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Sustainability Practices in Hotel Industry: A study on Madeira's hotels

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Master's in Management of Services and Technology

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BUSINESS
SCHOOL

Department of Marketing, Strategy and Operation

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Dedication and acknowledgments

After a long year of hard work and effort, it has come to the end of a milestone that marked an important journey in my life. A lot of hours in front of the computer, unforeseen events, a move to another country, and I could not be prouder and more satisfied with my master thesis. The conclusion of this dissertation has shown me that with patient and determination, we can find a way through the challenges and achieve our goals.

First of all, I want to thank my dear supervisor Professor Isabel Almeida for the patience, support, availability to find a solution and motivating me through all the process, and for being an inspiration.

With a lot of kindness, I want to thank to my parents, my sister, and my brother for always supporting me in every moment of my life, believing in me and encouraging me to always give my best.

A special thanks to my friends who came along throughout the entire process of writing this thesis, who faced the same challenges as me and never let me give up.

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Resumo

A indústria hoteleira é uma das indústrias mais poluentes e, a partir desta, é possível implementar ou adaptar várias práticas que contribuem significativamente para a preservação do ambiente. A importância da sustentabilidade nesta indústria é demonstrada pelos próprios hotéis e pelos seus clientes. A investigação apresentada consiste em conhecer as práticas sustentáveis implementadas e compreender o conhecimento sobre este tema da sustentabilidade na indústria hoteleira, a fim de contribuir para a prática e teoria. A metodologia de investigação qualitativa foi baseada em entrevistas realizadas aos hotéis e estes demonstraram que já estão muito preocupados com o ambiente e a tomar decisões mais sustentáveis quando se trata do seu negócio. A grande maioria deles já começa a implementar práticas sustentáveis porque reconhecem que se trata de uma grande mudança para o nosso planeta. Além disso, os próprios clientes já fazem as suas escolhas de acordo com a política de sustentabilidade de cada hotel e reconhecem o esforço feito por esta indústria. Porque representam um papel importante para o futuro, os hotéis sustentáveis devem influenciar outros que não estão a implementar práticas sustentáveis.

Palavras-chave: Indústria hoteleira; Sustentabilidade; Práticas sustentáveis; Preservação do ambiente; Escolha do cliente.

JEL Classification System: Q01 - Sustainable Development; L83 - Sports Gambling, Restaurants, Recreation, Tourism.

Abstract

The hotel industry is one of the most polluting industries and, from this, it is possible to implement or adapt various practices that contribute greatly to environmental preservation. The importance of sustainability in this industry is demonstrated by the hotels themselves and their customers. The research presented consists of knowing the sustainability practices implemented and understanding the mindset about this subject of sustainability in the hotel industry, in order to contribute to practice and theory. The qualitative research methodology was based on interviews carried out to the hotels and they have shown that they are already very concerned about the environment and making more sustainable decisions when it comes to their business. The great majority of them are already starting to implement sustainability practices because they recognize that this is a big change for our planet. In addition, the customers themselves already make their choices according to the sustainability policy of each hotel and recognize the effort made by this industry. The sustainable hotels should influence others that are not implementing sustainability practices because they represent an important role for the future.

Keywords: Hotel industry; Sustainability; Sustainability Practices; Environment Preservation; Customer choice.

JEL Classification System: Q01 - Sustainable Development; L83 - Sports Gambling, Restaurants, Recreation, Tourism.

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Glossary of Acronyms

RBV: Resource Based View

NRBV: Natural Resource Based View

EMS: Environmental Management Systems

3Rs: Recycle, Reuse, Reduce

GRI: Global Reporting Initiative

CSR: Corporate Social Responsibility

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CHAPTER 1

Introduction

1.1 Research context / Theme relevance

As part of the final project inserted into the Master of Services and Technology, the preparation of a thesis was proposed. This project is a dissertation on hotels that care about sustainability and its environmental impact, what kind of practices are adopted in this industry and study its influence on business performance.

Nowadays, sustainability is a common topic. It contributes to the improvement of quality of our lives, protection of our ecosystem, and preservation of natural resources for future generations. The needs of the present should be met without jeopardizing the needs of future generations. This leads to sustainable development which is characterised by the development that compromises to meet the needs of developing countries that look forward to a world more sustainable (Brundtland, 1987). Sustainable development can be addressed by companies as well, it implies that an organization must contribute to the growth of economic, social progress and stimulate sustainability.

Sustainable development is present in three areas: economic, environmental, and social (Delubac, 2022). The economic pillar is focused on how companies are responsible for economic development and growth, i.e., they should embrace a more responsible approach by contributing and inspiring others to protect the environment, recycle their products and use renewable energy. The goal of applying the economic pillar in a company is optimise the budget (Delubac, 2022). The sustainable development of a company includes a social pillar that represents the promotion of equality and consideration for individual rights. The aim is to end with social exclusion and discrimination, cooperate with solidarity and be responsible for the well-being of stakeholders. As mentioned, a company´s social pillar guarantees the well-being of the employees and ensures they feel motivated and satisfied in their work (Delubac, 2022). Finally, the environmental pillar of a company contributes to the protection of the environment, reduction of risks and measures the environmental impact of its activities. Within a company, this pillar includes saving energy, preserving agricultural resources, evaluating its carbon footprint, reducing greenhouse gas emissions, reducing waste in order to accomplish sustainable development goals. The main purpose of environmental pillar is to improve the CSR (Corporate Social Responsibility) strategy, so the management of the company must incorporate environmental targets. This strategy is suggested to companies that invest in sustainable practices (Delubac, 2022).

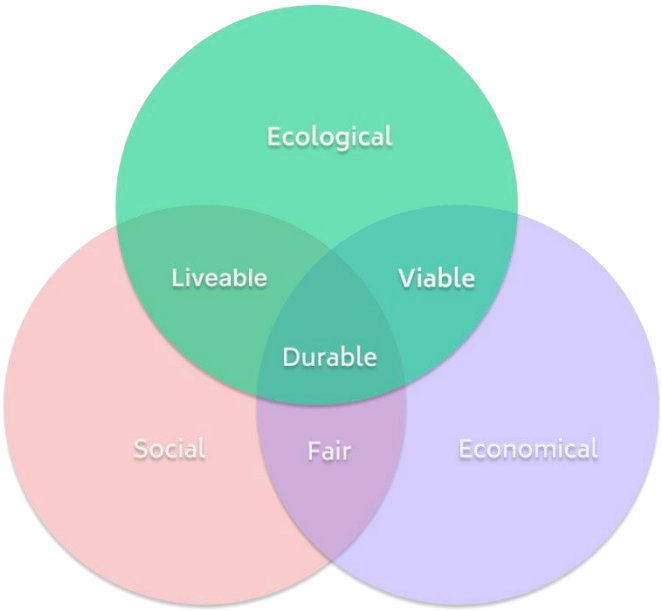


Figure 1.1 – Three pillars of sustainable development (source by Arnaud Delubac)

It is interesting to consider tourism because it is a vast industry that contributes a lot to the world's pollution. Therefore, a green and sustainable approach benefits hotels and maximises the long-term benefits of being environmentally conscious. "Sustainable hotels" consider their impact on the environment and seek to reduce it by adopting environmentally friendly practices in maintenance, services, logistics, products, and supplies (Fredericks, 2020). Some of these practices can be reducing waste, saving energy, or reducing water consumption (Fredericks, 2020). This not only helps our environment but also protects the company's money. Besides this, hotels can also improve their impact on sustainability by choosing the right sources to get resources from, for example select sources that provide organic food and drink; choose sustainable businesses and purchase their products; reduce the use of chemicals; buy eco-friendly products to clean the hotel; use organic bedding.

1.2 Problem to address

The main problem identified is that hotels have a significant impact on the environment through the pollution they generate (Asadi et al., 2020). Tourism contributes to 8% of global carbon emissions (Lenzen et al., 2018). There are also environmental risks, pollution and other negative impacts of the resources used. Hotel industry has a negative impact on the environment in three main areas: energy, water, and waste.

Therefore, it was important to study this problem and focus on identifying the activities that contribute to pollution and describe possible solutions to minimize the impacts.

It was crucial to consider pollution in different sectors, especially in the hotel industry. Therefore, hotels are responsible for preserving the environment and must determine which activities can be changed and develop new or alternative measures to become a "sustainable hotel".

1.3 Objectives

The main objective of this dissertation is to create a best practice agenda that can be applied to the hotel industry, including all types of hotels. The agenda represents the outcome of the project, i.e., based on the demonstrated results it was suggested to establish a best practice agenda on how to promote sustainability and how to make more sustainable decisions in the sector analysed, in this case the hotel industry. This agenda was created using information from hotels that focus on sustainability to understand what practices were in place. It also looked at the differences in environmental management practices across hotel categories and how they affect the environmental performance of each hotel. It is important to consider the fact of being on an island where resources are scarcer, where it could have a higher impact on carbon footprint if it was considered importing materials from the continent, and where the need for waste treatment and reduction of its production is essential.

The aim is to learn about new environmentally friendly practices in the hotels and understand how they are carried out. During the research, hotels with low environmental performance had the opportunity to learn new techniques and implement some of them in their facilities.

1.4 Research Question

From the literature, it was possible to gain some insights into sustainability practices in the hotel industry in different areas. One of the areas was related to business and its efficiency, which led to the formulation of the research question, *"How do sustainability practices affect business performance and organisational competitive advantage in Madeira's hotels?".*

1.5 Methodological Approach

Exploratory research was chosen as the methodological approach for the following study because it was a research question that had not been explored in depth before (George, 2021). This type of research was chosen because there was a theme and a specific question to be explored. Exploratory research was chosen because it can help to solve a difficult problem that has not been studied in the selected hotels, provides insights for future research, and is very flexible (George, 2021).

In exploratory research, data collection is divided into primary and secondary research methods (George, 2021). According to the research question identified above, this was explored through a qualitative study and interviews were conducted with relevant staff in the sector. This specific research

and problem were investigated using several hotels on Madeira Island, Portugal. The methodological approach is explained in more detail in Chapter 4.

1.6 Thesis Structure

In terms of structure, this thesis comprises six chapters, as follows: 1) Introduction; 2) Literature Review; 3) Conceptual Model and Research Proposals; 4) Methodology; 5) Results, Findings and Discussion; 6) Conclusions and Recommendations. The literature review includes the research of articles relevant to the acquisition of adequate knowledge on the topic. The methodology identified the methods that can be used for the project. Finally, the data collected was collected and described in chapter 5, leading to a conclusion and possible recommendations in the following chapter.

CHAPTER 2

Literature Review

The Literature Review chapter contains the main ideas and research findings on the topic under study. The sources used are from articles and each theme includes a summary of the most important aspects related to sustainable hotels and business performance. From a general point of view, the selected topics deal with sustainability in the tourism industry, basic and advanced sustainability practices in service organizations, mainly in hotel supply chain, green innovation, the importance of adopting a resource-based view in the context of sustainability to achieve competitive advantage, environmental management through each hotel category and green innovation in relation to a hotel's sustainable performance. Regarding the service itself, it was analyzed what factors can influence the service quality in the hotel industry, what sustainability practices are adopted in hospitality, and finally how service quality and sustainability impact the hospitality performance.

2.1 Sustainability and tourism

Sustainability is achieved through sustainable development that meets the needs of the present without compromising the needs of future generations (Brundtland, 1987). Sustainability is based on three principles: Social, Environmental and Economic. The social principle is shaped by people and their habitat, e.g., their culture, education, health, and other factors (Costa et al., 2019). In addition, the environmental factor refers to the way people or companies use natural resources (Costa et al., 2019). Finally, the economic factor refers to the fair and equitable production, distribution and consumption of goods and services, as well as social and environmental issues and impacts (Costa et al., 2019).

As sustainability is a well-known topic these days, it is interesting to look at it from a hotel’s perspective. Sustainability can also be applied to tourism and is defined as the effective management of resources, considering each place's environment and cultural values (Costa et al., 2019). The environment can be affected by energy use, water consumption and consumables in the hotel industry (Barreiros, 2021). People are also paying more attention to the impact of their actions on the environment, creating opportunities for hotels to attract new customers and keep them satisfied (Barreiros, 2021). In 2021, 61% of travellers wanted to travel more sustainably in the future, given the pandemic situation (Booking, 2021). According to Booking's Sustainable Travel Report 2021, travellers are more concerned about excessive waste, threats to local wildlife and natural habitats, overcrowding of popular attractions or destinations, and CO2 emissions. In addition, 73% of travellers said they would prefer accommodations that adopts environmentally friendly practices (Booking, 2021).

These findings show that it is important for hotels to focus their strategy on sustainability, as it can save them money, make them more energy-efficient, give them a competitive advantage and attract more customers (Barreiros, 2021).

Hotel managers focus not only focus on their business but also on the benefits to local communities. Therefore, many stakeholders can be involved in and benefit from sustainable tourism, such as tourism businesses that care about their image and reputation, their relationship with their employees and their environmental impact while keeping an eye on the long-term profitability of the business (Leaniz & Bosque, 2015). In addition, environmental groups see the tourism industry as a source of revenue. However, they are concerned about the negative impacts of this industry (Leaniz & Bosque, 2015). Moreover, tourists are increasingly looking for an experience in a high-quality and attractive environment and are paying attention to the impact of their trips (Leaniz & Bosque, 2015).

Sustainability in tourism has become more important in the eyes of society, which has led to the introduction of certification programmes that combine environmental, social, and economic factors (Costa et al., 2019). This environmental certification is a policy tool that helps consumers choose products and services that do not harm the environment and is a differentiating factor for businesses (Costa et al., 2019).

2.2 Sustainability practices in service organizations

Nowadays, adopting environmentally friendly practices and commitment to sustainability is very popular and crucial for our lives and future generations. These practices are mainly related to energy and water consumption and waste generation (Mensah, 2014). In the business world, it is also essential to integrate green activities into business operations. Sustainable practices play an important role for manufacturing and service companies. However, customers are not as aware of the environmental impact of service companies (Cainelli & Mazzanti, 2013). When looking at a hotel, sustainability practices can have a significant impact on cost savings (Graci & Dodds, 2008). In the long run, a hotel's green performance is crucial to achieving a competitive advantage and success (Segarra-Ona et al., 2012). Therefore, it is essential to consider sustainability practices in service businesses (Sari & Suslu, 2018). As for a hotel's supply chain, sustainability practices lead to cost reductions and an even better reputation among customers (Sari & Suslu, 2018). In this way, hotels should adopt some sustainability practices and understand which operations are improved by each adoption (Sari & Suslu, 2018). The results of Sari and Suslu (2018) study show that there is no specific strategy to improve green performance for all hotels. Therefore, each hotel manager analyses their own performance and decides on the better strategy option for the hotel, as they usually allocate their resources in the wrong areas.

It can be concluded that every service company, especially hotels, should incorporate sustainability practices in their supply chain. These practices lead to cost reductions and enjoy a higher reputation among customers (Sari & Suslu, 2018). Then, supply chain managers need to consider which areas are best suited to implement sustainability practices to improve business (Sari & Suslu, 2018).

2.3 Basic sustainability practices vs Advanced sustainability practices

The criteria to evaluate sustainability practices for a hotel supply chain fall into two categories. On the one hand, as Sari and Suslu (2018) note, the basic sustainability practices are implemented by many hotels, even if these hotels have a low impact on the environment. Sari and Suslu (2018), Gil et al. (2001), Oreja-Rodríguez and Armas-Cruz (2012) describe some examples of basic sustainability practices such as adequate training of staff on the concept and actions taken regarding environmental issues; participation in studies on the conservation of water and energy; demonstrating examples of environmental conservation practices to customers; reducing waste generation and attempting to decrease the environmental pollutants; designating areas for restricted smoking areas, for quiet areas and for healthy food areas to ensure a healthy lifestyle for customers. On the other hand, hotels that define their strategy with a focus on sustainability adopt advanced sustainability practices (Sari & Suslu, 2018). These practices include implementing measures that enable managers to monitor the hotel's performance in terms of sustainability practices and related the benefits of it; implementing green product procurement policies; using marketing campaigns by incorporating sustainable content; working with suppliers who are environmentally responsible and conscious; being aware of protecting and preserving the traditions and cultures of each place in order to preserve the value, historical part of the region and its cultural heritage (Gil et al., 2001; Oreja-Rodríguez & Armas-Cruz, 2012). From the study conducted by Sari and Suslu (2018), it can be concluded that the basic sustainability practices have a higher weighting than the advanced sustainability practices, as the basic sustainability practices are more noticeable to the people in the hotel than the others.

2.4 Green innovation

Regarding research, eco-innovation or "green innovation can be defined as the production, appropriation or use of a product, production process, service or management that leads to innovation in an organization (...)". (Wang et al., 2020, p. 1). Green innovation helps to reduce negative environmental impacts such as environmental risks and pollution (Wang et al., 2020). Applying this concept to the hotel industry, it is a service with fewer activities related to this type of innovation (Martin-Rios & Ciobanu, 2019). Some examples of green innovations are the development of new environmental technologies for waste facilities, energy saving or water treatment, new pollution

prevention systems, new environmental services, and alternative and greener programmes for production and consumption to reduce environmental impact (Arundel & Kemp, 2009).

According to the study, the hypotheses were based on the practice of green innovation and some aspects that have a positive effect on the hotel. This positive effect may result from a company's capacity to identify opportunities; capitalizing company´s opportunities; adopt green approaches from managers; receive pressure from stakeholders (Wang et al., 2020). Another valid hypothesis is that green innovations have a positive impact on competitive advantage in differentiation by attracting customers who care about the environment. This improves the hotel's reputation and enhances service quality as stated by Wang et al. (2020). Furthermore, green innovation can also increase the competitive cost advantage and the top manager's attitude towards the environment directly affects this (Wang et al., 2020). Moreover, it is an important factor in maintaining market share and further enhancing competitive advantage through appropriate methods that manifest sustainability (Bossle et al., 2016; Wang et al.2020; Xavier et al., 2017).

It is crucial to develop green innovations through a natural resource-based view (NRBV) to improve the environmental impact of tourism business (Wang et al., 2020).

2.5 Resource-based view (RBV)

The Theory of the Resource-based View guarantees that organizations can achieve a sustainable competitive advantage if they have valuable, rare, inimitable, and non-exchangeable resources and capabilities (Sirmon et al., 2011; Hart, 1995). According to Asadi et al. (2020), environmental regulations, green innovation strategy based on green organizational culture and energy conservation are intangible resources and create value for companies that is difficult to imitate according to RBV theory.

The natural resource-based view suggests that a company's competitive advantage depends on its relationship with the natural environment and is based on capabilities that support sustainable development (Wang et al., 2020). According to Wang et al. (2020), NRBV shows how a company's environmental management capabilities can achieve sustainable development and gain a competitive advantage. Based on the proposed model, the capacity of identifying and seizing opportunities, top manager´s posture and pressure from the stakeholders represent the four antecedents of green innovation (Wang et al., 2020). Then, the authors also identified three outcomes, i.e., green innovation has an impact on cost, competitive advantage regarding differentiation, and effective use of company´s resources to achieve operational and financial results (Wang et al., 2020).

2.6 Environmental management and type of hotel

As mentioned earlier, tourism is a sector that impacts significantly the environment (Graci, 2010; Asadi, et al., 2020; Leaniz & Bosque, 2015). Moreover, hotels are influenced and pressured to adopt greener practices such as policies related to the environment, participation in projects to prevent pollution, minimize the waste, mitigate the climate change, reduce the risk of environmental health, cost savings and business position in the market (Mensah, 2014). In addition, besides water and energy conservation there are other environmental management activities such as voluntary environmental management initiatives like eco-labels and environmental management systems (EMS) (Mensah, 2014).

In general, large hotel companies tend to be more proactive and manage their environmental performance more formally (Céspedes-Lorente et al., 2003). They also have a greater impact due to economies of scale in waste management (Céspedes-Lorente et al., 2003) and due to their more visible environmental impacts and being part of a chain, which also has an impact on environmental management (Mensah, 2014). On the other hand, it is more difficult for small hotel businesses to have effective environmental management because they lack the resources (Mowforth & Munt, 1998).

Mensah (2014) studied the environmental management practices of different categories of hotels in Accra, Ghana. The results show that the hotels with higher quality ratings (three to four star hotels) performed best in environmental management, followed by the one to two star hotels and the budget and guest houses. Hotels performed best when it came to focusing on the connection between people and their environment, promoting human health and well-being, and trying to prevent pollution (Mensah, 2014). In contrast, voluntary initiatives related to the environment, such as eco-labelling and certification, and environmental audits, scored the lowest. (Mensah, 2014). Small and medium-sized hotels performed worst in waste management, suggesting that these hotel categories should focus more on waste reduction, reuse, and recycling (Mensah, 2014). However, there are areas where the hotel types are similar and the author found no differences in areas such as educating staff and customers on environmental issues and measures to improve the environment, and consequently acquiring skills to make more informed and responsible decisions; using recycled paper to produce brochures and materials for advertising; supporting local sources by purchasing their products/services; hiring staff from the local community; finding alternatives to reuse materials and reduce waste; implementing initiatives to reuse bed linen and towels by customers (Mensah, 2014).

2.7 Green innovation on sustainable performance in the hotel industry

Managing a hotel business can be challenging and demanding in terms of sustainable business, as managers need to analyze how their actions might affect the environment by thinking ahead about

the possible consequences. If managers start to implement sustainable practices and change the service they offer, this will contribute to a more sustainable lifestyle by offering more alternatives to customers, thus playing a fundamental role for a sustainable future (Asadi et al., 2020). As mentioned earlier, tourism is a major contributor to CO2 emissions and accounts for 8% of global tourism greenhouse gas emissions (Lenzen et al., 2018). Therefore, this industry plays an essential role in promoting green consumption. With green initiatives, hotels can maintain their competitiveness (Asadi et al., 2020). It is also important to create a green organizational culture that reflects a set of beliefs, values and products that indicate the ambition or need to follow a sustainable approach in the organization (Harris & Crane, 2002) and involve employees in activities related to the environment and sustainability (Asadi et al., 2020). In this way, it is possible to gain and maintain a competitive advantage by developing a green organizational culture, and the hotel industry can better protect the environment (Gurlek & Tuna, 2018). In addition, green innovation practices can impact positively organizational costs (Asadi, et al., 2020).

Asadi et al. (2020) studied Malaysian hotels based on the resource-based view (RBV) to analyze the impact of green innovation on sustainable business performance. This study found that green innovation is positively associated with corporate environmental performance. Green innovation is something that hotel managers should invest in and set policies for, as it increases competitive advantage and creates benefits through environmental performance, as well as a win-win situation for all stakeholders. Therefore, businesses become more profitable when they are environmentally conscious. Hotel managers are thus tasked with formulating strategies and making significant changes to contribute to environmental sustainability. Moreover, by introducing green innovations in their production and processes, companies can save money, attract environmentally conscious customers and add value to their business.

2.8 Factors Influencing Service Quality in Hotel Industry

Oliveras-Villanueva et al. (2020), after analyzing articles and doing research based on numerous other authors, identified important factors in the hotel industry that influence the quality of services. These factors can be divided into environmental company factors and human factors.

The environmental factors influence the service through the equipment needed (Blesic et al., 2011) and by offering environmentally friendly products collected through other sustainability practices of the company (Oliveras-Villanueva et al., 2020). Then, the corporate factors are classified as high service quality, characterized by human resource management and education based on sustainability practices that improve environmental behavior and positively influence customer perceptions of service quality (Al-Refaie, 2015). Finally, the human factors consist of better practices

that enhance environmental behavior and increase company's competitiveness and customer satisfaction, leading to a higher perception of quality (Metaxas et al., 2019).

Finally, Oliveras-Villanueva et al. (2020) identified the relational factors based on the customer's satisfaction and loyalty in terms of practices and service quality that have a positive impact on business development.

2.9 Service Quality and Sustainability Practices for Hotel Industry

As many authors and studies have reported, it can be inferred that customer behavior and sustainability practices in the hotel industry are effectively linked as they influence customer's decisions and satisfaction (Prud'homme & Raymond, 2013).

For example, considering 3R practices (recycle, reuse, reduce) can lead to a higher reputation, influence quality and satisfaction, and thus contribute to better results for the business (Prud´homme & Raymond, 2013). Another critical factor is the product offered, which influences the consumer's decision if its production is linked to sustainability. Therefore, it is important to consider sustainability practices in the supply chain, such as reusing products, applying social practices, obtaining reliable information, good communication between channels and technologies, and monitoring practices (Oliveras-Villanueva et al., 2020). Applying the above practices and obtaining certificates will improve business performance (Chou et al., 2018).

In addition, companies can focus on training their employees on sustainability practices for the product or service offered to motivate them to be more environmentally conscious. These practices will also increase the service quality and thus the quality perceived by the customer, as well as the sustainability and business success of the company (Oliveras-Villanueva et al., 2020).

2.10 Impact of Service Quality and Sustainability on Hospitality Performance

Sustainability practices affect economic and financial performance in the implementation of an environmental strategy, with positive effects on employment and income (Sánchez-Ollero et al., 2012), as customers can perceive the quality and value of sustainable business and get information about costs savings (Oliveras-Villanueva et al., 2020). Furthermore, sustainability practices are an important aspect to consider as they have a positive impact on customer satisfaction and loyalty; consequently, customers are willing to pay more for the service offered (Oliveras-Villanueva et al., 2020).

Oliveras-Villanueva et al. (2020) state that high service quality increases customer perceived quality. When service quality improves, it also has a positive impact on business performance. For this reason, companies should focus on continuous improvement and innovation to maintain or increase

their competitiveness. Therefore, it can be concluded that sustainability practices and service quality positively impact purchasing decisions and customer satisfaction.

Through this study and in line with Oliveras-Villanueva et al. (2020), the sustainability and service quality practices that are important for business success in the hotel industry are adopting the 3Rs practices (reduce, recycle, reuse), caring for the environment, integrating these practices into internal operations, continuously improving quality and reducing costs, obtain sustainable knowledge at the organizational level, effectively managing costs related to sustainability, incorporating sustainable practices into food procurement and manufacture, obtaining certificates, monitoring environmental performance and encouraging human resources to adopt sustainable practices (Oliveras-Villanueva et al., 2020). Furthermore, sustainability practices can positively influence decisions related to purchasing, loyalty and satisfaction of the customers, as reflected in being open to pay a higher price, and in indicators attributed to employment and outcome (Oliveras-Villanueva et al., 2020). Furthermore, service quality has a positive impact on the company's competitive advantage, image, loyalty of the customer, decisions about purchasing, market orientation, the success of the organization, satisfaction of the customer, the performance of the company, reputation, and the quality perceived by the customers (Oliveras-Villanueva et al., 2020).

2.11 Final remarks regarding literature review

Lastly, it was considered that sustainability practices are crucial for every business, mainly for a hotel supply chain where basic sustainability practices play a more important role than advanced sustainability practices, as basic practices are more visible to customers. Furthermore, hotel companies need to invest in sustainability innovation and identify environmental capabilities and resources as sources of competitive advantage based on the NRBV. It was also possible to infer that companies that adopt green innovations can be more committed to the environment, save more money and attract more customers. Regarding the different hotel categories, it was found that the three to four-star hotels performed better in environmental management than the one and two-star hotels. Also, hotels performed better in environmental health and pollution prevention, whereas the worst performance was in voluntary environmental initiatives and in environmental auditing.

CHAPTER 3

Conceptual Model and Research Propositions

After identifying the problem previously mentioned in the Introduction and conducting a literature review, it is possible to formulate the propositions for the research question. The hypotheses described below will lead to the creation of a Conceptual Model. A Conceptual Model aims to categorize and characterize the different concepts related to the study and to understand their relationship (Rocco & Plakhotnik, 2009).

These ten propositions play a key role in this dissertation and will underpin the conclusions. These propositions, which also emerged from the literature review, pave the way for the development of the research instrument and the findings from the interviews. The model used in this research is represented in Figure 3.1:

Propositions targeting the research question "*How sustainability practices affect business performance and organisational competitive advantage in Madeira's hotels?*"

P1: Sustainability practices influence quality and satisfaction and increase hotel´s reputation with customers. Also, they can have a big impact on costs savings and thus contribute to better results for the company.

P2: In the long term, a hotel's green performance is critical to gaining a competitive advantage and being successful.

P3: The sustainability practices, the environmental monitoring, obtaining certificates, training employers for the product or service offered increase the quality of service and thus the quality perceived by the customer as well as the environmental performance and business success of the hotel.

P4: The sustainability practices have an impact on economic and financial performance in relation to the implementation of an environmental strategy, which has a positive impact on occupation and income. They also have a positive impact on customer satisfaction and loyalty, so that customers are willing to pay more for the service offered.

P5: Sustainability practices in the hotel industry influence customer choice and satisfaction.

P6: By developing an organizational green culture and investing in green innovation measures, it is possible to gain and maintain a competitive advantage.

P7: It is more difficult for small hotel businesses to have effective environmental management due to lack of resources.

P8: The voluntary environmental initiatives are depending on the hotel´s environmental performance.

P9: The dimension of a hotel influences the performance in waste management.

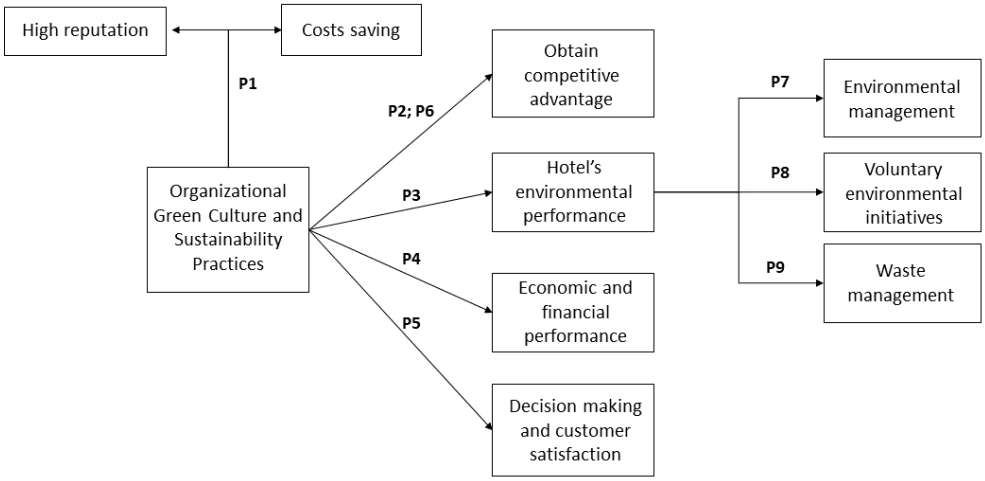


Figure 3.1 – Research Framework

The illustration above (Figure 3.1) was elaborated to obtain a simpler understanding on how each proposition are placed around the primary goal (to create a best practice agenda that can be applied to the hotel industry and how do they relate with the research process).

CHAPTER 4

Methodology

4.1 Research Design

Methodology incorporates the methods used in the development of the project. There are various research methods which guide to the solution of the problem and help to find a set of data. Qualitative, quantitative, or mixed data can be used to develop research. Qualitative data is mainly exploratory and allows a deeper understanding of theories, opinions, or ideas. Methods used to obtain qualitative information include group discussions and individual or observational interviews. The sample size is usually small and segmented. With quantitative data, the research aims to generate numerical data that is then converted into statistics that provide information about the study's trend. This data can be collected through face-to-face or online interviews, surveys on different platforms and observation. Mixed data is a combination of these two sources of information. The research methodology of the presented project was based on a qualitative study because it provides more specific and in-depth results.

The primary data collection was conducted through semi-structured interviews. The decision to use semi-structured interviews is based on the possibility to interact with the respondents and obtain detailed in-depth answers. Additional questions are also used, and the respondents' answers can still be compared. Since the present research is about describing a phenomenon, semi-structured interviews meet the criterion of gaining a deeper understanding of the chosen field.

Furthermore, when qualitative research is conducted by interviewing a specialist in the field, it allows for more detailed information than questionnaire interviews. Effective and adequate qualitative research can also be based on interviews, as this is a way to better understand and analyze opinions, behaviors, and experiences. In addition, the questions asked in interviews are usually open-ended questions that help to gather in-depth information, allowing interviewers flexibility and a comprehensive understanding. Therefore, choosing a qualitative study could answer the research question: *"How do sustainability practices affect business performance and organizational competitive advantage in Madeira's hotels?".*

The interviewees were the directors of hotels in Madeira. The primary objective of the interviews was to compare the environmentally friendly practices in the different hotel categories and to determine what is being done regarding sustainability. The interviews were semi-structured as similar questions were asked to the interviewees so that the differences between the different types of hotels could be understood. The aim of these interviews was to gain more knowledge about sustainability in the hotel industry from people who work in this field.

Concerning secondary data collection, an online search was conducted for articles dealing with the implementation of sustainability practices in the hotel industry and examples of hotels from other countries. This search provided information for the literature review and supported the contextualization of the problem under study.

Therefore, this approach will gather information on sustainability and the goals and perspectives of hotels. This thesis format will help to understand how sustainable Madeira's hotels are and what more can be done to improve sustainability.

4.2 Sample Characterization

When conducting research, the selection of respondents is important as the sample of respondents has a crucial influence on the research results. The survey of respondents for this research is based on non-probability sampling (Bryman & Bell, 2011). Respondents were carefully selected based on their ability to provide valuable data for the research. The use of a non-probability sample is most appropriate for the study as the data collected must fit the study´s parameters and serve the purpose. A sample of hotels in Madeira was selected for this study. The topic under study has a specific regional complexity (in terms of green and sustainable context) and requires a particular recognition and business maturity to understand what is required.

Only six of the twenty-one proposals sent to hotels with similar characteristics and a link to sustainability were accepted. In the end, four hotels conducted the interview. The interviewees were Maurílio Barreto, Raul Gonçalves, Carlos Silva and Décio Silva, representing respectively the Four Views Hotel, Quinta da Serra, Porto Bay and Quinta do Furão.

Respondent #1 is Maurílio Barreto, Revenue Manager and Environmental Manager at Four Views Hotels, for about five years. He has only recently been involved with the hotel industry but is now very interested in it. Maurílio is responsible for waste control and managing the environmental system. He also analyses energy efficiency and sets targets and procedures.

Raul Gonçalves is interviewee #2, who holds the role of Chief Executive at Quinta da Serra. He was very enthusiastic and had worked in the hotel industry for many years. In 2014, this hotel was reopened with an agricultural engineer to achieve the goal of being certified as an agricultural producer.

Interviewee #3, Carlos Silva, has worked at Porto Bay Group for more than twenty years as an administrator and more recently for the sustainability portfolio. Although he studied civil engineering, Carlos believes that "*sustainability is something we need to think about*" and sees it as an increasingly important area.

The last interviewee is #4. Décio Silva represents the role of Sales Manager at Quinta do Furão. With his young mind, Décio believes that "*sustainability is something that concerns us in the present. We must think, act, and make a difference today.*"

The table below (Table 4.1) was elaborated with the objective of organizing and relating the propositions with the respective questions asked to the interviewees. In this way, the overview of the topics discussed is simplified.

Proposition	**Topic**	**Questions**
Research Question: How do sustainability practices affect business performance and organizational competitive advantage in Madeira's hotels?		
P1	Sustainability practices	Q1
		Q2
		Q3
		Q9
		Q10
		Q11
		Q21
P2	Competitive Advantage	Q4
		Q22
P3	Service Quality	Q5 A)
		Q5 B)
P4	Economic and financial performance	Q6 A)
		Q6 B)
		Q12
		Q17
P5	Decision making and customer satisfaction	Q13
		Q14
		Q15
P6	Organizational green culture	Q16
P7	Effective environmental management	Q18
P8	Environmental performance	Q19
P9		Q8
		Q20

Table 4.1 - Propositions and respective questions

4.3 Data Collection instrument and Data analysis procedures

There are several research approaches when developing a study, namely explanatory, descriptive, and causal research, depending on the needs of the particular study. In this research, the secondary data was obtained through reviewing the literature on the topics mentioned in this paper. In contrast, primary data was collected through interviews.

This research is based on four qualitative interviews with interviewees who specialize in the hotel industry and are interested in developing a deeper understanding of the topic and taking different perspectives. All interviewees who have a close connection to the Madeira's hotel industry accepted the option of conducting the interview via an online session or via a written response. As mentioned earlier (Chapter 1.5), the aim was to run several interviews. Still, these were the only people who gave a positive response.

According to Bryman and Bell (2011), it is necessary to have an instrument for collecting primary data. To create an instrument, which may be an interview script, it is required to develop an operationalization. This step provides the opportunity to translate theories into research aspects (Bryman & Bell, 2011). Concepts are several building blocks in a theoretical framework and play an essential role in research (Bryman & Bell, 2011). Concepts need to be made concrete as they are often vague and complex. The concepts examined in this study were drawn from the theoretical framework (Chapter 3) and are listed below (Table 4.2). Several indicators were created and presented in the interview questions to test the concepts.

Theoretical Concept	**Concept Definition**	**Operational Definition**	**Proposition**	**Questions**
Sustainability	Is achieved through sustainable development that meets the needs of the present without compromising the needs of future generations.	To describe how the respondents perceive sustainability in hotel industry.	P3	Q5 A; Q5 B
Green innovation	Can be defined as the production, appropriation or use of a product, production process, service or management that leads to innovation in an organization.	To verify if green innovation gains or maintains a hotel's competitive advantage.	P2; P6	Q4; Q16; Q22
Sustainability Practices	Related to energy and water consumption and waste generation.	To describe which practices the respondents adopt in the hotel.	P1	Q1; Q2; Q3; Q9; Q10; Q11; Q21

Hotel Industry	Is a subdivision of the hospitality industry that specializes in providing customers with accommodation services.	To describe how the respondents perceive the hotel industry in Madeira.	P4; P5; P7	Q6 A; Q6 B; Q12; Q13; Q14; Q15; Q17; Q18
Sustainable Hotel	Is concerned about its environmental impact and seek to reduce it by adopting environmentally friendly practices.	To describe how sustainable hotels operate in Madeira.	P8; P9	Q8; Q19; Q20

Table 4.2 - Operationalization Table

The interview script was developed with the theoretical framework in mind to create interview questions relevant to the research (Bryman & Bell, 2011). Therefore, the questions asked during the interview were designed to provide valuable data. The interview questions are presented in an interview guide based on operationalizing the questions and reviewing the concepts. Appendix 1 contains the interview guide. Bryman and Bell (2011) point out the importance of informing the interviewee well about the research objectives, the possibility of anonymous participation and the research goals before the interview begins. In this study, the interviewer introduced themself in detail and described the research. The issue of anonymity was also addressed and it was pointed out that the data would only be used for the current study. The interview then began with the respondent talking about the concepts contained in the questions and explaining their perspective so that the researcher could understand the respondent's point of view.

The interviews in this study were conducted in Portuguese, which allowed for better interaction between the researcher and the respondent. In addition, respondents were informed about the recording process and gave their consent.

CHAPTER 5

Obtained Results, Findings and Discussion

The interviews were conducted in four hotels on Madeira Island. The first part of the interviews consisted of introductory questions confirming that sustainability is common in the hotel industry. #1 recognizes the importance of adopting sustainability practices because "*hotels are one of the main producers of waste, then they consume a lot of energy and have to be the first to set an example being such a large industry*". However, #2 thinks that organic production is important and "*the main goal was to obtain agricultural producer certification*". Then, #3 believes that "*sustainability is effectively a transversal thing that we all have to worry about more and more so that in the short or medium term there will be no more planet earth*" and it sees "*sustainability as an increasingly important area*". Lastly, #4 follows the same path as the other hotels and considers that "*sustainability is a situation to be dealt with in the present*" and that "*we need to think today, do today and change today*". When asked in conclusion how the values of how sustainability are integrated into the organizational culture, in all cases this is a recognized fact and none of them did not recognize the practices.

5.1 Proposition 1[1]

Now moving on to the second part of the interviews, which deals with questions about the implementation of sustainability practices. All interviewees confirmed that these hotels implement sustainability practices and believe that this has an impact on the quality of services and customer satisfaction. Respondent #1 received *"very positive reviews, and some customers even give suggestions".* For respondent #2, his *"philosophy is always to differentiate"* and *"guests choose the hotel because they like and appreciate it".* Respondents #3 and #4 are on the same path, and the hotel of #3 is *"appreciated and valued for these gestures that really matter".*

Furthermore, by adopting these practices, the hotel has a higher reputation among customers, a fact that was recognized by the hotels and as interviewee #1 mentioned: *"I think that more and more clients are recognizing the work we do in the area of sustainability".*

Regarding the organizational costs, all interviewees agreed that the sustainability practices lead to positive outcomes. Interviewee #1 said the result was *"very positive on the issue of waste, water, electricity has a huge impact and reduces our ecological footprint and consumption"*. Interviewee #2 said that organic production *"has a significant advantage because everything we produce, we do not have to buy. On the other hand, when we have surpluses, we sell them to companies here in Madeira*

[1] P1: Sustainability practices influence quality and satisfaction and increase hotel´s reputation with customers. Also, they can have a big impact on costs savings and thus contribute to better results for the company.

who have organic market products". "80% of sustainability practices result in positive effects" mentioned interviewee #3. Besides, as interviewee #4 referred *"it is always an acquisition, but we see it as an investment"*. The questions about the sustainability practices were suitable for supporting the first proposition, which was formulated based on Prud´homme & Raymond (2013), stating that a business can obtain better results when adopting sustainability practices because it can create higher reputation and have an impact on quality of the service and customer satisfaction. Also, it is possible to confirm and conclude that the mentioned practices generate reduction of costs and increase the reputation recognized by the customers (Sari & Suslu, 2018) and, by incorporating environmental issues in company´s strategy, it can arise some other advantages like costs savings (Gil et al., 2001).

5.2 Proposition 2[2]

The four respondents agreed that the hotel's sustainability is crucial to gaining a competitive advantage and success. For respondent #2, this is the differentiating factor. He said: *"in this case we would be just another five-star hotel, so the organic business is what sets us apart".* These results confirm what Segarra-Oña et al. (2012) said, it is possible to obtain competitive advantage and become successful, in the long term, when a hotel establishes a green performance and arouse sustainable development (Wang et al., 2020).

5.3 Proposition 3[3]

Considering the sustainability practices, obtaining certificates and training staff, all hotels confirmed that these increase the quality of the service. Interviewees #1 and #2 observe that their employees apply some practices in their own homes and pass them on to customers. Interviewee #3 also believes that *"all this increases the quality of the service and there are some good practices that are even required by certifiers, which is also a way to convince our internal customer to do them".* For respondent #4, *"the big motivation and driver for service quality is training; the know-how of external people".* Consequently, according to the experience of all hotels, it has a positive impact on the quality perceived by the customer and the company's performance. Thus, the third proposition is verified by describing that the company´s success is achieved based on the implementation of these practices, also increasing the quality of the service (Oliveras-Villanueva et al., 2020; Wang et al., 2020).

[2] P2: In the long term, a hotel's green performance is critical to gaining a competitive advantage and being successful.

[3] P3: The sustainability practices, the environmental monitoring, obtaining certificates, training employers for the product or service offered increase the quality of service and thus the quality perceived by the customer as well as the environmental performance and business success of the hotel.

5.4 Proposition 4[4]

In terms of economic and financial performance, sustainability practices impact this, as interviewee #4 mentioned: *"We have a reduction in energy costs, which positively impacts a financial level. They also have a positive impact on the occupancy and income of the hotel".* Interviewee #1 works *"with operators who consider the environmental aspect when choosing a hotel for their employees".* Regarding the bio hotel, interviewee #2 thinks that the hotel can attract *"other types of customers that a normal hotel would not attract (…) who then look for the organic part".* For interviewee #3 it is *"not the most important criterion, but it has some weight, and I think it is becoming more and more crucial and important at the moment of selection".* Finally, interviewee #4 stated *"we have a cost reduction and consequently a higher income".* As Sánchez-Ollero et al. (2012) mentioned that the economic and financial performance can be impacted by sustainable practices through the implementation of a strategy focused on the environment, arousing positive effects in terms of employment and income.

All hotels use indicators to measure the performance of sustainability initiatives. For example, the hotel of interviewee #1 works *"with a portal called Green View Portal where we enter all the indicators for waste, energy, water and purchasing and then set annual targets for these indicators".* Also, at Quinta da Serra, the interviewee stated *"we have internal indicators for example for waste production, gas consumption, water, light, etc. Green Key also requires us to set targets and always try to improve them"*. Regarding Porto Bay, interviewee #3 mentioned: *"we have some KPIs, namely carbon footprint, which is an important indicator".* The last interviewee also agrees, so the hotel of interviewee #4 *"does water measurements every month, for example, the irrigation system".*

The last question of this group asked about the motivation to start implementing sustainability in these hotels. For respondent #1, the primary motivation was *"really understanding that our planet needs help, and we should set an example. We believe we can make a difference and influence others to do the same"*. Respondent #2: *"it was already a belief of mine. So, when it was suggested to me to open this hotel, it should not be another five-star hotel, but a Bio Hotel as a differentiator. Beyond the word "Bio", it should also be sustainable"*. Nowadays, it is essential to recognize sustainability practices in the hotel industry, as the interviewees agreed. Therefore interviewee #3 mentioned, *"it is mainly the need to recognize that there is no plan B for the planet earth and that the time to act is now. We cannot postpone this kind of decision. We also believe that our guests come from this kind of politics".*

[4]P4: The sustainability practices have an impact on economic and financial performance in relation to the implementation of an environmental strategy, which has a positive impact on occupation and income. They also have a positive impact on customer satisfaction and loyalty, so that customers are willing to pay more for the service offered.

Interviewee #4 was not an exception, saying, *"firstly because our customers are aware of it and secondly because it pays off financially".*

When it comes to the results from the consumer´s perspective, they were quite interesting. The practices are recognized by customers and contribute to a higher reputation among customers. For example, interviewee #1 can see *"through the questionnaires we fill in because it is possible to see our performance evaluation"*. The other interviewees shared the same opinion, and Interviewee #2 added: *"I notice that more and more customers come exactly because of our attitude"*. In addition, sustainability practices also impact positively customer satisfaction and loyalty, as interviewee #1 explained: *"We have a large base of loyal customers who come back. Some customers have been coming to Madeira for 10 years and staying in our hotels repeatedly. They like everything: the sustainability and how everything works".* Interviewee #2 also added that the hotel does not have a customer loyalty program, but *"they demonstrate their loyalty by coming back several times"*. Interviewee #3 works *"with about 40% loyal customers"* and interviewee #4 answered positively to this question as well. These statements show that proposition four is valid based on Oliveras-Villanueva et al. (2020) who cited that sustainable practices have a positive impact on the satisfaction and loyalty of the customer, thus it represents a crucial element to consider in the business, and Asadi, et al. (2020) who added that the hotel industry has the opportunity to develop in various aspects by adopting environmental behaviors that will lead to customer satisfaction, as an example.

Regarding the service price offered, interviewee #1 reported: *"indirectly we can say that this is why the service is more expensive because there is a cost factor, but the sales value of the rooms is calculated concerning to the total cost of the hotel. Therefore, we do not sell the price of the hotel higher only because of sustainability practices"*. Interviewee #2 believes that *"the customer is willing to pay for a stay in that particular hotel"*, and interviewee #3 assumes that *"most of our customers are willing to pay for it if necessary".* On the same side, interviewee #4 said that they increased the price, mainly to improve the quality. Still, again the customers are willing to pay this price. According to the respondents' answers, it is possible to establish the last part of proposition four which describes that the customers are open to pay a higher price for the service (Oliveras-Villanueva et al., 2020).

5.5 Proposition 5[5]

Another important fact is whether the sustainability practices influence the client's decision as (Prud´homme & Raymond, 2013) cited. In all cases, the answer was positive. For example, interviewee #1 said: *"Yes, both from a normal client and from a company"* and interviewee #2 said: *"Yes, it is starting to influence"*. Interviewee #3 believes that it does influence the decision making of the

[5] P5: Sustainability practices in the hotel industry influence customer choice and satisfaction.

customer, but *"we do not usually advertise our work much, that's not our policy, we tend to be low-key. We do not set up the sustainability team to attract more clients, that will come in its own right".* Another case is the hotel of respondent #4, who thinks that it influences the customer's decision, but *"if we are at the same level, environmental aspects can influence the choice, and there are other hotels that have implemented more measures, and if that is the factor, there are other hotels in the region that win".*

Most hotels use indicators that measure customer satisfaction with sustainable initiatives. For example, interviewee #1 works *"with a platform called Revinate, which manages questionnaires sent to guests at the end of their stay, as well as customer reviews on popular platforms such as Booking, Tripadvisor, etc)".* Interviewee #3 has also adopted this type of performance evaluation *"we have the GRI (Global Reporting Initiative) reporting on sustainability, we have some KPIs, we have implemented a program called Feedback on digital where all customers usually answer the survey twice during their stay".* Interviewee #4 also agrees: *"for example, at Quinta do Furão, we have a platform that analyzes our customers' comments. When the customer checks out, a questionnaire is automatically sent through our system, and the customer receives it in their email. This questionnaire contains questions about check in and check out, the cleanliness of the rooms and the environmental policy. At the moment, the feedback is positive".* Interviewee #2 is an exception and does not use sustainability performance indicators based on the customer satisfaction. However, *"we measure it basically by the ratings and the questions we ask customers when they come to the hotel, and we try to find out how they discover us, and many people mention the question about the organic hotel".* Although respondent #2 does not adopt indicators to measure customer satisfaction with sustainable measures, all hotels agree that it influences the customer's decision like Oliveras-Villanueva et al. (2020) mentioned: sustainability practices can positively influence purchasing decisions, customer loyalty, customer satisfaction, willingness to pay a higher price, and customers recognize the value and provide financial support for sustainable hotels (Wang et al., 2020).

The last question of the third part of the interview was about the expected changes in the consumer profile soon. Interviewee #1 believes that *"it is a consumer who is increasingly concerned about environmental issues and who will increasingly choose hotels that take this care. I also believe that these are customers who are looking for activities that have to do with the environment, such as hiking or boat trips, for example"*. Regarding the Bio Hotel, respondent #2 expects *"my clients to change into those who are really looking for everything that is organic, ecological, and sustainable. Who already implement this in their lives and want to practice it on their holidays as well"*. Interviewee #3 has *"no doubt that they will change in terms of sustainability. After the pandemic, we noticed that the age group of customers has decreased. In the last two years, the average age has dropped by about five years, and we have managed to maintain loyalty from generation to generation"*. Finally,

interviewee #4 believes *"that the trend towards environmental protection will increase. Environmental issues will be looked at with more attention. (…) In Madeira, the age group that visits us has decreased, and this generation's awareness is different too".*

5.6 Proposition 6[6]

In the fourth part of the interview, questions were asked about the market perspective. The first question referred to the possibility of gaining or maintaining competitive advantage by developing a green culture and investing in sustainable innovation. All interviewees responded positively to this, even interviewee #1: *"Yes, I think we can only win".* Interviewee #2 also believes that *"from what I have seen, the bet in this area is really to be highlighted and, in the region, there are large groups making their way. Higher competitive advantage with the smaller groups as they start to lag behind".* This way, proposition six is confirmed according to Gurlek and Tuna (2018) who defend that is possible to obtain and maintain a competitive advantage through the development of an organizational green culture. Then, Asadi, et al. (2020) agree with the fact that green innovation increases competitive advantage so it is an aspect that should be invested in. Finally, and the concept of organizational green culture is very important to continue being competitive and productive (Asmui et al., 2016).

5.7 Proposition 7[7]

Among the hotels interviewed, there was no possibility to talk to a 3-star hotel, so a conclusion about proposition 8 could not be reached.

5.8 Proposition 8[8]

As for the break-even of the investment, the average of all hotels was 4 years. It was not invested all at once, but the four respondents had reached break-even at the moment.

The following question was about the area (or areas) where the hotel has less practices in terms of sustainability. On this topic, the answers were very different. Interviewee #1 said, *"we always try to do a little bit in all areas. However, I would like us to do more to encourage employees through external initiatives (…) I would like them to get out of their environment a little bit and try other activities to involve and motivate the employees".* Interviewee #2 had a problem with *"single-use plastics, namely in the amenities, that is in the shampoo and shower gel that we still use those individual doses".* The

[6] P6: By developing an organizational green culture and investing in green innovation measures, it is possible to gain and maintain a competitive advantage.

[7] P7: It is more difficult for small hotel businesses to have effective environmental management due to lack of resources.

[8] P8: The voluntary environmental initiatives are depending on the hotel´s environmental performance.

exception was respondent #3 who did not find any area with less sustainability practices. Respondent #4 mentioned, *"for example water consumption, we could put more emphasis on that"*. As reported by (Mensah, 2014), voluntary initiatives about environment, such as using eco-labels or getting certificates, and conducting environmental audits are areas where hotels perform worst. Therefore, it was not possible to reach an agreement and each hotel has its own area of worst performance and it is not possible to confirm that the voluntary environmental initiatives depend on the hotel´s environmental performance. Thus, proposition eight was refuted and contributes to the literature review that the worst performance area depends on the hotel.

5.9 Proposition 9[9]

The next question discussed which sector was the worst in terms of sustainability and whether this included waste management. The only hotel that agreed on waste management was the one of respondent #1, who stated, *"I will give this specific case here at Four Views Oasis. It has to do with recycling and waste management. We separate the organic waste and the undifferentiated waste. Still, when they come to pick it up, they mix it all up again"*. Interviewee #2 also mentioned, *"I notice that a lot of paper and plastic are produced, and that is unavoidable with what we buy. Because everything else, everything that is organic waste, we compost. It is tough to control this production that does not belong to us because a lot of paper and plastic waste production comes from the products we buy from our suppliers".* The other two respondents cannot highlight more positive or negative areas. Mensah (2014) mentioned that waste management was the area with worst performance for small and medium hotels, so this proposition was refuted because only two of the respondents mentioned waste management.

The sixth question was related to the adaptation/consideration of the hotel´s communication plan to the sustainable innovations introduced. Porto Bay, the hotel represented by interviewee #1, has *"a purchasing policy where we give preference to, for example, local products that are not individually packaged and products with less plastics (…) We always send our suppliers our environmental policy, our purchasing policy, and our green views report so they know how we are doing in terms of sustainability performance. (…) Then there is the newsletter issue for both customers and employees. For social media, we have a plan where we talk about their environmental actions, we take every x number of times".* In the case of interviewee #2, *"there was no adaptation, because we already started with the sustainability strategy. It is not easy to communicate because of our size. Our communication has always been focused on sustainability".* With this kind of topic, every hotel has a different strategy. Interviewee #3 mentioned, *"as I told you before, the Porto Bay Group is usually low-key in its*

[9] P9: The dimension of a hotel influences the performance in waste management.

disclosures. We have two or three moments a year when we publish the information for the internal client and on the souportobay website where the news are announced to give a sense of involvement in these things. The news also appears on our social networks without excessive emphasis". Quinta do Furão has not yet invested in this area, as interviewee #4 reports: *"our communication plan is made in loco, which means that people see with their own eyes what is being done regarding the environment. There is no manual with its practices, maybe we will if we implement all the measures we have planned."*

Then, it was interesting to know if stakeholders are pressuring the hotel to become more sustainable. Interviewee #1 replied in the negative, *"but it could also be because we have already run down a bit because we have been doing it for so long. And then we do this because we want to and not because of pressure. Maybe there is, but we do not care. We do it because we believe in it".* Interviewee #2 *"dares to say that it was only because of that pressure. In fact, my administrator said we would open this hotel, which has to be organic and influenced by all the stakeholders. So this pressure has always existed"*. Interviewee #3 explained that he did not feel the pressure and *"the feeling comes more from within. We are the ones who have to push our stakeholders to join us on this path, but the opposite has not happened so far".* Interviewee #4 agrees with #1 and #3. He answered: *"No. We have partners who are still not taking action, so it really came about internally and naturally and is part of our values and our mission".*

CHAPTER 6

Conclusions and Recommendations

The purpose of this master dissertation is to analyse hotels from Madeira Island that focus on sustainability and to understand what practices have already been applied addressing the following research question: *How do sustainability practices affect business performance and organizational competitive advantage in Madeira's hotels?*

All propositions will lead to the conclusion of the research question previously mentioned. It was asked to the respondents if they adopted the sustainability practices and how they affect the hotel's reputation, quality of the service and customer satisfaction. Besides, these sustainability practices could cause a reduction of costs as well, contributing to the success of the business. The results from these questions validated the proposition P1, showing that most of the respondents believes that *"Sustainability practices influence quality and satisfaction and increase hotel´s reputation with customers. Also, they can have a big impact on costs savings and thus contribute to better results for the company."*

Moving on to the next proposition, it was investigated the green performance of the hotels and obtaining competitive advantage from it. As previously mentioned, these will turn into success. This way, from the interviewee´s responses, it was possible to confirm proposition P2 which stated that *"In the long term, a hotel´s green performance is critical to gaining a competitive advantage and being successful."*

Apart from the sustainability practices, there are other ways of increasing the quality of the service such as environmental monitoring, obtaining certificates or training employers on the sustainability topic. Not only can increase the service quality, but also perception of the customer and the success of the company. According to the responses obtained from the interviews, the respondents had highlighted these methods that they embrace in the hotels. Therefore, the proposition P3 is has been verified: *"The sustainability practices, the environmental monitoring, obtaining certificates, train employers on the product or service offered will increase the service quality, and consequently the quality perceived by the customer, as well as the hotel´s environmental performance and business success."*

Regarding the economic and financial performance of an hotel, the sustainability practices can also have a great impact on it. By implementing these practices and following a strategy based on environmental measures, the selected hotels mentioned that they noticed a growth on the occupation because customers are becoming more environmentally conscious even on their vacations. These statements validated the proposition P4: *"The sustainability practices have an impact on the economic*

and financial performance regarding the implementation of an environmental strategy, which will influence positively the occupation and incomes. Also, they have a positive impact on customer's satisfaction and loyalty, and consequently customers will be willing to pay more for the service offered."

The last proposition that referred the sustainability practices recognized that they have an impact on customer´s choice and the satisfaction about the hotel. Thus, proposition P5 is confirmed: *"Sustainability practices performed by the hotel industry influence the decision of the customer and its satisfaction."*

Through respondent´s comments, hotels develop an organizational green culture and are starting to invest in procedures that bring innovation related with the sustainability. This way, proposition P6 is validated: *"By developing an organizational green culture and investing in green innovation actions, it is possible to gain and maintain a competitive advantage."*

As mentioned before, *"It is more difficult for small hotel businesses to have effective environmental management due to lack of resources",* proposition P7 cannot be confirmed or refused because there was no small hotel interviewed.

Regarding proposition P8 *"The voluntary environmental initiatives are depending on the hotel´s environmental performance"*, this one is refused. The respondent´s statements represent a contribute to the literature because interviewee #1 referred external initiatives was the area with lowest environmental performance. Then, for interviewee #2 was the single-use plastics. The third interviewee did not mention any specific area. Finally, interviewee #4 mentioned the water usage.

According to the statements made by the interviewees, it was possible to consider the area of waste management in these hotels. Since the hotels have the same dimension, it was asked what kind of problems they found. Interviewee #1 referred the waste management as a barrier. For interviewee #2, he was concerned about the production of paper and plastic from the suppliers. The other two respondents did not find any issue with the waste management. Thus, proposition P9 is refused: *"The dimension of a hotel influences the performance in waste management"*, which contributes to the literature.

Looking back to the research framework (Figure 6.1), the central point of focus is organizational green culture and sustainability practices. Through the analysis, it leads to the conclusion that, building a green culture in the organization and adopting practices related with sustainability, it is possible to achieve a higher reputation among customers as well as saving company´s costs. From the main point it is also possible to reach a competitive advantage concentrating in differentiation because in the hotel industry it is important to find a differentiating factor, and nowadays sustainability represents an advantageous and beneficial area to invest in. Despite the high investment, it will turn out valuable in terms of economic and financial performance, because in the long term it is going to have an impact in cost reduction. Besides this, sustainability practices can influence considerably the decision of the

customers because they are becoming more demanding about sustainable options, and they really value a hotel with these kinds of practices. Therefore, it will affect the satisfaction of the customers since they look for sustainable hotels and make their choice based on this factor. Regarding the hotel´s environmental performance, it is not possible to conclude that it depends on voluntary initiatives about the environment and on the way that hotels manage their waste. The environmental performance of a hotel depends on the areas that each hotel can manage its sustainability and which areas they are focused on, so the area with best or worst environmental performance is not identical for every hotel.

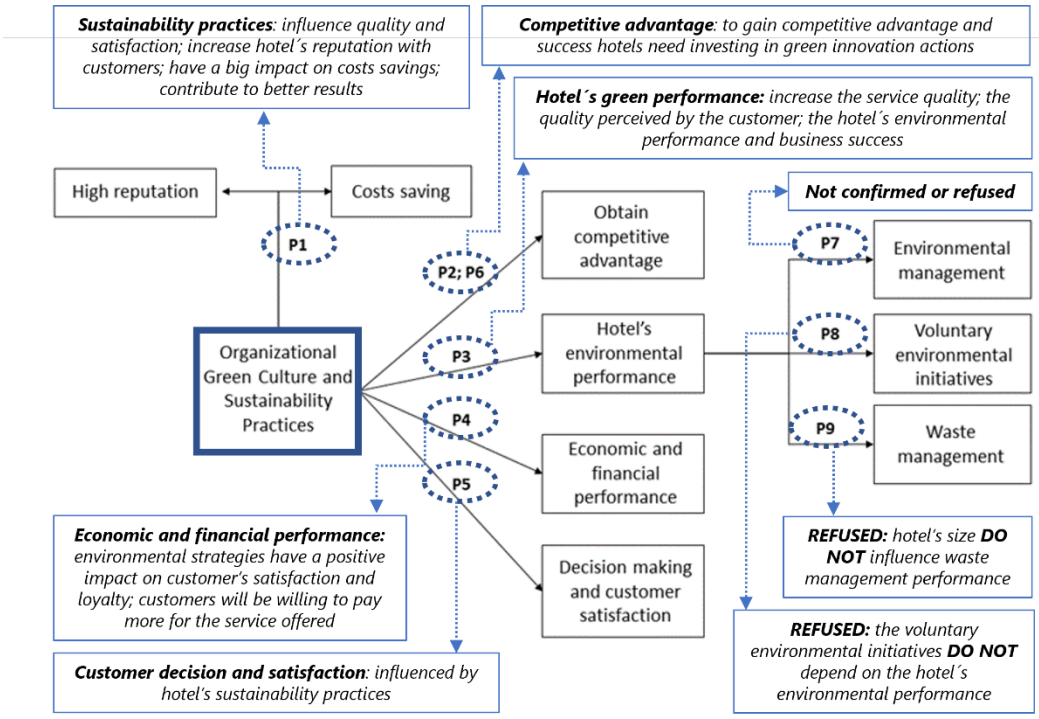


Figure 6.1 – Research Framework and confirmed/refused

Revisiting the research question, *"How sustainability practices affect business performance and organisational competitive advantage in Madeira's hotels?"*, it is possible to conclude that sustainability practices became a very important factor to these hotels, they recognize that it does affect the business performance and their competitive advantage.

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Appendix

Appendix 1 - Interview Guide

First of all, I want to thank you for your availability and attention in accepting my invitation for this interview. Your collaboration is very important for my research and will help me develop my thesis whose title is "Sustainability Practices in Hotel Industry: A study on Madeira's hotels".
As I had already mentioned in my introduction, my name is Luísa Sumares, I´m 22 years old, I´m from Madeira and at the age of 18 I went to study in Lisbon, where I took my degree in Industrial and Logistics Management, and I´m now in the Master in management of Services and Technology, both at ISCTE.

In this interview you will be guaranteed confidentiality and anonymity if you so choose. In addition, you may reserve the right not to answer any question.
The interview will be recorded to ensure clarity of responses. Do you consent to this recording? Do you consent to our proceeding with the interview?

My work intends to create a best practices model applied to the hotel sector, recognizing the sustainability practices that are already adopted in Madeira hotels to reduce environmental impact and promote sustainability in the sector. Since we are a region that lives a lot from tourism, I believe that this concern is transversal throughout the hotel industry.

Thus, the purpose of this interview is to analyze how sustainability is implemented in your hotel, what are the motivations and limitations behind its implementation, and what role this choice plays in strategic terms in the competitive landscape. Through the analysis of all the interviews, I will be able to elaborate the aforementioned best-practices model, which I will be happy to share with you. Regarding these objectives, do you have any questions you would like to ask?

A – Introductory Questions

- I would like to know more about the position that *(name of interviewee)* has at *(name of hotel).*
- Considering your role as *(respective function),* how do you define sustainability and how do you frame this concept in the hospitality industry?
- How are sustainability values integrated into both the organizational culture of your hotel and your employees?

B – Questions about implementation of 3Rs practices

1. Does hotel X adopt the 3Rs´ (recycle, reuse, reduce) practices?
   - **1.1.** If yes, does it influence the quality and the satisfaction of the clients, contributing to better results for the company?
2. By adopting the practices of the 3Rs (recycle, reuse, reduce), can it create a higher reputation?
3. Do sustainability practices impact any type of costs of hotel X?
4. Do you think that a green performance of a hotel is essential to obtain competitive advantage and achieve success?
5. **A)** Do sustainability practices, environmental monitoring, obtaining certificates, train employers on the product or service offered increase the service quality?

   B) And consequently, the quality perceived by the customer, as well as the hotel's environmental performance and business success?
6. **a)** Do sustainability practices impact the economic and financial performance regarding the implementation of an environmental strategy?

   B) Does it influence positively the occupation and incomes?
7. Do sustainability practices have a positive impact on customer's satisfaction and loyalty?
8. Do you have indicators to measure the performance of sustainability initiatives?
   - **8.1.** If not, how is it being measured?
9. Considering the various initiatives implemented in order to ensure sustainability not only environmentally and economically, but also in strategic planning, what were the main motivations.

C – Questions about customer´s perspective

10. Do sustainability practices help obtain higher reputation through customers?
11. Do sustainability practices impact positively the satisfaction and loyalty of the customer?
12. Are customers willing to pay more for the service offered?
13. Do sustainability practices performed by the hospitality sector influence the decision of the customer?
14. Do you have indicators to measure the satisfaction of the customer related to the sustainability initiatives?
    - **14.1.** If not, this performance is being measured?
15. What changes do you foresee in the consumer profile in the near future?

D – Questions about market´s perspective

16. By developing an organizational green culture and investing in green innovation actions, do you think that it is possible to gain and maintain a competitive advantage of hotel X?

17. What is the time interval to break-even on the investment? How is the investment so far justified?

18. (small hotels, 3 stars): Do you find more difficult to have an effective environmental management due to lack of resources?

19. Which area or areas does the hotel X have worst performance? Does it include voluntary environmental initiatives, such as eco-labelling and certification, and environmental auditing?

20. (small and medium hotels, 3-4 stars): Which area does hotel X have its worst performance? Does it include waste management?

21. What was the adaptation/concern of hotel X's communication plan to the implemented sustainable innovations?

22. Do you feel there is pressure from stakeholders to become more sustainable?

22.1. If yes, what is the impact?

E – Final question

23. I really appreciate your collaboration which will be extraordinarily important for my work. Finally, if you would allow me, would you like to contribute some more information to enrich this theme of sustainability in the hotel business?