

# Ecotourism Capital as an Enabler of Positive Change in Tourism Sustainability

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**Abstract:** Despite a global commitment to minimise the impact of tourism on the environment and maximise its benefits for local communities, the pressure of tourism on natural resources is still increasing. In this context, ecotourism becomes key to safeguarding the integrity of the ecosystem while producing economic benefits that can ultimately encourage the conservation of the environment. However, despite its benefits, there is still a need to develop the market presence of ecotourism strategies and initiatives. Thus, tourists' positive intention toward ecotourism and organisations that seek to meet the demand of the increasingly environmentally conscious market are key to the success of ecotourism initiatives. In the context of the information era, organisations may create a trustworthy relationship with ecotourists by providing them with accurate and engaging information on their environmental policies and actions. This relationship may result in the emergence of a critical intangible asset such as eco-tourism capital as tourists' decisions are based on image, perception and recommendations from social groups. For organisations to benefit from eco-tourism capital, they should use social media to generate opportunities for eco-tourists to experience and appreciate nature, respect local cultures, support local communities and minimise and mitigate their negative impact on the environment. Based on the above, the aim of this study is to explore, via a descriptive analysis of data collected from international ecotourists, how social media can be used to create eco-tourism capital. To that aim, we explore factors relating to ecotourism knowledge, green trust, and exposure to information on social media provided by ecotourism service providers.

**Keywords:** Knowledge management, Ecotourism, Social media, Ecotourism capital, Ecotourism knowledge, Green trust

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## 1. Introduction

### 1.1 Ecotourism Capital and its Contribution to Literature

Literature agrees on the potential of a knowledge management (KM) approach to tourism management. In particular, KM strategies and tools can assist tourism organisations in their efforts to learn and address the challenges related to environmental change. In fact, KM is perceived as a key antecedent for the innovation capability of tourism organisations (Baker and Yusof 2017), whilst organisational learning can help tourism companies become more resilient and better able to cope with uncertainties derived from changes in environmental policies and regulations (Leta and Chan 2021).

The considerations above point towards the need for organisations to turn their knowledge assets into agile structures to respond to the socio-economic challenges that emerge as a result of current and future sustainability-related issues, increased business competition and continuous social changes. In the presence of a framework for its exploitation, the ability to generate knowledge of ecotourism as a result of interactions between trusted ecotourism stakeholders enables individuals and communities to drive positive environmental change. This paper understands this ability to generate knowledge of ecotourism as ecotourism capital.

Ecotourism capital is defined in the context of this research as the result of combining an individual's ecotourism background with access to trusted sources of environmental knowledge. Such knowledge could range from principles of environmental conservation to sustainable tourism practices. We argue that in the current socio-economic environment, ecotourism capital becomes a key driver for sustainable development, leading tourists to look for opportunities to experience and appreciate nature, wildlife and local cultures while supporting local communities and minimising their negative impact on the environment.

### 1.2 Components of Ecotourism Capital

In the last two decades, information and communication technologies have increasingly enabled social interactions and the sharing of information and knowledge among individuals and communities. Social media,

for example, have often become a source of inspiration and recommendation of tourism products and services (Osei, Mensah, and Amenumey 2018). In this context, we propose that ecotourism capital is defined by three main components, namely ecotourism knowledge, ecotourism information exposure on social media and green trust.

Ecotourism knowledge is a concept used in the literature but does not benefit from a clear definition (Björk 2004, Tian et al. 2016). Therefore, in the same way that environmental knowledge is defined as how somebody expresses concern about ecological issues (Cegarra-Navarro and Martinez 2010), this study proposes to define ecotourism knowledge as the expression of an individual's concern about ecotourism products and services and its impact on the environment. Thus, in this study, ecotourism knowledge is related to environmental issues derived from tourism, allowing ecotourists to understand the direct and indirect impact of their actions and those of the industry on the environment (Mondino and Beery 2019).

In addition, to allow the ecotourists to get a holistic perspective of the implications of ecotourism, we propose that ecotourism knowledge must be drawn from various sources and related to a broad range of ecotourism services and product types. Finally, in the context of social media, the addition and combination of individuals' ecotourism knowledge can generate collective ecotourism knowledge that can provide the ecotourists with in-depth and diverse information and activate knowledge structures supporting new understanding of the concept (Björk 2004, Kimmerle et al. 2015).

Based on the above, ecotourists can access broad and deep ecotourism knowledge via ecotourism information exposure on social media (Hudson and Thal 2013). Indeed, social media can be regarded as a hub of knowledge (Zareie and Jafari Navimipour 2016) that offers a public forum for travellers to engage with one another and other ecotourism stakeholders and exchange ideas and knowledge. Therefore, social media provides a platform for interaction and communication where ecotourists knowledge and ideas about specific ecotourism products and services are actively generated and exchanged (Lee, Park, and Nam 2020, Leung et al. 2013).

However, the amount of information to which an ecotourist can be exposed on social media can be overwhelming and consist of unwarranted, outdated, and erroneous information (Carpenter and Harvey 2019, Chen, Xiao, and Kumar 2023, Neo 2022). Therefore, to be valuable to ecotourists, the information found online must be trustworthy. According to (Nekmahmud, Ramkissoon, and Fekete-Farkas 2022), green trust can be defined as an individual's propensity to rely on environmentally sustainable products or services based on performance, reliability, efficacy, credibility, and previous qualities (p.3). Then, the information provided by the ecotourism stakeholders should meet ecotourists' expectations regarding environmental insights, credibility and warranty. Indeed, ecotourists may not trust a piece of information online due to excessive exaggeration and vagueness (Nekmahmud, Ramkissoon, and Fekete-Farkas 2022).

## **2. Methodology**

Data was gathered using an online questionnaire developed with Google Forms tool. The questionnaire was distributed on Facebook, Instagram and LinkedIn. To ensure our sample was composed of ecotourists that use social media, we filter the questionnaire by adding the next question: Do you get information about ecotourism products and services on social media? (Commercials, posts of your friends, Facebook groups, influencers...). A total of 98 answers were received. After the responses of the participants who answered "no" to the question were excluded, we collected 67 valid questionnaires. Data were analysed using SPSS software.

The average age of the participants is 37 years old. 53.7% are female and 43.3% are male, identifying the rest as "other". Those with postgraduate studies represent almost 60% of the sample. The sample was international as the survey was distributed via social media (see Appendix). Finally, Facebook is the social network most used by the sample (80.6%), followed by Instagram (79.1%) and YouTube (70.1%).

The scales used to measure the variables were the next:

- Ecotourism knowledge was measured using the scale of Zhou and Li (2012) and Nekmahmud, Ramkissoon, and Fekete-Farkas (2022). The next four items were used: EKB1 - I am aware of different sources of information about eco-tourism; EKB2 - I know about a variety eco-tourism services and products types; ETK2 - I am very knowledgeable about environmental issues derived from tourism; and ETK3 - Using eco-tourism products/services is one of the most effective ways to reduce my environmental impact.
- The scale of Nekmahmud, Ramkissoon, and Fekete-Farkas (2022) was used to measure Green Trust: GT1 - Information about ecotourism products and services is generally reliable; GT3 - Information

about ecotourism products and services meets my expectations regarding environmental issues; and GT4 - Information about ecotourism products and services keeps promises and commitments for environmental protection.

- The Eco-information exposure variable was measured by adapting the scale of Lee, Park, and Nam (2020): EIE1 - I get a lot of ecotourism products/services information through social media; EIE2 - I frequently get tourist information about ecotourism products/services through social media; and EIE3 - I actively use social media to obtain tourist information about ecotourism products/services.

As we operationalised Eco-tourism capital as a second-order formative construct, we used the two-stage approach (Sarstedt et al. 2019). The first stage provided us with the score of ecotourism knowledge, green trust, and eco-information exposure without including the second-order construct in the model. The second stage uses these scores to measure the second-order construct (eco-tourism capital). Once the psychometric properties of the measures had been checked, the next step was the evaluation of both discriminant and convergent validity. Figure 1 summarises the results of the confirmatory factor analysis reflective-formative type.

As shown in Figure 1, the three first-order variables are composites, not factors. Indeed, when using the original scales, the indicators changed over time due to the passage of time and the dynamic of the companies, so the scales were converted from factors to composites (Cegarra-Navarro et al. 2021). For this reason, we have adapted the scales and the items to the current situation of companies in the eco-tourism sector (Cegarra-Navarro et al. 2021).

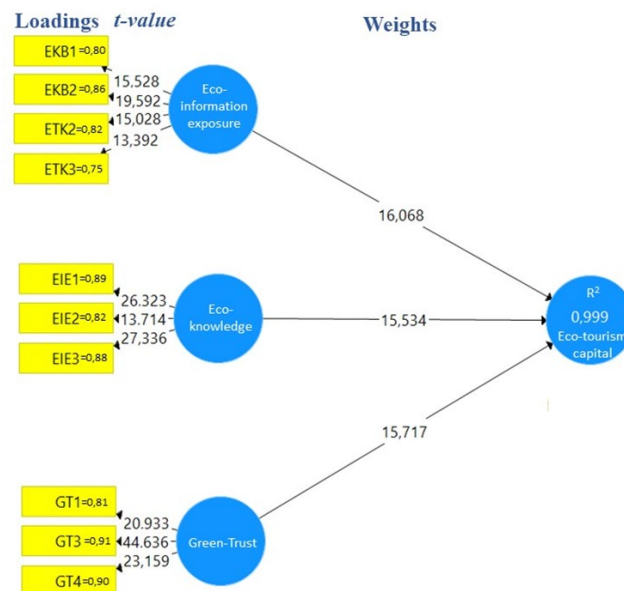


Figure 1: Research Model

### 3. Results

The initial results of the study allowed for the elaboration of a second-order factor leading to the creation of the “eco-tourism capital” variable. Indeed, the data analysis allowed to consider eco-tourism knowledge, exposure to eco-tourism information and green trust formative constructs of Eco-tourism capital. Therefore, accessing and sharing trusted sources of ecotourism information online potentially leads individuals to use their knowledge of the environment to become agents of positive change in sustainability efforts.

According to our results, we can consider eco-tourism capital as the result of the abilities of social media users concerned with reducing their tourism environmental footprint to find, sort, discern, trust and understand the information they are exposed to online and transform it into valuable knowledge.

Social media is used by all tourism stakeholders to share ecotourism information. For instance, travellers use social media before (e.g., to choose their destination and accommodations), during (e.g., for orientation and navigation, to determine attractions to visit) and after their trip (to share their experiences and to post reviews). Therefore, from a collective perspective, social media allowing for the dissemination and sharing of this

information act as an instrument for the development of eco-tourism capital and thus support the generation of valuable knowledge related to the mitigation of tourism's environmental footprint.

#### 4. Conclusions

This paper has described the fundamentals of a research that is currently in progress. Its aim is to contribute to the literature on the potential relationships between technology developments and tourism sustainability, with emphasis on the role of knowledge management. In this regard, the results of this study contribute to knowledge management field showing that eco-tourism capital is the result of a process of continuous learning that derives from the trust of tourists, previous green knowledge and exposure to information. By exploring how social media affect individuals' behavioural intentions towards the environment, our future efforts will first seek to inform the potential of social technologies to lead sustainability practices. In particular, we are interested in informing theory, practice and policies that support environmental education while promoting opportunities for tourists to experience and appreciate Nature, wildlife and local cultures while minimising their negative impact on the environment. Afterwards, we will focus on validating the proposed new construct of ecotourism capital through research aimed at a larger sample of the ecotourism population. We will also test new elements influencing the concept of ecotourism capital.

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**Appendix 1: Country Where the Participants Live**

<b>Country</b>	<b>Absolute value</b>	<b>Percentage</b>
<b>Spain</b>	12	17.9%
<b>France</b>	24	35.8%
<b>United Kingdom</b>	17	25.4%
<b>Poland</b>	1	1.5%
<b>Saudi Arabia</b>	1	1.5%
<b>United States of America</b>	2	2.9%
<b>Chile</b>	1	1.5%
<b>Algeria</b>	4	6%
<b>New Zealand</b>	1	1.5%
<b>Portugal</b>	1	1.5%
<b>India</b>	1	1.5%
<b>Netherlands</b>	1	1.5%
<b>Italy</b>	1	1.5%