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E-Tourism for Sustainable Development through Alternative Tourism Activities

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Abstract: E-tourism refers to the broader integration of Information and Communication Technologies (ICTs) in the tourism sector and infrastructure. In this context, tourists can choose the travel destination, use price comparison sites and buy online tickets at low prices, while tourism entrepreneurs enhance their marketing strategies in response to the increasing demands of modern tourism Over the last few decades, alternative tourism has gained considerable interest among tourists and enterprises in the tourism industry. At the same time, it acts as an enabler and a facilitator of sustainable development. This paper presents an overview of the current situation of content characteristics of the websites of enterprises involved with alternative tourism services in Greece. The websites are evaluated according to 30 characteristics through multicriteria method. Furthermore, the final ranking of websites is presented to identify the most successful strategies, as well as the website that need improvements. According to the results, an e-tourism website model is suggested for the entrepreneurs to exploit the opportunities that arise in the digitalization transformation of the tourism industry.

Keywords: e-tourism; alternative tourism; information and communication technologies; sustainable development; multicriteria decision analysis; website evaluation

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1. Introduction

E-tourism, also known as electronic tourism or digital tourism, refers to the adoption of Information and Communication Technologies (ICTs) in tourism sector. It involves the application of the internet and other digital technologies to promote, market, and sell tourism products and services, as well as to enhance the overall tourism experience [1]. E-tourism encompasses a wide range of digital tools and platforms, such as websites, social media, mobile applications, virtual reality, and artificial intelligence. These tools can be used to provide travelers with access to travel information, booking and reservation systems, virtual tours of destinations, personalized recommendations, and other travel-related services [2]. ICT and data play a crucial role in the management of tourism, as managers rely on these tools to accomplish various tasks, including online product promotion, strategic decision-making, customer satisfaction and product customization monitoring, and ensuring a sustainable business environment [3]. Therefore, attractive representations of products, such as travel destinations, have consistently played a critical role in the success of the tourism development [4].

This innovative form of tourism has enabled tourism businesses to reach a wider audience, reduce costs, and enhance the customer experience, while also creating new business opportunities and revenue streams. In order to ensure that tourism benefits everyone involved, the industry needs to prioritize working with communities and individuals to create mutually beneficial outcomes [5]. Factors that come before e-tourism websites, such as ease of use, website enjoyment, perceived authenticity, and perceived risk, can influence tourists in their decision-making process when selecting travel destinations [6].

Moreover, e-tourism endeavors to enhance the effectiveness of disseminating information, exchanging ideas, communicating, and carrying out transactions [7]. E-tourism complies with accessible tourism, which aims to enhance the range of travel options accessible to individuals with specific access requirements, encourage the participation and involvement of all members of society and enhance the industry staff's competencies and abilities [8]. The concept of accessible tourism acknowledges the partnership among stakeholders in the sector of demand, supply, and coordination, to recognize the disability, which involves mobility difficulties, vision problems, hearing disorders, cognitive impairments, and other physical abilities [9].

Sustainable development is based on the three fundamentals pillars: economic development, social development and protection of the environment aiming at a more equitable and sustainable future [10]. Sustainable development is a key goal of the United Nations and is reflected in the Sustainable Development Goals (SDGs), which deal with poverty, hunger, health, well-being, education, clean energy, economic development, innovation, inequalities, sustainable cities, peace, justice, combating climate change and environmental degradation [11]. Overall, sustainable development is a holistic approach to development and involves balancing economic, social, and environmental considerations, and requires the involvement of all sectors of society to achieve meaningful progress towards a more sustainable world [12]. The concept of sustainable development prompts us to consider the significance of incorporating effective project management methodologies with contemporary approaches to organizational management, including strategic planning, competitive strategies knowledge management, change management, and governance [13,14]. Growing attention is being paid to studying the advancement of sustainable urban development, whereby frameworks based on issues or themes are predominantly employed to develop indicators that focus on economic, social, and environmental dimensions [15–18].

E-tourism plays a significant role in promoting sustainable tourism development. The aim of e-tourism is to merge virtual and actual realms by utilizing currently available technologies such as the cloud computing, Internet of Things, and social media [19]. Sustainable tourism refers to the tourism that considers the environmental and socio-economic effects of tourism, both in the short and long term. It ensures the sustainable growth of its contributions to the economy and society, while simultaneously ensuring the sustainable use of natural resources. This means that the benefits of tourism should be shared equitably, while also minimizing any negative impacts on the environment and local communities [20]. Actually, the main idea is to achieve a well-balanced tourism development where all goals hold equal importance [21]. Sustainable tourism management should prioritize the strengthening of its resilience to disruptions and not only its stability [22].

Alternative tourism is considered the most sustainable form of tourism and includes non-traditional forms of tourism that focus on unique and authentic experiences, often involving interaction with local cultures, traditions, and environments [23]. Some examples of alternative tourism activities are the following: ecotourism, cultural tourism, adventure tourism, agrotourism and volunteer tourism. Ecotourism involves travel to natural areas that promotes conservation, supports local communities, and offers educational opportunities. It often involves various activities (bird or wildlife watching, hiking) and emphasizes responsible and sustainable travel practices [24]. The involvement of the community has the potential to enhance the social and economic sustainability of the host community through the creation of passive income streams, innovative product development, and increased employment opportunities [25–27].

Cultural tourism involves travel to destinations to learn about the local cultural heritage, history, ethics, values and traditions. It often involves various activities (visiting monuments and museums, attending festivals and other cultural events, participating in cultural workshops and classes) [28]. Adventure tourism involves travel to destinations to participate in physically challenging and adventurous activities (ziplining, bungee jumping, rock climbing, river rafting, mountain biking, skiing, kayaking). It often involves outdoor recreation and exploration of remote and wilderness areas [29]. Adventure tourism can be

characterized a type of wellness tourism, that appeals to those seeking self-actualization through participation in challenging activities [30]. Agrotourism involves travel to farms, vineyards, and other agricultural businesses to experience rural life and learn about farming practices. It often includes activities such as farm tours, farm stays, and farm-to-table dining experiences [31]. Volunteer tourism, also known as voluntourism, involves travel to destinations to participate in volunteer work that benefits local communities and environments. It often includes activities such as conservation work, community development projects, and teaching English as a foreign language [32].

E-tourism can play a role in fostering sustainable tourism development through various means. This innovative type of tourism can encourage responsible travelling through providing the travelers with information on sustainable travel practices, such as reducing carbon emissions, minimizing waste, and respecting local cultures and traditions. This can help to promote responsible and sustainable travel behavior among tourists [33]. E-tourism can support local communities by promoting local tourism products and services, such as eco-tourism, cultural tours, and local handicrafts. This can help to create sustainable livelihoods for local people and promote economic development in rural and remote areas. Moreover, the tourist experience can be enhanced by providing travelers with access to personalized recommendations, local tips, and immersive virtual experiences that promote cultural and environmental awareness. This can help to create more meaningful and sustainable tourism experiences [34].

As for the enhancement of the visibility of alternative tourism activities, e-tourism can help to promote alternative tourism activities by providing information about unique and authentic experiences that support local communities, promote sustainable tourism practices, and preserve cultural and natural heritage. This can help to increase the visibility and viability of alternative tourism activities and promote sustainable tourism development. In addition, e-tourism can facilitate online booking and payment systems for alternative tourism activities, which can help to streamline the booking process, reduce transaction costs, and increase accessibility for travelers. This can help to promote sustainable tourism development by making alternative tourism activities more accessible and affordable for travelers [6]. Overall, e-tourism can contribute to sustainable development through alternative tourism activities by promoting responsible and sustainable travel behavior, enhancing the visibility of alternative tourism activities, supporting local communities, and facilitating online booking and payment systems.

This paper provides an overview of the current situation of content characteristics of the websites of enterprises involved with alternative tourism services in the Prefecture of Serres, Greece. The websites are evaluated according to 30 characteristics through the TOPSIS multicriteria method. The final ranking of e-tourism websites is presented to identify the most effective e-marketing strategies. According to the TOPSIS results, an e-tourism website model is suggested for the entrepreneurs to exploit the opportunities that arise in the digital transformation in the tourism sector. It is the first time that the main methodology used in the paper, TOPSIS, is applied in the topic, that is to develop a benchmark. Entrepreneurs ought to incorporate sustainability within their business model in order to meet the challenges of new digital era, sustainability and green strategy in the future. By this way, they will see significant benefits both economically and socially through maintaining a steady pace with the ever-increasing sophistication of products and services entering the market place.

Section 2 describes the data collection, the content characteristics that are studied and the multicriteria method that was applied. In Section 3, the results are presented and finally, in Section 4, a discussion about the results of the study and some conclusions are presented.

2. Materials and Methods

The websites of the alternative tourism enterprises in the Prefecture of Serres were retrieved from the Greek Internet using the most popular search engines such as Google, Bing and Yahoo. The research took place during the second semester of 2022. The first step

was to record the name of the enterprise, the type of the enterprise, the form of alternative tourism that serves and the URL. The second step was to develop a 2-dimensional table to identify the existence or not of the 30 content characteristics at each website. These content characteristics constitute the variables X_1, X_2, . . . , X_{30}. The total amount of the content characteristics by each alternative tourism enterprise was also studied (Table 1).

Table 1. Content characteristics [35].

Variable	Content Characteristic	Variable	Content Characteristic
X_1	Two or more languages	X_{16}	Links to other companies etc
X_2	Information about products—services—activities	X_{17}	Additional topics with information on different categories
X_3	Contact information	X_{18}	Downloadable files
X_4	Local information	X_{19}	Calendar application
X_5	Digital map	X_{20}	Event calendar application
X_6	Audiovisual material	X_{21}	Celebration calendar application
X_7	Live web camera	X_{22}	Social media sharing
X_8	Search engine	X_{23}	Social media profile
X_9	Sitemap	X_{24}	Forum
X_{10}	Updated enterprise information	X_{25}	Related sources of information
X_{11}	Online survey	X_{26}	Third person advertisement
X_{12}	Online communication form	X_{27}	Newsletter
X_{13}	Weather forecast	X_{28}	RSS
X_{14}	Website visitor tracker	X_{29}	Code access
X_{15}	Frequently Asked Questions (FAQ)	X_{30}	Personalization of the page, trace, safety

The third step was to rank the websites using a multicriteria method to identify the most successful ones and highlight the necessary content characteristics. A multicriteria method is a decision-making approach that involves considering multiple criteria or factors to evaluate and compare different alternatives. These methods are used in a wide range of applications, such as project management, engineering, environmental studies, and business management. There are many types of multicriteria methods, each one with its advantages and disadvantages. Some of the most commonly used multicriteria methods include [36]:

Analytic Hierarchy Process (AHP): AHP is a popular multicriteria decision-making method that splits a complicated decision problem into a hierarchy of simple sub-problems. It uses pairwise comparisons of cases and criteria to determine the relative importance of each one and rank them accordingly [37].

- Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS): TOPSIS constitutes a method that compares cases evaluated according to their proximity to an optimal solution and their distance from a negative ideal solution. It evaluates the performance of cases based on multiple criteria and ranks them accordingly [38].
- Preference Ranking Organization Method for Enrichment Evaluations (PROMETHEE): PROMETHEE constitutes a multicriteria decision-making method that uses pairwise comparisons for ranking the alternative cases based on their performance relative to each other. It considers both positive and negative criteria and produces a ranking of cases based on a set of preference functions [39].
- Simple Additive Weighting (SAW): SAW is a straightforward method that assigns weights to each criterion based on their relative importance and sums the weighted scores of cases. It is a popular and widely used method because of its simplicity and ease of implementation [40].

However, the choice of the appropriate multicriteria method depends on the specific decision problem and the preferences of the decision-makers involved. In this research paper, TOPSIS method has been chosen. TOPSIS method is based on the idea that the optimal solution should present greater proximity to the Positive Ideal Solution (PIS) and a

longer distance from the Negative Ideal Solution (NIS) [41–43]. PIS refers to the solution that maximizes the benefit criteria while minimizing the cost criteria. On the other hand, NIS refers to the solution that minimizes the benefit criteria while maximizing the cost criteria [44]. So, the distance between the value of each alternative with the positive ideal solution (di^+) and the negative ideal solution (di^-) is calculated. The weight of each criterion is predetermined [45]. Alternative solutions are classified depending on the value of their Closeness Coefficient (CC) in decreasing order, which is calculated based on how far the respective alternative is from both the PIS and NIS. CC takes a value between 0 and 1. In this case, TOPSIS multicriteria method was applied, which involves the following steps [46]:

1. Identification of criteria and establishment of a performance matrix: The decision-maker identifies the relevant criteria for the decision problem. Variable z_{ij} represents the performance values of the alternative solutions according to the criteria.

$$M = \begin{matrix} \\ A_1 \\ A_2 \\ \dots \\ A_m \end{matrix} \begin{matrix} \begin{matrix} w_1 & w_2 & \cdots & w_n \\ C_1 & C_2 & \cdots & C_n \end{matrix} \\ \begin{pmatrix} z_{11} & z_{12} & \cdots & z_{1n} \\ z_{21} & z_{22} & \cdots & z_{2n} \\ \cdots & \cdots & \cdots & \cdots \\ z_{m1} & z_{m2} & \cdots & z_{mn} \end{pmatrix} \end{matrix} \quad (1)$$

Normalization of criteria: The criteria are normalized to ensure that they have the same scale of measurement. This step involves transforming the raw data of each criterion into a common scale, such as a range of 0 to 1 or −1 to 1.

$$n_{ij} = z_{ij} / \sqrt{\sum_{j=1}^{m} z_{ij}^2} \; j = 1, \dots, n, \; i = 1, \dots, m \quad (2)$$

2. Determination of the weighted criteria: The decision-maker identifies the weighting of each criterion to reflect their relative importance.

$$v_{ij} = w_j \otimes n_{ij}, \quad j = 1, \dots, n, i = 1, \dots, m \quad (3)$$

3. Calculation of the positive A^+ and negative A^- ideal solutions: The optimal solution represents the highest potential value, while the negative ideal solution represents the lowest potential value for every criterion.

$$A^+ = \{v^+_i, \dots, v^+_n\} = \{(\max v_{ij}, j \in J) (\min v_{ij}, j \in J')\}, i = 1, 2, \dots, m \quad (4)$$

$$A^- = \{v^-_i, \dots, v^-_n\} = \{(\min v_{ij}, j \in J) (\max v_{ij}, j \in J')\}, i = 1, 2, \dots, m \quad (5)$$

J deals with the benefit criteria, while J′ deals with cost criteria.

4. Calculation of the distance between each case and the positive (PIS) and the negative (NIS) ideal solutions: For each case, the distance to the best ideal solution is figured out by using the Euclidean distance formula, while the distance to the negative ideal solution is calculated by using the same formula in reverse.

$$d_i^+ = \{\Sigma^n_{j=1} (v_{ij} - v_j^+)^2\}^{1/2}, \quad i = 1, \dots, m \quad (6)$$

$$d_i^- = \{\Sigma^n_{j=1} (v_{ij} - v_j^-)^2\}^{1/2}, \quad i = 1, \dots, m \quad (7)$$

5. Calculation of the relative closeness (R_i) to the best ideal solution: The relative closeness of each case to the best ideal solution is figured out by dividing the distance to the negative ideal solution by the sum of the distances to the ideal and negative ideal solutions.

$$R_i = d_i^- / (d_i^+ + d_i^-), \quad i = 1, \dots, m \quad (8)$$

If $R_i = 1 \rightarrow A_i = A^+$

If $R_i = 0 \rightarrow A_i = A^-$

6. Ranking of cases: The cases are ranked according to their relative closeness to the ideal solution, with the highest score indicating the best case.

TOPSIS is a simple and effective method that provides a clear and transparent ranking of cases based on multiple criteria. However, it has some limitations, such as the assumption of linear relationships between criteria and the sensitivity to changes in the weights assigned to the criteria. TOPSIS methodology fits better to the targets of the project event if it is compared to other well-established methods. The reason for using the TOPSIS method in this case is due to its advanced development and efficiency in addressing multicriteria decision-making problems. it offers a straightforward calculation process and impressive adaptability [47]. Furthermore, there are the following main reasons [48,49]: (a) TOPSIS logic is comprehensible and accessible; (b) the computation processes are clear; (c) this approach highlights the best alternatives by its performance in multiple criteria through a mathematical formula; (d) the weights of the criteria are integrated into the procedures for comparison. In this case study, all criteria hold the same importance (weight = 0.125).

The TOPSIS method has been successfully applied to fields such as evaluation of e-shop websites [50], supplier selection [51], selection of warehouse location [52], ranking RES supply systems [53], assessing the ICT exploitation in EU energy policy [46], evaluating sustainable transportation systems [54], evaluation for photovoltaic strings [55], ranking international markets according to the stringency of food safety measures [56]. The application of TOPSIS analysis for the e-tourism websites assessment in the Prefecture of Serres is presented for the first time in this paper.

3. Results

The research through the Greek Internet resulted in the retrieval of 48 of the Alternative Tourism Enterprises (ATEs) in the Prefecture of Serres. Figure 1 presents the areas where these ATEs are located. Most ATEs (16) are located in the city of Serres, six ATE are located near Lailias ski area and 12 ATEs are located in the city of Sidirokastro and in Agistro village (famous areas for their therapeutic baths). Furthermore, three ATEs are established near Lake Kerkini, an attractive eco-tourism destination.

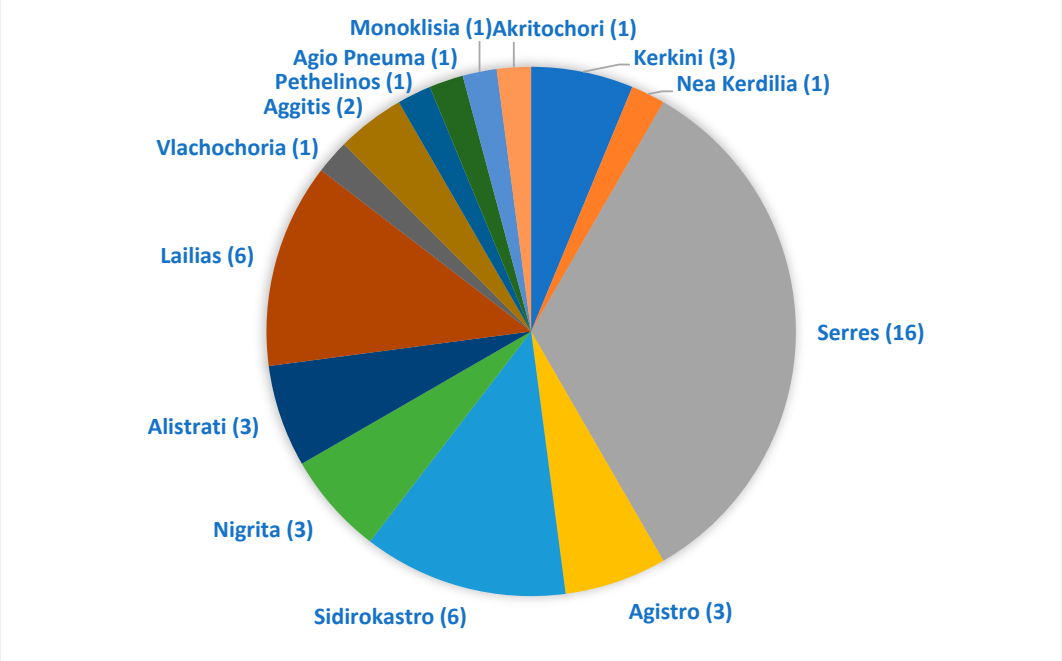

Figure 1. Partial Location of ATE.

Figure 2 shows the alternative forms of tourisms that are provided in the Prefecture of Serres. In particular, the most popular forms of alternative tourism is ecotourism (Lake Kerkini, Orfanos Gulf, Lailias Forest, Alistrati Cave, Akritochori Lake, etc.) and heritage tourism (Roupel Fortress, Monastery of Timios Prodromos, Monastery of Saint John the Baptist of Serres, Sarakatsani Folklore Museum, Lion of Amphipolis, Ancient Amphipolis, Zinzirli Mosque, etc.). On the other hand, the less popular forms of alternative tourism in the area is dark and gastronomic tourism (akanes, wine, etc.).

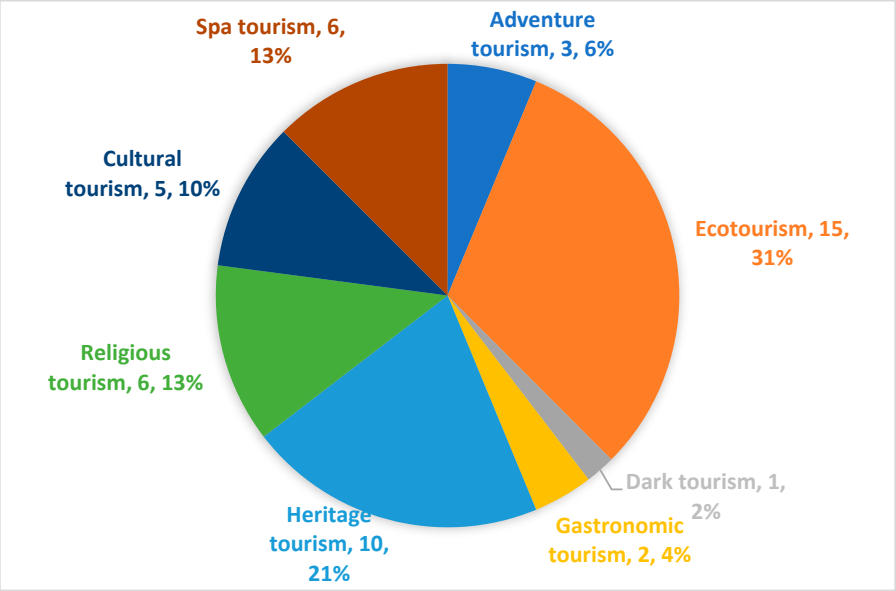

Figure 2. Alternative forms of tourism in the Prefecture of Serres.

Figure 3 presents the summary of achieved characteristics of each ATEs. Most characteristics (20) are achieved by two ATEs, two ATEs achieve 19 characteristics, one ATEs achieve 18 characteristics, three ATEs achieve 17 characteristics, six ATEs achieve 16 characteristics, while 10 ATEs achieve 15 characteristics. The rest of the ATEs achieve less than 15 characteristics. It is important to note that the ATEs with the same sum of characteristics, don't achieve the same characteristics, too. The analytical table is presented in the Appendix A.

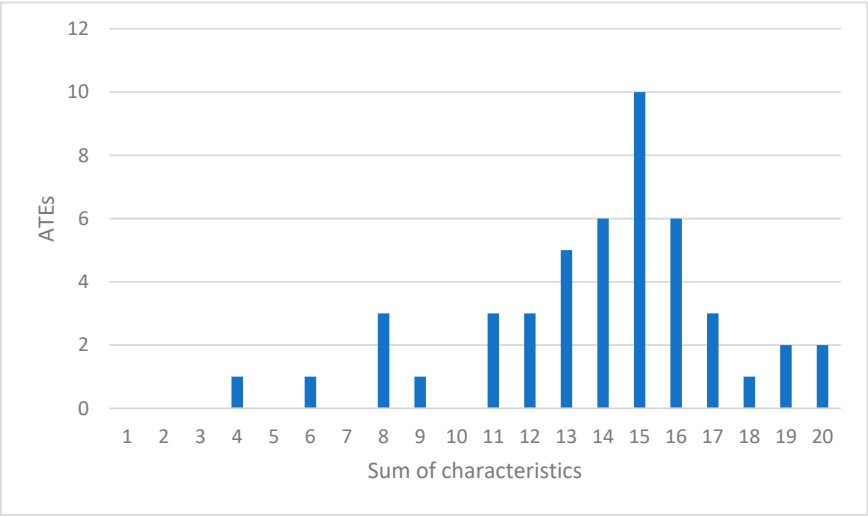

Figure 3. Sum of characteristics of ATE in the Prefecture of Serres.

As for the existence or not of social media profile of the ATEs, most ATEs (36 out of 48) have created a social media profile (Facebook, Instagram and Youtube) and take advantage of social media marketing (Figure 4). In particular, most ATEs join Facebook, while only 15 ATEs make use of Instagram, which is the most effective social platform for engaging audiances. Only 9 out of 48 ATEs join Youtube and produce videos or utilize Youtube Ads to promote their products or services.

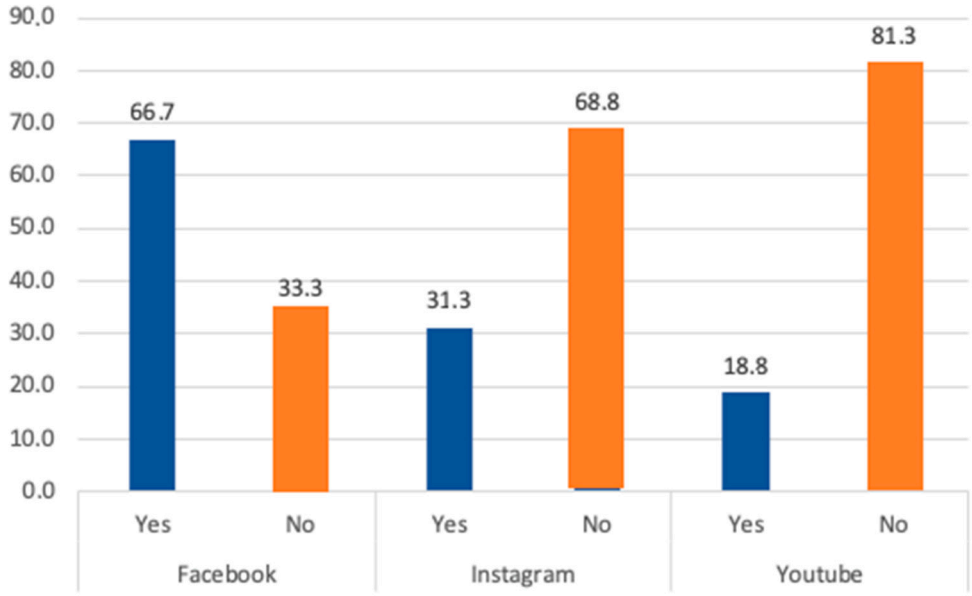

Figure 4. Profile on Social Media (%).

Table 2 presents the complete rankings of the 48 ATEs in the Prefecture of Serres, which are based on the CC. The CC is estimated for each ATE, and it is used for the total ranking, as each ATE with a higher CC is considered superior in ranking. According to the results of TOPSIS method, the total scores (CC) of ATEs present a great spectrum of values between 0.62743411 and 0.37582468 and that shows a significant contrast between the top and bottom ranked ATE. The ATE with the highest CC (ATE_1) adopts a variety of digital tools, such as a multilanguage website, it provides information about its products and services, provides contact information and an online communication form, local information, digital map, audiovisual material, live web camera, sitemap, news about the enterprise, a weather forecast application, a website visitor tracker, a tab entitled Frequently Asked Questions (FAQ), links to other companies, additional topics of information, social media profile and social media sharing button, related sources of information, third person advertisement and RSS. The ATE with the lowest CC (ATE_41) presents the following characteristics: information about products/services/activities, contact information, local information and online communication form.

Table 2. Total ranking of ATE in the Prefecture of Serres.

Evaluation Ranking	ATE	di^+	di^-	CC
1	ATE_1	0.111	0.187	0.627
2	ATE_33	0.111	0.187	0.627
3	ATE_37	0.111	0.187	0.627
4	ATE_9	0.111	0.187	0.627
5	ATE_44	0.111	0.187	0.627
6	ATE_11	0.124	0.188	0.603
7	ATE_45	0.124	0.188	0.603
8	ATE_43	0.124	0.187	0.602
9	ATE_13	0.124	0.181	0.594

Table 2. *Cont.*

Evaluation Ranking	ATE	di^+	di^-	CC
10	ATE_32	0.124	0.178	0.588
11	ATE_2	0.121	0.168	0.581
12	ATE_36	0.144	0.184	0.561
13	ATE_23	0.169	0.213	0.558
14	ATE_18	0.137	0.165	0.547
15	ATE_35	0.137	0.165	0.547
16	ATE_15	0.142	0.168	0.542
17	ATE_12	0.114	0.134	0.540
18	ATE_19	0.138	0.154	0.528
19	ATE_46	0.183	0.195	0.517
20	ATE_4	0.190	0.195	0.507
21	ATE_26	0.169	0.171	0.503
22	ATE_14	0.158	0.155	0.496
23	ATE_20	0.158	0.154	0.495
24	ATE_48	0.158	0.154	0.495
25	ATE_22	0.160	0.143	0.473
26	ATE_31	0.138	0.123	0.472
27	ATE_40	0.168	0.145	0.463
28	ATE_3	0.167	0.144	0.462
29	ATE_34	0.167	0.144	0.462
30	ATE_38	0.167	0.144	0.462
31	ATE_6	0.168	0.144	0.461
32	ATE_24	0.168	0.144	0.461
33	ATE_5	0.160	0.135	0.459
34	ATE_42	0.182	0.148	0.448
35	ATE_17	0.194	0.154	0.443
36	ATE_28	0.169	0.129	0.433
37	ATE_8	0.178	0.134	0.429
38	ATE_25	0.178	0.134	0.429
39	ATE_27	0.178	0.134	0.429
40	ATE_29	0.169	0.122	0.419
41	ATE_47	0.169	0.122	0.419
42	ATE_30	0.170	0.122	0.418
43	ATE_21	0.189	0.132	0.411
44	ATE_10	0.178	0.124	0.410
45	ATE_7	0.170	0.114	0.401
46	ATE_16	0.177	0.109	0.381
47	ATE_39	0.177	0.107	0.376
48	ATE_41	0.177	0.107	0.376

In general, ATE with higher CC are the e-tourism websites that provide the tourists with their content in multiple languages (×1), use navigation in the Google Maps (×5) and search engines (×8). These are the characteristics with the maximum contribution to the methodology. Also, e-tourism websites provide online communication (×12), a weather forecasting app (×13), information on different topics (×17), social sharing tool/button (×22), and related sources of information (×25).

4. Conclusions

In conclusion, E-tourism has the potential to promote sustainable development through alternative tourism activities. By leveraging digital technologies, tourists can be encouraged to engage in activities that promote environmental conservation, social and cultural preservation, and economic growth for local communities. Alternative tourism activities such as ecotourism, agrotourism, and community-based tourism can provide a unique and authentic travel experience for tourists while also creating opportunities for sustainable development. However, it is important to ensure that these activities are developed in a responsible and sustainable manner, taking into consideration the needs and concerns of local communities and ecosystems. With careful planning and collaboration between

stakeholders, E-tourism can be a powerful tool for promoting sustainable tourism practices and achieving the United Nations' Sustainable Development Goals.

Through the Internet research, 48 ATEs in the Prefecture of Serres were identified. According to the results, the most common form of tourism in the Prefecture of Serres tends to be ecotourism, while heritage tourism, spa tourism and religious tourism are less popular in the area. Based on the results obtained through the TOPSIS method, there was a significant variation in the total score CC values, indicating a considerable difference in the superiority of ATE websites. The top-performing websites can serve as a benchmark for developing a conceptual content model for creating an improved website for an alternative sustainable tourism enterprise. To conclude, the e-tourism website model presents the following characteristics: multilingual content, embedded Google Map, a search engine, an online communication, a weather forecasting app, information on different fields, social sharing button and related sources of information.

The results show that these enterprises in the Prefecture of Serres have to adjust to the new digital era and have to Improve their effectiveness and efficiency in developing their independent website. It has been noticed that many enterprises in the tourism sector who have created their own websites are mostly at the early stage of ICTs adoption, typically focused on promotion. These enterprises should progress to the later stages of ICTs adoption, which involve actively engaging with customers and fully integrating e-commerce activities with supply chain optimization. The websites with low total score should use as a model the website with high total score. Moreover, there is potential to incorporate further features into an entrepreneurial website in order to enhance its success. Examples of such features include multimedia content, a survey tool, a website analytics tracker, and a discussion forum.

The results of this study can be a valuable resource for entrepreneurs and web designers who are creating websites for enterprises that promote alternative tourism and want to participate in the new era of digital transformation. The findings of this study can assist in enhancing internet adoption by improving website design and implementation to achieve specific features and enhance digital services in the tourism industry in the Prefecture of Serres.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Sum of characteristics of ATE in the Prefecture of Serres (Analytical table).

	ATE	Sum of Characteristics
1	ATE_1 ATE_33	20
2	ATE_37 ATE_9	19
3	ATE_44	18
4	ATE_11 ATE_45 ATE_43	17
5	ATE_13 ATE_32 ATE_2 ATE_36 ATE_23 ATE_18	16

Table A1. *Cont.*

	ATE	Sum of Characteristics
6	ATE_35 ATE_15 ATE_12 ATE_19 ATE_46 ATE_4 ATE_26 ATE_14 ATE_20 ATE_48	15
7	ATE_22 ATE_31 ATE_40 ATE_3 ATE_34 ATE_38	14
8	ATE_6 ATE_24 ATE_5 ATE_42 ATE_17	13
9	ATE_28 ATE_8 ATE_25	12
10	ATE_27 ATE_29 ATE_47	11
11	ATE_21	9
12	ATE_10 ATE_7 ATE_16	8
13	ATE_39	6
14	ATE_41	4

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