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Evaluation of Selected Internet Portals for Booking Accommodation By Polish Consumers: A Survey Study*

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Abstract

The study aimed to identify which factors are essential when booking accommodation using online accommodation booking portals, as well as to examine how respondents evaluate the selected portals in terms of these factors. The survey was conducted in October 2022, with a group of 119 respondents. The assessment of individual portals was carried out using the Statistica 13.3 program, specifically the PROFIT analysis. The study the Pearson's chi-squared test was used. For pairs of significantly dependent variables the strength of the relationship was also calculated using the V Cramer's test and its direction using the D'Sommer's test. The results show that Booking.com is the best-perceived portal for booking accommodation according to respondents. All the discussed features were rated the highest by respondents. The other three portals mentioned by respondents that they use significantly differed from the Booking.com portal.

Keywords: travel services, online accommodation booking portals, e-commerce, PROFT multidimensional analysis.

Introduction

In today's world, more and more people are using the internet to make reservations for accommodation. As a result, online portals for booking accommodations have become very popular and important for the tourism industry. However, not all portals are equal in value and quality of services provided, which can lead to frustration and loss of time for customers.

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In recent years, the tourism industry has seen a significant increase in the popularity of online accommodation booking portals. The literature contains many studies on this topic, focusing on various aspects of the platforms' activities, such as their impact on customer behavior, the quality of services provided, and market competitiveness.

One of the most important studies on this topic is the "Global Online Accommodation Booking Market 2022" report published by the research firm MarketResearch.biz. This report analyzes the global market of online accommodation booking portals, taking into account factors such as popularity, revenue, market trends, and future forecasts. As Hoffman et al. (1999) suggest, the quality of the portal website for accommodation booking is an important element that builds trust, as their research shows that the analyzed network increased the perceived control of online service providers, directly affecting customers' perceived safety and confidentiality. Other interesting studies on online accommodation booking portals are presented by Phocuswright Research (2018), Arvidsson (2014), Liang & Pavlou (2015), Sparks & Browning (2011), and El-Said (2020).

Janiak and Kozłowska-Adamczak (2018) indicate that booking portals are currently not only a promotional element of accommodation facilities but also an important e-marketing tool for accommodation service entrepreneurs and tourists. Thanks to portals, companies offering accommodation services can expand the geographical reach of their business and utilize modern distribution channels by selling their services online. The service also provides companies with the opportunity to reach new market segments, i.e. customers who gladly use Internet tips just before embarking on a tourist trip. For tourists, the portal facilitates the process of searching for accommodation and shortens the time needed to find accommodation. The portal allows for quick finding and booking of the dreamed accommodation by entering specific requirements in the portal (e.g. location, date, and additional features). Offers prepared by various entities, most closely matching the criteria specified by the client, appear on the portal.

According to Ratnasingam (2012), customers' intentions regarding online hotel booking involve three main aspects. The first concerns the customer's assumption that the information provided on internet portals for booking accommodation is reliable and accurate. The second is the confidentiality of the customer's data, particularly credit card information. Customers pay attention primarily to issues related to proper security measures on the reservation website. The last third aspect is finalizing the reservation according to the options selected by them. Factors relevant to booking accommodations using internet portals were also studied by Liu & Zhang (2014). Based on a literature review of internet portals, they determined that the quality of the service, including its functionality, usefulness, safety, and privacy, has a positive impact on hotel reservation decisions. According to the authors, this shows that users focus more on the interface and approach to using the website than on the information provided by the portal.

In this article, an assessment was made of selected internet portals for booking accommodations, taking into account criteria such as ease of use of the portal, availability of accommodation offers, quality of customer service, and user reviews. Based on these criteria, internet portals were compared to help customers choose the best service for booking accommodations.

Methodology

The study was aimed at people who use online portals for booking accommodation services. The research tool, in the form of a survey questionnaire, was posted on social media platforms mainly related to tourism. The survey was conducted in October 2022, with a group of 119 respondents. The selection of participants was deliberate, as the authors were interested in the opinions of people who use online portals for booking accommodation services. 75% of the participants were women and 25% were men. The age range of the participants was as follows: below 26 years - 46.2%, 26-37 years - 16%, 38-49 years - 25.2%, and above 49 years - 12.6%. The majority of the participants rated their financial situation as good (51.2%) and average (35.3%), while 11% of the participants indicated that their financial situation was very good and 2.5% rated it as poor.

In order to investigate the significance of the relationships between the number of indications and individual responses and the metric characteristics of the respondents, the Pearson's chi-squared test was used. For pairs of significantly dependent variables, with a p-value below 0.05, the strength of the relationship was also calculated using the V Cramer's test and its direction using the D'Sommer's test. Meanwhile, the assessment of individual portals was carried out using the Statistica 13.3 program, specifically the PROFIT analysis. The PROFIT analysis is a multivariate analysis and is carried out in two stages (Kauf & Tłuczak, 2017). Firstly, dimensional scaling was performed, with the aim of graphically presenting the similarity structure using a scatter plot of objects and the results of the calculated correlations between variables. The second stage involved creating regression models by assigning appropriate values to each object on the map. The main goal of the analysis was to determine the directions in which the objects are located on the plane, in terms of the intensity of a particular studied feature (Jabkowski, 2010). Linear regression analysis will estimate how the studied objects are distributed on the plane with respect to the degree of intensity of each of the describing features. The number of estimations carried out in this stage is equal to the number of features of the studied objects. The result will be the ability to select variables and present the results on a plot called a biplot (Błażejczyk-Majka & Boczar, 2016). The multivariate scaling of the evaluation of portals for booking accommodation

services was assessed in terms of four factors: the number of interesting offers, ease of website use, website transparency, and their security.

Overview of the most visited portals for booking accommodation

Accommodation facilities are one of the fundamental and most important elements of tourism infrastructure. The goal of lodging services is to comprehensively meet various consumer needs. Depending on the type and standard of the facility, various types of services are offered (Cieślik and in., 2013). A lodging facility is a place that offers travelers regular or sporadic accommodation in rooms or other spaces. The number of rooms offered must meet a certain minimum, and all spaces are subject to joint management on commercial terms (https://stat.gov.pl/metainformacje...). In Poland, there are currently various categories of lodging facilities, including hotels, boutique hotels, motels, hostels, guesthouses, agritourism, bungalows, apartments, rental homes, campgrounds, bed and breakfasts, vacation homes, camping sites, shelters, resorts, etc.

Currently, one of the more popular ways of searching for and booking lodging services around the world is through the internet. The rapid development of e-commerce has changed the way potential consumers search for information. Online Travel Agencies (OTA) have taken advantage of this, filtering available offers as intermediaries and significantly facilitating the choice of lodging. Unfortunately, facilities that are not available on OTA platforms often become practically invisible to consumers who increasingly opt for convenient ways of obtaining information about lodging offers. On the other hand, those available on OTA platforms become highly dependent on them, often losing control over their pricing strategy and the amount of commission imposed by the intermediary (Yin, Goh & Law, 2019).

There is a wide range of available portals for booking accommodation services on the market. One of the most popular in the world is Booking.com, which currently serves billions of customers in over 40 different languages. The platform offers a very broad range of options, including full-sized hotels and private apartments. The search and filtering functions make it easy for customers to find the specific accommodation they are interested in. A significant factor in consumer accommodation choices is the available ranking, where other users rate their stay at a particular location (Mavridis and in. 2020). Since 2008, Airbnb.com has also been an actively developing accommodation platform. The site offers 6 million properties in over 191 countries, where people share their space with travelers who want to experience local cultures beyond sightseeing (Chayer & Lunsford, 2018). Another accommodation search engine is Kayak.com, which not only compares accommodation services but also allows users to search for flights, car rentals, and offers vacation packages. The portal allows for comprehensive travel planning and is also an ideal source of inspiration. The site achieved success through the comprehensive analysis of data such as flight and accommodation prices, enabling price forecasting in subsequent years (2015). Trivago.com is another browser created in 2005. The main concept of this portal was to change the way customers search and compare accommodation properties. By 2019, the portal was available in 31 languages and served over 5 million accommodation properties in 190 countries (https://company.trivago.com). Among Polish tourists, Nocowanie.pl is a wellknown portal for booking accommodation. The portal was founded in 2008 and currently offers over 150,000 accommodation offers in more than 10,000 cities in Poland. One of the main goals of the portal is to allow customers to easily and quickly search for accommodation offers in different regions of Poland. An important element of the Nocowanie.pl portal is its extensive database, which contains information about various types of accommodation properties, such as hotels, apartments, guesthouses, private rooms, or holiday cottages. Additionally, the service offers the option to book directly on the site, allowing for quick and convenient reservation of the selected offer. The Nocowanie.pl portal is also known for its tools and functionalities that facilitate the use of the site (https://www.nocowanie.pl). Another wellknown portal in Poland is OLX.pl. The portal has been operating since 2006 and is one of the largest services of its kind in Poland. One of the main goals of the OLX.pl portal is to enable users to easily and quickly publish and browse ads. The service offers a wide range of categories in which ads can be placed, such as automotive, employment, home and garden, as well as various types of services and entertainment. The service allows communication through private messages, which allows for safe and convenient transactions (https://pl.wikipedia.org/wiki/OLX).

In order to check the size of significance of individual internet portals, the number of views of the discussed above portals for searching accommodation worldwide was examined. Four portals were taken for analysis, i.e., Booking.com, Airbnb.com, Kayak.com and Trivago.com. The analysis covered a period of three months, i.e., August - October 2022 - the authors wanted to see how much interest there was in accommodation during the summer season (Fig. 1). Booking.com enjoys the highest popularity in the world, significantly ahead of its competitors, with a number of views of as much as 1.727 billion. In second place, with a much smaller number of views - 296.7 million - was Airbnb.com, followed by kayak.com - 127.9 million and trivago.com - 34.3 million.

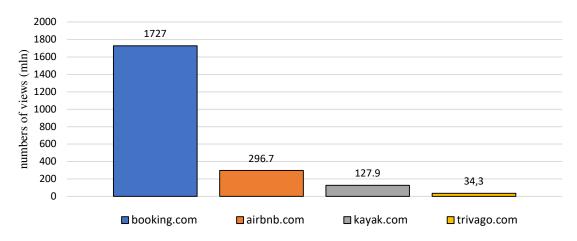


Fig. 1. Number of views of the most popular accommodation portals by users around the world, from August to October 2022 (in millions); Source: own study based on the analysis of data from the website: https://www.similarweb.com/ (Access: 31.03.2023)

The average time spent on each platform is not significantly correlated with the number of page views (Fig. 2). Despite the difference in the number of page views between booking.com and Airbnb.com, the typical time spent on both platforms differs slightly. However, consumers spent almost half the time on kayak.com and trivago.com compared to the other two platforms.

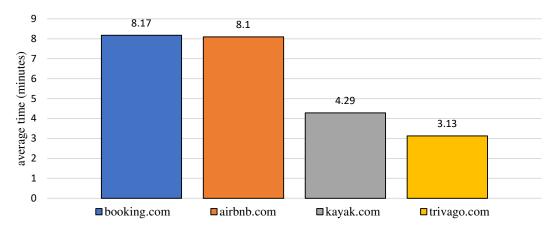


Fig. 2. Average monthly time spent by users on individual platforms for booking accommodations (average time in minutes); Source: own study based on the analysis of data from the website: https://www.similarweb.com/, (Access: 31.03.2023)

Another analyzed factor was the average number of listings viewed per person on each platform per month (fig. 3). The highest number of listings was viewed by users on Airbnb.com - an average of about 19. The most popular platform, booking.com, collected over half as many listings viewed as Airbnb.com. This may be due to better filtering of listings, so that visitors to the platform do not have to browse as many listings to find the one that meets their requirements.

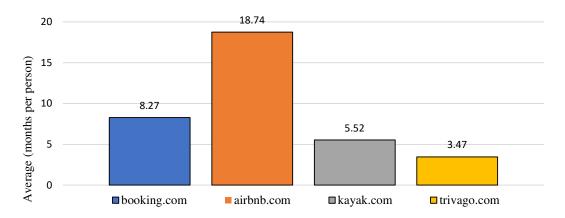


Fig. 3. The average monthly number of displayed offers of accommodations on individual platforms for booking accommodations worldwide (average from three months per person); Source: own study based on the analysis of data from the website: https://www.similarweb.com/, (Access: 31.03.2023)

Users of Trivago.com, Booking.com, and Kayak.com more frequently used mobile versions of the service than websites (Fig. 4). This may be due to a well-designed and intuitive application. Another reason may be additional discounts offered by services to people ordering accommodation through mobile applications.

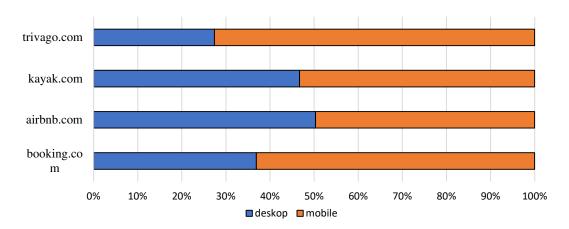


Fig. 4. Share of users using mobile apps and websites of accommodation booking portals worldwide in a month (%), Source: own study based on the analysis of data from the website: https://www.similarweb.com/, (Access: 31.03.2023)

All things considered, analyzing the examples it can be concluded that Booking.com is the most popular platform, significantly ahead of its competitors in terms of website visits and time spent browsing accommodation offers. On the other hand, on Airbnb.com, users viewed more offers on average than on other platforms. Most consumers prefer to use these portals through mobile applications.

Results

According to the presented research, the internet is the most trusted source of information about services in accommodation facilities (Fig. 5). Regardless of age or gender, it is the main tool that respondents use when choosing a facility. The frequent use of the internet by respondents when searching for offers has a positive impact on the activity of OTA services, which collect and sort offers of accommodation services according to the needs of specific customers.

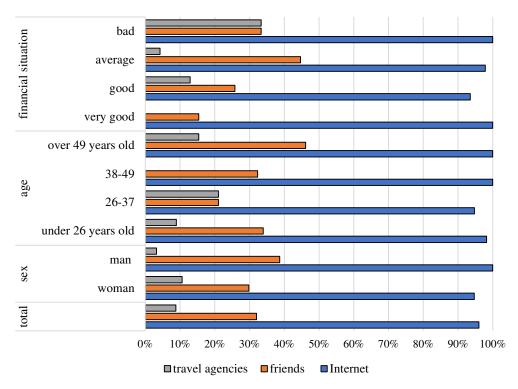


Fig. 5. Methods of obtaining information about accommodation facilities by respondents (%; multiple answers possible), Source: own study based on survey research

According to the obtained data, among various platforms for booking accommodation services (Fig. 6), respondents most frequently use Booking.com - a staggering 86% of the respondents. This demonstrates that this platform holds a dominant position in the market, and their marketing efforts are effective. In the second place, there are websites of specific accommodation establishments, utilized by 30% of the respondents. The third position is occupied by Airbnb.com, with 22% of the respondents using this platform. The remaining platforms are used by a small number of respondents. The least popular platform was Olx.pl, which may be attributed to the respondents' lack of trust influenced by the significant number of scams recently reported on this portal.

In the case of the most popular websites for booking accommodations, Pearson's X^2 coefficient was also calculated. Statistical dependencies occurred for the answers related to nocowanie.pl and the age of the respondents (p = 0.003), as well as for Google Maps and the gender of the respondents (p = 0.012). The older the person, the more likely they were to choose nocowanie.pl as the place to order accommodations, but the Cramer's V coefficient at the level of 0.026 indicates that this relationship was marginal. Using Google Maps, men ordered accommodations more frequently than women, as indicated by the positive direction of the d'Sommer's coefficient (0.2889), but the strength of this relationship was also weak (Vc = 0.22).

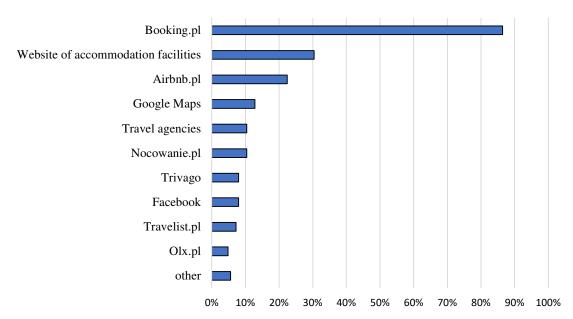


Fig. 6. The most frequently chosen websites for booking accommodation services by respondents (%, multiple answers possible), Source: own study based on survey research

According to the obtained survey data, Poles use various portals when booking accommodations online. The study included Booking.com, Trivago, Nocowanie.pl, and OLX.pl, which were evaluated based on the number of interesting offers, the transparency of the website, the ease of its use, and the perceived safety during the ordering of services. The preferences for each characteristic were expressed on a Stapel ordinal scale from -3 to 3, where -3 represents the worst rating and 3 represents the best rating. The averaged ratings within each group of characteristics are presented in Table 1. The higher the numerical value of the rating assigned to a given factor, the better the respondent evaluated it.

Table 1: Average values of ratings assigned to individual portals for booking accommodation

Platform	Average	Standard deviation
Booking.com	2.39050	0.06390
Olx.pl	0.58022	0.33096
Trivago	1.18565	0.94176
Nocowanie.pl	0.13868	0.16640

Source: own study using the Statistica program based on survey research

On the basis of the correlation matrix, multidimensional scaling was performed using the STATISTICA package (Table 2). The result of scaling is a matrix of correlations between the examined objects.

Table 2: Correlation matrix between variables

	Booking.com	Olx.pl	Trivago	Nocowanie.pl
Booking.com	0.000000	2.135646	1.786058	1.866915
Olx.pl	2.135646	0.000000	1.639894	1.417225
Trivago	1.786058	1.639894	0.000000	0.256638
Nocowanie.pl	1.866915	1.417225	0.256638	0.000000

Source: own study using the Statistica program based on survey research

In this way, a two-dimensional perceptual map of the examined features was obtained (Fig. 7), with the value of the matching function STRESS = 0.0000. The results of the multidimensional scaling procedure can therefore be considered reliable.

The multidimensional scaling allowed for subjectively grouping the studied portals. The results of the multidimensional scaling, in the form of the coordinates of points on the perceptual map and the results of the Euclidean distance matrix, were used to determine four multiple regression models. The charts only show the characteristics whose unidimensional regression results for each characteristic showed a fit level of at least R2 > 0.75.

Variables were not standardized before analysis because all the characteristics included in the study were of the same dimension.

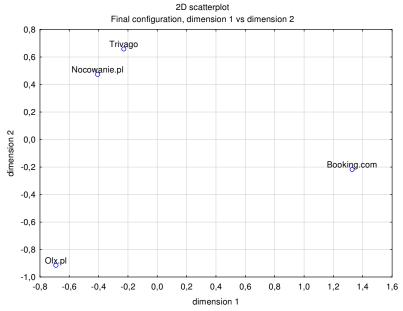


Fig. 7. The result of multidimensional scaling, taking into account the tested portals, Source: own study based on survey research

As a result of using multidimensional scaling with the use of Euclidean distance, four characteristics describing four portals for booking accommodation were reduced to two dimensions (Table 3). Regression analyzes were performed on the basis of the above data. The results of the regression analysis for the discussed dimensions are presented in Table 4.

Table 3: Regression worksheet

	Attractiveness of offers	Website transparency	Website ease of use	Security when using portals	DIM. 1	DIM. 2
Booking.com	2.30	2.44	2.43	2.39	1.33	-0.22
Olx.pl	0.20	0.47	0.98	0.68	-0.69	-0.91
Trivago	1.09	1.07	1.37	1.21	-0.23	0.66
Nocowanie.pl	0.91	0.77	1.17	0.91	-0.41	0.47

Source: own study using the Statistica program based on survey research

Table 4: Calculated regressions of the dependent variable for the discussed features

Feature		b*	Standard error of b*	b	Standard error of b	t(1)	p
	Expr.free			1.125	0.015	77.209	0.008
attractiveness of offers1	DIM. 1	0.968	0.019	0.934	0.019	50.257	0.013
	DIM. 2	0.251	0.019	0.306	0.023	13.033	0.050
website transparency ²	Expr.free			1.186	0.040	29.376	0.022
	DIM. 1	0.997	0,054	0.960	0.052	18.630	0.034
	DIM. 2	0.060	0.054	0.073	0.065	1.121	0.464
website ease of use ³	Expr.free			1.488	0.025	59.445	0.011
	DIM. 1	0.999	0.044	0.717	0.032	22.445	0.028

 $^{^{1}}$ R= 0,9998; R^2= 0.9996; Popraw. R2 = 0.9989; F(2,1) = 1347.8; p < 0.019; Błąd std. estymacji: 0,029

 $^{^{2}}$ R= 0.9986; R^2= 0.9971; Popraw. R2 = 0.9914; F(2,1) = 174.17; p < 0.053; Błąd std. estymacji: 0.081

 $^{^{3}}$ R= 0.9990; R^2= 0.9980; Popraw. R2 = 0.9941; F(2,1) = 252.05; p < 0.045; Błąd std. estymacji: 0.050

	DIM. 2	0.025	0.044	0.023	0.040	0.573	0.669
security when using portals ⁴	Expr.free			1.300	0.048	26.855	0.024
	DIM. 1	0.996	0.074	0.835	0.062	13.528	0.047
	DIM. 2	0.052	0.074	0.055	0.078	0.706	0.609

Source: own study using the Statistica program based on survey research

As a result, it turned out to be possible to present it in the form of a two-dimensional map of perception (Fig. 8).

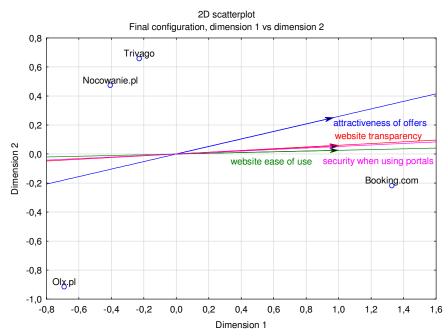


Fig. 8. Biplot taking into account the result of multidimensional scaling of accommodation portals based on the examined attributes, Source: own study using the Statistica program based on survey research

After performing regression analyzes of the analyzed variables using the PROFIT analysis algorithm, the direction coefficients were applied, which determine the sense and direction of the vector corresponding to each of the features selected to describe the dimensions (Table 5).

Table 5: Axis coordinates

	attractiveness of offers	website transparency	website ease of use	security when using portals
DIM. 1	0.9678	0.9968	0.9987	0.9959
DIM. 2	0.2510	0.0600	0.0255	0.0520

Source: own study using the Statistica program based on survey research

The result of the PROFIT analysis with the marked coordinates of individual features allows for a very intuitive interpretation of the similarities and differences between the analyzed portals. The chart shows that in the case of the analyzed portals, Booking.com received the best rating. In the case of this portal, all analyzed dimensions were rated the highest by the respondents. The second place went to the Trivago portal, the third to nocowanie.pl. while on the last OIX.

Conclusions

Internet portals for booking accommodation are playing an increasingly important role in the tourism industry. Through them, customers can easily and conveniently browse offers from all over the world, compare prices, and make reservations within a few minutes. Considerations regarding portals for booking accommodation indicate that this form of leisure booking is gaining in importance, and this trend will intensify in the coming years as studies show that the Internet is the most popular source for searching for accommodation. More than 95% of respondents use the Internet media during their leisure bookings.

 $^{^{4}}$ R= 0.9973; R^2= 0.9946; Popraw. R2 = 0.9837; F(2,1) = 91.746; p < 0.074; Błąd std. estymacji: 0.097

Among the OTA services gathered from surveys and analysis from similarweb.com, it appears that Booking.com is the most popular website. This may be due to the brand's well-developed marketing.

One of the main advantages for customers is the number of interesting offers. Individual portals differ significantly in the number of accommodation proposals offered on them. Some of them offer their customers a very diverse range of accommodation options, from cheap hostels to luxury hotels, allowing customers to find an offer tailored to their needs and budget. Information on internet portals for booking accommodations shows that they have different reach and different offers. Some specialize exclusively in offering accommodations, others expand their offer to additional services such as selling airline tickets or mediating in car rental. Still others focus solely on servicing accommodation services in a particular country. Another important factor that attracts customers to portals is the transparency and ease of use of the portal. Customers expect an intuitive interface that allows users to quickly find interesting offers, compare prices, view photos, and read reviews from other customers. Another important element is the perceived safety felt by the respondents during the ordering of services. These portals should be well secured, giving customers the assurance that their personal data and payments will be protected from unauthorized access.

The analysis conducted for the purpose of this work by PROFIT showed that out of the analyzed portals, Booking.com received the highest rating among respondents in terms of all analyzed attributes, followed by trivago.com in second place, Nocowanie.pl in third place, and Olx.pl last. However, it should be added that all three portals significantly differ from Booking.com in terms of these dimensions, which is considered by respondents as the best in all discussed attributes. Certainly, other discussed platforms should pay particular attention to the evaluated aspects and improve them so that customers who expect interesting and diverse offers and safety while using portals want to use their services.

The analysis presented in this article primarily concerns the issue of evaluating portals from the consumer's perspective, but for portals offering accommodation services, entities offering accommodation services are also important. Certainly, it would be important for the analysis to examine these portals in terms of their attractiveness to entities offering accommodation. Cooperation between them is certainly important for both sides.

Portals for booking accommodation are of great importance to entities offering accommodation because they allow them to reach a broad group of customers, both domestic and foreign. Thanks to them, entities offering accommodation can easily and conveniently promote their services to a wide audience.

References

- Arvidsson N. (2014) Airbnb and the Unstoppable Rise of the Share Economy. *Technology Innovation Management Review*, 4(8), 12-17. https://timreview.ca/article/791
- Błażejczyk-Majka L., Boczar P. (2016) Zastosowanie metod wielowymiarowych w charakterystyce preferencji konsumentów. Metody Ilościowe w Badaniach Ekonomicznych, 17(3), 18–32
- Chayer T., Lunsford R. (2018) Revolutioning the Sharinf Economy: How Airbnb Changed the Travel Industry, 6th International Conference on Innovation and Entrepreneurship,
- Cieslik I., Cieslik E., Siembida A., Tomczyk M. (2013) Ocena jakości świadczonych usług w obiektach noclegowych Górnego Śląska, Journal of Agribusiness and Rural Development, 4(30), 21-36
- El-Said O.A. (2020) Impact of online reviews on hotel booking intention: The moderating role of brand image, star category, and price. *Tourism Management Perspectives*, 33, 100604,10.1016/j.tmp.2019.100604
- Global Online Accommodation Booking Market (2022) [Online], https://www.researchandmarkets.com/reports/5322146/ global-online-accommodation-booking-market-2022#product--related-products (24.04.2023)
- Han Y., Chang Y., Wong S. F., Chong H. Q., Lee S. (2015) Uncertainty mitigation in online ticketing purchase: The moderating effect of analytics information, Regional Conference of the International Telecommunications Society (ITS): "The Intelligent World: Realizing Hopes, Overcoming Challenges", Los Angeles, USA, 25th-28th October, International Telecommunications Society (ITS), Calgary, 2-3
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999) Building consumer trust online. Communications of the ACM, 42(4), 80–85, https://doi.org/10.1145/299157.299175
- https://company.trivago.com/ Dostęp: 03.04.2023
- https://pl.wikipedia.org/wiki/OLX/ Dostęp: 8.05.2023
- https://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/245,pojecie.html/ Dostęp: 25.04.2023
- https://www.nocowanie.pl/rodo-w-obiektach-noclegowych.html/ Dostęp: 8.05.2023
- https://www.similarweb.com/ Dostęp: (31.03.2023)
- https://www.similarweb.com/ Dostep: (31.03.2023)
- Jabkowski P. (2010) O korzyściach wynikających z zastosowania analizy PROFIT, [w:] Praktyczna analiza danych w marketingu i badaniach rynku, StatSoft Polska, Kraków, 89-95

- Janiak M., Kozłowska-Adamczak M. (2018) Waloryzacja najpopularniejszych portali rezerwacyjnych z punktu widzenia użytkowości konsumenckiej i naukowej, *Turyzm*, 28(2), 101-109
- Kauf S., Tłuczak A. (2017) Analiza PROFIT i jej wykorzystanie w budowie mapy preferencji parametrów logistycznej obsługi klienta, Ekonomika i Organizacja Logistyki, 2(1), 81-90
- Liang, C. & Pavlou, P.A. (2015) The Impact of Online Reviews on Hotel Bookings and Perceived Trustworthiness. *Journal of Travel Research*, 54(6), 759-769, https://journals.sagepub.com/doi/abs/10.1177/0047287514531593
- Liu, J. N. K. & Zhang, E.Y. (2014) An investigation of factors affecting customer selection of online hotel booking channels. *International Journal of Hospitality Management*, 39, 71–83. https://doi.org/10.1016/j.ijhm.2014.01.011
- Mavridis T., Hausl S., Mende A., Pagano R. (2020) Beyond algorithms: Ranking at scale at Booking.com, [in:] Proceedings of the 4th Workshop on Recommendation in Complex Scenarios CEUR-WS, 1-7
- Nguyen H.Q.T., Le Y.N., Lam L.G., Le T.Y.N, Nguyen T.D., Pham T.K.Y., Nguyen T.L. (2022) Factors Affecting Online Reservation Decisions through Hotel Websites: An Empirical Study from Can The City, Vietnam. The Journal of Asian Finance, Economics and Business, 9(5), 0519–0529, doi:10.13106/jafeb.2022.vol9.no5.0519
- Phocuswright Inc. (2018) The Future of Online Travel [Raport]. Phocuswright Research. [Online], https://www.phocuswright.com/Travel-Research/Technology-Innovation/The-Future-of-Online-Travel-2018
- Ratnasingam, P. (2012) Customer's trust indicators in the online hotel booking decision. International Journal of Business, Humanities and Technology, 2(2), 192-198
- Sparks B.A. & Browning V. (2011) The impact of online reviews on hotel booking intentions and perception of trust. Tourism Management, 32(6), 1310-1323
- Yin C.H., Goh E., Law R. (2019) Developing inter-organizational relationships with online travel agencies (OTAs) and the hotel industry, Journal of Travel & Tourism Marketing, 36(4), 428-442