

Originality: Similar projects exist around the world but these implementations are new to Madeira Island and, with some more work, could provide some different aspects in the domain.

Key words: Smart destination, smart tourism, big data.

3. DETERMINANTS OF ENVIRONMENTAL CERTIFICATION OF HOTEL COMPANIES. AN ANALYSIS OF THE PORTUGUESE CASE

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Goal: Sustainability in tourism is one of the major topics of research. Sustainability is also a major issue of interest for all tourism actors in tourism supply and a major concern for tourism demand. From all stakeholders involved in tourism activity, hotel companies are urged to install responsible businesses and investment (Aznar et al., 2016; Claver-Cortés et al., 2007; Geerts, 2014; Park & Kim, 2014; Rodríguez & Cruz, 2007; Singal, 2014). The aim of the present paper is to identify main determinants of environmental certification of hotel companies in Portugal.

Method: The present study uses a methodology based on the analysis of hotel companies that have hotel units certified and those not having certified hotels units. Each company is established in Portugal and may operate one or more hotel units. The dataset was created considering two different databases: data from Hotel Establishments, such as hotels, aparthotels and Pousadas nationwide, registered in the Portuguese National Tourism Registry in 2021; data from the Analysis of Iberian Balance Sheets (SABI) database from Bureau van Dijk obtaining the economic and financial data of companies that manage those hotel units. Several variables were selected to assess the determinants of environmental certification related to the characteristics of hotel establishments. Financial indicators were also computed to determine the influence of financial performance on environmental certification.

Hypothesis were established concerning hotel companies' dimension, star rating, affiliation to a brand and financial performance. Data analysis and Tobbit regression were computed to test hypothesis.

Findings: The empirical results show that dimension, star rating and affiliation explain environmental certification. In fact, hotel companies with a higher average capacity also have a higher average of certified hotels. Likewise, hotel companies with a higher average on stars rating also have a higher average of certified hotels. Still, hotel companies with a higher average of affiliated hotels also have a higher average of certified hotels. Hotels with higher star rating are more concerned with environmental certification what could be explained by the type of more demanding consumer. Also, brand affiliated hotel companies adopt more frequently environmental certification since management processes are standardized and hotel chains may support individual units adopting certification (Gil et al., 2001). Hotel companies with higher capacity are more concerned with cost savings achieved through environmental certification and since larger hotels have a greater impact on the environment they are exposed to considerable environmental pressures from stakeholders (Gil et al., 2001).

Concerning financial indicators it was not possible to obtain statistically significant results. Though, for financial indicators as return on sales and return on equity, we could obtain positive results concerning a positive relation between financial performance and environmental certification. These results are in line with other works studying other countries as is the case of Gil et al. (2001), Duric and Topler

(2021), Cavero-Rubio and Amorós-Martínez (2020), Molina-Azorín et al. (2009) and Segarra-Ona et al. (2012).

Limitations: Limitations of the study are related to the reduced number of hotel companies in Portugal that have environmental certified hotel units.

Practical implications: The results of this study are important for hotel managers specially those managing higher star rating hotels and those managing higher dimension hotels. Future research could address hotel establishments instead of hotel companies and consider other types of indicators that relate to sustainability practices.

Originality: This paper intends to fill a gap in literature studying the Portuguese case on the subject of the determinants of environmental certification and how it relates to financial performance of hotel companies.

Key words: Environmental certification; hotel companies; brand affiliation; financial performance; Portuguese hotel sector.

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