INTERNETIZATION OF SELLING HOTEL ROOMS IN THE METROPOLITAN AREA OF ŁÓDŹ (POLAND)

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Citation

Abstract
The aim of the paper is to discuss spatial aspects of internetization of selling hotel rooms in metropolitan area of Łódź in Central Poland. However, only direct distribution channels were considered. Investigated hotels were divided into three groups referring to their ability to use Internet in direct selling activities. First group was established by the hotels most advanced in using Internet. Being advanced was understood as selling hotel rooms by online reservation systems. Hotels used to promote their services by their own website belonged to the second investigated group. It must be noted that mentioned enterprises presented full offer on their own websites, including detailed price information. However, they forced the clients to use phone, fax or email to complete the reservation process. Finally, the third studied group was established by the hotels without any experience with using Internet as a direct selling tool. Significance of three mentioned hotel groups was investigated both in spatial (metropolitan area of Łódź) and in time context (2009–2015 period).

Key words
internetization, direct distribution channel, hotel, metropolitan area of Łódź.

1. Phenomena of internetization of hotel industry

The term “internetization” was introduced by J. Urry (2003) as one of significant reasons for the growth of the average spatial range of social networks. Internetization is understood as the phenomenon of “the increasing adoption, diffusion, and deployment of Internet-based technologies and processes” (Etemad et al., 2010, p. 319). Internetization is strictly connected with the process of internationalization, particularly in innovative industries, or in innovative segments of highly heterogeneous industries like tourism (Zmysłony, 2014). Therefore, the more international markets the company wish to operate in, the more familiar with Internet-based technologies and processes such enterprise has to be.

K. Thakran & R. Verma (2013) pointed out four periods of internetization of distribution in tourism industry since the 1960s: GDS period, Internet period, SoLoMo period, and Hybrid period. The GDS period lasted until 1995 and allowed tourism suppliers to sell their services globally using real-time booking services offered by Global Distribution Systems. The
Internet period referred to the tremendous growth of the World-Wide Web between 1995 and 2000. The Internet allowed small and independent tourism suppliers to sell their services directly to the end customers, using web-based techniques, without extremely high commissions for Global Distribution Systems affordable only for large, international companies. However, at the beginning of the 2000s, further increase of significance of the Internet and search engines resulted in the development of third-party Internet-based companies: online travel agents. Tourists became knowledgeable and familiar with social-, location-, and mobile-based applications (Buhalis, 1998). The SoLoMo period lasted until 2013, when Hybrid period has commenced. Customers started to spend much effort on searching the World-Wide Web, using various devices and applications, looking for the best purchase option and experience (Xiang, Law, 2013). Thus, direct online distribution has become very popular again. The disintermediation phase has already been started (Thakran, Verma, 2013).

Two characteristics of recent distribution of hotel services must be emphasised. First, great consolidation of indirect distribution has been in progress since 2014. Global online travel agencies, especially Expedia and Priceline, have started to acquire local online intermediaries. Thus, indirect distribution channels of hotel services have become a challenge for direct sales. Moreover, small and medium-sized independent hotel enterprises have been trying to benefit from direct online sales of their rooms and have recognised it as a great opportunity to make their businesses more and more international. However, there is still a huge gap between the expectations and abilities of using web-based tools by such hotels. Thus, a lot of small and medium-sized hotel enterprises have started losing control over online distribution. Today, internetization, seen as a significant effect of globalization, has become challenging for investigated enterprises (Beritelli, Schegg, 2016).

It may be argued, that hotel companies are interested in developing their own online reservation systems, recognising them as more cost-effective than indirect channels. Moreover, it is expected that proprietary online reservation systems allow hotels to improve the quality of their revenue management techniques. However, it does not imply that hotels should avoid co-operating with online intermediaries. Multi-channel strategies might allow them to maximize hotels' revenues. Additionally, co-operation with online travel agents has a significant advertising aspect, as hotels' offers are displayed on intermediaries' websites (Beritelli, Schegg, 2016).

As internetization advances, the relationships between hoteliers and their guests are also changing. Thus, the term of e-loyalty was introduced. E-loyalty in the hotel market is defined as “the perceived loyalty towards a hotel booking website with the intent to either revisit the site or make a reservation from it in the future” (Bilgihan, Bujisic, 2015, p. 224). Thus, creating e-loyalty is feasible only when a hotel provides its own website with real-time booking feature. However, the quality of hotel website is not only influenced by this one feature. It also depends on other characteristics: navigability, attractiveness, professional design, usefulness of the content, customer retention, and social media (Ladhari, Michaud, 2015; Schmidt et al., 2008). Moreover, creating e-loyalty should be preceded by gaining the hotel guests' trust, primarily gained by access to secure online booking and electronic payment (Reichheld, Scheffer, 2000), privacy mechanisms (Schmidt et al., 2008), but also by the quality of hotel website (Wang et al., 2015).

It should be stressed that in Polish hotel industry, the Internet has become the most significant source of information about hotel companies and their products. Today, the Internet allows the hotel customers to make purchase decisions. Because of growing access of hotel customers to broadband connections, as well as the increasing online activity of hotel enterprises, online booking has become more and more popular. It must be emphasised that in 2011 hotels were recognised as the most internetized enterprises in Poland. 73% of investigated hotels were depicted as high-web companies. In the investigated group of hotels, the Internet was used for marketing and advertising, selling, and social networking (Cimochowski et al., 2011). Although many hoteliers are usually slow to adopt information and communication technologies, they find the hotel's own website to be the core of their online strategy, the focal point of their digital marketing. Moreover, hotel managers understand the significance of using social media and online indirect distribution channels, especially of co-operating with online travel agents (Inversini, Masiero, 2014).

The internetization of any company allows it to effectively manage its revenues. The above-mentioned effectiveness is a result of customer behaviour forecasting, demand estimation, segmenting the market, and price differentiation. Adaptation to these techniques is made possible by increasing familiarity with Internet-based technology (Rebezova et al., 2012). It is argued that web presence positively affects hotel revenues. Particularly, hotels with their own websites achieve higher growth rates than enterprises only using websites of intermediaries or
websites of destination management organisations, and much higher than companies without any web presence (Scaglione et al., 2009). Thus, internetization refers to the business purposes of commercial websites defined by J. Ho (1997). Hoteliers adopting e-commerce use their websites for promotion of their products and services, as well as for provision of data and information, while the enterprises more experienced with e-commerce also use their websites for processing business transactions.

2. Internetization and the relations between hotel industry and online travel agents

Recently, the use Internet has allowed manufacturers to transfer their products (especially digital products) directly to the end-users. However, in spite of previous studies (Al-Abdallah et al., 2014) and recognized expectations of the industry (Reinders, Baker, 1997), the intermediaries were not eliminated from various markets. Moreover, it must be noted that intermediaries started to provide their activities on the Internet as well. It is argued that primary assumptions that web-based selling tools allow the hoteliers to eliminate indirect distribution channels should be rejected. On the contrary, as hotels have become more familiar with online distribution, the intermediaries have changed their role and the products they offer in the tourism market. Thus, very few hotels do not cooperate with online travel agents. Today, hotels are benefit from the co-operation with intermediaries under this in terms of improving effectiveness of e-marketing, most of all: eliminating information disparity between hotels and their customers, and establishing loyalty in the online market (Bielszko et al., 2015).

Information technologies have significantly affected the nature of competition in the hotel industry. As the result of the phenomenon of internetization, a couple of facts about the recent hotel competition should be emphasised. First, the ability to use online distribution channels has become a significant entry barrier in the hotel industry. Second, the hoteliers have started to implement and develop revenue management techniques, especially price differentiation. Third, better and more accessible information about hotels and their services have become a product in itself. Thus, the general gap between hotel customers’ expectations and their perceived experiences has been significantly reduced. Fourth, hoteliers have been able to establish better external communication, to create closer relationships with both customers and suppliers (Buhalıs, 1998). The adoption of e-commerce enables hoteliers to become independent from intermediaries, especially online travel agents. It must be noted that the studied enterprises were slow to employ direct online distribution channels (Phelan et al., 2011). However, it is argued that hotels that effectively and directly sell their services online are more open to new market opportunities, including benefits from the information technologies supporting e-commerce (Garcés et al., 2004).

T. Demirciftci et al. (2010), and G. Gazzoli et al. (2008) found that in the developed hotel market in the United States, distribution channels are not used as a common tool of price differentiation. Thus, there are no significant differences between prices of accommodation facilities offered in direct and indirect online distribution channels. Hotels achieved rate parity between investigated distribution channels. Moreover, companies are now much more familiar with various techniques like accurate demand forecasting, managing of cut-off date for booking, allocating rooms between different distribution channels, and announcing room availability for online travel agents (Ling et al., 2015; Thompson, Failmezger, 2005; Tso, Law, 2005). However, in the middle of 1990s, the market situation was completely different. Using various business practices, online travel agents were able to provide lower prices than the rates offered by the hotels on their own websites. As the result, irrespective of price parity or disparity, hotel guests looking for a better offer are used to employing search engines of various intermediaries and reading the content of plenty of hotels’ own websites (Gazzoli et al., 2008).

3. Determinants of the internetization

The choice of online booking channel is influenced by various factors. However, three driving determinants can be distinguished: website quality (e.g. the quality of information, quality of service, trust and privacy), payment methods, and customer relationship (e.g. previous experience, marketing, especially reward programmes (Liu, Zhang, 2014). Thus, only real-time booking feature at hotel’s own website allows the accommodation enterprises to compete with online travel agents. Direct online distribution connected with the quality and features of hotel website, such as a reservation form on the website, instant confirmation of the reservation, and secure payment (Phelan et al., 2011; Purnawan, 2011), reward programme, price policy (O’Connor, Murphy, 2004), and management of availability of hotel rooms through indirect channels (Ling et al., 2015), makes disintermediation possible for hoteliers.
It is argued that company’s size can positively affect the use of Internet as a distribution channel. However, it is not obvious that traditional direct or indirect distribution channels have to be replaced by online channels. Traditional channels can effectively coexist with new direct online ones (Al-Abdallah et al., 2014). The Internet has become the most significant communication channel between hoteliers and their end customers. Therefore, small and medium-sized hotel enterprises have been forced to become more and more familiar with online distribution, and to solve the challenges of online trust and e-loyalty (Dabas, Manaktola, 2007). Traditional direct distribution channels are perceived as more suitable for small independent hotel enterprises, rather than for large companies, affiliated in a global hotel chains. It is common that hotel websites are used to disseminate information about services offered by the hoteliers. However, more sophisticated features like real-time booking through the hotel’s own website seem to not be accessible for small hotel companies. Such features are perceived as too expensive and not suitable for the investigated hotel segment (Dabas, Manaktola, 2007).

Significant impact of previous selling experiences and distribution preferences of enterprises on the internetization of both direct and indirect distribution of hotel services must be emphasised. Based on Austrian, German, and Swiss market experience, several types of distribution channel portfolios were distinguished: multi-channel distributors, real-time distributors, electronic distributors, and traditional distributors (Stangl et al., 2016). It must be noted, that both multi-channel and real-time distributors refer to the most familiar e-commerce enterprises, commonly providing their services in cities, mostly in the biggest hotels (with the largest number of available rooms).

4. Methodology

The main goal of the paper is to describe the progress of internetization in direct distribution of hotel services in the metropolitan area of Łódź in the years 2009–2015. The distribution channel is a structure that enables hotel guests to gain information about services offered by the hotel, to make and confirm their booking, to pay for hotel services and, additionally, to bundle hotel products (Buhalis, 2004). Direct online bookings should be understood as real-time bookings via the hotels’ own websites. On the other hand, indirect online distribution channels include online travel agents (merchant, agency and opaque model), destination management organisations (local, regional and national), and global distribution systems (Beritelli, Schegg, 2016; Lee et al., 2013). Moreover, the assumption has been made that bookings made through reservation systems provided by hotel chains under franchise agreements should also be investigated as direct sales. It must be stressed that all information about the product published in these channels are directly managed by the hotel (Law, Wong, 2010). The other group, namely the traditional offline distribution channels, should include both direct means like walk-ins or phone reservations, as well as indirect ones like traditional “brick-and-mortar” travel agents (Ivanov et al., 2015), destination management organisations, or event and conference organisers (Stangl et al., 2016). Finally, S. Schmidt et al. (2008) discussed email and reservation forms as imperfect variants of a hotel reservation system. It must be noted that email, or even a reservation web form, do not allow the customer to buy a hotel room. Both email and web forms merely allow the customer to send the reservation request, comparably to traditional offline distribution channels. Thus, investigated tools should be considered as online-offline direct distribution channels. Finally, the great impact of social media on hotels’ online distribution should be underlined (Xiang, Law, 2013).

The problem of spatial distribution of accommodation facilities in the metropolitan area of Łódź, especially hotel enterprises, has already been examined. The significance of the core of metropolitan area (Łódź and surrounding cities like Konstantynów Łódzki, Pabianice, and Zgierz, see Figure 1) for the location of accommodation services must be emphasised (Napierała, Adamiak, 2013; Napierała, Leśniewska, 2015). Moreover, the central district of Łódź still remains the most significant area of concentration of hotel services in investigated metropolitan area. However, the central district of Łódź should be understood not as a small administrative district, within its present borders, but as an area of nineteenth-century urban infrastructure, within the railway perimeter (Matczak, 1998, 2004; Nalej, 2014).

Three levels of internetization of hotel enterprises were considered: low-web, medium-web, and high-web companies. Low-web hotels were identified as those not able to present their offers (including price lists) on their own websites, or even those lacking a website. The offline character of the distribution of rooms offered by low-web hotels must be emphasised. Medium-web hotels presented detailed information (including price lists) about their offer on their own websites. However, real-time booking feature was not available. Finally, high-web hotels supported real-time booking on their own websites.
The level of internetization and other hotel characteristics (name, star rank, geographical coordinates, and the number of available rooms) were completed manually by analysing the content of hotels’ own websites. The research sample consisted of all hotels operating in the metropolitan area of Łódź in particular years (2009, 2012, and 2015), as listed in the Central Index of Hotel Establishments (Central Index of Hotel Establishments, 2015). The data on hotel establishments in the metropolitan area of Łódź was collected in the summer: in August 2009, in June 2012, and in June 2015.

Two classifications of municipalities in the metropolitan area of Łódź in the years 2009, 2012, and 2015, were employed. The first classification is based on the number of hotels, and the second one – on the number of hotel rooms. Two variables representing internetization of hotel enterprises were investigated: the percentage of low-web hotels (or hotel rooms) in particular municipalities, and the percentage of high-web hotels (or hotel rooms) in examined municipalities. However, the negative impact of low-web hotels on the studied phenomena of internetization must be emphasised. Thus, the considered variable had to be transformed into a positive character. Let \( x_i \) be the percentage of low-web hotels (or hotel rooms) in \( i^{th} \) municipality. Thus, transformed \( x_i^T \) is equal to:

\[
x_i^T = x_{\text{max}} - x_i
\]

The studied area consisted of 28 municipalities. However, the core city of Łódź was divided into 5 districts. Moreover, in 2009 hotel companies were located only in 13 of 32 investigated municipalities, in 2012 – in 15, and in 2015 – in 19. Thus, agglomerative clustering was employed for 47 municipalities-periods. Therefore, as argued (Zeliaś et al. 1991), the comparison of the progress of the internetization phenomenon between the municipalities and between the years was available. The plot of Ward’s hierarchical cluster analysis of variables depicting internetization allowed the introduction of five classes of municipalities during investigated years: class 1 representing municipalities with very high level of internetization of selling hotel rooms, class 2 – high level, class 3 – neither high nor low level, class 4 – low level and class 5 – very low level.

5. Results

In this study the number and size of hotels operating in the metropolitan area of Łódź in the years 2009, 2012, and 2015 were verified. Regular and significant development of accommodation facilities must be underlined. In 2009, 31 hotels offered 2349 rooms in the investigated area, in 2012 – 2861 rooms in 45 hotels, and in 2015 – 3512 rooms in 57 establishments. It is worth mentioning, that most hotels operated in...
the core city of the metropolitan area: 19 in 2009, 24 in 2012, and 30 in 2015. However, the spatial distribution of hotel locations in the city of Łódź was not regular. Most establishments offered their services in the central district of the city: 9 in 2009, 11 in 2012, and 14 in 2015.

During the investigated period of 2009–2015, the level of internetization in the hotel industry in the metropolitan area of Łódź has significantly changed. In 2009, only 22.6% of hotels were classified as high-web. Thus, less than one fourth of the investigated enterprises were selling their rooms using their own distribution systems. In 2012, this value increased to 42.2%, and in 2015 – to 52.6%. It must be noted, that the significance of hotel size as a determinant of internetization of investigated industry decreased in the period 2009–2015. Average number of rooms in high-web hotels in 2009 was equal to 145.4, compared to 55.5 rooms in other enterprises. In 2012, the average size of a hotel familiar with real-time direct booking amounted to 95.4 rooms, while in 2015 it decreased to 90.9. The reason for this is the growing egalitarianism of the phenomenon of internetization. The luxurious (and, at the same time, the biggest) hotels were able to distribute their services using direct online channels from the beginning of the investigated period. However, as shown in Table 1, the number of high-web middle class and economy hotels increased, both in absolute and relative values. It must be noted, that in 2009, only 20% of middle class and economy hotels used real-time booking technology. In 2012, this value increased to 39.5%, and in 2015 reached 47.1%.

The impact of distance from the central point of studied area (crossroad of Piotrkowska, Mickiewicza and Piłsudskiego streets as A. Wolaniuk (2012) proved) on internetization of hotel industry was considered as shown in Figure 2. In 2009, the service of real-time direct booking was available only in the hotels located in the centre of Łódź. The number of rooms offered in high-web distribution channels significantly increased over time, both in the core of metropolitan area, and in the suburbs.

As mentioned before, hierarchical cluster analysis was employed to introduce five classes of municipalities-periods: class 1 representing municipalities with very high level of internetization of hotels’ distribution, class 2 – high level, class 3 – neither high nor low level, class 4 – low level and class 5 – very low level. It must be underlined, that the analysis was conducted twice: according to the number of hotels in particular municipalities-periods, and according to the number of hotel rooms offered in studied space-time units. Results of these analyses are presented in Figures 3 and 4. It is worth mentioning that the municipalities classified at the lowest level of internetization appeared only in 2009. In the same year, there were no units at the highest level of internetization. What is important is that new hotel investments established after 2009 were mostly able to introduce real-time booking technology as they started operating. Thus, new areas for expansion of hotel industry were usually classified at a higher than average level of internetization in particular year. The changes in internetization of the hotel industry in particular municipalities of the metropolitan

Tab. 1. Internetization of distribution channels of hotel rooms in Łódź metropolitan area in the years 2009–2015, as a function of a category of the hotels

<table>
<thead>
<tr>
<th>Level of the internetization of distribution channels</th>
<th>Luxury</th>
<th>Middle class</th>
<th>Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hotels</td>
<td>Number of hotel rooms</td>
<td>Number of hotels</td>
<td>Number of hotel rooms</td>
</tr>
<tr>
<td>Year 2009</td>
<td>1</td>
<td>278</td>
<td>3</td>
</tr>
<tr>
<td>Real-time booking</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Own website</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Offline</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Year 2012</td>
<td>2</td>
<td>420</td>
<td>9</td>
</tr>
<tr>
<td>Real-time booking</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Own website</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Offline</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Year 2015</td>
<td>6</td>
<td>962</td>
<td>14</td>
</tr>
<tr>
<td>Real-time booking</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Own website</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Offline</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Author’s own research.
area of Łódź, as well as in the number of hotel rooms offered in investigated units were shown at Figure 5. It must be underlined that the studied area was developed both in terms of Internet technology and property investment. In the years 2009–2015, there were no municipalities with decreasing overall number of hotel rooms or rooms offered in hotels’ own distribution systems. However, the most intensive development of hotel industry in the metropolitan area of Łódź was diagnosed in municipalities located along the central north-south axis in line with the main road no. 91 (former no. 1). Thus, it is expected that the latest investments in the road network (especially putting into operation the A1 motorway in July 2016 from the junction Łódź-North to Tuszyń) may significantly affect considered changes in the hotel industry in studied area.

6. Conclusions and discussion

The process of internetization of hotel distribution discussed in this paper completely changed the hotel industry in the metropolitan area of Łódź in the years 2009–2015. The more hotels started to operate on the market, the more establishments were

Fig. 2. Internetization of distribution channels of hotel rooms in Łódź metropolitan area in the years 2009–2015, as a function of a distance from the city centre of Łódź

Source: Author’s own research.
eager to enable advanced Internet tools for direct distribution. The expansion of the hotel industry in the investigated area was confirmed both in terms of property investment and internetization. Thus, hotel enterprises opened after 2009 were able to introduce more advanced selling tools than average. The accuracy of online information about hotels is a significant aspect of internetization. The consistency between the contents of Internet data sources (e.g. hotel websites, websites of intermediaries) with official statistics on hotel industry was examined in previous studies (Napierała, 2013). It must be noted, that as early as 2009, the Internet was found to be a reliable source of information in Poland, both for hotels’ guests, and for researchers investigating accommodation facilities.

It must be emphasised that progress in electronic distribution was found to be one of the most investigated phenomenon in tourism studies at the beginning of the 21st century (O’Connor, Murphy, 2004). The development path – from traditional, offline distribution channels, through informational websites, the real-time booking engine on hotel’s own website, to the computer-assisted distribution channel manager – is an exemplification of the shift towards technology-driven management in hotel industry (Inversini, Masiero, 2014), or simpler – the internetization of the hotel industry. Moreover, it confirms that the implementation of advanced online selling tools might stimulate hotel managers to employ social media. On the other hand, A. Inversini & L. Masiero (2014) did not confirm any impact of studied internetization and hoteliers’ willingness to cooperate with online travel agents.

There are a lot of advantages of online distribution for the hotel industry (Buhalis, Licata, 2002). Both for customers and for enterprises, convenience is the most significant positive result of using Internet as a selling tool. Internet enables customers to increase their access to the information about

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**Fig. 3.** Typology of internetization in municipalities in metropolitan area of Łódź in the years 2009–2015, based on the number of hotels offered by online and traditional distribution channels

Source: Author’s own research.
the offered accommodation facilities. On the other hand, Internet makes the enterprises able to effectively penetrate customer databases. Moreover, Internet allows hotel companies to reduce distribution costs, and to increase customer interaction. As the result of these advantages, hotels using online distribution are able to increase their market shares, improve their customer services and their image (Garcés et al., 2004). However, some disadvantages of Internet distribution have to be emphasised. The most important is the lack of face-to-face contact with customers. This makes the companies unable to employ up-selling or cross-selling techniques. But, as D. Buhais & M.C. Licata (2002) argued, such disadvantages seem not to be as significant for the hotel industry as the perceived benefits. Particular difficulties of online distribution must be mentioned as well. Distrust in electronic payment methods, broadband issues and consumer habits are the most significant obstacles to online direct distribution in the hotel industry (Garcés et al., 2004).

The development of online distribution channels completely changed the traditional relations between information and distribution in the hotel industry (Garcés et al., 2004). Today, easy access to information about hotel services is a significant prerequisite for the effectiveness of online distribution. On the other hand, the structure of distribution channels includes the process of informing the customer about hotel products. As D. Buhais (1998) argued, hotel customers became very sophisticated, knowledgeable and familiar with information and communication technologies. It resulted in emerging requirements of the hotel enterprises for web-based selling tools. Referring to the typology of innovations proposed by D. Szutowski & M.A. Bednarska (2014), the investigated process of development of direct online distribution channels should
be considered as an excellent exemplification of innovations in the hotel industry.

References


