

ELEMENTS OF BEHAVIOURAL ECONOMICS AS A TOOL FOR HOTEL MANAGERS IN POLAND

Katarzyna KŚCIUCZYK^{1*}, Magdalena KRACZLA^{2*}

¹ WSB Merito Poznań University; katarzyna.ksciuczyk@chorzow.merito.pl

² WSB Merito Poznań University; magdalena.kraczla@chorzow.merito.pl, ORCID: 0000-0002-9382-4249

* Correspondence author

Purpose: The purpose of this article is to present findings on the use of behavioural economics elements on the websites of Polish hotels.

Design/methodology/approach: This article presents how Polish hotels use elements of behavioural economics to increase website effectiveness and encourage users to book a hotel service, and thus achieve the company's business goals. The research method used is an exploratory content analysis of the websites of selected hotels in Poland.

Findings: Some Polish hotels use elements of behavioural economics, and thus attempt to increase the number of bookings through their own/indirect booking channels - including the website. However, there is an area to be developed - many sites have identified areas where popular cognitive biases can be further exploited and thus work to increase conversions from the website. It was noted that the ability to exploit some elements of influence depends on the software that hoteliers use (usually the booking system - booking engine).

Research limitations/implications: It would be advisable to continue the consideration based on a study of the use of behavioural economics elements on hotel websites on a larger scale and to test the effectiveness of individual measures (for example through A/B tests on the websites). In addition, since cognitive errors are not only experienced by consumers, but also by managers, an area for investigation regarding the impact of cognitive errors on managerial decisions is also suggested. Specific theoretical constructs allow for a good description of the mechanisms under investigation, creating an innovative research space in the field of management science and quality.

Practical implications: Identifying and analysing the behavioural economics elements used on hotel websites, can shape the research space for determining the relationship between the use of these elements and the effectiveness of the website as one of the channels that achieves the company's business objective. Subsequently, enable managers to create effective communication on websites to increase the number of accommodation bookings through this channel.

Social implications: with knowledge of cognitive errors, a manager can create effective marketing strategies, make better decisions and better manage his or her team.

Originality/value: The websites of Polish hotels were reviewed, identifying the most common elements using behavioural economics. It was noted that Polish hotels use these elements to a limited extent. Examples of cognitive biases that are not yet or rarely used by hoteliers on their websites and could help to increase direct bookings were identified. In addition to

theoretical knowledge, the article draws on the authors' many years of experience in the topic of management, including in the hotel industry.

Keywords: manager, people management, organisation, hotel management, hotel marketing, behavioural economics, cognitive errors.

Category of the paper: viewpoint, case study.

Introduction

There are many sub-disciplines within the management and quality sciences, but three of them: human resource management, organisational behaviour and intangible asset management are particularly relevant in the context of the present considerations. This article assumes that effective business management - in all its complexity - requires a broad knowledge of human behaviour, mechanisms of shaping human motivation and the ability to use modern tools of influence. For only an in-depth understanding of the determinants of human behaviour allows for efficient management of business entities, which in this article refers to the hotel industry.

At a time when the Internet is a source of information and when consumers use it as a tool to search for products and services and make purchases, websites are one of the key elements of marketing strategy in companies in many industries, including the hotel industry. Among other things, websites serve the company's revenue goals and, in the case of hotels, aim to realise sales (through bookings) of the accommodation service.

The process of obtaining bookings is complex and involves many aspects, from marketing and promotion to customer relationship management and the use of modern technology. Chapter one of this article discusses how to obtain bookings and the role of the website in this process.

The second chapter is devoted to the issue of behavioural economics and the use of heuristics and cognitive errors on websites. The achievements of behavioural economics are relevant to management and quality sciences, because it is behavioural economics that helps to explain the irrational actions of people and provides an opportunity to influence consumers in order to increase the effectiveness of business and marketing strategies. Companies use cognitive biases and heuristics in website design to effectively influence consumer purchasing decisions and optimise performance metrics for transactions through the website.

Users who are looking for accommodation have the option of using OTA portals, for example Booking.com, or they can book accommodation through hotel websites. Due to the commissions charged by intermediaries, hotels rely on direct bookings, i.e. through their own websites, among others. In order to increase the effectiveness of the websites, hotels can exploit users' cognitive errors, just as online shops do. Hotel websites manage to find elements indicating the use of heuristics and cognitive errors, although to a limited extent. Chapter three describes the websites of selected Polish hotels in terms of the use of elements of behavioural

economics. The most popular cognitive errors were singled out, and their use on the websites to gain more bookings was described. It also identifies elements that are not used or are used infrequently and could help increase the conversion rate on the website.

These conclusions can serve as a basis for specific management decisions within management practice, as well as providing a key reference point for human resource management activities and analyses in business organisations.

1. Acquisition of bookings as part of hotel management

According to data from the Central Report (Hotel Facilities Inventory) of July 2024, there are 2861 hotels in Poland and thus 255,505 beds that hoteliers want to sell every day. According to a report by Horwath HTL, the value of the hotel market in Poland in 2023 was estimated to be around PLN 11 billion.

Hotels obtain accommodation bookings through a number of channels. An important role is played by e-brokers (e.g. Booking.com), who charge hotels a commission on each booking made by a user. Bookings through a website (using a dedicated booking system) are direct bookings, which allow customers to book easily and quickly without the need for intermediaries and hoteliers to **reduce the cost of obtaining bookings**. Direct bookings benefit both the hotel, which avoids paying a commission, and the guests, who can get better deals. Direct bookings also include bookings by telephone, via e-mail and so-called *walk-ins* (Morosan, Jeong, 2008).

According to a report by Profitroom, a leading provider of software for accommodation facilities in Poland, *37.31% of guests currently opt for this form of booking - the trend of making direct bookings is increasing*. The average result of direct bookings at this level (37.31%) indicates that there are still many customers choosing intermediaries, making the cost of customer acquisition high due to the need for additional commission fees (Profitroom report 'Direct bookings - an opportunity for hoteliers in the coming holiday season', 29 May 2024).

The manager should consider the costs associated with these channels when deciding on a strategy for presence in the various hotel distribution channels. Managing the cost of acquiring bookings is key to optimising marketing activities and increasing the hotel's profitability. Analysing these costs and controlling them effectively allows for better management of the marketing budget and improved effectiveness of the customer acquisition strategy (Ye, Yan, Wu, 2017; Morosan, Jeong, 2008).

Hotel managers who want to optimise their customer acquisition costs aim to maximise the share of direct bookings. They can achieve this goal through a marketing strategy that focuses, among other things, on activities related to the acquisition of traffic to the website. and when users generate sufficient traffic to the website, activities related to getting them to perform an action - implicitly, booking a stay through the website - are necessary (Ye, Yan, Wu, 2017;

Bernstein, Awe, 1999; Bharath, 2016). Profitroom indicates in its case studies that some hotels manage to achieve a direct booking share of more than 80% (Profitroom, Success Stories: <https://www.profitroom.com/pl/historie-sukcesu/>). The website, together with the booking system, becomes the main source of information and interaction tool for potential customers and is thus an effective tool for obtaining bookings.

It is important to bear in mind that today's business realities pose a major challenge for companies to adapt to dynamic changes in work organisation and resource management. New trends, present in every aspect of business, require innovation and flexibility in response to a changing and competitive environment. In order to survive and prosper, organisations and their managers need to innovate and acquire new competencies to manage effectively in a volatile environment. A key task for managers is to build the success of the organisation, building on modern knowledge and interpersonal skills (Kraczlą, 2016).

2. Behavioural economics as an effective tool for managers

Making a decision for many people is difficult, often requires a lot of effort and the decision is not always taken with care. People are not immune to making cognitive errors and companies exploit this fact to influence consumers in order to increase the effectiveness of their business and marketing strategy. Combining the fields of economics, psychology and management, behavioural economics confirms that people are not rational, their decisions are influenced by emotions, heuristics and cognitive errors. In the context of management science, behavioural economics provides valuable tools and theories that allow managers to better understand and influence the behaviour of others, including customers, through appropriate pricing strategies, marketing communications and customer experience management (Thaler, 1980; Kahneman, 2013).

Simplified inference patterns, i.e. heuristics and cognitive errors, are relevant in the context of decision-making, and thus can significantly influence the purchase (Matlin, 2009) - including purchases through a website. Within the framework of nudge theory, proposed by Richard Thaler and Cass Sunstein, it has been pointed out that by modifying the context in which decisions are made (so-called choice architecture), people can be induced to make more favourable decisions without violating their freedom of choice (Thaler, Sunstein, 2008). For example, by presenting a user with low product availability, we can induce them to buy more quickly by exploiting a 'loss aversion' cognitive bias.

Behavioural economics describes various concepts and cognitive biases that are applied in many fields, including marketing. **The anchoring effect** refers to the tendency of users to rely on the first piece of information (the anchor) when making a decision. That is, when a consumer sees a high price first, he or she will evaluate other prices in relation to this anchor, which will

influence his or her subsequent decisions (Tversky, Kahneman, 1974). **The confirmation effect**, which is the tendency to seek and interpret information in a way that confirms prior beliefs, ignoring or deprecating contradictory information, leads to distorted decisions and opinions (Benoit, Jacques-Philippe, 1995). **The unavailability effect** states that the limited availability of a product or service increases its attractiveness and desirability. People are more likely to make purchase decisions when they know that the availability of a product is limited (Cialdini, 2001). **The social proof effect** describes the tendency of people to make decisions based on the actions of others. For example, customer reviews and product ratings can reinforce trust and convince new users to buy (Cialdini, 2001). Similarly, the **false consensus effect**, or the tendency for people to overestimate the extent to which their beliefs, values and opinions are shared with others (Dobelli, 2013). Websites may display content that suggests that many people share the user's opinions or choices, thus increasing engagement. **The halo effect** refers to the tendency to transfer positive product attributes to other aspects of the product. For example, if a product looks attractive, consumers may believe that it is also of high quality (Nisbett, Wilson, 1977). **The default option effect** refers to a preference for maintaining the status quo. People tend to avoid change and stick to existing decisions or default settings (Thaler, Sunstein, 2008). For example, on websites, users may automatically 'select' default options, which can increase the value of purchases. **The primacy effect** describes the tendency to better remember the first and last items in a sequence (Aronson, Wilson, Akert, 1997). On websites, this can be exploited by strategically placing the most important information at the beginning and end of pages. **Complexity aversion** tells us that we prefer known risks over unknown ones. In practice, low-risk purchasing communication is used on websites (Baron, 2003). **Action bias** refers to the tendency of people to prefer action over inaction, even in situations where taking no action would be more beneficial. (Dobelli, 2013). This fallacy can be exploited on a website through the use of calls to action, the use of pop-ups and notifications, and the use of gamification elements, for example by collecting points. **The conjunction fallacy** refers to the tendency of people to assume that specific conditions are more likely than general conditions. An example of this error is the assumption that a specific story is more plausible than a general statement, even though the specific situation is less likely to occur (Tversky, Kahneman, 1983). To exploit this phenomenon, managers can highlight unique product features and use storytelling in marketing communications. **The pure exposure effect** is that people tend to prefer things that are familiar to them, even if they are objectively neutral or negative (Zajonc, 1985). On websites, one can see the use of this effect through a phenomenon like the repetition of certain content that the company wants to draw the user's attention to. **The house-money effect** refers to the tendency of people to take more risks when they play with money they have won rather than their own (Thaler, Johnson, 1990). An example of its use is when companies offer bonuses, discounts and freebies, encouraging users to take advantage of them. **The list length effect** refers to the tendency of people to prefer options at the beginning or end of a list, ignoring those in the middle (Murdock, 1962). Websites may place the most profitable products at the beginning and end of the listings to increase the

chances of users selecting them. **The contrast effect** is that the rating of an option is dependent on the previous ones that were rated (Dobelli, 2013). On websites, especially e-commerce sites, more expensive products are displayed next to cheaper ones. This makes the cheaper ones appear more affordable. **The unnecessary information effect** refers to the tendency of people to seek information that does not influence their decisions, which on websites is reflected in the presentation of excessive information about products or services (Vaughan, 2013). **The hook-up effect** is the tendency for people to follow the crowd, assuming that the actions of others reflect appropriate behaviour (Leibenstein, 1950). This is used particularly in e-commerce by displaying information about the popularity of products, such as '9 out of 10 people choose this product' or '10 people are currently viewing this product', to increase sales. Similarly, using other users' reviews of a product, service or shop on a page can encourage purchase. **The decoy effect** involves adding a third option to two existing options, making one of the original options more appealing (Ariely, 2018). On websites, it is common to see three options to choose from, where the middle option is extremely unattractive. This bias is used to steer the user's interest towards the most expensive option. Websites also exploit people's tendency to overestimate novelty, i.e. **the illusion of innovation** (Rogers, 2024). This happens in particular by emphasising novelty (e.g. new products on offer). **Loss aversion** is the tendency for people to react more strongly to losses than to gains of the same magnitude (Kahneman, Tversky, 1979). This is exploited on websites by using slogans such as 'Don't miss out on a bargain', 'Save £50' etc. in the content. Similarly, **fear of regret** is the tendency of people to avoid decisions that may lead to future regret or loss (Dobelli, 2013). People make irrational decisions under the belief that they will lose something. Online shops, taking advantage of this tendency, induce users to buy. This happens by emphasising the uniqueness of the offer, but also by offering easy product returns.

The above examples show that behavioural economics **has already found wide application in marketing communications, including websites**. This is especially the case in the context of e-commerce, where a purchase is made through a website, so the effectiveness of a website, measured, for example, through conversion rates, is extremely important. The use of cognitive biases and heuristics allows companies to design websites that effectively influence consumers' purchasing decisions and thus optimise performance metrics in relation to transactions through the website.

With tools such as **Google Analytics**, managers can analyse data about users on the website, to see how users behave on the website, whether they make a transaction and for what amount, or whether other events occur (for example, newsletter sign-ups, downloads, checking out promotions, etc.) defined on the website and measured in the tool. Google Analytics can also analyse reports on the user's path on the website: the path to purchase (Figure 1) and the path to payment (Figure 2). This allows the user's steps on the website to be identified and the so-called bottlenecks on the website to be determined, and attempts to eliminate them can then be made.

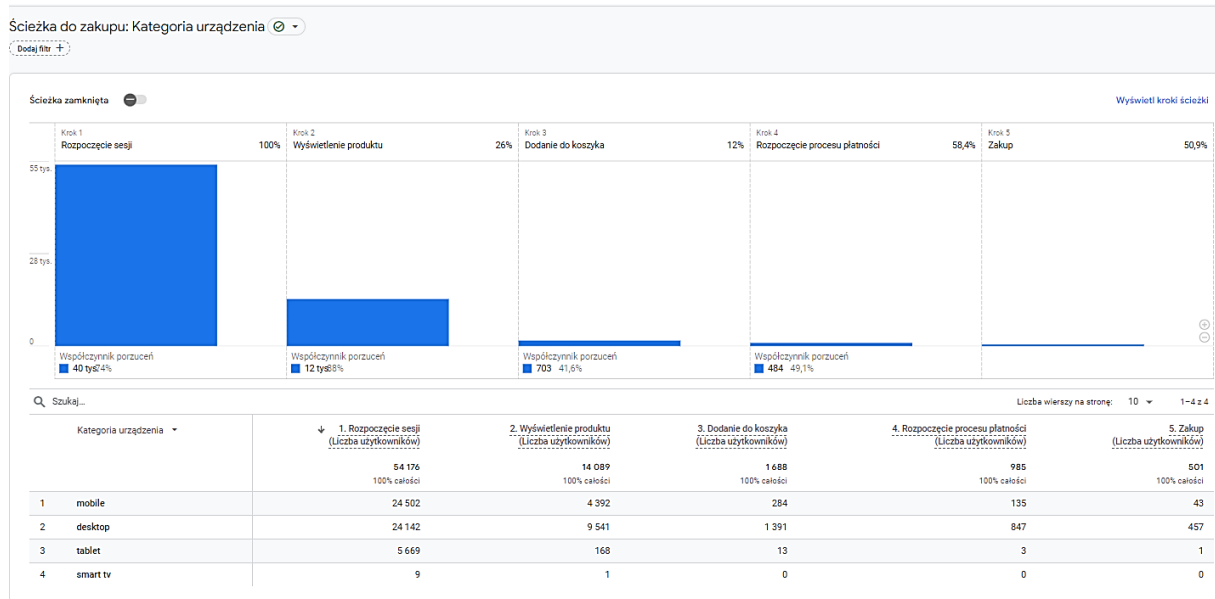


Figure 1. Screenshot from the Google Analytics tool (demo account), which shows a report on the path to purchase on the website.

Source: Own development.

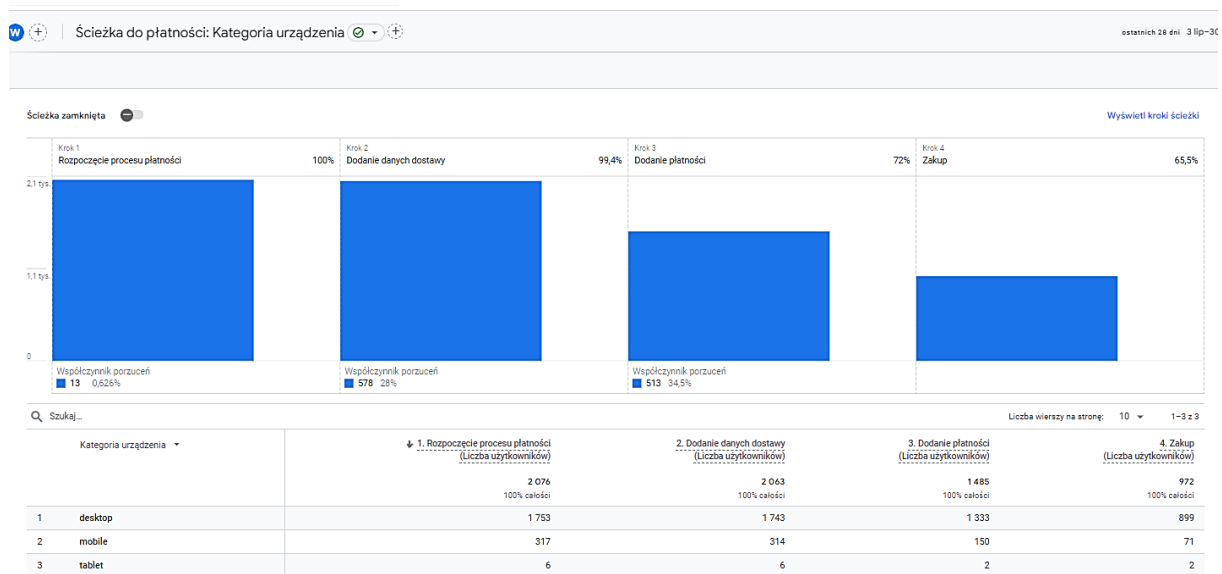


Figure 2. A screenshot from the Google Analytics tool (demo account), which shows a report on the path to payment on the website.

Source: Own development.

To illustrate, with the path to payment report, it is possible to check the so-called abandonment rate for the individual steps on the path, i.e. the percentage of users that have been retained between the current and the next step on the path (Google Analytics, 2024).

On the basis of this data, it is possible to try to optimise the purchasing process, by singling out and eliminating obstacles that may discourage the user from buying, as well as by using elements of behavioural economics to encourage the user to complete the transaction.

On websites, one important indicator is the **conversion rate**, i.e. the percentage of users who have completed a transaction or other action. Sometimes even a small percentage change in the conversion rate can translate into a significant increase in website revenue.

It can be assumed that we have 5,000 users per month on the website. and that the conversion rate for this website is 4%. Using this information and equation (1), it can be calculated that 200 transactions were made on this website per month.

$$\text{Conversion rate} = \frac{\text{numer of transactions}}{\text{number of users}} \times 100\% \quad (1)$$

If the average order value is assumed to be PLN 500, then the monthly revenue from the website is PLN 100,000. Optimising the conversion rate by 1% means more transactions with the same number of users (250 transactions, i.e. 50 more) and, consequently, more revenue from the website (by PLN 25,000), assuming that the average order value does not change.

If, through behavioural economics, you influence users to make more transactions through this, then you will increase the revenue from the website.

3. Behavioural economics on hotel websites

Reports show that the majority of people interested in accommodation services use the Internet to find an offer (Jarvis, MacKenzie, Podsakoff, 2003). Users who are looking for a hotel service direct their steps to the Internet. According to an article published in the Journal of Travel Research, up to 83% of travellers use the Internet to plan their trips, including booking accommodation (Filieri, McLeay, 2013). In addition, research conducted by the American Psychological Association (APA) and published on their website indicates that the Internet is a key tool used by consumers to gather information and make decisions about accommodation when travelling. Therefore, hotel websites have become a key marketing tool and their importance is increasing with the rapid development of information technology and changing consumer preferences (Fisher, Goddu, Keil, 2015).

One of the main goals of hotel websites is to allow users to book accommodation directly on these sites, allowing managers to avoid commissions charged by intermediaries such as Booking.com or Expedia. Direct bookings can generate 10-15% **more profit for** hotels compared to bookings through intermediaries (O'Connor, 2020). Interest in behavioural economics and its use on hotel websites to increase their effectiveness in attracting bookings should therefore be obvious given the potential savings associated with the lack of commission paid to OTAs.

Numerous studies mentioned in chapter two have shown that the application of behavioural economics contributes to the effectiveness of websites. There are many examples on websites that show how heuristics and cognitive errors are used. This also happens on the websites of HoReCa companies, including hotel websites, which will be the focus of this chapter.

In the context of the hospitality industry, attention should first be paid to Booking.com, the website for booking accommodation at establishments that make their rooms available on the site. As one of the leading booking platforms in Poland and the world, Booking.com is constantly striving to optimise its website to increase user satisfaction, conversions and competitiveness. This global booking platform uses advanced marketing techniques, data analysis and A/B testing to ensure the best possible experience for its users.

When discussing the hospitality industry, it is impossible to ignore the websites of intermediaries, such as Booking.com, which, by virtue of their scale of operation and revenues, operate on a much larger budget than individual hotels, and therefore have the ability to invest in a number of measures to improve conversions on the website and the specialists who deal with this area. On this intermediary's website we find many examples reflecting the use of elements of behavioural economics (Figure 3), including, for example, the effect of unavailability is used by presenting the message "Only 5 rooms left" or "Usually unavailable". Also, displaying information about the number of people viewing a hotel or the number of bookings made in the last hour uses social proof and the hook effect. Likewise, reviews and information such as 'Great location, highly rated by guests' and 'Couples rated this property highly', which are presented to users of the service, use the false consensus effect. Booking also steers users' decisions by displaying different pricing options and strategically placing different information on the site and offering different discounts and bargains.

Typ pokoju	Liczba gości	Cena za 2 noce	Twoje opcje	Wybierz pokoje	
<p>Pokój Dwuosobowy typu Deluxe z prysznicem</p> <p>● Został tylko 1 pokój na naszej stronie</p> <p>1 duże łóżko podwójne</p> <p>🌿 klimatyzacja 🛀 łazienka w pokoju</p> <p>📺 telewizor z płaskim ekranem</p> <p>🔊 dźwiękoszczelność 📶 bezpłatne WiFi</p> <p>✓ bezpłatny zestaw kosmetyków ✓ szlafrok ✓ toaleta ✓ wanna lub prysznic ✓ ręczniki ✓ pościel ✓ gniazdko koło łóżka ✓ przyjazny alergikom ✓ biurko ✓ krzeselko dla dzieci ✓ telewizor ✓ kapcie ✓ kanały satelitarne ✓ zestaw do parzenia kawy i herbaty ✓ radio ✓ ogrzewanie ✓ suszarka do włosów ✓ długie łóżka (> 2 metry)</p>	👤	<p>658 zł</p> <p>592 zł ⓘ</p> <p>Zawiera opłaty i podatki</p> <p>10% taniej</p> <p>Genius</p>	<p>🍽️ Bardzo dobre śniadanie – 20 zł ⓘ</p> <ul style="list-style-type: none"> Oferta bezzwrotna Zapłać z wyprzedzeniem ✓ Zastosowano 10% zniżki Genius w odniesieniu do ceny przed naliczeniem podatków i opłat 	0	<p>Rezerwuj</p> <ul style="list-style-type: none"> Zajmuje to tylko 2 minuty Natychmiastowe potwierdzenie
	👤	<p>738 zł</p> <p>664 zł ⓘ</p> <p>Zawiera opłaty i podatki</p> <p>10% taniej</p> <p>Genius</p>	<p>🍽️ Bardzo dobre śniadanie wliczone w cenę ⓘ</p> <ul style="list-style-type: none"> Oferta bezzwrotna Zapłać z wyprzedzeniem ✓ Zastosowano 10% zniżki Genius w odniesieniu do ceny przed naliczeniem podatków i opłat 	0	
	👤	<p>578 zł</p> <p>520 zł ⓘ</p> <p>Zawiera opłaty i podatki</p>	<p>🍽️ Bardzo dobre śniadanie wliczone w cenę ⓘ</p> <ul style="list-style-type: none"> Oferta bezzwrotna 	0	

Figure 3: Screenshot showing Booking.com website - an example of the use of behavioural economics on the website.

Source: Own development.

According to the Phocuswright report, in 2020, OTA (Online Travel Agencies) platforms, of which Booking.com is a part, will capture around 64% of all hotel bookings made online in Europe (including Booking itself 55%). This market share is likely to increase in the following years, given the dynamic growth of the e-commerce market and growing consumer confidence in online bookings (Phocuswright, 2024).

The success of Booking.com has led many hoteliers to model their service after theirs in order to improve the look and functionality of their own websites and thereby drive users who come to their site to book directly.

What is important to users making bookings? In the article 'Determinants of user's intentions to book hotels: a comparison of websites and mobile apps' (Ali, 2022), the author points out that the speed with which users can compare different accommodation options and the fact that booking is only a few clicks away have an impact on booking. Promotions and discounts and the security of the booking are also important to users. Users additionally check the credibility of the hotel by verifying reviews. Usually on the hotel website, users can find more information, for example about additional attractions that the hotel itself offers or places of interest nearby. Managers at hotels thus have the chance to attract potential hotel guests to the website, who, looking for additional information or promotions, may decide to book directly. The important thing is not to waste this opportunity and to use the elements of behavioural economics to keep the user on the site, get them to book and increase the hotel's revenue from direct bookings.

Table 1 provides a list of selected elements of behavioural economics that can be observed on hotel sites, along with a description of application.

Table 1.

List of selected elements of behavioural economics on hotel websites

Item	List of selected elements of behavioural economics	
	Element name	Examples of use on hotel websites
1	Anchoring effect	Hotels show the differences between e.g. accommodation options (rooms, flats, etc.) or price options (non-refundable rate, refundable rate). They also indicate the uniqueness of the product/brand (e.g. through the specifics of the facility - historic building, through additional attractions such as Wellness & SPA - pools, treatments, etc.).
2	Inaccessibility effect	Hotels may show limited room availability for the selected date (e.g. "Only 2 rooms left" or the limited duration of an offer or promotion (e.g. "Promotion only valid for 2 more hours").
3	Social proof effect	Hotels can show positive reviews on their websites from other guests who have previously visited the hotel.
4	False consensus effect	Hotels use information in the content on their websites to confirm the user's choice (e.g. "Couples rate this room highly", "Ideal for families with children", etc.).
5	The halo effect	Hotels may use photos/reviews of popular people who have used the hotel's services. Professional photos and videos of attractive people are also used, as well as spectacular shots of views from the hotel or the area, which are published on the website to give the user a good first impression.
6	Effect of the default option	Hotels can use the default option in the booking system - the most popular room type or rates/prices selected by default.

Cont. table 1.

7	Priority effect	Hotels show the most relevant information from their point of view at the beginning of the text. This may be information about the hotel's attractions or information related to the specifics of the offer.
8	Aversion to complexity	Hotels communicate the low-risk nature of the booking by using, for example, return offers that allow cancellation, often free of charge, within a certain period of time.
9	Action error	Hotels use a call to action (e.g. 'Book', 'Book now', 'Select a room', 'Use promo code').
10	Equivalence error	Hotels can describe the unique features of the service on their websites, use storytelling.
11	Clean exposure effect	Hotels promote (with great frequency) selected packages or offers on their websites. In many places on the website there is a button directing to the booking system.
12	House effect money	Hotels can offer freebies or bonuses and encourage users to take advantage of the offer.
13	List length effect	Hotels use bullets and short lists in their website content.
14	Contrast effect	Hotels may point out differences between offers, rooms or rates, present different options to choose from on the website.
15	Hook-up effect	Hotels can refer to specific guest opinions or preferences using numbers (e.g. '80% of couples choose this room' or '9 out of 10 guests rated their holiday stay highly').
16	The effect of unnecessary information	Hotels can extensively describe the services, the hotel itself, the rooms and also have blog articles on their websites. In addition, a large number of photos showing the same thing but from different angles may be used.
17	Decoy effect	Hotels may show an inferior, third choice option on their websites.
18	The illusion of innovation-ality	Hotels may use news announcements, e.g. new rooms or a new offer/stay package, new attractions at the hotel, etc.
19	Loss aversion	Hotels can show savings information (e.g. by applying a discount, a crossed-out price, etc.).
20	Fear of grief	Hotels may show restrictions (e.g. time) on the use of certain offers and promotions. They may also emphasise the bargain and uniqueness of the offer and the limited number of rooms on a given date (message: "Last available room").

Note. The table provides a list of selected elements of behavioural economics that can be applied to hotel websites.

Source: own elaboration

In order to verify how hotels use behavioural economics on their own websites, the websites of **21 different hotels** from all over Poland were analysed. We took into account the websites of those hotels whose offer can be found in Google search - they occupy high organic search engine positions or have online advertising in the form of sponsored links (Google Ads) running. Those hotels that do not offer online booking facilities on their website were excluded.

Table 2.

Elements of behavioural economics on the websites of selected hotels in Poland

Item	Elements of behavioural economics studied																			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U
1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1/2	Y	N	1/2	1/2	N	Y	Y
2	Y	Y	N	Y	Y	Y	Y	Y	Y	1/2	Y	Y	1/2	Y	Y	1/2	1/2	N	Y	Y
3	Y	N	N	N	N	N	N	Y	Y	N	N	N	1/2	Y	N	1/2	1/2	N	Y	Y
4	Y	Y	N	Y	Y	N	Y	1/2	Y	Y	Y	Y	1/2	Y	N	1/2	1/2	N	Y	Y
5	Y	Y	N	Y	Y	N	Y	1/2	Y	Y	Y	Y	1/2	Y	N	1/2	1/2	N	Y	Y
6	Y	N	N	N	N	N	N	N	Y	Y	N	Y	1/2	Y	N	1/2	1/2	N	N	N
7	Y	N	N	N	N	N	N	N	Y	Y	N	N	1/2	Y	N	N	1/2	N	N	N

Cont. table 2.

8	Y	N	N	N	N	N	N	1/2	Y	1/2	N	N	1/2	Y	N	N	N	N	N	N
9	Y	1/2	N	N	Y	N	N	N	Y	Y	N	N	N	Y	N	N	N	1/2	N	N
10	Y	Y	N	N	Y	N	Y	N	Y	Y	N	1/2	1/2	Y	N	N	1/2	N	N	N
11	Y	Y	N	N	Y	N	Y	N	Y	Y	N	N	1/2	Y	N	N	1/2	1/2	N	N
12	Y	Y	N	Y	Y	N	Y	N	Y	Y	Y	1/2	1/2	Y	Y	N	1/2	1/2	Y	Y
13	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	Y	1/2	Y	Y	Y	1/2	1/2	Y	Y
14	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	1/2	Y	Y	Y	1/2	Y	Y	Y
15	Y	Y	N	Y	Y	N	Y	1/2	Y	Y	N	Y	1/2	1/2	N	1/2	1/2	N	Y	Y
16	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	1/2	Y	Y	Y	1/2	N	1/2	Y
17	Y	N	N	N	Y	N	Y	Y	Y	Y	N	Y	1/2	Y	N	1/2	1/2	N	Y	Y
18	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	1/2	Y	Y	1/2	1/2	N	Y	Y
19	Y	N	N	N	Y	N	Y	Y	Y	Y	Y	N	1/2	Y	N	1/2	1/2	N	N	N
20	Y	Y	Y	N	Y	1/2	Y	Y	Y	Y	Y	Y	1/2	Y	N	Y	1/2	N	Y	Y
21	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	1/2	Y	1/2	Y	1/2	1/2	Y	Y

Note. Numbers used in the lines indicate: 1 - Hotel Diament Ustroń, 2 - Hotel Diament, 3 - Hotel Mariacki, 4 - Hotel Arłamów, 5 - Hotel Bania, 6 - Grand Hotel Kielce, 7 - Hotel Warsaw, 8 - Hotel Lublin, 9 - City Park Poznań, 10 - Hotel Lambert, 11 - Hotel Gdańsk, 12 - Copernicus, 13 - Marine Hotel Kołobrzeg, 14 - Mercure Wrocław, 15 - Focus Hotel Łódź, 16 - Malinowski Hotel, 17 - Arche Hotel, 18 - Little Rome Hotel, 19 - Aries Hotel, 20 - Radisson Warsaw, 21 - Marriott Hotel Warsaw. In the columns symbols have been used to denote individual elements of behavioural economics: A - The anchoring effect, B - The unavailability effect, C - The social proof effect, D - The false consensus effect, E - The halo effect, F - The default option effect, G - The primacy effect, H - The complexity aversion, I - The action error, J - The conjunction error, K - Pure exposure effect, L - House money effect, M - List length effect, N - Contrast effect, O - Hook-up effect, P - Unnecessary information effect, R - Decoy effect, S - Illusion of innovation, T - Loss aversion, U - Fear of regret. Where examples of the application of the indicated elements of behavioural economics have been found on a particular hotel's website, 'Y' is shown in the table, where no such application has been found, 'N' is marked. The indication "1/2" means that the hotel applies these elements in a limited/partial way.

Source: own compilation based on hotel websites from the table.

Table 2 shows the objects of the research and the behavioural economics elements found on the websites of these hotels. The home pages, offer pages, booking path and possibly additional elements/sub-pages were verified, depending on the content available on the site. The study was conducted in July and August 2024.

The most common cognitive errors used on the websites of Polish hotels were the action error and the anchoring effect. Each of the surveyed hotels exploited the **action error** on their website by using calls to action (Figure 4 and 5 - examples of the use of the action error). The most common calls to action in the hotel industry were 'Book' and 'Check availability'. There were also more elaborate calls to action, e.g. 'Book with obligation to pay' or a prompt to contact the reservations department by phone to clarify doubts or match an offer to the user's needs. 'Choose' is also a frequent call to action, in the context of selecting an accommodation option or rate/price option.



Figure 4. Screenshot showing an example of the use of an action error (call to action in the form of a 'Book' button) on a hotel website (Hotel Warszawa).

Source: Own elaboration.

	<p>Oferta bezzwrotna ze śniadaniem - rabat 11%</p> <ul style="list-style-type: none"> 🏷️ Oferta bezzwrotna - korzystna cena ⓘ 📅 100% przedpłaty 🍴 Śniadanie w cenie <p>Czytaj więcej</p>	<p>2 osoby, 1 nocleg, 1 pokój</p> <p>635,46 zł Najlepsza cena</p> <p>REZERWUJ</p> <p><small>Zawiera opłaty i podatki</small></p>
	<p>Cena dnia - ze śniadaniem</p> <ul style="list-style-type: none"> 🔄 Bezpłatna anulacja ⓘ 🕒 Zarezerwuj teraz – zapłać na miejscu! Nie wymagamy karty kredytowej 🍴 Śniadanie w cenie <p>Czytaj więcej</p>	<p>2 osoby, 1 nocleg, 1 pokój</p> <p>714 zł</p> <p>REZERWUJ</p> <p><small>Zawiera opłaty i podatki</small></p>
	<p>Wakacje - wspaniały wypoczynek z posiłkami</p> <ul style="list-style-type: none"> 🔄 Oferta częściowo zwrotna ⓘ 📅 30% przedpłaty 🍴 Śniadanie i obiadokolacja <p>Czytaj więcej</p>	<p>2 osoby, 1 nocleg, 1 pokój</p> <p>809 zł</p> <p>REZERWUJ</p> <p><small>Zawiera opłaty i podatki</small></p>

Figure 5. Screenshot showing an example of the use of an action error (call to action in the form of a 'Book' button) on a hotel website (Hotel Diament Ustróż).

Source: Own elaboration.

The anchoring effect (Figure 6) on hotel websites appears by offering different accommodation options (different types of rooms, with different sizes and amenities). Hotels also offer different stay packages (e.g. a holiday package that includes extra breakfast and dinner and access to various hotel attractions) and different pricing options (e.g. a different price when choosing to pay in advance without the possibility of a no-cost cancellation and a different price when choosing to book with the possibility of cancellation at no extra charge). Hotel websites can also include elements that show the user the uniqueness of the property

itself. This is done, for example, by showing the history of the building or the unique wellness and spa offer or other additional hotel attractions.

Pokój 2 osobowy standard

- 15 m²
- Dwa pojedyncze łóżka o szerokości 90cm z możliwością połączenia
- ✓ Wi-Fi, Klimatyzacja, TV
- Czytaj więcej

od **590 zł**

Pokój 3 osobowy standard

- 22 m²
- 2x pojedyncze łóżka o szerokości 90cm oraz łóżko o szerokości 140cm z również dla 2 os.
- ✓ Wi-Fi, Klimatyzacja, TV
- Czytaj więcej

od **660 zł**

Figure 6. Screenshot showing an example of using the anchoring effect (different accommodation options) on a hotel website (Hotel Lublin).

Source: Own elaboration.

The use of the **contrast effect** was noted just as often (in 20 of the 21 hotels surveyed) (Figure 7). Among the different accommodation options, different price options and packages, hotels show significant differences between them and differences in their value (e.g. a night in a standard room costs significantly less than a stay in a suite).

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Bezzwrotna

Elastyczna

Szczegóły

Szczegóły

Szczegóły

Figure 7. Screenshot showing an example of the use of the contrast effect (differences in price depending on the choice of options) on a hotel website (Hotele Diament).

Source: Own elaboration.

The **conjunction error** was noticed on the websites of 18 hotels out of 21 surveyed. Hotels exploit this effect through storytelling, given that people tend to listen to different stories. (Figure 8). The hotels publish videos and photos on their websites showing fictional guests enjoying the facility and its attractions, it is sunny during their stay and the hotel guests are having a great time participating in the animations.

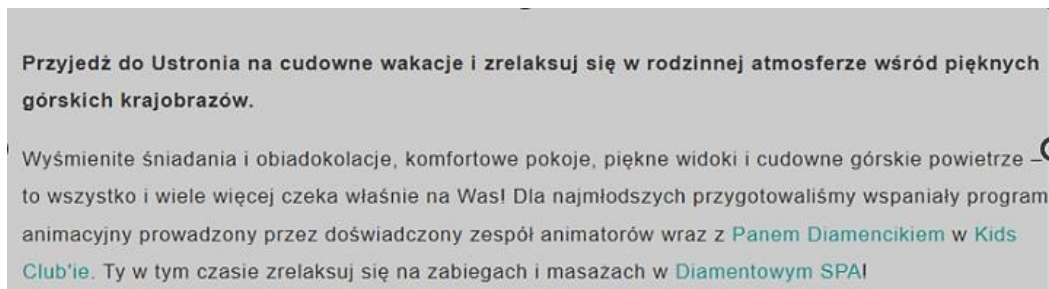


Figure 8. Screenshot showing an example of using a conjunction error (through storytelling) on a hotel website (Hotel Diament Ustronie).

Source: Own elaboration.

The halo effect was also frequently used in the hotels surveyed. This was done through the use of professional films and photos with attractive people on the websites or the presentation of spectacular views of the surroundings. When a user enters the hotel website, he or she immediately sees attractive images, thus making a positive first impression. On websites, hotels can also use popular figures (actors, athletes) and recommendations from them to influence the user's decision to purchase the service (Figure 9). The halo effect was noticed on the websites of 17 surveyed hotels.



Figure 9. Screenshot showing an example of the use of the halo effect (through the use of a well-known character) on a hotel website (Hotel Arłamów).

Source: Own elaboration.

On the websites of the 16 hotels, the use of the **priority effect** was observed, usually by placing the most relevant information at the beginning. Examples include a shortened pictorial description of the in-room amenities or a shortened description characterising the benefits of the stay package, which are presented at the beginning of a longer description. In this way, the most important information is presented at the beginning and the user immediately becomes familiar with it.

Hotel websites can also exploit fear of grief, loss aversion and the house-money effect in a relatively easy way. But this type of action was only observed on 13 websites out of 21 surveyed. This means that despite the effect being simple to implement, some hotels are not using it on their sites. The use of **the fear of regret** can be observed in particular in the booking engine, i.e. when the user goes to the booking system. Hotels emphasise the bargain of the offer through the limited availability of stay packages that can be booked on specific dates. Similarly,

messages indicating that the availability of rooms on a particular date of interest to the user is running out are often noticeable (Figures 10-12).



Figure 10. Screenshot showing an example of the use of fear of regret (by communicating the limited availability of an offer) on a hotel website (Hotel Mariacki).

Source: Own development.



Sekretna oferta odblokowana...

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Figure 11. Screenshot showing an example of using fear of regret (by communicating the limited availability of a discount - discount code) on a hotel website (Hotel Arłamów).

Source: Own elaboration.

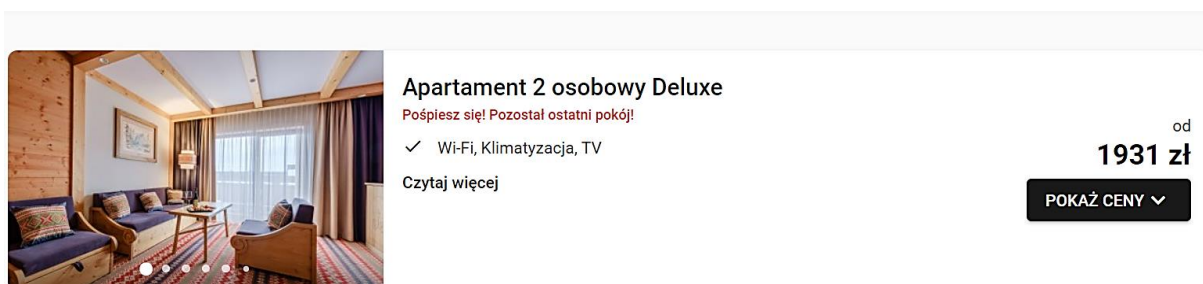


Figure 12. Screenshot showing an example of the use of fear of regret (by communicating the limited availability of a selected room) on a hotel website (Hotel Bania).

Source: Own elaboration.

The house money effect is used in the hotel industry through the use of discounts, promotions and bonuses or freebies, which are also popular in online shops (Figure 7, Figure 14). In stay packages, hotels also communicate about free access to additional attractions (e.g. pool area, sauna, etc.).

Limited offer messages can be considered in the context of exploiting **the unavailability effect**. Hotels use activities related to so-called secret offers, which are available exceptionally to selected users and are to be used for a limited time when booking through the hotel website (Figure 11). Hotels sometimes offer lower prices to users who join a discount club. Such offers are not available to guests without a club card (Figure 13).

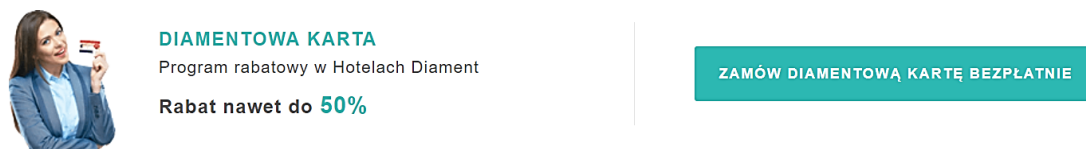


Figure 13. Screenshot showing an example of using the unavailability effect (by communicating a special offer available to Diamond Card users) on a hotel website (Hotele Diament).

Source: Own elaboration.

The exploitation of **loss aversion** was observed in those hotels that exploited the fear of regret at the same time. Hotels offering discounts communicated savings by crossing out the old, higher price and highlighting the new, lower price (Figure 14), or used slogans such as 'Don't miss out on a bargain' (Figure 15) or communicated limited room availability by warning of the possible loss of a bargain price or offer if a booking was not made immediately (Figure 16).

Twoja rezerwacja		
Promocja: Specjalny Rabat - Oferta		i
Bezzwrotna		
▼ Standard - Pokój Dwuosobowy - 1 pokój		476.76 zł
2 noc(e) 1 dorosły		
Suma	548.00 zł	476.76 zł
Suma		476.76 zł

Figure 14. Screenshot showing an example of the use of loss aversion (by communicating the old and new price) on a hotel website (Hotele Diament).

Source: Own development.

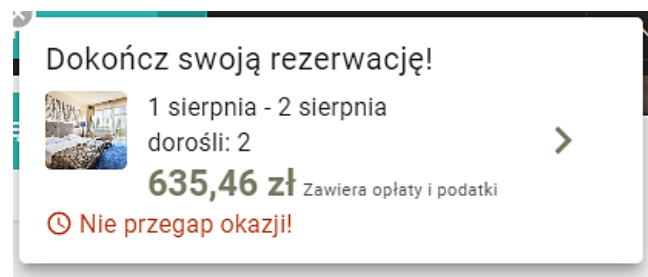


Figure 15. Screenshot showing an example of the use of loss aversion (through the message "Don't miss the opportunity!") on a hotel website (Hotel Diament Ustroń).

Source: Own elaboration.



Figure 16. Screenshot showing an example of the use of loss aversion (via a limited room availability message) on a hotel website (Hotel Radisson Warszawa).

Source: Own elaboration.

The use of messages using loss aversion, fear of regret, the house money effect or the unavailability effect can also be successfully applied outside the booking system, showing users information on the limited availability of certain offers and discounts or promotions and encouraging them to take advantage of them. This can be done through texts in the offer description, special pop-ups, i.e. windows that appear on the website e.g. when the user wants to leave the page, or widgets, i.e. graphic elements that appear to the user e.g. on the side of the page next to a specific offer. The examples show that hotels use different types of messages. Some use short messages such as 'Last room left', 'Don't miss out'. However, there have been long and more complicated messages that may not be understandable to the user (Figure 10). However, one should also ask oneself whether too many messages are counterproductive.

An example of the use of **complexity aversion** was observed on the websites of the 10 hotels surveyed. The hotels convince users of the low risk of the purchase by showing the possibility to cancel, i.e. the option to cancel the booking (Figure 17). In the case of 4 hotel websites, it was considered that there was a partial use of this element, due to the not very favourable cancellation conditions, which may discourage potential guests.

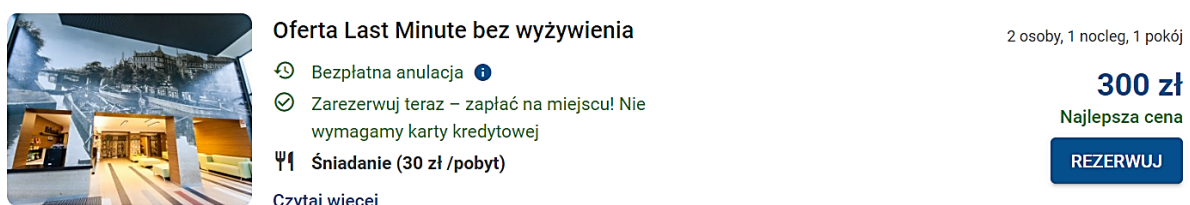
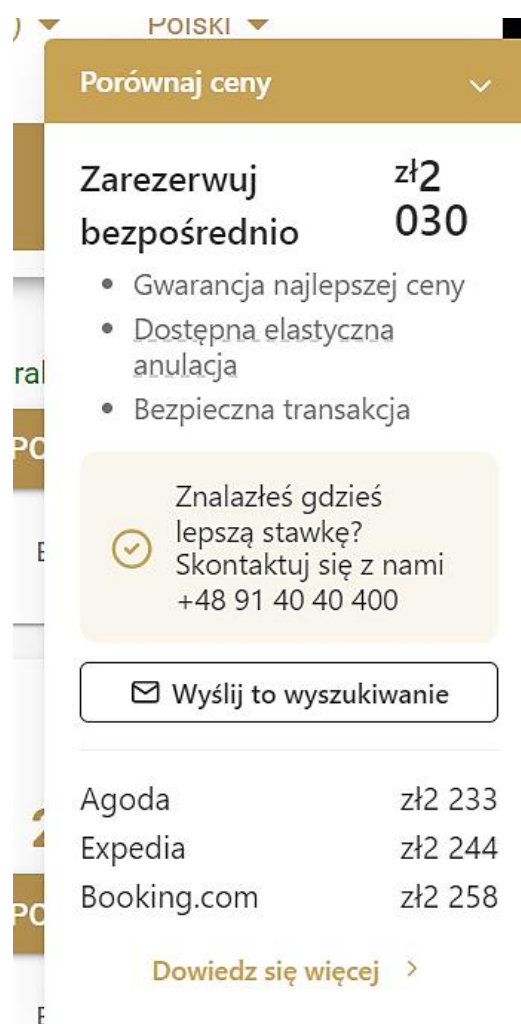


Figure 17. Screenshot showing an example of the use of complexity aversion (via a 'Free Cancellation' message) on a hotel website (Hotel Malinowski).

Source: Own elaboration.

An interesting option used by some hotels was the presentation of the price when booking directly via the website compared to prices on intermediaries' websites (Figure 18). With such information, the hotel reassures users that by booking on the website they will get the best possible price. The message about the best price guarantee and security can reinforce in the user the feeling that the transaction is low risk. Hotels can encourage users to contact them by phone if they find a better price offer than the one on the website. In this way, facilities can increase the chance of negotiating prices or explaining the details of the offer and the user completing the booking directly.



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Figure 18: Screenshot showing an example of price information on intermediaries' websites on a hotel's own website (Hotel Marine).

Source: Own elaboration.

The effect of pure exposure was observed on 12 hotel websites out of 21 surveyed. Hotels exploited this effect by frequently displaying promoted stay packages (e.g. a holiday package during the surveyed period) or frequently communicating the possibility of joining a discount club.

On the other hand, by showing messages such as "Most chosen room" or "Bestseller" on websites, hotels exploit **the false consensus effect** (Figure 18). Such action was observed in 10 cases out of 21 surveyed.

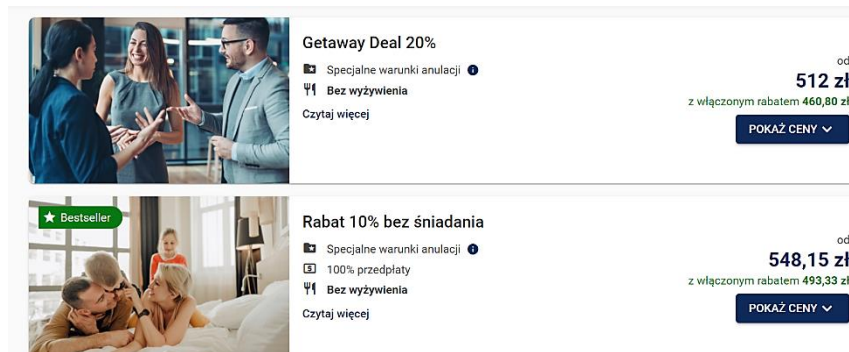


Figure 18: Screenshot showing an example of the use of the false consensus effect (via the 'Bestseller' message) on a hotel website (Focus Hotel Łódź).

Own elaboration.

The false consensus effect can be exploited on hotel websites in many other ways. For example, hotels could use messages about the most popular offers for families with children or for couples. Some hotels encourage website users to contact them directly by phone for a personalised offer (Figure 19). However, in order to make the most of the false consensus effect on the website, it would be useful for hotels to introduce content suggesting that many people share the user's opinions or choice through messages such as "Best choice for families with children" or "90% of couples choose this offer".



Figure 19: Screenshot showing an example of encouraging the user to contact the hotel directly (Grand Hotel Kielce).

Source: Own elaboration.

According to the authors, hotels only partially exploit **the decoy effect** on their websites. Often there are a lot of price options, which can cause discouragement among users and difficulty in making a choice. Usually prices and offers are presented from cheapest to most

expensive. Some hotels offered only one offer and one price option. Using the decoy effect, hotels can offer users 3 price options and 3 available packages on selected dates, highlight the differences between the proposals and reinforce the most expensive offer to make it the most attractive to potential hotel guests.

The effect of unnecessary information was observed on 15 hotel websites, in 10 of which it was found to be used only to a limited extent. Some hotels presented excessive information on their sites in the form of extremely long descriptions of stay packages or rooms.

In part, hotels also exploit **the effect of list length**. This was observed on the websites of 20 hotels out of 21 surveyed. When showing their offer, hotels usually show the cheapest option first. At the end of the listing, there are often inactive offers, which the user cannot use on the selected dates. There were situations where the package marked as the most popular was in the middle of the list of offers. Hotels can control the default display of offers. Hotels may present the most extensive and rich packages at the beginning of the listing in order to catch the user's attention. Some hotels present the offer, i.e. the available packages, to users first and then the details of the different rates. Similarly, as with packages, the available rates can be presented in an appropriate way - the rate that is most profitable for the hotel (i.e. usually the one that does not offer a no-cost cancellation option and the user authorises it with a credit card when making the booking) can be presented at the beginning of the price list.

The effect of social proof was observed in 6 hotels out of 21 surveyed. Hotels publish guest reviews on their websites using special plug-ins that pull real reviews from sites such as Tripadvisor or Google reviews.

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Figure 20. Screenshot showing an example of the use of the social proof effect on a hotel website (Hotel Mercure) by presenting guest reviews.

Source: Own elaboration.

Using plug-ins is an additional cost, but hotels can also use the effect of social proof in other ways. Without the use of external tools, a hotel can refer to guest reviews in the text on its website, quoting statements made by individual users who have added a review in other systems, such as surveys that the hotel sends to its guests after a stay. The way in which these reviews are presented can vary - hotels can use snippets of reviews in special boxes on the

website, random reviews (from a list of those available) can be presented in widgets that appear to users as they browse specific offers.

The hookup effect was observed in 6 hotels and was partially used in 2 hotels. Hotels mark offers by adding information such as "180 people are viewing this offer" or "10 people have just made a booking".

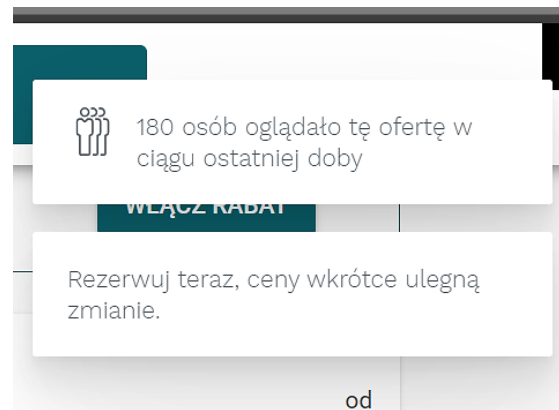


Figure 21: Screenshot showing an example of using the hookup effect on a hotel website (Hotel Arłamów) through information about the number of people who were interested in the browsed offer.

Source: Own elaboration.

Messages using the hover effect can appear on the website to users as pop-ups or similar effects (Figure 21.) - both on the homepage, on pages with descriptions of individual offers or packages, on pages with room descriptions, and in the booking system itself. The messages can relate to the most frequently selected offer but also to rate options. Slogans can be reinforced by adding quotes from other guests who have previously selected the offer the user is viewing.

The illusion of innovation, according to the authors of the article, was usually not used on the websites in the surveyed hotels. Only in 1 hotel was information regarding novelty observed (Figure 22).

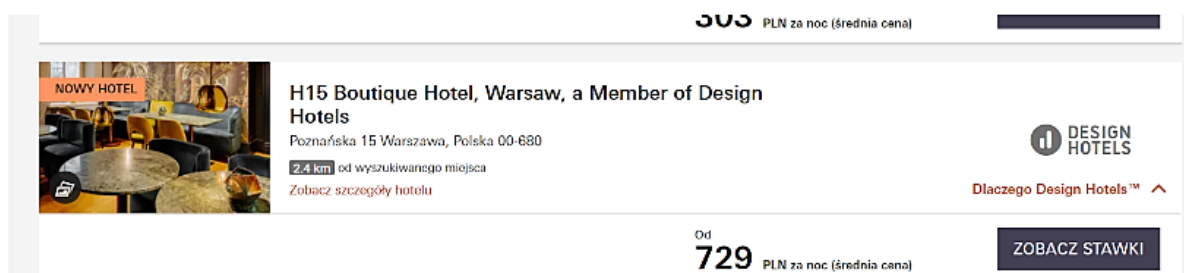


Figure 22. Screenshot showing an example of using the illusion of innovation on a hotel website (Hotel from the Marriott Warsaw group) through new hotel information.

Source: Own elaboration.

In some hotels, information was given about a recent refurbishment (Marking "newly refurbished room"). There was a lack of information on the pages about new packages, highlighting new attractions or facilities. In the texts, there was sometimes information about modernity (modern decor, modern equipment, etc.), but it was not well highlighted.

Hotels also rarely use **the effect of the default option** on their sites. Attempts to suggest a selected suggestion to users by marking it with a different colour were noted in the booking systems, but in most cases this option was not selected by default in the system. In 3 hotels out of the 21 surveyed, a pre-selected option was noted (Figure 23). In the case of 17 hotels, no default option was used at all, and in 1 hotel a partial default option was used.

The screenshot shows a hotel booking interface for a room named 'Studio'. On the left, there is a photo of the room and a 'CZĘSTO WYBIERANY' (Often Chosen) badge. The room details include: 2 people, 1 double bed or 2 single beds, and 17 m² / 183 ft². A description below the photo states: 'Oczekuj najlepszego! Komfortowe studio oferuje wszystkie udogodnienia potrzebne podczas długich pobytów, zarówno na podróże służbowe, jak i prywatne wizyty. Składa się z jednego pokoju z'. On the right, there is a 'PROMOTION' section with three options:

Option	Price
<input checked="" type="radio"/> Promocja: Specjalny Rabat - Oferta Bezwrotna	324.00 zł 281.88 zł
<input type="radio"/> Cena Dnia - Oferta Elastyczna	324.00 zł
<input type="radio"/> Cena Dnia - Oferta Elastyczna ze Śniadaniem	399.00 zł

Each option has a 'Szczegóły' (Details) link below it.

Figure 23. Screenshot showing an example of using the effect of the default option on a hotel page (Hotele Diament) by selecting the best rate suggested to the user.

Source: Own elaboration.

Hotels can use the effect of the default option in a number of ways. A default selected package that a hotel wants to promote on a particular date will be a tool to increase sales of that package. A default rate selected in the booking system can make that very rate the most popular choice for users.

Of the 20 behavioural economics elements studied that can be used on hotel websites, only the share error, the anchor effect and the contrast effect were used in virtually all the hotels studied. Elements such as the inaccessibility effect, the halo effect, the precedence effect, the complexity aversion, the conjunction fallacy, the pure exposure effect, the house money effect, the list length effect, the unnecessary information effect, the decoy effect, the loss aversion and the fear of regret were used or partially used in more than half of the hotels surveyed. Less than half of the hotels used the illusion of innovation, the hookup effect, the default option effect, the false consensus effect and the social proof effect.

The techniques used by hotels depend on the capabilities of the software they use - reservation systems, PMS (Property Management System), CRM (Customer Relationship Management) and CMS (Content Management System) and additional external plug-ins. Where there is limited capacity to implement the activities described in the article within the standard software the hotel uses, additional programming work is required to enable the website to utilise certain elements. In practice, if a manager wants to use information on the website about how many users have just made a booking or how many are currently viewing a particular offer, this data should be read from the hotel system and then, in a dynamic way, shown on the website. Software issues can be a stumbling block, but given the possible benefits, managers should consider investing in the necessary tools or approach website communications in a creative way and try to apply elements of behavioural economics using the options available,

such as in-content messages, additional buttons, pop-up/drop-down windows, etc., that are possible to implement within the basic options. In particular, relatively rarely used elements such as the social proof effect, the illusion of innovation or the false consensus effect can be implemented on a website without the use of additional tools. Combining multiple elements of behavioural economics on hotel websites, can produce the best results in terms of the direct bookings that hotels care most about.

4. Summary

The aim of this article was to present the current situation and conclusions regarding the use of behavioural economics elements such as heuristics and cognitive errors on the websites of selected Polish hotels. The article analyses 20 different elements of behavioural economics in the context of their use on the websites of 21 selected hotels. Examples of the use of cognitive errors are presented and new solutions dedicated to the hotel industry are proposed.

Among the hotels surveyed, surprisingly few used most of the cognitive errors described on their websites, despite the fact that the hotels surveyed usually belong to well-known brands and their size suggests the availability of a budget for modern tools. In contrast, the strategy evident on the websites in all cases studied suggested the existence of managers' awareness of the need to maximise support for direct bookings. Among the hotels surveyed, the Hotel Mercure Wrocław can certainly be singled out, whose website noted the use of all or part of all the elements of behavioural economics indicated in the article. However, as many as 10 hotels out of the 21 surveyed did not make full use of even half of the cognitive errors on their websites. In some cases, the messages used are worth modifying, as the current ones may not be understood by users (e.g. Figure 10). In some cases, inconsistencies were noted, e.g. when certain terms were selected, certain messages were applied and in some cases they were not, or messages were applied when the user was viewing the hotel site on a computer and not applied when viewing the site on a mobile device. Occasionally, certain messages were used on pages in excess or in a way that may cause annoyance (e.g. the use of pop-ups that cannot be closed or are very difficult to close, particularly on mobile devices). This points to the **failure of** hotel managers to **exploit** the full potential offered by the website and the need for managers to be made aware of the value of using behavioural economics elements to increase direct bookings.

The effectiveness of the individual elements of behavioural economics can be tested directly on the website. A number of tools serve this purpose. Among other things, Google Analytics allows you to analyse the number of users on your website and how these users behave, whether they make a booking or abandon a purchase at different stages of the path to payment. The Optimizely or VWO tool allows A/B testing to be carried out, so that it is possible to determine unequivocally whether a particular functionality implemented on the website has

resulted in an increase in the conversion rate. With the help of the tools, hotel managers can know the answer to which messages are effective and to what extent.

With hotels facing fierce competition and competing for guests with intermediaries, effective bookings management has become a key element in the operational success of accommodation establishments. Today's hotel market is characterised by high dynamics and volatility in customer preferences. Hotels need to constantly adapt their strategies and use modern tools to successfully **attract direct bookings** and remain competitive in the market. Behavioural economics provides valuable insights into people's decision-making mechanisms that can be used effectively in management. Understanding cognitive errors and how they affect people's behaviour allows managers to design more effective marketing and sales strategies.

The analyses carried out have shown interesting and practically relevant relationships between behavioural economics tools and the effectiveness of hotel management. These results can significantly contribute to the development of management science and quality, especially in a business context. They not only facilitate the understanding of these relationships, but also support strategic decision-making related to the creation of flexible and innovative companies and the achievement of significant competitive advantage.

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