Geotourism and the 21st Century–NTOs’ Website Information Availability on Geotourism Resources in Selected Central European Countries: International Perspective

Agnieszka Rozenkiewicz 1,*, Krzysztof Widawski 1 and Zdzisław Jary 2

1 Department of Regional Geography and Tourism, University of Wrocław, 32 W. Cybulski St., 50-205 Wrocław, Poland; krzysztof.widawski@uwr.edu.pl
2 Department of Physical Geography, University of Wrocław, 34 W. Cybulski St., 50-205 Wrocław, Poland; zdzislaw.jary@uwr.edu.pl
* Correspondence: agnieszka.rozenkiewicz@uwr.edu.pl; Tel.: +48-71-375-95-75

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Abstract: The power of the Internet as a communicative and promotional tool in the contemporary world of tourism is unquestionable. Nevertheless, the context of online information availability referring to geotourism and georesources is very rarely addressed in the academic literature. This article undertakes research into the online information availability on georesources presented on the official websites of the National Tourism Organizations (NTOs) of three selected Central European countries with similar geotourism conditions, namely the Czech Republic, Poland, and Slovakia. Their NTOs underwent a descriptive content analysis in order to highlight the dominating trends in the online presentation of georesources. As concluded in the article, information on geotourism resources available online is rather dispersed, as it is usually presented under divergent umbrella terms. Therefore, measures need to be taken to present a holistic online picture of geoheritage on an international level of availability, where certain pieces of geotourism-related information correspond with each other, accurately applying the system of hyperlinks. The research outcomes and suggestions for the future may find applicable use for various stakeholders of the tourism industry, especially the authorities responsible for different levels of its promotion.

Keywords: geotourism; georesources; Internet

1. Introduction

1.1. The Power of the Internet in the 21st Century World of Tourism

One of the predominant tasks of National Tourism Organizations (NTOs) is the promotion of tourism in certain regions. This promotional activity applies diverse tools and techniques with participation in tourism fairs, media advertising, PR, promotional materials in the form of printed leaflets and catalogues, study tours for journalists, and bloggers’ involvement, to name just a few. Their prevailing purpose is evoking the interest of both international and national tourist groups, influencing the tourists’ decision-making process regarding the final choice of a particular tourism destination and the undertaken forms of tourism activities, through providing a vast array of choices in accommodation and amenities [1]. Nowadays, printed advertising materials are becoming obsolete [2]. It is the Internet that has gradually become the number one player in the tourism advertising industry since the last decade of the previous century.

Not only has the Internet revolutionized the transfer of tourist information, but it has also triggered a change in tourists’ behavior in recent years. A sharp hike in the frequency of using the Internet
while planning a journey and making the final decision shows us how much human beings—and thus travelers—have become dependent on modern technology [3,4]. The current situation is the product of many variables, most importantly the Internet’s global availability, combined with real-time information updates, as well as the possibility of direct contact with the clients: a reality that has never been known before [5–7].

Nowadays, on the tourism market, as competitive as it is, launching a website cannot be perceived merely as a possibility, but rather as an absolute necessity that needs to be acknowledged by DMOs (Destination Management Organizations) [8,9]. Making use of this distribution channel of information is usually the first step in the modern reality of tourism to promote and commercialize a certain fragment of the tourist space [10]. What is more, due to the Internet, the tourism industry has become a global phenomenon that is available at a reasonable price. The regions promoting their tourist potential online enhance their global market position [11]. On the other hand, it needs to be stated that merely the online presence does not guarantee success [12]. A constant increase in the overall number of tourism-oriented websites causes an increased difficulty in attracting potential tourists, and finally, visiting consumers [13].

1.2. Online Information and Regional Promotion—How to Do It Right?

1.2.1. The Past and the Present—the Spectrum of Change

In the past, a choice of a particular tourism region by a potential tourist was either based on the offer of travel agencies or word of mouth. In the digital era of the 21st century, the Internet is, by far, the most popular source of information. This cyberspace guarantees tourists the ability to make their own individualized choices depending on the tourist information that was made available for them. Information communication technologies have revolutionized the tourism industry since the 1980s [4,14,15]. The websites containing the necessary information for tourists are becoming an indispensable distribution channel of tourist information in general [16,17], and they are the channel that essentially is of the greatest significance these days [18,19]. It has not changed for years now that a destination’s website is practically the first information source that tourists consult to find more specific tourist information on the place they wish to visit. In many cases, it is a real game-changer. Based on the exact information found, its availability, and how it is presented online, tourists make their final decisions on the choice of the regions in which they want to spend their vacation time. In the era of such a dynamic development of the information transfer, such as the one enabled by the Internet and social media, communication between a certain region and the institutions responsible for its promotion (NTOs and DMOs) seems to be the key issue. Therefore, it is worth focusing on how the promotion of a region and its resources is carried out online.

The success of a region in terms of its tourism popularity is usually a derivative of an adequately created and user-friendly website. It was as early as at the beginning of the 21st century when Baggio proposed a set of conditions that induce this success. He referred to it as the “Decalogue” [20] (p. 3). The researcher pointed out three basic issues, namely: the necessity of outlining a clear strategy, the aims, and the recipient groups that the offer is aimed at. The elements that enable interaction between the user and the above-mentioned organization should be well-functioning and designed in a user-friendly manner. The website’s content should be presented in a way that ensures high levels of acquisition and accuracy, starting from the colors applied, through the font size, to finish off with the correct grammar and text style. The content information provided ought to be credible and essential to encourage repeat online visits. It is best if the website’s layout is easy to navigate for all the possible recipient groups. To ensure a high level of content credibility, it should be regularly updated and corrected if needed. It is also necessary to advertise the website widely through both traditional media channels and the Internet.
1.2.2. Advantages and Disadvantages of the Website Information for the Tourism Market

The website’s quality is of pivotal importance in brand creation, as indicated by many researchers [21–23]. It is crucial to emphasize that merely the website’s existence raises the region’s attractiveness and influences its competitiveness on the tourism market [20] (p. 12). Quite often, potential tourists have only a vague idea of the destination they are planning to visit. Hence, online information that is provided easily and interestingly is of unquestionable importance, since it usually has an impact on the final travel destination choice [15,16,24,25].

Undeniably, a website is a key promotional tool [8,26]. In the contemporary world, tourists go online searching for all kinds of information, from practical information, such as the prices, through to the accommodation offer, transport possibilities, entertainment offerings, and regional attractions [27], and the Internet usually is the only source of information acquired [28]. Both DMO-managed and private websites are amongst most frequently visited ones by tourists prior to undertaking their journey [8,29], and their positive impact on the decision-making process is a fact [30–32]. It is also unquestionable how much the Internet has changed the tourism world [33–35]. Tourism belongs to the industry branches that refer to the Internet tools most willingly, with the websites being the most popular information sources, and therefore the most popular promotional tools of tourism regions in general [36,37]. The website’s content is as essential as its level of interactivity. Both of these elements increase the attractiveness of the tourism destination for the potential client [38,39]. Thus, a well thought out and adequate website proposal ought to become one of the basic elements of the promotional development strategy in the region [40,41]. From the recipient’s perspective, the functionality of the website is not only limited to its content value [42,43], but it is also created by other facilitating tools, such as the navigation system that constitutes the core of its usability [44–46].

The advantages of the online presentation of tourism-related information far outbalance its drawbacks. However, it is noteworthy that there is a risk for the web users that stems from the fact that easily accessible and visually appealing online information more and more frequently replaces the real-life experience. This trend also refers to geotourism resources. On the other hand, regardless of how attractive a certain tourism resource is in reality, if it does not exist in the virtual world, the chance of its occurrence in the tourists’ awareness decreases to almost none. This shows how far the dependence on the online information amongst tourists has grown these days.

1.3. Georesources and the Role of Online Presentation

Finally, a question arises: what is the place of geotourism and its resources in the context of online presentation and regional promotion? This form of tourism, even though it is based on the natural values of the landscape that were considered to be important elements of the tourism space for years, received closer attention as a separate form of tourism only in the last decade of the previous century. As highlighted by Hose—one of the pioneer researchers who defined the phenomenon in question—the geological aspect in the concept of geotourism deserves the utmost attention [47,48].

Another issue of great importance is the proper interpretation of the elements of the inanimate nature aided by the tourist facilities, owing to which the tourist gains an insight into the knowledge in geology and geomorphology of the visited place [49,50]. What is more, this knowledge considerably exceeds the basic level of information needed to admire the aesthetics of the observed fragment of the natural space [51]. Newsome and Dowling [52] indicate the importance of taking a sustainable approach to the visited resources. On the one hand, geotourism facilitates need to appreciate their role in the landscape and the evolutionary history of the Earth. On the other hand, a sustainable approach protects the geotourism resources by raising the awareness of the tourists, who are interested in getting to know the geology of the place in more detail, when it comes to the necessity of their preservation, to ensure the continuity of the geoheritage for the future generations. The obligation of preserving the heritage of an inanimate nature was also articulated by Hose and Vasiljević [53]. It originated in the idea that is commonly referred to in the academic literature as geoconservation. Its predominant task is the need to protect the geodiversity that, according to Grey [54], can be understood as a set of geological
elements amongst which the greatest focus is placed on rocks, minerals, and fossils, as well as on the
gemorphological elements such as landforms and physical processes, to finish off with the elements of soil. All of the above is referred to as geoheritage [48,55]. Most of the recent studies in this subject area emphasize the dualistic character of the phenomenon of geotourism [56]. Namely, the in situ geosites are the predominant points of tourist interest; nevertheless, what is growing in popularity are the ex situ elements of geoheritage presented to the wide audience in the form of museum exhibitions. The latter form of presentation of an inanimate nature is characteristic of the urban areas in particular.

So as to avoid any ambiguity in understanding of the basic concepts used in this research paper, its authors have presented them in a visual form (Figure 1) and proposed the following definitions. The notion of geodiversity entails all the possible elements related to the inanimate nature, regardless of their scale. Hence, geodiversity comprises both single sites, such as individual rocks and minerals, as well as surface elements, i.e., mountain ranges, uplands, etc. Within the concept of geodiversity, one can differentiate the elements that are valuable witnesses of the natural processes, which are unique in character, or for other reasons that are cognitively important. These elements of an inanimate nature can be defined as geoheritage. Geosites, on the other hand, are the integral components of geoheritage that due to their smaller scale can be perceived holistically by the public. Most geosites can be classified as potential resources for geotourism, whereas only the ones of the greatest scientific value that, at the same time, are adequately prepared to the needs of the tourist traffic (in the form of the existing infrastructure) can be referred to as the real or actual geotourism resources that constitute the basis for creating the geotourism products.

![Figure 1. Interrelations between the basic ‘geo-concepts’. Source: Authors’ own elaboration.](image-url)

This specific set of tourism resources requires adequate presentation and promotion to ensure the development of geotourism in regions that abound in the resources of an inanimate nature. These processes are happening on different levels—local, regional, national, and international—and require divergent tools. The most popular and the most effective at the same time is the Internet. Therefore, it is worth analyzing how the plethora of the Central European geoheritage resources is perceived by the National Tourism Organizations of chosen countries and how they promote it, so as to ensure becoming an essential factor in generating the geotourism movement in this part of Europe, which only three decades ago came back on the map of the Old Continent’s tourism landscape.
2. Materials and Methods

The predominant research aim in this paper was determining the level of accessibility of online information on geoheritage and geotourism on the websites of the NTOs of selected Central European Countries. The choice of the countries applied in the research was made in accordance with the regional division by the International Geographical Union. Additionally, only the countries whose National Tourism Organizations are operating under the auspices of the European Travel Commission, a nonprofit organization responsible for promoting Europe as a tourism destination, were taken into consideration. Altogether, three neighboring countries with similar geoconditions, and hence comparative geotourism resources potential, were chosen to be analyzed: namely Poland, the Czech Republic, and Slovakia (It is worth accentuating the fact that all three countries in question entered the system and market changes at a relatively similar time, and therefore faced comparative challenges. It is the Internet that offers them a chance to fully enter the global market, and to create a truly competitive tourist offer). Their NTOs underwent descriptive content analysis as the qualitative method used to conduct the research. The categories under assessment comprised the following:

- Placement consistency of georesources under the main bookmarks;
- Scope of information available in English, as opposed to the original language of the NTO;
- Embedded search engines’ results for the selected search terms, i.e., geotourism, geosite, geopark, geoheritage, geology, landscape, nature.
- Presence and validity of hyperlinks directing the reader to further information on geoheritage;
- Mobile website version and mobile applications’ availability;
- Information accuracy and cohesion;
- Language accuracy.

Furthermore, the international perspective included in the article’s title was achieved through focusing on the English versions of the NTO’s websites, which was based on the assumption that “English is an international language in a global sense” [57]. The online research was carried out between 15 October and 17 November 2019, applying the Google Chrome web search engine.

3. Results

As previously stated, the websites of three NTOs, namely the Polish Tourism Organization, the Czech Tourism Authority, later in the text referred to as Czech Tourism, and the Slovak Tourist Board, underwent the content analysis focused on the geotourism theme. Tables 1–3 show the online research outcomes divided into five main categories under comparison, i.e.,:

- Homepage bookmarks (English version), where the general content is set aside the geotourism-related content;
- Homepage bookmarks and geotourist information in the NTOs’ original language version (mutual relations);
- Embedded search engine responses to the selected geotourism keywords;
- Availability of the mobile version of the website and mobile applications in English;
- Language accuracy.
Table 1. Geotourism content analysis of the Polish NTO’s website.

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<tr>
<th>Country</th>
<th>Poland</th>
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<tr>
<td>Official Name of the NTO</td>
<td>Polish Tourism Organization (operating under the supervision of the Ministry of Sport and Tourism of the Republic of Poland)</td>
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| NTO’s Website Addresses | English version: https://www.poland.travel/en  
Original version: https://www.polska.travel/pl |

**General Content**

**NEWS: Travel inspirations:** 74 website articles containing mostly ideas for themebased journeys from taking part in sport events through discovering the secrets of World War II to visiting famous Hollywood movies’ locations, finishing off with culinary tourism experiences and travels suggested by famous bloggers.

**CITIES:** 18 cities in Poland are described through their characteristic features; hyperlinks to the city’s official portals are provided.

**REGIONS:** 16 regions of the country according to the administrative division into voivodeships are presented; introductory articles accentuating the predominant tourist attractions are available; hyperlinks directing the reader to the official tourist portals of each region (with the exception of the Greater Poland voivodeship and the Opole voivodeship) are provided; the only invalid hyperlink was the one of the portal of the Lubelskie voivodeship [60]. Two official portals did not have their English versions, i.e., West Pomerania [61] and Świętokrzyskie Voivodeship [62]; notabene, the hyperlinks directed the reader to the official websites of the voivodeships and not to the official tourism portals as mistakenly suggested. Further information on the Silesian region [63] was available in German only.

**Geotourism-Related Content**

**Poland, a place to be in 2020:** The PDF attachment to the article named Poland’s Highlights 2019/2010 #VisitPoland #Polandtravel in the initial position highlights that the mining sites of Krzemionki Opatowskie have been recently inscribed on the World Heritage List. A hyperlink to a separate article is provided, where the reader can also find the hyperlink to the official website of the attraction [58]. Unfortunately, the original name “Opatowskie” was misspelled in the promotional materials. 

**New UNESCO Site:** The article merely mentions that there is a new UNESCO site in Poland providing the most basic information; interestingly, the name of the place is not given, neither are the directions, nor the hyperlink to any further information or article is provided [59].

**#VISITPOLAND Poland by YouTubers:** Landscape values of the country are mentioned in chosen videos e.g., hiking adventures in Poland. However, no specific geotourism information is presented.

**Selected georesources are presented in relation to the regional division of the country. Searching for the relevant geotourism information requires initial knowledge on the topic. An example of the region rich in geotourism resources is Lower Silesia. Lower Silesia (Dobry Sącz)—the Land of Many Treasures: includes information on the old mines and underground attractions of the area; the role of the Sudety mountain range is emphasized. Two more examples of regions crucial from the point of view of georesources are Śląskie and Świętokrzyskie. The first one constitutes an example of the largest industrialized area in the country with its mining facilities of the “Guido” Coal Mine, the Queen Louise Adit, and the Tarnowskie Góry Silver Mine (a UNESCO-listed site) being introduced for the readers in the main article [64]. The majority of the above-mentioned attractions are available for tourists who wish to embark on a journey tracing the Industrial Monuments Route. When it comes to the online presentation of the Świętokrzyskie region, geological values of the Świętokrzyskie Mountains and the Pepper Mountains are stressed. The most important tourist geoattractions, namely the flint mines of Krzemionki, the Raj cave, and the Jurassic Park in Bątow are mentioned in the main article.

**Overall,** the introductory articles describing each region strike a balance between the presentation of the cultural and natural resources at tourists’ disposal. Nevertheless, in relation to the natural values of the landscape, the biotic aspects of it seem to overtake the general scope of attention.
Table 1. Cont.

<table>
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<tr>
<th>Country</th>
<th>Poland</th>
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<td><strong>DISCOVER:</strong></td>
<td>Tourist information is organized under nine categories:</td>
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<tr>
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<td>World Heritage Sites, Castles and Palaces, Art and Culture, Holy Places,</td>
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<tr>
<td></td>
<td>National Parks and Outdoors, Caves and Mines, Historical Trails,</td>
</tr>
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<td></td>
<td>Genealogy Trails, and Shopping in Poland.</td>
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<tr>
<td><strong>World Heritage Sites:</strong></td>
<td>Altogether as many as 16 places were recognized as UNESCO sites in Poland, six of which are especially important from the point of view of geotourism, namely: Krzemionki, Tarnowskie Góry Silver Mine, Muskauer Park, Wieliczka, and Bochnia Royal Salt Mines. Quite surprisingly, the newest UNESCO site in Poland—Krzemionki, inscribed on the list of the World Heritage Sites only in July 2019—is accompanied by the shortest article of all, and is preceded by other articles, i.e., Family time travels, Eileen Aldis—A vlogger in Poland, and pictures of Travel inspirations (originally placed under the bookmark called NEWS). Hence, in order to reach the main article with 117 words in its word count, the reader has to scroll down to the bottom of the page and then, if interested in further information on the site’s exact location etc., has to enter the official website of Krzemionki.</td>
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<tr>
<td><strong>National Parks and Outdoors:</strong></td>
<td>Basic information on the 23 national parks in Poland including a map and introductory articles are available; six national parks do not have the official website versions available in English, i.e., the hyperlinks to the Góry Stołowe National Park, the Roztoczański National Park, and the Gorczański National Park. No information is provided on the fact that the Giant Mountains National Park was established a geopark.</td>
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<td><strong>Caves and Mines:</strong></td>
<td>The underground wonders of Poland including the cave systems (9), the military sites (10), mines (17), and other tourist attractions of the type are described shortly. A separate introductory article is devoted to the selected Polish caves, the Queen Louise Adit, the Guido Coal Mine, the “Wieliczka” Salt Mine and its Graduation Tower, the Bochnia Salt Mine, the underground chalk tunnels of Chełm, and the Tarnowskie Góry Silver Mine.</td>
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| **EXPERIENCE:** | Tourist information is organized under eight categories:                |
|                 | Boating and Sailing, Bike Trails, Skiing, Hiking and Climbing, Spa, Polish Cuisine, Polish Traditions, and Spice Up Your Travel. |
| **Four categories, namely Boating and Sailing, Bike Trails, Skiing, Hiking, and Climbing focus on the landscape values of Poland, offering numerous possibilities for engaging into active tourism.** No information specifically aimed at geotourists is given. Notwithstanding, basic pieces of geotourism-related information appear in the section of Hiking and Climbing; for instance, the rock formations of the Table Mountains are mentioned in the article devoted to hiking and climbing in the Sudetes [65]. Another category worth mentioning is Spa, especially in the context of geothermal springs. Their geothermal features when perceived as visual attractions can be categorized as geotourism resources [66]. The geothermal springs of the country are briefly described in different articles of the subcategory called Health Resorts. The main article distinguishes the geothermal waters of Iwonicz. Nevertheless, without initial knowledge on the topic, the reader has to go through as many as 43 short articles to find more accurate information on the availability of geothermal springs. Unfortunately, there is no English equivalent of the article called Thermal baths in Poland as a way to deal with the autumn blues; it is available only in Polish, and the role of the Podhale region in this respect is strongly emphasized [67]. |
### Table 1. Cont.

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<tr>
<td><strong>Poland</strong></td>
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**Download brochures:** 10 documents downloadable as PDF files are available for visitors, i.e., Poland: Major tourist attractions, Poland: Cities, Poland: Castles and palaces, Poland: Culture and art, Poland: Health resorts and spas, Tastes of Poland, Poland: religions, rites and traditions, Poland: Wild nature, and Poland: UNESCO World Heritage Sites. Two brochures offer basic information concentrating mainly on both biotic and abiotic natural resources of Poland. The first one, simply named Poland, contains sections titled Sea, Lakes, and Forests. It underlines the uniqueness of the amber coast of the Baltic Sea, the waters of the Masurian lakes, as well as the Białowieża treasures. Moreover, there is information concerning the Polish mountain ranges with the Karpatoszue Range, the Tatras, and the Podhale Region, as well as the Bieszcady mountain range. The scenic view opportunities for the photography enthusiasts are described in relation to the Słowiński National Park and its shifting dunes, the Mouth of the Warta River joining the Oder, the Biebrza Marshes, the Bieszcady Mountains, the Białowieża Forest, and the Tatras with their alpine landscape. A separate page is devoted to the Salt Mine in Wieliczka; as the article states, it is a masterpiece created by nature and man. What is more, active tourism opportunities in the picturesque landscapes of the Great Masurian Lakes, the Dunajec Gorges, as well as the underground attractions of the Golden Slope and the Golden Mountains, together with the cave systems of the Kościelska Valley in the Tatras are described.

The second brochure is called Poland: Major Tourist Attractions and offers tourist information on 163 places worth visiting, which are grouped according to the administrative division of the country into 16 regions. Chosen examples of geotourist attractions include the shifting dunes in the Słowiński National Park, the seashore cliff of the Wolin Island, the rock labyrinth of the Jagged Rocks (Bledne Skaly) in the Table Mountains National Park, the River Prądnik Valley in the Ojców National Park, the Kiszewki flint mines near Białowieża, and many more [68].

The third brochure that is important from the geotourists’ perspective is Poland: Wild Nature. It mainly focuses on the biosphere; nevertheless, such attractions of the inanimate nature such as the Stołowe Mountains Rock Maze and the Magical Land of Rocks in the Kraków-Częstochowa Upland, the Dunajec River Gorge, the Thermal Baths in Podhale, the Tatras Mountains, and the Bear Cave in the Sudetes are also presented. This brochure is interactive; therefore, it enables the user to visit the linked websites.

The brochure entitled Poland—UNESCO World Heritage Sites provides a brief, usually a two-page long description of each World Heritage Site ( WHS) in the country. However, it needs updating, as no information on the Kiszewski flint mines is provided. Interestingly, the promotional article on the Muskauer Park does include the following information: “this natural phenomenon also covers the area of the Muskauer Arch—the only terminal moraine visible from space” [69]. Nevertheless, no information is given on the fact that the Muskauer Park lies within the landscape park area of the same name, and more importantly from the geotourism perspective, within the Muskauer Arch Geopark area. The latter is the only Polish geopark that is on the list of the Global Geoparks Network under the UNESCO auspices.

**WTM:** promotional information of the participation of the Polish Tourism Organization in the World Travel Market in London. Not applicable.

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**PLAN YOUR TRIP:** Useful tips regarding the planning process prior to, or during the journey are facilitated through six categories: Traveling, Practical Information, Trip planner, Accommodation, Brochures to Download, General Contact, and Database Search.
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<tr>
<th>Country</th>
<th>Poland</th>
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<tr>
<td><strong>Homepage Bookmarks and Geotourist Information (Original Language Version)</strong></td>
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<tr>
<td></td>
<td>Homepage bookmarks are different in Polish than in English, so is the placement of georesources under certain categories. The scope of information on geotourism in Polish is broader. An example of the information missing in an English version is a separate article on the phenomenon of geotourism [70] presenting one geopark of the international rank—the Muskauer Arch Geopark, belonging to the Global Geoparks Network [71], and two geoparks of the national rank, i.e., the St. Anne Mountain Geopark and the Giant Mountains Geopark with the buffer zone. The hyperlinks to more information on the last two geoparks mistakenly direct the reader to the website of the country’s Ministry of the Environment, where no further information can be found [72]. Two more geoparks attracting visitors mainly locally are also mentioned (Geopark Kielce and Geopark “Stone Forest in Routocze”). The hyperlink directing the reader to the information on georesources provided by the Polish Geological Institute is invalid [73]. Even though comprehensive information on geotourism is available there in Polish [74], the English version of the website is unattainable.</td>
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<thead>
<tr>
<th>Keywords</th>
<th>Number of Results</th>
<th>Content</th>
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<tbody>
<tr>
<td>geotourism</td>
<td>0</td>
<td>none</td>
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<tr>
<td>geosite</td>
<td>0</td>
<td>none</td>
</tr>
<tr>
<td>geopark</td>
<td>1</td>
<td>Geopark in Kielce [75] Centre for Geo-Education, established in 2003 and renamed Geopark Kielce for marketing purposes [76], comprises a network of geotourist and educational facilities presenting the area’s georesources under the protection of the geological reserves. Apart from a short article, the hyperlink to the website of the Geopark in Kielce with comprehensive information available in English is provided. No information on the Muskauer Arch Geopark, the Saint Ann’s Mountain Geopark, or the Giant Mountains Geopark with the buffer zone is mentioned.</td>
</tr>
<tr>
<td>geoheritage</td>
<td>0</td>
<td>none</td>
</tr>
<tr>
<td>geology</td>
<td>2</td>
<td>The results for the search term ‘geology’ are as follows: The Bałtowski Jurassic Park (Experience-Family Fun; Family Fun is not actually available under the bookmark called Experience on the main website, it only becomes visible after using the embedded search engine. Some places much more clearly related to the topical word in question do not appear as the results at all; for instance, none of the geoparks are linked with the word ‘geology’, neither are the regions that abound in georesources, such as the Swiślakrzyskie voivodeship [77]; The Pieprzowe Mountains and the Queen Jadwiga’s Ravine.</td>
</tr>
<tr>
<td>landscape</td>
<td>59</td>
<td>A vast array of articles from which to choose. A potential geotourist needs initial knowledge on the topic to find the relevant information, as some results are only remotely related to the concept in question.</td>
</tr>
<tr>
<td>nature</td>
<td>59</td>
<td>A vast array of articles to choose from. A potential geotourist needs initial knowledge on the topic to find the relevant information, as some results are only remotely related to the concept in question.</td>
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| Mobile Version of the Website and Mobile Applications | A mobile version of the website is available for both Android and iOS devices. Mobile applications: information on the top 10 mobile applications useful for traveling in Poland is given, i.e., Foodspotting, Accuweather, Google Maps, With XE Currency App, Go2Stop, Voice Translator, Blablacar, PeakFinder, TripAdvisor, and Polska Niezwykła. Especially the last three of them provide selective information on georesources. |
| Language Accuracy | Native level of English proficiency in the text, no major mistakes, only a few typos can be found, e.g., Krzemionki “Opiatowskie” instead of Opatowskie [58] or Muzakowski “Park” instead of Park [78]. |

Source: Authors’ own elaboration.
Table 2. Geotourism content analysis of the Czech NTO’s website.

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<th>Country</th>
<th>The Czech Republic</th>
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<tbody>
<tr>
<td>Official Name of the NTO</td>
<td>The Czech Tourism Authority (operating under the supervision of the Ministry for Regional Development)</td>
</tr>
</tbody>
</table>
| NTO’s Website Addresses | English version: https://www.czechtourism.com/home/  
| | Original version: https://www.czechtourism.cz/ |

<table>
<thead>
<tr>
<th>General Content</th>
<th>Geotourism-Related Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESTINATIONS: Comprehensive tourist information together with an interactive map is provided for Prague, Central Bohemia, East Bohemia, West Bohemia, South Bohemia, North Bohemia, Moravia, and Silesia.</td>
<td>A very detailed list of places to visit in the regional division of the country together with the capital city of Prague as a separate unit is given. Finding certain information on geotourism resources requires initial knowledge on their spatial distribution and the recognition of their original names. An example of the region that abounds in geotourism resources is the Bohemian Switzerland in North Bohemia, whose geotourism is succinctly described [79]. The article that the reader is led to following this access path clearly states that Bohemian Paradise is a UNESCO Geopark. Website navigation is facilitated by the use of hyperlinks, directing the reader to downloadable brochures and guides (available within <a href="http://www.czechtourism.com">www.czechtourism.com</a>), as well as to booking.com offering accommodation nearby. Additionally, each article presenting a place to visit is accompanied with the option of showing its location on the map as well as the basic phone and address data. The hyperlinks (usually more than one) for each place under the regional division in most cases enable the reader to reach an external website whose English version is available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Homepage Bookmarks (English Version)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CULTURAL HERITAGE:</td>
<td>Geotourism-related content is most easily accessible under the Active Holiday bookmark. There are three main categories of active holiday in the Czech Republic proposed, i.e., Summer Activities, Winter Activities, and the category of Natural Heritage. Among other examples of activities for the summer period, visitors are encouraged to enjoy the Bohemian Paradise through hiking [80], biking experiences [81], or having a walk along the gorges of the Bohemian Switzerland [82]. The most important from the point of view of geotourism is the information provided under the bookmark named Natural Heritage [83], which is further divided into six subcategories, namely Mountains, Rivers, and Lakes, Protected Areas, Caves, Observation Towers and Lookout Points, and finally, Rock Towns [84]. The latter is of pivotal importance for geotourism with the Adršpach rock formations, the Bohemian Paradise UNESCO Geopark, Prachov Rocks, Broumovské stěny, Hřensko and its gorges, and Svatoš Rocks being singled out and thoroughly described. There is an interesting system of further categorization of the places into the summer sport locations or nature-related spots that can also make the decision-making process of the tourist easier. Another key bookmark is Protected Areas, where practically all the places described have at least one feature to them that can easily qualify them as geotourism-related, starting from the Pravčická brána (Pravčická Sandstone Gate), which is the biggest natural sandstone arch in Europe, to three geoparks, namely the Bohemian Paradise UNESCO Geopark, the Geoloci GeoPark, the Železné hory Geopark. Health and Spas with its subcategories is a place to look for further information on geothermal waters. Introductory articles provide very succinct information; therefore, without initial topical knowledge, the reader needs to click on most of the suggestions to find out more on the West Bohemian spa triangle with the Vřížlo hot spring of the Karlovy Vary or the mineral-rich springs of the Teplice and Bečvou Spa, and many more.</td>
</tr>
<tr>
<td>UNESCO</td>
<td></td>
</tr>
<tr>
<td>Spiritual Czechia</td>
<td></td>
</tr>
<tr>
<td>Historical Towns</td>
<td></td>
</tr>
<tr>
<td>Castles and Chateaux</td>
<td></td>
</tr>
<tr>
<td>Intangible Heritage</td>
<td></td>
</tr>
<tr>
<td>Museums and Galleries</td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td></td>
</tr>
<tr>
<td>Culture and Entertainment</td>
<td></td>
</tr>
<tr>
<td>Christmas</td>
<td></td>
</tr>
<tr>
<td>ACTIVE HOLIDAY: Tourist information is organized under the umbrella terms of Cultural Heritage, Active Holiday, and Health and Spa.</td>
<td></td>
</tr>
<tr>
<td>HEALTH AND SPA:</td>
<td></td>
</tr>
<tr>
<td>Medical Spas</td>
<td></td>
</tr>
<tr>
<td>Medical Tourism</td>
<td></td>
</tr>
<tr>
<td>Wellness in and out of spas</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Cont.

<table>
<thead>
<tr>
<th>Country</th>
<th>The Czech Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVENTS: All sorts of events are presented applying a very useful information filtering system by region, date range and category, i.e., Festivals, Musical and Theatrical events, Exhibitions, Social Events, Events for Children, Sports Events, Folk Crafts and Markets, Gastronomic Events, Historical and Military Events.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>TRAVEL INFO: Tourist information is categorized under Practical Information, Brochures, Useful Mobile Apps, Restaurants, and Accommodation.</td>
<td>Brochures: Altogether as many as 50 downloadable PDF documents are at visitors’ disposal. The information of a universal character that geotourists can find useful is predominantly placed under the following categories: Trips from Prague provides basic information on georesources of the Bohemian Paradise, Karlovy Vary, and the Bohemian Switzerland; Czech UNESCO Treasures is a 10-page long section of the document that is devoted to the UNESCO Natural Wonders of the Czech Republic; a separate article focuses on the Bohemian Paradise [85], which was established a UNESCO Global Geopark; a UNESCO Treasures Map is also provided. Single pieces of information on geoheritage also appear in the Best of the Czech Republic, Active Holiday, Family Holidays, Czech Mountains: Bike and Hike, Regions of the Czech Republic: Top Sights and Attractions, Spas and Health Resorts.</td>
</tr>
<tr>
<td>STORIES: As the main marketing slogan suggests (Czech Republic Land of Stories), tourist information is told through several stories. Altogether, there are as many as 20 stories to choose from.</td>
<td>The Bohemian Paradise [86] and the Bohemian Switzerland are yet again brought to the visitors’ attention together with the Beskid Mountains as regions of the most outstanding beauty of the natural landscape. Each traveling story is told through a short video encouraging the visit.</td>
</tr>
<tr>
<td>TRIPS: The trips offered are divided by region, by the trip type (cycling and hiking trips), and by category (Towns and their Stories, Jewish Bohemia). Under the trip details, the visitor is provided with the story behind the trip, its itinerary, the list of attractions with a short description, as well as with the suggested restaurant and accommodation details.</td>
<td>There are no trips dedicated to geotourists specifically.</td>
</tr>
<tr>
<td>TRAVEL PROFESSIONALS: The bookmark provides professionals with the necessary details on undertaking cooperation with Czech Tourism for marketing reasons.</td>
<td>Information provided is not applicable for regular visitors.</td>
</tr>
<tr>
<td>Homepage Bookmarks and Geotourist Information (Original Language Version)</td>
<td>Not only are the bookmarks different in the Czech version of the website, but the website itself in the original language of the NTO is not available from the position of the language change. It is a completely different online portal serving a different purpose: Geotourism information is limited in comparison to the English version. There is a hyperlink to a bachelors thesis devoted to the design of the tourist product of the Vysočina Geopark [87].</td>
</tr>
</tbody>
</table>
Table 2. Cont.

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Number of Results</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>geotourism</td>
<td>0</td>
<td>none</td>
</tr>
<tr>
<td>geosite</td>
<td>0</td>
<td>none</td>
</tr>
</tbody>
</table>

Embedded Search Engine Responses to Selected Search Terms

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Number of Results</th>
<th>Content</th>
</tr>
</thead>
</table>
| geopark | 11 | The list below shows the most accurate results for the search term “geopark”, together with their original access path [88].  
GeoLoc GeoPark (Activities–Active Holiday–Natural Heritage–Protected Areas);  
Železné hory Geopark (Activities–Active Holiday–Natural Heritage–Protected Areas);  
Bohemian Paradise–UNESCO Geopark (Activities–Active Holiday–Natural Heritage–Protected Areas);  
Egeria Geopark (Activities–Active Holiday–Natural Heritage–Mountains).  
Apart from the short description of each geopark, the reader is provided with the option of showing the exact location of the place on the map, as well as with the basic contact information, a hyperlink to the place’s official website (if in operation), and a hyperlink to download guides and brochures. A hyperlink to search for accommodation in the surrounding area is also given.  
Some of the search results, for instance “Prague—a magical atmosphere you won’t find anywhere else”, seem not to have a clear relation to the search term under discussion. |
| geoheritage | 0 | none |
| geology | 5 | The list below presents the exact titles of the articles as the results for the search term “geology”:  
Železné Hory Geopark;  
Central Bohemian Mountains and Lusatian Mountains;  
Winter in the Czech Republic: Where to Head out for in Search of Warmth and a Good Time;  
Lower Morava Biosphere Reserve;  
Keeping the Children Entertained—Zoo, Science Parks, and Sporting Activities in the Czech Republic [89].  
Not all of the articles mentioned above are linked with the search term directly, and others, such as the previously described geoparks, are ignored. |
| landscape | 229 | A vast array of articles to choose from. A potential geotourist needs initial knowledge on the topic to find the relevant information, as some results are only remotely related to the concept in question. |
| nature | 311 | A vast array of articles to choose from. A potential geotourist needs initial knowledge on the topic to find the relevant information, as some results are only remotely related to the concept in question. |

Mobile Version of the Website and Mobile Applications

Mobile version of the website is available for both Android and iOS devices.  
Mobile Applications: Czech Republic Land of Stories, Jewish Bohemia and Moravia, Czech Republic Wine Trails, Camping Sites in the Czech Republic, Pocket Fennec—Your City Guide,  
Omio—Travel around the Czech Republic, GoOut: Cultural Events in the Czech Republic, Man About World—Gay Travel Magazine + Guides, Vocabulary Miner, TOP 100 Czech Sights mobile app, PhoneMaps, Prague Trips by Public Transport, Czech Money mobile app, Czech Spa Resorts, Czech Days—The Official Portal, AppsMapper Czech—The Best Android Apps for Czech. Most of the 16 mobile applications available on the website are of universal character; no specific app is oriented on the theme of nature, landscape, or geoheritage.

Language Accuracy

Native level of English proficiency in the text, minor mistakes that do not influence its understanding. There are several typos to be found, e.g., the Brdy Mountains (double “s” at the end of the word) [90], or “tthe” instead of “the” in the article concerned with the Pravˇcice Sandstone Gate [91].

Source: Authors’ own elaboration.
### Table 3. Geotourism content analysis of the Slovak NTO’s website.

<table>
<thead>
<tr>
<th>Country</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official Name of the NTO</strong></td>
<td>Slovak Tourist Board (operating under the supervision of the Ministry of Transport and Construction of the Slovak Republic)</td>
</tr>
</tbody>
</table>
Original version: [http://slovakia.travel/](http://slovakia.travel/) |

<table>
<thead>
<tr>
<th><strong>Geotourism-Related Content</strong></th>
<th><strong>General Content</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The bookmark entitled <em>The best of Slovakia</em> emphasizes the natural resources of such areas as the Tatra and Northern Spgi [92], the National Park of Slovenský Raj, the Caves of the Slovak Karst, as well as the Dýr (Malá Fatra Mountains). Each short article is accompanied with an option to send it to a friend, print its content, and—elements that are especially useful in the trip planning process—display it on a map and show the street view. Under the UNESCO Natural Heritage one can find basic geotourism information in particular on the caves and abysses of the Slovanský karst and the Dobšinská Ťažová jaskyňa cave. Using the hyperlinks, the reader is lead to the article called the Caves of the Slovak Karst (originally placed under <em>The Best of Slovakia</em>). Unique Slovakia lists the following geotractions that either cannot be found elsewhere or constitute extremely rare examples of geosites typical of Slovakia [93]. The Ochtinska Aragonite Cave; The biggest cave dripstone in Kráľovohorsko; The rock houses of Brhlíkove (the complexes of rock dwellings in tuff rocks); The stone balls of Megotíky; The Slovak opal mines. Geotourism resources can be found in practically all of the 21 tourist regions presented on the website; nevertheless, the ones of the greatest importance include the following: the region of Horehronie, the Tatras and Northern Spgi, the Danubeiland (Podunajsko), the Region of Central Považie, the Region of Gemer and Malohont, the Region of Liptov, the Region of Lower Zemplín, the Region of Orava, the Region of Polonine, the Region of Poštova, the Region of Spiš, the Region of Šariš, the Region of Southern Spgi, and the Region of Zilina and its environs. Finding more specific information on georesources requires either initial topical knowledge, or the reader has to read through all the introductory articles.</td>
<td></td>
</tr>
<tr>
<td><strong>PLACES TO GO:</strong></td>
<td><strong>Tourist regions</strong></td>
</tr>
<tr>
<td>The best of Slovakia</td>
<td>Autumn in Slovakia—Good Idea</td>
</tr>
<tr>
<td>UNESCO</td>
<td>Amongst the things to see and do in Slovakia in terms of geotourism, the most important is the category named Nature and the Countryside, which is further divided into National Parks, Geoparks, Caves, Water Reservoirs, Botanic Gardens and Zoos, and Natural Curiosities. The categories that clearly stand out here are Geoparks, Caves, Natural Curiosities, and National Parks. The first one, with its online slogan (Attractive Geoparks Luring for Hiking), encourages tourists to undertake active rest in three geoparks of Slovakia, i.e., in Banská Bystrica Geopark, Banská Štiavnica Geopark, and Novohrad-Nížná Global UNESCO Geopark [96]. The first two are of national importance; the last one was inscribed on the list of Global Geoparks, and is under the patronage of UNESCO [97]. Apart from naming the geosites within their borders and underlying their overall significance in geoheritage protection, the articles devoted to each geopark provide their exact location, including the GPS geographical coordinates. The articles were also equipped with four active icons, namely ‘send to a friend’, ‘print’, ‘display on map’, and ‘street view’. There is also a hyperlink directing the reader to the official website of each geopark. It is available in English in all three cases, although sometimes further information is very limited in its range, as in the case of the Banská Bystrica Geopark [96]. The second category that is significant for geotourists is Caves. According to the introductory article [97], only eight from the overall number of 6200 caves in Slovakia are adjusted to the visitors’ needs, whereas the list of accessible caves in Slovakia, which are available for the visitors as the PDF file as a part of the same article, states that there are as many as 19 show caves in Slovakia [98]. The aforementioned list provides all the necessary tourist information, including the exact GPS location, the spatial distribution on the map, contact details, website address (for 18 caves), and most importantly, availability according to the season. Under Natural Curiosities, one can find chosen examples of the Slovakian geosites, e.g., the Bešeňová Travertine Formation, the Craters of Ružbachy in the Spišský Karst, the Krasnohorsko, the Tatras and Northern Spgi, the Danubeiland (Podunajsko), the Region of Central Považie, the Region of Gemer and Malohont, the Region of Liptov, the Region of Lower Zemplín, the Region of Orava, the Region of Polonine, the Region of Poštova, the Region of Spiš, the Region of Šariš, the Region of Southern Spgi, and the Region of Zilina and its environs. Finding more specific information on georesources requires either initial topical knowledge, or the reader has to read through all the introductory articles.</td>
</tr>
<tr>
<td>Unique Slovakia</td>
<td>The best of Slovakia emphasizes the natural resources of such areas as the Tatra and Northern Spgi [92], the National Park of Slovenský Raj, the Caves of the Slovak Karst, as well as the Dýr (Malá Fatra Mountains). Each short article is accompanied with an option to send it to a friend, print its content, and—elements that are especially useful in the trip planning process—display it on a map and show the street view. Under the UNESCO Natural Heritage one can find basic geotourism information in particular on the caves and abysses of the Slovanský karst and the Dobšinská Ťažová jaskyňa cave. Using the hyperlinks, the reader is lead to the article called the Caves of the Slovak Karst (originally placed under <em>The Best of Slovakia</em>). Unique Slovakia lists the following geotractions that either cannot be found elsewhere or constitute extremely rare examples of geosites typical of Slovakia [93]. The Ochtinska Aragonite Cave; The biggest cave dripstone in Kráľovohorsko; The rock houses of Brhlíkove (the complexes of rock dwellings in tuff rocks); The stone balls of Megotíky; The Slovak opal mines. Geotourism resources can be found in practically all of the 21 tourist regions presented on the website; nevertheless, the ones of the greatest importance include the following: the region of Horehronie, the Tatras and Northern Spgi, the Danubeiland (Podunajsko), the Region of Central Považie, the Region of Gemer and Malohont, the Region of Liptov, the Region of Lower Zemplín, the Region of Orava, the Region of Polonine, the Region of Poštova, the Region of Spiš, the Region of Šariš, the Region of Southern Spgi, and the Region of Zilina and its environs. Finding more specific information on georesources requires either initial topical knowledge, or the reader has to read through all the introductory articles.</td>
</tr>
<tr>
<td><strong>THINGS TO SEE AND DO:</strong></td>
<td><strong>Tourist regions</strong></td>
</tr>
<tr>
<td>Tourist information is organized under seven categories, i.e., Nature and the Countryside, Culture and Sights, Spa and Relax, Sports and Activities, Traditions and Gastronomy, Autumn Inspirations, and Autumn in Slovakia—Good Idea.</td>
<td></td>
</tr>
</tbody>
</table>

**Homepage Bookmarks**

Table 3. Cont.

<table>
<thead>
<tr>
<th>Country</th>
<th>Slovakia</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABOUT SLOVAKIA</td>
<td>The tourist information is further divided into eight categories: Facts, History, Who We Are, Regional Division, Towns, Interesting Information, Practical Information, and Videos. Mostly not applicable. Information on georesources is of fragmentary character and can be found under the category of Regional Division, but it requires initial knowledge on the spatial distribution of the resources. Videos, on the other hand, focus mainly on the visual appeal of the Slovakian natural and cultural landscapes divided into 14 themes.</td>
</tr>
<tr>
<td>EVENTS</td>
<td>The Slovakian events are presented as weekend events, nearby events, and regular events. There is also an event calendar with the date, event type, and country as the search filters, as well as the Autumn Palette with events planned for the autumn time. Not applicable.</td>
</tr>
<tr>
<td>TRAVEL ESSENTIALS</td>
<td>The interactive Map tool is extremely useful, as it corresponds to the website’s bookmarks and its overall organization of attractions. Using a system of ticks limits the number of choices displayed on the screen. For instance, only the location of geoparks or other geotourism-related sites can be shown [100]. The filtering option under Attractions offers geotourists a chance to find information further categorized as Caves and Nature Interests. What is really useful is an accompanying interactive map. What makes it hard to use for the English-speaking user, though, is an inconsistency in translation, as most of the articles are available in Slovak and only some are available in English [102].</td>
</tr>
<tr>
<td>JOURNALS ARTICLES</td>
<td>The 10 most beautiful castle ruins in Slovakia; 10 romantic destinations in Slovakia; The Blue eyes of the Slovak mountains; Country holiday experiences in the air and on the water; How our ancestors used to live; How to see a lot and not get too tired; Sheepfolds, farms, and ranches of the Slovak countryside; Specialties of the Slovak meadows and forests; Symbol of the Tatras and other mobile treasures; The beauty preserved in wood; Unique sacrail treasures from wood; Wandering through sheepfolds in Liptov; What can Smolenice offer; and Wooden churches of UNESCO World Heritage. Especially the article entitled ‘The Blue eyes of the Slovak mountains’ can be interesting for geotourists, as it presents the country’s most spectacular and picturesque sites of the Tatra Mountains, including the Kmet’ov waterfall in the Nefcerka valley, the Waterfalls of Cold Creek rank, and other sites such as the Herliansky geyser.</td>
</tr>
<tr>
<td>PLANNER</td>
<td>An online tool that enables visitors to customize the trip to Slovakia. There is an option to filter the tourist offer by category, region, and season. There are also separate bookmarks giving information on tourist trails, accommodation, and upcoming events. Not all of the information is available in English [103]. The filtering option under Attractions offers geotourists a chance to find information further categorized as Caves and Nature Interests. What is really useful is an accompanying interactive map. What makes it hard to use for the English-speaking user, though, is an inconsistency in translation, as most of the articles are available in Slovak and only some are available in English [102].</td>
</tr>
</tbody>
</table>

Homepage Bookmarks and Geotourist Information (Original Language Version) The English version of the website is almost exactly the same as the original. Both the main bookmarks and their internal content are repeated. In addition, the introductory articles are neither shortened nor prolonged in English, offering international visitors the same information access as for the domestic ones. The only exception to the rule of the consistent appearance of information in all languages is the travel planner, where one can find information available mainly in the Slovak language [101].
Table 3. Cont.

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Number of Results</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>geotourism</td>
<td>2</td>
<td>The first hyperlink directs the reader to the general article on geoparks, as it was previously described under Things to See and Do [94]. From the three geoparks in Slovakia, the second response to the search term ‘geotourism’ is the Banská Bystrica Geopark [103]. Information on the existence of the other two geoparks as separate results is not available.</td>
</tr>
<tr>
<td>geosite</td>
<td>2</td>
<td>The first hyperlink directs the reader to the website’s homepage in the Slovak language [104], whereas the second one directs readers to the general article on geoparks, as in the case of ‘geotourism’.</td>
</tr>
<tr>
<td>geopark</td>
<td>?</td>
<td>Not available for proper comparison, as the embedded search engine of the website is connected with the general Google search engine. Therefore, in most cases, even though relevant information can be found this way, it repeats itself depending on the language of translation and the exact number of results cannot be given, or results unavailable on the website under analysis are provided.</td>
</tr>
<tr>
<td>geopark</td>
<td>?</td>
<td>As described before in the case of the ‘geopark’.</td>
</tr>
<tr>
<td>geopark</td>
<td>?</td>
<td>As described before in the case of the ‘geopark’.</td>
</tr>
</tbody>
</table>

Mobile Version of the Website and Mobile Applications

The mobile version of the website is available for both Android and iOS devices. Altogether, as many as 13 mobile applications are advertised for tourists traveling in Slovakia. Geotourists might be especially interested in the Košice Region Tourism app presenting the geosites of the Slovak Paradise and the Slovak Karst, as well as the article titled ‘Exciting Underground Adventures in UNESCO-Listed Caves’ [105]. Another one that geotourists might want to use is the High Tatras Region app, where the tourist routes are accompanied with the necessary description, visuals, and other pieces of practical information. The remaining apps are universal in character and, among others, offer a vast range of functionalities from the Tourist Map of Slovakia to an App for the Road, helping drivers in case of emergency [106].

Language Accuracy

Native level of English proficiency in the text; no major mistakes to be found. Minor mistakes in translation appear; for instance, in an article concerning geoparks, one comes across the following sentence: “In this regard, geoparks have been created to focus on the protection of abiotic nature, scientific research as well as to education to arouse interest of the public” (a typo in the word ‘regard’, ‘education’–a noun that should be replaced with a verb ‘to educate’, and followed by a linking word ‘and’). Another example: “Growing around the world through the growth of geoparks, geotourism focuses not only to flora and fauna, but also to abiotic environment” (the English expression “to focus on” was changed into “to focus to”) [94]. At times, examples of translation inconsistency can be found, especially in relation to proper names. It can be confusing for an English-speaking reader. For instance, the original name Dobšinská Ľadová jaskyňa is either translated into “Dobšinská Ice Cave”, or into “Dobšina Ice Cave” [7]. In addition, a misspelled and pluralized category named “Technical Herritages” appears in the Travel Planner [107].

Source: Authors’ own elaboration.
4. Discussion

All three NTOs analyzed provide the readers with information under seven main bookmarks maximum. What is fully understandable is that the organization of content on each website is a part of its overall design and an idea behind it. It is common knowledge that regardless of personal interests and the exact information that visitors want to obtain, the websites should be as easy to navigate as possible. It is also crucial for them to be intuitive and enable the readers to find whatever they are looking for as quickly as possible. Hence, the smaller the number of clicks and the clearer the names of the categories used on the website, the more universally understandable they are in the tourism industry, which is preferable.

Only two steps need to be taken in order to find the geotourist information in the case of the Polish Tourism Organization, where one of the main bookmarks—Discover—leads the reader to the article named Caves and Mines: Underground Attractions (Figure 2). However, it has to be stated that the above-mentioned are only two examples of attractions within the interest of geotourists.

Figure 2. Underground attractions of Poland (a two-step access path: Discover–Caves and Mines). Source: [108].

The access path of three steps was required by the Slovak Tourist Board to find a separate article on Geoparks, which was most appropriate from the perspective of geoheritage protection and the geotourist offer (Figure 3). At the same time, it was not singled out as an individual subcategory on the websites of the Polish and Czech NTOs, which is not understandable, as all three countries can pride
themselves on having geoparks belonging to the Global Geoparks Network, not to mention the ones of the national and local rank.

Most frequently, as many as three to four steps and more were to be taken in order to find more specific geotourist information, as indicated in Tables 1–3. For instance, in all three cases, information on geoheritage is provided in relation to the regional division of the country. Regions and their tourist offer are either distinguished as the main bookmarks, as on the website of the Polish Tourism Organization, or Czech Tourism, where they are referred to as Regions and Destinations respectively, or as on the website of the Slovak Tourist Board, which they are found within the subcategory of the bookmark titled Places to Go. Geotourist information available via this access path requires initial knowledge on the topic. Therefore, considering the overall number of clicks and introductory articles to go through, it is much more likely to be used by a person who is already familiar with the areas in question (Figure 4), making it much less likely for potential inanimate nature-interested travelers to do so. Moreover, taking into consideration the natural values of the landscape, the biotic aspects of it seem to overtake the general scope of attention.
Another example of similar categories under which more information in question can be found for all three countries are the national parks. Similarly to the regional division of the countries, it requires the reader either to possess initial knowledge on the topic to find the necessary information relatively quickly or to spend some quality time reading through the introductory articles to learn about the georesources that they hold (Figure 5).

**Figure 4.** National Park of Slovenský raj (a four-step access path: Places to Go—Tourist Regions—Region of Gemer and Malohont—National Park of Slovenský Raj). Source: [109].
Additionally, and quite surprisingly, even though all three countries advertise their cultural and natural resources under the auspices of UNESCO, none of them even mentions in the main article that certain geoparks within their area belong to the Global Geoparks Network, and hence can be referred to as UNESCO Global Geoparks. According to the Global Geoparks Network [111], “UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development”. As it is a relatively new initiative that originated in 2015, the website’s content and the way in which information appears on the page should be updated and follow the newest trends and guidelines for the tourism industry and nature protection. Czech Tourism uses the name “Bohemian Paradise–UNESCO Geopark”, but as stated before, not in the main article devoted to the UNESCO sites of the country, and this piece of information is available after knowing the following access path Activities–Active Holiday–Natural Heritage–Protected Areas–Bohemian Paradise UNESCO Geopark (Figure 6). In addition, in the case of Poland, even though the Muskauer Park (Park Mużakowski) in Łęknica, as one of the greatest examples of the 19th century gardening architecture in Europe, is advertised under the access path of Discover–World Heritage Sites–Muskauer Park, no information whatsoever, even in the form of a hyperlink, is given on the fact that it lies within the
Muskauer Arch Geopark area, which is the only Polish geopark that is on the list of the Global Geoparks Network under the UNESCO auspices. The Slovak Tourist Board seems to have made the information on the Novograd-Nógrád UNESCO Global Geopark most easily accessible via Things to See and Do–Nature and Countryside–Geoparks—Novohrad Geopark. It is understandable that the main article on the UNESCO-listed heritage of each country predominantly focuses on the most recognizable lists. Notwithstanding, since selected geoparks function under the same patronage, it is worth at least mentioning this fact or providing a proper hyperlink.

![Czech Republic](https://example.com)

**Figure 6.** Bohemian Paradise–UNESCO Geopark (a five-step access path: Activities–Active Holiday–Natural Heritage–Protected Areas–Bohemian Paradise). Source: [112].

The hyperlinks system of each NTO leading the reader to more detailed geotourism-related information also needs improvement. For instance, in the case of the Polish Tourism Organization’s website, when the reader is willing to enter the tourism portal of the West Pomeranian Voivodeship, s/he is directed to the website of the West Pomeranian Marshall’s Office with no English language version. Additionally, even though the hyperlinks to the official websites of the Polish national parks are provided, generally speaking, the information that can be found there is usually far from ideal, mainly due to the English language version’s unavailability and/or issues in translation. A similar problem appears when reaching the official national parks’ websites of the Czech Republic. In contrast, the Slovak Tourist Board does not provide the reader with the hyperlinks to the country’s national parks at all. However, it does so for its geoparks. Nevertheless, even though the Network of Geoparks of the Slovak Republic, providing comprehensive information on the subject matter, is mentioned under the main article devoted to the Novohrad Geopark, no hyperlink is included.

While comparing the geotourism-related content of the websites and the responses of the embedded search engines to the selected search terms (i.e., geotourism, geosite, geopark, geoheritage, geology, landscape, nature), it seems that most of them do not serve their function successfully. ‘Geotourism’, ‘geosite’, and ‘geoheritage’ were not used within the website’s content at all; even though there is every reason behind linking them with the phenomenon in question, no results were shown. The
most serious problem though seems to be giving preference to information of lesser importance from the point of view of the tourist attractions’ rank. For instance, after having typed the word ‘geopark’, the Polish Tourism Organization’s embedded search engine provides information on the Geopark Kielce only, but completely ignores the Muskauer Arch Geopark, which is one of the UNESCO Global Geoparks. Information on the remaining geoparks of the national rank in Poland is also excluded from the website’s content. Yet another example from the Polish NTO is that some search words such as ‘geology’ are not thematically linked with the right articles. To exemplify, using the embedded search engine in order to find information on the above-mentioned Geopark Kielce that abounds in geosites, one will not succeed in doing so. Therefore, the reader does not stand a chance of finding comprehensive information on the Polish attractions within their scope of interest so as to make an informed traveling decision. Meanwhile, examples from Czech Tourism show that the aforementioned phenomenon can also be reversed, and the searching process might result in finding information on the places that are only remotely related to the search terms under discussion. Moreover, the overall number of embedded search engine responses to the words ‘nature’ and ‘landscape’ makes it hard for the reader to find geotourism-specific information. A clear preference in most articles is given to the biotic aspects of both nature and landscape, whereas the abiotic ones are either eliminated or diminished. Conducting a similar comparison for the Slovak NTO’s website was mostly impossible due to the fact that the website’s embedded search engine is linked with the general Google search engine.

Providing limited information in the English version of the NTOs’ websites in comparison to their versions written in the mother tongue is understandable, as long as such a limitation is connected with the rank of attractions to being covered. Neglecting information on tourist attractions that are already internationally recognizable, or that stand a chance of becoming ones in the near future, is unjustified and should not take place.

Even though it has become standard to make the mobile versions of the NTOs’ websites available for their users, making theme or interest-oriented mobile applications, especially with the geo-prefix in their name, is still a niche to be covered. ‘Nature’ and ‘landscape’ seem to be too vast in their character and understanding to serve this function properly from the perspective of geotourists.

With reference to the language accuracy, all the geotourism-related content on the websites of the NTOs under analysis represents native or a native-like level of language proficiency in translation. The most common mistakes are typos or inconsistencies in the translation of the proper names, as indicated in detail in Tables 1–3. Nonetheless, they do not influence the overall level of understanding of the text for the English-speaking recipients.

5. Conclusions

The descriptive content analysis of the selected NTOs’ websites enabled the authors to draw the following inferences and improvement suggestions:

1. Information on georesources provided by the NTOs of selected European countries is dispersed and usually of fragmentary character; as long as the generalization of facts is fully understandable and inevitable on national portals, excluding information on the existence of geotourism attractions of an international rank in particular should not take place, especially when they constitute good examples of attractions that stand a chance in raising the tourists’ level of awareness on the concepts of geoprotection and sustainability;

2. Geotourism-related information falls under divergent umbrella terms, and therefore, it usually requires much effort from the readers to come across the content of their interest; it could be improved at least by implementing the key word ‘geotourism’ or one of its derivatives (e.g., ‘geosite’) to the NTOs’ online travel planners;

3. Both animate and inanimate landscape values co-create the inextricably linked tourism space; therefore, it seems unjustified to prioritize one for the sake of the other and focus promotional actions mainly on the animate landscape tourism resources;
4. As it is impossible to draw a clear-cut line between various types of tourism activities relying upon the same resources, online information availability should be ensured by an appropriately working system of search terms that are prepared in cooperation with tourism experts who are aware of their mutual relations, which could in the end result in a more effective use of the websites' content;

5. Even though there is every reason for distinguishing ‘geoparks’ as a separate bookmark on the websites of NTOs, or at least a subcategory of nature-related attractions, it is not a common practice;

6. Access to further geoheritage information provided via hyperlinks on the websites of the NTOs analyzed is possible only in some cases; usually, it is just a theory due to the issues in translation and/or the information provided is incomplete, out of date, or the reader is led to a different website than the hyperlinks' names suggest. It is most common in reference to the official websites of the national parks; therefore, there seems to be too much lost opportunity and the current situation calls for a change;

7. Making the brochures available as downloadable PDF files focused on the concept of geotourism could be one of the possible solutions for presenting each country’s geoheritage potential in a holistic way;

8. Presenting the geotourist offer including the spatial distribution of georesources could also be made available via mobile applications as they are ever gaining in popularity, especially among the younger generations of visitors; moreover, information provided this way does not have a direct physical interference whatsoever with the landscape, and therefore helps to maintain it as untouched by the tourism traffic and its needs as possible;

9. Including information on the availability of geoparks under the UNESCO auspices, at least in a form of a hyperlink, or an active picture directing the reader to further information on UNESCO Global Geoparks is a good promotional opportunity;

10. NTOs present the country’s tourist offer in a holistic way, which is in agreement with the general idea for presenting certain content and the overall website design. Nevertheless, there is a need for a think tank enabling expert consultations, especially between the marketing and promotion sector representatives and experts in the tourism industry that would lead to such online presentation of information that, on one hand, would maximize the use of the countries’ tourist offer potential in accordance with the rules of sustainable development, and on the other hand, would not neglect or diminish the role of the abiotic aspects of the environment;

11. Promoting geotourism on a national level via NTO’s websites with its scientifically and cognitively valuable resources alongside other, well-consolidated forms of tourist activities can be conducive to gaining knowledge on and appreciating the geological component in both natural and urban recipient areas.

To summarize, the actions conducive to the accurate presentation of geotourism resources on the NTOs’ websites, as presented in Figure 7, are threefold. All three levels, namely the primary actions focused on the geotourism resources per se, followed by undertaking the cooperation of the experts in three realms of knowledge, and finally, the actions concentrated on the e-aspect of their promotion are of equal importance. It is worth emphasizing that as far as the very first step of actions to be taken is concerned, the scientific value of geosites is of utmost importance. The procedure of their recognition, exploration, and taking an inventory of the sites can vary in different countries. Nevertheless, the elements that the above-mentioned procedure usually have in common are being drawn by teams of academics, most frequently specializing in geology, and financed among others from the ministerial funds. To exemplify, in Poland, the binding documents drawn in this respect in 2006 and 2012 respectively were:

- The Catalogue of Geotourist Sites in Poland (written under the scientific supervision of Słomka, Doktor, Joniec, and Kicińska-Świderska, and published by the AGH University of Science and Technology in Cracow) [113];
The Catalogue of Geotourist Sites in Nature Reserves and Monuments (written under the scientific supervision of professor Slomka from the AGH University of Science and Technology, Department of General Geology, and Geotourism in Cracow) [114].
even though the importance of the NTOs from the perspective of tourism marketing cannot be denied, the broadly understood Internet offers much more than the website information; therefore, especially the aspect of using social media as a promotional tool for geotourism is the research area that should attract more attention in the academic literature.

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