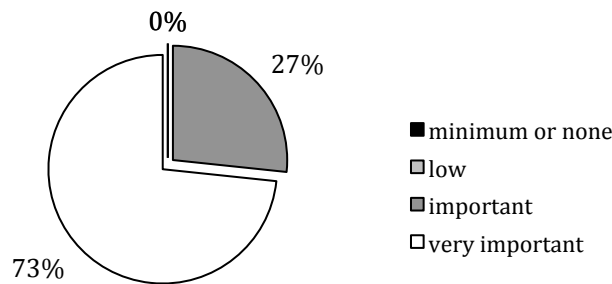


3.3 Travel portals: value judgments

The third section of the survey has been dedicated to value judgments expressed by hotels on travel portals, which include OTAs and other intermediaries, such as comparative portals (e.g. Tripadvisor) or portals of direct and intermediated offers (e.g. Trivago).

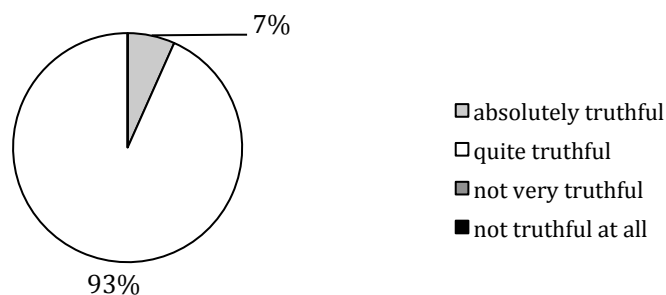
Fig. 8 shows the degree of influence attributed to travel portals publishing visitors' judgments. 73% of those interviewed think travel portals are very influential, while the remaining 27% consider them important. No respondent judged low or null this kind of influence. This is a new confirmation of the role travel portals have in the intermediation and orientation of accommodation demand.

Fig. 8 - Degree of influence attributed to travel portals



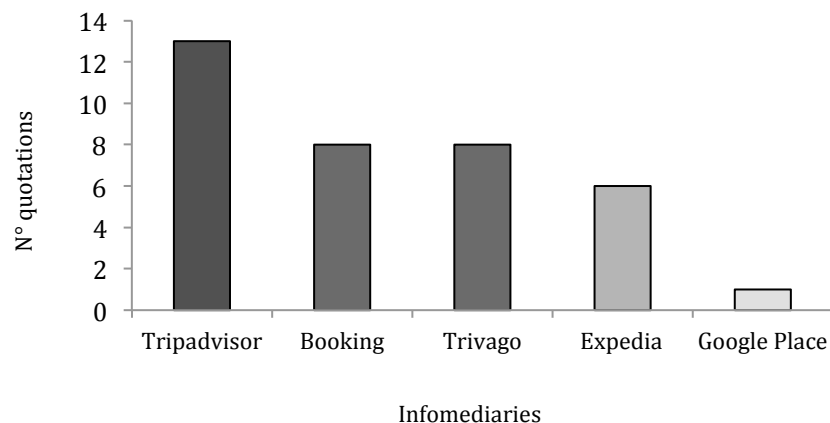
On the critical judgments expressed by hotel visitors on travel portals (Fig. 9), the evaluation is almost unanimous: 93% of respondents believe that they are “quite truthful” while 7% think they are “absolutely truthful”. Surveyed hotels contradict the opinion – apparently widespread at industry level in Italy – that these critical judgments are very little or completely not truthful. In other words the sample shows to believe in this form of criticism and takes it into serious consideration.

Fig. 9 - Opinions regarding the truthfulness of visitors' comments on travel portals



The following figure (Fig. 10), corresponding to an open-ended question, provides a ranking of the most important infomediaries⁶ (by summing up the number of quotations, even multiple).

Fig. 10 - The most important infomediaries



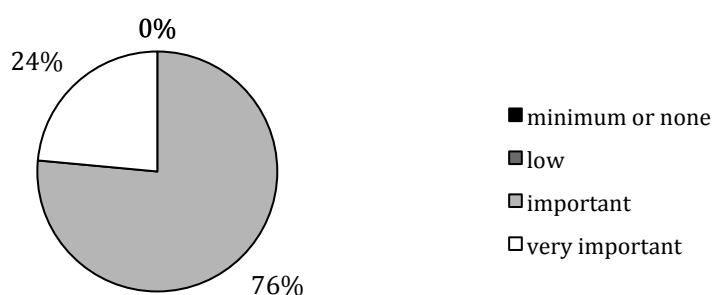
The sample identifies Tripadvisor, followed by Booking and Trivago, as the most important infomediary. 3 out of 5 quoted portals are not in the category of OTAs.

3.4 Online market and hotel management

In the fourth section, we have tried to measure the online market impact on different aspects of hotel management.

The first question concerns the influence of travel portals on the commercial strategy. 24% of respondents believe this impact “very important” while 76% think it “quite important” (Fig. 11).

Fig. 11 - Travel portals' influence on commercial strategy

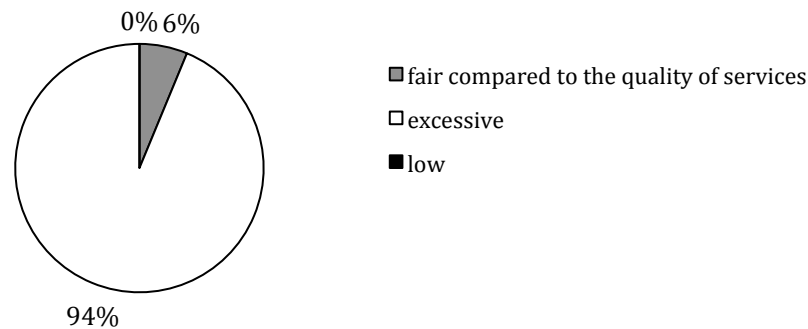


If compared to the less specific question on travel portal influence (Fig. 8), such a distribution of answers suggests either that commercial policy maintains a sort of independency from the action of Internet-based intermediation or that the commercial policy itself can be further adjusted to seize all the opportunities offered by the web (we stand for this second interpretation, based on further answers to the questionnaire; see Fig.17) .

The sample has been concordant (Fig. 12) in judging the amount of the commissions applied by the travel portals: 94% of respondents believe they are “excessive” while just 6% think they are “fair compared to the quality of services”. This result confirms evidently that the negotiation power of the surveyed hotels – even the ones owned by a chain – is inferior to that of travel portals.

Despite the generalized opinion that the cooperation between hotels and travel portals is a business opportunity for hospitality industry, scholars did not miss to underline several possible reasons for a conflict of interest between agent and principal (Lee, Guillet, & Law, 2013; Christodoulidou, Brewer, Feinstein, & Bai, 2007). Therefore the answer given by the sample points out a major problem in this relationship, the cost of OTAs' services, to which hotels could react in different ways, for example by sharing information at industry level (the present research constitutes an example) in order to make more transparent the OTAs' commercial practice or by strengthening their direct control over online sales and promotion.

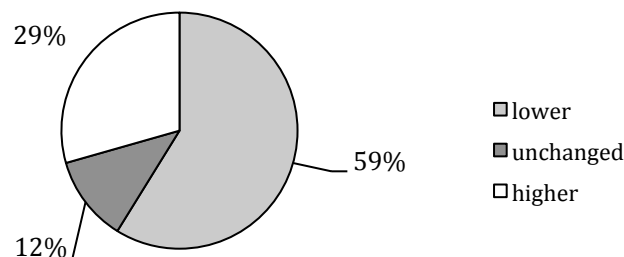
Fig. 12 - Commissions paid to travel portals



Most of the interviewed hotels (59%) believe that in the near future commissions' size may diminish (Fig. 13). In addition to the possible effect of individual and collective response to travel portals' supremacy, hotels could take advantage also from new intermediaries' entry into the online market.

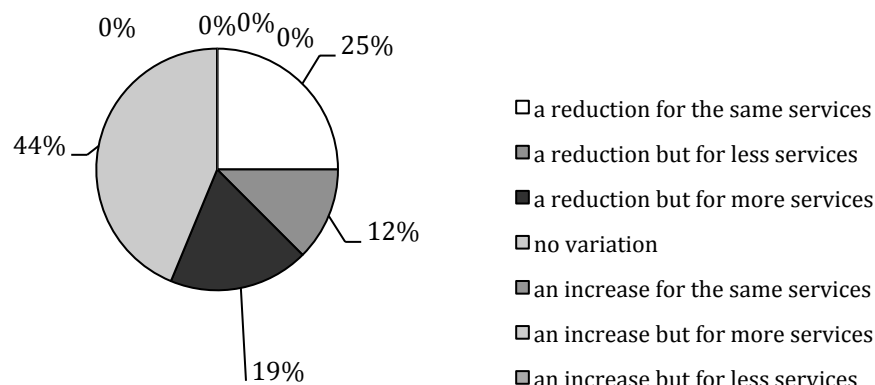
Nevertheless some lodgings remain pessimist, and 29% think these commissions will even increase. This outcome may depend on the future level of market barriers to entry, that is on the size of the IT and commercial investments needed by new competitors to gain a significant market share.

Fig. 13 - Travel portals' commissions in the near future



In Fig. 14, the survey deals with online market's impact on hotels' room rates (and by this way with economic and operative management). Out of seven given answers – a large spectrum of possible outcomes – preference is given to “no variation” (44%), followed by “a reduction of room rates for the same services” (25%) and by “a reduction of room rates accompanied by a wider offer of services” (19%). Evidently, for reasons connected also to the advent of the online market and travel portals, 44% of the hotels believe to be more exposed to competition up to the point that, to keep the occupancy rate, they feel obliged to reduce prices and sometimes to increase services. In other words, online market's impact is reducing profitability for a significant share of the sample.

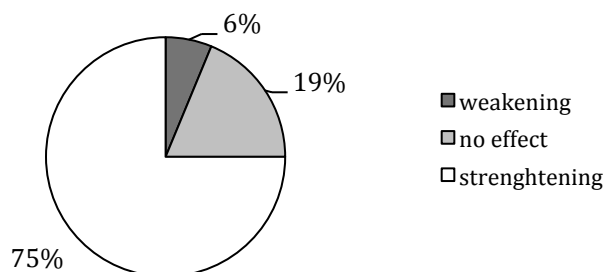
Fig. 14 - Online market's impact on room rates



The following question of the survey (Fig. 15) collects hotels' opinion on the effects of the growth of the online market over their brand. Undoubtedly, this is a complex query: it assumes that hotels know the significance of brand and its implication, for example for room pricing⁷.

A large majority of respondents (75%) believes their brand has been strengthened. The answer which has been given to this question (part of a series of crossed queries) shows to be slightly incoherent with what has emerged in Fig. 14 (decreasing room rates and marginality) and in the following Fig. 18 (visibility as main obstacle to direct online sales) but basically coherent with turnover trends (growing revenues in the last three years; Fig. 20).

Fig. 15 - Online market's effect over the hotel brand



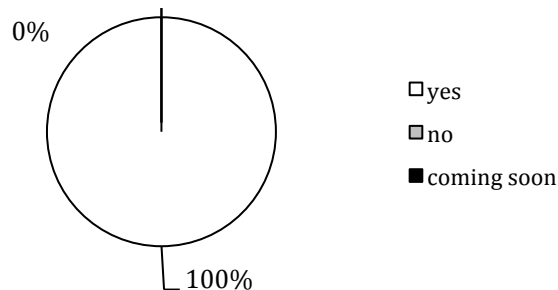
The unanimity of positive answers to the question "if your website is equipped with an online booking system" looks extraordinary especially if compared with the ex-ante foreseeable situation and with Italian hotels general picture (Fig. 16).

In phrasing this query we did not distinguish all possible IT solutions, which can include Property Management Systems (PMS), capable of managing and coordinating all company functions up to electronic sales, Central Reservation Systems (CRS), which can be used by a hotel chain "to handle reservations between multiple properties" (Green, 2005, p. 15), and then the most recent and cheap remote solutions, such as the ones offered by Application Service Providers (Buhalis & Jun, 2011; Leung & Law, 2013).

In order to fully understand the peculiarity of the sample's answer, it is important to recall that up to recently even the debate among scholars was centered on the size of the advantages connected to the ownership of a website, eventually providing

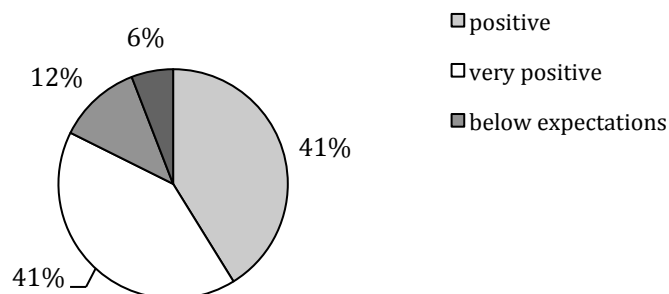
information on room rates (Mariani & Mordenti, 2010; Scaglione, Schegg, & Murphy 2009). From the technological as well as the commercial perspective, the step forward has been considerable.

Fig. 16 - Is your website equipped with an online booking system?



Moreover, Fig. 17 shows that the majority of hotels considers positive/very positive the trend of direct online sales. We could infer, from an economic point of view, that the investment made on related services and IT equipment is producing returns in line with expectations. Nevertheless 18% are still unhappy about their online booking systems' performance: they are all independent hotels. In this respect, it is important to mention that scholars already observed that the level of investments, which are necessary to develop an efficient online reservation system, may be out of reach for such a class of hotels (Gursoy, 2010).

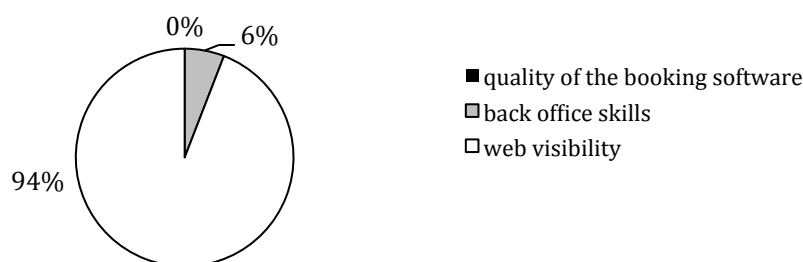
Fig. 17 - The trend of direct online sales



Almost unanimously (94%), hotels believe that the main obstacle to the increase of direct online sales is given by Internet visibility, obviously judged inadequate (Fig. 18). Supposedly, the root cause lays on the high costs which hotels undergo to improve their web positioning, through actions of Search Engine Marketing (Paraskevas, Katsogridakis, Law, & Buhalis, 2011) or Social Media Marketing (Leung, Law, van Hoof, & Buhalis, 2013)

No respondent mentioned "the quality of the booking software" as main obstacle. Such an absence seems coherent with the unanimous answer to cross question in Fig. 16. Inadequate back office skills are considered an obstacle by a narrow minority (6%), though other surveys pointed to the Internet Distribution Manager and to the E-commerce Manager as missing profiles in the hospitality industry (Ambrosetti S.p.A., 2009).

Fig. 18 - The main obstacle to the growth of direct online sales



3.5 Corporate performance

The last section of the survey concerns overall corporate performance. Some questions are control queries, asked specifically to verify the coherence with previous statements.

The first question deals with employment trend. In some industries e-commerce has produced a reduction in the number of active companies (such as travel agents' industry: Ginanneschi, 2014), in others a redundancy of workforce (Frey & Osborn, 2013). As far as hospitality is concerned, no specific research or study is known.

Our survey shows that as a whole over the last three years employment has increased (50% of hotels think that way, compared to 17% who declared an employment reduction).

Considering their impact on turnover (above 36% according to Fig. 5), we can suppose that for our sample the growth of direct and indirect online sales had a positive influence on employment levels. This interpretation is coherent with hotels' statement about the online market effect on room rates/services mix: if room rates mainly decrease, offered services (and relative staff) keep steady or increase (see Fig. 14).

Fig. 19 - Number of employees over the last three years

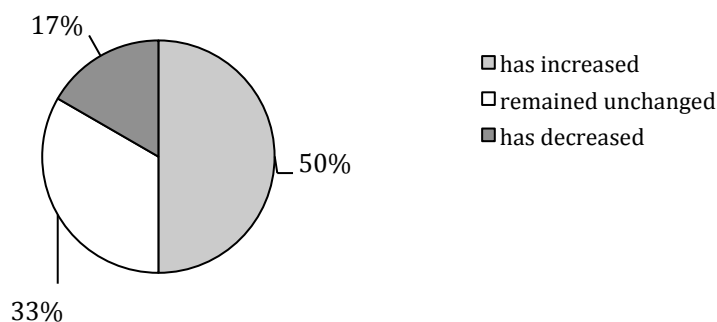
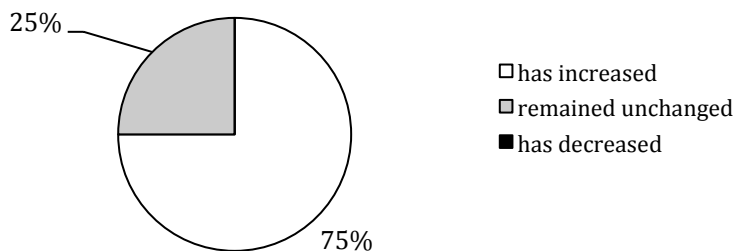


Fig. 20 shows hotels' opinion on turnover dynamic over the last three years. Turnover as increased for 75% of respondents, while it remained unchanged for the remaining 25%. Therefore, as a whole, the sample experienced a growth, which is difficult even in this occasion not to connect to online sales level. Both CRS and booking through OTAs could have underpinned sales growth as well as the conquest of foreign customers (which replaced the Italian ones, declining because of the economic crisis).

Fig. 20 - Turnover over the last three years



The last question went unanswered by respondents. It was the most complex query in terms of filling modality: giving a value between 0 (no importance) and 3 (maximum importance) to 5 factors (from economic crisis to Internet advent) which could have provoked an eventual turnover decrease. No hotel reported a decline in total revenues and coherently the whole sample left this query unfilled. In drafting the questionnaire the author could have overestimated the probability of such a type of negative event.

4. Conclusions

Despite suffering from a self-selection bias, the survey on the sample of Tuscan hotels collected some interesting information about e-commerce trends at industry level.

In particular, answers highlight a growing influence of OTAs and travel portals in the intermediation of supply and demand of accommodation services. OTA related booking reached 36.2% of the hotels' total revenues, while smaller hotels are even more dependent on these intermediaries for sales generation. In parallel we noticed that 100% of the hotel sample has adopted online reservation systems evidently aimed to conquer market shares and a direct relationship with e-tourists. In respect to this specific type of consumer/shopping preference, expanding everywhere, travel portals and hotel online reservation systems are direct competitors.

Hotels' overall approach to e-commerce seems to be driven by their consolidated experience in multichannel distribution: given the price paid to OTAs for their service (too high for the great majority of them), hotels deem convenient to invest in the development of their own online reservation system. Small and independent hotels are the less satisfied by the current situation: they are becoming more and more dependent on OTAs for sale generation while they do not have enough resources to promote adequately their own website. Instead, according to the sample, the growth of the online market seems mainly to be strengthening hotel brands.

Concerning e-commerce impact on hotels' balance sheet, the survey provides other important indications. Over the last three years, turnover has increased for 75% of the sample (stable for the remaining part): this could be due to the extension of the geographical base of customers made possible by the web (foreigners surpassed Italians), and to a higher occupancy rate. In fact, room rates are slightly declining. Meanwhile, as a consequence of the increased level of competition fostered by the web, services offered to tourists actually increased. The combined effect of these two factors resulted in a diminished profitability.

The number of hotel employees over the last three years has predominantly increased. This observation seems to be connected to the higher level of services offered to customers. From the survey emerged even a specific need for new skills to improve and adapt back offices to e-commerce requirements. However, but this is purely the opinion of the author, on the front of employment and of service organization we are not dealing with a stable equilibrium: the industry is evidently losing margins, and, in the future, cost cutting pressure could probably increase.

(I) I wish to thank EBIT Toscana and its President, Andrea Giannetti, for the authorization to publish the results of the survey among member hotels. I am also indebted to Francesco Grottanelli, who provided insightful advice on hotel reservation systems and procedures.

¹ “An internet transaction is the sale or purchase of goods services, whether between businesses, households, individuals, governments, and otherpublic or private organizations, conducted over the internet. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line (OECD, 2002).

² 12 companies provided data of 17 hotels, all located in Tuscany. In case of more hotels owned by a single property, the central administration answered on behalf of all local units.

³ Externalization is an important phenomenon in Italy. Especially larger lodgings and chains hand out some services to cooperatives or third companies. Because of this missing information we did not consider the number of employees as an independent variable for some of the following analyses, preferring to it the class of turnover.

⁴ For the latest definition of “stars” in the Italian legislation, we refer to DPCM 21 ottobre 2008, “Definizione delle tipologie dei servizi forniti dalle imprese turistiche nell'ambito dell'armonizzazione della classificazione alberghiera”.

⁵The weighted mean has been calculated taking as benchmark the highest value of each class of turnover.

⁶ According to Palvia and D'Aubeterre (2007), “infomediary is an emergent business model adopted by organizations in response to the enormous increase in the volume of information available and the critical role of information in enabling e-commerce”.

⁷ Higher average daily room rates revenues and higher occupancy rates tend to be associated to the brands which are most appreciated by consumers (O'Neil & Mattila, 2010) For a definition of brand in the hospitality industry see Dev (2012).

References

- Ambrosetti S.p.A. (2009). *Analisi dei fabbisogni formativi del settore turistico-alberghiero*. Roma, Italy: Fondir. Retrieved from <http://www.fondir.it/sites/default/files/indagini/Analisi%20dei%20fabbisogni%20formativi%20settore%20turistico%20alberghiero.pdf> (10 September 2014)
- Brancato, G., Macchia, S., Murgia, M., Signore, M., Simeoni, G., Blande, K., (...) & Hoffmeyer-Zlotnik, J.H.P. (2005). *Handbook of Recommended practices for questionnaire development and testing in the European Statistical System*. Bruxelles, Belgium: Eurostat.
- Brace, I. (2013). *Questionnaire design*. London : Kogan Page Limited.
- Buhalis, D., & Jun, S. (2011). *E-Tourism*. Oxford: Good Fellow Publishers Limited.
- Christodoulidou, N., Brewer, P., Feinstein, A. H., & Bai B. (2007). Electronic Channels of Distribution: Challenges and Solutions for Hotel Operators. *FIU Hospitality Review*, 25 (2), 92-100.
- Dev, C. S. (2012). *Hospitality branding*. New York: Cornell University Press.
- Fredriksson, T. (2013). E-commerce and Development. Key Trends and Issues. *Workshop on E-Commerce, Development and SMEs, 8-9 April*. Geneva, Switzerland: WTO. Retrieved from https://www.wto.org/english/tratop_e/devel_e/wkshop_apr13_e/fredriksson_ecommerce_e.pdf (10 September 2014)
- Frey, C. B., & Osborne, M. A. (2013), The future of employment: how susceptible are jobs to computerization? *OMS Working Paper*, 17 September 2013, Oxford, England. Retrieved from http://www.futuretech.ox.ac.uk/sites/futuretech.ox.ac.uk/files/The_Future_of_Employment_OMS_Working_Paper_1.pdf (10 September 2014)
- Ginanneschi, M. (2014). The Growth of Internet Purchases and Travel Trade. *Tourism Economics*, 20 (5), 1105–1115.
- Green, C. E. (2005), *De-Mystifying Distribution*. Bethesda, MD: HSMAI Foundation.
- Gursoy, D. (2010). Chaotic Changes in Distribution Channels: Implications for Hospitality Companies. *European Journal of Tourism, Hospitality and Recreation*, 1 (1), 126-137.
- ISTAT (2012), *Linee guida per la qualità dei processi statistici*, Roma, Italy: ISTAT.

Law, R., Leung, R., & Buhalis, D. (2009). Information Technology Applications in Hospitality and Tourism: A Review of Publications from 2005 to 2007. *Journal of Travel & Tourism Marketing*, 26(5), 599-623.

Lee, H. A., Guillet, B. D., & Law, R. (2013). An Examination of the Relationship between Online Travel Agents and Hotels: A Case Study of Choice Hotels International and Expedia.com. *Cornell Hospitality Quarterly*, 54(1), 95–107.

Leung, D., Law, R., van Hoof, H., and Buhalis, D. (2013), Social Media in Tourism and Hospitality: A Literature Review. *Journal of Travel & Tourism Marketing*, 30, 3–22.

Leung, R., & Law, R. (2013). Evaluation of Hotel Information Technologies and EDI Adoption: The Perspective of Hotel IT Managers in Hong Kong. *Cornell Hospitality Quarterly*, 54(1), 25 –37.

Linea, N. D., & Runyan, R. C. (2012). Hospitality marketing research: Recent trends and future directions. *International Journal of Hospitality Management*, 31, 477– 488.

Mariani, M. M. & Mordenti, I. (2010). Does ICT really matter? Preliminary evidence from the Premier Hotels case, *AlmaTourism*, 2, 48-54.

OECD (2002). Annex 4. The OECD Definitions of Internet and E-commerce Transactions. In OECD, *Measuring the Information Economy* (pp. 89-90). Paris, France: OECD Publications.

O'Connor, P., & Murphy, J. (2004). A Review of Research on Information Technology in the Hospitality Industry. *International Journal of Hospitality Management*, 23 (5), 473-484.

O'Neill, J. W., & Mattila, A.S. (2010). Hotel Brand Strategy. *Cornell Hospitality Quarterly*, 51 (1), 27-34.

Osservatorio Nazionale del Turismo (2014), Presenze di italiani e stranieri per regione 2012, ONT official website. Retrieved from http://www.ontit.it/opencms/opencms/ont/it/cruscotto/grafici/121_Presenze_di_italiani_e_stranieri_per_regione_2012?sezione=trend/grafici (10 September 2014)

Palvia, P. C. & D'Aubeterre, F. (2007). Examination of Infomediary Roles in B2C E-Commerce. *Journal of Electronic Commerce Research*, 8(4), 207-220.

Paraskevas, A., Katsogridakis, I., Law, R., & Buhalis, D. (2011). Search Engine Marketing: Transforming Search Engines into Hotel Distribution Channels. *Cornell Hospitality Quarterly*, 52(2), 200-208.

Scaglione, M., Schegg, R., & Murphy, J. (2009). Website adoption and sales performance in Valais' hospitality industry. *Technovation*, 29, 625–631.

Schegg, R., Stangl, B., Fux, M., & Inversini, A. (2013). Distribution Channels and Management in the Swiss Hotel Sector. In Cantoni, L., & Xiang, Z., *Proceedings of Information and Communication Technologies in Tourism 2013* (pp 554-565). Innsbruck: Springer.

Turban, E., King, D. R., & Lang, J. (2010). Introduction to e-commerce. 3/E. Upper Saddle River, New Jersey: Pearson/Prentice Hall.

Wardell, D. (1987). *Hotel technology and reservation systems: Challenges facing the lodging industry*. *Travel and Tourism Analyst*, 2 (June), 33-47.

Zott, C., Amit, R., & Massa L. (2010). The Business Model: Theoretical Roots, Recent Developments, and Future Research. *IESE Working Paper*, WP-862, 1-43. Retrieved from <http://www.iese.edu/research/pdfs/di-0862-e.pdf> (10 September 2014).

Appendix

Questionnaire "E-COMMERCE AND ONLINE BOOKING"

(Translation from Italian)

1. Indicate the turnover class:

- .. up to €0.5 mln
- .. between €0.5 mln and €1 mln
- .. between €1 mln and €3 mln
- .. above €3 mln

2. Indicate the number of employees (average, including seasonal workers):

3. Indicate the number of workers in externalized services:

4. Indicate the number of stars:

5. Specify if the hotel is affiliated to a chain: .. Yes .. No

6. What percentage of your turnover comes from travel portals?

OTAs, and other intermediaries to which a commission has been paid even after customer check out

2011	2012	2013	2014 (estimate)
<input type="text"/> %	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %

7. Your customers are

% Italian

% European (Italy excluded) *UE-28*

% Extra-European

8. How many customers booked online

of total Italian customers?

of total European customers (Italians excluded)?

of total extra-European customers?

9. What degree of influence do you attribute to travel portals that publish visitors' judgments?

minimum or none low important very important

10. Do you consider these visitors' judgments truthful?

absolutely truthful quite truthful not very truthful not truthful at all

11. Could you name the infomediaries that you deem influential on the hotel choice of potential online customers?

12. What kind of influence do travel portals have on your hotel commercial strategy?

minimum or none low important very important

13. Commissions paid to travel portals are:

Fair compared to the quality of services Excessive Low

14. Do you think that travel portals' commission in the near future will be:

lower unchanged higher

15. Define the impact of online market over room rates during the last 3 years (only one answer admitted):

a reduction for the same services

a reduction but for less services

a reduction but for more services

no variation

an increase for the same services

- “ an increase but for more services
- “ an increase but for less services

16. Do you think that the online market has your hotel brand?

- “ weakened
- “ left unchanged
- “ strengthened

17. Is your website equipped with an online booking system?

- “ yes
- “ no
- “ coming soon

18. If yes, how do you consider the trend of online direct sales?

- “ positive
- “ very positive
- “ below expectations
- “ completely unsatisfactory

19. In your opinion, what is the main obstacle to the growth of direct online sales?

- “ quality of the booking software
- “ back office skills
- “ Web visibility

20. Over the last three years, the number of your employees has:

- “ increased
- “ remained unchanged
- “ decreased

21. Over the last three years, your turnover has:

- “ increased
- “ remained unchanged
- “ diminished

22. If yes, you think that this reduction could be due to:

(value each entry with a number between 0 – no importance – and 4 – highest importance)

the economic crisis and the fall of consumptions of touristic services

the advent of internet and e-commerce

a commercial policy not adequate to current challenges

a lack of adequate investments

the choice of other touristic destinations