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## Redesigning User Experience: The Role of Design Thinking in Global Digital Tourism Services

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### **Abstract:**

**Purpose:** This paper examines how Design Thinking (DT) supports innovation in digital booking platforms, focusing on Airbnb and Booking.com. The aim is to evaluate how DT-based features such as rating systems, recommendations, and direct host interaction influence user trust, satisfaction, and decision-making.

**Design/methodology/approach:** A quantitative survey of 111 active users was conducted using purposive sampling to capture real experiences with both platforms. Respondents assessed usability, transparency, and safety, allowing for an integrated analysis of user perceptions.

**Findings:** The study shows that Booking.com is perceived as more intuitive, transparent, and reliable than Airbnb. Features like rating systems, filters, and loyalty programs strongly enhance satisfaction, while services such as Airbnb Experiences remain underused and poorly communicated. The study is limited to two platforms and self-reported data; future research should broaden the sample, include qualitative insights, and track long-term user behavior.

**Practical recommendations:** Results stress the need for user-centered innovation, clear communication of features, and iterative design to improve customer value and loyalty.

**Originality/value:** The paper offers one of the first empirical analyses of DT in global digital tourism, contributing insights for both scholars and practitioners.

**Keywords:** Design thinking, digital platforms, innovation, Airbnb, Booking.com.

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## 1. Introduction

In today's global economy, driven by rapid technological development and rising consumer expectations, innovation has become a strategic imperative for organizations across industries. Traditional problem-solving models are increasingly unable to provide the agility, user orientation, and interdisciplinary collaboration required to address complex market challenges.

Against this backdrop, Design Thinking (DT) has emerged as a human-centered and iterative methodology that combines creativity with analytical reasoning to deliver practical, desirable, and viable solutions (Arabasz and Sińczuch, 2016; Brown and Katz, 2011). While initially rooted in product design, DT has expanded its relevance far beyond this domain, finding applications in business management, healthcare, education, and public services, thereby positioning itself as a global framework for innovation (Hałub, 2015; Lockwood, 2010).

The international scholarship highlights DT's distinctive contribution to organizational transformation. Its iterative nature, driven by prototyping and continuous feedback, reduces the risk of costly errors and supports early detection of design flaws (Skala, 2019).

Moreover, DT has been recognized as an enabler of digital transformation, facilitating the integration of emerging technologies such as artificial intelligence into user-oriented solutions (Boroń and Kosiński, 2021). Importantly, empathy-based exploration and cross-disciplinary collaboration make DT particularly effective in capturing diverse perspectives and aligning innovation with real-world needs (Kelley and Kelley, 2013; Sobocińska, 2020).

Despite its growing popularity, research on DT remains fragmented, with limited empirical studies examining its effectiveness in digital platforms and service-based industries. Most existing contributions focus on conceptual frameworks or general applications, while little systematic evidence addresses its impact on consumer decision-making and user experience in the digital tourism sector.

This gap is particularly relevant in the case of global booking platforms such as Airbnb and Booking.com, which have incorporated elements of DT into their design processes but whose effectiveness has not yet been extensively evaluated (Wolińska-Skuza and Skuza, 2021). The present article aims to address this research gap by analyzing how DT-driven innovations influence user satisfaction, trust, and decision-making in digital booking platforms (Adamopoulos and Thalassinou, 2020).

It explores the extent to which DT-based functionalities such as rating systems, direct host interaction, or personalized recommendations shape user experience and loyalty, while also assessing how users perceive the effectiveness of these innovations in improving transparency, usability, and security.

Furthermore, the study examines potential differences between Airbnb and Booking.com in terms of DT-driven adoption and user reception.

By taking this approach, the article contributes to the international discourse on the practical implications of Design Thinking in digital service innovation and provides insights relevant both for academics and for practitioners working at the intersection of design, technology, and consumer behavior.

The remainder of this article is structured as follows: the next section reviews the theoretical foundations of Design Thinking and its role in fostering innovation across industries, followed by a detailed presentation of the research methodology and the case selection. The subsequent section reports the empirical findings of the survey, while the discussion interprets these results in light of existing literature. Finally, the conclusion highlights the main contributions of the study, outlines practical implications, and suggests directions for future research.

## **2. Literature Review**

In the contemporary world of rapid technological progress and shifting consumer expectations, organizations face increasing pressure to create innovative solutions that genuinely address user needs. Traditional problem-solving approaches often fail to deliver the required flexibility, speed, or user focus. Against this backdrop, Design Thinking (DT) has emerged as a human-centered, iterative, and interdisciplinary methodology for innovation that bridges creativity and analytical thinking to solve complex problems (Arabasz and Sińczuch, 2016).

Design Thinking originated in the world of product design, but its applications have expanded significantly across business, education, healthcare, and public services. Tim Brown, the former CEO of IDEO - a globally renowned design consultancy - has played a critical role in developing and promoting the methodology. He defines Design Thinking as a discipline that empowers individuals outside the design profession to use designer-like methods to tackle business and societal challenges (Brown and Katz, 2011).

From a theoretical perspective, Design Thinking integrates empathy, ideation, and experimentation in a structured yet flexible process. As noted by Hałub (2015), it combines knowledge from various scientific disciplines to enable innovation in diverse teams, improve internal processes, and enhance the customer experience. Its user-centric approach supports the development of practical, desirable, and viable solutions, making it a strategic tool for enterprises striving to align with changing market dynamics.

The methodology's iterative nature, characterized by prototyping and continuous user feedback, enables the early detection of flaws and reduces the risk of costly errors—particularly in the early stages of business development. This has made Design Thinking particularly relevant for startups and technology-driven enterprises (Skala, 2019). Furthermore, Boroń and Kosiński (2021) emphasize the role of DT in supporting digital transformation, arguing that it facilitates the integration of emerging technologies, such as artificial intelligence, into organizational processes while maintaining a strong focus on end-user needs.

Academic contributions also underline the systemic role of Design Thinking in fostering organizational innovation. Nowicki (2018) emphasizes DT as a problem-solving framework that promotes interdisciplinary collaboration, continuous learning, and stakeholder engagement. Similarly, Lockwood (2010) highlights that the approach allows not only the design of new offerings but also the rethinking of existing customer experiences and brand value propositions.

At the heart of Design Thinking lies the integration of analytical reasoning with creative problem-solving. This hybrid approach is designed to address complex, ill-defined challenges by focusing on human needs, empathy, and experimentation (Zielińska, 2013). The central principle is human centeredness, which emphasizes understanding users' emotions, motivations, and limitations through qualitative methods such as interviews, observations, and experience mapping (Cyrek, 2024).

Empathy-driven exploration encourages designers to see the world from the users' perspective, often by directly involving them in the design process. This participatory mindset leads to iterative prototyping and continuous refinement of solutions - not aiming for perfection at first, but for evolution over time based on real-world feedback (Arabasz and Sińczuch, 2016). As Sobocińska (2020) argues, this flexibility makes Design Thinking a distinct and adaptive methodology in contrast to traditional, linear design methods.

The interdisciplinary nature of DT teams is another critical success factor. Collaboration between individuals from different domains - such as design, psychology, engineering, and business - enables multi-perspective ideation and richer solutions (Skowrońska, 2019). As Kelley and Kelley (2013) note, rapid experimentation and openness to failure are integral parts of the process.

Rather than avoiding mistakes, Design Thinking treats them as valuable learning experiences that drive better outcomes.

In a globalized and fast-changing market environment, innovation has become a strategic imperative for enterprises. Companies unable to adapt to emerging challenges risk losing their competitive edge.

To foster innovation, many organizations turn to methodologies like Design Thinking, which promotes user-centered, iterative problem-solving and encourages interdisciplinary collaboration (Wolińska-Skuza and Skuza, 2021).

Unlike traditional approaches, Design Thinking helps generate not only original ideas but also implementable solutions tailored to real user needs. By integrating diverse perspectives and enabling rapid prototyping, it drives the development of products, services, and processes that improve organizational efficiency and customer value (Sobocińska, 2020). Moreover, its adaptability makes it relevant across industries, not just in tech-oriented startups.

Innovation is increasingly seen as a defining capability of modern organizations. As Drucker (1992) emphasized, it transforms change into opportunity. In this sense, innovativeness - the ability to continuously generate and apply novel solutions - is a key driver of long-term success (Nowacki, 2010). Enterprises that cultivate knowledge, invest in intellectual capital, and collaborate with research institutions are better positioned to maintain market relevance (Stefaniuk, 2019; Białoń, 2010).

However, implementing innovation also comes with barriers, including financial constraints, insufficient human resources, and weak innovation cultures. SMEs in particular often struggle to access RandD funding (Kupczak, 2022).

Organizational resistance, risk aversion, and rigid administrative systems further hinder progress. Educational and regulatory shortcomings, especially in countries like Poland, limit the potential for cross-border collaboration and dynamic knowledge exchange (Frankowski and Skubiak, 2012).

Design Thinking is expected to play an increasingly vital role in innovation processes, especially as emerging technologies like AI, AR, and VR reshape user experiences. Its application is expanding beyond business, supporting social impact initiatives and sustainability goals. It is also becoming integral to education, equipping future generations with creative and collaborative problem-solving skills.

The rise of speculative design further enhances its potential by exploring future scenarios and preparing organizations for uncertainty. In the age of digital transformation, Design Thinking remains a human-centered approach that balances technological progress with empathy and creativity (ERGO Design, 2022).

### **3. Research Methodology and Case Description**

In order to assess the effects of implementing innovations based on Design Thinking, a quantitative study was conducted in the form of an online survey among users of the Airbnb and Booking.com platforms. Purposeful sampling was used, based on the respondents' experience with at least one of the platforms surveyed, which allowed us to collect the opinions of people who actually use innovative solutions.

Airbnb and Booking.com are examples of platforms that have successfully adapted human-centered design principles into their strategies and operations. Airbnb uses Design Thinking to design unique guest experiences based on a deep understanding of their needs, while Booking.com develops solutions based on A/B testing and user behavior analysis, which is in line with the iterative approach characteristic of Design Thinking.

The choice of Airbnb and Booking.com as case study subjects is based on several key premises:

- The digital tourism sector is currently one of the fastest growing branches of the service economy. Growing consumer demands and intensifying competition make innovation an important element of growth strategies.
- There is a lack of empirical research in the literature assessing the effectiveness of Design Thinking methodology in the context of digital platforms. Previous studies have typically focused on the general advantages of this method, neglecting to assess the impact of specific functionalities on consumer decisions and perceived service quality.
- From a practical point of view, the growing importance of trust, security, and transparency of booking processes in the online environment makes understanding the factors influencing user perception particularly important. The Design Thinking methodology, through its empathetic approach to service design, can contribute to increasing customer satisfaction and loyalty to platforms.
- This topic has great application potential, is current and interdisciplinary, so the results obtained can be a valuable guide for UX designers, product development managers, and consumer behavior researchers in the tourism industry.

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The study involved 111 respondents with diverse demographic and social profiles, differing in age, gender, level of education, and frequency of travel. All participants had experience using features such as rating systems, recommendations, host contact, loyalty programs, and services such as Airbnb Experiences.

Although purposive sampling was used, random selection elements were also included in the later stage, which increased the external validity and objectivity of the results. In addition, control criteria were adopted, such as confirmed use of the platforms and knowledge of specific functions related to Design Thinking.

The survey was conducted online using Google Forms, which was consistent with the digital nature of the study. This format made it possible to quickly reach respondents who are active in the online environment, which increased the methodological accuracy.

The diversity of the sample allowed for partial generalization of the results and identification of representative trends. The sample size (111 people) is in line with recommendations for user-centered design research, where the quality and depth of data are key, not just their statistical representativeness.

#### **4. Research Results**

The survey consisted of three main sections. The first section contained introductory questions (personal details): this part was used to collect basic information about the respondents, such as age, gender, level of education, employment, and experience in using booking platforms. This allowed for a preliminary characterization of the study group and enabled the analysis of the results in the context of the user profile.

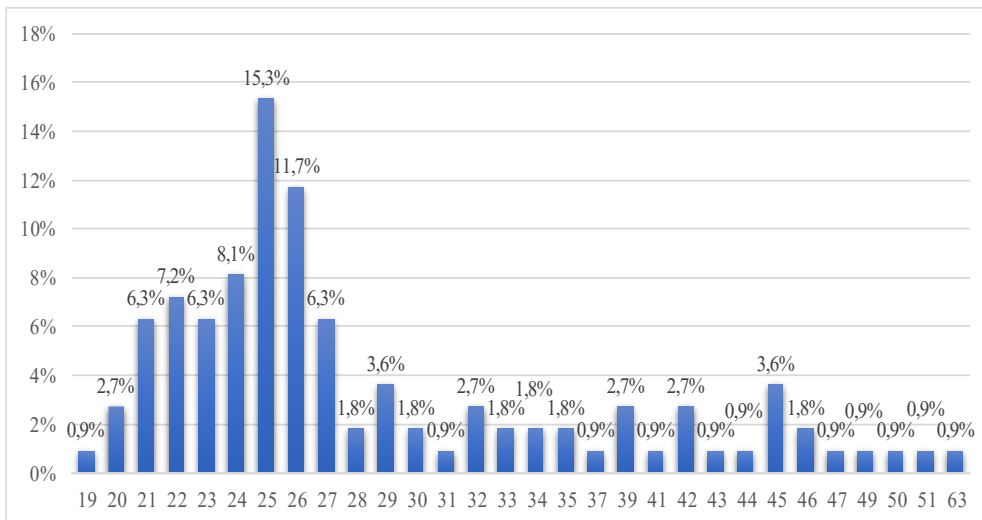
Before analyzing the results of the study on the application of the Design Thinking method in companies, it is important to characterize the group of respondents.

Demographic data, such as age, allow for a better understanding of the context of the responses and the potential impact of life and professional experience on the perception of innovative working methods.

Figure 1 shows the age distribution of the study participants, which forms the basis for further interpretation of their opinions and attitudes towards the issue under analysis.

The study covered 111 people, the largest group of whom were young people, mainly aged between 22 and 26. The group of 25-year-olds stands out in particular, accounting for as much as 14.4% of all respondents. The ages of the remaining participants varied—the study included both people under 20 and over 50, but their share was significantly smaller.

**Figure 1.** Age distribution of respondents

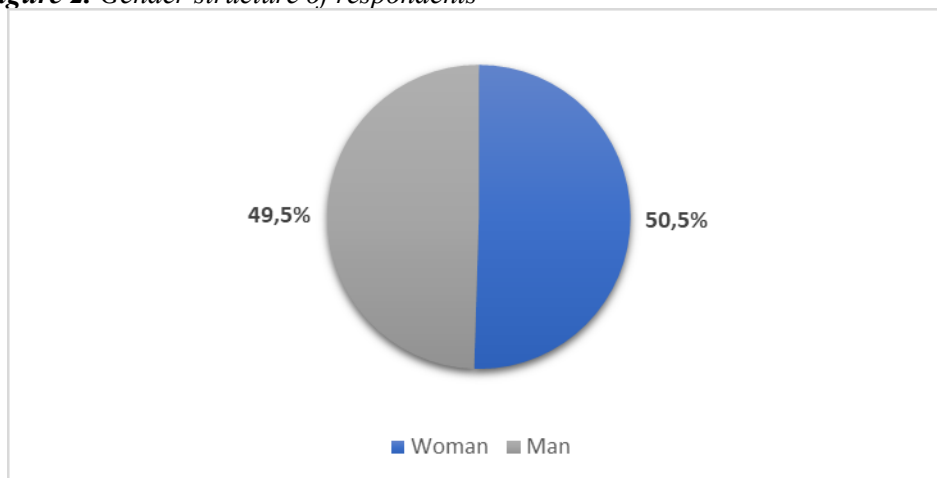


**Source:** Own elaboration.

The analysis of the respondents' demographic data also includes gender structure, which may influence differences in the perception of innovation and the use of design methods such as Design Thinking.

The gender diversity in the study group allows for a better understanding of whether the approach to innovative solutions shows significant correlations related to this socio-demographic characteristic. Figure 2 shows the percentage distribution of study participants by gender.

**Figure 2.** Gender structure of respondents

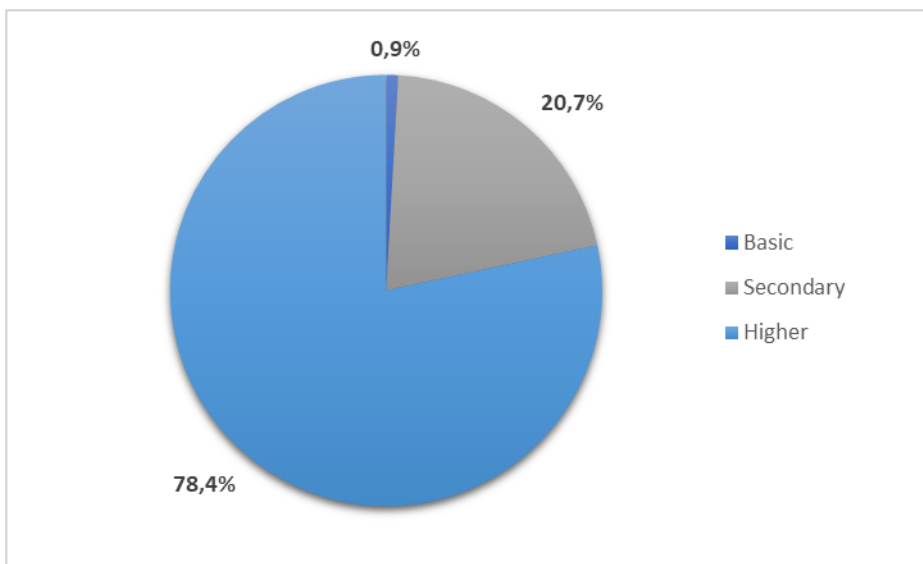


**Source:** Own elaboration.

Respondents were almost evenly divided in terms of gender: women accounted for 50.5% of all respondents, while men accounted for 49.5%. Such a balanced gender distribution increases the reliability of the survey results and allows for a more objective analysis of the perception of innovation regardless of demographic characteristics.

Another important element of the demographic analysis of respondents is their level of education. Knowledge of the educational structure of the study participants allows for a better understanding of their competencies, experiences, and the potential impact of their level of education on their perception of modern design methods. Figure 3 shows the percentage distribution of respondents' education.

**Figure 3.** Education of respondents



**Source:** Own elaboration.

The vast majority of participants (78.4%) have a university degree, which may suggest that the study group has a solid level of education and theoretical and practical knowledge in their field. This profile of respondents is important, especially in the context of research on new methods such as Design Thinking, which require an advanced understanding of issues related to innovation, design, and problem solving.

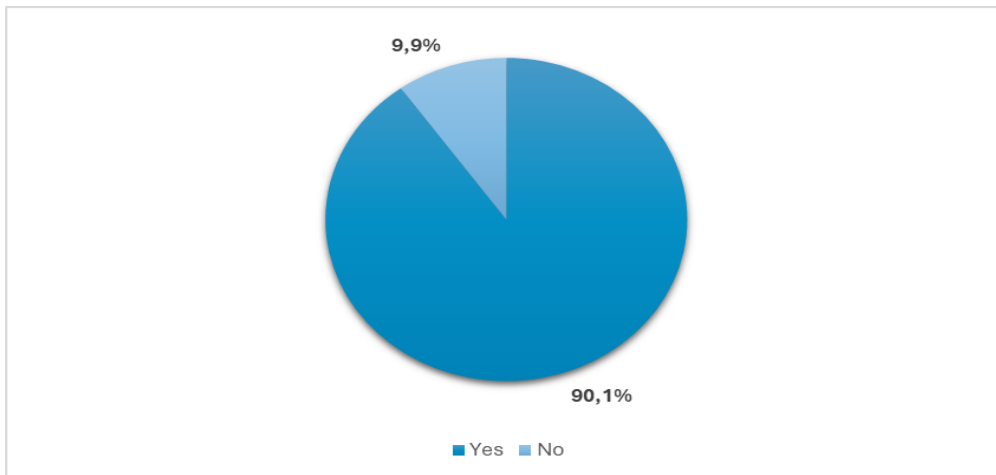
One of the objectives of the study was to determine the extent to which respondents use modern digital solutions in their everyday lives, including popular booking platforms such as Booking.com and Airbnb. Both of these services are considered examples of companies that successfully apply the principles of Design Thinking in

user experience design. The data presented in Figure 4 provides a starting point for further interpretation of user behavior and attitudes towards such services.

The last question in the first part of the survey, concerning the use of Airbnb or Booking.com booking platforms, was answered by 111 people. The vast majority of respondents, as many as 90.1%, declared that they had experience in using at least one of these platforms.

This result demonstrates the high popularity of modern digital tools for booking accommodation services and their strong roots in the daily consumer habits of the respondents. On the other hand, 9.9% of respondents admitted that they had never used Booking.com or Airbnb.

**Figure 4.** Percentage of respondents using the Booking.com and Airbnb booking platforms



**Source:** Own elaboration.

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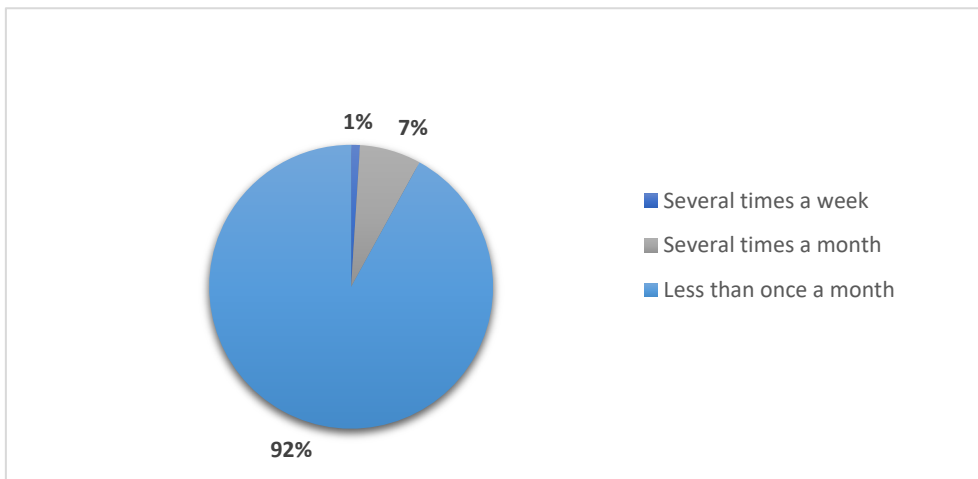
On the other hand, 9.9% of respondents admitted that they had never used Booking.com or Airbnb. As a result, their participation in the survey ended at the filtering question stage, as the rest of the survey concerned experiences, opinions, and assessments related to the functionality of these specific platforms. The inclusion of this filtering mechanism allowed for the substantive consistency of the

collected data and focused the analysis on a group of 100 users who had real contact with the services offered by Booking.com and Airbnb.

This survey design increased the accuracy of the study and enabled an in-depth analysis of consumer attitudes in the context of experiences with digital services designed using the Design Thinking approach. After determining how many respondents had experience using platforms such as Booking.com or Airbnb, the next step was to determine the frequency of their use. Figure 5 illustrates how often respondents book accommodation through these platforms.

Among those participating in the survey, the vast majority—as many as 92% of respondents—use booking platforms such as Booking.com or Airbnb less than once a month. Only 7% of respondents say they use such services several times a month, while a marginal 1% indicated that they make reservations several times a week.

**Figure 5.** *Frequency of use of accommodation booking platforms*

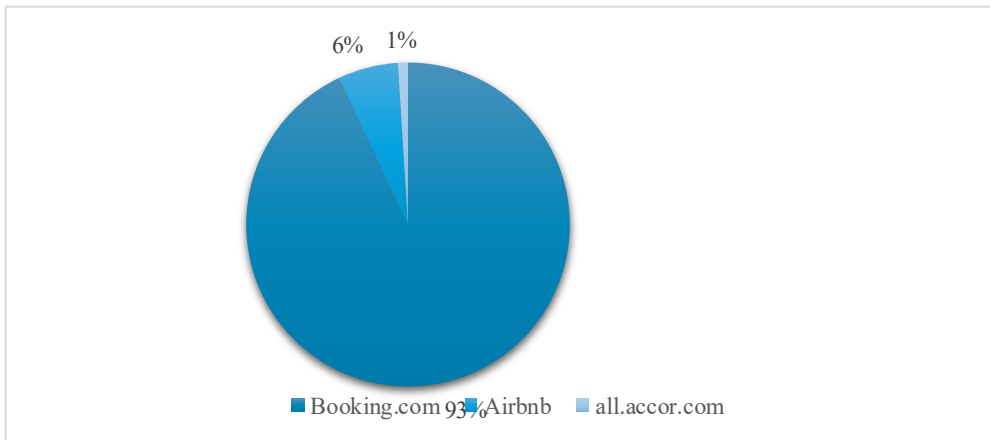


**Source:** *Own elaboration.*

The next issue analyzed in the survey concerns the respondents' preferences regarding the choice of booking platforms depending on the length of their planned stay (Figure 6). The aim was to determine which services are most often chosen for short trips lasting one or two nights.

An analysis of the data presented in Figure 6 shows that for short-term bookings, the vast majority of respondents (93%) prefer to use the Booking.com platform. This result clearly shows that Booking.com is perceived as a more functional, flexible, and practical option for organizing short stays. This may be due to the wide availability of hotels, hostels, and guesthouses, as well as the simplified booking process, which often does not require contact with the host or additional correspondence.

**Figure 6.** Preferences for booking platforms for short stays among respondents

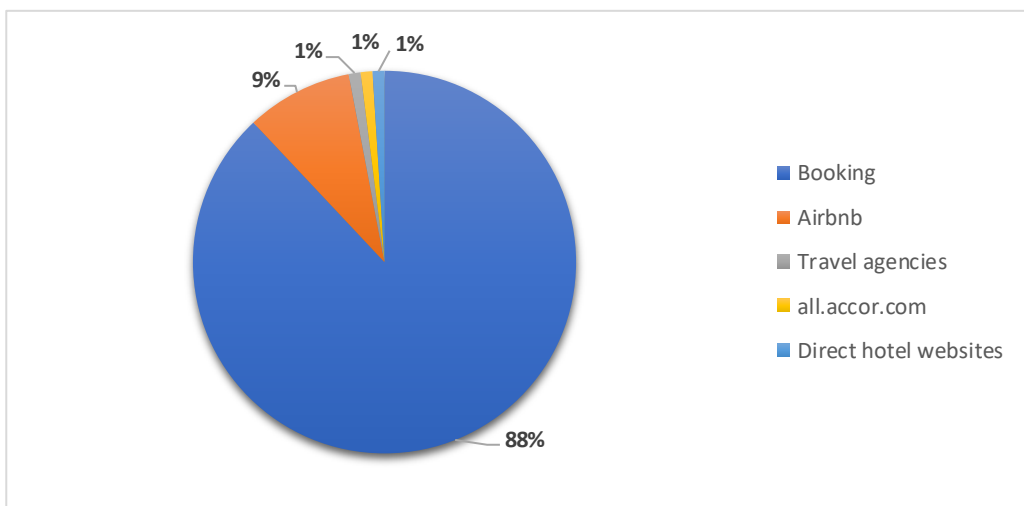


**Source:** Own elaboration.

Airbnb was indicated by only 6% of respondents, suggesting that this platform is less frequently chosen for short-term bookings. This may be related to a more complex rental process, a higher level of user engagement in contact with the host, or a greater share of offers requiring a longer stay.

In order to obtain a more complete picture of the respondents' consumer behavior, the study also included an analysis of the choice of booking platforms in the context of longer stays, i.e., those lasting at least three nights. Figure 7 illustrates which services the respondents most often choose when planning longer stays.

**Figure 7.** Preferences for booking platforms for longer stays among respondents

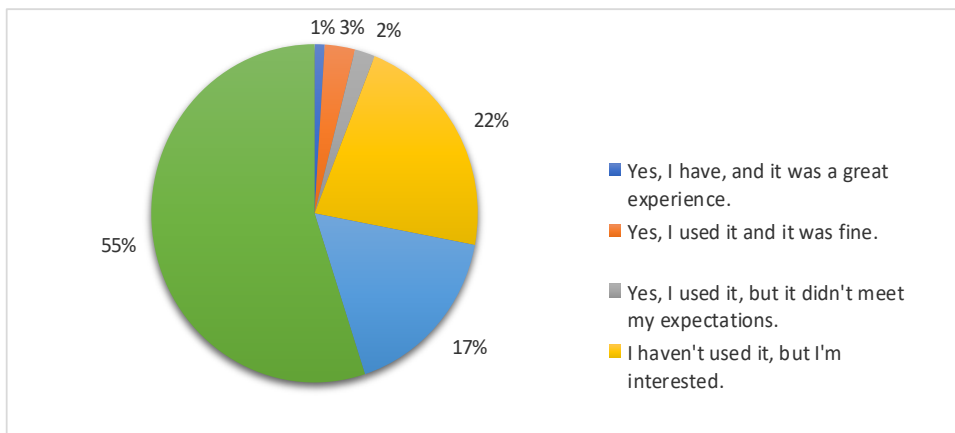


**Source:** Own elaboration.

The data presented in Figure 7 shows that Booking.com also dominates in the case of longer bookings, gaining the approval of as many as 88% of respondents. Airbnb, which promotes stays with local hosts and longer “home-style” stays, saw a slight increase in interest in this category, with 8% of respondents declaring that they use this platform for longer stays.

The survey also sought to assess the level of awareness and popularity of a lesser-known but growing feature offered by Airbnb, namely Airbnb Experiences. The aim of the question was to examine the extent to which users are aware of this option and to what extent they use it or show interest in trying it out. The respondents' answers are presented in Figure 8.

**Figure 8.** Distribution of respondents' answers on the topic of “Airbnb Experiences”



**Source:** Own elaboration.

The data presented in Figure 8 shows that a significant proportion of respondents (55%) had never heard of Airbnb Experiences before. This result indicates a relatively low level of awareness of this feature among platform users, even though it has been part of the offering for several years.

Another 17% of respondents admitted that they were familiar with the service but had not used it and were not interested in it, which may indicate a lack of need for additional attractions during their travels or skepticism towards this type of offer. Importantly, 22% of respondents declared that although they had not yet had the opportunity to use Airbnb Experiences, they were interested in it.

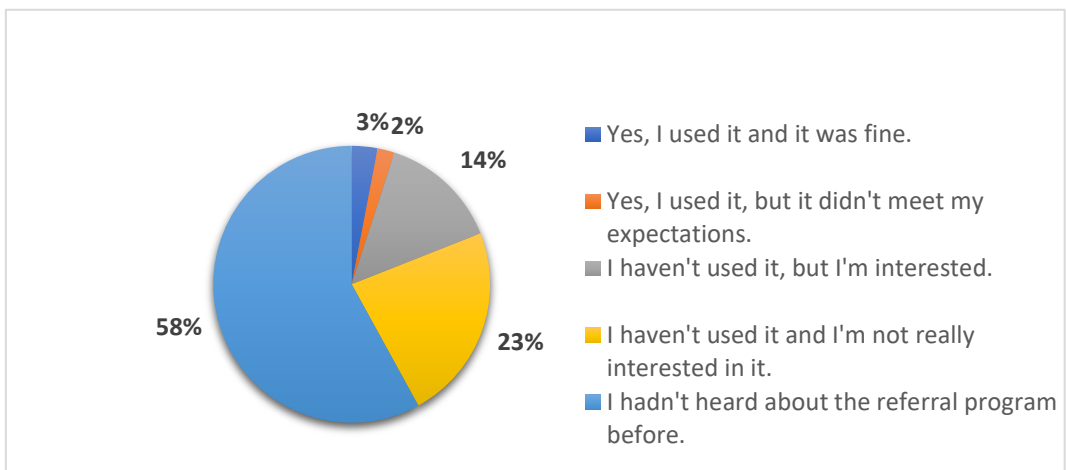
Only a small percentage of respondents (about 6%) had actually used Airbnb Experiences, but positive reviews of the service dominated among this group. Although numerically small, their opinions may indicate the great potential for development of this feature – provided that its recognition and availability can be increased.

The rest of the survey assessed respondents' awareness of additional features of the Airbnb platform that go beyond standard accommodation bookings. One of these is the referral program, which allows users to invite friends to use the platform in exchange for discounts or other benefits.

Figure 9 shows the extent to which respondents are familiar with this service, have used it, and what their opinions are about it. Similar to Airbnb Experiences, Airbnb's referral program also has low recognition.

As many as 58% of respondents said they had never heard of this feature before, suggesting that its promotion on the platform may be insufficient or not sufficiently highlighted in the user interface (Figure 9).

**Figure 9.** Distribution of respondents' answers about the Airbnb referral program



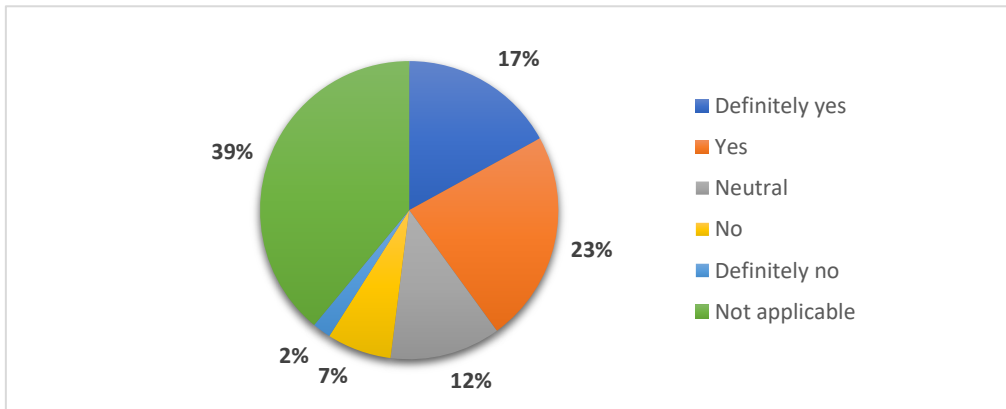
**Source:** Own elaboration.

Another 23% of respondents are familiar with the program but have not used it and are not interested in doing so, which may indicate a low level of motivation to share the service or a belief that the benefits of participating in the program are insufficient to take action. 14% of respondents expressed interest in the referral program, although they had not yet had the opportunity to use it.

This group can be considered potential users whose decision may depend on a clear presentation of the program rules, transparency of benefits, and ease of use.

The next question focuses on analyzing the factors influencing respondents' booking decisions, with particular emphasis on the rating and review system available on the Airbnb platform. The results are presented in Figure 10.

**Figure 10.** Distribution of respondents' answers regarding the Airbnb rating system



*Source:* Own elaboration.

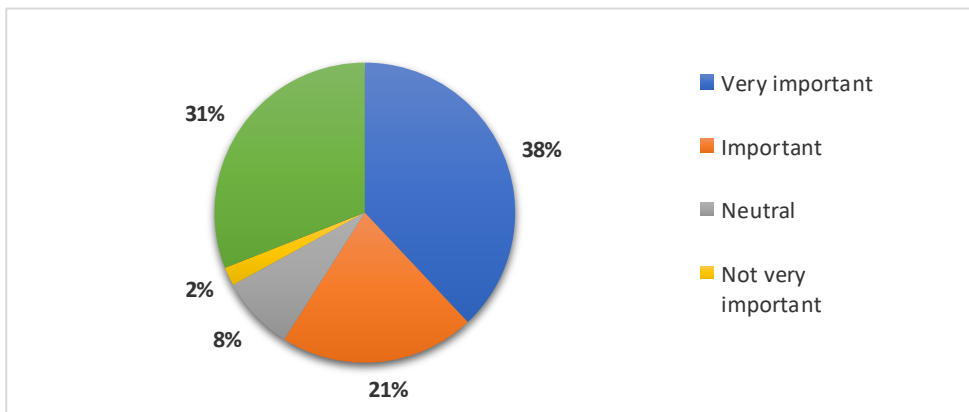
The responses provided by the survey participants show that a total of 40% of respondents attach significant importance to the rating system available on Airbnb. Among this group, 17% declared that the rating system definitely influences their booking decisions, and 23% said that it somewhat influences their decisions.

Another 12% of respondents took a neutral stance, which may mean that they do not consider ratings to be a key factor, but are not completely indifferent to them. On the other hand, 7% of respondents said that the rating system does not influence their decisions, suggesting that they are guided by other criteria, such as price, location, or photos of the offer. The largest group, 39% of respondents, are people who indicated that this issue does not concern them.

Safety is one of the key factors influencing user trust in digital platforms offering shared services, such as Airbnb. Therefore, the survey included a question about the perception of the importance of safety when using this platform. The aim was to determine the extent to which this aspect influences booking decisions and whether users recognize its importance in the context of interacting with unfamiliar hosts and staying in private spaces. Figure 11 presents the distribution of respondents' answers in this regard.

The survey shows that safety is an important issue for most respondents. 38% of respondents considered it very important, and another 21% described it as important, which together accounts for 59% of respondents for whom safety is an important factor when using Airbnb. For 8% of participants, the safety aspect remains neutral, which may indicate a lack of clear experiences – neither positive nor negative – related to this issue. On the other hand, only a small percentage of respondents considered safety to be unimportant, which may suggest a greater propensity for risk or a belief that the platform offers a sufficient level of security.

**Figure 11.** Distribution of respondents' answers regarding the safety of the Airbnb platform

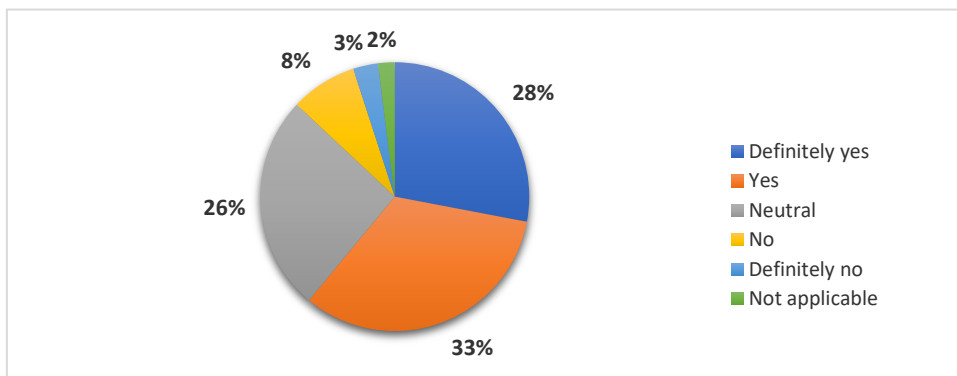


*Source:* Own elaboration.

At the same time, it should be noted that as many as 31% of respondents indicated that the question did not apply to them. This relatively high percentage may indicate that a large proportion of respondents have not yet had personal experience with using Airbnb, which confirms earlier results showing limited knowledge of some of the platform's features and a relatively low level of use among some respondents.

Contemporary booking platforms increasingly use recommendation algorithms that analyze previous searches and user preferences to offer tailored offers. Therefore, survey participants were asked whether recommendations on Booking.com—such as suggestions based on previous searches—help them choose accommodation. The distribution of responses is shown in Figure 12.

**Figure 12.** Distribution of respondents' answers regarding recommendations on Booking.com



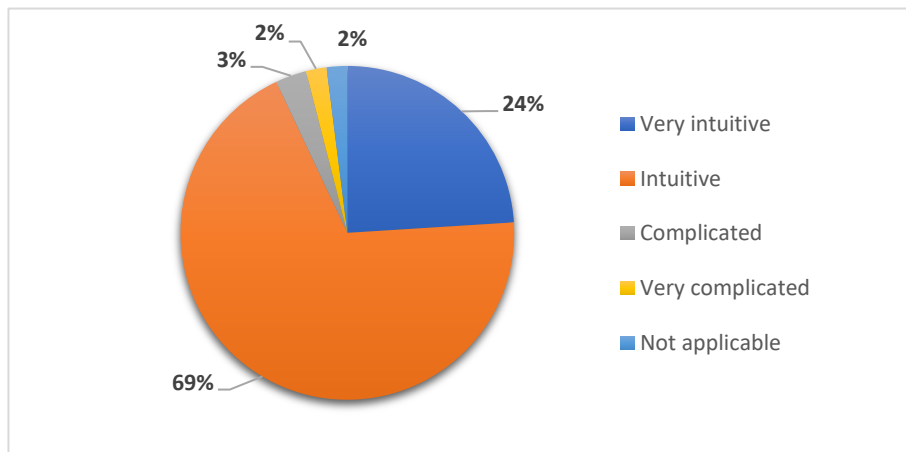
*Source:* Own elaboration.

The data obtained from the survey shows that the recommendation algorithms on Booking.com are well received by users. A total of 61% of respondents answered positively when asked about the usefulness of recommendations – 28% said “definitely yes” and 33% said “yes.” 26% of respondents took a neutral stance, which may mean that they do not attach much importance to recommendations or do not notice their impact on their decisions.

This attitude may also indicate that recommendations are treated as background information and users rely on their own selection criteria. On the other hand, only 8% of respondents found the recommendations unhelpful, which is a small percentage and suggests that criticism of this solution is marginal.

One of the key aspects influencing the quality of the user experience in a digital environment is the intuitiveness of the interface—that is, how easily and naturally users navigate the platform and achieve their goals, such as searching or booking. In the case of booking platforms, ease of use becomes particularly important, especially for people who use them occasionally or for the first time. As part of the survey, respondents were asked to rate the intuitiveness and ease of use of Booking.com. The distribution of responses is shown in Figure 13.

**Figure 13.** Distribution of respondents' answers regarding the intuitiveness of Booking.com

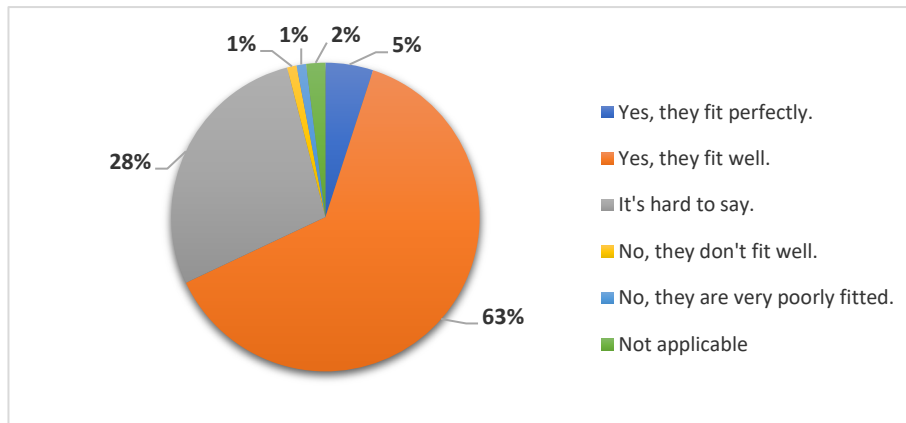


**Source:** Own elaboration.

The survey results clearly show that Booking.com enjoys a very positive rating in terms of user interface intuitiveness. 69% of respondents found the platform intuitive, and another 24% described it as very intuitive. This means that as many as 93% of users rate the website as transparent, simple, and logically designed—which is key to a positive user experience.

One of the key factors influencing a positive user experience on booking platforms is the relevance and suitability of the offers presented to the user's individual needs. Booking.com, as one of the largest platforms in this category, uses a range of filters, recommendation systems, and user data to best meet user expectations. Figure 14 shows the results of the research on this factor.

**Figure 14.** Distribution of respondents' answers regarding the suitability of offers on Booking.com



**Source:** Own elaboration.

In the next question, participants were asked to indicate which of the innovative solutions offered by booking platforms they consider most valuable from the user's point of view.

The aim of the question was to identify functionalities that actually support the decision-making process, increase the convenience of using the website, and improve overall customer satisfaction. The respondents' choices reflect their actual needs and experiences in interacting with platforms such as Booking.com and Airbnb. The results are presented in Figure 15.

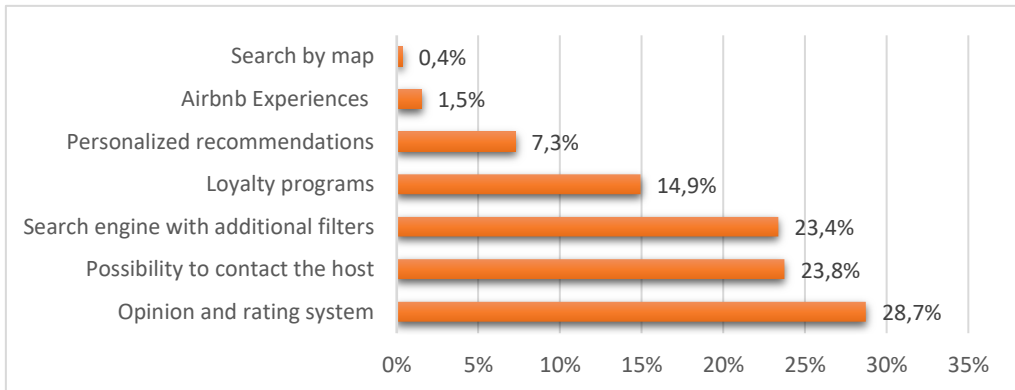
The data in Figure 15 indicate that the review and rating system was considered by respondents to be the most valuable innovation, with 28.7% of respondents selecting this option.

In second place was the ability to contact the host directly (23.8%), which is a particularly important feature in the context of Airbnb, where the relationship between the guest and the host can significantly affect the quality of the stay.

Users appreciate the ability to ask questions, negotiate terms, or quickly resolve issues. This was followed closely by a search engine with additional filters (23.4%), which allows offers to be better tailored to individual needs. Slightly fewer

respondents appreciated loyalty programs (14.9%), which may indicate that although they are perceived as an addition that increases the utility value of the platform, they are not among the key elements influencing the daily use of the service.

**Figure 15.** Distribution of respondents' choices regarding the most valuable innovations on platforms



**Source:** Own elaboration.

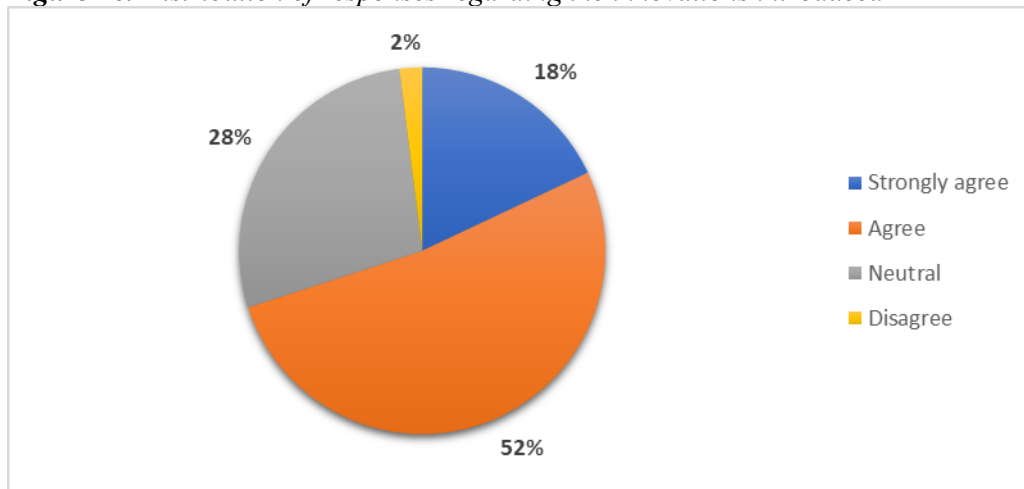
Personalized recommendations received relatively little recognition (7.3%), which may be surprising in the context of the growing role of recommendation algorithms, but may also mean that users do not perceive their impact or do not consider them sufficiently accurate. At the bottom of the list are Airbnb Experiences (1.5%) and map search (0.4%), confirming their marginal importance in the eyes of most users.

In the next question of the survey, respondents were asked to express their opinion on the real impact of innovations introduced by booking platforms – such as Booking.com and Airbnb – on the booking process. The aim was to check whether new features and improvements had actually translated into a better user experience, increasing the speed, convenience, and transparency of the system. The respondents' answers are summarized in Figure 16.

The results presented in Figure 16 show that most respondents have a positive opinion of the impact of innovation on the booking process. As many as 52% of respondents answered “I somewhat agree,” and another 18% answered “I strongly agree,” which together accounts for 70% of users who believe that the introduced features have actually made the platforms easier to use.

28% of respondents took a neutral stance, which may mean that they did not notice any significant changes recently or considered that their impact was not significant enough to influence their overall assessment of the experience. Only a small percentage of users expressed disapproval, indicating that the innovations did not positively affect their experience.

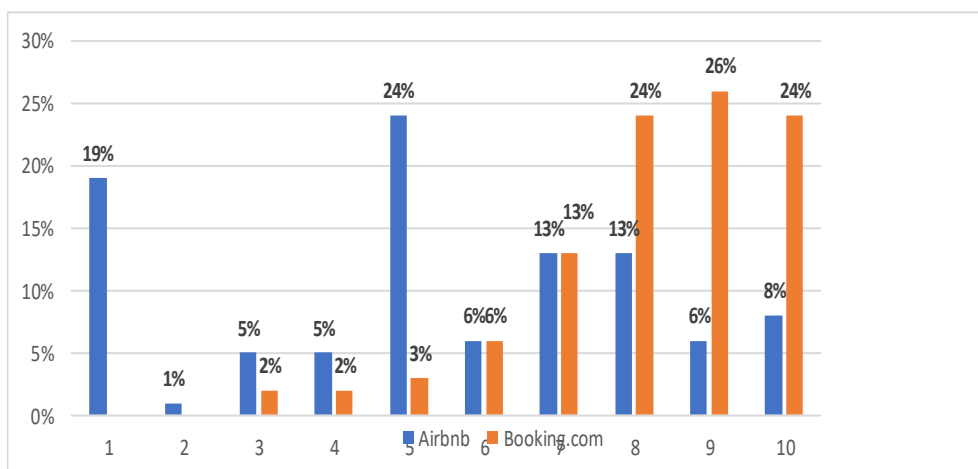
**Figure 16.** Distribution of responses regarding the innovations introduced



**Source:** Own elaboration.

In the final part of the survey, respondents were asked to rate the likelihood of recommending the Airbnb and Booking.com booking platforms to others. The aim was to examine the degree of user loyalty and overall satisfaction, expressed not only in direct use of the services, but also in the willingness to promote them. Responses were given on a scale from 1 (very unlikely) to 10 (very likely). Figure 17 shows the distribution of ratings for the Airbnb and Booking.com.

**Figure 17.** Propensity to recommend Airbnb and Booking.com



**Source:** Own elaboration.

The results obtained for Airbnb reveal a significant divergence of opinion among users. The largest number of people (24%) chose a rating of 5, which in the context of the NPS scale means a neutral attitude towards recommendations. However, it is worrying that as many as 19% of respondents gave the platform the lowest rating (1), and a total of 30% gave ratings between 1 and 4.

This is a clear sign that a significant group of users express disappointment, distrust, or low satisfaction with the services offered by Airbnb. By comparison, positive ratings (8–10) received only 27% of the votes, which puts the platform in an unfavorable light, especially in terms of loyalty potential.

In the case of Booking.com, the distribution of responses was diametrically different, with high ratings dominating. As many as 74% of respondents declared a high willingness to recommend the platform (ratings 8–10), with the most people giving a rating of 9 (26%), followed by 10 (24%) and 8 (also 24%).

Importantly, negative opinions (1–4) were practically marginal, accounting for only 4% of all ratings. This distribution indicates a high level of user satisfaction, strong trust in the platform, and significant marketing potential based on recommendations.

## **5. Conclusions and Future Research Implications**

The study confirms that implementing innovations based on Design Thinking principles -empathy, iteration, and user-centered design - has a measurable impact on user satisfaction and decision-making in the digital tourism sector. Booking.com emerged as the preferred platform for both short- and long-term stays, consistently outperforming Airbnb in terms of perceived usability, intuitiveness, and trust.

Highly valued features included the review and rating system, advanced search filters, loyalty programs, and direct host contact, aligning with prior research highlighting the importance of transparency, personalization, and trust in online services (Sobocińska, 2020; Boroń and Kosiński, 2021; Tyagi *et al.*, 2023).

From a practical perspective, the findings suggest that service providers should:

- Continuously invest in user research to refine functionalities and align them with real customer needs.
- Improve communication and promotion of underutilized features such as Airbnb Experiences and referral programs.
- Prioritize transparency, security, and ease of use as core design priorities.
- Apply iterative testing and interdisciplinary collaboration to accelerate innovation cycles.

While the results demonstrate a positive link between Design Thinking-driven innovation and user experience, the study is limited by its reliance on self-reported

survey data and the absence of qualitative insights. The purposive sampling approach, although suitable for targeting experienced users, limits broader generalizability.

Future research should:

- Combine quantitative surveys with qualitative methods (e.g., in-depth interviews, usability testing) to better understand emotional and behavioral responses.
- Compare additional booking platforms (e.g., Trivago, Expedia) to map competitive advantages of DT implementation.
- Assess long-term loyalty trends following the introduction of specific DT-based features.

In conclusion, the study supports the view that Design Thinking is an effective framework for creating competitive, user-focused innovations in the tourism industry. Its continued application - enhanced by emerging technologies such as AI and advanced analytics - can further improve personalization, trust, and overall service value in digital platforms.

## **References:**

- Adamopoulos, A., Thalassinou, E.I. 2020. Tourism development and economic growth: a comparative study for the G-6 leaders. *European Research Studies Journal*, 23(1), 368-380.
- Arabasz, M., Sińczuch, M. 2016. *Design thinking*. Studio Graficzne Piotr Kurasiak.
- Białoń, L. 2010. *Zarządzanie działalnością innowacyjną*. Wydawnictwo Placet.
- Boroń, K., Kosiński, M. 2021. *Transformacja cyfrowa a design thinking*. Difin.
- Brown, T., Katz, B. 2011. *Change by design: A guide to designing products and services for growth and impact*. Palo Alto, CA, Harper Business.
- Cyrek, M. 2024. *Design thinking – co to jest i na czym polega?* Cyrek Digital. <https://cyrekdigital.com/pl/baza-wiedzy/design-thinking/>.
- Drucker, P.F. 1992. *Innowacja i przedsiębiorczość: Praktyka i zasady*. Polskie Wydawnictwo Ekonomiczne.
- Ergo Design. 2022. *Design thinking vs. speculative design – przyszłość, która nadejdzie*. <https://www.ergo.design/insight/design-thinking-vs-speculative-design-przyszlosc-ktora-nadejdzie>.
- Frankowski, P., Skubiak, B. 2012. *Bariery innowacyjności w Polsce*. Uniwersytet Szczeciński.
- Hałub, P. 2015. *Design thinking jako element rozwoju innowacji społecznych*. *Wrocław Economic Review*, 21(1).
- Kelley, T., Kelley, D. 2013. *Creative confidence: Unleashing the creative potential within us all*. Crown Business.
- Kupczak, P. 2022. *Bariery w obszarze implementacji innowacji w przedsiębiorstwie – próba analizy i syntezy na przykładzie badań empirycznych*. Wyższa Szkoła Biznesu – National-Louis University.

- Lockwood, T. 2010. Design thinking: Integrating innovation, customer experience, and brand value. Allworth Press.
- Nowacki, R. 2010. Innowacyjność w zarządzaniu a konkurencyjność przedsiębiorstwa. Difin.
- Nowicki, M. 2018. Zarządzanie innowacjami w praktyce. Design Thinking jako narzędzie rozwiązywania problemów. Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Skala, A. 2019. Startup manual. Budowanie i rozwój startupów technologicznych. Poltext.
- Skowrońska, M. 2019. Miasto i myślenie projektowe. Design thinking jako skrzynka narzędziowa. Uniwersytet im. Adama Mickiewicza w Poznaniu.
- Sobocińska, M. 2020. Design thinking: Narzędzie pracy zespołów projektowych. Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- Stefaniuk, L. 2019. Innowacyjność i jej znaczenie dla korporacji. Zeszyty Naukowe Wyższej Szkoły Humanitas. Zarządzanie.
- Tyagi, P., Grima, S., Sood, K., Balamurugan, B., Özen, E., Thalassinou, E. (Eds.). 2023. Smart analytics, artificial intelligence and sustainable performance management in a global digitalised economy. Emerald Publishing Limited.
- Wolińska-Skuza, A., Skuza, M. 2016. Wpływ Design Thinking na rozwój przedsiębiorczości. Edukacja Ekonomistów i Menedżerów.
- Zielińska, E. 2013. Design thinking. Model pracy badawczej w obliczu dzikich problemów nauk społecznych. Instytut Socjologii Uniwersytetu Warszawskiego.