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What Is the Value of an Environmental Certification Label in Tourism Industry? Is It Worth the Effort?

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60-76 minutes

1. Introduction

Tourism can contribute to the socio-economic development of tourist destinations [1], with a significant weight in the GDP of several countries. In 2023, still recovering from the crisis caused by the COVID-19 pandemic, the sector contributed USD 7.7 trillion (about USD 24,000 per person in the US) and weighted 7.6% in world GDP.

Tourism has many positive impacts, and its role in promoting the economy and the development of society, in general, is valued, whether through job creation, cultural and heritage preservation, or infrastructure improvement, among other things [2,3]. However, the activity also faces challenges at various levels, particularly in terms of community well-being and environmental preservation. This happens because tourism often causes overuse of natural resources [4,5], pollution, heritage degradation, and precarious and seasonal employment [4].

To manage these impacts and problems, tourism needs to become more sustainable and responsible and be based on better socio-economic, environmental, and cultural management.

The constant growth in tourism, combined with an increasingly strong environmental, social, and cultural awareness, has put the concept of

sustainability and certification onto the agenda of political decisionmakers and the media in general. With a more informed and aware consumer, many companies have been forced to standardize practices to achieve greater transparency in their activity, thus submitting themselves to sustainable tourism certification processes.

The literature review showed that, although sustainability certification was a much-discussed topic in academic circles during the 1990s, in the first two decades of the 21st century, literary production declined.

Considering that humanity increasingly needs to preserve its resources, as otherwise the planet's reserves will be depleted, and that tourism, if properly managed, can help achieve the Sustainable Development Goals, two possible scenarios arise:

- The subject of sustainability has lost interest in academia because businesspeople have become more environmentally aware and, as a result, have adopted a proactive stance in terms of taking in sustainable practices and joining certification programs. As a result, the topic has been exhausted and is no longer on the agenda of researchers.
- The pandemic crisis experienced worldwide between 2019 and 2021
 caused a change in people's way of being and behaving, and issues
 such as sustainability certification are no longer the focus of scientific
 research, which has moved on to other areas of study. However, there is
 still a need to delve deeper into the subject.

It seems pertinent to revisit the subject to understand which changes occurred in sustainability certification in recent years. To do this, two questions were formulated:

- Has there been a significant increase in the number of tourism companies certified in sustainability over the last 3 years?
- What is the evolution in terms of motivations, difficulties, and

benefits perceived by tourism entrepreneurs in relation to sustainability certification systems?

The aim of this study is to find out whether there have been any changes in the motivations of tourism entrepreneurs to join sustainability certification systems and what benefits and difficulties they perceive in adopting these systems.

This issue is particularly important in a context that makes it imperative to make tourism more sustainable. In other words, it is important to meet the needs of visitors, communities, and the entire sector, considering the environmental, social, and cultural impacts in the present and future (adapted from WTO, 1998).

This article is structured around six sections. After a brief introduction to the topic, the conceptual background is developed. Next, the research methodology and the results obtained are presented. This is followed by an in-depth discussion of the subject before moving on to the conclusions, which summarize the main findings and their implications.

2. Conceptual Background

2.1. Tourism Sustainability

Over the years, various definitions of sustainable tourism have been put forward, but there is no agreement on a single definition for this concept [6]. Nevertheless, sustainable tourism can be described as that which "... both now and in the future operate within natural capacities for the regeneration and future productivity of natural resources; recognize the contribution that people and communities, customs and lifestyles, make to the tourism experience; accept that these people must have an equitable share in the economic benefits of local people and communities in the host areas..." [7]. In this sense, tourism sustainability is based on three fundamental pillars linked to the environment, society/ culture, and economy, which can be assumed to be different types or

sub-types of sustainability [8,9]. If economic sustainability means that companies are viable and stable in the long term and that socioeconomic benefits are generated for local communities, social sustainability seeks respect for human rights and different cultures and the well-being of local communities. On the other hand, environmental sustainability aims to ensure that natural resources, natural heritage, and biodiversity are preserved and well managed [10].

This last dimension, the environmental one, has been the most studied in terms of sustainable tourism [11]. However, there are currents that advocate a systemic approach based on the adoption of not only environmental, but also social and economic principles, which, according to Batle et al. [12], form a more robust model of sustainability.

2.2. Sustainability Certification

As the concept of sustainability gained momentum, models of good business practices that can minimize or mitigate the negative impacts of tourism emerged. The same is valid for the positive impact of tourism in terms of preserving natural and cultural heritage, and in terms of a more equitable distribution of its economic benefits. The implementation of good practices by tourism companies makes it possible to preserve and enhance natural resources, and it also has the benefit of attracting tourists who are concerned about reducing their ecological footprint [13].

Good practice models, or sustainable tourism certifications, are voluntary instruments that make it possible to improve the environmental, social, and economic performance of a company, destination, or service. Honey and Rome [14] define certification processes as a voluntary procedure or procedures that assess, audit, and give written assurance to a facility, product, process, or service that meets specific standards. It awards a marketable logo to those that meet or exceed baseline standards. In this sense, certification consists of implementing production processes based on sustainable criteria developed and verified by an external agent

[15].

Certification labels began to be awarded in the 1980s and became more widespread in the 1990s [16]. Today, there are more than 200 certifications and seals for sustainable tourism [17], and several companies are dedicated to certifying tourism products, companies, and destinations. These include Green Key, Biosphere, EU Ecolabel, Rainforest Alliance Certificate, Green Leaf Foundation, Green Tourism Business Scheme, Travelife, Green Globe, TourCert, and EarthCheck (Figure 1).

Figure 1. Certification scheme seals. Source: own elaboration.

Due to the great diversity of certification systems, with different criteria, indicators, objectives, and planning levels, there is no consensus or common metrics. However, there is consensus on the objectives. The main objectives of these certifications are the implementation of good practices that reduce the environmental impacts of tourism businesses, job creation, the preservation of local identity, a better distribution of wealth to local communities, and the involvement of residents in tourism planning processes [18].

2.3. Motivations of Entrepreneurs and Managers to Join Certification Schemes

The literature review on the motivational factors behind managers' and business owners' decisions to submit their companies to environmental or sustainability certification processes identifies four sets of reasons:

- Managers' convictions and beliefs regarding the benefits that certification can bring to the company, in various areas, and ensure the alignment of environmental objectives with the companies' economic objectives [5,19,20,21,22,23,24,25,26].
- Marketing motivations, related to the implications of certification for companies' brand valuation and with the aim of better meeting the

expectations and motivations of consumers and stakeholders [10,15,22,24,25,27,28,29].

- External motivations related to the regulatory context and pressure from customers and other stakeholders in favor of more sustainable production criteria [7,15,20,24,25,27,28,30,31,32,33].
- Motivations related to economic efficiency and cost reduction [10,21,22,24,25,26].

2.3.1. Decision-Makers' Convictions and Beliefs about the Benefits of Eco-Certification

An important factor in the decision to join a certification scheme lies in the strong environmental commitment of entrepreneurs and top managers that stems from their environmental sensitivity (values), desire to learn (personal goals), and beliefs about the general context and the ability to achieve their goals. Several authors [4,20,22,34] state that the notion of environmental responsibility and the personal goals of decision-makers, combined with an appropriate general context, play an important role in the decision to adopt an eco-certification. Therefore, in the field of tourism, the convictions and beliefs of decision-makers lead them to believe that eco-certification contributes significantly to the sustainable management of their companies [25]. In addition, the manager/owner's concern for natural resources and acceptance of a moral/ethical responsibility to take conservation measures [21] extend far beyond their interest in reducing negative environmental impacts [24,35], covering areas linked to the pillar of social sustainability, namely promoting the equitable distribution of the economic benefits of tourism [6], increasing employees' sensitivity towards the environment [25,36], educating people about nature and improving the relationship with the local community [6], supporting the conservation of natural resources [21], raising employee awareness of environmental issues [25], and increasing employee satisfaction [19,37]. All of these areas point out that

underlying the decision to join a certification scheme is also an attitude of transparency and consistency in adopting sustainable practices. Significantly, when choosing a hotel to work in, many employees give priority to those that are already certified [25].

2.3.2. Marketing Motivations and Brand Valuation

Ecolabels are a choice mechanism for consumers [15], and, as mentioned above, eco-certification allows managers to show environmentally sensitive management [38]. Therefore, the decision to adopt a certification scheme is also linked to the desire to meet the expectations and motivations of consumers and other stakeholders. Among the marketing motives (advantages) most frequently mentioned in the literature are the following: increasing employee loyalty to the company [25]; improving the establishment's image [10,21,24], attracting "green" tourists [24]; and increasing the social reputation of establishments and customer satisfaction [25]. It is important to note that, although most tourists do not include the eco-certification of hotels among their selection criteria, there are studies that report that, once exposed to tourist establishments with eco-accreditation, customers tend to choose these establishments for future stays [27,28,29]. In short, there is a belief that eco-certification helps companies in the tourism industry gain a competitive advantage [6].

2.3.3. Motivations Associated with Economic Efficiency and Cost Reduction

When choosing a certification scheme, ecological sustainability has a strong correlation with economic sustainability, as ecological considerations are also financially justified by greater eco-efficiency and consequent cost savings [39]. The association between the adoption of a certification scheme and cost-reduction motivations is unanimous in the literature, although there is no consensus among researchers on the real

impact of eco-certification on improving the financial performance of tourism companies [40]. There are, however, authors who guarantee that eco-certification maximizes economic gains [22] and reduces operating costs in the organization [21,24]. The reduction in operating costs derives mainly from water and electricity savings [10,21,22,25].

Combining the reduction in operating costs and marketing benefits, these authors conclude that eco-certification in tourism increases the profitability of companies and creates competitive advantages over competition.

2.3.4. External Motivations Related to the Regulatory Context and Customer Pressure

Eco-certification is always a voluntary decision on the part of companies (certified entities) that adopt a set of good practices, audited regularly by a third party (certifying entity). However, there are sometimes regulatory pressures from stakeholders who feel entitled to choose companies that demonstrate compliance with good environmental practices [20,32,33]. These pressures can come from customers, tour operators, travel agents, or shareholders themselves [31,41]. In this sense, the decision to join a certification scheme is partly determined by an effort to gain legitimacy (regulatory or social compliance). In this context, Yılmaz et al. [25] state that ecolabeled hotels are preferred by tour operators.

2.4. Barriers to the Adoption of Environmental Certification Schemes

The low level of penetration of environmental certification seals is generally explained by four types of inhibiting factors, namely human barriers [24,41], financial barriers [6,41], operational barriers [21,25], and external barriers [24,27,28,42].

The human barriers to the adoption of environmental labels can be categorized into three types of limitations: lack of information regarding

good practices and certifications, lack of human resource capacity and the negative attitude of managers based on the belief that processes and resources will become more expensive [43]. Best and Thapa [21] identify employee resistance, difficulty in making the necessary organizational changes, lack of knowledge, and the belief that environmental management is useless or unnecessary. In addition to the lack of skills and expertise among employees, Sucheran and Arulappan [24] mention two contextual factors: the lack of awareness campaigns about the importance of ecolabels and the lack of appropriate marketing.

As financial barriers, two interconnected aspects stand out: the costs inherent in adopting and maintaining the environmental label, along with the belief that such a decision does not add economic value to the business [6]. Many entrepreneurs claim that eco-certification is expensive to implement [21,25] or lack of capital [21] or the belief that the potential benefits are not evident.

Many entrepreneurs, especially in smaller companies, refer to a set of operational barriers, assuming that the implementation and maintenance of an ecolabel is a laborious and complicated process, with rigid procedures whose compliance implies productivity losses [21,25].

No less important are the external barriers related to consumer behavior and the normative ambiguity resulting from the absence of a regulatory body [6]. In fact, "ecolabels" for tourism products and services usually have little notoriety and/or influence among tourists [28]. Studies show that ordinary tourists do not recognize ecolabels, and those who do recognize them attach little importance to them because they are not sure that they provide environmental benefits [27,28]. As Banerjee [20] points out, eco-certification/accreditation did not emerge in response to a consistent and strongly expressed desire from most consumers but has historically been driven by suppliers. The low consumer demand for ecolabels is also due, according to Sucheran and Arulappan [24], to the lack of a regulatory body and the lack of support from governments.

3. Materials and Methods

This research has a twofold objective. First, it intends to understand the main drivers and constraints for companies to join certification schemes, and, second, it aims to compare and evaluate possible changes between the years 2021 and 2024. To do so, a comparative study was conducted.

3.1. Data Collection

Data were collected using an intentional and controlled sampling method, namely convenience sampling (a non-probability sampling method). Online questionnaires were distributed by the Sustainable Tourism Observatory of Centro de Portugal to a list of 2000 managers in 2021 and 2024. Despite the fact that these lists are annually updated, the authors admit that some of the questionnaires were answered by the same company and/or managers in both years. Despite the large number of potential respondents, only 417 questionnaires were collected. In 2021, 213 people answered the questionnaire, and in 2024, 204 participants adhered.

3.2. Measurement Instrument

The questionnaire form was composed of 4 sections and 14 questions.

Section one was composed of 3 questions. The first question was intended to assess the level of awareness managers have of certification enterprises. A total of 10 companies were selected and measured in a four-point Likert scale, where one = don't know at all; 2 = barely know; 3 = know quite well; and 4 = know extremely well. A second question asking if the company was certified with an ecolabel was formulated using a three-point Likert scale, where 1 = no; 2 = in the process of joining a certification scheme; and 3 = yes. For those who answered 2 or 3, a follow-up open question was asked to know which ecolabel the company had gained.

Section 2 included 3 questions that intended to understand the motivation, difficulties, and perceived benefits managers saw in ecolabel certification. A five-point Likert scale was used from 1 (irrelevant) to 5 (very relevant). To determine the items for each question, the findings from previous studies were used. Research conducted by Ban et al. [19]; Lozano [35]; Margaryan and Stensland [22]; Sampaio et al. [34]; Best and Thapa [21]; Yılmaz et al. [25]; Bansal and Roth [20]; Revell et al. [4]; Sucheran and Arulappan [24]; Buckley [15]; Burgin and Hardiman [28]; Budean [27]; Chafe and Honey [29]; Mair and Jago [10]; and Vernon et al. [39] was reviewed to assess the motivation that drives enterprises to join certification schemes.

To determine the difficulties of implementing these programs, Best and Thapa [21], Yılmaz et al. [25], Burgin and Hardiman [28], Budean [27], Banerjee [42], and Sucheran and Arulappan [24] were consulted.

The question related to perceived benefits was formulated according to the insights provided by the studies of Best and Thapa [21], Yılmaz et al. [25], Mair and Jago [10], Margaryan and Stensland [22], Buckley [15], Burgin and Hardiman [28], Budean [27], Chafe and Honey [29], and Sucheran and Arulappan [24].

In section number 3, respondents were asked the level of agreement with 16 sentences related the adoption of ecolabels. A five-point Likert scale from 1 (irrelevant) to 5 (very relevant) was used. Studies from Best and Thapa [21], Yılmaz et al. [25], Tian and Robertson [36], Ban et al. [19], Han e Hyun [37], Sucheran and Arulappan [6], Margaryan and Stensland [22], Buckley [15], Burgin and Hardiman [28], Budeanu [27], Chafe and Honey [29], and Mair and Jago [10] were used to formulate the questions.

In the 4th (and last) section, questions related to the company were asked (the section and location where the company performs and number of employees). Sociodemographic data were also collected from respondents (job title, age, education, and gender) in this section.

3.3. Data Analysis

The data were analyzed with SPSS V.29 software.

The characteristics of the companies and the personal and professional features of the respondents were indicated by a cross-table analysis based on the years in study. So as to measure the internal consistency of the scales used, coefficients of internal consistency were calculated (Cronbach's Alpha). Explanatory factor analysis (EFA) was used to determine the validity of the scales. A principal component analysis was carried out to assess the motivations to, advantages of, and obstacles to joining certification schemes. The technique of comparing means was used to understand the similarities and differences of motivations and constraints between certified versus non-certified companies.

4. Results

Table 1 summarizes the general characteristics of the two samples of respondents in this study (2021 versus 2024) based on four parameters related to the companies (sector of activity, company size, region where the company is located, and whether it has been certified by an ecolabel), as well as four other parameters related to the individual respondents, namely job title, education, gender, and age. Since the unit of analysis in this study is companies involved in tourism, and not individuals, the "position in the company" parameter is a very relevant indicator of the professional representativeness of the respondents.

Table 1 clearly shows that approximately 70 percent of the respondents in the two samples have management or general management positions in their companies, and that only 16.5 percent of the respondents do not have a management position.

Table 1. Characteristics of the sample.

It is also important to note that the two samples (2021 versus 2024) are identical in six of the eight parameters considered. The significance

levels of the χ^2 test reveal that there are no significant differences in the following six parameters: sector of activity (χ^2 = 6.208; p = 0.287), company size (χ^2 = 0.941; p = 0.816), respondents' job title (χ^2 =2.863; p < 0.182); respondents' education (χ^2 = 0.130; p = 0.710); respondents' gender (χ^2 = 1.122; p = 0.289); and respondents' age (χ^2 = 7.017; p = 0.071). The two samples differ only in the "region" parameter (χ^2 = 24.863; p < 0.001): compared to the 2021 sample, the 2024 sample includes more companies from the Coimbra, Leiria, and Aveiro regions and, conversely, fewer companies from the Oeste and Serra da Estrela regions. We can therefore assume that, overall, the two samples are similar in terms of their structures.

However, one can notice that, from 2021 to 2024, the number of certified companies grows significantly, from 19.4% to 34.9% of respective samples, and, conversely, the number companies "in the process of joining" decreased significantly, from 9.4% in 2021 to 3.9% (χ^2 = 9.943; p = 0.007). In short, there seems to be a gradual increase in tourism companies' adherence to environmental and sustainability certification.

When measuring the level of awareness of the 10 certification schemes (Figure 2), it is evident that the level of recognition of most ecolabel schemes is very low among respondents. Thus, seven of the ten ecolabel schemes presented are unknown to most respondents. At the opposite end of the spectrum, Biosphere emerges with the highest level of awareness, with around 20 percent of respondents saying that they "know this ecolabel very well", and around 20 percent saying that they "know it relatively well". In second place in the awareness ranking comes the Green Key, and in third place is the EU Ecolabel.

Figure 2. Familiarity with ecolabels. Source: own elaboration.

The data presented in <u>Figure 2</u> on the notoriety of ecolabels are consistent with the percentage of companies certified by the two best-known ecolabels, namely Biosphere and Green Key (in second place),

as shown in Figure 3.

Figure 3. Ecolabels adopted by the companies. Source: own elaboration.

To better understand the reasons behind the decision to submit tourism businesses to an environmental or sustainability certification process, respondents were asked to rate the degree of importance of a set of 23 reasons and advantages that could be associated with certification (Table 2). Based on a principal component factor analysis (Total Variance of 71.76%; KMO = 0.922, p < 0.001), with varimax rotation, these 23 motives and advantages were structured into five factors.

Table 2. Principal component analysis of motivations and advantages of being certified.

Factor 1 (with 22.61% of variance), "improving customer-based brand equity", brings together a set of eight motives related to the positive impact of certification on the company's brand ("customer satisfaction", "greater company attractiveness", "strengthening loyalty", "attracting more customers", "employee satisfaction", "meeting customer expectations", "strengthening environmental awareness", and "increasing company profitability"). Factor 2 (with 15.63% of variance), "achieving competitive advantage", aggregates the variables "increase negotiating power", "improve social reputation", "contributes to the sustainable management", "get competitive advantages", and "significantly reduce environmental impacts". Factor 3, which we have labelled "achieving eco-efficiency/cost reduction" (with a variance of 15.16%), combines the variables "water saving", "energy efficiency", "cost reduction", and "savings on product purchases". Factor 4, "strengthening competitiveness", with a variance of 11.75 percent, combines the following four perceived advantages: "more support from public authorities", "increase employee motivation", "increase company profitability", and "meet expectations or requirements of tour operators". Finally, factor 5 (9.01%), "improving the company's image", is related to

the variables "to improve company image" and "environmental awareness among business owners and managers".

Regarding the perceived difficulties and obstacles that discourage the adoption of a certification scheme (Table 3), the factorial analysis in principal components (Total Variance of 65.33%; KMO = 0.723, p < 0.001), with varimax rotation, extracted the following two factors: factor 1, "higher costs and lower price competitiveness" (with a variance of 46.26 percent, and encompassing the variables "it is expensive", "it increases operating costs", "it increases service prices", and "it's a complicated process"); and Factor 2, "Difficulties in adapting working methods", with 19.07 of the variance and aggregating the three variables of "difficulty in ensuring compliance with the criteria", "difficulty in applying the certification criteria", and "difficulty in covering the costs of the process".

Table 3. Principal component analysis of perceived obstacles to joining a certification scheme.

It is particularly important to find out whether the certification process influences the answers to this questionnaire, i.e., whether there are significant differences between respondents from certified companies and respondents from non-certified companies in the evaluation of the five factors related to perceived reasons and advantages and in the evaluation of the two factors related to perceived obstacles. Table 4 shows that respondents from non-certified companies give higher means scores to the obstacles associated with the certification process: 3.64 versus 3.29 (p < 0.001) for "higher costs and lower price competition", and 4.14 versus 3.68 for "difficulties in adapting working methods".

Table 4. Comparing means between certified versus non-certified companies *.

However, the results are more ambiguous when it comes to evaluating the motives and advantages of joining certification schemes: the "strengthening competitiveness" factor is weighted more highly among respondents from non-certified companies, and, conversely,

respondents from certified companies give higher scores to the "improving the company's image" factor. In the remaining three factors (improving customer-based brand equity, achieving competitive advantage, and getting eco-efficiency/cost reduction), there were no statistically significant differences between the two samples.

As <u>Table 5</u> shows, in the longitudinal assessment, i.e., comparing the responses of the 2021 and 2024 samples, there are no significant differences in the average scores, either in the assessment of the five reasons and perceived advantages or in the assessment of the two factors related to the difficulties inherent in the certification process.

Table 5. Comparing means between samples: 2021 versus 2024.

As shown in <u>Table 6</u>, the average scores for the factors "getting ecoefficiency/cost reduction" and "strengthening competitiveness" are higher the larger the number of employees in the respective companies. In the remaining three factors relating to the reasons for and advantages of joining certification schemes, as well as in the two factors relating to perceived obstacles, there are no statistically significant average differences depending on the number of employees of the companies.

Table 6. Comparing means: company size (number of employees).

This study also sheds light on the effect of three sociodemographic variables (gender, age, and schooling) on valuing environmental certification schemes. Regarding gender (Table 7), female respondents give a significantly higher weighting to the motivation and perceived advantages of joining certification schemes.

Table 7. Comparing means: male vs. female.

Regarding the age variable, <u>Table 8</u> shows that the average scores for four of the five factors of "motivations and advantages of being certified" certification schemes are higher in the age segment of young people up to the age of 30.

Table 8. Comparing means: age.

Level of education is the sociodemographic variable that has the least influence on respondents' answers. Only in the evaluation of the "improving the company's image" factor are there significant differences between respondents with and without a university degree. Respondents with a university degree gave greater weight to this factor (Table 9).

Table 9. Comparing means: high school vs. university diploma.

5. Discussion

The samples from 2021 and 2024 are identical in what concerns sector of activity, company size, respondents' job title, education, gender, and age. These results suggest, as expected, that some respondents may be the same in both years of the analysis. This increases the validity and relevance of this study when comparing the perceived benefits, advantages, and difficulties in adopting certification schemes by tourism companies between 2021 and 2024.

Numbers differ between the years in analysis in what concerns the certification process. The analysis of the results of the questionnaires carried out in 2021 and 2024 revealed that there was a significant increase in the number of certified companies (from 19.4% to 34.9%). This shows that some of the companies that were in the process of joining certification schemes in 2021 have completed the process and are now certified. It also explains the fact that the number of companies in the adhesion process has decreased from 9.4% in 2021 to 3.9% in 2024. This increase is a good sign for tourism, as more companies are implementing practices to reduce their environmental impact.

The data also demonstrate that there has been an increase in recognition of the importance on the part of tourism companies to adhere to sustainable tourism certification. However, recognition of most sustainability certification seals remains very low among those interviewed, with seven of the ten seals unknown to the majority of businesspeople. Biosphere stood out as being the certification with the

greatest recognition; around 20% stated that they "know this ecological label very well", and another 20% stated that they "know it relatively well". In second place, the level of recognition came to the Key Green, and thirdly, to the EU Ecolabel. The data are consistent with the fact that companies are primarily Biosphere and Green Key certified. The results show that there is still a lot of work to be done by certification companies to become better known to tourism entrepreneurs, whether through training, advertising, or awareness campaigns, in order to show the benefits of making companies more sustainable and of the implementation of good environmental and social practices.

Entrepreneurs had to evaluate the importance of 23 reasons and advantages for certification. According to those questioned, certifications help to increase customer satisfaction, the company's attractiveness, loyalty, environmental awareness, and profitability (factor 1). According to factor 2, the companies increase their negotiating power and their social contribution, they improve their energy efficiency, and they reduce environmental impacts. According to factor 3, sustainable practices help save water and energy and reduce costs. According to factor 4, certification helps companies reinforce their competitiveness, through the support of public authorities, and increases employee motivation. Finally, according to factor 5, the certifications improve the company's image and increase awareness among entrepreneurs and managers.

The implementation of good practices in accordance with certifications for tourism sustainability brings the benefit of constantly innovating, staying up to date in relation to these practices, as well as allowing continuous improvement for companies.

The reasons that motivate the decision to submit a business to a sustainability certification process are, by order of importance, as follows: "improving the company's image", "achieving eco-efficiency/cost reduction", "achieving competitive advantage", "improving customerbased brand equity", and "strengthening competitiveness".

On the other hand, the perceived difficulties and obstacles that discourage the adoption of certification schemes are "difficulties in adapting working methods" and "higher costs and lower price competitiveness".

Respondents are also afraid that there will be difficulty in meeting the criteria for the certifications. These results demonstrate that there is also work to be done to demystify entrepreneurs' fears regarding prices, through consultancy, workshops, online courses, or practical manuals, and subsidies can also be offered for adhering to certifications or tax incentives for small business. Finally, certification companies can also provide testimonials of success from entrepreneurs who are certified, highlighting the benefits offered.

When comparing the responses of entrepreneurs from certified companies with those from non-certified companies, it was possible to verify that the latter attribute higher average value to obstacles such as "higher costs and less price competition" or "difficulties in adapting work methods". On the other hand, "strengthening competitiveness" is considered by non-certified companies as one of the motives and advantages of joining certification schemes.

Respondents from companies certified in the advantages gave a higher rating to the factor "improvement of the company's image". The results show that perceptions differ between the two groups and that certified companies end up having a better perception about the advantages.

In relation to sociodemographic variables, at the gender level, female respondents attribute significantly greater weight to the motivation and perceived advantages of joining a certification system, possibly because women are more sensitive to environmental and social issues and for the implementation of good practices. We can also assume that the gradual empowerment of women, with the consequent rise of more women to senior positions, will create a more favorable climate for joining environmental and sustainability certification schemes in tourism

companies.

In terms of age, the average scores for four of the five factors of the certification schemes "motivations and advantages of being certified" are highest in the age segment of young people up to 30 years old. Young people, aged up to 30, are known to be more sensitive to environmental and climate-change issues and are more informed about the negative externalities of tourism and the importance of sustainability. This generation is also more open to changes and innovations. Therefore, it is not surprising that younger respondents may have an important role in the future in favor of implementing good practices and adopting certification schemes.

Education has less influence on the answers given by businesspeople, except in relation to the factor "improving the company's image", where interviewees with university education gave greater weight, as they recognize the current importance of having a good reputation for the company associated with values of environmental and sociocultural sustainability.

Our results are in line with Yılmaz [25], who argue that, in the group of managers with a less positive attitude towards the advantages and benefits of certification, there are male members with primary- and secondary-school qualifications. On the other hand, those with managerial positions, with higher levels of education, and with certification systems already in place have a more positive attitude towards certification.

As might be expected, the size of the companies (in this study, operationalized as "number of employees") may have some influence on the perception of the reasons for and advantages of joining a certification scheme. The bigger the company is, the more "getting eco-efficiency/cost reduction" and "strengthening competitiveness" are valued by the company in what concerns certification schemes. For the rest of the factors for obstacles and advantages, the size of the company has no

influence on the perspective.

Previous authors who studied the implementation of certification schemes in the tourism and hospitality sector show coherency with the results of this study when suggest that companies implement certification systems with the aim of (i) increasing market share and competitiveness [44]; (ii) increasing profitability [44]; (iv) attracting more conscious consumers [45,46,47]; (v) reducing costs through the proper management of energy, water, and solid waste systems [25]; (vi) favoring the value chain [48]; (vii) improving the company's reputation and image [18,49]; and (viii) reducing their environmental impacts [45,46,47].

Certification for sustainable tourism leads to the implementation of good practices by companies and more efficient management of natural resources. In addition, it increases tourist satisfaction [38] and generates trust [19], leading to greater consumer loyalty [46].

6. Conclusions

This study focused on investigating the perception of businesspeople regarding the motivations, advantages, and difficulties of joining a sustainability certification system in tourism for two different periods, 2021 and 2024. The influence of sociodemographic variables, such as age, gender, and education, was also verified in regard to the variation in perception among entrepreneurs. The degree of recognition of the different sustainability seals in tourism among businesspeople was also studied.

The literature review and the results of our study show that people who know less about certification schemes have a weaker opinion about this topic [25]. Nevertheless, it can be concluded that the environmental certification label has had its value increased in the past 3 years, and, nowadays, more managers believe that going through processes of certification schemes is worth the effort. This shows that there is greater

demand and greater interest in implementing good practices in tourism.

By adopting good practices, companies minimize the impact of their environmental footprint and contribute to the preservation of local culture and economic development [24]. In this sense, we can say that sustainability certification favors environmental, social, and economic performance, and, for this reason, in accordance with Yilmaz's [25] argument, certification systems should be disseminated and supported by the state through tax incentives.

In view of the above, it can be concluded that the objectives of this study were achieved. Nowadays, people are more aware of the environmental impacts of tourism and welcome the implementation of measures to reduce the environmental footprint of tourism companies [38,50]. There has been a significant increase in the number of tourism companies certified in terms of sustainability over the last 3 years and a favorable evolution in terms of the motivations and benefits perceived by young female tourism entrepreneurs in relation to sustainability certification systems. At the same time, there has been a decrease in the perceived difficulties.

7. Theoretical Implications

This study sheds new light on certification schemes. It helps to increase theoretical knowledge in relation to sustainable tourism and, more specifically, in relation to sustainable tourism certification systems for companies.

First, it deepens the knowledge of what are the perceived benefits and advantages of joining certification schemes. This study is a pioneer in regard to analyzing different types of motivations held simultaneously, such as internal and external drivers and marketing incentives.

Second, it expands the knowledge of what are the concerns and disadvantages of adhering to certification schemes by explaining how human, financial, operational, and external barriers can prevent

companies from having ecolabel seals.

Third, it makes important contributions to how the perceptions of businesspeople concerning certifications schemes have changed over time, highlighting the biggest changes between the years 2021 and 2024.

8. Practical Implications

Certifications, as previously mentioned, are a way of ensuring that companies implement environmentally sustainable practices that are also socially fair. For practitioners and business managers, this study shows the advantages and benefits for tourism companies to adhere to certification schemes, providing useful information for them to use when promoting their services.

Certifications are important, as they enable businesspeople to implement more sustainable and efficient measures in their companies. With these schemes, companies will have a significant role in the preservation of the natural environment. At the same time, and from a business perspective, the activity costs will diminish. Therefore, more wealth and health will be created for the economy and for the planet.

That is the main reason why it is important to disseminate certification seals in tourism.

The findings of this study can be used to leverage communication and define training strategies for companies once they help to identify the public that will be most receptive to participating in a certification system (women and young entrepreneurs). The results also made it possible to identify the fears of businesspeople about adhering to certifications; fears such as higher costs, less price competition, and difficulties in adapting to work methods can be demystified through awareness campaigns and marketing and political strategies to support these businesspeople.

It is also important to highlight the relevance of training tourism professionals to monitor data about the sustainability, which contributes

to the efficiency of the company processes. It is necessary to teach entrepreneurs how to collect and analyze data related to the sustainability. This will help them to know how to measure the impact of their companies and of the good practices implemented, check their progress, and find areas that can be improved in order to also reduce costs by improving energy and water efficiency, for example.

Certification companies and tourist destination managers can use the results of this study to create strategies to get more companies to become certified. Entrepreneurs can also draw important conclusions from this study, as the results show that investing in certification helps to improve the image, reputation, and competitiveness of companies.

Destination management organizations aware of the benefits that adopting sustainable labels brings to destinations may conceive policies that act as a stimulus for businesses to join the certification schemes. As a result, long term, destinations become more sustainable.

As previously stated, it is important that tourism actors understand the importance of monitoring, sustainability, and certifications. It would also be beneficial if there was fiscal and financial support for entrepreneurs who want to join these certification systems.

Given the fact that external pressure, either from suppliers or consumers, is one of the drivers for adopting certification schemes, a combined effort to promote the adoption of certification schemes from government institutions is recommended. Not only, as Yilmaz [24] argues, should certification systems be disseminated and supported by the state through tax incentives, but DMO should launch campaigns to promote certification schemes in medium/large-scale enterprises that have the financial and human resources to implement these schemes and advertise the leveraging of the benefits one can get from adhering to these processes; giving emphasis to cost reduction and competitiveness is recommended.

All of these steps presented will help make tourism more sustainable and

reduce its impact on tourist destinations.

9. Limitations and Future Research

This study has some limitations. Because it is a case study, the results focus on a specific region of Portugal; thus, it would be important, in a future study, to expand to other national or even international regions. In addition, only the perspective of business companies was studied. It would also be relevant in a future study to also include consumers' perception regarding certifications and also to include other sociodemographic variables.

Author Contributions

Conceptualization, F.D., A.M.L. and P.E.; methodology, F.D.; software, F.D.; validation, F.D.; formal analysis, A.M.L.; investigation, F.D., A.M.L. and P.E.; resources, F.D.; data curation, F.D.; writing—original draft preparation, A.M.L.; writing—review and editing, A.M.L.; supervision, F.D. All authors have read and agreed to the published version of the manuscript.

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Data can be presented upon request.

Conflicts of Interest

The authors declare no conflict of interest.

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Figure 1. Certification scheme seals. Source: own elaboration.





Figure 2. Familiarity with ecolabels. Source: own elaboration.

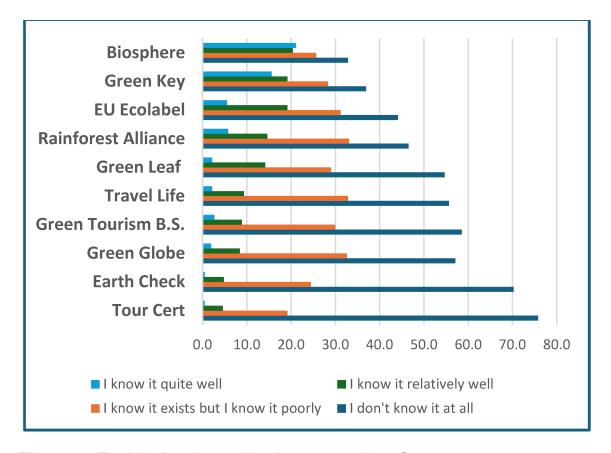


Figure 3. Ecolabels adopted by the companies. Source: own elaboration.

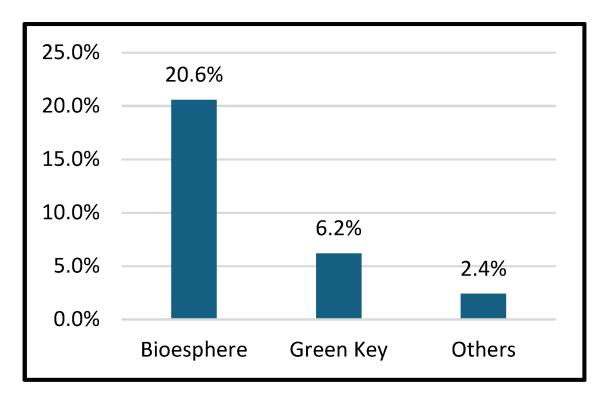


Table 1. Characteristics of the sample.

2021		2024		Total	
N =	%	N =	%	N =	%

	213		204		402	
Sector of activity ($\chi^2 = 6.208$; $p = 0.287$)						
Accommodation	139	65.3	129	63.2	268	64.3
Tourist entertainment	31	14.6	41	20.1	72	17.3
Travel agencies	6	2.8	5	2.5	11	2.6
Restaurants/catering	20	9.4	11	5.4	31	7.4
Transport	1	0.5	4	2.0	5	1.2
Other	16	7.5	14	6.9	30	7.2
Company size ($\chi^2 = 0.941$; p = 0.816)						
1-to-3 employees	107	50.2	107	52.5	214	51.3
4-to-10 employees	45	21.1	37	18.1	82	19.7
11-to-50 employees	45	21.1	47	23.0	92	22.1
More than 50 employees	16	7.5	13	6.4	29	7.0
Region ($\chi^2 = 24.863$; p < 0.001)						
Beira Baixa Region	7	3.3	12	5.9	19	4.6
Region of Coimbra	33	15.5	43	21.1	76	18.2
Region of Leiria	23	10.8	35	17.2	58	13.9
Serra da Estrela	24	11.3	17	8.3	41	9.8
Médio Tejo Region	16	7.5	14	6.9	30	7.2
Viseu Dão Lafões	16	7.5	20	9.8	36	8.6
Region of Aveiro	15	7.0	26	12.7	41	9.8

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Oeste Region	79	37.1	37	18.1	116	27.8
Respondents' job title (χ^2 =2.863; p < 0.182)						
Owner/administrator	61	28.6	56	27.5	117	28.1
CEO/managing director	96	45.1	78	38.2	174	41.7
Department manager	22	10.3	35	17.2	57	13.7
Employee	34	16.0	35	17.2	69	16.5
Respondents' education (χ^2 = 0.130; p = 0.710)						
Primary or secondary education	49	23.0	50	24.5	99	23.7
Higher education diploma	164	77.0	154	75.5	318	76.3
Respondents' gender (χ^2 = 1.122; p = 0.289)						
Male	108	50.7	114	55.9	222	53.2
Female	105	49.3	90	44.1	195	46.8
Respondents' age ($\chi^2 = 7.017$; p = 0.071)						
Up to 30 years old	19	8.9	15	7.4	34	8.2
31 to 40 years old	42	19.7	36	17.8	78	18.8
41 to 50 years old	77	36.2	59	29.2	136	32.8
51 to 60 years old	50	23.5	71	35.1	121	29.2
Over 60	25	11.7	21	10.4	46	11.1

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Is your company certified? ($\chi^2 = 9.943$; p = 0.007)						
Yes	27	19.4	45	34.9	72	26.9
In the process of joining	13	9.4	5	3.9	18	6.7
No	99	71.2	79	61.2	178	64.6

Table 2. Principal component analysis of motivations and advantages of being certified.

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
F 1: Improving customer-based brand equity	3.76		5.652	22.61%	0.927
Increase customer satisfaction	3.85	0.828			
Increase company attractiveness	4.13	0.729			
Strengthen customer loyalty	3.64	0.715			
Attract more customers	3.77	0.694			
Increase employee satisfaction	3.34	0.693			
Meet consumer expectations	4.19	0.681			

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
Rise employees' environmental awareness	3.85	0.653			
Increase business profitability	3.39	0.651			
F 2: Achieving competitive advantage	3.78		3.907	15.63%	0.872
Increase negotiating power vis-à-vis operators	3.37	0.786			
Improve the company's social reputation	4.10	0.729			
Contributes to the company's sustainable management	3.96	0.686			
Get competitive advantages	3.94	0.609			
Significantly reduce environmental impacts	4.06	0.607			

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
F 3: Getting eco- efficiency/cost reduction	4.16		3.791	15.16%	0.919
Water saving	4.32	0.886			
Energy efficiency	4.35	0.867			
Reduced costs	4.26	0.718			
Savings on product purchases	3.91	0.669			
F 4: Strengthening competitiveness	3.71		2.936	11.75%	0.817
More support from public authorities	3.64	0.870			
Increase employee motivation	3.57	0.855			
Increase company profitability	3.83	0.563			
Meet expectations or requirements of tour operators	3.81	0.477			
F 5: Improving	4.30		2.253	9.01%	0.781

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
the company's image					
To improve company image	4.33	0.782			
Environmental awareness among business owners and managers	4.31	0.723			
KMO Adequacy	0.922				
Bartlett's Test of Sphericity	4.279.	405 (df: 300)) p= 0.000		
Ratio of Total Variance	71.756	5%			
Overall Cronbach's Alpha	0.952				

Table 3. Principal component analysis of perceived obstacles to joining a certification scheme.

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
F 1: Higher costs and lower price competitiveness	3.53		3.24	46.26%	0.777
It is expensive	3.53	0.819			

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph		
It increases operating costs	3.49	0.761					
It increases service prices	3.41	0.717					
It's a complicated process	3.70	0.714					
F 2: Difficulties in adapting working methods	4.01		1.33	19.07%	0.793		
Difficulty in ensuring the conformity with the criteria	3.88	0.904					
Difficulty applying certification criteria	3.93	0.898					
Difficulty covering the costs of the process	4.21	0.637					
KMO Adequacy	0.723						
Bartlett's Test of Sphericity	1122.0	1122.087 (df: 21) p = 0.000					
Ratio of Total Variance	65.325	5%					
Overall	0.805						

	Mean	Factor Loadings	Eigenvalues	Variance	Cronbach's Alph
Cronbach's Alpha					

Table 4. Comparing means between certified versus non-certified companies *.

	Non- Certified		Certified		Signifi	icancy
	Mean	SD	Mean	SD	t	sig
Motivations and advantages of being certified						
Improving customer- based brand equity	3.74	0.82	3.90	0.80	-1.70	0.090
Achieving competitive advantage	3.77	0.88	3.95	0.78	-1.76	0.078
Getting eco-efficiency/cost reduction	4.22	0.94	4.21	0.85	0.07	0.940
Strengthening competitiveness	3.75	0.88	3.51	0.96	2.19	0.029
Improving the company's image	4.23	0.80	4.60	0.54	-4.23	0.000
Obstacles to joining a certification scheme						
Higher costs and lower price competition	3.64	0.78	3.29	0.86	3.69	0.000
Difficulties in adapting working methods	4.14	0.82	3.68	0.84	4.72	0.000

Table 5. Comparing means between samples: 2021 versus 2024.

	2021 Sample		2024 Sample		Significand	
	Mean	SD	Mean	SD	t	sig
Motives and advantages of being certified						
Improving customer- based brand equity	3.82	0.83	3.76	0.81	0.74	0.460
Achieving competitive advantage	3.85	0.88	3.78	0.87	0.71	0.476
Getting eco-efficiency/ cost reduction	4.27	0.86	4.16	0.98	1.22	0.223
Strengthening competitiveness	3.71	0.90	3.71	0.93	0.02	0.983
Improving the company's image	4.33	0.80	4.30	0.75	0.36	0.721
Obstacles to joining a certification scheme						
Higher costs and lower price competitiveness	3.50	0.81	3.57	0.81	-0.94	0.348
Difficulties in adapting working methods	3.99	0.82	4.02	0.87	-0.29	0.770

Table 6. Comparing means: company size (number of employees).

	1 to 3	4 to 10	11 to 50	>50	F	Sig
Motivations and advantages being certified						

	1 to 3	4 to 10	11 to 50	>50	F	Sig
Improving customer-based brand equity	3.72	3.88	3.85	3.80	0.96	0.410
Achieving competitive advantage	3.76	3.96	3.81	3.86	1.04	0.376
Getting eco-efficiency/cost reduction	4.10	4.26	4.42	4.26	2.82	0.039
Strengthening competitiveness	3.57	3.83	3.85	3.90	3.25	0.022
Improving the company's image	4.33	4.24	4.35	4.38	0.41	0.746
Obstacles to joining a certification scheme						
Higher costs and lower price competitiveness	3.61	3.42	3.52	3.33	1.73	0.161
Difficulties in adapting working norms	4.02	4.00	4.00	3.89	0.23	0.873

Table 7. Comparing means: male vs. female.

	Male		Female		Significancy	
	Mean	SD	Mean	SD	t	sig
Motivations and advantages of being certified						
Improving customer-based brand equity	3.70	0.82	3.89	0.81	-2.33	0.020

	Male		Fem	ale	Significancy	
	Mean	SD	Mean	SD	t	sig
Achieving competitive advantage	3.75	0.90	3.89	0.84	-1.71	0.089
Getting eco-efficiency/cost reduction	4.07	1.01	4.37	0.78	-3.41	0.001
Strengthening competitiveness	3.54	0.95	3.90	0.84	-4.03	0.000
Improving the company's image	4.22	0.83	4.43	0.68	-2.69	0.007
Obstacles to joining a certification scheme						
Higher costs and lower price competitiveness	3.48	0.80	3.59	0.82	-1.28	0.201
Difficulties in adapting working methods	3.89	0.86	4.13	0.81	-2.92	0.004

Table 8. Comparing means: age.

	Up to 30	31– 40	41– 50	51– 60	>60	F	Sig
Motivations and advantages of being certified							
Improving customer- based brand equity	3.99	3.82	3.88	3.69	3.53	2.59	0.037
Achieving competitive advantage	4.02	3.81	3.91	3.70	3.72	1.55	0.188

	Up to 30	31– 40	41– 50	51– 60	>60	F	Sig
Getting eco-efficiency/ cost reduction	4.51	4.40	4.28	3.99	4.02	4.41	0.002
Strengthening competitiveness	4.15	3.83	3.80	3.50	3.42	5.59	0.000
Improving the company's image	4.47	4.24	4.39	4.26	4.27	1.01	0.403
Obstacles to joining a certification scheme							
Higher costs and lower price competitiveness	3.37	3.56	3,.55	3.59	3.38	0.94	0.440
Difficulties in adapting working norms	3.85	4.24	4.02	3.93	3.83	2.61	0.035

Table 9. Comparing means: high school vs. university diploma.

	High School			niv. oma	Significancy		
	Mean	SD	Mean	Mean	t	sig	
Motivations and advantages of being certified							
Improving customer- based brand equity	3.74	0.82	3.80	0.82	-0.66	0.507	
Achieving competitive advantage	3.87	0.90	3.80	0.87	0.71	0.477	
Getting eco-efficiency/ cost reduction	4.22	0.87	4.21	0.93	0.07	0.945	

	High School			niv. oma	Significancy	
	Mean	SD	Mean	Mean	t	sig
Strengthening competitiveness	3.80	0.94	3.68	0.91	1.13	0.257
Improving the company's image	4.13	0.90	4.38	0.72	-2.77	0.006
Obstacles to joining a certification scheme						
Higher costs and lower price competitiveness	3.58	0.90	3.52	0.78	0.73	0.469
Difficulties in adapting working methods	4.10	0.87	3.98	0.84	1.29	0.199

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