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**Analysis of the Actual and Potential Impact of Marine
Wildlife Tourism Operators on Marine Conservation
in the Azores**

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Abstract

Tourism operators are an essential stakeholder of the tourism industry. As such, they have a great influence on how the tourism industry is designed and which impact it is causing. The main tourism sector in the Azores is the marine wildlife tourism industry. Its main products are whale-watching and scuba diving. The marine environment in the Azores has been named as a biodiversity hotspot due to its specific characteristics, for instance the topography. However, this sensitive ecosystem is being threatened by various impacts, such as overfishing, pollution, and the anthropogenic disturbance of marine wildlife. Thus, it is interesting to investigate if marine tourism operators, who are on one side depending on a healthy marine environment and on the other side represent one of the largest industries of the area, are actively contributing to the conservation and protection of this environment.

This present study analyses the marine tourism operators actual and potential impact by elaborating on the potential areas of action as well as the challenges that these entities are facing when contributing to marine conservation. To reach these research aims, a case study, including the methods of a qualitative interview analysis and a quantitative review analysis, was performed. Finally, recommendations to overcome the identified challenges were posed. The study's main findings are that marine tourism operators are generally showing a great motivation to support marine conservation. They are primarily facing a lack of resources in the financial and workforce aspect, and a lack of support from governmental institutions. Furthermore, tourists generally do not show a high environmental awareness. This indicates an essential area of action for the operators.

Key words: marine tourism industry, marine conservation, challenges, sustainable tourism, Azores

JEL Classification System: Z320: Tourism and Development (Environmental Tourism); Z320: Tourism and Development (Tourism and Development)

Resumo

Os operadores turísticos são uma parte interessada essencial da indústria do turismo. Como tal, têm uma grande influência na forma como a indústria do turismo é concebida e no impacto que está a causar. O principal sector do turismo nos Açores é a indústria do turismo de vida selvagem marinha. Os seus principais produtos são a observação de cetáceos e o mergulho. O ambiente marinho dos Açores foi designado como um hotspot de biodiversidade devido às suas características específicas, por exemplo, a topografia. No entanto, este ecossistema sensível está a ser ameaçado por vários impactos, como a sobrepesca, a poluição e a perturbação antropogénica da vida selvagem marinha. Assim, é interessante investigar se os operadores de turismo marinho, que, por um lado, dependem de um ambiente marinho saudável e, por outro, representam uma das maiores indústrias da zona, estão a contribuir ativamente para a conservação e proteção deste ambiente.

O presente estudo analisa o impacto real e potencial dos operadores de turismo marinho, desenvolvendo as áreas potenciais de ação, bem como os desafios que estas entidades enfrentam quando contribuem para a conservação marinha. Para atingir estes objectivos de investigação, foi realizado um estudo de caso, incluindo os métodos de análise de entrevista qualitativa e de análise de revisão quantitativa. Finalmente, foram apresentadas recomendações para ultrapassar os desafios identificados. As principais conclusões do estudo são que os operadores de turismo marinho mostram, em geral, uma grande motivação para apoiar a conservação marinha. Deparam-se sobretudo com a falta de recursos financeiros e de mão de obra, bem como com a falta de apoio das instituições governamentais. Além disso, os turistas não demonstram, em geral, uma grande consciência ambiental. Isto indica um domínio de ação essencial para os operadores.

Key words: sector do turismo marítimo, conservação marinha, desafios, turismo sustentável, Açores

JEL Classification System: Z320: Tourism and Development (Environmental Tourism); Z320: Tourism and Development (Tourism and Development)

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1 Introduction

1.1 Introduction

Marine ecosystems worldwide are of severe importance for the worlds' population and the overall health of our planet. However, they are continually suffering under multiple impacts, such as climate change, plastic pollution, anthropogenic use of the marine environment, extractive industries like industrial fishing and many more (Boonstra et al., 2015; Kvamsdal et al., 2023). In contrast to this, marine conservation measures are still widely underdeveloped and existing potential is not fully utilised (Rahmstorf et al., 2023). Therefore, it is essential to continually explore new ways of increasing marine conservation efforts.

The marine environment of the Azores is of significant value in various aspects. For instance, it serves as a feeding and nursing ground for several, partially threatened, marine fauna (Afonso et al., 2020). The archipelago can show various successes in marine conservation, such as an established marine protected areas network and the transition from an extractive whaling culture to a flourishing whale watching industry (Abecasis et al., 2015; J. Vieira et al., 2018). However, besides these efforts, the sensitive marine environment of the archipelago is still suffering under severe impacts such as industrial overfishing, plastic pollution, and others (Sylvia Earle Alliance, 2021).

The marine wildlife tourism industry has been proven to be a major influence on marine environments in both negative and positive ways (Duan et al., 2022). One of the many powerful stakeholders, that hold a major responsibility in how the tourism industry is being shaped, are private tourism operators and businesses (Gössling & Reinhold, 2024). Therefore, it is relevant that tourism operators recognise their responsibilities and use their potential in contributing to a positive development of conservation in their destination. However, oftentimes tourism operators face barriers that prevent environmentally-friendly behaviour and their contribution towards a more sustainable tourism industry (Gössling & Reinhold, 2024). It is therefore essential to overcome the specific challenges that marine tour operators are facing, in order to leverage further potential for marine conservation.

1.2 Aims of the Study

The aim of the current study is to evaluate the potential and actual contribution towards marine conservation by marine wildlife tourism operators in the Azores. In order to achieve this aim, several objectives have been formed. First, it is essential to visualise the current status of the marine wildlife tourism industry and current marine conservation issues as well as efforts that

are taking place in the Azores. Secondly, marine wildlife tour operators in the Azores are to be characterised as powerful stakeholders that can create a significant impact on marine conservation efforts. Thirdly, various thematic areas in which tour operators can have an impact towards conservation are identified. Lastly, barriers as well as opportunities that hinder and enhance marine conservation participation by marine wildlife tour operators are evaluated.

1.3 Research Questions

In order to fulfil the proposed objectives, several central research questions have been formed. These are the following:

- Which roles do marine wildlife tour operators take on in marine conservation efforts in the Azores?
- Which factors are hindering marine wildlife tour operators when actively contributing to marine conservation?
- Which opportunities do marine wildlife tour operators see when actively contributing to marine conservation?

1.4 Rationale

In the current research of marine conservation the output from natural sciences is considerably outweighing the output from the social sciences field (Boonstra et al., 2015). However, it is negligent to overlook this perspective, as a development towards long-term conservation can only function with the balance of the areas of ecological, social, and economical sustainability. Tourism research is an interdisciplinary field, which symbolises an essential mediator between natural and social sciences. More interdisciplinary research in marine conservation and ocean studies is urgently needed (Boonstra et al., 2015). The present study serves as a contribution to this interdisciplinary study field of marine conservation.

Furthermore, a high public interest and engagement towards sustainability and conservation can be observed. Here, a value-action gap exists, most commonly due to a lack of knowledge of the public about how support marine conservation measures (Easman et al., 2018). The tourism industry can serve as an accessible mediator between the public and marine conservation. It is therefore essential to scientifically explore this interrelation of marine conservation and the marine wildlife tourism industry, to establish measures that further engage the public in marine conservation.

The Azores are a valuable study area in this regard, as they represent an overlap of a sensitive ocean environment and a well-established marine wildlife tourism industry. It is expected

that the obtained results can partially be applied to other island destinations that possess similar characteristics. Conclusively, this study contributes to the growing body of research which engages with the potential of private, small-scale tourism businesses to work towards conservation (Gössling & Reinhold, 2024).

1.5 Methodology

To answer the research questions, a case study methodology was conducted. This includes qualitative and quantitative data analysis. Qualitative, semi-structured interviews with marine wildlife tour operators are being applied to firstly understand the perception which members of the marine tourism industry have towards marine conservation, secondly to identify the actions which they are already conducting that benefit marine conservation measures, and lastly to analyse the challenges which they are facing when conducting these and limiting them from further engagement. Interviewed tour operators include whale-watching- and diving operators, as these industries represent the largest share of the marine wildlife tourism industry in the study location (Sustainable Fisheries Group, 2019). In order to obtain a holistic understanding of the current situation, the opinions and statements of the operators are put into context to the perception of another essential stakeholder group of the marine tourism industry, the tourists, who are participating in the respective marine tourism activities. For the assessment of the tourists' perception the quantitative method of a review analysis is implemented. Here, a topic and sentiments analysis were applied.

1.6 Structure

This study is structured in a coherent way, to visualise the potential and actual impact that marine wildlife tourism operators have on marine conservation in the Azores. It begins with the introduction chapter that gives a thematic structural entry, and visualises the relevance, context, methodology, and structure of the study. Secondly, in the literature review interprets the essential terms of “wildlife tourism”, and “marine wildlife tourism”, which are defined and related to the case study location of the Azores. The current status of research, regarding these themes, is being highlighted. Thus, the literature review serves as a basis to create a larger context and understanding of the research topic. Following is the introduction to the case study, in which the study location of the Azores is explained, as well as current marine conservation issues and efforts that are taking place in the study area. The evaluation of these two fields is essential in order to form a deep understanding of the current interrelations of the marine tourism industry and marine conservation in the Azores. In chapter 3 the applied methodology is explained. This enables comprehensibility of the chosen data collection and analysis methods. Consequently,

the results of the data analysis are being visualised. In the discussion the analysed results are put into context, relating them to the literature review. Lastly, theoretical and managerial recommendations are expressed. Also, limitations of the current study are clarified and suggestions for future research are given.

2 Literature Review

2.1 Wildlife Tourism

2.1.1 Definition and Research Status

“Wildlife tourism” can be defined in various ways. It intersects several forms of the tourism industry, including adventure tourism, eco-tourism, and conservation tourism, which can partly be seen as sub forms of nature-based tourism (Hill & Gale, 2009). When managed in a certain way it can function as a contributor to sustainable tourism (Twining-Ward et al., 2018). Due to this unclear overlap of different tourism sectors scholars are hesitant to decide on one single definition for the term “wildlife tourism”. A broad definition is “tourism activities that include encounters with wild animals” (Higginbottom, 2004, p. 2). However, this definition entails several difficulties. Firstly, the definition of a “wild” animal varies among scholars but is mostly defined as a non-domesticated animal (Borges de Lima & Green, 2017). Secondly, the location of wildlife tourism activities can be either in captive, semi-captive or wild environments. Captive and semi-captive locations include amongst others zoos, aquaria, and wild parks (Higginbottom, 2004). Lastly, the intention of the tourists has to be taken into consideration. This aspect is categorised into non-consumptive and consumptive tourism behaviour. Consumptive wildlife tourism products entail suffering or even death of the wild animal. Such products are amongst others trophy hunting tourism (Higginbottom, 2004). Scholars decide according to their study area or their view on animal ethics if they include consumptive wildlife tourism in their studies. For instance, the World Travel and Tourism Council (WTTC) intentionally excluded captive and consumptive wildlife tourism in its recent study (WTTC, 2019).

In consequence of this overlap of various industries, research in wildlife tourism is a highly interdisciplinary field. It involves study areas of economics, conservation, ecology, and psychology. Due to this highly intersectional study field, there are a numerous themes that are still underrepresented in research (Borges de Lima & Green, 2017). It can therefore be seen as essential and necessary to discover wildlife tourism and its impacts more deeply in academia including all the different disciplines and perspectives.

2.1.2 Current Developments in the Industry

2.1.2.1 Scope of the Industry

Likewise to the increase of the global tourism industry, the wildlife tourism industry is growing steadily and is expected to grow at a rate of 10% per year (Twining-Ward et al., 2018; UNWTO, 2015). Thus, the global wildlife tourism industry holds a major economic value. In 2018 it took up 3.9% of the total of 10.4% global GDP which is generated by tourism (WTTC, 2019). The

overall industry income is expected to nearly double within the next ten years, increasing from 128 billion US\$ in 2021 to 219 billion US\$ in 2032 (Future Market Insights, 2021). Consequently, in some regions, wildlife tourism takes up a highly essential role for the economy (UNWTO, 2015). The importance of the wildlife tourism industry is magnified when considering the socio-economic perspective: 21.8 million jobs worldwide are created either directly or indirectly by the industry. This number amounts to 6.8% of all jobs connected to tourism (WTTC, 2019). From the demand side, the dimension of the wildlife tourism industry becomes clear when visualising that more than every 5th tourist worldwide is participating in wildlife watching activities while on holidays and six out of ten tourism excursions are involving animals (Imbsen et al., 2022; Statista Ltd, 2023).

2.1.2.2 Animal Welfare Concerns

The industry is highly dynamic and continually evolving due to the rise of various movements. One major influence on the industry is the growing concern of the public in regard to animal welfare in tourism (Essen et al., 2020). It is proven that numerous wildlife tourism products lead to considerable harm and physical as well as psychological suffering among the respective animals (Lovelock & Lovelock, 2013). A study conducted by the organisation World Animal Protection shows that over 500.000 animals worldwide are suffering under the impact of wildlife tourism (Moorhouse et al., 2015). In contrast to the prevailing animal abuse in tourism, 81% of European travellers state that they want to avoid activities that create negative impacts on the environment and wildlife (Storne et al., 2022).

The increasing public awareness pressures the industry to continually reevaluate the use of animals in tourism products and to adapt their existing products to the expectations of the tourists, the public, and new industry regulations. However, it can be seen that there is a great need for education and awareness among tourists, as there is a “dissonance between beliefs and behaviour” (Schmidt-Burbach & Hartley-Backhouse, 2020, p. 49). 80% of tourists attending wildlife tourism attractions are not aware of the negative impact which they are potentially reinforcing by visiting these attractions (Moorhouse et al., 2015). This phenomenon is defined as the value-action gap (Easman et al., 2018).

2.1.2.3 Demand Side

The recent concept of “last-chance tourism” is another contributor to the wildlife tourism industry. The continuous biodiversity crisis and the consequences of climate change on the natural environment can be seen as a major motivation for tourists to observe wildlife in their natural habitat (Dawson et al., 2011). The impending loss of charismatic megafauna and natural

landscapes in general are motivating tourists to experience these animals in their natural habitat while they are still existing (UNWTO, 2015). Although, this development can be seen as highly contradictory because it is causing further destruction in the destinations which the tourists are concerned about, it can foster pro-environmental behaviour and other aspects in the tourists, which are beneficial for conservation (Dawson et al., 2011; Groulx et al., 2016). However, it also aligns with the finding that the overall tourist behaviour is becoming more and more selfish (Canavan, 2017).

These and further movements in tourist behaviour pressure the industry to continually analyse and potentially adapt to tourist expectations. The industry has to understand the tourist, in order to fully utilise tourism's potential for conservation (Macdonald & Wester, 2021). However, at the same time it has to be aware of its impacts as the tourists are rarely conscious of the negative effects their purchasing choices are causing (Moorhouse et al., 2015). This situation stands in contrast to the finding that the majority of wildlife and nature tourists are motivated to learn about climate change and conservation (Schweizer et al., 2013). Thus, it can be assumed that there is great potential for the tourism industry to offer educational value to their visitors.

2.1.3 Marine Wildlife Tourism

Humanity is increasingly using the ocean as a space for social needs, and within this also the touristic use is increasing. One can say that the ocean is continually becoming a social space (Spalding & Suman, 2023). Marine tourism is a relatively new phenomena, if one is excluding the traditional beach holiday which has been established since the early 1900's (Orams & Lück, 2014). The marine tourism industry shows a large overlap with the wildlife tourism industry, as marine animals are popular attractions for tourists. While in the past big marine animals, so called megafauna, were predominantly mystified and perceived as dangerous they are now a main pull-factor for marine wildlife tourism. Especially, charismatic species, such as cetaceans (whales, dolphins, porpoises), elasmobranchs (sharks and rays), and other animals such as turtles, are driving the marine wildlife tourism industry (Mazzoldi et al., 2019).

Presently, marine tourism is a well-established industry, which generates high economic value. It is both one of the largest sectors of the ocean economy as well as of the tourism industry (Duan et al., 2022; Ward-Paige et al., 2020). Especially, small island regions depend greatly on the economic impact of this tourism form (Northrop, 2023). Despite the large exploit of the ocean environment, only 2.9% of the ocean are currently protected from fishing impacts (Rahmstorf et al., 2023). Like other nature-based tourism forms, also marine wildlife tourism is depending on a healthy and functioning ecosystem in the destination while at the same time its mere presence is threatening respective ecosystems. Threats to marine ecosystems caused

by marine wildlife tourism are amongst others pollution, crowding, and negative impacts on the animals' well-being (Duan et al., 2022). Marine wildlife tourism itself is extremely vulnerable to anthropogenic impacts, such as climate change, rising sea levels and overexploitation of fish populations (Sustainable Fisheries Group, 2019). Thus, it is inevitable to increase the marine environments' protection through productive marine conservation measures and to manage marine tourism more sustainably.

Juxtaposed to the threats the ocean environment is facing through marine wildlife tourism, the rise of this tourism form can also be seen as an opportunity to engage more people into ocean conservation (Allison et al., 2020). There are multiple measures to reduce the pressure that marine wildlife tourism puts on marine environments. A widespread example is the "Code of Conduct". It has been proven that guidelines such as a "Code of Conduct", can significantly decrease the negative impact that scuba and snorkelling tourism poses on coral reefs (Hunt et al., 2013). The United Nations World Tourism Organisation (UNWTO) describes various detailed strategies and approaches on how marine tourism can contribute to the sustainable development goals (SDGs). Under the category of goal 14 "Life under water", the organisation lists different steps: amongst others education and training on environmental conservation among tourism operators, increasing responsibility among tourism stakeholders, and an increase in legislation and policy measures (UNWTO, 2023).

2.2 Wildlife Tourism as a Conservation Measure

From the preceding chapters it can be seen that wildlife tourism and especially marine wildlife tourism are growing industries. There are countless examples in which tourism can be seen as an exploitation of natural resources and a risk for ecosystems and their living inhabitants. However, when managed in a sustainable way, tourism holds the potential to contribute to positive effects in conservation. Even prominent figures in animal conservation like Jane Goodall see advantages in animal tourism, when managed correctly (White Beazley, 2023).

2.2.1 Financing Conservation

Wildlife tourism has a high impact on the financial aspect of conservation. The high revenue tourism generates makes this industry one of the most important instruments in financing protected natural areas, where it is "strengthening conservation efforts and supporting sustainable development and community empowerment" (Imbsen et al., 2022, p. 9).

Despite tourism being the main financing contributor for natural parks there is still unused potential for the financing of further conservation measures. Only a small part of the income that tourism generates for natural parks is lead back into their maintenance (Balmford et al.,

2015). Additionally, natural parks are frequently confronted with financial limitations, due to insufficient governmental funding (Sgalitzer et al., 2016). Thus, tourism is an indispensable source of income to fulfil conservation goals (Hehir et al., 2022). It has been found out that the majority of natural parks is ineffective, and in some cases ecosystem health does not differ from unprotected areas (Watson et al., 2014). This shows that well organised and sufficiently funded natural area management is highly necessary, which might be achieved by increased financial contribution through wildlife tourism.

However, the dependence of natural parks on tourism revenue can lead to a critical situation in which the conservation and protection of animals becomes dependent on tourism. Ecotourism researcher Buckley visualises this relationship with the following statement: “The increasing reliance of conservation on tourism is widespread. Take tourism away and animals die” (Buckley, 2012/2012). He furthermore explains that if tourism is not sufficiently present in natural parks anymore, extractive industries like poaching will increase (Buckley, 2012/2012). This leads to the assumption that natural parks should be financed by multiple sources, in which wildlife tourism can be a powerful source of finance but not the only one.

Tourism revenue, which can be used for conservation measures, can be increased if tourism organisations effectively utilize the philanthropic behaviour of tourists. Especially in tourism, philanthropic behaviour is high due to the urge of “giving back” while travelling (Novelli et al., 2016). Within the industry, philanthropic behaviour is mostly apparent in international travel, last-chance tourism, first visitations and nature-based tourism (Hehir et al., 2022). This can be reasoned by the concept that “to protect wildlife and ecosystems, people must care about it and that people only care about what they have experienced” (Williams, 2013/2013). This notion is also commonly mentioned by conservationists, such as Sir David Attenborough. Various case studies prove that among wildlife tourists there is a willingness to pay (WTP) a higher price for the tourism product if the additional money is being directly invested into the conservation of the respective natural area and its animal species (Booth et al., 2022; Murphy et al., 2018; Pedroso & Kung'u, 2019).

Lastly, the establishment of a functioning wildlife tourism industry can also have a severe impact on the local economy, as it can be seen as an alternative to extractive industries. Extractive industries are defined by their unsustainable use of natural resources and through this oftentimes cause harmful consequences for the local environment, its animals, and people (Okoro, 2019). It is increasingly recognized that charismatic megafauna species are more valuable alive than dead, which could serve as an incentive for communities to further develop the wildlife tourism industry and to decrease more exploitative traditional industries (Booth et al., 2022).

The economic move towards wildlife tourism is not only impacting local conservation and ecological sustainability but can also be utilized as a tool for social sustainability and community development. Higginbottom (2004) states that “recreation-related” industries generate five times greater employment and ten times greater economic benefits than industries that rely on the exploitation of resources. This links directly to community development through tourism which is described in the following chapter.

2.2.2 Community Impact

Also from the social perspective, wildlife tourism takes on a major role. It has been seen that tourism can function as a valuable tool for sustainable community development and long-term poverty alleviation (Croes, 2014). This is especially apparent in rural and island destinations, which are not equipped with abundant economic opportunities (Okoro, 2019). In these destinations community-based tourism is a common practise and functions as a sustainable alternative to mass tourism (Giampiccoli et al., 2020; López-Guzmán et al., 2011). As mentioned before, wildlife tourism mainly takes place in rural areas, which leads to the overlap of these two tourism forms. Stone & Nyaupane define this intersection as “wildlife-based community tourism”, aiming to connect conservation goals with improved community livelihood (Stone & Nyaupane, 2018). However, these goals have also been seen as conflicting in several case studies (Karanth & DeFries, 2011).

Even though tourism is a powerful economic tool, it is essential that it is only being used as a “supplemental income” (Dodds et al., 2018, p. 1547), as economic dependence on tourism is highly probable. This is also amplified by the frequent failure of revenue-sharing schemes. These schemes aim to direct revenue generated by tourism products, especially in natural parks, back into local communities. However, “distributional issues” (Booth et al., 2022, p. 1) often-times cause the failure of these schemes leading to a situation in which ecotourism has “mainly benefited local governments and private sector leaving limited benefits to local people” (Sabuhoro et al., 2021, p. 2). When revenue-sharing schemes do not succeed and local community members are facing poverty, there is a tendency to turn back to exploitative behaviour. In these cases the natural resources of the adjacent natural park are often being exploited for profit or for mere survival (Sabuhoro et al., 2021).

Possible social consequences of the establishment of wildlife tourism and natural parks are amongst others a top-down approach, exclusion of locals and prioritisation of nature over people (Bluwstein, 2017; Wieckardt et al., 2022). Additionally, power imbalance and loss of livelihoods can occur (Black & Brandful Cobbinah, 2018; Marijnen, 2022; Wondirad et al., 2020).

Thus, ecotourism projects that take place in protected areas carry the risk of leading to the opposite of the desired outcomes: negative attitudes towards conservation among the local community, discontent, conflict, and even violence (Ojeda, 2012; Wieckardt et al., 2022).

Also in the marine context, the establishment of tourism can interfere with the local communities, such as the fishing industry. Such a development has been observed in various locations, for instance Zanzibar Island (Benansio et al., 2016). However, if the fishing community is directly involved in tourism products, it is oftentimes beneficial for them. A clear pattern which can be observed frequently, however, is that the communities which are low in income and education benefit the least from tourism development (Su et al., 2017). Various factors, such as the lack of skills, make it hard to move employment from the fishing industry to the tourism industry.

2.2.3 Scientific Impact

Marine wildlife tourism can be a significant contributor to scientific research about the marine environment and marine animals. Sufficient knowledge about the ocean is still lacking (Enevoldsen et al., 2024). Marine wildlife tourism operators can take on an important role here, as they can collect a variety of different data during their offered tours. For instance, wildlife watching tours can be used to collect data on animal movements through photo-identification projects, whereas diving operators can collect observation data. An impactful example shows the case of the “Great Fiji Shark Count” in which 39 dive operators collaborated in a five-year data collection project of shark abundance and spatial patterns. This specific kind of data was not collected before and therefore contributed to valuable novel knowledge (Ward-Paige et al., 2020).

It can be seen that citizen science is a commonly used approach in wildlife tourism, as it has the potential to collect scientific data despite limited financial resources as well as to engage the public into conservation work (Silvertown, 2009; van der Velde et al., 2017). Science is expensive and the necessary funds are often not available, especially in the marine environment. Thus, tourism can be beneficial because it provides financing and workforce in science. The definition of “citizen” includes all members of society, such as amongst others tour operators, tourists, and locals. Citizen science takes up a large part in data collection for research and it has been stated that a majority of research projects can only succeed with the participation of citizens (Silvertown, 2009). Especially, in the marine environment citizen science is highly relevant, as regular access to the ocean by researchers is oftentimes not guaranteed (Thiel et al., 2014).

A connection of citizen science and marine wildlife tourism products is widely common and useful to accumulate necessary data for conservation efforts (P. V. R. d. Santos & Bessa, 2019). However, when engaging in citizen science projects, researchers have to ensure scientific quality of the collected data, as citizens are mostly not trained in a science background and therefore need clear guidance and support when collecting the data (van der Velde et al., 2017).

2.2.4 Education and Environmental Awareness

Besides the previously mentioned conservation outcomes of wildlife tourism, this industry also functions as a “powerful driver [...] to raise public awareness” (Mazzoldi et al., 2019, p. 2). An effect of a sustainably managed wildlife tourism industry includes that the local population recognizes the social and economical benefits which can be derived from an intact environment. This situation can lead to a higher awareness of conservation issues and interest in wildlife protection among the local community (Higginbottom, 2004). Thus, valuable local stewardship for nature and wildlife can be reinforced.

Parallel to the notion that wildlife tourism can enhance conservation engagement within the local community, it also holds the potential of enhancing environmental education and awareness among tourists themselves. It has been found out that marine wildlife encounters such as whale watching can increase pro-environmental behaviour in tourists (Hoberg et al., 2021). Furthermore, wildlife tourism experiences can draw awareness to oftentimes overlooked issues, which can be seen by a case study carried out on basking shark tourism in Ireland. It shows that especially commonly unknown species can benefit from the attention that is given to them by wildlife tourism (Gray et al., 2022). Also, previously established opinions and perceptions of tourists about certain species can change when experiencing them in their natural habitat (Mazzoldi et al., 2019). The combination of education and entertainment, which is often aimed for in wildlife tourism products, is defined as edutainment (Pratt & Suntikul, 2016). To create a long-term impact on the pro-environmental behaviour of the tourists through edutainment, tour operators must consider certain aspects and overcome various challenges in “finding an ethical, workable, and profitable balance” (Essen et al., 2020, p. 13). Thus, tour operators must be aware of the potential impacts of their offered products on tourists and create ways to further enhance the engagement. Pratt and Suntikul (2016) suggest employing mainly local tour guides on wildlife watching tours, which enables another layer of educational value in regard to local culture. They conclude that to achieve a holistic edutaining product it is “imperative that there is interpretation [...], education, and interpretation signage, and interpretation training for the guides” (Pratt & Suntikul, 2016, p. 881).

2.2.5 Conservation Measures by Private Tourism Operators

2.2.5.1 Awareness and Sense of Responsibility

As evaluated in chapter 2.1, numerous wildlife tourism products lead to physical and psychological suffering among the respective animals. Furthermore, as mentioned in 2.1.2.3, the desire of experiencing threatened species and remote natural landscapes is increasing among wildlife tourists, which creates a continuous pressure on already vulnerable ecosystems (Higginbottom, 2004). Thus, there are countless situations where wildlife tourism and by broader definition ecotourism causes the opposite of its actual goal; damaging the environment in which it is taking place and which it set out to protect (Duffy, 2010). A major influence on the management of tourism, and thus a significant contributor to a potentially positive impact, is the private sector. Private tourism businesses have “enormous potential to protect and restore nature” (Imbsen et al., 2022, p. 15).

Even though there seems to be a large understanding among tourism businesses that action towards environmental issues is highly urgent, industry activism is still lagging (Imbsen et al., 2024; Schmidt-Burbach & Hartley-Backhouse, 2020). This can be seen clearly by the results of a recent study conducted by the WTTC. It shows that only 34% of observed tourism businesses have a business policy on animal welfare (Imbsen et al., 2022). Furthermore, the study found out that the „appreciation of the importance of animal welfare [by tourism businesses] is still developing” (Imbsen et al., 2022, p. 31). Additionally, it can be seen that negative impacts on welfare and conservation caused by wildlife tourism often go unnoticed by tourists (Moorhouse et al., 2015). Thus, it can be assumed that even though there is a responsibility in the provider of wildlife tourism products to clarify and educate about potential negative impacts, this responsibility is not fully recognised yet. The impactful role that private businesses take on in society is visualised by the finding that they are being more trusted by the public than governments and thus have more power and potential in engaging people into conservation efforts (Edelman Holdings, 2022).

Also from the business’ perspective it is essential that environmental activism is being increased. As previous research has put it: “for tourist organizations, being perceived as sustainable is not just a competitive advantage, but a key factor for business survival and development” (Cavalcante et al., 2021, p. 1). Imbsen et al. (2022) is even assuming that it might become legally required for businesses to report their impact on biodiversity. This further shows the need for private tourism businesses to engage in conservation measures.

2.2.5.2 Barriers

It can be said that research regarding barriers for wildlife tourism businesses to contribute to conservation is still limited. However, findings from literature regarding conservation engagement from private businesses in general can be applied. Several common barriers in regard to climate change mitigation by small and medium-sized tourism companies have been analysed (Gössling & Reinhold, 2024). Comparing these findings to other research in the field, such as thematic reports by WTTC, it can be assumed that they can largely be applied to tour operators in the wildlife tourism industry contributing to conservation efforts as well.

The major barriers for “actions for nature” are a lack of financial and staff resources, and a lack of knowledge and understanding about how to implement conservation actions (Imbsen et al., 2024, p. 11). This finding is reinforced by Hoogendoorn et al. (2019), who stated that businesses aiming for a sustainable model, encounter higher financial barriers than regular businesses (Hoogendoorn et al., 2019). Reasons that are limiting conservation action can be divided into internal and external. External reasons are amongst others, movements that are coming from the market and the government. In the market perspective it is a concern of businesses to be accused of greenwashing when implementing environmental-friendly measures. From the government perspective it is observed that not enough regulations and control mechanisms are existing, which could serve as an orientation and incentive for businesses (Gössling & Reinhold, 2024). Tour operators are lacking support on the implementation of conservation measures and wish to collaborate with governments. Also, tour operators are not fully aware of the opportunities that they have “to make a positive contribution to nature protection and restoration” (Imbsen et al., 2022, p. 31).

The finding that a lack of knowledge exists, aligns with Northrop’s (2023) statement that a common challenge for conservation activism is the isolated approach within the tourism industry. It has been found that leadership and innovation exist around most destinations, however, it is not being shared. Knowledge sharing of both successes and failures could advance sustainability through tourism at a faster pace (Northrop, 2023).

It can be concluded that the most striking barriers for conservation actions are the lack of knowledge and awareness, lack of financial and staff resources, and lack of external support.

2.2.5.3 Strategies

In order to shift the wildlife tourism industry towards a positive force for conservation, it is essential that the barriers and challenges mentioned in 2.2.5.2 are overcome and tour operators are enabled to utilize their full potential towards conservation. To achieve this situation, there

are various strategies that can be applied. However, wildlife tourism products are highly individual, differing in environment, activity and use of animals. Its impacts are “ambiguous and context dependent” (Macdonald & Wester, 2021, p. 199). Therefore, it is difficult to generalise management approaches (Borges de Lima & Green, 2017). Consequently, it shows the importance of regular assessment of the businesses’ “nature-related risks and impact” with a “customised approach” (Imbsen et al., 2024, p. 5).

Certainly, the biggest impact that wildlife tourism operators can have towards a sustainable tourism industry, is excluding products from their portfolio that create negative impacts (Imbsen et al., 2022). Furthermore, as visualised in the chapters 2.2.1-2.2.4, there are also several strategies for managing wildlife tourism in a way that benefits conservation, such as involving the community and offering educational value. Thus, factors that have been proven to be of a high importance for a successful and impactful wildlife tourism concept are high community involvement and stakeholder collaboration (Twining-Ward et al., 2018). Regarding the latter, it has been found out that NGOs are the most supportive of sustainable development compared to other actors (Wondirad et al., 2020).

Implementing a sustainable business model, further indirect positive impacts can be enabled. For instance, Gössling and Reinhold (2024) state that business operators that feel positive towards pro-environmental management can also influence their staff with this mindset.

In regard to the tourists’ behaviour, tour operators have great power to create influence. As mentioned in chapter 2.1.2.3 tourists are oftentimes struggling to identify truly sustainable tourism products (Moorhouse et al., 2015). In this aspect, tour operators can help by displaying a transparent explanation of their environmental impacts (Imbsen et al., 2024). Furthermore, the role of tour operators and tour guides is continually changing. Before, they acted as “agent of service”, whereas now the role is steadily transforming into an “agent of change” (Ren et al., 2024). This bears potential in the tour guides’ abilities to create an impactful positive change on the tourists’ behaviour and thinking.

As mentioned in chapter 2.2.1, tourist philanthropy can be seen as a rising opportunity for tourism operators to collect funding for conservation. However, in most organisations this potential is not fully being utilized. This is mainly due to a lack of awareness and knowledge of how to effectively push tourists to donate. Sgalitzer et al. (2016) mention that the main aspects that push tourists to donate are trust and transparency. Place attachment has been found to be the strongest push factor for pro-environmental behaviour by tourists (Groulx et al., 2016). Concluding from this it could be said that tour operators should focus on strengthening the place

attachment among tourists. Thus, by connecting people more to nature, an increased pro-environmental attitude and behaviour can be created (Fretwell & Greig, 2019).

Finally, it can be seen that even though wildlife tourism operators are facing various barriers to conservation action, there are also several strategies and opportunities that they can pursue in order to increase their positive impact.

2.3 The Azores

2.3.1 Study Location

The Azores archipelago is very unique in its setting and characteristics and can therefore serve as a location for pilot projects in various industries (Azevedo, 2017). The ocean represents more than 90% of the Azores' territory (OECD, 2023). The economic use of the ocean in the Azores is continually increasing, which means that it is also being exposed to exploitation and thereby threatening the oceanic environment. Especially touristic use of the marine environment is increasing. Therefore, it is essential to evaluate possibilities to increase ocean conservation and to define efficient measures for the oceans' protection in the prospect of a growing marine tourism industry.

The Azores is an archipelago in the North Atlantic. Besides the archipelago of Madeira it makes up one of the two autonomous regions of Portugal (LSE & CASE, 2019). The Azores consists of nine separate inhabited islands, which together are home to 245.766 people (2015) (Azevedo, 2017). The biggest island is São Miguel, in which also the region's capital Ponta Delgada is located. The Azores is the most remote oceanic archipelago in the Northern Atlantic (Afonso et al., 2020). Together with the regions of Madeira, Cape Verde, and the Canary Islands, it makes up the biogeographical region of Macaronesia (Fernández-Palacios et al., 2011).

2.3.1 Development Status and Economy

The Azores, together with several other Portuguese regions, are defined as a less developed region within the EU (Beier & Kramer, 2018; European Commission, 2022b). The region shares common characteristic traits with other island regions, which are seen as causes for underdevelopment, such as limited natural resources, remoteness, and the small size of land (Bentz et al., 2013). Additionally, the archipelagos' isolated location increases transportation costs and impedes full integration into European trade (Azevedo, 2017). Thus, the Azores' economic and demographic factors show severe differences to the Portuguese mainland. Especially, in the field of education and employment, the Azores show great deficiencies, which can be visualised by various variables. Significant indicators are the number of early leavers from education and training in the age range of 18-24, which is three times higher in the Azores than the Portuguese

average, as well as the low percentage of tertiary education attainment. Furthermore, 62.7% of inhabitants aged 25-64 possess education which is categorised as primary or lower secondary education. This equates to a three times higher proportion than the EU average. Also, the Azores are among the regions with the highest poverty level in Portugal (European Commission, 2022a).

The lower economic development status of the area is further shown by the fact that the Azorean GDP commonly is below the Portuguese mainland GDP as well as lower than the EU average (OECD, 2023). However, in recent years it shows a higher growth rate and will presumably rise up to the mainland level in the near future (Presidência do Governo dos Açores, 2023/2023). The main economic activity is services. Agriculture, especially dairy farming, also takes up a large importance (Azevedo, 2017). Fishing represents another essential branch of the agricultural economy. With a size of around 900.000 km², the Azores possess one of the largest Exclusive Economic Zone (EEZ) in the EU (Azevedo, 2017). The Azorean fishing industry is mainly organised in small-scale artisanal fisheries and holds a high social and cultural value (ICES, 2022; Neilson et al., 2014). There is a considerable increase in the tertiary sector, due to the relatively recent increase of the tourism industry (Kueppers & Beier, 2018).

Due to the underdeveloped situation of the Azores, the region is benefitting from diverse funds from the EU, which have been invested in education, infrastructure, agriculture, and fisheries (European Commission, 2022a). Since 2004 the Azores have been categorised as an “outermost region” by the EU and are therefore part of a specific development programme (European Commission, 2022b; OECD, 2023).

2.3.3 Biodiversity Hotspot

The Azores offer a wide range of different ecological habitats with diverse characteristics. This is explained by the extraordinary geographical location of the archipelago above an intersection of three continental plates, seismic activity, and a mild climate through the Gulf stream. These diverse characteristics make the Azores an ideal habitat for an abundance of marine life, and especially marine mega fauna (Afonso et al., 2020). Marine mega fauna includes cetaceans (whales, dolphins, porpoises), turtles, birds, and large fish. These species are essential for the functioning of the ocean’s ecosystem. However, about one third of all global marine mega fauna is currently threatened with extinction (Pimiento et al., 2020).

24 cetacean species have been found in Azorean waters (Silva et al., 2014). This number equates to one quarter of the global amount of 93 cetacean species and makes the Azores a location of “one of the highest cetacean biodiversity in the world” (Afonso et al., 2020, p. 2), (IUCN - SSC Cetacean Specialist Group, 2019). Also elasmobranch populations in the Azores

have been classified as “exceptional and abundant” (Carreira et al., 2014). Furthermore, the Macaronesia region is, amongst few other regions, home to the “highest diversity of fish species” but similarly one of the “areas with the highest number of threatened species” within Europe (Nieto et al., 2015, p. 5). The Azores function as an important habitat for various marine species due to numerous reasons, for instance as nursing and foraging grounds or as resting points on migratory routes (Carreira et al., 2014; Fossette et al., 2010; Silva et al., 2014). The presence of a great number of marine mega fauna and other marine wildlife makes the Azores an essential place for their protection. If the Azorean waters are not sufficiently protected, it puts multiple species at further risk.

2.3.4 Marine Conservation Issues and Efforts

As the previous chapter 2.3.3 visualises, it is essential that the Azorean marine ecosystems are being conserved and protected. However, there are various factors that are threatening the marine ecosystems’ health. The major threats and momentarily applied instruments are being evaluated in the following chapters.

2.3.4.1 Fishing Industry

A large threat to marine animal populations worldwide is the fishing industry, which is currently operating in an unsustainable way. This can be seen by the high percentage of overfished marine stocks which reached 33% in 2015 (Vázquez-Rowe, 2020). Also, in the Azores, the fishing industry poses a major threat to marine populations. Various marine populations are suffering due to direct targeting as well as bycatch. The impact of IUU fishery (illegal, unreported, unregulated) should not be underestimated. Pham et al. state that IUU numbers can be up to ten times higher than official landing statistics. However, in the Azores the level of IUU is considered to be lower than in other locations worldwide, and mainly consisting of the catch of recreational fisheries. Another environmental impact of the industrial fisheries in the Azores are discards from the demersal fishery, as they oftentimes include endangered species (Pham, Canha, et al., 2013).

When analysing the impact of fisheries on the Azorean marine environment, it has to be differentiated between the industrial fleets of European mainland, such as Spain and Portugal, and the local Azorean fisheries community. In contrast to the industrial fisheries, the local fishing industry in the Azores is mostly artisanal and is seen as a sustainable fishery, due to the smaller scale and the use of methods that cause lesser impact (Carvalho, Edwards-Jones, & Isidro, 2011). Currently, industrial fishing is taking place through commercial fleets mainly from the Portuguese mainland and Spain within the EEZ (Das & Afonso, 2017). These fisheries

are primarily targeting swordfish and blue shark by surface longline (ICES, 2022). Longline fishing is considered to be very detrimental for biodiversity, as it creates a high rate of bycatch (Ovetz, 2006). In contrast to the local fishery, the industrial fishery is being seen as less environmentally cautious and displaying unregulated actions (Pham, Canha, et al., 2013). In order to reduce unsustainable fishery, the Azorean government introduced several limitations such as fishing quotas, minimum landing sizes, prohibition of deep-sea trawling, and reduced number of licenses for bottom longline fishing (Fauconnet et al., 2019; Pham, Canha, et al., 2013).

A species of specific concern is the elasmobranchs, as they are most vulnerable to fishing impacts (Pimiento et al., 2020). Sharks and rays are commonly captured as bycatch (R. Santos et al., 2020). Furthermore, several kinds of elasmobranch are also explicitly being targeted. Especially blue shark is a common fished species, which is being targeted even more than tuna by Spanish and Portuguese fleets. The Spanish catch accumulates up to 25% of global blue shark catches (Cappell et al., 2022). This shark species is widely apparent in the Azores and recently being used for diving tourism, through which it could presumably be protected (González-Mantilla et al., 2022).

As mentioned in chapter 2.3.1, the Azores receive large funds of the EU due to the low development status. A large proportion of these funds are subsidies for the fishery industry (Carvalho, Rege, et al., 2011). This financial support can be assessed as contradictory to the negative impact that the fishing industry is posing towards the environment. Carvalho et al. explain that a reduction in subsidies for the Azorean fishing industry would have overall economic and societal benefits (Carvalho, Rege, et al., 2011). Furthermore, a diversion from subsidies in the fishing industry towards subsidies in MPA management, is estimated to have a larger benefit for the fishing industry due to the recovery of fish stock (Ovetz, 2006).

Finally, it can be concluded that the Azorean fishing industry is in need of further regulations and limitations in order to stay at a level which is sustainable. Especially, in regard to highly vulnerable species such as elasmobranch, the respective fisheries should be monitored more strictly (Pham, Canha, et al., 2013).

2.3.4.2 Pollution

Similar to other remote oceanic islands, the Azores are exposed to an extraordinary accumulation of marine plastic waste, which amasses on Azorean shores and coastlines, as well as in the water column. Research assumes the waste reaches the archipelago through oceanic gyres. Also a large abundance of microplastics was found on Azorean beaches (Rodrigues et al., 2024). When looking at the global database “Litterbase”, it is evident that marine plastic waste is a large issue in the Azores and presents a severe threat for the health of marine animals and

ecosystems (Tekman et al., n.d.). Marine plastic waste poses severe threats for wildlife and ultimately marine ecosystems (Law, 2017). Especially for marine mega fauna, which is highly abundant in the Azorean ecosystem, plastic waste poses a potentially lethal obstacle (Senko et al., 2020).

Additionally to plastic pollution, also other materials have been found in Azorean waters. A majority of litter in deep-sea areas of the Azores consists of material which is used in the fishing industry, such as fishing lines (Pham, Gomes-Pereira, et al., 2013). Also, it has been observed that sharks are suffering under the impact of retained fishing hooks (Mucientes & Queiroz, 2019). This shows another pressure that the fishing industry is posing on marine environments in the Azores.

The sustainability agency of the Azores (Azores DMO) states that plastic consumption within the Azores is decreasing significantly due to awareness campaigns and bans (Azores DMO, 2022). This shows that awareness campaigns in the area of plastic consumption can have a substantial effect, probably due to the simple applicability in the daily consumption of consumers. However, the marine environment of the Azores is not only being threatened by local plastic pollution but also by plastic that was used in other locations and landed on the Azores due to oceanic gyres (Rodrigues et al., 2024). Thus, besides awareness efforts, also collection efforts have to be conducted. Currently, various international organisations are working towards the reduction of plastic waste in the Azores, such as IMPLAMAC and Ocean Lit Project (IMPLAMAC, n.d.; OCEANLIT, 2021). Additionally, successful marine waste collection measures on the archipelago have been implemented (Azores DMO, 2022).

2.3.4.3 Marine Protected Areas

Marine protected areas (MPA) are seen as an impactful instrument in global ocean conservation. They are essential to guarantee the health and recovery of marine species and thus bring “substantial health, social and economic benefits to coastal communities and the EU as a whole” (European Commission, 2020, p. 11). MPAs are essential for fish populations’ wellbeing, as it has been found that there is a severe increase of fish biomass in well managed MPAs (Edgar et al., 2014).

The Azores were among the first regions that pursued the conservation strategy of MPAs (Abecasis et al., 2015). It is even stated that they are the “cornerstone of Azorean marine conservation policies” (Abecasis et al., 2015, p. 8). The network of the Azorean MPAs consists of 52 MPAs within the EZZ. Even though this means that a large area of the Azorean waters are protected, it has been found out that the majority of the MPAs are not being managed and

regulated sufficiently (Sustainable Fisheries Group, 2019). This aligns with the previously mentioned finding (chapter 2.2.1) that the majority of natural parks has been found to be ineffective (Watson et al., 2014). Another consistency in research is that MPAs when not managed effectively show no difference to areas where fishing industries are not limited (Edgar et al., 2014). Considering the importance that MPAs hold in overall marine conservation, it is especially concerning that the current effect of protection within the MPA-network of the Azores is lagging (Sustainable Fisheries Group, 2019). However, there is strong local support for marine protected areas in the Azores (Abecasis et al., 2013). This suggests that pressure on legislation can be intensified by the public.

2.3.5 Marine Wildlife Tourism Industry

The marine wildlife tourism industry in the Azores is a large industry and similar in economic value to the fisheries industry (Sustainable Fisheries Group, 2019). Nature, and especially the marine environment, is a major aspect in the decision process to visit the Azores for 41% of the tourists (Queiroz et al., 2014). The industry is composed of various touristic products. These can be divided into the following subindustries: whale- and dolphin-watching industry, diving industry, and the big game fishing industry.

The largest marine wildlife tourism product in the Azores is whale-watching. 32.4% of the tourists coming to the Azores participated in this activity (Queiroz et al., 2014). The yearly generated economic income of the industry is estimated at a range of 5.5-7.3 million €, while the diving industry is estimated at 2.2-18.3 million €, and the big game fishing industry is at 2.1-4.7 million €. Considering the lower end of these ranges, the whale-watching industry generates a higher economic value than both of the other sectors combined. However, through the higher costs of diving products, this industry could economically outpace the whale-watching industry (Sustainable Fisheries Group, 2019). An extraordinary fast-paced shift of industries took place, when whaling was banned in 1984 and the first whale-watching business opened only five years later, in 1989 (Bullock, 2024; Espaço Talassa, 2024a). A technique which is unique to the whale-watching industry in the Azores, is the usage of “Viagias”. These are land-based lookouts that were used to spot whales during the whaling era. Nowadays, this technique offers a high sighting guarantee, which makes the whale-watching industry of the Azores so popular. It also shows the cultural value that is still deeply connected to the whale-watching industry of the Azores (Espaço Talassa, 2024a).

Juxtaposing the whaling industry to the whale-watching industry might lead to a skewed perception of the whale-watching industry as a highly ethical and environmentally friendly practise. But various negative impacts on the animals through whale-watching products have

been widely proven. The most present one is underwater disturbance produced by the noise of boats, which has impacts on the animals' behaviour and communication (Mazzoldi et al., 2019). Also, these activities can lead to increased stress in the animals due to wrong approaching behaviour by tour operators (Neves-Graça, 2004).

Consequently, whale-watching in the Azores is a highly regulated industry, which serves as a global industry standard. The measures used for its regulation are a limited distribution of licenses and an extensive set of rules, comprised in a Code-of-Conduct system (Sequeira, 2018). While swimming with whales is “strictly forbidden”, it is still allowed to offer swimming with dolphins activities (Sequeira, 2018, p. 4). It is assumed that swimming with dolphin activities can have severe impacts on the animals, especially the calves. Thus, these activities are under criticism, and a continuous shift in the industry towards a ban of this activity can be observed (Espaço Talassa, 2024b; Futurismo, 2022). Still, more research is needed on the impacts that animals are experiencing when being used for swimming-with-dolphins activities (Bullock, 2024; Ceccetti et al., 2019).

The diving industry in the Azores can be divided into several fields, differing in technique, location, and target. Different diving techniques are scuba diving, free-diving, and snorkelling. Different locations for diving are offshore and coastal diving. Targets for diving can differ in animal species. The most popular animal species targeted by divers are manta rays, and sharks, which are both mainly approached in offshore scuba diving (Azores Tourism, 2022). However, also snorkelling with whale sharks has gained recent popularity due to the increasing abundance of this species in the Azores (Bentz et al., 2014). Most visited offshore locations are underwater mountains, as it is there where most marine fauna aggregates due to abundant feeding options. Such seamounts are Princess Alice Bank, Condor Seamount, and Dollabarat (Azores Tourism, 2022). An emerging product of the Azorean diving industry is shark diving. It is assumed to offer high conservation and economic value, as it can provoke a shift from the extractive fishing industry to the tourism industry and attract more tourists that are engaged in conservation (González-Mantilla et al., 2022). Shark-diving is mostly conducted with blue sharks, which is a rarely used species in a touristic context (Azores Tourism, 2022). However, research assumes that this activity, likewise to other marine wildlife tourism activities, is changing the behaviour of the animals (Mazzoldi et al., 2019).

The Azores offer ideal locations for big game fishing tourism and this activity is assumed to increase in the near future (J. C. Vieira & Antunes, 2017). Even though the majority of these operators are presumably supporting sustainable catch-and-release measures, customers are also allowed to retain their catch (Sustainable Fisheries Group, 2019). This can be seen as a

contradictive behaviour. Also, recreational fisheries are posing pressure on commercial fisheries (Diogo & Pereira, 2013). Another sustainability concern regarding tourism activities that are happening in the open seas, such as shark diving and big game fishing, is the potential risk of pollution (Pham, Gomes-Pereira, et al., 2013). Further research is needed to investigate the overall impact of big game fishing in the Azores (J. C. Vieira & Antunes, 2017).

It can be seen that the marine tourism industry of the Azores is continually changing and developing. A relatively new touristic product being offered in the Azores is free diving. Due to its novelty, there are no economic numbers available yet. The previous mentioned phenomena of last-chance tourism (chapter 2.1.2.3) can also be applied to the Azores, as there are several threatened marine mega fauna species made accessible to tourists in the archipelago. A future potential new product has been defined as the deep-sea submersible tourism (Sustainable Fisheries Group, 2019). To explore the effects on the environment of these new and potentially increasing tourism products is of interest and need for further research.

2.4 Conservation Measures through Marine Wildlife Tourism Operators in the Azores

As mentioned in chapter 2.3.5, in the Azores marine wildlife tourism operators are mainly whale- and dolphin-watching companies and scuba diving operators, which can be categorised as small-scale operations. From an industry perspective, the significant and continuous growth of the marine wildlife tourism industry in the Azores requires critical analysis of its impacts and opportunities (Sustainable Fisheries Group, 2019). It also demands the creation and application of concepts that are contributing to positive effects of the industry. It can be observed that there is a high overlap of the marine wildlife tourism industry with conservation measures of the Azores apparent.

As mentioned in chapter 2.2.5.3, the most effective measure towards conservation that tour operators have momentarily, is to prohibit any products that have negative effects on the animals. As explained above, this process has been and is still taking place in regard to the touristic products of swimming with cetaceans. At the moment, continually more operators are distancing themselves from the activity of swimming with dolphins, for instance Futurismo and Espaço Talassa (Espaço Talassa, 2024b; Futurismo, 2022).

The increase of marine tourism operations in Azorean waters can create source for conflict with the long-established fishing industry. However, the Azorean fishing industry is also motivated to work towards conservation, which can be seen in their achievement of becoming a plastic-neutral industry, their efforts in collecting marine plastic waste, and their support of stricter regulations (IPNLF, n.d.; Neilson et al., 2014). Also, it has been found that the majority

of the fishing community supports the development of tourism (Abecasis et al., 2013). Thus, there is potential for the two industries to work together to enhance conservation efforts. It has been found that fishers work together with diving operators in Santa Maria Island for the product of snorkelling with whale sharks (Bentz et al., 2014). Further potential collaboration has not been assessed in research yet and it can therefore be assumed that it is not fully utilised yet.

As stated in chapter 2.3.5, the majority of the Azores MPAs lacks in effectiveness. In accordance with the finding of chapter 2.2.1, that natural parks and areas are mostly underfunded, this is also the case with Portuguese MPAs (Horta e Costa et al., 2017). Marine wildlife tourism can take on a critical role for the financing of the Azores MPA-network. This is not fully utilised yet (González-Mantilla et al., 2022). Also considering that one of the largest sectors of marine wildlife tourism in the Azores is the scuba diving industry, there is a high potential to utilise WTP of scuba divers, as they show a generally higher motivation than other types of tourists to donate towards marine conservation (Daly et al., 2015). A recent study evaluates that there is a continuously increasing WTP from shark divers towards shark protection (González-Mantilla et al., 2022).

In order to effectively pursue conservation measures, the biology and behaviour of marine animals has to be known. However, several species are considered as data deficient, due to a lack of data on behaviour and other scientific aspects. Especially sharks and other large predatory species lack population data (Afonso et al., 2020). The lack of data hinders measures to achieve protection for the species. Data collection of cetaceans is costly and high operational effort, therefore there is a severe knowledge gap (Silva et al., 2014). Due to the high abundance of several cetacean species in the Azores, this issue is of high relevance for the region. Regarding the scientific impact of marine wildlife tourism in the Azores, it can be observed that citizen science projects are a widely applied conservation measure in the area. For instance, projects like “Manta Catalog” and “MONICET” largely depend on the efforts of tour operators to collect data about various marine animals (González García et al., 2023; Manta Catalog, 2023).

Also in regard to the local community, marine wildlife tourism in the Azores can be applied positively. Recent research found out that ocean literacy is still low in the Azores (Costa et al., 2024). Therefore, besides the educational value that marine wildlife tourism products offer for the tourists, there is also high potential of education measures for the local population. As mentioned in chapter 2.2.1, it is acknowledged that megafauna is more valuable alive than dead. This is especially true for marine animals (Booth et al., 2022). This notion can be seen as a potential development in the Azores, as it can provide higher economic value for the communities while also limiting fishing impacts.

Further actual and potential conservation measures by marine wildlife tourism operators in the Azores will be analysed and discussed in the following chapters.

3 Methodology

3.1 Research Hypothesis and Conceptual Framework

Deriving from the literature review, two central research hypotheses can be formed:

H1: Marine wildlife tourism operators in the Azores can create an essential impact in marine conservation through the application of diverse measures in the fields of natural area protection, education, research, community development, and political engagement.

H2: Marine wildlife tourism operators in the Azores are being confronted with challenges in regard to lack of financial and human resources, lack of support, and lack of knowledge, which impede their contribution to marine conservation.

Through the applied case study method, it is expected that the hypotheses can be either confirmed or denied. The conceptual framework of the study is based on the assumption that marine tourism operators in the study location are working to create a positive contribution to marine conservation. This is assumed due to the results of the literature review, which show several measures are already being implemented by tour operators. These measures are being applied since recent years and in most cases have been proven successful. For instance, the scientific contribution towards MONICET and Manta Catalog photo-ID sites, and the increasing criticism on the activity of swimming with dolphins can be seen as impactful measures. A well-known contribution to marine conservation is the economical shift from a whaling culture towards a well-established whale-watching industry. The identified areas of potential contribution are natural area protection, education, research, community development, and political engagement.

However, as can be seen from the literature review, it can be assumed that similar to other tourism destinations, also in the Azores tour operators are experiencing barriers and challenges that hinder their effective contribution. Recent research has identified such challenges as the lack of financial and staff resources, lack of support by the government and the lack of knowledge on how to contribute to conservation (Gössling & Reinhold, 2024; Imbsen et al., 2024). At the moment of the writing of this study, no existing study has identified such challenges for marine wildlife tourism operators in general and especially in the Azores. Also, no existing study has examined the perception that tourists have of the contribution to marine

conservation that tour operators are creating. Therefore, the presented conceptual framework will serve as a base to close this academic gap and identify which challenges for marine tourism operators to contribute to marine conservation are apparent in the Azores.

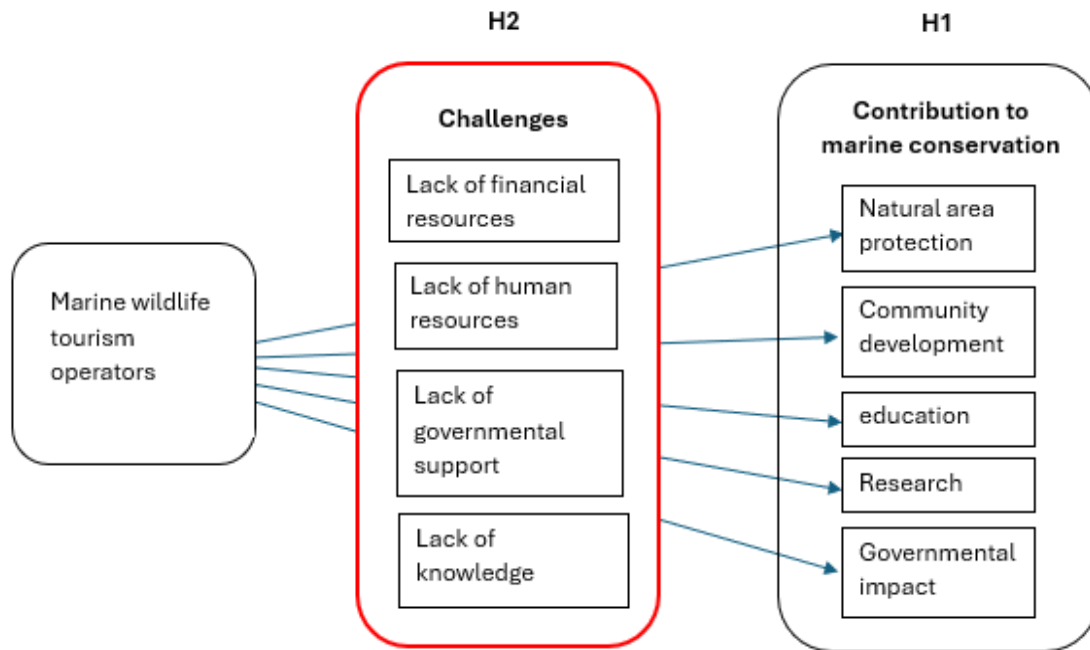


Figure 1: Conceptual framework (created by author 2024)

3.2 Interview Analysis

3.2.1 Data Collection

It was decided to conduct a qualitative interview analysis, due to the specific and individual knowledge that this method offers. It was assumed that tour operators are facing individual challenges, as their experiences are differing from each other. Therefore, a qualitative interview analysis was decided to best acquire this personal data. Suitable participants for the study were identified as marine wildlife tourism operators who are operating in the Azores. In order to connect to these participants for the interviews, various methods were applied. First, popular websites were used. These were the thematic marine tourism webpages of the official tourism destination website “Visit Azores” as well as Google Maps (Associação Visit Azores, 2022a, 2022b). On Google Maps the region of the Azores was searched for the key words “diving”, “scuba diving”, “free diving”, and “whale-watching”. From this desktop search 39 tour operators were identified. Furthermore, the same key words were applied on the social media platform Instagram. This led to another 6 potential interview participants. Of all 45 identified operators, current contact details were found for 37. Finally, these operators were contacted via e-

mail, Instagram, phone call, and WhatsApp. From this process nine interviews were organised and conducted in the time frame of March until May 2024.

3.2.2 Interview Process

For the design of the interviews, a semi-structured approach was used. This allowed for a structure and comparability of the interviews, but at the same time for a customisation and individuality (Ravitch & Mittenfelner Carl, 2021). Besides the applied interview guide, the interviewer customised the interviews with personalised follow-up questions. This is a common approach in qualitative research, as it gives the participant the possibility to share experiences and opinions which he finds relevant to the topic but are not touched upon by the interview questions. Thus, it leads to a fuller and deeper understanding of the participants' perspective (Ravitch & Mittenfelner Carl, 2021). The interviews were held remotely with the video call applications Zoom and WhatsApp. Furthermore, the vocals of the interviews were recorded with the permission of the participant, in order to be able to process the data for the analysis.

To ensure that all essential topics were approached during the interview, an interview guide was designed. This guide includes thematic areas based on the research hypotheses and conceptual framework, and uses the information gained through the literature review. Thus, the main categories of the interview guide were “conservation impact of the business”, “marine tourism industry and its conservation impact”, “shark tourism as a conservation tool”, “perceived tourist behaviour”, and “future outlook”. Furthermore, the category of “conservation impact of the business” was divided into the subcategories “conservation engagement”, “cooperation among organisations”, and “tourist engagement”. For each category, a set of questions was chosen (Appendix A.3.1). The limit of total questions was set to 25, in order to keep the interview within a reasonable time frame of maximum 60 minutes. To guarantee a productive and efficient flow of the interview, a test interview was conducted with one test participant. Through this test, questions which were very similar were able to be identified and adapted. Thus, the interview guide became more precise and concise.

3.2.3 Data Analysis

For the data analysis of the interview data the vocal data was transcribed. In order to answer the research questions of this study, solely the content of the interview was important. Thus, it was decided to simplify sentences by deleting repetitions of words and filler words. However, to ensure the accuracy of the data and to prevent a biased interpretation due to the change of the original words, everything else was exactly transcribed as the participant phrased it (Ravitch & Mittenfelner Carl, 2021)

Furthermore, the interview participants were assigned an alias to ensure anonymity and usability of the data. The aliases are assigned as follows:

Interview number	Operation	Alias
1	Scuba diving	D1
2	Scuba diving	D2
3	Scuba diving	D3
4	Whale-watching	W1
5	Scuba diving	D4
6	Scuba diving	D5
7	Whale-watching	W2
8	Scuba diving	D6
9	Whale-watching	W3

In order to analyse the data, a coding method was applied. Here, it was decided for thematic coding. This is because the aim of the study is to identify thematic categories in the form of challenges that hinder marine tourism operators to contribute to marine conservation. With the thematic coding it makes it possible to compare concepts and to identify agreements and disagreements among the participants (Ravitch & Mittenfelner Carl, 2021). Furthermore, inductive and deductive coding was applied. This means that codes were based on the interviews as well as on findings of the literature review (Ravitch & Mittenfelner Carl, 2021). For the coding process the software MAXQDA was used. Appendix A.3.2 shows an excerpt of the applied codes, to visualise how the method was applied.

3.3 Review Analysis

In order to add another perspective of an essential stakeholder group of the marine tourism industry to the case study, it was decided to include the method of a review analysis. Analysing online reviews has been proven to be an effective method to gain insights on customers' opinions on products (Wang et al., 2020). Especially, in regard to touristic services reviews take in a significant role (Menner et al., 2016). This is amongst others due to the fact that touristic services are generally intangible and as such hold certain characteristics. For instance, they are only being consumed at the same time as their production because they cannot be stored. This means that customers are not able to touch, look, or otherwise assess the quality of the product

before the point of purchase. These reasons make the customers' purchasing decision largely depending on the perception that they gain from other customers' reviews (Menner et al., 2016).

3.3.1 Data Collection

The present study is focussing on user-generated content in the form of online reviews. The reviews are being collected from the website "Tripadvisor". With 30.2 million reviews being added to the platform in 2022, Tripadvisor names itself "the largest travel guidance platform in the world" (Foley, 2023).

In order to create a usable sample of data, certain criteria were established. First, only reviews from the interviewed companies were analysed, so that a comparison to the operators' statements of the interview analysis could be drawn. Furthermore, only reviews that were written in English were considered. The data collection was conducted in July 2024, thus only reviews which were published until this date, were collected. Taking the presented criteria into account, a total of 1,442 reviews were collected (Appendix B.2; B.3). To collect the data, the "Tripadvisor Reviews Scraper", provided by the web-scraping service "Apify", was applied (Copelli, 2023). This obtained data collection is defined as unstructured data.

3.3.2 Data Processing

For the aim of this study it is particularly relevant to examine different aspects of the collected online reviews. First, it is to be evaluated if tourists that are participating in marine tourism products in the Azores are aware of marine conservation issues of the region.

In order to achieve these findings, text mining techniques are applied. These techniques are topic analysis and sentiment topic analysis, which will be visualised in the following. Both methods were conducted with the software "MeaningCloud" (MeaningCloud LLC, 2024).

3.3.2.1 Topic Analysis

First, a literature-based dictionary was created. This serves to guide the analysis in a top-down approach, and to summarise the text data into thematic clusters. Reviews were analysed without the title, as it was assumed that the title is often a summary and thus a repetition of the review. The data was analysed in the two categories of whale-watching and diving tourism, in order to draw comparisons between these touristic product categories.

To find out, whether tourists are aware of the conservation impact of operators, first a text mining analysis has to be conducted. In this way, it can be investigated if tourists are mentioning conservation impacts, that operators are applying, in their reviews. For the text mining analysis a thematic dictionary has been created. This dictionary is based on the findings of the literature review and additional literature. It assesses the themes of "Education value", Ecological

Awareness”, and “Customer engagement”. These themes have been adapted to specific aspects of the case study location when necessary. To each theme 9-11 words were applied. The difference in the number of words is due to the high similarity of various words, for instance “trash” and “plastic”. However, a similar range was considered, so that the frequency of the categories is not being affected by the number of words in each category.

The category “Environmental awareness” is applied in order to establish if tourists are aware of environmental themes, such as conservation issues. Here, the scale established by Despotović et al. was used (Despotović et al., 2021). This scale is widely used to identify ecological awareness. However, in some respects it had to be adapted to the context of the present case study, as most themes aspects are related to a persons’ behaviour in the home location, such as “recycling”.

The theme of “Animal Welfare” is included in the “Ecological awareness”-dimension. This is because it is aimed to find out the tourists awareness of animal welfare contexts within the tourism product. The topic of “animal welfare” is based on the concept of the five freedoms of animal welfare (Webster, 2005). Even though, this concept was initially designed for domesticated animals, it can serve as a basis for wild animals used for human entertainment as well. Especially, the freedoms 2-5 can be applied to non-captive and non-consumptive wildlife tourism activities, such as whale-watching. They describe that the respective animals should be free of discomfort, fear, stress, and have the possibility to express their natural behaviour (Webster, 2005). As mentioned in chapter 2.3.5, marine wildlife tourism activities can lead to stress through for instance underwater noise, injury through boat collision, and changes to the natural behaviour (Mazzoldi et al., 2019). Furthermore, the specific term of “swimming with dolphins” is included in the analysis, as this is an activity that is seen as highly critical in the case study location. Applying terms based on the connection of the five freedoms of animals with marine wildlife tourism, in the text analysis, aims to investigate if tourists are aware of both negative and positive animal welfare impacts.

The next assessed topic category is “Educational value”. This category aims to investigate the educational impact that tourists receive through marine tourism products, and whether they receive any educational value at all. This dictionary is based on the findings of Ballantyne, who elaborated how tourists take in educational inputs during wildlife tourism experiences (R. Ballantyne et al., 2007).

The last category is “customer engagement”. This category is highly essential to find out whether the marine tourism products have an effect on tourists and are for instance pushing

tourists to cognitive action or even behavioural change. For the assessment of this dimension, the scale of Hollebeek et. al was applied (Hollebeek et al., 2014).

Regarding the creation of the dictionary, it has to be kept in mind that certain words can be used in multiple different meanings. Thus, these words were left out of the analysis to prevent misinterpretation. For instance, “approach” can be related to the sustainability approach of the company but also to the proximity approach of the boats towards the animals. To identify such words, a test was conducted to investigate in which different relations they were used. “Environment” is another example. This word was often used to describe a “safe environment” indicating that the customer felt safe during the tour, which mainly relates to diving tourism. However, the test showed that this double meaning is rather seldom and therefore it is assumed that the word “environment” is mainly being used for describing notions that indicate environmental awareness, such as “environmentally friendly”.

It can be assumed that there are differences in words used for whale-watching and diving activities. This is due to the different activity design. For instance, interpretation is a common tool for enabling education during whale-watching trips but is conducted differently in diving trips. While during whale-watching trips the guide explains the animals’ behaviour etc. during diving trips the guide is limited in his explanation manners and often makes the diver aware by pointing out different animals. The list of words included in the dictionary can be found in the Appendix B.1.

Before the analysis was conducted, the dictionary was tested to ensure its validity and quality. After the test, the dictionary was adapted and improved according to the results of the test.

After conducting the topic analysis, it was possible to analyse the results. The analysis shows the frequency of the topics, which indicates how often the specific words occur in the reviews. To visualise the frequency the percentage of the occurrence of the word relating to the total reviews was calculated (Appendix B.2; B.3). This leads to findings of how important the several dimensions are for tourists, and how aware they are of certain aspects.

3.3.2.2 Topic Sentiment Analysis

In order to deepen the understanding of the tourists’ perception, the topic sentiment analysis was applied. The aim of this topic sentiment analysis is to visualise the sentiment of the customers according to the different themes found in the reviews. In this way one can evaluate if certain aspects of the tourism product are being received as positive or negative from the tourists’ perspective. For the analysis of this current study it is essential to investigate the attitude and opinions tourists have towards the conservation impact of the operators. As elaborated in chapter 2.4, the conservation aspect of tour operators is mainly based on animal welfare,

educational value, community involvement, and scientific contribution. For the conservation aspect of the MWT industry in the Azores, it is essential that the tourists are aware of the conservation impact that the operators are conducting. Only if tourists are aware of these impacts, they can benefit from it and even enhance it. Thus, the MWT industry can grow and become a more powerful alternative to extractive industries.

The software Meaningcloud calculates the sentiment assessment in 5 letters, where N- means very negative and P+ means very positive. In order to be able to calculate the average sentiment regarding a certain topic, the average has to be calculated. Therefore, the letters were transferred into numbers, following this system:

N- = -2

N = -1

NEU (neutral) = 0

NONE (software did not identify sentiment) = /

P = 1

P+ = 2

4 Findings

4.1 Tourism Industry's Perception of Marine Conservation

4.1.1 Concern about Marine Conservation by Tourism Operators

In order to estimate the impact that tour operators can have on marine conservation, their attitude and opinions towards this topic have to be elaborated. If tour operators show awareness and concern about marine conservation issues, there is a high potential that they find ways in how to contribute to marine conservation compared to if such awareness and concern would not be identified.

From the interview analysis it is evident that the majority of interviewed tour operators express a high concern about the current situation of the marine environment in the Azores (Appendix A.3.1, 1.246; A.3.4, 1.338; A.3.3, 1.71 & 231; A.3.2, 1.145; A.3.9, 1.102). This finding aligns with the finding mentioned in 2.2.5.1 that environmental awareness among tourism operators of the overall tourism industry is increasing (Imbsen et al., 2024). The majority of participants, that has been operating in the Azores for multiple years draws a comparison in regard to the abundance of the marine environment from their starting time until the current moment. Thus, they state that they can clearly see a difference in the abundance of marine wildlife. In their statements they mention that especially fish populations have been going down (Appendix A.3.2, 1.361; A.3.5, 1.130; A.3.6, 1.336). This is being visualised by the following quotes:

“There is nothing in the water now” (Appendix A.3.5, 1.130). Participant D4 furthermore explains that also the numbers of megafauna such as sharks has been decreasing (A.3.5, 1.51).

„But in 22 years, I've seen it completely declining, you know. If we have 22 years more like this, we will not see anything.” (Appendix A.3.2, 1.361).

In contrast to these statements, W3 mentions that whale numbers have been increasing in the last years, which is presumably due to the termination of the whaling industry (Appendix A.3.9, 1.97).

Overall, it can be said that the participants display high engagement and interest in marine conservation. This might be due to the fact that most operators show a very high and detailed knowledge of the regional marine biology and ecosystems. For instance, Participant D1 mentions the important function that the Azores take on in global migration patterns and reproduction patterns of marine megafauna (Appendix A.3.1, 1.73). This also aligns with the findings of the literature review (Afonso et al., 2020). Presumably, they were able to acquire this knowledge

due to their long work experience in the Azores, due to the fact that they grew up in the Azores, and due to higher level education, such as master's degrees in marine biology. Also, it is to assume that their motivation to participate in the interview already shows an interest in the topic. On the contrast it can be said that the majority of interview requests did not lead to a conducted interview, which suggests a lack of interest of marine conservation among the majority of tour operators. However, non-participation can also be due to other reasons, which are mentioned in chapter 6.2.

Furthermore, it can be seen that patriotism can lead to increased passion for conservation: *"I have this will for the island"* (Appendix A.3.4, 1.346). Participant W2 also explains that an interest and engagement in marine conservation is highly necessary for the operators, because their own business relies on the health of the marine environment (Appendix A.3.7, 1.283).

When asked about their personal actions towards marine conservation, multiple tour operators mention plastic collection (Appendix A.3.3, 1.157; A.3.6, 1.129). Participant D3 mentions that a lot of dive centres around the Azores distribute mesh bags to the divers when they take them underwater, so that they can collect trash and bring it to the surface (Appendix A.3.3, 1.157). As shown in chapter 2.3.4.2, marine plastic collection is an essential marine conservation measure in the Azores. This is especially applicable for diving operators, as they can remove plastic object directly out of the habitat of marine animals. Also, beach clean-ups can contribute to this effect. Furthermore, beach clean-ups can also have educational effects. This can partially be confirmed by the results of the review analysis, because the words connected to plastic collection are being mentioned in reviews. However, the frequency is low, indicating that there is large potential to raise awareness about this environmental issue (Appendix B.2; B.3). Participant D5 states that participating to beach clean-ups is highly time-consuming and thus not possible for her to contribute to this measure on a regular basis even though she wants to increase her contribution (Appendix A.3.6, 1.129).

Participant D4 sees large potential in using the financial results from the tourism industry to finance protected areas (Appendix A.3.5, 1.188). As mentioned in chapter 2.2.1, this is a concept which is being implemented successfully worldwide. Also participant D3 mentions that the established diving tourism industry can be used as a strategy to increase tourism in general. Both participant D1 and participant D3 suppose that the focus has to be on the increase of high-quality tourism to leverage financial assets which can be used for conservation (Appendix A.3.1, 1.147; A.3.3, 1.334).

It can be seen that in regard to specific touristic products, the tour operators have very different opinions. An obvious example for this situation is the relatively recent rise of the shark

diving tourism. Here, operators are very indifferent in regard to the welfare of the animals. Participant D4 states that the activity of shark diving is changing the animals' natural behaviour (Appendix A.3.5, 1.63). However, participant D6 negates this statement, as the sharks' behaviour remains in the natural range (Appendix A.3.8, 1.357). Furthermore, he argues that shark diving is beneficial for the species' conservation, because it increases the awareness of a potential economic shift from the extractive fishing industry towards a significantly more profitable shark diving industry (Appendix A.3.8, 1.389). Also, it can increase the emotional connection that tourists have towards these animals, which are often being perceived in a negative way (Appendix A.3.8, 1.374). This discussion shows that substantial scientific results regarding these developments are still lacking, and thus leading to uncertainty and disagreement among the tour operators.

Among the tour operators there is a high degree of frustration in regard to the topic of marine conservation noticeable. Participant D4 mentions that only in the last year there were three dive centres that closed their business because they were tired and did not feel supported in their business (Appendix A.3.5, 1.253). Further operators express their own frustration about the industry (Appendix A.3.4, 1.325). Participant D5 mentions "*I don't have that much hope*" (Appendix A.3.6, 1.353). The overarching opinion of most operators is that there is not enough marine conservation effort happening in the Azores (Appendix A.3.2, 1.241; A.3.6, 1.356). D6 mentions "*There are things that can be done that are not happening*" (Appendix A.3.8, 1.282). Tour operators agree that an essential measure to increase regional marine conservation is to implement more MPAs (Appendix A.3.3, 1.231 & 1.144; A.3.5, 1.187; A.3.9, 1.192). This aligns with the general perception of academia (Abecasis et al., 2015). These findings show the strong engagement and interest that operators have in contributing to marine conservation efforts.

In contrast to the perception of tour operators' that they display a high concern and awareness of marine conservation, it is interesting to include the results of the review analysis. The dimension of "ecological awareness – animal welfare" describes the perception which tourists have of the operators' engagement towards conservation in the aspect of wildlife. Here, the words "respect", "care", and "responsible" are mentioned in 14% of the whale-watching reviews and 8% of the diving reviews (Appendix B.2; B.3). It has to be clarified, that the word "care" in the diving reviews is also commonly used to refer to the staffs' care towards the customers instead of the care towards the environment (Appendix B.6, 1.33). In the category of "ecological awareness - environmental values" the words "sustainability", "ecological", and "environmentally friendly", which are commonly used to describe environmentally conscious businesses, are each used in less than 1% of the total reviews (Appendix B.2; B.3). This can

either indicate, that tourists do not recognize the conservation effort that companies are pursuing or that they do not pay attention to it in the first place.

Concluding from the findings, it can be said that the tour operators state that they have a high concern and engagement towards marine conservation. However, only few tourists mention this engagement in their reviews. This indicates that the tour operators' engagement is not being recognized or appreciated by tourists.

4.1.2 Industry Responsibility and Performance

Besides the tour operators' own position on marine conservation, also their perception of the industry's overall mindset towards this topic was identified. Similarly, to their personal concern about marine conservation, participants estimate that a lot of fellow companies in the marine wildlife tourism industry are also showing this concern. However, they also observe that there are companies who are prioritising profit above conservation (Appendix A.3.5, 1.273; A.3.7, 1.298). For instance, it is mentioned that there are skippers who are not trained well enough or are not as concerned about the impact they are causing on wild animals. According to several participants there are companies that violate the regulations of the industry-wide "Code of Conduct". However, participants state, that there are no procedures in place to control and to penalise incorrect behaviour (Appendix A.3.5, 1.414; A.3.7, 1.289). This deficiency can also be confirmed by the literature review in chapter 2.3.5 (Ceccetti et al., 2019). Participant W1 states that a disrespect of rules by few companies impedes the ability of others to do "*good work*" (Appendix A.3.4, 1.439).

Regarding the relationship between the operators, it can be seen that it is very ambiguous. In some cases, there is competition existing (Appendix A.3.7, 1.263). According to the interview statements, this is due the fact that some operators only think about their own business (Appendix A.3.3, 1.310; A.3.5, 1.448). However, participant W1 mentions that competition does not necessarily have to be negative: "*If it is healthy competition, I am ok with that*" (Appendix A.3.5, 1.448). It has also been stated that operators are cooperating in the daily business, for instance when one operator overbooked and needs to borrow material to fulfil his booking requests (Appendix A.3.8, 1.152).

In contrast to an existing competition in the business aspect, there is cooperation apparent regarding the topic of marine conservation (Appendix A.3.3, 1.313). According to participant W1, a healthy cooperation is essential to increase marine conservation efforts: "*There has to be cooperation and a balance between the islands, if we want to focus on protection and conservation*" (Appendix A.3.4, 1.295). This can also be confirmed by the literature review, in chapter

2.2.5.3. A cooperative relationship between the businesses is essential to create a productive knowledge-sharing for conservation efforts (Twining-Ward et al., 2018). Participant D2 mentions that this is because in this specific aspect they all have the same goal. According to him, in the case of issues and problems in the industry, the operators organise meetings with each other and have an association that is functioning as a representative of common interests and concerns in front of the government (Appendix A.3.2, 1.118).

4.1.3 Destination Marketing and Sustainability Mindset

In order to find out if the tour operators feel assured in conservation efforts by the general tourism industry, they were asked for their opinion about the sustainability management of the Azores. Here, a common negative perception was found.

In general, it can be observed that the word “sustainability” is not very liked among most tour operators because they feel that the meaning of the word is changing and thus it is becoming an “empty” word and solely being used as a marketing strategy (Appendix A.3.4, 1.618; A.3.2, 1.225; A.3.5, 1.141). Overall, participants display a negative attitude towards the industry’s sustainability efforts. D4 mentions “*They [the industry] are doing nothing in the sea about sustainability*” (Appendix A.3.5, 1.140). He enforces his statement by saying that it is in fact the “*other way around*”, thus working against sustainability (Appendix A.3.5, 1.146). This is being mirrored in the statement of participant W1, who says that sustainability is supposed to work in a cycle model, but in the Azores, he assumes that this is not happening. In his view, the Azores might be sustainable in the ecological perspective, but not in the social perspective, thus making the cycle system incomplete (Appendix A.3.4, 1.556). Several participants mention that for the Azores it is easy to declare themselves as sustainable, because the archipelago does not have a big environmental pollution, such as factories or a big industry (Appendix A.3.4, 1.548; A.3.8, 1.278). However, for the participants the definition of sustainability is different than the presumed definition of the destination organisation: “*For me the big effort to be sustainable is when you have all the conditions to not be, but you [manage] to be*” (Appendix A.3.4, 1. 560). They wish that more would be done in terms of actual conservation measures and not using the given characteristics of the Azores as a way to declare the sustainability of the region (Appendix A.3.8, 1.328).

Multiple operators state that they find the marketing and self-presentation of the Azores misleading. “*It is portrayed that people think there will be sharks and mobulas around every corner, but it’s not like that*” (Appendix A.3.5, 1.133). This supposedly results in a situation where tourists are arriving in the Azores with expectations that differ from reality, caused by skewed marketing. Also in the context of eco-labels, participant D4 is doubting the impact of

these certifications. He states that companies “*just use this label to be attractive, but they don’t do nothing about it*” (Appendix A.3.5, 1.346).

4.2 Tourists’ Perception of Marine Conservation

4.2.1 Awareness of Conservation Issues and Efforts by Tourists

Leading on from the high awareness of conservation issues that tour operators are displaying, it is essential to elaborate the awareness of tourists, who are participating in marine wildlife tourism activities.

Multiple operators agree that there is not great awareness about marine conservation issues among tourists noticeable. Most tourists “*just [...] want to dive*” and enjoy their holiday (Appendix A.3.5, 1.311; A.3.6, 1.206). D5 assumes that probably tourists are environmentally-conscious when they are in their home location. However, when they are on vacation, they do not seem to think about conservation issues (Appendix A.3.6, 1.208). This is a common phenomenon in tourism literature, known as the value-action gap (Easman et al., 2018). As evaluated in chapter 2.1.2.2, there is still a great difference between the beliefs and attitude visible from tourists in regard to animal welfare and sustainable behaviour as a whole. These findings can also be confirmed by the review analysis. As mentioned in 4.1.1, the frequency of expressions indicating environmental awareness is very low in the reviews (Appendix B.2; B.3).

D4 observes that in the selection of companies, tourists are commonly prioritising a cheaper price above conservation efforts. Thus, he sees an increase in the focus on the financial aspect, which makes it more difficult for companies to advertise their conservation projects (Appendix A.3.5, 1.312 & 1.327). Participant D3 mentions that marine conservation issues seem very abstract and far away for most people and that therefore they do not relate these issues to their personal actions (Appendix A.3.3, 1.143).

Contrastingly, participant W1 states that most people who are coming to the islands to dive are “*really concerned about the pollution, about the environment, about conservation. They are really, really concerned about that*” (Appendix A.3.4, 1.461). Also, D2 states that several tourists choose his product based on environmental consciousness (Appendix A.3.2, 1.61). W1 even assumes that tourists who are coming to the Azores in general have the “*idea that these are islands to preserve*” (Appendix A.3.4, 1.473). This is confirmed by participant W2 who says that people who are coming to the Azores are looking for something “*authentic and sustainable*” (Appendix A.3.7, 1.58). W1 expects that if this attitude by tourists is being stabilised, it will be very beneficial for the region (Appendix A.3.4, 1.474). Additionally, participant D3 observes that there is a growing interest among diving tourists to be involved in something more than

diving, for instance citizen science projects. Though he adds that this is a minority of the clients (Appendix A.3.2, 1.137). These findings lead to the assumption that there is further potential for tour operators to raise awareness about the current critical situation of the marine environment.

W2 recognizes this potential and states that increasing environmental awareness among tourists is an important part of their work as a marine tourism operator (Appendix A.3.7, 1.62).

4.2.2 Attitude towards Animal Welfare among Tourists

A large aspect of ecological awareness in wildlife tourism, is the behaviour that tourists display towards wild animals. Despite a likely lack of awareness about general marine conservation issues, operators agree that most tourists display a considerate behaviour when handling encountered animals (Appendix A.3.2, 1.66, A.3.5, 1.403). However, here it is interesting to consider the differences in the two tourism products of diving tourism and whale-watching tourism, which are shown in the review analysis. There is a clear discrepancy noticeable between the two activities in the category of “ecological awareness - animal harm”. In whale-watching reviews this topic is being mentioned in 15% of total reviews, whereas in diving it is only being mentioned in 2% of the reviews (Appendix B.2; B.3). Regarding the theme of „animal harm” it is interesting that in 24 of the total whale-watching reviews the activity of “swimming with dolphins” was mentioned. Most tourists, that mention this activity, show a clear aversion towards this activity, which could mean that the increasing criticism of the whale-watching industry regarding this activity is successfully reaching the tourists (Appendix B.6, 1.9).

It is interesting to see that words that are indicating a negative impact on wildlife, such as “disturb”, “noise”, “chase/chasing”, “interfere”, “disrupt” are mentioned at a very low level, meaning 6% of the whale-watching reviews and 1% of the diving reviews (Appendix B.2; B.3). The lower percentage in the diving context can be interpreted to mean that negative impacts on animals in the diving context are not as visible as in the whale-watching context. This could be shown for instance, by the unequal mentioning of the words “chasing” or “noise”. It is remarkable however, that even though underwater noise caused by boats is the most common concern in marine wildlife tourism activities, this word is only mentioned rarely in both the whale-watching as well as the diving reviews (Appendix B.2; B.3).

It is also important to point out that the most frequently used word in the category of “animal harm” is “close”. Interestingly, the topic sentiment analysis suggests that it is being perceived in a positive way, as the average sentiment in this category is only slightly negative in the diving context (-0.1) and even in the positive spectrum for the whale-watching context (0.3) (Appendix B.4; B.5). Whale-watching tourists seemingly appreciate that the boats are getting close to the animals, to enable a more intense experience. However, literature has found out that

close interaction with the animals is highly disturbing (Neves-Graça, 2004). These contradicting findings show that tourists are presumably not fully aware of the animal welfare risks the tourism products hold. In the diving context the word “close” is used differently than in the whale-watching context, as it most commonly describes the location of the dive centre to either the ocean or various amenities (Appendix B.6, 1.36). Therefore, this result is not fully substantial to define the diving tourists’ awareness of animal welfare.

Also, when looking at the category of “ecological awareness” as a whole, the identified pattern continues. Words that are connected to this theme are being mentioned in 53% of whale-watching reviews but only in 25% of diving reviews (Appendix B.2; B.3). This clearly contradicts the findings of current literature, which state that diving tourists are more eco-conscious than other types of tourists (Bentz et al., 2016). It is to mention that in none of the tourist reviews the word “code of conduct” is being found. Also the word “guideline” is only mentioned twice in the total reviews. As mentioned in chapter 2.3.5, research shows that the Code of Conduct is one of the most useful instruments to ensure a high animal welfare in wildlife tourism activities. This leads to the assumption that tourists are not aware of this method.

These findings indicate a low awareness by tourists of the negative impacts that marine wildlife tourism activities are causing. This aligns with findings of the literature review (Moorhouse et al., 2015). It furthermore adds to the overall assumption that tourists do not have a high level of awareness in the topic of marine conservation.

4.2.3 Economic Power towards Conservation from Tourists

The literature review shows that an essential contribution from tourists towards conservation lies in their financial power. As mentioned in chapter 4.1.1, interview participants also agree that this is the case.

However, difficulties to leverage this financial potential are apparent. Participant D4 states that there is a movement towards a higher price sensitivity among tourists: “*People are just worried about 5€ difference and that’s it*” (Appendix A.3.5, 1.355). According to him, tourists only care about conservation, if they book a trip which is specifically designed for that cause (Appendix A.3.5, 1.335). He never had a reservation made because of the different certifications that his dive centre has (Appendix A.3.5, 1.365). Participant D5 mentions the same situation (Appendix A.3.6, 1.176). Also participant D3 states that the Azores momentarily compare themselves with low-cost diving destinations, for instance Egypt, which leads to the attraction of a price-sensitive tourist profile (Appendix A.3.3, 1.363).

As mentioned in chapter 2.2.1, it has been found out, that scuba divers display a higher WTP than other tourists (Daly et al., 2015). However, this approach has not yet been fully utilised in the Azores. Participant W2 mentions that instead of raising their own donations from tourists, they redirect them to the organisations themselves (Appendix A.3.7, 1.249). Participant W2 states that tourists have great power to create a strong impact on marine conservation. Depending on their choice of company they can financially support conservation actions (Appendix A.3.7, 1.327). She furthermore explains that also the voice of the tourists is a strong tool to change current negative structures of the industry. For instance, when tourists express their critical opinion in reviews or even towards the government (Appendix A.3.7, 1.330).

Concluding from this chapter, it can be said that the majority of tourists are not interested in conservation. This finding is reinforced by other conducted studies, such as (Buckley & Mossaz, 2018). Furthermore, tourists do not seem to recognize their power to increase sustainability and conservation efforts within the marine tourism industry, as they are mostly not aware of this.

4.3 Education and Awareness Measures

Leading on from the finding that most tourists are not aware or engaged in conservation efforts, it can be clearly shown by the literature review that education within wildlife tourism can have a substantial impact on environmental awareness among tourists and decrease the indicated deficiency. As visualised in chapter 2.2.4, a major influence that tour operators can have towards conservation is educational value, both for locals and for tourists. The majority of the interviewed tour operators is aware of this potential and sees it as a great responsibility and core aspect of their company. This is being visualised by the following statements:

- *“It’s part of our work to also increase the environmental awareness and we focus a lot on this”* (Appendix A.3.7, 1.62).
- *“I think the most important factor for [us] it’s like educating people and bringing the people, the clients, the tourists to a close contact to nature that they usually don’t have access to”* (Appendix A.3.8, 1.55).
- *“But the most important thing is that we educate people about tourism and show them what’s in the sea”* (Appendix A.3.1, 1.148).

4.3.1 Education for Tourists

Regarding the educational value of marine wildlife tourism products towards tourists, it is interesting to juxtapose the attitudes of the interview participants with the attitudes of the tourists

by including the results of the review analysis. In this way it can be estimated if the effort that tour operators are putting into education is actually being received by the tourists.

Various ways how tour operators can create educational value for their clients have been identified in chapter 2.2.4. According to the interview statements, several of these methods are being applied in the business operations. The most commonly mentioned strategies to enable educational value are briefings, explanation and interpretation of what is happening during the tour, and in some cases debriefings. Also, other methods have been mentioned, for instance by participant W2. She suggests that games are an effective learning tool on their offered tours, as “*everyone loves games*” (Appendix A.3.7, 1.96).

As mentioned in chapter 2.2.4, wildlife tourism oftentimes fails to keep up the potential for behavioural change which is being established during the visit. Therefore, tour operators can implement various different structures and strategies to keep up this movement (Roy Ballantyne & Packer, 2011).

The theme “Educational value – communication” received the highest positive average score in the topic sentiment analysis. The score is 1.5 (whale-watching) and 1.55 (diving). This is aligned with the result, that elements which can potentially lead to educational value are the highest priority for both tourism activities. In whale-watching the most mentioned category is “observation”. In this category the most frequently used word is “see”. This word appears in almost half of the total whale-watching reviews (44%) (Appendix B.2). Of course, in whale-watching the main focus of the activity is the “seeing” and “watching” of animals, so the result was to be expected. Leading on the findings of Ballantyne, it can be said that whale-watching has a high potential to enhance learning through observation. Contrastingly, in diving, education appears to happen through communication values instead of observation actions.

In both whale-watching and diving, the category of “communication” takes on a high importance. Here, the most mentioned words are “guide”, “knowledgeable”, and “professional” (Appendix B.2; B.3). This shows the significance which the tour guide embodies in both activities. It is highly appreciated by the tourists to interact with a guide who can share his knowledge about the marine world, as can be seen by the common mentioning of “marine biologist” when talking about the tour guide. The assumption can also be confirmed by the topic-sentiment analysis, which shows in both cases a polarity of 1.5 (between P and P+) (Appendix B.4; B.5). However, it seems to take on a higher relevance in the whale-watching context than in the diving context. This is clearly shown by the topic analysis. In the whale-watching analysis, the word “knowledgeable” has double the frequency than in the diving analysis (16%, 8%). In contrast, the word “professional” has a higher frequency in the diving context (21% vs. 13%) (Appendix

B.2; B.3). It is to assume that here “professional” is being connected with the diving activity itself and not necessarily associated with the biological knowledge of the tour guide. Diving is an activity that requires a high level of attention and expertise. It is to assume that diving tourists highly value the professionalism of tour operators due to the inherent risks of the activity. This can also be confirmed when looking at the category “safety”. In the diving context this category places 4th, whereas in the whale-watching context it places 7th (Appendix B.2; B.3).

From the previous findings, it can be said that the guide functions as an essential mediator to pass on knowledge to the tourists in both activities. This can be visualised by the following reviews:

- *“The guides were passionate and informative. We especially appreciated the thoughtful and ethical mindset of the company that included a debrief at the end of the experience. Very well worth the money!”* (Appendix B.6, 1.20)
- *“Lovely diving. The crew were super helpful and friendly. Dives were well planned and Our dive guide showed us loads of nudibranch. Highly recommend”* (Appendix B.6, 1.40)

As mentioned in chapter 2.2.4, it was found out that entertainment often takes on a larger role in wildlife tourism than education (Pratt & Suntikul, 2016). This theoretical implication can be confirmed by the topic analysis. The words “fun” and “enjoy” are used more frequently than the words “learn” and “explain”. Also it seems that even though the tourists take in new information they do not define this as “education”. The words “education”, “educational”, and “teach”, are used at a noticeably low number (Appendix B.2; B.3). Various tour operators, especially in the whale-watching context, mentioned that the briefing before the trip is a valuable method to convey information (Appendix A.3.7, 1.69; A.3.8, 1.86). However, the word “briefing” is only being mentioned in 6% of the whale-watching reviews (Appendix B.2). This finding suggests that tourists take in the information in a different way than what the tour operators expect. For instance, the explanations during the trip might have a higher educational value for tourists than explanations before the trip.

These findings lead to the assumption that the expectation of tour operators on how tourists take in educational value, highly differs from the way tourists actually process educational value. This discrepancy should be addressed in order to utilize the full educational potential of marine wildlife tourism products.

4.3.2 Education for Locals

A central finding of chapter 2.4 is that ocean literacy is generally low in the Azores. Thus, it has been found that there is a need for enhanced education of ocean conservation in Azorean schools

(Costa et al., 2024). This problem has also been identified among the tour operators. Two participants mention that the content that students learn at school is not connected to the direct environment around them. Participant D4 mentions the example of marine biology university students that are only rarely experiencing the Azorean Ocean, and participant W1 mentions that school children learn about the history of mainland Portugal but not about their own island (Appendix A.3.4, 1.514; A.3.5, 1.446,468). Both come to the conclusion that the educational curriculum has to more closely related to the local environment. W1 visualises: *“If you want to promote some idea of the island [...], you need to start from education”* (Appendix A.3.4, 1.518).

The main barriers for teachers to increase ocean literacy among students are “scarcity in the curricula and insufficient knowledge on the subject” (Costa et al., 2024, p. 8). Regarding the latter, several interviewed tour operators are already reacting to this deficiency by offering educational talks and other events, such as cost-reduced participation on tourism products for school students.

However, according to participant W1, awareness of ocean conservation seems to be lacking among the general public as well (Appendix A.3.4, 1.511). D6 states that he clearly sees a contradiction in this context: he defines the Azores as one of the *“most wild regions in Europe”*, however, he observes that environmental awareness among the locals is still low (Appendix A.3.8, 1.200). D6 states that the people are connected to the cultural nature, but not to the wilderness (Appendix A.3.8, 1.203). W1 visualises that there is still behaviour by the locals which shows that they are not aware of conservation impacts. He draws the comparison to the 1960s-1970s where, according to him, it was normal that Azorean inhabitants threw trash out of their car into the landscape. Nowadays, this kind of behaviour seems to be rare, but he still observes it from time to time. He says in contrast to these few locals, tourists would not display this kind of behaviour (Appendix A.3.4, 1.486). From these findings it can be said that more education about environmental behaviour is needed for local communities, also for people who cannot be reached through the school environment. Participants agree that this is an essential aspect towards a change in the perspective and behaviour of locals.

Here, tour operators also have the potential to reach audiences even outside of schools, by offering regular presentations and educational talks about the ocean environment. Initiatives like these are already conducted successfully by participants (Appendix A.3.4, 1.219; A.3.5, 1.477; A.3.7, 1.110). Also a reduction of the price for disadvantaged groups of society is a successful measure, as it makes the products of the tour operator accessible to everyone (Appendix A.3.8, 1.187).

However, even though various projects are already existing, it proves to be challenging for tour operators to increase environmental education among the public. D6 mentions that what is lacking to bridge this gap between understanding and appreciating nature while living in it, is securing financial resources (Appendix A.3.8, 1.240). Also, there are varying opinions about the effectiveness of such efforts. For instance, participant W1 states that in contrast to education for children education for grown-ups is not as effective, as he believes that once they have established their habits and behaviour, they are not going to change (Appendix A.3.4, 1.523).

To conclude, it can be found that tour operators are reacting successfully to the significant need of further education about marine conservation among schools and other public spaces. However, various challenges to increase this offer remain. The most obvious challenge in this context is the lack of financial resources, as tour operators often offer projects and products for free in order to make them widely accessible.

4.4 Research and Science

4.4.1 Collaboration with Research Projects

Similar to cooperations with schools, multiple tour operators of the marine wildlife tourism industry are also cooperating with universities in order to increase general scientific knowledge in marine conservation. There are various examples of how tourism operators can successfully contribute to science. The majority of interview participants states that they contribute to science mainly by collecting relevant data during the trips. The most mentioned method of data collection is photo-ID (Appendix A.3.4, 1.299; A.3.7, 1.129). But also other forms of data are being collected, such as pieces of squid which are floating on the surface (Appendix A.3.9, 1.241). W2 states that tour operators are a reliable source for data in regard to consistency, as they go out to sea every day (Appendix A.3.7, 1.182). Also, similar locations are being visited repetitively, which ensures further consistency of the data. A very successful example of such a partnership is a project that was supported by participant D1. He explains that in cooperation with the university and various nature conservation organisations, they were able to track and visualise the migration patterns of several animals. The findings led to the situation that the Azorean Parliament decided against mako shark fishing. This is a significant step towards the protection of this threatened species (Appendix A.3.1, 1.79).

In general, the interview participants highly value the contribution to science through their work. D1 mentions that research is the basis for long-term conservation work. Furthermore, he states that the tourism industry has large potential to enable research (Appendix A.3.1, 1.253). Also, W3 emphasises the need for scientific work: *“I think it's always important to have more*

and more information. I can tell us about our future. In the end it will be good for everyone” (Appendix A.3.9, 1.227).

An interesting development that has been observed by various participants, is that some tour operators also contribute to science due to egoistic reasons. Their motivation is coming from an economic mindset, because they expect that this contribution is creating an advantage for the business. W2 explains that tour operators understood that if the species are not being protected and are disappearing, they cannot use them for their own business anymore (Appendix A.3.7, 1.283). W1 implies that companies are using research as a way to gain money through funding (Appendix A.3.4, 1.161). It can be argued that this behaviour is abusing the cause of science and thus presumably leading to low quality results. Furthermore, W2 observed competition in the industry in the aspect of scientific projects and that some operators are not sharing the scientific data they collected: *“It sucks for science because cooperation is leading science forward”* (Appendix A.3.7, 1.263).

Additionally to the competitive mindset within the marine tourism industry in regard to research, there are also further challenges that the operators are facing when contributing to science. Participant W1 and D6 say that oftentimes business interests and research interests are conflicting (Appendix A.3.4, 1.123; A.3.8, 1.46). The tour operators are expected to contribute to research, for instance, by data collection. W1 continues that from a business perspective it is oftentimes not rationally viable to use the time and human resources for scientific data collection, as they have to be concerned about reaching their profit target and fulfilling their economical obligations. Usually research teams do not offer payment for the service that the tour operators provide. This puts the operators in a difficult position in which they wish to contribute to science, but resources are lacking. This conflict is shown in the following statement: *“So for me it is really something that I really want to be part of, but it needs to make sense”* (Appendix A.3.4, 1.145). From this statement it becomes clear, that the mindset of universities and researchers in regard to cooperation with businesses is not universal and thus prone to misunderstandings.

Another challenge is shown in the exclusion of tour operators from the complete research process. Especially, when tour operators are coming from a marine science background, they wish to be more included in the research process of cooperations with universities. Participant W1 says that the universities *“have the ideas, they have the decisions, they are going to do the data the way they want”* and do not leave room for input from the tour operators themselves (Appendix A.3.4, 1.172). This makes tour operators feel left out of the process. D5 mentions

that this exclusion decreases the motivation for her contribution to projects (Appendix A.3.6, 1.275). Also W1 feels that his work does not get valued and appreciated (Appendix A.3.4, 1.205).

Despite the apparent conflict between universities and tour operators, there is another challenge evident. As visualised in chapter 2.2.3, data collected by tour operators should be considered with limitations. W2 states that “*Our priority are the clients*” (Appendix A.3.7, 1.184). This statement also aligns with the finding of van der Velde, that the selection of the data is being influenced by their role as a service provider, mentioned in chapter 2.2.3 (van der Velde et al., 2017). Conclusively, it can be seen that the majority of the operators wants to contribute to science but often gets prevented in the process due to diverse reasons, such as misunderstandings in the relationship between universities and the operators, the pressure of doing additional work while keeping the business going, and the feeling that the effort does not get appreciated or is not valuable.

4.4.2 Citizen Science

Besides cooperative projects with universities, several tour operators establish their own projects which are often based on the concept of citizen science. Multiple interviewees state that they contribute to photo-ID and other data collection platforms with their own photo material and photos taken by their clients (Appendix A.3.7, 1.217). As mentioned in chapter 2.2.3, the contribution to these platforms is very useful for research as they provide a continuous monitoring of diverse data (Ward-Paige et al., 2020).

According to participant W2, it is rewarding for tourists when they are being part of the data collection process. Furthermore, it shows them that their money is contributing to science (Appendix A.3.7, 1.194). However, this inclusion of tourists into the scientific data collection process is only possible with certain data collections and scientific actions. A major characteristic of such actions is the obvious visibility of the action itself. Participant W2 uses the tagging of a turtle as an example for such an action (Appendix A.3.7, 1.250). Meanwhile, tour operators track other kinds of data during the trips, which is not visible for tourists. Taking the tourists’ perspective into account, it is interesting to see that the topic of “science” is fairly underrepresented in their reviews (Appendix B.2; B.3). This indicates that tourists are either not aware of the scientific data collection or they do not feel the need to mention it

D3 mentions another situation in which citizen science can successfully be used as a mediator between tourism and science. He explains his experience of a full citizen science trip in which tourists help scientists to collect scientific data during multiple days. The results of the trip had a valuable impact on the research project (Appendix A.3.3, 1.193). He suggests that projects like these can continually be established and promoted, as the interest among tourists

for these projects seems to be rising. He states that *“People want to do something during their vacation [...] that they believe is important”* (Appendix A.3.3, 1.204).

In total, it can be seen that marine wildlife tourism operators can contribute substantially to the advance of science and research in marine conservation. However, various barriers are existing and impeding this contribution. The main challenges which hinder marine tourism operators to contribute to scientific projects are the lack of human and financial resources and, in some cases, a negative relationship between the universities and tour operators. The lack of human resources is mainly noticeable during the data collection process. Oftentimes there is no time during the trip to conduct the trip and simultaneously collect scientific data. Also, the processing of the collected data is time consuming and can only be conducted outside the busy tourism season. This leads to a large delay between the submission of the data and the actual point of collection. W2 visualises this problem through her expression: *“You would have to have two jobs”* (Appendix A.3.7, 1.233). Another factor hindering a consistent data collection is the high seasonality. In the winter months, when the tours are not operating, it is not possible to collect data, due to harsh sea conditions. Furthermore, it can be seen that tourists are mostly not aware of the data collection and thus cannot benefit from this process in the aspect of educational involvement.

4.5 Perception of Community Impact

4.5.1 Economic Impact

Most participants are stating that the marine tourism industry generates significant economic value for the Azores. This aligns with the findings of chapter 2.3.5. Participants point out that the economic value is not only generated within the tourism businesses but also indirectly in other economic segments, such as gastronomy, transportation and supermarkets (Appendix A.3.1, 1.266). However, participant D6 contradicts this observation, by saying that the economic value does stay in the tourism industry and does not reach the local community (Appendix A.3.8, 1.248) He also makes clear that economic value from the tourism industry is highly seasonal and therefore not reliable (Appendix A.3.8, 1.254)

Cooperation with the local community is highly valued and seen as essential among participants. Working together and cooperating with the community, for instance in the aspect of education, *“is the part that makes us complete”*, says participant W1 (Appendix A.3.8, 1.234). As mentioned in chapter 4.3.2, especially in the aspect of education several tour operators are cooperating with local institutions, for instance schools.

An example for a more socially sustainable approach is mentioned by W2 and D6, as they explain that their companies offer their product to locals at a much lower price to locals (Appendix A.3.7, 1.119; A.3.8, 1.171). Including the community in the tourism industry and also forwarding the created benefits to them is essential when moving towards a socially sustainable development in tourism. This has been visualised in chapter 2.2.2.

4.5.2 Impact on Fishermen Community

A specific community within which the tour operators are acting, is the fishermen community of the Azores. As visualised in chapter 2.2.2, it is essential for rural destinations to create a positive connection between the community and tourism stakeholders (Okoro, 2019). Interview participants show contrasting experiences and attitudes towards the connection between the fishing industry community and the marine tourism industry community. For some participants the connection to the fishing community is displayed in positive cooperation, whereas for others it is being seen as negative relationship. Also, there is a common perception that fishermen do not recognize the importance of marine conservation and are even hindering its advance (Appendix A.3.1, 1.169).

It seems that the fishermen community, likewise to the general society, is very divided into people who want to support marine conservation on one hand and people who do not care as much about conservation work on the other hand. Participant D5 experienced both sides of this community. She states that it depends on which people you meet, and which network you create (Appendix A.3.7, 1.117). She shares a situation that she witnessed of fishermen who are not considerate about their ecological impact on the marine environment, as they left their damaged fishing net in the ocean and did not clean it up (Appendix A.3.7, 1.135). Also, participant W3 observes confrontation with members of the fishing community, for instance in regard to MPAs: *“Of course, there's always some fishermen that do not agree. They do not like the idea of protected areas”* (Appendix A.3.9, 1.192). However, he also explains that if there are protected areas, it will mean that in the future there will be more fish to catch. Thus, it will also be beneficial for fishermen, too (Appendix A.3.9, 1.196).

In contrast, participant D3 acknowledges the fishing industry's efforts in becoming more sustainable. For instance, he names the implementation and regulation of fishing quotas (Appendix A.3.3, 1.80). In his view the majority of the fishermen respects the regulations, and acts with a sense of responsibility (Appendix A.3.3, 1.92). Also W1 positively describes a project in which fishing boats are being precisely controlled to prevent illegal catch (Appendix A.3.4, 1.689). The perception that the local fishing industry is becoming more sustainable aligns with academic findings. As mentioned in chapter 2.3.4.1, research found out that the majority of

Azorean fishermen are indeed supporting conservation measures (Neilson et al., 2014). D3 confirms this, as he clearly observes a changing behaviour of the fishermen community throughout the years. For instance, fishermen are increasingly releasing species that they fished unintentionally. He says that these kinds of actions have to be “*honoured*” and promoted to ease the tension towards the fishermen community. Similarly, he points out that there is also inconsiderate behaviour happening among divers. Thus, both industries have to be looked at holistically. For tourism operators he sees the responsibility in “*look[ing] at the good examples and promot[ing] better behaviour*” (Appendix A.3.3, 1.129).

However, not every participant holds a positive opinion towards the fishing industry. Participant D4 mentions that the fishing industry is what is holding up the process of establishing MPAs. He says that they only hold on to this industry because it is needed to sustain their families. Furthermore, he criticises that the fishing industry as a whole is not sustainable in the long-term: “*You keep dreaming and you keep making holes, and the only way you keep dreaming and making holes is because it's supported by the government*” (Appendix A.3.5, 1.89). Here, it is to add that research found that the local fishery has been classified as sustainable in contrast to the international fleets (chapter 2.3.4.1). Also, D6 mentions that the local fishing community is not fishing large amounts, as they are mainly fishing for self-sustenance (Appendix A.3.8, 1.218). Thus, there has to be a clear differentiation made between the industrial fishing fleets and the artisanal local fleets.

Similarly to D4, participant W2 mentions that the mindset in the Azores is often “*old-school*” (Appendix A.3.7, 1.335). Also, W3 experiences that the older generation of the community is romanticising the past whaling industry. These findings imply that part of the fishing community wishes to hold onto traditional concepts. It also suggests that fishermen are afraid to lose their livelihoods. This is further reinforced by D1. He explains that relations with fishing communities are oftentimes strained, especially with the introduction of new products, such as shark diving. It is hard to convince the fishing industry to agree to proposed regulations, such as a fishing ban of threatened shark species (Appendix A.3.1, 1.168). In this context, also governmental structures seem to take on a powerful role. D1 suggests that politicians abuse this situation of conflict for their advantage and take on positions that are in favour of the traditional ways instead of possible innovation (Appendix A.3.1, 1.170). D4 agrees on this topic and adds that there is a powerful lobby that is representing the fishing industry (Appendix A.3.5, 1.196).

However, there is also cooperation visible between the two industries. D1 describes a cooperative project of his business: “*We provide apprenticeships for the fishermen's children to become captains and work for us in the tourism industry*” (Appendix A.3.1, 1.181). Similarly,

W3 explains that his business is working together with the son of a former whaler in the role of the lookout (Appendix A.3.9, 1.246). Also D5 is describing a cooperative relationship between her business and the fishing community (Appendix A.3.6, 1.92). It is to assume that creating employment opportunities can be a viable solution to ease the conflict, as also more human resources are needed in the tourism industry, according to W3 (Appendix A.3.9, 1.151).

Most participants agree that the industries have to work together instead of against each other and thus prioritising cooperation above confrontation. However, according to D4, their demands are so different and therefore not compatible with each other (Appendix A.3.5, 1.223). In contrast, D3 states that even though there is an obvious tension between the two industries, he is optimistic that a balance can be reached and that the industries can function parallel to each other (Appendix A.3.3, 1.98). He believes that a holistic understanding of both sides has to be achieved, so that both industries can work together (Appendix A.3.3, 1.115). This is highly necessary as *“We are all in the same space. We are all in the ocean”* (Appendix A.3.3, 1.120).

Considering the results of the review analysis, it is interesting to see that tourists are not commonly mentioning the fishing industry in their reviews. The frequency of the words “fishing”, “whaling”, and “exploit” is around 1% (Appendix B.2; B.3). This suggests that tourists do not recognize the interconnection of these two industries. It also aligns with the general low awareness of environmental issues, as visualised in chapter 4.1.1. In the few cases in which the fishing or whaling industry are mentioned, they are being romanticised (Appendix B.6, 1.16). This suggests a skewed perception that tourists have of the impact of the fishing industry. It can be said that tourists are not aware of the impacts that the fishing industry is creating for the marine environment, and they would benefit from more educational input and awareness on this topic.

In conclusion, it can be seen that the relationship between the two industries is very unstable and vulnerable. Furthermore, there are numerous conflicting opinions among the tour operators apparent. This seems to make the process of cooperation between the two industries challenging.

4.6 Perception of Governmental Action

Most interview participants are displaying dissatisfaction and disappointment when confronted with governmental actions and policy creation in regard to marine conservation measures. It can be resumed that most participants are not trusting the government and feel like they are left alone in the pursuit of marine conservation.

In general however, the perception is that the government is acting too slow and not moving forward. There are too few actions visible. Common statements are like the following:

- *“We [the tour operators] have a lot more projects than the government. [...]. The government is not going forward”* (Appendix A.3.2, 1.129)
- *“We are not fast with laws”* (Appendix A.3.4, 1.564)
- *“Nothing moves forward, nothing moves forward. You are just discussing”* (Appendix A.3.5, 1.79)

An aspect in which governmental action seems to be lacking is the regulation of the whale-watching industry. W1 explains that “Code of conduct”-guidelines were outdated until last season (Appendix A.3.4, 1.403). Literature has shown that Code of Conducts are an essential instrument in whale-watching tourism to guarantee the welfare of the animals. It is necessary that these guidelines are updated regularly, to accommodate updates of the animal rights’ movement and to increase the welfare of wild animals that are involved in tourism activities (chapter 2.1.2.2). Another essential aspect is the licensing system of whale-watching licenses. According to W1, the process to apply for new licenses is taking too long and thus hindering new companies to enter the industry (Appendix A.3.4, 1.382). The findings that governmental and political action is urgently needed has also been confirmed by other studies (Afonso et al., 2020).

Another big factor that triggers frustration among the operators is the slow process of establishing MPAs. Participant D4 estimates that the Azorean community has already been trying for 60 years to establish MPAs, but the process has not been moving forward noticeably since then (Appendix A.3.5, 1.75). This can be confirmed partially from the literature review in chapter 2.3.4.3, where it was found that Portuguese MPAs are not being managed in an effective way (Sustainable Fisheries Group, 2019). As mentioned in chapter 4.5.2, participants state that the government is afraid to lose votes from the fishermen community, which is why they hesitate to make impactful decisions towards MPAs.

Additionally to the slow movement of the government, a lack of long-term thinking is observed, which can be seen by following statements:

- *“There’s no one is looking to the future”* (Appendix A.3.5, 1.97)
- *“We are not seeing the problem far away, we see the problems after they it happened.”* (Appendix A.3.4, 1.565)

According to the participants, the short-term thinking is being exemplified by the subsidizing of the fishing industry and the parallel overcharging of the tourism industry. Participant D4 explains that the government is supporting an unsustainable industry by funding the fishing industry (Appendix A.3.5, 1.94). As mentioned in chapter 2.3.4.1, the fishing industry in the Azores receives large funds by the EU. Also, D1 mentions that by subsidizing the fishing industry, the government is enforcing an uneconomical system. According to him the fishing

industry is costing the region more money than what it can generate (Appendix A.3.1, 1.154). In contrast, the tourism industry does not receive funding and in some cases is even being overcharged. Participant D4 states that it is the “opposite way of thinking” when being compared to other islands destination as for example Madeira Island (Appendix A.3.5, 1.117).

Participant D4 mentions that important scientific information and research “*does not reach the government*” and it is therefore not available for decision makers (Appendix A.3.5, 1.159). This is also reinforced by another participants, who state that people in the decision-making process must take on information from the outside, because they lack information and experience in the field. This supposedly leads to decisions made out of pressure and not information (Appendix A.3.4, 1.322).

The frustration and disappointment from the tour operators in regard to the government suggests that they are not relying on the government anymore and are not as inclined to work towards legislative change as they would if they would experience support from the government. Thus, participant W1 wishes for a more solution-oriented communication, as he thinks that at the moment people are only talking about problems, but they should instead talk about solutions (Appendix A.3.4, 1.335). He furthermore wishes to be more included into sustainability planning on a political level: “*I want to be part of that, I want to give my word to think with them [the government], to help with them*” (Appendix A.3.4, 1.804).

Despite all the negative opinions that tour operators are expressing towards the government, participant D1 also positively mention the recent policy changes that the government made. He states that these changes were severely influenced by pressure from the tourism industry (appendix A.3.1, 1.70).

In conclusion, it can be seen that the tour operators do not trust the government and politicians to make decisions that have a positive impact on marine conservation. This lack of trust hinders a cooperation between the marine tourism industry and the government. However, such a cooperation would be beneficial as direct information and insights from the tourism industry are needed to make informed decisions, given the size and economic importance of this industry.

5 Discussion

When looking at the findings from the previous chapters, one can see that marine wildlife tourism operators are already contributing significantly towards marine conservation through various actions across different areas. Furthermore, a high potential for increased contribution towards marine conservation can be identified. However, several challenges are impeding this potential contribution. The most pressing challenges to engage further in marine conservation, which were identified, are limited resources. Especially, a lack of human resources and financial resources was found. This result aligns with the findings of the literature review (Gössling & Reinhold, 2024; Imbsen et al., 2024). In the following chapter, the identified challenges are analysed and recommendations are developed. These recommendations are aimed towards the different stakeholders of the tourism industry; the marine wildlife tourism operators, further businesses involved in the tourism industry, the regional government, the tourists and the residents of the destination. It is a common consensus that in order to create a positive impact on conservation through tourism, cooperation among these stakeholders has to exist (Twining-Ward et al., 2018).

5.1 Financial Constraints

One of the most pressing challenges, that tour operators are facing when contributing to marine conservation, is the lack of financial resources. It can be seen that this deficiency impedes the development and continuation of conservation projects, as seen in chapter 4.4.1. The fact, that conservation work often occurs without financial compensation is enforcing this situation.

Various recommendations and solutions have been proposed by the tour operators themselves to confront this deficiency. Participant D4 is addressing this issue by using a specific part of his company's income as donations and contribution to scientific projects (Appendix A.3.5, 1.290). Participant W1 emphasises the necessity of financial compensation by universities for the contribution tour operators are giving to scientific data collection. He explains that this concept is already successfully taking place in the context of cooperation with other institutions, such as schools (Appendix A.3.4, 1.211).

D4 suggests that a tourism tax should be implemented, which could be used for the financing of MPAs (Appendix A.3.5, 1.318). Tourism taxes are a common instrument to financially support natural areas (chapter 2.2.1). However, this tax would have to be implemented by the whole tourism industry and not individual companies, as this would presumably put them at a disadvantage in the market (Appendix A.3.5, 1.312). This scenario is to assume due to the

increasing price-sensitivity that has been observed by multiple operators within the industry (chapter 4.2.1).

In order to attract tourists with high financial capacity, which can be used for conservation work, it was suggested to position the Azores as a high-cost and high-quality diving destination. This strategic change could increase touristic income, which could be used for conservation measures.

Another essential aspect to increase financial resources, is the utilisation of willingness to pay (WTP). As mentioned in chapter 2.4, it has been observed that tourists in the Azores, especially diving tourists, are motivated to pay additional fees if they are being used for conservation work (Daly et al., 2015; Gonzáles-Mantilla et al., 2022). Until now, it seems like this potential is not being fully utilised by tour operators. Throughout this study it has been shown that the Azores possess a well-established scuba diving industry which has been growing constantly in recent years and also developing new high-priced products, such as shark diving (chapter 2.3.5). Gonzáles-Mantilla et al. found out that especially this new customer group displays a high WTP (Daly et al., 2015; Gonzáles-Mantilla et al., 2022).

Some of the operators, like D5 and W2, are requesting tourists for donations for other organisations. Presumably it would be more effective to establish their own philanthropic system, as this will reduce a step of action for the tourist. Thus, it would increase the probability of action of the tourists. Literature shows that international tourists are more likely to donate to conservation charities than domestic tourists (Hehir et al., 2022). This can be seen as a chance for the Azores, as the majority of tourist arrivals are international.

To utilise the full potential of WTP, tour operators should be aware of the specific dynamics of philanthropic spending amongst tourists. For example, as mentioned in the literature review, tourists are more likely to donate during their trip than after their trip. Also, when they feel closely connected to nature the likeliness of spending increases (Hehir et al., 2022). This is a great chance for the industry, as emotional engagement of tourists can be identified as high, regarding the review analysis (Appendix B.2; B.3).

5.2 Human Resources Constraints

Besides money, another resource which tour operators are lacking is human resources. As mentioned in chapter 4.4.2, participants state that in order to contribute consistently towards conservation projects, they would need more workers. Additionally, it has been identified that the region is depending on the workforce from people from outside the islands.

Another aspect where human resources are missing is within the cooperation and management of conservation projects. Multiple operators mention that the continuation of projects is challenging. Oftentimes, an intermediate is missing, who guarantees the continuation and effectiveness of conservation projects.

This deficiency could be addressed by employing more local people within the marine tourism industry. It is to assume, that this approach could also enhance environmental awareness among the local population. As mentioned in chapter 4.5.2, multiple operators have already successfully increased the engagement of local employees within their businesses, which indicates that this can be a viable solution.

5.3 Lack of Awareness among Tourists

Concluding from the overall findings, it can be said that the awareness of tourists in regard to marine conservation and sustainability issues as a whole is relatively low. The results of the analysis show that tourists are mainly concerned about their own holiday and not the environmental impact of their trip. It is severely problematic if tourists do not recognize the impact which they are causing, as it impedes the progression of conservation actions through tourist participation. It can be seen that different conservation actions of tour operators are being perceived differently by tourists. For instance, the concept of plastic collection is mentioned frequently in the analysed tourist reviews, whereas “science” is being mentioned very rarely. Thus, there is a pressing need to increase communication about already existing conservation measures and conservation topics in general. Tour operators can take on a critical role in this process, as they can function as important mediators of conservation knowledge, which has been visualised in chapter 4.3.

From the literature review and the analysis, it can be seen that tourists are also not aware of the impact that their purchased tourism activities are putting on involved animals. It suggests that operators should explain their methods and consequences of their activities more clearly and transparently to tourists, in order to increase awareness and comprehension of their own actions. Leading on from this finding, in chapter 4.2.1 the value-action gap was mentioned. In order to overcome this gap, D5 suggests that the tourists have to be informed about their potential impact on marine conservation already before they are starting their holiday, preferably in their home location (Appendix A.3.6, 1.231). A solution could be for tour operators that are contributing to marine conservation to highlight their efforts in international media, for instance in the origin countries of tourists. Most operators already participate in fairs during the winter season where they have access to the origin markets of tourists. However, there is not a lot of engagement in the topic of conservation visible among fair visitors.

Another possible solution to enhance tourists' awareness and knowledge about marine conservation in the Azores even before the trip, is to adapt the general destination marketing strategy of the destination. In the analysis it has been found that the current destination marketing might be misleading in certain aspects, as it is portraying a healthy environment. However, if tourists are aware of marine conservation issues before their trip, they can use their purchasing power in choosing a company that supports marine conservation instead of a company that is indifferent to marine conservation. Therefore, it is essential that the destination marketing does not only display the Azores as a healthy environment, but also the environmental issues the region is facing. An approach which shows the critical situation of the marine environment and by this raises awareness among tourists, could be a destination pledge, such as the well-established campaign of the "Palau Pledge". With a destination pledge, tourists have to sign a pledge on their arrival. In this pledge they acknowledge their responsibility and promise to behave in a sustainable way while they are staying in the destination (Medel, 2020). Especially islands are a very suitable location for this measure, because the majority of tourists arrives by airplane and can be required to sign the pledge for instance at the pass control. This concept can be a powerful measure to educate tourists and to hold them accountable for their actions.

As mentioned in chapter 4.2.1 tourists are not selecting the destination based on the conservation impact that they can potentially create there. Tourists are mainly choosing the Azores as a marine wildlife tourism destination because of the "*big creatures*", meaning marine megafauna such as whales, dolphins, sharks, and mantas (Appendix A.3.3, 1.221). This observation leads to the consideration that the tourism industry could utilize marine megafauna as flagship species to raise awareness among tourists about conservation impacts and how threatened these species are.

As explained in chapter 4.3.1, most interview participants see it as their responsibility to educate tourists on their trips. Considering that few tourists display a high level of environmental awareness, this is a significant contribution that tour operators have towards marine conservation and should further engage in. However, there are certain challenges identified that prevent tour operators to pass on the full educational value to tourists. For instance, the process of how tourists receive educational value is being perceived differently by tour operators than by tourists themselves (chapter 4.3.1). The review analysis shows that whale-watching tourists take in educational value mainly through observation whereas diving tourists take in educational value through communication measures. In both tourism products the tour guide is highly important as he represents an effective mediator to pass on environmental knowledge.

These findings indicate how tourism operators can adapt their education offer to increase environmental knowledge and awareness among tourists. A strong focus should be set on the tour guide, as he holds the strongest potential to convey knowledge. The point of time which is best for tourists to take in knowledge is during the trip itself instead of during the briefing. This should also be considered by operators when designing their product. Furthermore, it has been found that tourists prioritise entertainment above education. Considering this finding, an effective measure to increase educational value could be to connect theoretical inputs with entertainment, such as W2 suggests, by implementing games into the education process.

5.4 Challenges in Contribution to Science

Chapter 4.4 visualises the valuable impact that tour operators can have towards scientific research. However, also several challenges to enhance this contribution have been identified.

The most outstanding challenges are again the lack of financial resources and available workforce. As mentioned in 5.1, it is suggested that research teams should offer financial compensation for the data collection services that they are requesting from the tour.

To overcome the lack of human resources, volunteers from the local community could be recruited for field work. Likewise, the involvement of tourists into citizen science could be enhanced. This adaption would also respond to the fact that tourists are not being involved in the processes and therefore the educational value is not being fully utilised. Furthermore, these adaptations would presumably also increase environmental awareness among the local population. However, it has to be guaranteed that the collected data meets quality standards, as this is a common challenge in citizen science procedures. Literature has found that certain species are more difficult to identify than others, which makes data collection by not educated persons challenging in these cases (González García et al., 2023).

Another challenge that tour operators are facing when contributing to scientific projects is that they feel excluded of the process (chapter 4.4.1). In general, the relationship between tour operators and universities is oftentimes perceived as strained. These situations are leading to frustration and decreasing motivation to continue the cooperation. Thus, in order to create effective research work the cooperation has to be easy and sensible. The input that tour operators are offering has to be appreciated and seen as valuable. Here, a possible solution could be for the data collection projects to send out regular updates of what is happening with the data as well as reminders to tour operators that their data collection is valuable. To make the process of data collection easier and less time consuming for tour operators the websites could be adapted into a more intuitive way. For instance, the data platform MONICET created an app, which

made mobile use possible. In these ways, tour operators can be further motivated to upload their collected data.

5.5 Lack of Governmental Action

In chapter 4.6 it has been found out that tour operators commonly feel frustrated by the government's' perceived inaction. It is essential to observe and mitigate this frustration, as it can become a factor that is hindering marine conservation action.

Leading on from chapter 4.1.2 it can be seen that animal welfare policies in regard to marine tourism are not fully respected in the Azores. A common suggestion to ensure correct behaviour on sea, is that tour operators take on a reporting role, in which they report incorrect behaviour of other operators to authorities. It is to assume that this method would be easy to implement, because the tour operators are on the water everyday and therefore, they can monitor behaviour of industry members regularly. Furthermore, a compulsory trainee programme for skippers should be necessary. In regard to previously mentioned financial constraints that tour operators are facing, it should be considered if such training programmes could be funded by the government or through potential tourism taxes. A similar approach is brought forward by participant D4, who suggests the implementation of a licensing system for all tour guides that work on land and in the water with a mandatory yearly renewal. This could prevent incautious behaviour and unintentional destruction by tourism employees.

Another identified challenge in the aspect of governmental action is the fact that tour operators do not feel involved in legislative decision-processes. As W1 suggests, mediators who are representing the different industries and opinions could be applied to address this need. The idea that it is fundamental to include the community members into decision-making processes in the shaping of a sustainable tourism industry is not new, but an essential factor of the sustainable development (2.2.2).

5.6 Natural Impacts

As seen in chapter 2.3.5, the tourism industry in the Azores is highly seasonal and focusses on a short period of time. This makes it hard for operators to engage fully in conservation activities without impeding their business. It also leads to a constant lack of experience among new employees in the marine tourism industry, due to the frequent exchange of workers in the field which is generated by the high seasonality.

Furthermore, the tourism industry is very vulnerable to climate change. Especially, in the Azores, there are various changes happening in weather systems and the ecosystems, such as invasive species, temperature changes, and the increase of the water level (Appendix A.3.9,

1.207). D1 mentions that it is continually harder to find slots where the weather is good, due to the changing climate and weather situations (Appendix A.3.1, 1.190). This is a challenge which will presumably increase in the next years as temperatures and oceanic conditions are changing. Thus, marine tourism in the Azores could potentially become a more fragile industry. It is to assume that with increasing climate change, more such events will happen. This requires the tourism industry to be constantly flexible and adapting to new circumstances, by innovating new products or techniques.

5.7 Future Outlook and Opportunities

The Azores are at a critical point in their touristic development, especially in regard to the tourism forms that depend on a healthy marine environment. On one side, marine resources are declining drastically, leaving only a short time frame for appropriate conservation action. Various opinions state that tourism should be increased, in order to take advantage of the remaining resources and to likewise support their protection. On the other side, a development towards mass tourism should be avoided. It has been observed sufficiently that mass tourism brings destructive consequences to vulnerable island destinations.

Here, the participants show differing opinions. Some participants wish for an increase in tourism. It was mentioned that there has to be a shift towards a high-cost tourism product. In contrast, W1 mentions that *“If we keep this kind of tourism [where tourists are aware of the need of preservation and conservation], we are on a good path”* (Appendix A.3.4, 1.473). To succeed in this challenge, a considerate and sustainable strategy has to exist, which includes all stakeholders and puts value to the natural environment.

When looking at the successful shift that has been happening from the whaling industry towards the whale-watching industry, it is worth considering if another such event can take place, for instance in regard to the shark fishing industry. As mentioned in chapter 2.3.5, various researchers have already positively visualised such a development (González-Mantilla et al., 2022). However, if this development is being pursued, alternative livelihoods have to be created for the fishermen community. As mentioned before, such opportunities can be offered by the marine tourism industry. Contrasting to this notion, it should also be aimed towards a diversification of industries. Participant W3 mentions the risk of solely depending on tourism (Appendix A.3.9, 1.168). Therefore, it is advisable that besides the expansion of the tourism industry also other industries are being considered.

In total, there is a lot of frustration visible from the tour operators, as in their opinion, marine conservation efforts are not moving forward. Thus, rebuilding trust in major organisations

and institutions, such as the government and the tourism industry as a whole is essential to increase cooperation and thus creating long-lasting marine conservation efforts together.

6 Conclusion

6.1 Summary

The present study shows that marine tourism operators in the Azores have numerous possibilities of contributing to local marine conservation. Already successfully implemented measures and potential measures include the increase of environmental knowledge among tourists as well as locals through education, the contribution to scientific projects, and individual actions such as plastic collection. By combining these measures, long-term changes can be enforced, such as political and economic developments.

Main challenges that are impeding these conservation measures were identified as a lack of financial resources and human resources, a lack of awareness among tourists, disagreements between operators and researchers, and frustration due to governmental inaction.

Regarding the research hypotheses, it can be said that both hypotheses can be confirmed. However, the hypotheses H2 should be adapted in certain aspects. With the study it can be identified that the tour operators are not showing a lack of knowledge. In fact, the opposite can be seen. All interviewed operators show a deep understanding of the issues that the marine environment in the Azores is facing. This notion can also be confirmed by the review analysis, as tourists perceive the tour operators as very knowledgeable. Furthermore, another large aspect can be added to H2. This is the lack of ecological awareness among tourists, which was clearly identified in the study and poses a challenge for tour operators to enhance their conservation efforts.

The study successfully found answers to the research questions. It was discovered that marine wildlife tour operators take on a significant role in marine conservation efforts. This is due the fact that they have access to a wide audience, such as tourists as well as locals. Furthermore, they act as a connection between various fields. For instance, they have the opportunity to connect the public with the science environment, which is mostly inaccessible for the general public.

The factors that are hindering the operators to contribute to marine conservation are very diverse and found across all the different disciplines. The majority of the factors can be solved and minimised. However, factors such as “natural impacts” as mentioned in chapter 5.8., are mostly out of the control of tour operators. Thus, they can only work towards minimising the impact of the consequences and constantly adapting their businesses towards a changing environment.

Despite the challenges that marine wildlife tour operators are facing when contributing to marine conservation, there are also clear opportunities available. It has been elaborated that the majority of tourism businesses are concerned about the environment. Therefore, by engaging in conservation measures, the community between the operators and other stakeholders can be strengthened due to this mutual link. This can lead to a stable and impactful tourism industry. Also, when engaging in conservation measures, it is to assume that more tourists will be attracted. Thus, the tourism industry has the potential to grow and develop into a sustainable direction.

Even though the study focusses on a specific location, it can be assumed that aspects of the results can be transferred to other tourism destinations. Especially, when the location shows high similarities with the study location of the Azores, such as an island destination that possesses a large marine tourism industry, it can be expected that results can be transferred. This means, that the present study is contributing to current knowledge and the current discourse of how marine wildlife tourism can be managed more sustainably. The found recommendations can serve as inspiration and a theoretical guidance for tour operators and other members of the marine tourism industry, to achieve an increased contribution towards marine conservation with their business.

6.2 Limitations

The study shows certain limitations. Considering the qualitative data collection, the main limitation is the low number of interview participants. The nine participants only represent a small portion of the whole marine wildlife tourism industry of the Azores. This low share is presumably due to various reasons. First, the listings on the internet might not be up to date and show operators, that are not active anymore. Consequently, new operators, that only opened their business recently might not be shown online and are therefore not possible to be identified remotely. Furthermore, tour operators might assess themselves as not suitable or competent enough for the interview. The latter is evident from various replies received by operators, who state that they are lacking experience in the marine tourism industry in the Azores and therefore do not want to participate in the interview. Thirdly, it is to be assumed that mainly tour operators who already have an interest in marine conservation and feel an urge to contribute to research, replied positively to the interview request. Operators, which are not interested in this field, presumably did not react to the requests. This might lead to biased results. Similarly, the majority of the interviewed participants have a background in marine biology, which might again lead to a biased opinion towards marine conservation. Another reason for limited response on the

interview requests could be the timing of the interview period, as it took place during the preparation and start of the tourism season. Therefore, tour operators might not have any time capacity available.

To overcome the limitations various actions were taken. Interview requests were individualised, aiming towards a higher answer rate. Follow-up messages were sent to prevent not obtaining a reply due to overseen requests or the spam folder. Also, if a tour operator did not reply to the first request, another channel of communication was used. This change was mainly from email communication to WhatsApp communication, as it was assumed that tour operators use mobile messenger services such as WhatsApp more regularly than email services.

The research focussed on the two stakeholder groups that are directly involved in the creation of marine tourism products, which are the tour operators and the tourists. Due to the limited scope of this analysis, further stakeholder groups were not assessed in detail. However, this shows certain limitations as implementing another perspective, such as the residents' opinions, would have added more depth to the analysis. It is to assume that to interview big game fishing tour operators would have led to further insights, because they take in a large share of the marine wildlife tourism market. Thus, including further perspectives, opinions, and points of view can be seen as a suggestion for future research.

As mentioned above, it is to expect that the results of the study can be transferred to other island destination which have a well-established marine wildlife tourism industry. However, there are certain aspects that are individual to the Azores, which limits the study's transferability. First, the geographic and biological set-up of the Azores creates a unique habitat with specialised characteristics, which is not existing like this in many other locations. However, in certain aspects the Azores also show similarities to other island destinations, such as the economic underdevelopment and lack of funding, isolation and remoteness.

A limitation of the review analysis is, that scales for the assessment of sentiments and perceptions regarding the tourists' perspective are rarely existing. Therefore, existing scales had to be adapted to the tourism context. Here, the necessity of creating such scales related to the tourism context becomes clear, as these will be required for further impactful research. With the proposed research tourism products can continually be more shaped to the tourists' behaviour and thus enhancing the impact of conservation measures.

A general limitation of a topic analysis is that only the precise words that are indicated in the dictionary can be detected by the system. Words and expressions that are synonymous with indicated words, are not being considered. This limitation was confronted by using a large list of possible synonyms. However, due to the large number of reviews and a certain subjectivity

that is involved when creating the dictionary, it is to assume that several reviews were not registered in the analysis.

6.3 Outlook and Future Research

This study creates a base for further research in diverse areas, as it covers a broad range of conservation activities that marine wildlife tourism operators in the Azores are pursuing. However, these activities should be examined further in detail. For instance, in the field of education it can be examined which kind of teaching methods are most successful for marine wildlife tourism products. Further studies can be done to explore the topics of environmental learning through wildlife tourism and to design suitable education programmes for marine wildlife tourism businesses. In this aspect, it is also interesting to examine long-term behavioural change in tourists. Also, in the field of governmental action, further studies can be used to establish viable action plans. Furthermore, the study could be expanded to other participant target groups, such as sport fishing tour operators, residents, members of the fishermen community, and persons from the policy field. To receive a more detailed understanding of the tourists' perception of marine conservation, reviews which were written in other languages could be analysed. This procedure would also show potential differences between the way how tourists perceive environmental education based on their cultural background. In this way, procedures could be adapted by the operators to receive a best possible outcome.

To conclude, it can be said that the marine wildlife tourism industry in the Azores is expected to grow in the next years. Simultaneously, the marine environment is becoming increasingly more threatened. Thus, it is crucial to increase marine conservation efforts. By implementing the recommendations of this study, the marine wildlife tourism industry can contribute positively to this development.

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Appendices

Annex A: Interview Analysis

A.1 Interview guide

1. Introduction

- Could you give a short description of your company?
- How long has it been operating in the marine wildlife tourism industry in the Azores?
- What are the main products that you are selling?
- What is your main customer group?

2. Conservation impact of the business

Conservation engagement

- In which area do you see your highest potential for contribution to marine conservation?
- If you are already implementing conservation measures, do you feel an impact of this on your business?
- What encouraged you to implement these measures?
- Do you see yourself responsible in taking on marine conservation efforts?
- Which challenges have you been facing in implementing conservation measures?

Cooperation among organisations

- Are you aware and participating in marine conservation projects in the region?
- Is there an active and supportive network of tour operators that work towards conservation in the Azores/ in your specific island together?

Tourist engagement

- Do you think tourists receive education and environmental awareness about conservation from your tours?
- Are you taking steps to educate tourists on how to behave on their holidays eg. Code of conduct?
- Do you feel that tourists take these advises and rules seriously?

- What is your opinion about citizen science and other scientific actions? Example: Project in Fiji by diving operators: Great Fiji Shark Count (GFSC)

3. Marine tourism industry and its conservation impact

- Is there cooperation (for example knowledge-sharing) between the operators?
- Is the spread-out character of Azores impacting the progress of sustainability?
- Do you feel that the tourism destination organisation and the government of the Azores is supporting you and the industry in becoming more environmentally active? Do you feel supported in your mission?
- Do you feel well informed and aware about current conservation issues in the marine environment of the Azores?
- Do you feel like you are being included in decision processes?
- Do you feel that awareness about marine conservation issues is apparent in the Azores/ your island/ among locals/ among tourists? How do you think that yourself are influencing this perception/ awareness?

4. Shark tourism as a conservation tool

(Only applicable if business offers shark diving)

- What is the general potential of shark diving tourism to contribute to shark conservation and protection around the Azorean Islands?
- Do you think that shark diving increases the awareness of shark conservation among tourists and can ultimately lead to an increase of pressure on policy makers for the fishing industry?
- Are there challenges and risks in offering shark tourism?
- Do you see a risk for the animals and tourists when offering more shark tourism?
 - Do you feel like the shark diving industry is being threatened by the fishing industry? For example through overfishing?

5. Perceived tourists behaviour

- How do you estimate the interest that tourists are expressing in marine conservation? High/low?

6. Future outlook

- In which direction do you feel the marine wildlife tourism industry in the Azores is going?
- What are your wishes for its development?
- Do you wish for more visitors on the islands? Or are you afraid that more tourism would have a negative impact on the destination, for example overcrowding etc.?

A.2 Coding Example

Theme	Code	Code description	Example	Source in Appendix
Conservation in marine tourism industry	Tourism industry > tour operators perception of conservation	Visualises the opinion and standpoint that tour operator takes on towards marine conservation within the marine tourism industry in the Azores	But it emphasises the importance of the Azores because we still have a good food chain, and things are happening. Nevertheless, it must be protected now so that we don't continue to over-fish, so that the species that remain are not dependent on the northern hemispheres and can survive here.	A.3.1 1.246
	Tourism industry > Industry's conservation mindset	Visualises the opinion and standpoint that the tourism industry as a whole takes on towards marine conservation within the marine tourism industry in the Azores	So of course they are selling, the Azores is selling itself as a very sustainable destination, but I don't think that is completely true. I think it's just consequence of the location of being underdeveloped and not really because they are doing a good job to execute that and to really be sustainable and to really an example in that sense.	A.3.8, 1.294
Tourists' behaviour and mindset	Tourists' perspective > Tourist profile	Describes observed characteristics of tourists to find out general traits	And nowadays what you have also is that people are getting more and more selfish. So that they're mainly worried about themselves and about what they can see and about having experiences they want to see only the best. They only want to have the best.	A.3.5, 1.390
	Tourists' perspective > Tourist perception of marine conservation	Understanding tourists' standpoint towards marine conservation issues and efforts	So from my background of diving, that is a small background, I understood that everybody that comes from diving, most of them are really concerned about the pollution and about the	A.3.4, 1.460

			environment, about the conservation. They are really, really concerned about that.	
Marine tourism industries in the Azores	Marine tourism industry > diving industry	Characteristics and set-up of the diving tourism industry in the Azores	I would say that ship wreck diving is not one of the Azores highlights, because people that go to the Azores mostly want to see creatures such as the manta rays, the whale sharks and for the last two to three years shark diving gained some interest.	A.3.3, 1.22
	Marine tourism industry > whale-watching industry	Characteristics and set-up of the whale-watching industry in the Azores	In the zodiac we take 12 people. Myself, I started with the zodiac, but then I went to a catamaran of 60 people and then I went for a catamaran of 45 people. But there are catamarans in other islands, like São Miguel, that take more than 100 people.	A.3.9, 1.120
Governmental actions	Government and legislation	Describes the opinions that tour operators have towards governmental and legislative efforts in regard to marine conservation	That's the problem, because we would like to do a lot of things, but the government unfortunately is not going forward.	A.3.2, 1.129
Local community engagement	Local community	Describes the engagement of local community members in marine conservation	They were talking about the management of our islands and how it works in terms of sustainable way, how the different positions of people in the society, so someone that works in the toll hall, someone that is the president or companies. So all these different people from the community that could make a decision from the heart.	A.3.4, 1.358
Marine conservation impacts by tour operators	Marine conservation efforts > tour operators	Describes measures taken on by tour operators to enable educational value of tourism product	I think the most important factor for it's like educating people and bringing the people, the clients, the tourists to a	A.3.8, 1.55

	measures > Education		close contact to nature that they usually don't have access to.	
	Marine conservation efforts > tour operators measures > Science and Research	Describes contribution of tour operators to science and research	What can tourism do? Tourism can only inform, create awareness, educate, show people and keep telling them what is happening out there in the sea and work together with researchers. We only have a chance if we work together with researchers and try to promote conservation-oriented research.	A.3.1, 1.253
Fishing industry and fishermen community	Fishing industry > fishing community	Describes the positive as well as negative aspects of the relationship between the marine tourism industry and fishing industry	We are all in the same space, we are all in the ocean. Some of use mainly in the surface, in the islands also, but we are all in the same place, so we have to be together first. After that we can work together.	A.3.3, 1.119
Challenges	Challenges > Limitations	Describes the challenges and specifically limitations that tour operators are experiencing when contributing to marine conservation	Because already now it's very hard for us to get people to work in the restaurants, and hotels and other things about tourism. We have people from outside, from Brazil, from Asia, from Africa, from Cape Verde. It's true that the islands they can grow more.	A.3.9, 1.151
			Me, I do a lot of photos or videos, but I don't have time usually to participate and I don't know if it's really useful.	A.3.6, 1.274

A.3 Interview Transcriptions

A.3.1 Interview 1, Participant D1, 23.03.2024

00:00:01 Interviewer

Great. Yes, exactly, so maybe you could just give a brief description of your company in general. For how long has it been operating in the Azores and what are the main products that you sell and the main customer group?

00:00:30 D1

I can do that. All right, I came to the Azores in 1993. With worldwide experience as a dive guide. In the Galapagos and other places where I worked for a long time. I then came to the Azores, actually to go whale-watching, and at that time it was still possible to go into the water with the whales. I wanted to take underwater photos of sperm whales, but then I got stuck straight away in 1993 and immediately decided to set up my own base there, because at that time there were hardly any structures to operate proper diving tourism and offer diving.

And that's how it was. It was all very small for the first few years and I did everything on my own, initially without a boat around Pico at all the land-based sites that you can reach from the small fishing harbours. Then later by boat to dive things in the channel to Faial and a little further outside. And then things developed over the years, the technology got better, there was a bit more money, you could buy navigation systems, so you were safer when travelling. And then the Princess Alice deep-sea mountain was the first thing that boosted diving tourism, initially in the Azores and on Pico.

Then I sort of invited people from the diving magazines, journalists and so on. And we did the first reports on Princess Alice with the mobile boats for snorkelling. Of course, that was an explosion in the diving market, because we hadn't really had anything like that in Europe before and people were able to stay in Europe and dive big fish. Pelagic fish and mobula rays and manta rays and things like that didn't even exist in Europe before. There was just Mediterranean diving, which is actually limited in terms of sightings. And then we were there and that's why the first big diving tour operators approached us and said "Hey, we want to work with you" and then we bought the next bigger boats. Although in the first few years it was all done with rubber dingies and then this trip out to Princess Alice, which is almost 100 kilometres, it was all very exhausting.

But then we developed it further and bought the next bigger boats. Tourism also increased, a lot more people came and that meant there was a bit more money and then, at some point after a few years, I found a dead sperm whale. And a lot of sharks were eating the dead sperm whale and then I took pictures of it and sent them to Dr Erich Ritter from the Shark School.

00:03:40 Interviewer

Yes, so the sperm whale was on the bottom of the sea when you found it?

00:03:46 D1

Yes, exactly. Erich Ritter, unfortunately he already passed away, he was a shark researcher and he looked at the pictures and immediately said "You know what, I'm coming. And we'll try to dive the sharks there together and attract them in the blue water". And that's what we did. Erich came and we immediately achieved huge successes in the first year and then had immediate

success in places that seemed interesting from the deep-sea topography. And then I started and said "Okay, we'll start building a programme and diving with blue sharks". And that was basically an even bigger wave than the Princess Alice wave was. That the diving world reacted to it and said "Wow, pelagic blue sharks in blue water at 50 metres visibility, you can't find that anywhere else. Either the animals are fished out everywhere or the visibility is poor, like in South Africa. And then we started to gradually build up this tourism. We also ran the Sharkschool here for many years and were then able to grow and even install small cruise ships for six people. We now do the cruises in the deep-sea mountains between the central archipelago, where people can sleep and then spend the night at the Princess Alice bank and so on. And so we have gradually raised the quality of diving tourism. Our company has always been the pioneer and innovator when it comes to diving programmes. Yes, and now for 31 years in total.

00:05:31 Interviewer

Yes, yes, that's great. I didn't realise that it didn't exist anywhere else in the world, with these conditions.

00:05:40 D1

Well, in this quality it only exists here in the Azores and only around Pico. There are places like Pico and Faial, where there are exploding spots where the sharks are. And so of course we said, "OK, we'll see if we can ask people in our area who are interested in sponsoring projects to expand our knowledge about sharks and shark migrations and then we started this cooperation with the DOP (Departamento de Oceanografia e Pescas), with Jorge Fontes, and they then sponsored us and we were able to buy 30 satellite sondes, which were then also attached to Megafauna.

And the interesting thing is that other species are suddenly coming to us as a result of climate change. And whale sharks are also being seen here more often. Yes, and three years ago was the first time that we really had a spot where we saw 200 different whale sharks within a month. And the university was able to identify them. And thanks to our investments, we were able to determine, for example, how the blue sharks migrate, how the mobulas migrate and also the whale sharks. And very, very interesting things have come out of it, which, for example, contributed to the fact that the member of the European Parliament from the Azores voted against catching mako sharks for the first time two years ago. Because with our studies and in cooperation with some nature conservation organisations, we were able to prove that the animals really do exist in the area, that the migration routes are there and that it is important to protect the animals.

Particularly in the case of mako sharks, which we see relatively frequently, it is the case that even if we were to stop fishing them in the North Atlantic today, the quota would continue to fall for the next 20 years and there would be fewer and fewer animals and very, very slowly after 25 years, the quota of mako sharks in the North Atlantic would start to recover, so slowly. But it was definitely a huge success for us that the Azores representative didn't vote in favour of catching mako sharks for the first time and regulations have also been drawn up for when they are caught, that they are being released again, that observers are on board and so on. Of course, it's a different question what will be implemented, but the law is at least existing on paper now.

84 And I think the same thing is on the way at the moment with other species, with the blue sharks
85 and with the establishment of protection zones. Because if you look at the map of where the
86 animals migrate and take the Azores as the northern line and you draw a line between the mid-
87 Atlantic ridge and Lisbon, then you have the underside of a trapezoid, because if you draw the
88 trapezoid further down, you would have the Mid-Atlantic Ridge on the western side and the
89 African continent on the eastern side and the whole thing goes down to south of the Cape Verde
90 Islands and quite a bit further. And these are the areas where all the deep-sea banks are, which
91 are very important for the reproduction and migration routes of these animals, and all this has
92 been discovered. They were able to show where the mobulas go, where the sharks go, where
93 the makos and blue sharks go.

94 And the whale sharks even go down to Venezuela, which nobody knew until then. So they go
95 where the Orinoco flows into the sea, and the warm Caribbean water mixes with the South
96 American current. There seems to be a huge food source via this mixture of water, huge food
97 resources, where the whale sharks then go to feed. And that's where they stay until they start
98 migrating northwards again, so up the mid-Atlantic ridge until they reach the Azores, and then
99 turn right at the mid-Atlantic ridge to return to the Azores to hunt small fish together with the
100 tuna.

101 *00:10:23 Interviewer*

102 Okay, so it's like a seasonal movement?

103 *00:10:31 D1*

104 Yes exactly, a movement that follows the seasons.

105 *00:10:31 Interviewer*

106 Yes, okay, so that's definitely a lot of information. So you would actually have to establish the
107 marine protected areas across different national borders?

108 *00:10:42 D1*

109 Yes, that would have to be developed internationally. That international catch protection areas
110 are then created and possibly also that shipping traffic is channelled in such a way that it takes
111 place in corridors and not in areas where there is an increased occurrence of megafauna.

112 *00:11:02 Interviewer*

113 Yes, ok, and tourism could then influence this by working together with politics, so to speak?

114 *00:11:13 D1*

115 So not with politics, but with research. Because no politician will want to approve anything if
116 they haven't backed it up with research. They always want something so that the research can
117 prove it. What is important, is where they can go and prove what the research results are. You
118 can't protect nature without research results. And that research is financed by tourism. So for
119 instance as a support for the DOP in Horta, so that they can collect more data more quickly,
120 because of course it's all a question of time. If over-exploitation continues, it's a question of
121 time, at some point everything will be gone. It's no use to us knowing in 50 years' time what
122 the migration trails used to look like, but we need to know specifically how up-to-date the
123 migration trails still are and take action now. And as I said, the first small step was this story

124 with the mako fishing quotas and the laws. It's still scratching the surface, but it's the right way
125 to go. And of course we were very proud to say that we were able to contribute to this with our
126 little part and the more people come to the Azores to dive with sharks, the more awareness of
127 these species is raised. There is a desire in the diving community to protect these species, these
128 areas and to show that they exist and not let them sink into nirvana somewhere and that people
129 have no idea what is happening and how the animals are moving. These are the basic, important
130 things.

131 *00:13:04 Interviewer*

132 So the main problems you want to tackle are the reduction of fishing quotas and establishing
133 marine protected areas?

134 *00:13:17 D1*

135 Yes, exactly, very exactly. Above all, finding out where the reproduction areas are. Protect re-
136 production areas and working towards the protection of over 70% of the Azores' waters as de-
137 clared nature reserves. This is also what the government has now planned.

138 *00:13:34 Interviewer*

139 And how much is currently a nature reserve?

140 *00:13:39 D1*

141 I can't tell you the percentage because it's constantly changing, but it's enshrined in the law that
142 is now being released. Yes, of course these are important things that have to happen. The Azores
143 are such an enclave with a 50-mile protected fishing area around them, where megafauna still
144 have relative peace and quiet and where they can reproduce, find food and so on. That's why
145 it's important that these areas are protected and preserved, that they remain as they are and are
146 not being fished empty.

147 Also there has to be more focus on tourism, on high-quality tourism. Because if you work out
148 how many people bring money to the Azores to dive and dive with sharks, it's so much more
149 than what the fishing industry earns from shark fishing. And you mustn't forget that all the fleets
150 that still catch sharks are sponsored with EU money. That means it's a subsidised business for
151 the EU. On the other side tourism is resource that we have created from nothing and brings in
152 money for the Azores, while fishing simply costs money in the EU and the fishing fleets are
153 virtually sponsored by the EU, with new ships, engines, freezers and whatever else is involved.
154 So it's actually a crazy thing that we pay for a product with EU taxpayers' money, but which is
155 completely or 99% intended for export to Asian countries or North Africa.

156 *00:15:34 Interviewer*

157 Yes, okay. I've often read that sharks are worth more alive than caught.

158 *00:15:37 D1*

159 And they are still being processed into dog food.

160 *00:15:53 Interviewer*

161 Yes, that's intense. And would you say that the local population of the Azores stands behind
162 shark tourism, or are they more on the side of the fishermen?

163 00:16:04 D1

164 Many people who are in the Azores have realised that tourism is also about shark tourism. But
165 of course we have a lot to do with fishermen and socially disadvantaged people and these so-
166 cially disadvantaged people, just like in any other area, naturally have no opinion or under-
167 standing of the need to protect things. Because the socially disadvantaged forestry worker will
168 keep sawing until the last tree is cut down and socially disadvantaged fishermen will keep fish-
169 ing until the last fish is fished and will always vote against it and take to the streets and demon-
170 strate. And that is of course a story with politicians, to weigh up how many people there are
171 who understand this with tourism and how many people there are who are socially weak but
172 are many more voters when they make a cross, when the politician stands up and simply shouts
173 "We will not ban shark fishing!" on such an election campaign, yes, and then of course he has
174 a whole fishing village behind him. And then we're back to the general topic of what is political.

175 00:17:24 Interviewer

176 As a tourism industry, do you take any measures to somehow increase the awareness about this
177 topic among the local people?

178 00:17:33 D1

179 There's nothing you can do yourself. You can't go against the fishermen, you always have to
180 work with the fishermen. Yes, that doesn't mean that we tell them where the sharks are, but it
181 does mean that if there is anything we can co-operate on, then we co-operate. We provide ap-
182 prenticeships for the fishermen's children to become captains and work for us in the tourism
183 industry. That's what we do. We do everything like that and fishing is also declining, but the
184 mills are moving very slowly. But the most important thing is that we educate people about
185 tourism and show them what's in the sea and what's on the other side.

186 00:18:18 Interviewer

187 Yes, cool and yes, in all these different subject areas. What do you think are the biggest chal-
188 lenges for tourism in terms of making an impact?

189 00:18:36 D1

190 At the moment, there are other aspects of tourism that are more profound, and that is climate
191 change. Because climate change, the rising sea levels and the shifting of ocean currents are
192 changing the feeding grounds of the animals, and the weather is changing so that tourism can
193 take place. Last year, we had a lot more bad weather and windy days, which led to a lot more
194 cancelled trips because the Gulf Stream is changing and the low-pressure systems are reaching
195 the Azores in a completely different way. That's something we have to observe now, but it's
196 very likely. The fact that there is more water in the sea, the storms are getting stronger - you
197 can see that in the hurricanes in the Atlantic are getting much stronger. This means that we will
198 of course be facing different weather. I think that's the biggest challenge, finding the slots so
199 that the weather is good. There's nothing we can do about it now, because the change already
200 started a long time ago and we have to deal with it now.

201 The second big problem is the pollution of the oceans, the fact that many species of marine
202 megafauna are so sick and poisoned. And it is impossible to get this poison out again. These are
203 heavy metals such as mercury and so on. But plastic pollution and the amount of microplastics
204 and plastic in the stomachs of fish is also a huge percentage. This means that the cancer rate for

205 humans is currently increasing immeasurably due to the toxins in our food. If you look at how
206 high the cancer rates are in the Azores compared to other areas and you look at what people
207 have been eating all their lives, like the raw food for example. And you know there's a heavy
208 metal deposit in there, you know there's a nuclear deposit in there from the capping of nuclear
209 waste that the Americans dumped on the mid-Atlantic ridge 20-30 years ago and didn't tell
210 anybody. I think that's the biggest challenge, but there's nothing you can do about it, these are
211 all things that have already happened.

212 In other words, the sea is damaged and, of course, people and animals, all the links at the end
213 of the food chain, have to deal with it and struggle with it. It's not even something that nature
214 can adapt to, but a toxic poisoning that has taken place and where the effects will now be felt
215 in the coming years. And the worst thing, I think, is the melting of the poles. And the fact that
216 the poles are melting means that food resources that were previously inaccessible are being
217 released. Food resources that lived protected under the ice and were inaccessible to marine
218 mammals. The release of this food supply is currently leading to a food explosion in the North
219 Atlantic. This means that the herring population in the North Atlantic is exploding, causing
220 other species such as saithe, cod and halibut to explode. However, this also means that these
221 food resources will have disappeared in the next 15 to 20 years and will be depleted and unable
222 to reproduce because there are no longer any safe reproduction areas under the ice. And then
223 there will be a very, very big decline and because within a few years there will suddenly be no
224 more food for all these consumers. This means that these huge shoals of herring will be gone
225 and destroyed within a very short space of time because the entire food chain will no longer be
226 able to keep up.

227 Nothing will get out from under the ice and it will only get worse, as you can see from the
228 example of Cape Smith in Russia, known to us as the Gulag Archipelago. All our prisoners of
229 war were locked up there during the Second World War. There's a town there that you can only
230 get to by helicopter or tracked vehicles. And there's an American researcher at Cape Smith who
231 I'm in contact with. And there were about half a million walruses living around this town and
232 colonising these beaches. Today, 3000 - 4000 still live there, all emaciated and skinny. The rest
233 are gone because the Russians have of course been overfishing up there for years and there is
234 no longer enough food. In other words, that's already happened. In other words, the ice has
235 receded and there are no more food supply fish. And the walruses are now at the end of the food
236 chain and can no longer find food. And you can already see that, and it will follow in other
237 locations as well.

238 *00:23:53 Interviewer*

239 Ok, and exactly the same thing will happen around the Azores?

240 *00:24:00 D1*

241 Not necessarily immediately in the Azores, because the Azores are much further south and have
242 nothing to do with the ice melting. I'm talking more about the fishing areas around Greenland,
243 Iceland and Norway. But of course that's where our whales go to feed. The male sperm whales
244 that we have in the Azores are up there and eat up there. The fin whales, the blue whales, the
245 big baleen whales all go north and feed, and they need this food supply. If there's nothing left,
246 then they'll come back and there won't be anything left. But it emphasises the importance of the
247 Azores because we still have a good food chain and things are happening. Nevertheless, it must

248 be protected now so that we don't continue to overfish, so that the species that remain are not
249 dependent on the northern hemispheres and can survive here.

250 *00:24:57 Interviewer*

251 Yes, okay, it's amazing how it's all connected.

252 *00:25:08 D1*

253 Yes, it's all very interrelated. But to come back to your topic: What can tourism do? Tourism
254 can only inform, create awareness, educate, show people and keep telling them what is happen-
255 ing out there in the sea and work together with researchers. We only have a chance if we work
256 together with researchers and try to promote conservation-oriented research. Much better than
257 going out with a SeaShepherd ship and ramming a Korean industrial fishing ship. That might
258 attract attention, but it doesn't help.

259 But if research can provide detailed and well-founded evidence of how important it is to protect
260 certain species, establish fishing quotas, set up fishing areas and protect reproduction grounds,
261 then we have a small chance.

262 *00:26:01 Interviewer*

263 And tourism can then support research, especially financially?

264 *00:26:13 D1*

265 Yes, financially, if we can show that the gross national product of tourism, of diving tourism,
266 far exceeds that of the fishing industry, creates jobs, generates revenue, because the people who
267 come to tourism go to the supermarkets, they go refuelling, they sleep in hotels, they go to
268 restaurants and they create jobs for the people who work in tourism. If that is guaranteed, then
269 we have a chance.

270 *00:26:43 Interviewer*

271 Okay and how would you say the shark diving industry or the diving industry in general is
272 developing in the Azores? So is it still growing or how is it right now?

273 *00:26:56 D1*

274 Well, shark diving tourism has increased by 100% over the years, because of course it's also
275 going around the world and people are spreading the information. Whereas 20 years ago the
276 Azores were a very, very unimportant diving destination, today the Azores are a very important
277 diving destination. Because of course the subject of diving tourism is also changing. The focus
278 is different today than it was 20 years ago. Back then, you had to see the Red Sea and colourful
279 corals. Today, people want to see the last surviving megafauna in the sea. And there are hardly
280 any better regions than the Azores.

281 *00:27:34 Interviewer*

282 So last chance tourism. So there are still new providers coming in, even on the other islands?

283 *00:28:02 D1*

284 Well, there's not much point on the other islands. Where the music plays for diving is Pico,
285 Faial, Santa Maria. Those are the best diving areas. São Miguel is closer, they have to go to

286 Santa Maria, everything is already fished out there and the islands in the north are not devel-
287 oped. It will be another 20 years before that is touristically developed. And the other islands in
288 the central archipelago, like Terceira, there are one or two diving bases, but they don't have the
289 sharks there because the seabed is so flat down there. The same goes for São Jorge and Graciosa,
290 where the diving is mediocre.

291 *00:28:33 Interviewer*

292 Yes, okay, so it's mega localised, sort of on the 3 islands then.

293 *00:28:42 D1*

294 Exactly.

295 *00:29:48 Interviewer*

296 If the diving industry continues to develop, are you worried that it could lead to overtourism or
297 mass tourism?

298 *00:29:56 D1*

299 No, I think it will be limited because there is a limit to what can be done for the diving industry.
300 I don't think there will be too many diving centres because there won't be enough for everyone.
301 And those who have made a name for themselves, like us and a few others, will always be
302 ahead, because many people have no idea about marketing and don't know how to get it out
303 into the world. All the small Azorean diving centres that have come up have also gone out of
304 business because either they relied on the EU to promote them, and that won't happen again
305 because they have also learned their lesson. That if someone buys a boat and finances it with
306 EU funds, it will be sold after 5 years and they will buy a tractor or a nice sports car. But they
307 have now realised this and people who work seriously and are committed to it for years will
308 survive. The quality will indeed continue to improve.

309 *00:31:01 Interviewer*

310 Thank you in any case for all the information. That was really interesting.

311 *00:31:09 D1*

312 All right, if you need anything, get in touch.

A.3.2 Interview 2, Participant D2, 09.04.2024

00:00:03 Interviewer

Yeah. OK. Perfect. So, yeah, for my thesis, I'm looking at how tourism businesses can have an influence on marine conservation in the Azores and therefore, I thought maybe for starting the interview, you could give a short presentation about your company. Like how long has it been operating in the Azores and what are the main products that you are selling?

00:00:35 D2

OK, I have two companies, they are completely different things. So I have a dive centre which has been running for 21 years, I guess, yeah. And then I have a cruise ship where we do liveaboard. So we also do diving cruises, yes. It's also diving, but it's sold as a one-week trip or two, with guests around the islands and in shore, somewhat shore places. And then apart from that I also have a guest house, so accommodation for some of our guests that visit us. Just so this is the three main points, and of course in the diving, we offer not just the little dives where we go out every day, and also try-dives and dives for non-certified people and then snorkelling activities and teaching diving for sure, so we teach all the levels, even the instructor-certification. So that's what we do.

00:02:07 Interviewer

OK. Yeah. And then for the diving company, what kind of dives are you doing like what kind of wildlife are you mainly focusing on?

00:02:22 D2

Good question. Depends on the seasons. During the year it's different, for example in the summer part of the diving we do especially in the catamaran the cruises because it's a sailing catamaran, so most of the time, whenever we can, we are sailing, and we go to the offshore places so that we are looking for basically is the big pelagic life. Like mantas, the mobulas, the whale sharks. So the groups of big tunas, and so that's the focused kind of trips, you know? And for the rest, well, depends on the places. We have like 25-30 different places we dive, so some are not even really because of the fish, but it's the volcanic formations which are amazing here, and it's also some wrecks that we have. So I mean when you go for a wreck, of course you want to see fish, but the purpose is to see the wreck.

But of course, there are some species that people like more to see, like the groupers, because they become really big, tunas and barracudas when they are hunting mackerel or sardine. Then they also like octopus because they are funny. And some, a lot of people, especially Germans, it's funny, but Germans have a thing with morays, the love moray eels. So it's funny because a lot of Portuguese people don't like to see morays and they don't care so much. But the Germans love to see morays. So there's also that kind of difference between countries and cultures, you know.

00:04:31 Interviewer

Yeah, I was not thinking about that like different country or different nationalities want to see different things, but that's interesting.

00:04:39 D2

41 Yeah. Like Portuguese and Spanish, don't ask me "why?", but if they see an octopus, that was
42 a fantastic dive. And for a German guy, and of course this is not a rule, people are different, but
43 in more than 25 years diving with people from all over the world, we see some patterns, you
44 know. For example for a Germany if we see 6 morays during one dive, he's thrilled, it was a
45 really nice dive, you know? So, there are these kinds of cultural differences, yeah.

46 *00:05:12 Interviewer*

47 OK. And are you implementing some kind of conservation or sustainability activities in your
48 companies?

49 *00:05:29 D2*

50 You know, when I hear the word "sustainability" I'm even afraid, because there's so much bull-
51 shit called sustainable and it's not. You know I'm even afraid of that kind of word. But of course
52 we do a lot of activities like cleaning days and of course, we instruct our guests and our students
53 to pick up all the garbage when they see some in the sea. And for example, the liveaboards I
54 have, the catamaran has solar panels, it has a wind generator. So basically, we use not so much
55 fuel, because it was really meant to be kind of ecological or the most ecological possible kind
56 of cruise.

57 *00:06:36 Interviewer*

58 Yeah. And do you feel like your customers are also environmentally conscious and like choos-
59 ing your company because of this, because of the solar panels or something like?

60 *00:06:50 D2*

61 A lot yes. Not just because of that. I mean, of course, for a lot of them it's because of environ-
62 mental consciousness. But a lot of them also choose because of the noise. If you go on the boat,
63 it's travelling all night. And when the engines are running, maybe you don't sleep that well. If
64 it's just sails, then you sleep. I would say that some people of course do it because of environ-
65 mental concerns, but for some it's just because this is more silent and also because of the con-
66 cept. I mean, 90% or more of the liveaboards in the world, in Maldives, Philippines, Red Sea,
67 wherever, it's big boats that are meant for 24 people guests. And we made it completely different
68 because usually it's maximum 6-8 people. And that's more cosy and people prefer that kind of
69 thing compared to a boat with 24 guys. So that's perhaps the most differentiating thing in this
70 project, you know?

71 *00:08:17 Interviewer*

72 OK. So yeah, it's very like personal, kind of an individual. OK. And if you encounter wildlife
73 on the dives, for example, do you have like a specific guideline for the tourists so that they
74 know how to act? Like that they are not touching the wildlife.

75 *00:08:38 D2*

76 Yeah, for sure. For sure. Yeah, but that's almost. That's almost a code of behaviour from the
77 drivers not to touch the fish. I mean, it's not something that we need to say for us that much
78 because it is something and they know. Of course, a lot of times we refer to some things that
79 we see that we cannot touch for sure because it's poisonous or because it's dangerous or and
80 when we say that we always say "Of course you shouldn't touch the rest of the wildlife. Because
81 we have to talk about dangerous ones and then we take that opportunity to say the others you

82 should not touch either, you know. And then there are some specific things for example, for
83 mantas and mobulas and stuff we always say: "Please turn off the flashes. Don't put flashes on
84 them" and so there are some specific things for certain species you know. Or at least concerns
85 that we try to teach them not to do that in that way.

86 *00:09:50 Interviewer*

87 Yeah. And those things are like international or is it just at the Azores, do you know?

88 *00:10:00 D2*

89 No, I mean. Internationally, whenever you take a diving course, no matter which kind of training
90 agency, all of them, teach people not to touch animals and not to interfere with wildlife. So
91 that's international. Of course, then there's some specific rules for the reserves. For example,
92 when it comes to mantas because, we have a regulation of some. It's not really a law, but it's
93 some guidelines that operators that dive with mantas and whale sharks and stuff have to follow,
94 and then some things that are even forbidden. For example, we cannot dive in with whales. It's
95 forbidden. We cannot. Yeah, we cannot dive with dolphins unless they come to us, of course. If
96 you are in a dive and they come to us, we cannot say "go away". But we cannot promote diving
97 with dolphins, you know, so.

98 *00:11:05 Interviewer*

99 And is this implemented by the government or by the tourism industry of the Azores, or who is
100 making these rules?

101 *00:11:16 D2*

102 No, actually it was a work that was done with some operators and with the University of Azores
103 and it was not something that the government created a law for. It's just a code of ethics that we
104 all signed and we try to follow. So it's not really a law. You don't pay any fine if you use flashes
105 on mantas. Yeah, but still the operator, if it's a good operator, he will not take you on the next
106 dive, for example.

107 *00:12:00 Interviewer*

108 And you feel like most tour operators are like agreeing to those rules and following them?

109 *00:12:08 D2*

110 Yeah. Yeah, I do.

111 *00:12:10 Interviewer*

112 OK, nice. And like, how is the communication between the tour operators? Because I feel like
113 the Azores are really spread out and there are like different operators on all the islands. But do
114 you have like kind of a network to support each other or something like that?

115 *00:12:29 D2*

116 Yeah, you have an association ourselves. So although we are far apart and we use completely
117 different dive sites and stuff, some of the concerns are the same, you know. So there's an asso-
118 ciation that defence that and represents us in governmental activities. Actually, I was president
119 for some years at another association that started this one that we have now so.

120 *00:13:02 Interviewer*

121 Well, what is the name of the association?

122 *00:13:06 D2*

123 AOMA, it means association of operators of marine activities of Azores.

124 *00:13:11 Interviewer*

125 Ah ok, thank you. OK, I have not found out about that yet, so thank you and do you know what
126 their current projects are in regard to marine conservation? Like I heard that there is like the
127 MPAs the protected areas, are going to increased?

128 *00:13:46 D2*

129 We have a lot more projects than the government. That's the problem, because we would like
130 to do a lot of things, but the government unfortunately is not going forward. All the governments
131 are too afraid to do that because of the community of fishermen. Which they think it's more
132 important and actually the marine protected areas are also to protect fishermen, but I think more
133 fishermen understand that than the government. Which is stupid. It's a pity, but that changes
134 because now the president of the government, was my student in diving. So I hope that changes
135 a bit, but unfortunately, it's not easy because for example they are creating more areas of pro-
136 tected areas. But the truth is, it's not really conservation of the species. They say its like this but
137 its not. But it's not because the places where they are doing that, its in offshore places, really
138 deep ones, and that's because of protecting the deep mineral exploitation of things which Ca-
139 nadians want, which Americans want, which so actually part of that is being created not with
140 the purpose of protecting habitats or species. It's just because of economical things for deep
141 mining, you know.

142 *00:15:40 Interviewer*

143 OK. So do you think there's a need for more protection of species as well?

144 *00:15:49 D2*

145 Of course, yeah.

146 *00:15:49 Interviewer*

147 OK. And yeah, do you think that, like marine tourism could have an influence on that? Like, if
148 the government sees that marine tourism is also like a big economic factor or industry?

149 *00:16:07 D2*

150 Yeah, for sure. Actually that has happened already. You had the question about the sharks, es-
151 pecially the blue sharks. Because it all started to be nice destination for shark diving. And that
152 attracts a lot of tourists per year. And actually, when you catch the shark it's an average of 0,25€
153 per kilo here in Azores, so it's just ***** criminal to kill an animal like that. That can bring
154 a lot of tourists and a lot of income to a lot of operators just because of making nothing. You
155 know you don't make any money with that. So, they are of course a species that should be
156 protected all over the world, so to increase their numbers. So that should be a concern, although
157 I'm going to tell you that I don't agree so much with people diving with blue sharks, because
158 actually the only way to do it, is to use the chumming-technique. Like you have to attract them

159 with blood or pieces of tuna heads and stuff like that. To attract the Sharks. And I don't think
160 it's a good idea, I mean, in a way it protects the sharks, and it raises the concerns about protecting
161 them. And even the government did some things to protect them and also European Union, not
162 as much as they should, but it is something. But the thing is we are changing the habits. We are
163 chumming them to places with some fishermen and I know a lot of fishermen that don't fish
164 sharks and don't want sharks because they know they are important for tourism, but some others
165 like "Shit, these guys were diving in there and there's always sharks in there, so let's fish them."
166 you know. So yeah, actually we are promoting them. We are raising awareness. We are also
167 making money out of that. I mean the operators that do that, I don't, but in another way, we can
168 be damaging something, you know. So I don't agree we should do that.

169 *00:18:55 D2*

170 So yeah, it's like a contradiction, like on the one hand, you're trying to protect them, and on the
171 other hand it changes the behaviour. Changing the behaviour and attracting them to places
172 where they can be fished.

173 *00:19:15 Interviewer*

174 Yeah, but do you see another solution to this? Like especially for the Sharks now to raise more
175 awareness about them without diving for them? Like, do you think that tourists would still be
176 interested in it without seeing them?

177 *00:19:34 D2*

178 That's the point. If you know Jacques Cousteau? He said: "You cannot love what you don't see".
179 OK. So that's part of the answer. Of course people need to see them and be fascinated by diving
180 with them to protect them, but I think that would be really easy. If I was in the government, the
181 first thing I would do is it, it is totally forbidden to catch and load, transport, whatever shit with
182 sharks. So then it would finish, you know.

183 *00:20:23 Interviewer*

184 Yeah. So the fishing industry would finish, you mean?

185 *00:20:28 D2*

186 Yeah, for sure. I can give you an example. Well, we receive 2000 people more per year. That
187 ask us, that are diving with us for a week or three days or whatever, and some ask me where I
188 shall eat fish or where's a good restaurant or whatever. Yeah. And I used to recommend a very
189 nice restaurant and fish. And then one day I went there with a group of divers and they showed
190 me the menu and there was shark on the menu. And I said: look, I recommend, I don't know,
191 hundreds of people to come here every year. If you don't take the shark of the menu, I will
192 never recommend your restaurant again.

193 *00:21:25 Interviewer*

194 Ah, OK. So you spoke to the owner of the restaurant?

195 *00:21:29 D2*

196 Yeah, and he immediately deleted it. And he said I'm sorry. This was four years ago, and he
197 never had shark again on the menu. You see. So if people start acting like this, then they

198 understand. Yeah. And when there is no restaurant present buying shark, then the fishermen will
199 not be interested in in catching them. Because they have no one to sell it to.

200 *00:22:03 Interviewer*

201 OK. So you mean the change should come from the demand side, kind of from the customer
202 that they just stop eating shark?

203 *00:22:13 D2*

204 Yeah, but also from the Azorean Government. Because the government should say, “Hey, this
205 is interesting for tourism, this is interesting for protecting the species. So from now on it's for-
206 bidden and any restaurants that have sharks on the menu will get a fine. And each fisherman
207 that catches this will get a fine”, that's it.

208 *00:22:29 Interviewer*

209 Yeah. Yeah, that's that would be nice. And you said before, like the fishermen communities kind
210 of they're like two different sides. So some people who understand it and don't fish sharks any-
211 more. And some people who will still do it. But yeah, the government could change that with
212 starting to fine them.

213 *00:23:07 D2*

214 Yeah, that's it, if the government really has a strategy, I use the word that you used before “a
215 sustainability strategy”, you know? The thing is, we don't. And its like “Ok, this gives me a lot
216 of votes, so I'll say yes to this. And we cannot really function like this you know?”

217 *00:23:33 Interviewer*

218 OK, this is interesting because like I feel the Azores are being marketed as such a sustainable
219 destination?

220 *00:23:40 D2*

221 Well, its not.

222 *00:23:45 Interviewer*

223 OK, so there's like a yeah, it doesn't match kind of with the government strategy.

224 *00:23:53 D2*

225 Marketing is one thing. What will happen is another one. And I can speak about this with
226 knowledge. First of all, because of so many years diving here, I know how things have been
227 developed in a negative way. And yeah, the other thing is I'm a veterinary surgeon and I was
228 working for the government as an inspector for fisheries. So I really do know what's happening
229 and why it's not going further in some ways, and you know, because I was there and doing
230 inspections so.

231 *00:24:37 Interviewer*

232 Yeah. So you have kind of both perspectives.

233 *00:24:38 D2*

234 And I know the fishermen in all the islands.

235 *00:24:46 Interviewer*

236 OK. And so you feel like in the recent years it has been more negative development than posi-
237 tive?

238 *00:24:56 D2*

239 Yeah, for sure. Because if you don't stop some things like this, like the sharks that I was telling
240 you and if you don't create really in a serious way, marine reserves, this is just bullshit. It's just
241 marketing or propaganda you can call it. It's not really aiming for something.

242 *00:25:26 Interviewer*

243 Yeah. OK. So what would you wish kind of for the future? Like how the industry would de-
244 velop? Like which aspects would be the most urgent ones in your opinion, apart from the fishing
245 ban?

246 *00:25:46 D2*

247 Changing politics, the politics and politicians.

248 *00:25:56 Interviewer*

249 Yeah. So like, would you think that if there would be more marine tourism, it would help to
250 change the perspective?

251 *00:26:12 D2*

252 Yes, for sure. And we have two really nice examples of that. One is Santa Maria, the island of
253 Santa Maria and the other is the island of Corvo. Because both of them are really small islands,
254 I mean Corvo is ridiculously small, but it happens in Corvo that there was a guy. I don't know
255 if you know, but Corvo has 400 habitats. So it's really small, yeah. But there was one guy that
256 started a dive centre a few years ago there. There is a place that has a lot of big groupers and
257 stuff, so they found out that a lot of divers wanted to go there to dive, and the fishermen found
258 out "Oh shit, if we have 100 divers coming, we will sell them a lot of fish." Because they also
259 want to eat fish, mackerel or barracuda or tunas or whatever. So if we keep those fishes in there,
260 we will make a lot of money. So they will not fish those fishes away. But then the dive centre
261 closed and now the fishes are not there anymore. So this is a very good example that when
262 people realise that "Ok, if tourism comes, we all win. And we can win with other fishes that we
263 can fish somewhere else and not on that specific spot or whatever. Then it will be good for
264 everyone."

265 So this also happened in Santa Maria because Santa Maria is a very small island. With, well,
266 4500 inhabitants or something. But they have part of tourism in there and it's really big because
267 we have a fantastic place for diving with mantas and mobulas and whale sharks also. A lot of
268 tourism is diving tourism and that created a lot of even specific groups for marine reserves and
269 stuff in Santa Maria, because it's the sort of the impacts of tourism and of course the taxi drivers
270 like that people come, and the guys from the restaurants also, the fishermen also like them. So
271 they started respecting a little bit more the marine protected areas. So that's two good examples
272 that yes tourism also brings awareness that this should be kept okay, you know.

273 *00:29:14 Interviewer*

274 So yeah, it's not only the diving tour operators that earn the money, but also indirect earnings
275 for the restaurant, for the hotels or something? Yeah, OK, that makes sense.

276 *00:29:28 D2*

277 Yes, sure. You need to rent a car. You rent a bike, you buy souvenirs. I mean, the tourists bring
278 money. Doesn't matter if you come for diving or for tennis or whatever. But you will rent a car,
279 you will eat, you will sleep somewhere. You will get a taxi. So everyone in the chain makes
280 money out of it. And with diving it's the same. I mean the diving operator makes money, yes,
281 but actually the hotels do a lot more and the flights companies also.

282 *00:30:04 Interviewer*

283 Yeah. Ok, that's interesting. And in Santa Maria, it's still existing or it also had to close?

284 *00:30:17 D2*

285 No, it still exists. Yeah, I think there are 5 dive centres there and they bring a lot of people.
286 Yeah, they bring a lot of people during the summer. It's a lot, I would say, I don't know the
287 figures, but I would say 60 or 70% of the people that visit Santa Maria, it's because of diving.

288 *00:30:42 Interviewer*

289 Ohh OK yeah, it's a big portion. But how do you cope with the seasonality then? Because like
290 most of the big species like marine species are migratory, right in the Azores? Like they're only
291 there for a couple of months and then in the other months what kind of experiences do you offer
292 then?

293 *00:31:10 D2*

294 Well, in for example, in Santa Maria they close the dive centres. In October they close and then
295 reopen after May.

296 *00:31:23 Interviewer*

297 So like half a year, more than half a year they are closed.

298 *00:31:29 D2*

299 And you know why? Because people don't go there for diving in that time. So they close.

300 *00:31:35 Interviewer*

301 And do you know what they do during the other months?

302 *00:31:42 D2*

303 Do you dive?

304 *00:31:46 Interviewer*

305 I've only tried it one time yet, but I want to do it more often.

306 *00:31:54 D2*

307 Schnuppertauchen.

308 *00:31:54 Interviewer*

309 Yeah, yeah.

310 *00:31:57 D2*

311 No, no, I mean a dive centre is a lot of work, to have all the boats, the regulators, the tanks, the
312 jackets, everything working for a season. You must spend the whole winter preparing that. You
313 know, so it's a lot of work to do. So that things work during the one season and for example in
314 my case in January, for example, we have dive shows in in Paris, we have dive shows in Düs-
315 seldorf, we have dive shows in Utrecht and so on. So we cannot be here because we are pro-
316 moting the companies in other countries to bring tourists. So that's also part of the work.

317 *00:32:36 Interviewer*

318 Ok, I just remembered when you said Düsseldorf, its the "Boot", right? OK. Interesting.

319 *00:33:02 D2*

320 Yeah, that's the that's the biggest one in Europe. I think I go there every year for the last 15
321 years or something.

322 *00:33:15 Interviewer*

323 Well, yeah, thank you for all the information. I think that's all the questions I have at the mo-
324 ment. Do you have anything more to say or like a summary of where do you want the industry
325 to go kind of in the future?

326 *00:33:42 D2*

327 So, I don't know. I think basically it's maybe like we said before, the Azores are marketing about
328 the sustainability and the protection of the environment and this and blah blah blah. I think it's
329 time to cut the crap you know and stop bullshitting people. With things that are totally stupid. I
330 mean, if you don't really do the proper things to protect them and to prevent that things disap-
331 pear, it's just marketing and it's propaganda. I mean, it's like cutting millions of trees to put I
332 don't know how many solar panels. Yeah, that will last five years and then you need to change
333 them and that will not produce the electricity you need for electric cars and then call that sus-
334 tainable. That's ridiculous.

335 *00:35:03 Interviewer*

336 Yeah. And then also like, I feel like there's such a time pressure because within a couple of
337 years, if it continues like that, the fish populations will be gone. So that it has to be like a fast
338 movement or development kind of.

339 *00:35:23 D2*

340 You know I'm really surprised about nature because in a lot of places where I was diving and
341 were totally decimated, you know, gone, overfished totally. In a lot of places like that, after 10
342 years I saw some fishes returning, that I would never think that that place would have again. So
343 there is still hope, but the thing is if we don't stop with overfishing and it's everywhere, there's
344 no way that things are colonised again, you know.

345 *00:36:10 Interviewer*

346 Yeah. So like it is time to give the ocean a break. And so the populations come can increase
347 again.

348 00:36:23 D2

349 Yeah, but we all know that you must do that in strategic places, in breeding places where the
350 layouts are in seasons that are for reproduction. And we all know that. I mean, marine biology
351 is not ten years old, you know. We know these things. But the thing is, it's not respected at all
352 and we don't follow what we know in science. It's just economical interests, that's it. And of
353 course, marketing is also a commercial interest. If I say that everything is perfect in Azores, you
354 will come to the Azores.

355 00:37:19 Interviewer

356 Yeah, that's true. So yeah, it's to attract more tourists, but then the tourists also have to see
357 something, like if there's nothing to see anymore, then they won't come either.

358 00:37:32 D2

359 For sure and they will not recommend and so the others will not come also. So actually it's just
360 shooting yourself in the feet. But I mean, we still have amazing stuff. But in 22 years, I've seen
361 it completely declining, you know. If we have 22 years more like this, we will not see anything.

362 00:38:10 Interviewer

363 Yeah. That's really sad. I hope I can still come to the Azores to see all of this. Ok. Because you
364 mentioned the scientists and university before, I was wondering, are you kind of cooperating
365 with them? So if you see animals on your dives, do you like forward the information to re-
366 searchers or something like that?

367 00:38:41 D2

368 Yeah, we do. We even participate in some Photo ID websites that for mobulas and mantas and
369 stuff. So we participate in that. And actually we did a one-week cruise also with the oceanario
370 Lisboa and we were doing workshops on conservation and also ID of some species. So we
371 cooperate with a lot of, not only the university, but also things like that. So Oceanario Lisboa
372 they did with us also.

373 00:39:41 Interviewer

374 Yeah, yeah, I saw there's like an NGO like the Oceano Azul.

375 00:39:47 D2

376 Yeah, also that, yeah.

377 00:39:49 Interviewer

378 Yeah. So, like increasing the science or scientific knowledge about the different animals and
379 their behaviours would also like help to put more pressure on the government maybe. Do you
380 think?

381 00:40:11 D2

382 Yeah, I think we do. But the thing is they are stupid.

383 00:40:23 Interviewer

384 OK. Yeah. OK, well. That's a lot of information, definitely, which will be helpful for my thesis
385 for sure. Thank you for the.

386 *00:40:39 D2*

387 And whatever you need, just let me know.

388 *00:40:42 Interviewer*

389 Yeah. OK. Thank you so much.

390 *00:41:22 D2*

391 You're welcome. And good luck with your study, OK?

392 *00:41:26 Interviewer*

393 Yeah. Thank you.

1 A.3.3 Interview 3, Participant D3, 11.04.2024

2 *00:00:06 Interviewer*

3 OK, perfect. So yeah, for the first question, I would just ask you to kind of describe your com-
4 pany, like since when has the company been operating in the Azores and what are the main
5 products that you are selling?

6 *00:00:25 D3*

7 OK so. We started doing this in July 2018. And yeah, we are a company that promotes Portugal
8 as a diving destination. So we invite people to come here to Portugal to dive. Of course when
9 I say Portugal I mean mainland Portugal and also the Azores and Madeira Island.

10 *00:00:54 Interviewer*

11 OK. And how much does the Azores take up in the whole business? Like is it like a big product
12 or are people mostly going to mainland Portugal or how is the situation?

13 *00:01:07 D3*

14 The Azores are one of our main destinations, because it is recognised as one of the best diving
15 sites worldwide. So of course, a big part of our business comes from trips to the Azores. I would
16 say that it's maybe 40% of our business.

17 *00:01:32 Interviewer*

18 Ohh OK. And the dives that you're offering there are like mostly to observe the marine wildlife
19 like for example, sharks or other marine animals, or I also heard from other interviews that there
20 are some wrecks in the Azores that people are diving to, like what is the main focus?

21 *00:01:53 D3*

22 I would say that ship wreck diving is not one of the Azores highlights, because people that go
23 to the Azores mostly want to see creatures such as the manta rays, the whale sharks and for the
24 last two to three years shark diving gained some interest. However, as you know, the best loca-
25 tion or the main dive location for shark diving is of course the Faial and Pico Islands. You can
26 go to shark diving spots both from Pico and Faial. And as a matter of fact, last year, we had the
27 Diving talks show, we were talking with Nuno Sá, I don't know if you know him, but he is a
28 recognized, reputative underwater photographer and videographer. He does a lot of work in the
29 Azores too, although he travels a lot around the world to shoot and Nuno said that Faial is
30 probably the best spot in the world today to dive with blue sharks, a species that we have here.
31 It's not difficult or impossible, or it's not rare, for example, to spot other species of sharks in the
32 Azores, but in fact, the species that is more local and more liked is of course the blue shark.

33 People go to the Azores because they think it's an incredible location already, people like the
34 Azores because it's very good for diving. And mainly I would say, the biggest attraction of the
35 Azores are the offshore dives spots which are iconic, called for example Ambroiso, Dollabarat,
36 and Santa Maria where people dive with sharks. In the other islands, such as Faial and Pico,
37 yes, we are offering now shark diving and there are people that are coming there that want to
38 dive with the sharks.

39 *00:03:52 Interviewer*

40 OK. And then how is your business working? Because until now I only interviewed people who
41 have like their own diving centre in the Azores. But you are kind of cooperating with them, or
42 do you also have your own?

43 *00:04:29 D3*

44 Yeah, yeah. Yeah, it's like you anticipate. So what we do is to promote the destinations, so we
45 act as an attraction point for dive trips. And we work, of course with our local partners, which
46 are the dive centres, the tour operators, hotel chains, because we forward our clients to these
47 local providers. Sometimes we have big groups coming, so what do we do is what we call the
48 "dive buddy". This is someone that goes in the trip to facilitate, to coordinate, to help the group.

49 *00:05:19 Interviewer*

50 OK. Like a tour guide, interesting. So you have kind of a network of the local diving operators?

51 *00:05:32 D3*

52 Yeah, we work with almost all of them. Of course there are dive centres which are more pro-
53 fessional. And some that are more informal. So depending on the type of clients, the type of
54 objective of the trip, we select the partners that we believe have the best services that we want
55 to provide. So it's our responsibility, the clients ours. So if something goes wrong of course, it's
56 on our side. So we have to select carefully the operator that is going to do the dive. We don't
57 have that concern when we talk about outside experiences which are of course part of our pack-
58 ages. People want to visit the islands, people want to visit the villages, the towns. Because they
59 want to have the opportunity to get to know better the island where they are spending their time,
60 or the islands, because sometimes we have packages that take people from an island to the
61 others. But with the diving I think it's something more overwhelming, because it has to be
62 perfect. Everything has to work out and to be good. But so far, we are okay, in the last 5 years
63 we didn't have any problems, so we are very happy with our partners because the dive centres
64 work in a professional and educated way. So the dive guides are professional, and they compare
65 very well with other operations around the world. So the dive centre operations, they are very
66 professional. And usually they have the highest recommendations after doing it.

67 *00:07:50 Interviewer*

68 OK. And now talking about like marine conservation, are you implementing any conservation
69 or sustainability measures in your products or activities?

70 *00:08:08 D3*

71 Yeah, of course. We have this general concern of these topics, because of course we want to use
72 diving as a way of raising awareness on the need to keep us responsible. And also to use as a
73 business that deals with natural resources but has a positive impact. So of what we usually say
74 when we discuss with the dive centres or with our clients when we discuss this type of things
75 with for example, governmental organisations and institutions is that they have to be aware that
76 one alive shark or alive fish or every species, the economic value of the creature living in the
77 water is higher than that this fish that is killed. Of course, the fishing industry is necessary,
78 people eat fish. But we believe that there is a balance that we can achieve and both things can
79 live together. Portugal is the only country in the world that a level of sustainable fishing, so we
80 have a quota, so I'm talking about also the islands. So we have a quota for fishing, and we have
81 been respecting those levels of allowed fishing to make it sustainable. So what we fish every

82 year is a little bit less than what we should fish to ensure that the type of species can go up, can
83 be sustainable. So this is something that we achieved in the last years, and I think it's something
84 good that happened.

85 *00:10:36 Interviewer*

86 Yeah. OK. Nice. And yeah, do you think like those fishing quotas are accepted from the fishing
87 communities, like there's no urge to go beyond those fishing quotas like illegal fishing?

88 *00:10:55 D3*

89 I would say that for fishing as a business, for the fishing industry, of course, they always want
90 to fish more. But they are not fishing more, I would say mainly for two reasons. One is that the
91 industry of Portugal is not big enough, to spoil and to go beyond their quota. Or maybe there's
92 a sense of responsibility that the government and other institutions created in the last years. So
93 I can give you one example, not specifically about the Azores, but in Portugal in general, one
94 of the reasons why people that come to stay in Portugal, one of the reasons why they are really
95 happy after they have come is that the number of species, the life underwater that they see,
96 surprises them. They did not expect to see so many fish underwater, and they have this experi-
97 ence.

98 So I would say that so far things are treated in a reasonable way, and yes of course we can look
99 at this as a business case that proves that these two things can handle together. Of course, there's
100 always, and I'm sure that if you talk with dive centres from the Azores, there is also some tension
101 between the fishing industry and the dive centres. I have this type of discussions with many of
102 the dive centre owners that I met during the years, and we talked about this. And if you talk
103 with the dive centres, they are would never be happy because of the diving industry, because
104 they say that the fishermen fish too much. And if you talk with the fishermen, they will say that
105 they should fish more, and the dive doesn't interest at all. For me what I have to do is to find a
106 balance between these two and to try to stay together.

107 *00:13:00 Interviewer*

108 Yeah. And like, what would be a like a possibility to communicate like to bring those to sides
109 together. Like is there any organisation or something like that that tries to connect? Do you
110 think that like these organisations help to bring those to groups together?

111 *00:13:35 D3*

112 I mean, it's very important for the diving community and for the fishing community, I think it's
113 very important to stay together, to work together and to discuss this together. I am not a believer
114 on the power of having different industries associations, unless you put them together and they
115 can discuss freely. It's very important for the fishermen to understand what divers do and it's
116 also very important for the divers to understand what the fishers do. I totally forward that type
117 of initiatives, because if you put people together talking about the different interests, they will
118 eventually reach to the conclusion that, the 1st conclusion is that they have to work together.
119 Well, if they are working together, they have to be together. We are all in the same space, we
120 are all in the ocean. Some of use mainly in the surface, in the islands also, but we are all in the
121 same place, so we have to be together first. After that we can work together. For example, when
122 I see videos on social media of fishermen throwing back to the ocean species that were caught
123 on the net and that they cannot fish, I think that we are doing something right. We have to

124 honour that and we also have to give more visibility to that type of action. It's true that we have
125 people fishing what they cannot fish, it's true that some of them try to find ways of going beyond
126 what they can do. But it's also true that we have fishermen that have a sense of responsibility
127 that maybe ten years ago, they wouldn't do that. On the other side, we also have divers that are
128 respectful, that behave properly in the water, and we have divers that don't act like that. There
129 is every type of behaviour. We have to look at the good examples and use them to promote
130 better behaviour.

131 *00:16:09 Interviewer*

132 Yeah. OK. It's in both industries. And then considering the tourists, do you do any education or
133 like raise environmental awareness among your customers?

134 *00:16:25 D3*

135 Yes, so first I would say that more and more people that dive want to do different things than
136 travelling and diving. So we have more and more people, that come, and they want to be in-
137 volved in for example, citizen science projects. Which is something that is good and it's also
138 important to raise awareness of that. As we were talking about before. So people more and more
139 and more want to feel engaged and want to be engaged in those type of initiatives. But this is a
140 small portion, a small percentage of our client base. So it's not the main source of interest. But
141 you can always use diving as a way of doing that. I can give you an example that we usually
142 talk about with our partners, and we want to also talk about this with our clients. So if you think
143 about pollution, if you think about plastics in the ocean of course you relate that immediately
144 with industry reasons, so some others, some very big companies, some very, very, very bad
145 people, not us, but some others in the big cities, and so they are doing that and it's very, very,
146 very bad because the oceans are getting polluted. Of course there's a contribution there, but
147 sometimes when you dive you see a plastic glass underwater. Or you see a Coca-Cola can un-
148 derwater. Or you see a plastic bag underwater.

149 And what we usually say is that if you see a plastic cup underwater it's because someone threw
150 it. It's not an industry that is throwing plastic cups in the water. It's not an industry that is throw-
151 ing cans in the water. It was one of us. We were sailing our boat to go to a dive spot, we were
152 drinking and maybe it wasn't on purpose, maybe the wind took it and now it's in the water, and
153 now it's a problem. So if you bring a plastic cup to the surface and put it in the recycle bin this
154 is a contribution. And of course, you think it's not important, but first it is very important be-
155 cause of the example, and then if you multiply that by thousands and thousands of divers all
156 around the world doing the same, we will bring tons of trash to the surface. I can tell you, for
157 example, that we have dive centres in the Azores, that when they take divers underwater, they
158 give them a mesh bag and they say: "If you find something underwater, put it inside the mesh
159 bag and bring it to the surface and we will recycle it". I would say this is the right way of doing
160 this.

161 *00:19:28 Interviewer*

162 Yeah, of course, so the tourists are also aware of the impact that they can have. Yeah. And then
163 you said citizen science, so you track the animals that you see in a database?

164 *00:19:50 D3*

165 There are a lot of different projects. One that I like a lot, and this is interesting because that was
166 one of the talks on the 1st edition of the Diving Talks. We have this scientist, Ana Filipa Sobral,
167 she is studying the manta rays. And we already talked about this, the manta rays are one of the
168 reasons why people want to go to the offshore diving in the Azores. And it's something that she
169 has been trying to understand, is that it is not a resident community of mantas. Well, I think
170 she's starting to figure out what is going on. There are some dive spots close to the Santa Maria
171 Island, where you can always dive with manta rays. Every time, you dive there you can see
172 four, you can see twenty, you can see ten, but there are always manta rays swimming around
173 you in that dive spot. And what she's studying is, are these the same manta rays always? Are
174 they going somewhere around the world and then they tend to dive spot, to this location? So
175 what she does is she takes pictures of the mantas' bellies, because there are some dots. So look-
176 ing at the pictures she can identify if it was a fingerprint. Because the belly is always different
177 and it's unique for each animal. So she uses citizen science, she asks people to go to dive with
178 her and to take pictures, and she asks people that dive all around the world to take pictures from
179 the bellies. And then she has this huge database where she tries to understand if the mantas that
180 they have there are swimming around or if they stay there.

181 *00:21:59 Interviewer*

182 Yeah. OK. Interesting. So yeah, you are kind of also cooperating with science then and with
183 research?

184 *00:22:07 D3*

185 Well, this project is financed or supported by this Portuguese foundation, and they are owners
186 of the oceanario. Maybe you visited it already?

187 *00:22:21 Interviewer*

188 Yes, I went there.

189 *00:22:47 D3*

190 It's one of the largest aquariums in the world and maybe the 1st or 2nd biggest in Europe. And
191 they fund the project. And in the two years ago they launched this initiative, which is to promote
192 as a trip, holiday, vacation, to go to Santa Maria, to stay there with Filipa for one week and to
193 dive with her to do that. So it's like a nature, science, citizen science-trip. They really helped
194 the project with this trip in the last years.

195 *00:23:26 Interviewer*

196 OK. So you think that, like the social science aspect, is getting more and more popular among
197 tourists as well?

198 *00:23:35 D3*

199 Yeah. Yes, it's getting more popular, and people are more into that type of collaboration during
200 vacations. As I told you, people go everywhere to dive, if you have money to pay for your trips,
201 people like to go to different locations. And people are looking for new opportunities. The first
202 is to find new destinations, and Portugal is of course on the front line to catch this type of
203 interest, because people don't relate Portugal with diving. So we want to be positioned there as
204 the new diving destination, it's how we promote our geography. People also want to do

205 something during their vacation, during the trips, that makes them happier because they are
206 going to do something that they believe is important.

207 *00:24:37 Interviewer*

208 OK. So it's kind of travelling with a purpose?

209 *00:24:43 D3*

210 Yeah, "diving with a purpose", it's the expression they use for promoting the Manta conserva-
211 tion experience. So if you go to the ocnario-website and looking for the Manta conservation
212 experience it says, "diving with a purpose".

213 *00:25:02 Interviewer*

214 Interesting. And do you feel like a difference between the whole destination of Portugal, like
215 people that are going to the Azores are more interested in conservation or is it like a different
216 destination or is there no difference?

217 *00:25:21 D3*

218 There is different type of projects in other locations. There are certainly people that have this
219 type of concern in other destinations like in the Azores. But so far people haven't been selecting
220 the destinations depending on that, unless we are talking about a specific sample of divers. But
221 usually people go to the Azores because of big creatures, because of mantas or the sharks. Peo-
222 ple that go to the mainland have a different objective. It's not there yet.

223 *00:26:00 Interviewer*

224 OK. And what's the objective when people go to Madeira? I haven't looked into the Madeira
225 dive industry yet. So I don't know what the word.

226 *00:26:13 D3*

227 It's something that is not a characteristic of Madeira. But it's something that is very important
228 in Madeira, but that started here in mainland Portugal. We started 24 years ago developing
229 marine reserves. So we have a lot of many different marine reserves all around the Portuguese
230 coast. We also have some important marine reserves around Madeira, and also in the Azores.
231 But I would say that we should have more marine reserves. One of the initiatives that we want
232 to promote in the Azores, for example with the tourism association of the Azores. We talked
233 about this a lot because they have to realise that they need to protect the species. Yeah, because
234 species having a big impact on the water of the Azores and the local environment. Because I
235 told you, we have developed for many, many, many decades now different marine reserves
236 around our islands geography.

237 And as a matter of fact, for example, in Madeira, last year, Portugal created the biggest Euro-
238 pean marine reserve, which is around the Selvagens islands. So you see, in Madeira archipelago
239 has multiple islands, we have the Madeira Island, which is the main island, then we have Porto
240 Santo, these two are inhabited. Then we have the Desertas, which are south of the Madeira
241 Island. And in these Desertas we have a marine reserve where we have the rare monk seal
242 community. So we have a very big monk seal community over there we cannot live there, be-
243 cause of the monk seals. And then further South, even closer to the African continent, there are

244 the Selvagens, which are very small islands. And around these very small islands, last year
245 Portugal created the biggest European marine reserve.

246 And in Madeira there's also some important marine reserves where we dive with different spe-
247 cies, we don't have the mantas, we don't have the sharks, but we have other species that are
248 very friendly and that we love to dive with. So I would say that people that go to Madeira, they
249 don't go because of this, because they don't know. We are working hard to promote Madeira to
250 get to a place where Azores is already today. People say that the Azores are one of the best
251 diving destinations we have, but for instance Madeira can be even better for people that have
252 different interests. And for example, where you have huge schools of fish. So this also very
253 interesting. Maybe in the future people will recognise that in the Azores we have these charac-
254 teristics and in Madeira we have these characteristics and in mainland Portugal we have differ-
255 ent, other characteristics. So people can choose whatever they prefer.

256 *00:29:41 Interviewer*

257 Yeah. When you said marine reserves, it's the same as marine protected areas?

258 *00:29:55 D3*

259 Yes, marine reserves are marine protected areas. We have a lot of them in mainland Portugal.
260 That's one of the reasons why people get very, very, very surprised of the number of fish that
261 they see when they dive here. Also, the water here, the ocean here is very very polluted, so in
262 Madeira or the Azores the waters have more fish. Of course we also have marine reserves in
263 the Azores and marine reserves in Madeira.

264 *00:30:17 Interviewer*

265 Yeah. OK. And then you mentioned that you work together with the tourism organisation of the
266 others like the Visit Azores, right?

267 *00:30:29 D3*

268 So we work with the tourism boards in all the three places. In mainland Portugal, Madeira and
269 the Azores. We have a close relationship with them. Because diving is like a strategic to increase
270 diving tourism, is attractive for the whole tourism of Portugal. It's attractive for all the different
271 regions. So they know that we are doing this promotion, they know us. We've been doing dif-
272 ferent projects together in the last years and we will follow in the next years also with that type
273 of promotion, because we bring Portugal journalists, we bring influencers, we bring tour oper-
274 ators on familiarisation trips, on test trips, and when we do this, we work with the regional
275 tourism associations.

276 *00:31:34 Interviewer*

277 OK. And so the tourism association of the Azores are picturing or marketing the Azores as a
278 very sustainable destination. And I read that they also got certified as a Hope spot like last year,
279 I think. Do you agree with this vision?

280 *00:32:01 D3*

281 Yes, totally. Of course they are conserving. Well, it's not totally true what I was going to say,
282 because I was going to say that Azores tourism doesn't worry about fishing or they don't interest
283 about fishing, but they do. Also because the Azores is also a fishing destination, in the high seas

284 fishing, touristic activities they are doing there. But I know that for the Azores it will for exam-
285 ple be very important to win the World Travel Award for the best diving destination in the world.
286 I know that this is one of their objectives. So of course, when they promote the Azores like that,
287 they really believe that it's something that has to be considered. And of course, when we talk
288 about sports fishing, that's not the type of fishing that has a bad impact on underwater life.
289 Again, that is something that can happen together at the same time.

290 *00:33:12 Interviewer*

291 They can happen together with other tourists forms as well. OK, so also the diving operators
292 are not really concerned about the sports fishing.

293 *00:33:26 D3*

294 There is a bigger connection between the diving community and this type of fishing community
295 in terms of business. They hang out together. And sometimes for example the dive centres use
296 the fishing boats when they have different type of clients that want to dive maybe in different
297 locations with more comfort, because the fishing boats are better for sailing than the dive boats.
298 For example, sometimes we have special clients, that go to the Azores to do diving there, some-
299 times we hire the fishing boats, and we use those for the offshore spots.

300 *00:34:17 Interviewer*

301 Yeah, that's interesting because I haven't heard about those sports fishing yet. So the whole
302 cooperation among the Azores, like you mentioned before, that there's like this tension, obvi-
303 ously, between the fishing industry and the diving industry. But among the diving industry
304 themselves, do you feel like there's a good network and the businesses are like supporting each
305 other to become more sustainable or to act more towards conservation?

306 *00:34:58 D3*

307 I wouldn't say that. I would say there's more cooperation because of conservation. I would say
308 that when they discuss that about topics, they are together and the concern, the changes. But on
309 the day by day, on the normal existence of those different actors, they of course have their own
310 interests, and they are more concerned about growing their business than collaborating. Which
311 is something that is not correct and they should know that they can go further if they collaborate,
312 but these are people that are more focused on their own interests.

313 But anyway, for what is important, when the topic is marine conservation, of course they are all
314 on the same side. Dive shop owners say no, no more fishing, we need less fishing. So they are
315 aligned on these changes, but on the day by day, they take care of their own business. And they
316 should collaborate. For example, a very practical example: you have a group that is coming and
317 then the boat of your dive centre will be occupied. If someone comes in who wants to dive, of
318 course they will forward this client to a different dive shop. But that's tactical, so it's something
319 that happens and their reaction is that they say, "You can go to the dive shop on the other side,
320 and they will take you to dive". But they should be strategically. They should be strategically
321 because they should know that, for example, if they collaborate with dive centres on other is-
322 lands, they might be able to host clients that are considering going to different islands. If I only
323 have a dive shop in Santa Maria, I cannot help someone who wants to go diving in Faial. They
324 should be more proactive in promoting that type of collaboration to solve more and to be able
325 to reply to a bigger sample of people trying to visit different islands in the Azores in general.

326 00:37:27 Interviewer

327 Yeah, it would make sense. OK, so what do you think apart from the fishing industry, what do
328 you think are the main challenges at the moment in the Azores concerning the marine conser-
329 vation?

330 00:37:47 D3

331 I wouldn't say that the main concerns are in marine conservation, because we are on the slope
332 going up. Our concern is to recognise the need of being more responsible. To proactively work
333 for the conservation of the natural resources. So this is an onwards slope, so we are on the right
334 path. I would say that the concern is more the pricing concern. Because what we see is that the
335 diving operators I'm talking here about. But what you see you is the prices of the accommoda-
336 tion are getting higher and higher and higher every year. Because of the pressure. But when you
337 look at for example the diving centres community, they are not moving along in that. Of course
338 they are not selling on the lower price. But they should ask more money. And they are promot-
339 ing, they are trying to compete with other destinations that are mass destinations, for example,
340 like the Red Sea in Egypt. But they should position themselves as a higher cost destination
341 because of the quality of the service they provide, the environment and of course the lack of
342 supply. And they don't understand this, so we try talking to them and to explain but they don't
343 understand.

344 So what you see is that for example, when we have dive centres going to international exhibi-
345 tions, international fairs, they are selling packages, so dive packages for example, for 700€,
346 600€, 800€ and they do that because they want to compete with for example Egypt. But you
347 cannot compete, you cannot position yourself as a low-cost destination. So then your price is
348 very, very small. So what I usually tell them is if you have three times the price you will have
349 clients, they will completely understand this. But it's not on their mindset that they are doing
350 anything wrong. So we are trying to work this type of strategy. It's something that they have to
351 do because they are ruining the destination and the people that come, are people that don't have,
352 for example, the capability of buying for the hotels that they have there and the hotels together
353 with the diving are the reason for the exceptional experience. And they end up by not having
354 this exceptional experience because they stay in low-cost hotels, low-cost accommodation with
355 no special conditions. And they think this is representative of the Azores, but what is repre-
356 sentative of the Azores is very high-quality hotels, very high-quality topside experiences. But
357 the diving industry is doing the opposite. Which is really, really wrong and we will fight for
358 changing that.

359 00:41:34 Interviewer

360 OK, so yeah, you want to have the high quality and high-cost tourism in the Azores?

361 00:41:43 D3

362 Yeah, because we don't have space. If you only have limited capability of hosting, you should
363 target people that have more money, more financial capabilities. Because we have that to offer.
364 Instead we are attracting people that are discussing 5€ here and 5€ there, you know. So that we
365 are doing really wrong, and we have to change that.

366 00:42:13 Interviewer

367 And then how do you see this like the tourism industry in general developing in the future?
368 Because if you want to promote the Azores like to be an established diving spot, for example,
369 then more people are coming in the future probably. And how do you prevent them that mass
370 tourism happens, which is which would be destructive for the destination?

371 *00:42:41 D3*

372 We have to develop more the diving infrastructure. So for example, when we are lobbying for
373 the government and the tourism board to support, for example, work to be done at the dive
374 centres to improve the quality of infrastructure. So we have very good professionals, we have
375 very good instructors, we have very good dive masters, life guards. We have good boats, people
376 have a comfortable nautical asset to dive. But we need to have that also on the physical infra-
377 structure on land. So one thing that we've been doing, we are talking with the regional tourism
378 associations in the Azores and Madeira to get from the government, for example, support pro-
379 grammes, financial problems to aid the dive centres to make better physically infrastructures to
380 host, on the other side, on the accommodation side, more and more what is being developed
381 very high-quality projects, to attract people with more money. And then all this together might
382 help us to attracting more qualifying, better the tourist that we want to bring to the Azores than
383 we are doing so far.

384 *00:44:12 Interviewer*

385 So yeah, the main objective is to make a high-quality tourism and to position the Azores as like
386 a diving spot. I think actually that's all the questions that I have.

387 *00:44:29 D3*

388 OK, good. Yeah. And you have my contact. If you want to know more about whatever, call me
389 or send an e-mail. If you need something more about the Azores or more contact to people to
390 talk with and maybe to provide information.

391 *00:44:54 Interviewer*

392 OK. Yeah. Like if you could provide more contacts, it would be really helpful.

393 *00:45:02 D3*

394 Good talking to you.

395 *00:45:02 Interviewer*

396 Thank you for your time. Thank you.

A.3.4 Interview 4, Participant W1, 15.04.2024

00:00:07 Interviewer

As the first question I thought maybe you could just describe your company, like how long has it been operating in the Azores and what is like the main product that you are selling? So where's like the focus?

00:00:24 W1

Just before of that Ilka, if it was possible just by curiosity because we have had a lot of people asking us for master thesis and all of this, so we always like to understand a bit for instance, if you have been already in the Azores or Terceira Island. And also how did you find us? Just for us to have an idea. It's also interesting for us. But we can also talk in the end, there's no problem.

00:00:49 Interviewer

No, we can also start with that. Like yeah, unfortunately I haven't been to the Azores yet, but I really want to go because, like, right now I've been researching so much, and it just seems really amazing. So how I found out about the topic in general is that I'm studying sustainable tourism development. And last year I started to get more into like marine conservation and I lived in Malta for a couple of months and there I started to research about shark conservation because I was working with an NGO which is called SharkLab Malta and that's why I decided to focus on the Azores. Because there's the shark diving industry that's started and yeah, from that I kind of got onto the topic of marine conservation and.

00:01:38 W1

So your master thesis is really going to be about the Azores?

00:01:42 Interviewer

Yeah. It's focus is on the Azores.

00:01:46 W1

Very well. So what I can tell about the company. So the company started in 2009, so it is already 15 years old. I just entered the company in 2014. And I started with an internship and then today I'm a Co-manager with Paulo. That is the one that founded the company. Our focus is whale watching, it's our main activity. But then we have other activities such as a trip to the islands, that is Ilhéus das Cabras, like a volcano that we have here, that we go there, it has some caves also a nice place for scuba diving and snorkelling. Then we also do tours like swimming with dolphins, the tour snorkelling tours. We also go for other islands and the sunset tours as well, as long as it's private tours and all of this.

00:02:36 Interviewer

Yeah. So you also offer diving or activities?

00:02:41 W1

The closest we have, I can talk a little bit about me because then you can see we have some perspectives that can help with some answers. But in terms of company itself the closest we have is swimming with dolphins and snorkelling that we have the year and in groups.

39 But I'm a divemaster, from PADI. I did not a lot of dives, my idea was really doing kind of
40 some background and have different backgrounds for research. So the skipper licence, so boat
41 licence, diving. So everything that I could get to have a nice curriculum and have opportunities
42 wherever it will be possible. Of course my idea was always to come back to Terceira Island and
43 really be part of marine biology here. I did a bachelor in Algarve. In South of Portugal. In
44 marine biology, I really enjoyed it. But for me what was very interesting, because I had a very
45 nice space of marine biology in Algarve. But then I did a master, Erasmus Mundus, you know,
46 the EMBC. It was really about marine biodiversity and conservation.

47 *00:03:45 Interviewer*

48 Ah yeah, Erasmus Mundus it's the same that I'm doing. Ah, OK, interesting.

49 *00:03:55 W1*

50 And it was very nice because in each year you could choose just one university. So we had six
51 different universities, and I chose Belgium my first year and 2nd I was in Spain, and I was in
52 the middle we had like a summer school, so I did it in Slovenia. It was very, very nice and my
53 master thesis was here in the Azores, in Faial, in the department of oceanography and fisheries.

54 So with this background, then you can see that can be a bit more connected with conservation,
55 but then I can talk a bit what was the base that I have in terms of studies. What I thought about
56 it in terms of research, and now what is nowadays in terms of being, I don't feel really right now
57 as a marine biologist because today I'm really organising a company, it is different and if you
58 want that can be one of the topics that may be interesting, even maybe for your master thesis. I
59 don't know if you're talking about this point that is the connection between research and com-
60 panies and this is has been a big problem, at least for us. And if you want that can be one of the
61 topics.

62 *00:04:59 Interviewer*

63 Yeah, definitely. Yeah, yeah, of course. Like, I also wanted to talk about it because on the web-
64 site of your company, it says like that your aim is a responsible participation on research and
65 environment education with our community. So yeah, one topic of the interview is like the
66 research and science impact that tourism can have, like for example, citizens science or like
67 cooperation with universities. And then I was also interested in the education with the commu-
68 nity. Like, yeah, what kind of activities do you do there?

69 *00:05:44 W1*

70 So what I can tell you this is we are in Terceira Island. So we have nine islands in the Azores.
71 Terceira is the third largest, but the second most populated. We are talking about 60,000 people.
72 There's not a lot of people. And we have the University of the Azores, it's divided or spread, at
73 least for three islands. Here the focus is more about nursery or related with the group agriculture.
74 So it will be more the focus here. Despite that we have also some parts or at least we have one
75 person, one person on the island that is really focused on marine biology, but this person really
76 goes around the world, so it goes for the places, for the universities, for Brazil, for Macau. So
77 it goes for different places in the world. So it's really not a person that is only focussed here.
78 That is on the João Pedro Barreiros, this is one of the doctors here.

79 Then we have a little bit more the part of biology, medicine and all the other stuff in São Miguel,
80 that will be the main island with 120-130,000 people. And Faial will be the one focusing on

81 marine biology. So this one they have a department, the Department of Oceanography and Fish-
82 eries and that one was the one that I did my thesis there. And that one is really focused on
83 research marine biology. That would be the one.

84 *00:06:59 Interviewer*

85 Yeah. That would be the one in Horta?

86 *00:07:17 W1*

87 Yes, Horta is the city, Faial is the name of the island. And then it has about 15,000 people,
88 something like that. Then you see the difference. That's why a lot of research, if you find articles
89 here, papers about the Azores, a lot is from DOP, and by Faial and Pico.

90 So just to explain the islands, you can understand that we are very limited in terms of partici-
91 pation in marine biology here. What happens is if you see one of our partners, one of them for
92 instance is Kelp research. Kelp Research is with some researchers from Netherlands, and they
93 just receive money. I don't know how it works, but to be their university and maybe some Eu-
94 ropean funds, I don't know. And they come here, they have already 2 boats organising here, they
95 are here, some time during to July. So it's like 2 months, June and July. And they are really into
96 it, to tag, to protect sperm whales and the rissols and the beaked whales. So they are now very
97 focused on deep sea research and with them we have a lot of contribution because they have a
98 spotter, we have a spotter, we organise ourselves. So it's kind of a symbiose.

99 *00:08:39 Interviewer*

100 OK, so between the company this is?

101 *00:08:42 W1*

102 And that is the word that I'm trying to reach because when works with the universities, they're
103 always some thinking about we must help research. So it's like mandatory.

104 So what happens is for instance people go ready to our office and say, "Ohh here we have this
105 box. So what you're going to do is when you find a piece of squid, you just get this piece of
106 squid you put on this box. You send me to São Miguel, you put in the fridge, you put the name,
107 you put the data" and I say, "Oh wait, wait, wait, wait." And this is the big concern about the
108 partnerships, especially with people from the Azores.

109 So what has been happening is we have some partnerships that was very nice. For instance
110 MONICET is one of them that collect the data. So we see this sperm whale here and we get the
111 coordinates, and we put ourselves on the programme and you see the several bubbles, the dif-
112 ferent areas from different companies that were doing that.

113 The thing is, we are doing that just because. So when I say just because it's we are doing this
114 on the beginning with a lot of will because it was very nice programme, they organised that.
115 But the thing is, when we go always for the problem of money.

116 *00:10:09 Interviewer*

117 Yeah. So you don't like as a company you don't get a benefit kind of out of the corporation?

118 *00:10:10 W1*

119 That will be one of the reasons, but for me the most difficult reason to accept is because the
120 university is receiving money for this programme. The researchers are receiving a salary for
121 this programme and others. And we must participate because we work as a marine company,
122 and I think that, in my opinion, it doesn't work very well. I think we are the first ones that we
123 wanted to be more connected with research, but we can never forget the companies they work
124 for service.

125 So a lot of people when talking about research, and this is my exchange, when I came from
126 marine biology and now when I'm working with the company. I want to be part because I have
127 this thing inside me so that we would like, we enjoy, we want to be part, I want to be the one in
128 the boat and being with everyone, and I'm trying to help and do our best. So right now, for
129 instance, it's starting a new programme with Photo-ID from blue whales and whales, so it's very
130 nice, but we have two main goals.

131 One may goal is, of course, try to give the best quality, quality as we can do and make people
132 very happy from our tours. But just together with this, is of course you need to have profit,
133 otherwise you will not be here next year. And we need to improve ideas every year, so it costs
134 you need to pay. You need to have employees with you, you need to find the best ones to have
135 a top quality. And this is the thing that doesn't work for us. Because what happens is they look
136 for us and they look as "You need to do that. You must do it because you are a company that
137 works at the sea". So it's not going to take a lot of my time because you just put on the paper
138 and that is not really the truth. Because we don't have problems to do the things, the problem is
139 if you do something you don't have time for other things. And especially when you need to
140 collect data and also put yourself the date inside, that is a lot of work. So that would be one of
141 the topics I don't know if you heard that about these other companies.

142 *00:12:35 Interviewer*

143 Yeah. At the moment, like in so much detail, it's the first time that I hear it.

144 *00:12:38 W1*

145 Yeah. So for me it is really something that I really want to be part of, but it needs to make sense.
146 So people come already to our office just like, it seems that we work for them, and you say,
147 "OK, now you're going to do like this." It's just like they don't really ask us already if you want
148 to be part of it. It's just like, "Here this is for you, and you're going to do that tomorrow."

149 *00:12:52 Interviewer*

150 Yeah. Yeah, OK it seems like it's mandatory for you.

151 *00:13:05 W1*

152 Yeah, just like I'm working in the company of the university. So for me, it doesn't make a lot of
153 sense. What is happening here is some companies are already doing their own research. That is
154 very interesting. I don't really know why they are doing this way. One of my ideas is because if
155 they are really doing good research, they can just have some benefits on the Azores in terms of
156 licence, they can have some benefits but also it shows their concern and can be promotion as
157 well, I understand. But also what happens is, I believe, if you're doing research, you can ask for
158 funds. That is I think the big purpose. Of course they can really understand, they are doing their
159 job, they put people also that are finishing their courses, and they want to be part there. So it's
160 the way that people are doing research and work as guide. I understand that. But of course I'm

161 not into the details of these companies, but I know some companies are doing that especially in
162 São Miguel. The other part of the community, that part.

163 *00:14:16 Interviewer*

164 Sorry. Can I just ask a question about the research part still? So what would be your like solu-
165 tions to this problem that like? A change in the communication or a change in like a shared
166 profit, kind of?

167 *00:14:32 W1*

168 I'm in the position that for now I can only give solutions from the company, because from the
169 university I need to know what the problem is. Because if the problem is a lack of money, so it
170 means that the project we are not together. It means the project they are only thinking about
171 what they are doing, they are not thinking. Because I think we should do that together.

172 So it's something that they have the ideas, they have the decisions, they are going to do the data
173 the way they want and then they just come close to you and just like fishermen, they say, "OK,
174 if you find this, you give to us". So even for fishermen, sometimes they say, "If you find this, I
175 give you 10,000 € for this data or 1000 €, because this is for the market fish, and we need the
176 fish from this mark or 10 € for each mark. So with fishermen they do that. Because they know
177 otherwise, they don't give they're not going to give to them the data.

178 In our case, I just think that, or we just remember that we do service, we don't do research. So
179 I don't have problems to be part of research, but I do a service for this research, and I can do a
180 budget for that idea. So doesn't need to be like something very high, but I can do a budget. So
181 that will be a solution. We can be part of this project, and we give a budget for that type of
182 project that will be easy peasy, but they don't think this way. Usually when they think about the
183 company is the last concept, because the first concept is, "Well, we can just ask them, and they
184 do that for us and then we have this data".

185 *00:16:12 Interviewer*

186 Yeah. So do you think the universities or researchers would be open to pay for the service as
187 well?

188 *00:16:21 W1*

189 I think the researchers will be open mind for that. The problem is what is the background? So
190 if the university will think about that, I don't think university will pay for that almost for sure,
191 but it needs to be part of the project. So they have a budget, and this budget can be organised
192 for these different types of ideas. But I don't know how it works these budgets. I don't know
193 how they programme that. As you know, we have scholarships, with these scholarships you can
194 do a master thesis, you can do a bachelor thesis. So I think it would be just the same idea for
195 some kind of projects. So they want to do a tag information with the, could be a beaked whale.
196 And they need to have a collection of at least 100 examples of specimens to have a very nice
197 profile of deep sea, and also understand with cameras or whatever. It's a project that is available
198 and if someone wants you can request for that and you need the company, you need the tags,
199 and that will be the amounts that we'll give for this budget. This is just a way of then organise
200 and get this budget and organise about this. But I understand it's not easy.

201 *00:17:40 Interviewer*

202 Yeah. It's hard to like, connect all the different interests together.

203 *00:17:47 W1*

204 What I can just mention is, I don't think right now it's working at least with us with the idea that
205 "For you it's not going to take a lot of time". This is not the best answer.

206 About the community, I think that is working very well. So what happens it that you have
207 schools we have for instance Geopark Azores. That is a good example of the service. Geopark
208 Azores is the park that works all about the geology, actually in the Azores in general but we
209 have our base here in Terceira. And for instance, they come with the kids from different schools.
210 But they ask for a service. They ask for a budget, when they want to go with the tour to the
211 island and we go there and they say, "OK, we want two hours, we want to go with these kids,
212 give me a price". And then we go there, we have a guide and he's going to talk about the rocks
213 and the formations, and we give this service. That works very, very well. This just makes sense.
214 So we have a company, and you have a department of the Government or the department of the
215 environment, the Geopark. They put us together and it makes sense.

216 The other things that we can do that is very easy that we do it for free and for me is has no sense
217 that it has costs, is a lot of schools or also other things ask us to go for a talk. So they ask us to
218 go for a talk and talk about the specific subjects. I've been already with kids talking about
219 dolphins, I have been already with grown-ups talking about bachelors or master thesis or so that
220 for me it makes the whole sense and that is the part that right now is working very well in terms
221 of community. In terms of the Geopark Azores that is a service and in terms of the things that
222 we do for free because we say yes and it makes sense for us because then we are together, we
223 are community and we are promoting the activity itself, not only for us but for Terceira Island.
224 So for me it makes the whole sense.

225 *00:20:04 Interviewer*

226 So you are doing this like as part of your motivation to like to contribute to conservation, but
227 also as a kind of promotion.

228 *00:20:15 W1*

229 Yeah, I've been Friday, they asked already for the topic of garbage at the sea. So we are doing
230 this part all with the presentation of the garbage at the sea for the little ones at about 6 years
231 old, 8 years old. And I was very surprised because they know already a lot of stuff, they knew
232 about the bioaccumulation. So I was like "Wow, what?!". And some part of the presentation
233 was to explain that, and they knew or at least some of them knew already. And it was easy.
234 Sometimes is very interesting and this part it makes us complete. But the part of the university
235 is working that way that then I don't understand. Because I know that in some islands, for in-
236 stance, in Faial the Department of Oceanography and Fisheries sometimes they work with com-
237 panies and they pay for certain types of service because they know they need that boat to go 15
238 miles outside to find a whale, and for that you need expertise, you need the boat, you need
239 insurance, you need the spotter and that it's all the operation going on. So it's not something that
240 you want for free and because as you know, Ilka, data costs money.

241 *00:21:12 Interviewer*

242 Yeah, you have costs, yeah. Yeah, it's a lot of work to collect the data.

243 00:21:24 W1

244 I can just give you a very easy example that if you want to do something in social media. If you
245 want to reach not 100 people, but you want to reach 500 people, you need to pay 10 € plus
246 something plus taxes, because that will be the way to promote your idea your project. So it's
247 just the same for me just the same.

248 00:21:48 Interviewer

249 OK. And when you talk about the community, like the schools, for example, do you just talk
250 about Terceira or also the other islands?

251 00:21:58 W1

252 For me it depends. Some topics are very general, so actually worldwide, some topics is really
253 about Terceira. And talking about Terceira is where I feel more comfortable. Because for me
254 talking about the other islands, I don't know if you have been talking already with some people
255 from other islands?

256 00:22:16 Interviewer

257 Yeah, like from Pico for example.

258 00:22:18 W1

259 And for me, it's very difficult to have a perspective of the Azores in the general way. So for me,
260 the correct way to look to the Azores is to talk with each person from each island. Because we
261 are separated. It's just like Darwin with the birds. So actually we have different accents, different
262 types of culture. We are Azores, but we have a lot of difference, and it can be very different
263 companies the way you work.

264 00:22:44 Interviewer

265 It's very spread out.

266 00:22:49 W1

267 Sometimes it makes a difference from each village. Imagine each island. So I don't like when
268 people from other islands talk about the other islands. I think the best way is to talk about your
269 island and you have a very good perspective. You can have opinion only, of course is not correct
270 or not correct. It's only your opinion. Of course I can give opinions from different islands, but
271 to be always some disturbance.

272 00:23:18 Interviewer

273 Yeah, sorry. There's just a siren here because I live, like, right next to a big street in Lisbon. But
274 yeah. So do you feel like the spread-out character of the Azores is kind of impacting, like, the
275 cooperation between the islands and the negative way, maybe like that you are working in dif-
276 ferent ways. For example, or don't agree on something?

277 00:23:43 W1

278 That is a long historical about the Azores because, for instance, if you compare it to the other
279 archipelago of Portugal, that is Madeira, it's very different. That is a Big Island you have one
280 decision on one island and here we have eight decisions, plus the big decision of São Miguel.

281 São Miguel is the main island and is the one that usually has the government and everything
282 and the decisions are right there and makes a lot of difference for other islands. So it's very
283 difficult to find balance between the islands.

284 And now when I talk about balance, I'm talking about the tourism and the connections, it's very
285 difficult. But it's difficult for natural reasons. It's not that they are doing everything to go for
286 one place. In the Azores, people are free to choose which island they want to go to.

287 Of course the way things are done, of course you have some preference. Why? Because the
288 promotion is different. If you find the Azores, you'll find easily, the first photos you'll see are
289 from São Miguel.

290 *00:24:58 Interviewer*

291 Yeah, they just have resources.

292 *00:24:59 W1*

293 Because it's an island with more population. The island, with more promotion. But I think it's
294 normal, it's just like a capital from the Azores, let's say. Of course, it's difficult to find a balance
295 between the islands. But this balance has to be there because of the protection and conservation,
296 so there needs to be in equality.

297 *00:25:27 Interviewer*

298 Yeah. OK. So do you feel like there has to be more support within the islands, like for example,
299 I found out about AOMA, like the association of marine operators and that's kind of a solution
300 to bring together different like maybe from different regions than one organisation?

301 *00:25:46 W1*

302 For me the solution is you always need to have to have a good representation of nine organisa-
303 tions. Why nine? Because each island has to have a word.

304 *00:25:56 Interviewer*

305 Ah, OK, yeah, it's nine islands.

306 *00:26:01 W1*

307 That will be important, but it's difficult. It is just me giving opinions, because of course Corvo,
308 it has a population of about 400 people.

309 *00:26:11 Interviewer*

310 Yeah, it's tiny. Yeah.

311 *00:26:13 W1*

312 But how they are going to answer for a population of São Miguel with 125.000? So it is difficult
313 to find this balance, because even the ones that are making decisions, the ones that are in the
314 government, sometimes it lacks a lot of experience in the field, in information. So it's difficult
315 is. I see a lot of times that they just need help from outside.

316 *00:26:46 Interviewer*

317 What do you mean from the outside?

318 *00:26:48 W1*

319 I think it's also learning from the others. It's simple like that sometimes. Or you are able to learn
320 with the others, with the errors with things that are doing great, and this can be adaptable here
321 or not. Or even asking for information. I think you need to have this humility with yourself to
322 understand, "OK. And I need to know more about that to make a decision". And not only make
323 a decision because we must make a decision.

324 Since I started here, I've been to a of different meetings of the island. Where we asked like what
325 we can do for the tourism of Terceira Island and then we have everybody related with tourism
326 on Terceira Island and it was very nice to see these types of meetings. But then the way they
327 were managed.... You know, one important thing I think one of the fundamental things when
328 you have a meeting with such important and such a lot of people that are important for this
329 topic, for tourism, you need to have someone that is in control. An intermediate. That says,
330 "OK, so let's go for another opinion" and usually it's not something that you go once and is
331 finished. Only if you want and you need that you are just putting together everyone. Because if
332 you want to find something, it's a lot of work. Because sometimes people just want to give
333 opinions, they not really want to go for focus of an answer or asking about solutions. So prob-
334 lems are easy to find. If you start talking with five or ten people, you find a lot of problems.
335 Solutions is what we need to work with, that is the thing, and I think right now people still a lot
336 of focus and so on problems.

337 *00:28:44 Interviewer*

338 OK, so there's like missing something like an entity or something that is the mediator.

339 *00:28:53 W1*

340 So I'm just saying my example and what it meant to me and how it changed me my mindset. So
341 instead of trying to do my best for everyone, start thinking in solutions. I started thinking in the
342 problems of the company and then I could manage the solutions of the company. That's why I
343 changed from internship and from employee from co-manager. Because Paulo, the one that
344 found the company, started seeing that on me. He started seeing, "OK. This guy is not just like
345 someone that is coming here to work. No, he really wants to change. Really wants to work for
346 solution". And I still have this will for the island because I'm really passionate about the tourism
347 and the marine conservation. It is very difficult. I don't know how old are you? I started here
348 when I was 23 years old.

349 *00:29:40 Interviewer*

350 Yeah. I'm 24.

351 *00:29:43 W1*

352 I know I'm 35 and for me was disappointed. I was very and also frustrated because you really
353 come with all this will. And I came here and was thinking like "OK, I can come for 24 hours
354 work. For me it's not bad. I really want to make a change". And in some meetings, you could
355 see people with different age with the same thinking. But the thing is, you always need the
356 intermediate. That is fundamental.

357 For me, we had the university here from Salzburg, from Austria. They were doing this interme-
358 diate. They were talking about the management of our islands and how it works in terms of
359 sustainable way, how the different positions of people in the society, so someone that works in
360 the toll hall, someone that is the president or companies. So all these different people from the
361 community that could make a decision from the heart. And that was very, very nice. For me it
362 was one of the best meetings because it was different. The times where we went, and then in
363 the beginning it was a lot of people, but then we had just some people that were really interested
364 left and these people, each one was from one part of the society. It was very interesting. But
365 then they finished the course.

366 *00:31:15 Interviewer*

367 So it's like bringing everyone together.

368 *00:31:20 W1*

369 And what happened is the idea was there, but then we missed the intermediate.

370 *00:31:25 Interviewer*

371 OK, so it's like not a long term-project?

372 *00:31:27 W1*

373 You know why we need intermediate? Because if you do it by yourself, of course, if I'm doing
374 myself, I have a company, then you have a problem already. Because everyone will think that
375 you are doing that for some kind of purpose. And you need to an intermediate with a very easy
376 purpose. I want the best for you. I want the best for you island. And this is the difficulty.

377 *00:31:54 Interviewer*

378 OK. Yeah. So I heard from other interviews that like the bureaucracy, or the governmental leg-
379 islation is like a bit behind in the marine conservation or not really supportive.

380 *00:32:08 W1*

381 A lot, a lot, a lot. A lot behind. Yes, we are right now in about I think it's three years waiting for
382 the new licence coming out. So the licence from whale watching is closed. I don't know, I think
383 since 2018. 2017 or 2018. And since then they are working in a new idea for the licence, so it's
384 not only the licence itself but how they work in the different island. For whale watching and
385 still, nothing came out.

386 *00:32:44 Interviewer*

387 So you need a licence to be able to do the service?

388 *00:32:50 W1*

389 First you buy a boat and buying a boat you need to put this boat in a maritime touristic licence.
390 When you have this licence then you can apply for a licence for whale watching. And then this
391 licence for whale watching and this licence of maritime touristic, you can put more boats inside
392 if it's available or not. In case of maritime touristic yes. So you can do tours around the island,
393 but you see whales right now, no it's not available. Or at least to open new companies, it's
394 available for what it has already. Let me know if I'm coming out from the topic.

395 00:33:31 Interviewer

396 No, no, I think it's really interesting. Like it's so much information. So yeah, thank you for all
397 of that. Yeah. I was also like, about the whale watching, I also saw that you have like the re-
398 sponsible guideline or conduct, I think it's called on the website. So that's also like a law or
399 rules from the government that you have to follow or it's like your own decision as the com-
400 pany?

401 00:34:01 W1

402 So that was very difficult to create because this we put this year. Just now in fall season, winter
403 season and these guidelines is from 1999. So that's why it was difficult because some of them
404 was not making sense at all. And what we did is we did an easy combination from what was
405 there because we cannot put things from our heads, we just put from there and in an easy way
406 that everybody can understand what supposed is correct and is not correct. And these guidelines
407 are the one available for the Azores. This one is just the resume, that we did to be easy to
408 everybody, to understand. It's a bit more complex than that, but it's not really easy, if you want
409 to put everything in one image. So we just decided what was easy for everybody to understand
410 at least what we must do.

411 00:35:00 Interviewer

412 So every whale watching operator has to follow the same guidelines. OK. And is it like, are
413 there any consequences if people do not follow the rules?

414 00:35:13 W1

415 So we can have the maritime police that can do some fiscalisation. I don't know if you have the
416 knowledge to understand all of this because that is very specific. So right now the exchange
417 also in the ones that are in the fiscalisation, usually what happened, what I saw already happened
418 in the past, is when some company is not feeling OK because some kind of approach other
419 company is doing, they report to that. That would be the easiest way, because actually you are
420 the ones that being every day at the sea. It's difficult because always when you have a company
421 starting from the beginning, it's like everything in the world, if you start something, how you're
422 going to know everything. Because it's one thing you see in the paper, and one thing you see in
423 practise. And I understand that. But then one thing that we have that is quite difficult is what
424 we call the common sense.

425 00:36:34 Interviewer

426 OK. Yeah, yeah, yeah, it's like to not touch a whale or something like that.

427 00:36:36 W1

428 And the common sense is the thing that we never know if it exists or not.

429 00:36:43 Interviewer

430 OK, that's true.

431 00:36:45 W1

432 The common sense for you is different than my common sense. Of course, some people that
433 think similar than the common sense makes sense, but if you don't think similar, then it doesn't

work. But right now, at least in Terceira Island, at least since I'm here in 2014, we have been the best approach ever, so everyone is very careful. Everyone is trying to do as slow as possible. Before that we had two other companies that were really thinking about money and don't care about other things. You feel that on people, when people are passionate and when really like that, it was that people are doing there because someone was asking for them to go to the sea. Then what happened is they're not doing good work but not allow all the other companies doing good work. But fortunately, these two companies, they are not operating anymore. At least for whale watching. And now everything is alright. I'm very glad about everything that is happening. At least three major companies that are working on the island.

00:37:51 Interviewer

Yeah. OK. And you have like a good connection with each other?

00:37:57 W1

Yes, yes. Sometimes we do meetings when it's needed for something. So right now we are in the best position ever since I remember. Of course, there's always some challenge. Of course, there's always some competition, but for me, if it's healthy competition and always OK with it. Because everyone is going then with that.

00:38:17 Interviewer

OK. And then I also wanted to ask about the tourists like, I was thinking because I only interviewed diving businesses at the moment and like often diving tourists are coming to the islands to see the marine wildlife, of course. And they are like divers maybe a bit more aware of like marine conservation issues, but I thought maybe whale watching tourists they come to the island to do hiking or like also other activities and they are not coming mainly for the marine wildlife, so maybe you can reach tourists and that they're not aware of marine conservation issues yet. And then you can be like the step to teach them more about it or educate them more or something like that. Like would you agree on that?

00:39:16 W1

So from my background of diving, that is a small background, I understood that everybody that comes from diving, most of them are really concerned about the pollution and about the environment, about the conservation. They are really, really concerned about that. I had very few examples of people that don't care, at least those that come for the company and want to do diving. So I think there's already people that used to do diving with companies they already come with this idea.

So that's why it's also a small area. So diving is a small business comparing, for instance, whale watch. At least in the two big islands or even the three or four. That is, we have four islands in the whale watching that is São Miguel, Terceira, Pico, and Faial. And I think whale watching is a larger business than diving and just by the numbers. We have boats already in São Miguel that are taking close to 80 people. You cannot do diving with 80 people in one tour.

Just because the numbers don't match. What happens is, in terms of people coming, even if they don't do whale watching or diving, I think that tourists that are coming for the Azores, they are coming already with a perfect idea that these are islands to preserve. And if we keep this type of tourism, I think we are in the good path. I think what is missing a lot of education still in the population on the islands.

476 00:41:08 Interviewer

477 So you think tourists already have a bit more awareness?

478 00:41:13 W1

479 I wasn't born here, but all my family is from here. I was born in Brazil. All my family used to
480 emigrate to Brazil on that time in the 60s and 70s, and I'm born there, but I came here, when I
481 was nine years old. On that time when I was 10-12 years old, people used to take out the garbage
482 from the car. So they drink something, or Coca-Cola or something and put it outside. Just throw
483 it outside. Nowadays it's very rare to see this type of behaviour, but still nowadays I see some
484 behaviour like this that for me is impressive. Impressive. Or I saw already people just in the
485 centre on the city and taking some kind of chocolate, and the paper goes directly to the floor
486 with the garbage just by the side. And that is very strange. So I believe that is not going to
487 happen with the tourists. Of course, if the tourism is from other islands, then it happens. Because
488 the education is there. Or the poor education. So imagine if I'm from this island and I'm going
489 to another I'm also a tourist. If I don't care in mine, I don't care the other as well.

490 00:42:35 Interviewer

491 Yeah. OK. Like you mean the domestic tourist from the Azores themselves?

492 00:42:38 W1

493 Domestic tourists. Or the type of tourist just the same way we have here, just the same popula-
494 tion we have. I'm not saying the general this is a limitation, but it exists. To me, it doesn't make
495 sense nowadays in the 21st century, it doesn't make sense at all. Because if they didn't have
496 education, if we didn't have garbage, because the city is very clean. Every day, like, I don't
497 know 7:30 AM, we are already cleaning the city. It comes a little truck and cleans everything.
498 And it's a very clean city, but still we see some part of the population doing that. And that for
499 me is disappointing. But I believe in terms of education, the new future, the kids, I believe that
500 is quite optimistic. I believe that this good.

501 00:43:38 Interviewer

502 So yeah, like does the tourism industry work towards more education among the communities
503 as well? Like you said before, like the school talks, but also for like older generations maybe?

504 00:43:53 W1

505 Yeah, the old generations are the ones that are really, actually, a part of the society itself or in
506 the micro society. What I'm going to consider micro society is someone that works in the field
507 with cows and in the daily basis. What they do, they are in the village, that is a part of the city
508 and of course depends on the mentality, because some people, even if they are part of the city,
509 they have their family, they have their neighbours, they can be a perfect example for everyone.
510 Sometimes the worst example for everyone. Sometimes they just don't care, or sometimes they
511 just don't have the education. For me, as you know, in the system of education, there are a lot
512 of things that we don't learn in education at all. So if you take the mandatory school, that is until
513 the 12th grade, you don't talk about money, you don't talk about sex, you don't talk about gender,
514 you don't talk about pollution. And especially one of the things that I miss a lot here is you don't
515 talk about the islands. Yeah, I was learning about the history of Portugal. And I didn't learn
516 about the history of Terceira. For me it was very strange. I understand you learn in a general

517 way. I don't know how it works the system of education in terms of exchanging. But if you want
518 to promote some idea of the island and you have an agreement of society, you need to start from
519 education. That is the only way. With grown-ups, there's no way that you can do it.

520 *00:45:43 Interviewer*

521 Hmm. OK. So like, once they have their behaviour, they are not going to change.

522 *00:45:49 W1*

523 They are not. The only thing you can do is start the beginning. Start the difference, start the
524 changing. It's not going to be the change right now. It's just the start, the beginning.

525 *00:46:03 Interviewer*

526 Yeah. Do you like, do something like, for example, beach clean ups or something like that,
527 which is not like at your or also education, but more like something active with the community?

528 *00:46:18 W1*

529 Yes, people used to do that. Well, so sometimes they organise, they go for this beach today
530 tomorrow for the other one. Fortunately, we have a lot of people that.

531 *00:46:28 Interviewer*

532 Do that. OK. And it's also something that the companies organise?

533 *00:46:36 W1*

534 Companies, sometimes it's more difficult. It's more organisations like NGOs, yes, just like that.

535 *00:46:47 Interviewer*

536 UM, yeah, it's already a lot of information. I also wanted to talk about, like, the perception that
537 you have of the Azores in general because, like from what I've been seeing, the Azores are
538 marketing themselves as like a very sustainable destination. And it also got like certified as a
539 Hope Spot recently. Do you feel like the tourism industry is like living up to these presentations
540 or these standards. Or is it like, not really a matching kind of?

541 *00:47:26 W1*

542 I think that my honest opinion in terms of the sustainable Azores, it's just because it's easy. And
543 why I'm going to tell you it's easy. Because the Azores are sustainable in terms of environment,
544 but they're not sustainable in terms of a society, a community. Imagine if it passes one week in
545 Flores, another island that the boat is not going there, they start missing milk, start missing a
546 lot of things in the shops. So we are dependent. So being archipelago that is dependent, of
547 mainland to bring us supplies and some particular stuff, we are not sustainable. But we can be
548 sustainable because we don't have big factories, we don't have big businesses. So that's why for
549 me it's quite easy. So what they are doing is, I understand the promotion, it works. But I heard
550 always the more knowledgeable people saying is, "For you to work on something, you need to
551 start from inside to outside". And I think the Azores they start from the outside to the inside.

552 Because from the outside we are saying we are sustainable and afterwards we start putting some
553 things and today we cut trees, and tomorrow we do this. But for me, sustainable it's a system
554 that is a cycle. Then it's sustainable, because it never finishes. When you have water, the water

555 is drunken, but then it goes out, but then it's filtered and then comes back inside and then you
556 have a cycle. But here, I don't think we have a cycle. I think to be sustainable, we need to be
557 measured for the Azores. And what we are doing to be sustainable is we are promoting the
558 Azores as sustainable because it's in trend. And it's easy for the Azores to be sustainable because
559 we don't have big problems with that. So right now, if I don't have a lot of pollution at the sea,
560 I'm sustainable. For me, sustainable is when we have naturally, so this is what Azores is doing,
561 but for me the big effort to be sustainable is when you have all the conditions to not be, but you
562 do it to be. And that is the difficult one. Then you need the ones that need to think about it, you
563 need to put rules, you need to put limitations. And right now they try to do their best. With what
564 they have. That's why we are waiting for the licence since 2017. So we are not fast in laws. We
565 are not seeing the problem far away, we see the problems after they it happened. And for me
566 sometimes sustainable is either you are fast changing, or you can see that far away, so you
567 understand that it will not be a good idea and let's go for another one.

568 *00:50:56 Interviewer*

569 Yeah. So like more long-term thinking.

570 *00:51:01 W1*

571 And I don't see long term in the Azores. I see a short term that is, "The Azores are sustainable.
572 Come here and you're going to enjoy it".

573 *00:51:10 Interviewer*

574 Yeah. And then like, if more people are coming at one point, it won't be sustainable anymore
575 then?

576 *00:51:15 W1*

577 For instance, or if you start having a lot of businesses. And it is happening already, we see a lot
578 of restaurants coming here. It's starting now the big companies, McDonald's, KFC, Burger
579 King, they're starting already, even in the small islands. These businesses are not even related
580 with the culture of the island, so it's nothing related. So what happens, is these businesses are
581 putting down the local business. And the islands stop having identity.

582 *00:51:52 Interviewer*

583 Yeah, it's like gentrification.

584 *00:51:55 W1*

585 But the thing is, it's just like we are seeing the beginning. What is going to be this bullshit?
586 What I'm going to do? Ilka, we are going to be here together in Terceira and what we're going
587 to do? For me, that's why I like to do these interviews, because I always have the hope that my
588 voice can do echo for different areas. At least my opinion, because I'm not the one that says
589 everything right, but at least I've put my opinion. And I try to bring out a bit of truth. And I try
590 to be very fair with it. So I try to be the most honest with that what I can be. As I began this this
591 interview, the company needs to have profit and needs to have quality. That is the only way that
592 we can have sustainability in the company. But then as you can see, it's very easy to use the
593 word sustainability.

594 *00:52:50 Interviewer*

595 Yeah. Yeah. It's like an empty word. Like it became so overused.

596 *00:52:56 W1*

597 So we have a sustainable company, because we are working.

598 *00:53:02 Interviewer*

599 Yeah. Now it's really interesting to hear from you like, because you've been living there for so
600 long, you can kind of see the development.

601 *00:53:11 W1*

602 Of course, you pass some frustration. For me, what calms down my frustration is because I'm
603 very into the company and I can do changes. I see the changes I can do. So for instance our
604 website I do with a sponsor. It's earth at my home, we are doing the website. We do our flyers.
605 Each year we think about new solutions for the problems we are having. And this is what put
606 me with the will to come the next day. Otherwise, if I'm still thinking about for the best for the
607 island and changes. The change is going to be natural, so you go down and we must have a
608 change, or you go up and the change is happening already.

609 *00:53:55 Interviewer*

610 Mm-hmm. So you can feel the impact that your actions are having, in regard to marine conser-
611 vation now, how do you feel the impacts there that you're having with the company? Which
612 impacts do you feel like or positive developments that you have like with the company?

613 *00:54:22 W1*

614 So the company in terms of positive behaviours we must have. I think the beginning of this type
615 of company, so not ours specifically the only thing I can say specifically we can do is the kind
616 of meetings that I mentioned before with kids or some people that ask us for opinion and or
617 something like that because the company it has already a profile of, I'm not going to work. Use
618 the word that you are using, "sustainability", but it has a profile that's changing, that's shifting.

619 So talking about until 1987 was hunting sperm whales. The Azores were hunting sperm whales.
620 In like 1989/90 started these types of companies. The whale watching started in San Diego in
621 1950s and here it started in the 1990s, whale watching, from a French that unfortunately already
622 passed away, Serge Viallelle, and he was the one that started that on Pico. So Pico was actually
623 the last island to hunt for whales and the two years afterwards we're seeing sperm whales with
624 tourists. I think that is the shift. That is the amazing thing of the Azores. It is amazing how you
625 are hunting one day and the other day you are taking pictures. Yeah, that is amazing. That is
626 amazing. That is a something to show for the grandsons and whatever, because that is a big
627 step.

628 But how it works this step? This step works again because of what? It is because of money.
629 Because if you think about it in the simple way: Why did they hunt sperm whales? They were
630 not hunting sperm whales because they were ugly or because they were coming close to the
631 Azores, they were hunting because they couldn't do anything more. The only way they started
632 learning that from the Americans, that were coming. With boats, talking about this experience,
633 they were hunting already in in America. North America, United States. And they started learn-
634 ing that, but they start doing the boats here because it was very expensive to bring boats from
635 America. The boats were also very expensive. And they started doing that here and they started

636 the culture. And this culture then started, and they had profit. And when they started under-
637 standing then again, some people, some companies of whale watching do that worldwide they
638 started understanding that could be more interesting than actually hunting whales.

639 *00:57:04 Interviewer*

640 Yeah, it's like a marine animal is more profitable when it's alive and being used alive than the
641 hunted ones.

642 *00:57:15 W1*

643 I think and I put myself also together on this thinking, so researchers, they are thinking the
644 wrong way. Because they talk about sustainability and put rules to people to stop, you are not
645 doing nothing. But if you are finding solutions for them to earn more money, stopping some
646 kind of activity then you found the solution. So if you agree with me, us as researchers, because
647 even if you are not researching, you are part of the researcher community in some way some-
648 how. I had just this thinking, we are actually putting problems on the table, we are not bringing
649 solutions. Because research is what they do, they give the limitations. They say, "No, no, no.
650 You cannot catch more of this. No, no, no. This area should be protected. No, no, no, no". And
651 I understand that is the part of research.

652 If you bring solutions, so right now, why do people worldwide talk about sustainability? Be-
653 cause it gives profit. Everyone is trying to buy now. It's mandatory by law you cannot use for
654 instance, here in the Azores you cannot use more gas bottles to heat up the water. So right now
655 you have these water boils that are put in the electricity. But The thing is, one gas bottle is like
656 20 €, and the water boiler is 2000 €. So it makes sense. And then they sell this. But then it needs
657 maintenance as well, but the government will help you when you buy, they give you a percent-
658 age. So that is one perfect example. So if you find a way this is profitable. That's why right now
659 the electric cars have been very difficult because it's very, very expensive. If people had the
660 possibility to buy again, it would be working very well because it is expensive, they buy it, they
661 have power and the possibility to buy and then it works in a cycle. But right now it's going very,
662 very slow because it's already a big cost. So the exchange is too big.

663 *00:59:33 Interviewer*

664 Yeah. So like the right way to do it would not prohibit something but to offer an alternative at
665 the same point.

666 *00:59:45 W1*

667 Yeah, a solution and instead then we always talk about profit. But actually this is what we
668 learned the whole cycle of life of us. So when you start studying what are people start asking
669 to you, "What we are thinking about in your bachelor? And why you are going to do a bache-
670 lor?", "Ah, because I'm passionate". Yeah, but are you going to live from your passion or are
671 you going to do work? So this is what we start learning since the beginning. Of course it's sad,
672 we need to think in a different way, but that is the society we have. This is what we have. It's
673 everything about money. Unfortunately, sometimes it's so much thinking about money and
674 there's no space for love. It's only money, money, money. And it's true, I accept that. But it's the
675 reality.

676 *01:00:32 Interviewer*

677 Yeah, like the concept of wealth, should be adapted maybe to other aspects as well. But yeah,
678 the whale fishing, like when you talked about the whale hunting, it reminded me of, like it's
679 basically the same situation now with the shark hunting as well. The shark diving businesses
680 try to put more use to the sharks alive. And to make money out of it so that the sharks are not
681 being fished anymore? Yeah.

682 *01:01:04 W1*

683 Here you have. That's why I probably want to also to talk about with the diving companies, they
684 do the shark diving. What happens is, for instance, we have a programme here that is called
685 POPA. I can send you a text.

686 *01:01:22 Interviewer*

687 Yeah. OK. Perfect. Thank you.

688 *01:01:25 W1*

689 So I can just resume very easy this programme. This programme started because it had a bad
690 publicity, but it was true, that people on the boats were also hunting dolphins. So the tuna fishery
691 was hunting dolphins. Sometimes I like to be very practical with this type of thinking because
692 sometimes people say, "Oh my God, they eat dolphins!". OK, but you eat chicken, we eat cows.
693 But with horses it's oh no, it's forbidden. But for some countries, horses are just like cows. It's
694 really about only about culture. Of course then it has some more information on the background
695 because you know about the bioaccumulation. But it's a different stuff. But sometimes they
696 hunted dolphins which was not the target, but they have. And this programme was created to
697 show, so it goes one guy on the boat, and show that you are not hunting because he is doing a
698 report for everything that you are hunting. And this programme is still on these days. For me, a
699 very old-fashioned way to work, on that time I accepted. But nowadays again, what is the best
700 way to solve solutions? I'm going to give a very easy example. Do you know that triggerfish?

701 *01:03:36 Interviewer*

702 No, I don't think so.

703 *01:03:38 W1*

704 So triggerfish is very good for eat, that's what people say nowadays. Because on the past, they
705 catch this fish, and they put to the sea. They don't care about that. They don't want to fish that
706 fish. And people start eating this fish. There are a lot of fish of this in the Azores, and they are
707 hunting this fish, getting this fish like local fishermen, like families and they're eating it. You
708 need to take out the skin, it seems like a skin like a shark, you need to take out the skin and
709 everything you need to do a filet. And it started appearing in the markets, 5€ per kilo. It's like
710 "Oh my god, 5€ per kilo, it was like for free". You know what is the price nowadays?

711 *01:04:31 Interviewer*

712 It's more maybe?

713 *01:04:33 W1*

714 I saw it like 2 days ago. 17 € per kilo.

715 *01:04:40 Interviewer*

716 17? OK, so more than three times the price. It's because it became popular?

717 *01:04:50 W1*

718 Do you see this is the examples we have in life happening in front of our eyes? That is the
719 example. Don't be scared with my words. The only thing I'm trying to do is, maybe you already
720 have these notions, I don't know you so well this way, but I'm just trying to bring some of the
721 truth, at least that that I'm seeing in this year for you to with this information you maybe can
722 organise some idea and OK, we had this interview, and I matched this information.

723 *01:05:36 Interviewer*

724 Yeah, I hope I can achieve something with this with thesis.

725 *01:05:39 W1*

726 Ohh I'm not doing the job of drawing in pink.

727 *01:05:44 Interviewer*

728 Yeah, I guess like we have to be realistic.

729 *01:05:50 W1*

730 Actually I'm trying to bring you the grey and hoping for a black and white. But I know things
731 mostly are grey. I'm really a person of black and white, but I understand black and white is very
732 difficult.

733 *01:06:10 Interviewer*

734 Yeah. OK. Yeah. We talked for so long. Like, this is really great that you're giving so much
735 input. It's really interesting.

736 *01:06:20 W1*

737 It's just because I have been already in this position, so I understand that if you are asking
738 companies to have interviews, it's not because you want to be bored, it's because you really
739 want information that can be useful for you, and in my opinion, if I'm going to do something
740 and you too, I'm going to do for the best. So I'm trying really. So I'm doing this because I'm
741 always hopeful like I mentioned in the beginning that someone sometimes comes here and says,
742 "We did the interview and now we are planning something". Like Salzburg, the Salzburg Uni-
743 versity that was a great example. If you want to know more about that, I think you can contact
744 the Câmara de comércio. I think that would be the best one. This is the Câmara de comércio,
745 this one is from, I think, Sao Jorge, Terceira, and Graciosa. I think its from these three islands.
746 So Chamber of Commerce is very something very usual in the town halls or in the cities and
747 they are the ones organising with companies and everything. And this one I'm going to give you
748 here the link and maybe you can find some contacts about the Salzburg University and what
749 was the idea, what was the project. Because that for me was a fantastic example. Of course then
750 we don't have the continuation, but the beginning was a fantastic example of what I mentioned
751 in the beginning that we need the intermediate and we are in the small-scale, so people know
752 each one. So we know that that guy is the one that has a restaurant and that one is the one that
753 has the milk from the donkey. So we know and when you have someone that has something,
754 you always have some thoughts in the back. You are like, "OK, maybe he's thinking about that
755 idea". That is different when you have an intermediate.

756 *01:08:44 Interviewer*

757 But that's like kind of an advantage of like a smaller community like compared to maybe the
758 mainland of Portugal, which is so big.

759 *01:08:52 W1*

760 The big advantage of small community is what is happening now in the Azores. We have a
761 sustainable agriculture. Yeah, that is what we have. Why? Because we are a small community.
762 So waters are clear, the fields are green. But because we are a small community, it is not because
763 we are doing something. Actually it's because we are not doing nothing. This is why I'm glad
764 of the Azores, because when we keep this way, we have a fantastic outcome. Yeah, right now
765 it's increasing a bit. It starts changing a bit. Because you know, when you have a bit of comfort
766 you take out a bit of environment. It's always this balance.

767 *01:09:36 Interviewer*

768 Yeah, like it comes with a cost.

769 *01:09:37 W1*

770 There are always some consequences. So you cannot have a bit more of comfort, when I talk a
771 bit more comfort, I and talking about electricity, I'm talking about all type of comfort. If you
772 want to have a restaurant, you need to have all the cycle of things for restaurant, especially if
773 it's a good restaurant, you want fresh food. But then you want this type of fresh food that is not
774 the season, but that restaurant doesn't care because the customers are asking for that and that
775 season. So you start taking out the environment. And it's not natural.

776 *01:10:15 Interviewer*

777 Yeah, it's like concluding question at the end. Like, I was just wanted to ask like, what do you
778 wish for the development of the tourism industry? Like, which kind of direction do you want it
779 to go in to have like a positive impact?

780 *01:10:35 W1*

781 So sometimes it's easier for us to say what we don't want, then actually what we want. Because
782 when we ask, we start thinking about what we don't want, we find what really, we want. And
783 what I don't want is perfection because it doesn't exist. If you go for perfection, then you don't
784 achieve that. What I think I wanted to see in Terceira, because for the Azores it's very difficult,
785 but in Terceira, I want to see the thinking in long term. This is what I want to see. So if you start
786 thinking in long term for some goals that really make sense, that could actually be achieved, so
787 I'm not thinking about long term that is impossible, I want possible long term, this is what I
788 want to in Terceira Island. And the community knows about this long term. The problem is you
789 know, each cycle of the government is four years. And four years is not a long time. And that is
790 one of the big problems.

791 *01:11:43 Interviewer*

792 Yeah, I've heard that. Like, also from the other interviews that's the one of the main problems.

793 *01:11:49 W1*

794 So what they do is actually only for two years because they need to do something in their man-
795 dates. To show that they did and then to have more time to say that they did. Because if they do
796 something in the last year then it's not visible yet, you know. That is the tricky thing.

797 *01:12:10 Interviewer*

798 OK, so more long-term thinking, yeah.

799 *01:12:13 W1*

800 I don't have a problem at all to be part of the meetings to work with meetings, if I see the long-
801 term it belongs to us, as community, if it makes sense for me, I'm related with that. So if I have
802 not only profit because profit it can be just the word of sustainability, so profit can be just a
803 better life doesn't mean profit of money. So profit can be also just like the word of sustainability.
804 So if I have profit in the long term, I want to be part of that, I want to give my word to think
805 with them, to help with them. So I see this is also one of the problems and I understand, because
806 you cannot have 6000 people talking with you in a meeting. So you need to have some of them.
807 But usually when I have these opportunities, I really want to go.

808 *01:13:15 Interviewer*

809 Yeah, I have a lot of information now I have to transcribe everything, so that's going to be a lot
810 of work, But yeah, I'm really happy about it.

811 *01:13:26 W1*

812 I just hope that I could help for your confusion like thinking Out-of-the-box.

813 *01:13:33 Interviewer*

814 Yeah, I can already say like when I started the research progress, I was thinking will it be even
815 enough for a master thesis? But now I have something new with every interview I get new
816 perspectives and new inputs.

817 *01:13:50 W1*

818 And let me tell you that at least for me, that is the best way to do it. I've had people just like
819 you ask me what you're asking on the e-mail. For me is like that I don't have time. I have time
820 here to be talking with you all day. But to send an e-mail with answers for people to do a copy
821 paste. Then I am not losing my time with that.

822 *01:14:21 Interviewer*

823 Yeah. You can't put everything in just one sentence.

824 *01:14:25 W1*

825 No, and then I'm seeing already this person is not the person that is working. You understand?
826 Or if someone asked me two questions by e-mail and you want me to answer or want to do a
827 questionnaire, I understand it's practical. Yeah, but it's not the same. Otherwise we start missing
828 connection with people. Then then we are just a lot of papers together.

829 *01:14:59 Interviewer*

830 Yeah, I like to do the interviews in person as well.

831 *01:15:05 W1*

832 Yes, yes, I think it's a very good decision. All the ones that are personal and when I have avail-
833 ability, I'm doing all of them and I've been doing a lot of them and it's interesting because I
834 know the position that we are thinking maybe sometimes we are thinking that we we're going
835 to talk about conservation and we do all that, but then I'll start putting other questions people
836 like, OK, I was not expecting that. And remember one of the interviews that we had is that OK,
837 it's very different from each island. It's very funny because I just talked with someone from
838 another island and angles can be very different. That is the Azores the natural selection. If you
839 don't have any more questions. It was a pleasure if you need something more forward, just tell
840 us. And if you pass by Terceira, come and talk with us. I used to say that it's easier for you to
841 find us than we find you.

842 *01:16:17 Interviewer*

843 Yeah. Thank you for the talk. It was really nice.

844 *01:16:34 W1*

845 Yes, no problem. Thank you, very much and good luck, with your thesis.

846 *01:16:41 Interviewer*

847 Thank you. Thank you. Have a nice day.

1 A.3.5 Interview 5, Participant D4, 22.04.2024

2 00:00:03 Interviewer

3 Perfect. So yeah, as the first question or like beginning of the interview, I just wanted to ask,
4 could you maybe give a short description about your company like since when have you been
5 operating in the Azores and what are the main products that you are selling to tourists?

6 00:00:21 D4

7 Yeah. So we work since 2007, and we are mainly dedicated to scuba diving and diving courses.
8 This is our main working area and also this year or last year we started with free diving also.

9 00:00:36 Interviewer

10 OK. And the diving courses like what is the main attractions that tourists want to see, or the
11 tourists are booking with you? Like the offshore places or something else?

12 00:00:47 D4

13 Yeah. So many of the persons that are coming to the Azores, they come with this idea that they
14 want to see mobulas or blue sharks or sometimes even whales. Which is a problem because this
15 is not the reality of the diving here in around the islands. So around the islands, you get the
16 closest dives, which are near the coastline. And those are mainly for the local marine life. And
17 to see mobulas or blue sharks you have to go offshore, so it's not something that you will do
18 every day, and you cannot even dive with whales or dolphins. You cannot scuba dive with them.
19 Which means that people cannot do this kind of activity if they want to come to the Azores.

20 00:01:30 Interviewer

21 OK. And you cannot dive with them because it's forbidden?

22 00:01:35 D4

23 It's forbidden. The only thing you can do is swimming with dolphins, with five species of dol-
24 phins and even this swimming with dolphins some companies are starting to not do it because
25 it's a lot of impact to the animals. So some of the whale watching companies that normally did
26 this activity they are no longer doing it, or they are stopping doing it because they noticed that
27 the impact is too big on the animals.

28 00:02:05 Interviewer

29 OK. And yeah, you said you also offer the offshore dives, but not as regularly as the coastal
30 dives?

31 00:02:13 D4

32 No, no. The offshore dives are mainly for groups, prebooked groups. So that means we only
33 accept reservations for offshore if we have a group of eight persons. If not, before we did it,
34 like trying to make a group here. But then it's a nightmare because one person wants to go, the
35 other one doesn't want to go on that day but wants to go on the next day. And then for you to
36 manage to put everyone together in the group and even more relying on the kind of weather that
37 we have in the Azores, which is something that we don't have good weather every day so, it's
38 even worse. So we just decided to start doing it with groups because then the group is booked,
39 and we know that everyone wants to go. So it's a lot more easy.

40 *00:03:01 Interviewer*

41 Yeah, OK. Yeah. And also because of the shark diving, I wanted to ask because I've talked to
42 other operators before, and some see it as an opportunity to protect sharks because then they
43 are like putting value to them.

44 *00:03:21 D4*

45 Yeah, it is an opportunity for sure, but also, it's something that is not changing. So at the moment
46 we have a big lobby of sharks being fished on the Azores mainly by the Spanish fleet, and this
47 lasts for several years, which doesn't make any sense because they should be protected already
48 because as you were saying, a shark that is alive, there's way more value than that. Yeah, just
49 by starting through that, it makes more sense to protect them, but also the impact that we're
50 doing on the animals is huge, you know, so I don't see any good reasons if we keep looking at
51 the animals or something just to catch as a resource and not protecting them. I can tell you that
52 when I started diving here in the Azores, I could see sharks in some of the dives, especially the
53 dives that we did offshore, I could see several sharks. And now for you to see sharks, the only
54 way is to put food in the water and even then, it's not guaranteed that you will be seeing a shark,
55 you know.

56 *00:04:37 Interviewer*

57 Yeah. Yeah, I heard about that. And then also some other operators said that they don't like to
58 do this because it changes the behaviour of the sharks?

59 *00:04:46 D4*

60 Yes, of course. You're bringing sharks from 100 meters deep, 200 metres deep to the surface,
61 you know. So if they are not charged, they're not swimming in the blue water in the surface.
62 They're mainly swimming near the peaks underwater. So what you're doing, you're putting food
63 on the water, so it pulls the shark up to the surface because they feel it's food anyway. Then you
64 will see them. So the energy they spend going up and down it will be fed. But it's not what we
65 should do. We should have this kind of diving where you go offshore and you see sharks, but
66 the fishing fleet around the Azores are mainly outside fleets. So even though you get some
67 Azorean fishing boats that still catch sharks, the impact is huge. As I told you before, we see
68 sharks now, it's very rare that we see sharks.

69 *00:05:38 Interviewer*

70 Yeah, yeah, that's really frustrating. I guess that the numbers are going down.

71 *00:05:42 D4*

72 Yeah, yeah, yeah. And foreign companies, for you to have an idea, I'm a marine biologist, so
73 I'm here in the Azores for 26 years, working with scuba diving here also for 26 years and I know
74 that before me there was already people trying to make marine reserves and now so mainly,
75 we're already 60 years trying to do marine reserves.

76 *00:06:10 Interviewer*

77 Ah, OK, so it's a really slow process.

78 *00:06:11 D4*

79 And nothing moves forward. You know nothing moves forward. You just discussing. And they
80 keep pushing stuff and discussing and keep pushing stuff and no one moves forward to make
81 what is needed to be made which is protecting, you know. So it's taking forever.

82 *00:06:29 Interviewer*

83 And what do you think makes this process so slow? Like what is the challenges to it?

84 *00:06:38 D4*

85 In my opinion, it's the interest of the fishermen. Because the fishermen were here before and
86 it's an activity that is very made in the Azores, you know. So it's a local economy, so there's
87 always this pressure of not changing nothing because they rely on fishing to sustain their fam-
88 ilies. But it's like you having an old mine and you keep trying to dig the mine, even if the mine
89 is not giving you nothing, you know. You keep dreaming and you keep making holes, and the
90 only way you keep dreaming and making holes is because it's supported by the government.
91 Because if you go to the fishermen and say "OK, now you rely on yourselves. So your activity
92 needs to be profitable by itself. You know, and then they will have problems because then they
93 have to pay the fuel at the normal price, they have to pay the boats at the normal price. And
94 what happens now is that they are very much supported and the only reason why they keep
95 fishing in areas that are not profitable, sometimes even more it's because it's like supported so
96 they will keep doing it, you know? And they managed to survive because of it.

97 So we lack management on the islands very much. I think there's no one is looking to the future.
98 So everyone is looking to now and what we can catch now and what we can take from the sea
99 now and no one is relying from the future so.

100 *00:08:05 Interviewer*

101 Yeah. And like the fishing industry gets so much support from the government. And like, in
102 contrast, the tourism industry also gets support or how is it there?

103 *00:08:19 D4*

104 You only get support from the government if you apply to a project where you will buy things
105 for your company supported by the European Union. But that's the only way. If you don't apply,
106 if you don't make a project, and you start your company from scratch and you put it up by
107 yourself, there's no support from the government, not even on taxes, not even on fuel nothing.
108 Actually in some cases tourism companies are overcharged compared to other companies. If
109 you go to Madeira Island and you have discounts for tourism companies because they know
110 you're bringing tourists from the outside. So they know you're bringing income to the island,
111 which is good. People don't come to the island to sleep. Yeah, come to the island to do some-
112 thing on the island, you know.

113 *00:09:12 Interviewer*

114 Yeah, they spend a lot of money.

115 *00:09:13 D4*

116 So and what they do, they make discounts on the companies because they know they need these
117 companies to be alive to keep bringing people to the activities on the island. Here is the opposite

118 way of this feeling. So they say, “These companies are earning money with tourism so we will
119 overcharge them on taxes, so no problem.”.

120 *00:09:31 Interviewer*

121 Ah, OK. Well, I didn't know that. It's like such a different mindset, comparing like with other
122 places.

123 *00:09:38 D4*

124 Completely different. In my opinion it has been also related to the fact that the Azores took a
125 lot of time to build up tourism. So this was not touristic at all, and just in the last years the
126 tourism has been growing. Which means just in the last year you start seeing the impact or the
127 benefits of having tourism in the economy of the island, and only now they start to look to these
128 things and say “OK, if we want to keep offering these kinds of activities, we need to protect.”.
129 It's our case for example, when we go scuba diving. It's very difficult for us to see fishes be-
130 cause, you know, there's nothing in the water now, you know. It's more and more difficult for
131 us to have animals to see, to have marine life that you can watch, you know? So it's crazy. You
132 get the point that when you are promoting the Azores people think they're going to see a mob-
133 ulars and sharks all around the corner, you know in every spot you will see these animals. And
134 then they arrive here and there's nothing like that.

135 *00:10:45 Interviewer*

136 Yeah. Like also with my research that I'm doing now, like, I'm looking a lot at like also the
137 tourism website from the Azores and it's always marketing itself as like a sustainable destina-
138 tion.

139 *00:11:02 D4*

140 Right. And they are doing nothing in the sea about sustainability, you know? Completely out-
141 of-the-box. It's just a brand, you know, it's just marketing. But then you can say, oh, we are
142 sustainable because we are very green. Yes, but you look to the countryside, if you come here,
143 you will see that most of the landscape is pastures for cows.

144 So then that saying that nothing is sustainable. Everything was completely changed. You don't
145 have anymore the trees or the forests that we had when the islands were settled. It's completely
146 the opposite way. We have landfills for cows. And we keep introducing lots of animals in the
147 landfill. So that means there is lots of waste going in the ground, all this waste and also fertilisers
148 end up in the sea. So it's a big bullshit, you know. Yes, we are we compared to other places, we
149 are still balanced. And try to have a good thing between the economy and between way of
150 living, blah blah blah. But still, there's a huge thing that is lacking for us to be fully sustainable
151 and I think that one of the things that needs to be immediately done is to protect. Is to have
152 marine reserves, is to have land reserves where people will pay to go there. Because if you have
153 these things paid, then you have money to invest on maintenance of course. You have money
154 to invest in guards to keep the marine reserves protected. So all this needs to come from the
155 visitors, not from the government, you know.

156 I think you should when you finish your master. I don't tell you to send all the work, but I think
157 you should send an abstract and the conclusions to the local government because I think a lot
158 of this information when people do these works, I'm a biologist and I work with biologists for
159 several years and I think it's one thing that lacks a lot is that the information doesn't reach the

160 government. So the advisors, you know, so if you are doing your work, that is so important.
161 And to show them that the way we are doing is not the proper way, we need to give more
162 importance to this, this and that, this information should reach the government. You should grab
163 an abstract with the conclusion and send to the government and say "I made a master thesis on
164 this, and this is my conclusion. So if you want to grow good tourism on the island, you have to
165 think about this and that, you know? This is the only chance of them reading something from
166 someone outside of the box because they are doing what they do every single day. They are not
167 going to change just because they need to change, you know?"

168 *00:14:05 Interviewer*

169 Yeah, it's really motivating to hear because yeah, it's nice to know that the work is actually
170 doing something. So yeah, I will try definitely.

171 *00:14:17 D4*

172 Not just the studies. It's not just your master to complete university and that's it, you know?
173 Maybe the people from university will read it, but no one else will read it, you know? And if
174 you grab that and you send it to the decision makers, which is the government, then you putting
175 this on the oven, on the people that we will really make decisions, you know?

176 *00:14:38 Interviewer*

177 Yeah, yeah, I will definitely try to do it. But I also feel like there's already a lot of, like, scientific
178 works being done on the Azores in this area and a lot of organisations?

179 *00:14:54 D4*

180 There is and this is depending on the lobby. So there is a fishermen lobby, and we have the
181 scientific work lobby. So scientific work relies on money from the government also. So they
182 will always say that you need more scientific work. We will always say this, you know. And
183 what we see is like, OK, but there are millions of EUR being spent in scientific work. Where
184 are the conclusions of those works? You need to have some conclusions, during all these years
185 you need to have some conclusions. And even if you don't have conclusions, even if there's still
186 something to be studied, just at least you need to rely on what is made outside. You need to rely.
187 Other countries are already protecting. Other countries are already going in this direction, and
188 if we don't go in this direction, what will happen in the future is that we don't have fish and we
189 will not have marine reserves. So both the fishermen will not earn nothing, and both the tourism
190 will not earn nothing because there's not anymore, any animals to show. It's a basic it's a simple
191 principle, it doesn't make any sense.

192 *00:16:08 Interviewer*

193 Yeah. So it sounds like the government is just afraid to do the conclusions.

194 *00:16:18 D4*

195 I think they're mostly afraid of making pressure against the fisherman, for example. You know,
196 because the lobbies are so big with the fishermen that they don't want to make pressure and
197 they're afraid of losing votes and the incredible thing is that the fishermen know that things are
198 not good. They know, but they want to keep doing it because as long as they manage to do what
199 they're doing, they can keep earning money from the government. They can keep having jobs
200 and everything. The funny thing is that if you speak with the fishermen, the one that goes in the

201 boat. Those are the ones that will tell you they need to do something different. If you speak to
202 the owners of the boats, then it's a different story.

203 *00:17:16 Interviewer*

204 Ah, OK yeah. Because the fishermen go out there and they see the difference like that they don't
205 catch as much anymore.

206 *00:17:18 D4*

207 Yeah, and the owners, they don't want to do the same thing. You know, they want to keep doing
208 what they do.

209 *00:17:33 Interviewer*

210 So yeah, it's like a bad system. Does the tourism industry like for example, different tourism
211 operators kind of communicate with the fishermen?

212 *00:17:49 D4*

213 They have been communicating the last years. We have some meetings with the local govern-
214 ment and everything. But you know it's just crazy. No, it's just crazy. It's just crazy because, I
215 give you an example. There's a project here, its known as "Blue Azores". You heard about them?

216 *00:18:17 Interviewer*

217 I think is it the project of the Ocenario from Lisbon?

218 *00:18:25 D4*

219 And you go to these guys, and they have been spending several 24 months doing meetings with
220 the fishermen, you know. And trying to tell them like "OK guys, you need to do this and that
221 and that". And the fishermen agree with this for 24 months. And then after the 24 months, they
222 come outside and they say, "Oh no, no, we don't want this because not everything that we want
223 is being taken care of". And it's normal you know. For me I would like to protect 50% of the
224 coastline. But I'm pretty sure no one is going to accept to protect 50% of the coastline. You
225 know the fishermen, they want only 10% to be protected. You know, and the government says,
226 "No, we don't make 10, we make 15" and they will say, "No. we don't agree because now you
227 want to put 5% more".

228 *00:19:28 Interviewer*

229 OK. So it's like a lot of discussion.

230 *00:19:30 D4*

231 So of course we will, we will never deal with it. It's almost impossible to have everyone satis-
232 fied, you know.

233 *00:19:36 Interviewer*

234 Yeah, yeah, there has to be, like, a compromise.

235 *00:19:44 D4*

236 So let's see what happens in the next years.

237 *00:19:53 Interviewer*

238 Yeah, hopefully it happens faster with the protected areas because I also heard like there's this
239 time pressure, of course that if the populations go down so fast then at some point you can't get
240 them back anymore if it's not protected.

241 *00:20:11 D4*

242 Yeah, then it's more difficult, you know? So I don't know, for me, I'm here for 26 years. We
243 have been discussing and over discussing this and we don't move forward. It's just this conver-
244 sation over this conversation, always.

245 *00:20:32 Interviewer*

246 So, don't you get, like, really frustrated if you don't see any progress?

247 *00:20:39 D4*

248 Yeah, yeah, of course. I'm very frustrated. For you to have an idea, just this year, you got three
249 dive centres that were out for sale.

250 *00:20:50 Interviewer*

251 OK, so they couldn't continue their business, you mean?

252 *00:20:53 D4*

253 No, no, they were tired. They just said, "This is enough for us. We are selling our business".
254 You get to a point that you are like, "OK, I'm working in this business, but I don't see any
255 support. We don't see anything being made to support the business. We don't see anything being
256 made at least to keep the golden eggs on the box. So people, at least we can show different
257 things to people".

258 *00:21:20 Interviewer*

259 Yeah, sounds really frustrating. Is there like a corporation among the different dive centres, like
260 also across the Azores? Because I thought that you were on São Miguel, so like the biggest
261 island.

262 *00:21:40 D4*

263 There are two associations. One belongs to the Azure so it congregates all the dive centres
264 around the Azores and some tourism companies. This is more related to scuba diving. There's
265 one commission that is just for the companies in São Miguel Island. And then you have some
266 different associations for whale watching companies, for example.

267 *00:22:06 Interviewer*

268 So it's like the different tourism companies can support each other then in this situation.

269 *00:22:14 D4*

270 Yeah, yeah. But it's difficult, because it's each person it's going in in their own way, you know.
271 And sometimes, for example, I'm a marine biologist and I have a company, so I'm very worried
272 about the environment, you know. But you have a lot of companies where the owners, they are

273 just worried about making money at the end of the year. So for that, the perspective is com-
274 pletely different, you know.

275 *00:22:38 Interviewer*

276 Yeah, they're like different intentions with the business kind of. Yeah. I also saw on the website
277 that you are like supporting different organisations like the WWF with like funding and you
278 also have your own project like "Projeto Água Viva"?

279 *00:23:04 D4*

280 Yeah, so Projeto Água Viva is a local environmental education project. So we try to pass envi-
281 ronmental movies to the public without fees, so it's for free. People don't pay. We try to organise
282 underwater clean-ups, and we are helping scientific projects related to the university. So at the
283 end of this month we have a sea horse project coming out with us to look for seahorses. Last
284 month we had some seaweed sample trip to try to take samples of Sargassums that were coming
285 to the island, so we're always helping with different scientific projects and at the same time we
286 also go to schools and make presentations for the kids and everything.

287 *00:23:54 Interviewer*

288 Ah, OK, nice. So it's like, yeah, education based. And you do this as part of the business?

289 *00:24:05 D4*

290 It's we dedicate 2% of our income to this. So 2% of our income goes to this and then we use it
291 money to do these projects and to go it's still related to the company, but it's a different area of
292 the company. We also use this 2% of income that we take from the company to make donations,
293 direct donations. So within Manta trust and also Sea Shepherd. And this kind of projects that
294 are more known, I will say.

295 *00:24:35 Interviewer*

296 Yeah, OK. Interesting. And I saw that you are also contributing to the Manta catalogue with
297 like photo identification?

298 *00:24:44 D4*

299 And now we are starting with them also a project about stingrays. Eagle rays, stingrays. So we
300 try to identify as many as possible, because we are the company that goes out more often to the
301 sea. So we try to collect as much information as possible.

302 *00:25:04 Interviewer*

303 Yeah. And you are doing this on the trips with the tourists, so the tourists also kind of contribute
304 to it?

305 *00:25:10 D4*

306 Yes, yes, yeah.

307 *00:25:12 Interviewer*

308 And do you think that the tourists that are coming to your tours are like aware of all the marine
309 conservation issues or do you have to teach them about it, kind of?

310 00:25:25 D4

311 A lot of them are just coming because they want to dive and that's it. And more and more, you
312 see this way of thinking like, "Ohh, you are 5€ more expensive than them. So I will go with the
313 other company".

314 00:25:39 Interviewer

315 OK, so they don't really put like a focus on the conservation impact that you have?

316 00:25:45 D4

317 No, not. Not that way. It's very difficult for a company to show they are different. You know, in
318 this way of thinking. What I think the only difference it will make is that people have to make
319 to pay for marine protected Area G and then you know that you're paying 10 € extra and this is
320 to pay a marine tax, where it will be used for conservation, for example.

321 00:26:16 Interviewer

322 Yeah. So you think then the people are more motivated to go with you. Or what do you mean?

323 00:26:23 D4

324 Not, not. Not only that, but the fact that they will pay for extra, because the marine reserve is
325 being settled, then they understand the difference between having to pay a little bit extra. If it's
326 just looking to one company you're looking to the other. It's very difficult for your company to
327 stand out based on marine conservation projects, you know. Because more and more people just
328 care about what they will pay and what they will get, you know.

329 00:26:52 Interviewer

330 Yeah. OK. But do you think like when the tourists then, like, are getting involved into the citizen
331 science projects, for example, that like after the dive, they will have learned something like they
332 will be more, it will have an impact on them?

333 00:27:11 D4

334 How many tourists do you have that are worried about citizen projects? I can count my two
335 hands, how many tourists per season. You understand? Or they book something that's related to
336 conservation. Imagine that we do a manta dive, which is specifically to make photo ID. So they
337 know they are going to pay to do specifically photo-ID. So that's one thing. If they come and
338 they pay to do a trip to see mantas, they are not worried about scientific projects. They are
339 worried about the mantas.

340 00:27:56 Interviewer

341 Yeah. OK. So they kind of have to know before?

342 00:28:01 D4

343 Yeah, so that's why I'm telling you, that it's very different than people book their trip comparing
344 companies and saying, "Ohh this one makes a lot of environmental efforts like we do for ex-
345 ample, but the other one doesn't". And also you have what you call the "Green label" which is
346 a lot of companies use this labelling just to be attractive, but they don't do nothing about it. You
347 know and at the same time coming out with a company and then you are being overcharged 10

348 € because you know that you're going to dive in a marine reserve. It's not the company itself,
349 it's the marine reserve, which is there, and people will be mandatorily charged to dive in the
350 marine reserve.

351 *00:28:52 Interviewer*

352 Yeah, I guess this like this concept is also happening in other places already.

353 *00:28:58 D4*

354 I guess so, because it's the only way because I don't know. I see and I compare with other
355 companies, and I don't see any differences. You know, it's like people are just worried about 5
356 € difference and that's it.

357 *00:29:13 Interviewer*

358 But you said about the “Green label” like that people are just using it and not actually doing
359 something for it. But is there not like a certification process that they have to like to report their
360 impacts?

361 *00:29:28 D4*

362 It depends. It depends on what is. For example we have the PADI Green Star Award, but now
363 they are changing it for “Eco Dive Centre” which is a different name and then SSI has the
364 system of “Blue Ocean Dive Centre”, which you have to do something. But then again, I never
365 had a reservation that was specifically made, because we were “Eco Dive Centre” or “Blue
366 Dive Centre” or “Green Star Awards Dive Centre”.

367 *00:30:07 Interviewer*

368 Yeah. OK. So it's not really helping.

369 *00:30:12 D4*

370 It's like tourists say, “I'm booking with you because you are this.”? No, never. Never in my life
371 has this happened. It can be that maybe when they are booking, they see it, they say ohh they
372 have it but it's not what makes them book. You know it's not that. People will rely much more
373 in the reviews and what you have in the reviews than in the fact that you are a “Green Eco Dive
374 Centre”.

375 *00:30:41 Interviewer*

376 OK, interesting. Yeah. And about the reviews, like you can't really do anything about it like
377 apart from offering a good experience of course. But like you can't have an impact on what
378 people say about.

379 *00:30:55 D4*

380 Yeah, but each person will have their own experience, and for some of them sometimes they
381 made a five-star review because they have a certain kind of experience and then you have others
382 that have a different concept, different idea. So for them the dives are not good. So they make
383 you a four- or three-star review because the dives are not good. Or its just because they don't
384 like the way you speak with them in the morning, and they make you a one-star review because
385 they were grumpy in the morning and didn't want to give you a five-star review, yeah.

386 00:31:29 Interviewer

387 Ah that's funny. Yeah, well, tourists are hard to satisfy.

388 00:31:37 D4

389 Its more difficult having a business nowadays, you know, it's very, very difficult. And nowadays
390 what you have also is that people are getting more and more selfish. So that they're mainly
391 worried about themselves and about what they can see and about having experiences they want
392 to see only the best. They only want to have the best. They don't accept that you are working
393 with wild animals, so some days will be good, some days will be less good. Even that for them
394 is difficult to accept. Because people are more and more like, "Oh, I just want the best. Give
395 me the best dive sites, give me the best dives". And that's it. You need the best times and that's
396 it.

397 00:32:14 Interviewer

398 Yeah. It OK so. People are also not really aware. I've seen that there are like some different
399 Codes of Conduct, for example, like that you're of course not allowed to touch the wild animals
400 or something like that. And do you feel like people are respecting this anyway or like because
401 you said people don't really care?

402 00:32:40 D4

403 In scuba diving most of them, I will say yes. But not everyone is like this. Sometimes you get
404 people that are not so careful about not touching the bottom. Or even for example, if you speak
405 about the whale watching companies, some skippers are more careful, and they like to work in
406 a certain way. Others are like just hired for the season, so they don't care if they go fast to a
407 whale or if they know, like if they are not so worried about being careful with the animals, you
408 know.

409 But that's another thing. I think that the only way of not having this issue is to make for example,
410 if you want to work in the Azores, you should have, even if it's online, you should do a test, an
411 exam to apply to have a licence to work on that island. Like if you want to be a dive guide or if
412 you want to be a local guide with the van or anything you have to apply to have this licence.
413 And this licence would be valid for one year and you have to renew it every year or anything
414 like this. Because what's happening is that then you have people that don't know what they are
415 doing. They're just, you know, earning money for the season, and then they go to another place
416 to do their job in another place, you know.

417 00:34:05 Interviewer

418 Ah, OK. So you think that there has to be more like education among the employees as well?

419 00:34:11 D4

420 Yes, yes, yes. Among the workers and among the kids. We should invest more in kids education
421 in schools, make them more aware about the environment things, especially about the islands
422 aspects, and what things should be protected on the islands.

423 00:34:31 Interviewer

424 Yeah. Yeah. So education is a big thing, of course. And you said that you are like going to
425 schools for this?

426 00:34:42 D4

427 Yeah. Sometimes we go. Yeah, yeah. I make presentations about environmental issues, garbage
428 in the sea, sharks, importance of sharks on the environment, marine reserves, things like that.

429 00:34:57 Interviewer

430 OK. And do you feel like there's already, like, I don't know how long you've been doing this
431 for, but do you feel like there's a growing awareness in the communities?

432 00:35:11 D4

433 No, less and less. Because one thing is as you go there, you speak with them one time and that's
434 it. They will never see you in in their lives again. Another thing is they have this as part of their
435 education during all their lives. Because the problem in new generations, they are being taught
436 to be worried about things like electronics. So they are very worried about the mobile phone,
437 new generation mobile phones. How do they get this video on Instagram? How do they get this
438 on TikTok, you know? You speak about environmental issues with them, they don't care because
439 it's not something that they have to deal with every day, it's not something that they will worry
440 about every day, so.

441 00:35:58 Interviewer

442 OK. Yeah. That's interesting because like I thought of from my perception, the Azores are quite
443 rural. So if you live there, you are like connected to nature. Or at least there's nature around
444 you.

445 00:36:13 D4

446 No, no, no, less and less. I don't see it. More and more we teach kids indoors. We don't put kids
447 outside of the schools. We don't put them to hike in nature, so they understand the value of
448 nature. We don't put them to go in the sea, to have an experience about the sea and environmen-
449 tal issues. So if we are teaching kids inside doors, what they do in their break between classes
450 is to get their mobile phones and watch their mobile phones all day. In the end they will only
451 worry about protecting their mobile phones, not protecting the sea, not protecting the environ-
452 ment, you know? And we are losing these generations. You know these generations more and
453 more, they are caring about other stuff and not the environment, so. And this has been an issue
454 for several years.

455 00:37:13 Interviewer

456 Do you think it would be like an opportunity to take the kids like on a trip with the tourism
457 operators?

458 00:37:24 D4

459 Yeah, yeah. Even to do snorkelling or even to do hiking, you know, or even to do something
460 outside of the school. Because the problem is that there are very much inside of the school and
461 there's no relation with the countryside. There's no relation with the trees there no relation with
462 the, you know, nothing.

463 00:37:43 Interviewer

464 Yeah. So, I mean, are you offering this or like are you doing this as well?

465 00:37:50 D4

466 We do, we do offer this. And we do inclusive tours. For you to have an idea, in the university
467 as a marine biology course, the only time they go out scuba diving during their three years of
468 degree is the time that we offer them a trip. The students from the degree they don't go inside
469 of the water to scuba dive, snorkelling, free diving, whatever. Everything is made indoors. Eve-
470 rything is made inside doors. And we are already speaking about people that are, in the end of
471 their training to become biologists one day, you know.

472 00:38:32 Interviewer

473 Yeah, that's so contradictive somehow. So you think that from the school or university side
474 there's not really this initiative?

475 00:38:46 D4

476 There's no money. Because you need money to put kids outside. You need transport. You need
477 people to have these perspectives. The only thing why they do the activity with us is because
478 we offer them.

479 00:38:54 Interviewer

480 For free then?

481 00:39:04 D4

482 For free, I don't charge, you know. So that's the only reason why they do this activity or else
483 they will not even put their feet in the water.

484 00:39:12 Interviewer

485 Yeah. So that's like a problem with the government then again, because there's no funding?

486 00:39:17 D4

487 Yeah, because there's no investment on these areas. You know. And this is being for like this for
488 ages. OK, so I need to go under the water, we are almost one hour of interview. Do you have
489 another question that is very important for you to make before I need to hang off?

490 00:39:39 Interviewer

491 Yeah. So, yeah, the last question that I'm always asking is like, what do you like wish where the
492 tourism industry in the Azores is developing? Because like, I also feel there's a risk there's like
493 mass tourism coming and are you afraid of this? What is your perspective on this?

494 00:40:01 D4

495 I'm never afraid of mass tourism, if the tourism is well developed. So if you develop proper
496 tourism where people are paying to come and there's a limitation on the number of persons that
497 go can go certain places, there's no problem. I give you an example. You go to Galapagos is-
498 lands, and you can only have a certain number of permits per year, and that's it. And if you
499 cannot go that year, you will book your trip for five years in advance, you know.

500 And the problem is, tourism is still growing here, so we need to think how we want tourism in
501 in 20 years from now. And the thing is they still authorise lot of hotels building, and they are

502 seeing local investments like you have house and you want to rent the house for accommoda-
503 tion. They're letting everyone rent their house for accommodation, which is a problem because
504 then there's no houses to rent if you want to stay on the island and live, the prices are rising like
505 crazy. So yes, mass tourism can be a problem if people don't worry about the future. If people
506 worry about the future, then they do things looking to other places that already passed through
507 this thing. So you don't need to do the same mistakes.

508 *00:41:24 Interviewer*

509 Yeah. Yeah, like there are already a lot of examples where it has had negative impacts, so.

510 *00:41:31 D4*

511 Yeah. No, what you need to do is look to the others, where you have this negative impact and
512 don't do the same mistakes. Do your thing in a different way. Or you can even have meetings
513 with these countries. And go there and organise meetings with their tourism industry to try to
514 understand what you can do differently? What can you do that will improve what you're doing
515 and not going through the same thing over and over, you know?

516 *00:41:51 Interviewer*

517 Yeah, yeah, makes totally sense.

518 *00:42:00 D4*

519 Canary Islands or Costa Rica or Galapagos? You know something like that.

520 *00:42:06 Interviewer*

521 Yeah. Yeah, yeah, I guess even Madeira is already quite touristy.

522 *00:42:11 D4*

523 Yeah, but even though they're doing something, some things are being different. But some
524 things are just marketing label, you know? So it's true, they're doing some stuff, but some things
525 are just for the label you know. They're not doing it for real, you know.

526 *00:42:29 Interviewer*

527 Yeah, it's like green washing.

528 *00:42:39 D4*

529 If you remember anything else, you let me know through WhatsApp.

530 *00:42:46 Interviewer*

531 Thank you so much for the conversation, that was really good.

532 *00:42:47 D4*

533 Alright, thank you.

1 A.3.6 Interview 6, Participant D5, 02.05.2024

2 *00:00:11 Interviewer*

3 OK, perfect. So yeah, for the first question, I would just ask you to present like your company
4 or yeah like how you are operating in a tourism industry like you told me that you are operating
5 for four years as a diving teacher and like, yeah, which island are you operating on, and which
6 is like the most common product that you are selling to tourists?

7 *00:00:43 D5*

8 OK, I'll start. I am offering activities since 2021. So this year will be my 4th year. I offer courses,
9 but also excursions. And I am in a partnership with the with the diving centre so that I use the
10 boat of the diving centre, the motor boat. Sometimes I also go by shore and sometimes I use
11 some fishermen boat when the boat (of the diving centre) is not available. And I'm working in
12 the Azores from mid June till mid of mid-October. So the high season because in the Azores it's
13 really complicated to go to sea in the winter, but there are some people that manage to do it all
14 year long, but they can maybe go just one time a week or two times a week.

15 *00:01:53 Interviewer*

16 OK, because the conditions are like too stormy or too difficult?

17 *00:01:58 D5*

18 Yeah, exactly a lot of wind, big, big, big waves. So it's not, it's not easy. So that's why the big
19 season in the Azores, well in the ocean, it's between June and October, beginning of October.

20 *00:02:15 Interviewer*

21 OK, nice. And you are operating from all the islands, or do you have like a base in one specific
22 island?

23 *00:02:24 D5*

24 No. Yeah, I'm based in Santa Maria. OK, but sometimes I work in Faial because the diving
25 centre with whom I'm in partnership, they also have a diving centre in Faial. So sometimes I go
26 to Faial and yeah, and I was proposed to work one week to create a workshop, a freediving
27 workshop in Flores for one week. But so far, I didn't do it because I have already a lot of requests
28 in Santa Maria, but that would be a plan also. In Flores the season is shorter because it's more
29 July and August. If you try to go before and after sometimes it can be very complicated with
30 the conditions.

31 *00:03:20 Interviewer*

32 Interesting. Like I didn't know there are different conditions for the different islands.

33 *00:03:21 D5*

34 Yeah, because actually the nine islands, they are quite far from each other and like you have a
35 high range because the between the ones, between Flores and Corvo and between Santa Maria
36 you have, I don't know, maybe 1000 kilometres or more. It's really really far from each other.
37 So it changes a lot the conditions. So it makes difference between South and North and between
38 West and East. There is a big difference, so it changes completely the weather. So the Santa

39 Maria, normally it's the most sunniest island, and it's where you have the best temperature in
40 the ocean.

41 *00:04:24 Interviewer*

42 Oh, OK yeah. I haven't been to the Azores yet, so I really want to go at some point. And you
43 said that you are offering courses and also excursions. So then for people who are already like
44 certified as diving, I guess and what is like the bigger portion like are there more people coming
45 for the courses or for the excursions?

46 *00:04:52 D5*

47 Actually, it depends. But actually I have a lot of requesting courses. I was very surprised about
48 that because the Azores is not an easy place to start diving because we have currents, we have
49 waves. But I yeah, I have a lot of people that who are discovering diving actually with me. So
50 I like it very much. It's super nice, yeah. And I have also some requests of certified free divers,
51 maybe more and more. But first I had a lot of requests for courses. Now I think it's stopped to
52 be a bit like 50/50, a bit more like this. But there are excursions also in my courses. Because
53 for me in the Azores, it would be a shame just to be along the rope the way, if you know how it
54 works.

55 *00:06:04 Interviewer*

56 Yeah, yeah, I've tried it once.

57 *00:06:04 D5*

58 So there are always excursions in my courses so to enjoy. To get your knowledge and try to
59 then.

60 *00:06:20 Interviewer*

61 Yeah. And then I guess like one of the main factors why people are coming to the Azores is like
62 the marine wildlife, for example, in Santa Maria, there's the whale shark. A lot, right? Yeah.

63 *00:06:30 D5*

64 Exactly. Yeah, sometimes. Sometimes we have, like 99% of the time, if you come between end
65 of June and beginning of October, you have 99% chance to see the mobula rays. So this is for
66 sure, quite for sure, but the whale shark is really rare actually. We talk a lot about it. But it's rare
67 because they are not staying in an area, he is going where there is food. So sometimes it is in
68 Ambrosio with the mobula rays, so we can see it, but sometimes it's somewhere else. So far,
69 the company with whom I'm working is not searching for the whale shark. But there is a com-
70 pany now, well, there are more and more requests of people who want to see the whale shark.
71 So there is a request that we offer these services. So not us, but there are some companies now
72 that they offer to search for the whale shark. So they take the boat, and they go at sea for 2-3
73 hours and they search for it. So they help with the fishermen for instance. Because usually the
74 whale shark is usually not far from tunas. I don't know if you saw the movie "Ilha dos gigantes"?

75 *00:08:02 Interviewer*

76 Uh, no, I don't think so, I don't know it.

77 *00:08:05 D5*

78 OK, that would be nice. It's called "Ilha dos gigantes" in Portuguese. And in this movie, you
79 can see that they explain the synergy you have between the whale shark and the tunas. So that's
80 why the fishermen can help, because the fishermen they are fishing the tunas, so sometimes
81 they can have the whale shark not far so they can give the information to the diving boats and
82 the tourist boats.

83 *00:08:23 Interviewer*

84 So there's like a corporation between the fishing community?

85 *00:08:30 D5*

86 Yeah, exactly.

87 *00:08:35 Interviewer*

88 You also mentioned before that you are sometimes taking the boat from the fishermen. If the
89 diving operators are not available?

90 *00:08:44 D5*

91 Yeah, exactly. It's not like a fisherman. I mean, it's a boat. Well, it's a fisherman, but it's a local
92 one. It's not the big fisherman boat. It's just one guy who likes to go fishing. So sometimes he
93 offers fishing tours to people who want to go fishing. And me when I get this boat of course it's
94 not for fishing, it's a boat for diving. So it's just like boat that can be used for fishing activities,
95 but it can also be used for to tour the island or do a diving activity, yes, just separated.

96 *00:09:41 Interviewer*

97 Yeah, yeah. But it's interesting because from other interviews I heard that the fishing commu-
98 nity, sometimes it's like, not really cooperative with the tourism industry because they are like,
99 yeah, there's this discussion, like where they feel like the tourism industry is taking away or,
100 like invading their space kind of. So yeah, it's interesting.

101 *00:10:09 D5*

102 Well, we can, we can say it depends because sometimes it's the diving boats who say that the
103 fishermen, they are going too close for instance in Ambrosio. Well it depends. Sometimes it can
104 be interesting. Like I remember in Faial one day we had a blue shark in Princess Alice Bank
105 because the fishermen they were very close. So probably there is some blood of the tunas going
106 in the water. So the blue shark was here, so it was nice for the tourists. But sometimes, like you
107 have another effect, for example in Ambrosio. Sometimes when the fishermen they are too close
108 to Ambrosio, the mobulas they leave. Yeah. So it's spread mobula rays. So sometimes it's diffi-
109 cult because we go there, and we don't have that much, or we don't see them at all because the
110 fisherman around and they spread the mobula rays.

111 *00:11:29 Interviewer*

112 OK. But in general, you think that there's like a cooperation between the two industries and like
113 you are trying to help each other out?

114 *00:11:41 D5*

115 Well, for the whale shark it is. Because there are some diving boats that try to get some infor-
116 mation from them. So, sometimes it works well, it depends. And you know it's a network. So if

117 you get the network if you are friends with the people, the right people, so you can manage to
118 do things and.

119 *00:12:09 Interviewer*

120 Yeah, you need to know the right connections, kind of.

121 *00:12:15 D5*

122 Yeah. So it's always like this.

123 *00:12:18 Interviewer*

124 OK. And then considering like the whole conservation impacts of like the tourism industry and
125 also like individually for you like do you take on any conservation measures on your trips? For
126 marine conservation?

127 *00:12:39 D5*

128 It's complicated. Like when we see something in the water of course we take it out of the water.
129 Umm, sometimes it can be things floating, things in plastic that are floating. Sometimes when
130 I go in the water from the shore, for instance. And when I see something plastic or something
131 or a bottle, I take it I put it in my buoy. But sometimes it's so much, it's so much that we cannot
132 do anything. Like one day there were a lot of tiny pieces of net, and they were everywhere. And
133 there were fishermen boats very close from us, so I guess it was them. So they were maybe
134 removing their net, and they were taking the fishes out of the net, and they were putting all the
135 different parts of their net in the water. So with this you cannot do anything because they were
136 everywhere it was a lot, a lot, a lot. So what I do sometimes because I have some friend organ-
137 ising that on the island. Sometimes I go and clean the beaches with them, so we take some big
138 bags, and we try to remove the plastic and also micro plastic. And sometimes also they try to
139 organise with diving boat, they try to organise one day, well several days like maybe one day a
140 month. Try to have a moment to clean an area for instance. Thanks to the boats like areas, that
141 we cannot reach without a boat. But this is not done directly by me, like I'm participating to
142 those kinds of things.

143 *00:14:34 Interviewer*

144 And this is also an organisation? Or are these just private people organising this?

145 *00:14:41 D5*

146 I don't know if they have an association or something like that. They have a place in Santa
147 Maria with where they are selling classes and coffee and etcetera. So I think it's done as volun-
148 teer and just gathering the people. But of course they are writing the name of the different
149 companies involved in the cleaning, but I think it's quite personal and people who are available,
150 they come, and they help it. And then we put all the bags somewhere and they call someone
151 from the from the town and then from the city, and then someone will come and pick the trash.
152 OK, so that's how it works. And then me on my own I just try to give some of my money every
153 year to association because so far, I don't have that much time to get involved, so I just give a
154 bit of money, so it's kind of part of my income that goes to association and that's all. But I don't
155 make advertisement on that. It's just my own things and I would like to have more time to help
156 myself, that would be nice.

157 00:16:15 Interviewer

158 Yeah, and do your client or your customers, do they know that you are contributing to the or-
159 ganisations? Like in my research, I found out that tourists who are like environmentally con-
160 scious, if they know that an organisation is contributing to marine conservation, they would be
161 like willing to pay extra to like as a donation kind of so. Do you think that this would like work
162 in your company as well, like that the tourists that are coming to you are in this environmentally
163 conscious mindset or do they not really care about it?

164 00:17:03 D5

165 Sometimes I can feel it, but not that much. Like imagine when we have this meeting in France
166 it's called "Salon de la plongee", it's an event that lasts 4 days where all the people they can see
167 all the destination. All the diving destination possible.

168 00:17:29 Interviewer

169 Ah OK, I think I haven't heard of it, but it's like fair?

170 00:17:36 D5

171 Yeah, its a fair. So like for instance, for instance, when the people they come, they ask. So I
172 have some people coming and they ask question, they try to get information about what we are
173 offering and it's really, really rare that it's really rare like maybe it's going to be 5% of the people
174 who try to ask a question in this direction, I don't know. Maybe can we go by boat, or can we
175 go by sail boat? Or we go by motor boat? Are you doing something? They don't really ask
176 question in this way. It's really rare. Like maybe you have 1-2 times a year, I have someone that
177 tells me, oh, I want to go by sail boat to the Azores and then I say no problem. Then you need
178 20-25 days to reach the Azores. And you can go to the Canarian Island and try to find a boat to
179 go there. And so I feel like when the people that comes to the vacation it depends. But I'm
180 talking about the people like I got who are not asking any question when I get them, they don't
181 ask any question about it. So I guess they are not thinking about it.

182 Yeah, I think when they are thinking of their vacation, they are thinking of their vacation, and
183 they want to enjoy it. Whatever will be the price or whatever be the destination the time, and
184 by flight or motorboat. It's quite rare, but sometimes, like sometimes if I say, OK, you have to
185 know that for the sharks, for the blue shark, we're going to appeal them with the blood of sar-
186 dines. Yeah, and it's rare, it's rare, but sometimes I have some people who say no. "No, I don't
187 want that." So I don't want to search for the whale shark. I just want to fall on the whale shark
188 and that would be my luck. But otherwise I don't want to search for it. But there is not that much
189 I think concern, but I think they divide the people. They probably divide like sometimes they
190 do action, you know, in a direction. Maybe they do action and when it comes to vacation then
191 now, they wanna enjoy.

192 00:20:02 Interviewer

193 OK. Yeah, it's the holiday mindset kind of.

194 00:20:14 D5

195 Yeah. I think. But the companies they do the same. It's greenwashing. It's the same because the
196 companies they do what they have to do. They do their greenwashing so that they can do what
197 they have to do. They separate like greenwashing would be one part of the company someone

198 that and the other part is business. So and I think the people most of the people, most people I
199 have in this industry like if I take the example of my job, I think it's people who separate.
200 Because they never talk about that or it's really rare. And if it's dirty some they try to clean, but
201 the majority they will leave it like this and then they will try to look at somewhere.

202 *00:20:57 Interviewer*

203 They would just ignore it.

204 *00:21:00 D5*

205 Yeah. Ignore it. Yeah, yeah. Because I think they are on vacation and they want to enjoy it and
206 they probably but, but it's not meaning that the people, they don't care. I think they probably
207 care, and they do action. But at another, at another moment in their life. And that's another thing.
208 I think it's like this, I understand.

209 *00:21:22 Interviewer*

210 Yeah. And do you see like a possibility or like a strategy on how to keep this mindset going also
211 throughout the holiday, like if they are already environmentally conscious, like how can you
212 keep it, keep their environmentally consciousness going even though they are on holiday, do
213 you have any like ideas on that maybe?

214 *00:21:52 D5*

215 Good question. It's difficult because they come to enjoy, they don't have a lot of time, yeah.
216 Usually those people, they have only three days, four days and on Santa Maria. It goes very
217 fast.

218 *00:22:04 Interviewer*

219 Ah really? Because they are spending like more time on other islands as well? Or is it their
220 whole time on the Azores?

221 *00:22:09 D5*

222 Yeah, yeah. Usually that that depends. But sometimes they just have one week and then they
223 come to Santa Maria. But sometimes they have a bit more, so they try to do 2, maybe three
224 islands. So they are focused on that. I think it's difficult or, you know it's not the kind of vacation
225 like it's the like I'm thinking of volunteer works. Like you pay for you know I don't remember
226 the name...

227 *00:22:45 Interviewer*

228 How it's yeah, like voluntourism.

229 *00:22:48 D5*

230 Yeah, I think it's more like this and then the people, they, they know, they know that they pay
231 for everything and when they are at the place, they will participate in the action that the associ-
232 ation, the organisation is doing. But we are not an association, that's been the difference also.
233 Because the association they are completely involved one hundred 100% in the protection I
234 don't know for the turtles what it stands for, for example the baby turtles. They don't have any
235 kind of money coming from elsewhere. So those people who wants to make a volunteer week
236 or more that will give the money to them, and they will help during their stay. But they come

237 just for that. But us we are proposing something different like cruises or activities, it's for them
238 to enjoy and to relax on their vacation and to enjoy and to maybe to flew away from problems
239 that they have.

240 *00:24:11 Interviewer*

241 It's like an escape kind of daily life.

242 *00:24:15 D5*

243 I think so, yes. It's difficult to bring. But the thing that can be done is like if we have like
244 merchandising, we could have like when we sell T-shirts or things like that, we could have
245 something like in organic cotton or if you buy this. Like me, I could say "ohh if you buy this or
246 when you pay, one percent that goes to that kind of organisation that I'm involved in, where I'm
247 giving money every year." You know I can say that. But so far, I didn't do it. I didn't advertise
248 it yet. But I can say that and try to put those organisations I give money for I could put the
249 information on my website.

250 *00:25:21 Interviewer*

251 Yeah. Yeah, I think that would be a good possibility because then people know that like which
252 organisation they can contribute to. Yeah, because otherwise if they are coming from abroad,
253 they don't know about all the different initiatives in the Azores.

254 *00:25:31 D5*

255 Yeah, I totally agree, yeah.

256 *00:25:42 Interviewer*

257 And then I also read about a project which is the Manta catalogue on the Azores. I don't know
258 if you know about it, yeah.

259 *00:25:52 D5*

260 I know about it.

261 *00:25:53 Interviewer*

262 So do you also participate in that like that you kind of contribute to research as well on your
263 trips when you see the different mantas that you, yeah, share the photos with this organisation,
264 for example. So they can do their research on the Mantas?

265 *00:26:15 D5*

266 Yeah. So we have the papers at the office in our diving centre, we have the papers so that we
267 can contribute, but also our clients can contribute. OK, so this is cool. Then us sometimes we
268 contribute but it's difficult because we have so much to do that it's really difficult to take time
269 to participate. Yeah, I think what is really nice is that everything is at the office so everyone
270 when he's in the diving centre, everyone can see about that and there is a lot of our clients who
271 are keen on participating on that. They are super happy to see the mobula rays and then they
272 are super happy to give their photos and etc. So this this can work. This can work, but of course
273 we are doing photos. Me, I do a lot of photos or videos, but I don't have time usually to partic-
274 ipate and I don't know if it's really useful. I don't feel the urge so far of doing it. Because I was

275 wondering if it's still continuing. So because we don't, yes, I don't hear that much about it. So I
276 was even wondering if it's still working or not.

277 *00:27:52 Interviewer*

278 OK, so you don't here like the results coming from the participation kind of?

279 *00:28:06 D5*

280 No, no, no, no, no. Like. Yeah, yeah. Because sometimes I have some emails, I am in a list
281 where I get some emails, but I don't remember to receive that often or even one day to receive
282 an e-mail from Manta catalogue. But maybe yes, but I have so much to do that's it's complicated
283 also sometimes to have a look. I know that recently we signed, we were a lot to sign to try to
284 redefine the areas where they can fish and not fish.

285 *00:28:44 Interviewer*

286 So like, yeah, marine protected areas.

287 *00:28:49 D5*

288 Yeah. So I participated in that, of course. I signed the documents and I have some clients, some
289 old clients or they send me things. Well like when they want me to sign like there is a "Ocean
290 alive" it's another organisation but it's from Portugal. So when this girl, she has some things to
291 sign. She sent them to me, and I signed.

292 *00:29:15 Interviewer*

293 Nice. Yeah. Yeah, that's also support.

294 *00:29:22 D5*

295 Yeah, yeah, yeah. It's in support signature, of course, because its interesting what she does.
296 Yeah, we have all a lot to do and yes, it's not easy to do all of it. But yeah, of course when I
297 receive mails and someone asks me for a signature I would say yes, when I know the people
298 who are sending me that, when I know it's a friend. I know it's a good client and of course I
299 sign. And I hope it can help, of course, it's just a signature, but yeah.

300 *00:29:58 Interviewer*

301 Yeah. Yeah, I guess so. So you think like a challenge to contribute more to marine conservation
302 is the fact that it's often like voluntarily kind of like it's, yeah, something that comes on top of
303 your normal work and it's not really, like you don't get money from it, of course. So it's yeah, it
304 just takes up a lot.

305 *00:30:23 D5*

306 Yeah, it's not, it's not only money. The problem is that I have a lot of requests and that would
307 be a shame to say "No" to someone, because on this day I'm gonna do something as a volunteer.
308 I want to also satisfy the people who are coming, and the season is really short, it's only four
309 months. So it's difficult to say no. Yeah. And it's also a very exhausting season and really, really
310 exhausting. So when we have the day off, we try to rest. I remember that one day I went to clean
311 the beach on the day off and I was completely but completely exhausted. So it's a really, really
312 tiring job. So it depends on the people, of course, there are maybe some people who can handle
313 it better, but me, it's a job that really tired me a lot. So I do what I can, but usually I can do

314 more, I do volunteer stuff but when I'm in France, when I am in my country during eight
315 months. I have more time to act as a volunteer.

316 *00:31:44 Interviewer*

317 Yeah. OK. Yeah. So that's a lot of information, of course already. Uh, do you have any like
318 hopes or ideas on how the marine tourism industry and the Azores is going to develop like, do
319 you have any wishes kind of for like the future development?

320 *00:32:08 D5*

321 What I like in the Azores next to the other countries, where I've been diving, it's that we don't
322 have a lot of boats so far in the areas. Even in Faial, in Faial we have more boats. Because Faial
323 it's the big, big, big Island, yeah. Like Sao Miguel, also it's a big Island of course. So Faial and
324 Sao Miguel maybe it starts to be a bit rushed but of course, it's what we appreciate, what the
325 people appreciate when they come to the Azores, that we don't have a lot of boats on the ocean.
326 So when we get to a site, there is only one boat, maybe two maximum. So and they are small
327 boats. It's not the 25-35 divers where like we have in the Egypt for instance. So it's what the
328 people, what they enjoy. So I think it's good that in a way that the government of the Azores
329 don't try to get more tourism. Because it's how it makes the thing nice, it's we are like happy
330 few.

331 But for me it's there's still, a lot of fishing boats and last year we saw that there is a lot of boats
332 from Madeira who are so far, they were fishing in Madeira and now they are coming to the
333 Azores.

334 Maybe because they don't have enough fishes now in Madeira, so they go to the Azores. So it's
335 all the same. We are, like if you discuss if you talk with the people who are in the Azores for
336 like 30 years ago, they can tell you that you have maybe 20% of the fishes you had 30 years
337 ago.

338 *00:33:55 Interviewer*

339 Yeah, I heard that. It's like the numbers are decreasing.

340 *00:34:05 D5*

341 Yeah, so it's a bit scary, so. And now you see that the fishermen boat they come to the Azores.
342 There is a movement, there is movement. OK, there is no more fishes in Madeira. So let's go to
343 the Azores etc. So at certain point, it's always the same problem. We are fishing too much too
344 much. And the areas, which should be protected, they are not protected in reality so I'm not sure
345 that the tourists, the tourist activity they are making that damage. I think it's quite good given if
346 the fishes maybe they would prefer to be alone, but I guess it's less damage than all those boats
347 fishing. It's always the same we are fishing. We are killing too much. Next to what we really
348 need, yeah. And there are, and we know all the food that we are throwing away because it was
349 not possible to sell at the right time. It's a problem and we are killing too much, and all the
350 fishes were killed just in the nets. Because they were on the net or the net working the ground
351 of the ocean. So it's a big problem just to have some fishes. We are killing a lot of other fishes
352 and killing the ground and so on. So I don't have that much hope. I chose to do this job the last
353 years as much as possible. And yeah, and then because it feels like whatever we do, it's going
354 so far now so fast in the bad direction that even what we do, even if there are some actions I

355 don't know if it will be enough to save. To save the areas. Yeah. So me, I'm not very unfortu-
356 nately, I'm not very optimistic.

357 *00:36:28 Interviewer*

358 OK. Yeah, yeah, I guess it can be frustrating to see it like the change or like the development
359 and then not being able to that much about it. Yeah, because I guess the regulations and the
360 fishing limitations are kind of lacking.

361 But do you think that the tourism industry could kind of push the government to change these
362 regulations and to put more pressure on this? Yeah, like legislation and limitations and all of
363 this because like through the marine tourism, you kind of take economic value out of the fishes
364 that are still alive and not the ones that are dead. And it's more than fishing the fishes. I did
365 some research, and I always found out that alive fishes are more valuable than dead fishes.

366 *00:37:35 D5*

367 Yeah, of course, for sure. Yeah, I would love what you say. I would love that, that it can happen
368 like tourist industry get bigger than the fishing industry and then we manage to reverse the
369 thing. Yeah, that would be awesome. That would be awesome. But I don't know. You know it's
370 we are in a world that it's money that controls everything. So if the money from the fishing
371 activities brings more money than the tourist activities. There still will be more fishing activi-
372 ties.

373 But I hope that they can maybe understand one day that they will not be able to fish anymore if
374 there is no more fish so. But it seems like the people, they see the wall, but they go on it anyway,
375 they go on it very fast. And they just take the money that they can and when there will be no
376 more money to take at this at this point, they will go on another business to get more money
377 again.

378 *00:38:51 Interviewer*

379 So yeah, yeah. It's like really short-term thinking.

380 *00:38:56 D5*

381 Yeah. Short-term thinking. Yeah. Yeah, unfortunately it is. But I would love that what you say
382 arrives. Like tourism industry brings more money and suddenly, OK, we stop fishing. Well, we
383 fish less and people you will eat less fish. That's it and that's all. And we have to take time
384 because it's terrible. Because actually the nature can very quickly start again. With the COVID
385 time, there are some areas where there were no more fishes or no more animals, and suddenly
386 they appear, and they grew and because they have suddenly space. Yeah, human activity has
387 been reduced and then and it can be very fast actually. But we are going so fast when we are
388 working, that I feel like unfortunately human activities are going too fast from the nature how
389 the nature can recover.

390 *00:40:09 Interviewer*

391 So we have to give the nature more space.

392 *00:40:10 D5*

393 We have so much to do. Like, you know, when we are cleaning those beaches, it's difficult for
394 me always because it's really sad. Because we are cleaning and when you go cleaning the next
395 week or it's the same.

396 *00:40:24 Interviewer*

397 Yeah. It's like never ending.

398 *00:40:28 D5*

399 Yeah, yeah, it's never ending. It's really scary, actually. It's really scary.

400 *00:40:36 Interviewer*

401 Yeah, definitely. Well, I hope that it can be a more optimistic in the future.

402 *00:40:44 D5*

403 Yeah. I'm sorry. I guess in your work you will try to give a good way and try to give some hope.
404 Of course, it's important to give hope. Yeah, but the reality now it's a bit scary. And we wonder
405 what can happen.

406 *00:41:22 Interviewer*

407 Yeah. Well, thank you for the talk. Like I think I like we talked about so many topics, and I
408 think I asked all of my questions. So yeah, if you have anything more to add that you want to
409 talk about, then please do.

410 *00:41:32 D5*

411 Ohh I'm happy.

412 *00:43:10 Interviewer*

413 OK. OK. Thank you so much.

414 *00:43:13 D5*

415 You're welcome.

1 A.3.7 Interview 7, Participant W2, 07.05.2024

2 *00:00:04 Interviewer*

3 OK. So yeah, the first question that I always ask is like could you give a description about your
4 company like especially tell us that how do you actually pronounce it? I'm not really good in
5 Portuguese. Like, since when has it been operating in the Azores and what are the main products
6 that you are selling like what are the most popular trips for example and what is the main cus-
7 tomer group like just a short description?

8 *00:00:38 W2*

9 OK, so yes, our company is operating since 1989, so it's been now 35 years. And it was born
10 by like the creators Serge and Alexandra. Serge has passed away already, so Alexandra now is
11 taking care of the company. But they were sailing around, and they were interested about the
12 whaling culture around here. So how they started was to hire the old lookout that used to spot
13 whales for whaling. And they hired this guy to just keep doing the same. It was Joao Vigia, he
14 was the first lookout. So yeah, we are here in South of Pico, in Lagoas and we mainly work
15 with whale watching. We only do whale watching trips. And usually we have two trips per day.
16 So three-hour trips. In the summer we can have three. And we have another project that it's what
17 we call the Sao Jorge trip or biodiversity trip and it's a full day that we go whale watching
18 around here, then we go to Sao Jorge to eat, have lunch, go a bit around the coast and then
19 continue with whale watching. So it's a bigger tour. There we focus not only on whales and
20 dolphins, but other diversity like we also focus a lot on the birds and turtles that we find.

21 *00:02:25 Interviewer*

22 And then the customers are like also interested in these other species or are they mainly coming
23 for the whales?

24 *00:02:36 W2*

25 Yeah, mainly coming for the whales and dolphins. This is definitely what they search for, but
26 then we all we have a lot of weekly clients, OK, people that stay here the full week, they buy
27 like a package of five trips or more.

28 *00:02:53 Interviewer*

29 So they do a whole week of whale watching?

30 *00:02:56 W2*

31 Going out every day during the whole week. And these ones are usually more interested in other
32 stuff as well. So usually we have this full day tour once per week. Like on Fridays. Usually they
33 like to take that one too, cause it's different and they can focus on other things. Yeah, but yeah,
34 it's a product that we also sell a lot, but it's more difficult with the weather. You know about
35 Azores. Azores is tough here. And to do this kind of trip and to full day on a small boat and
36 crossing the channel it's very, very perfect conditions that need to be. So it does not happen so
37 often as we would like so, definitely the normal whale watching tours are the ones that we sell
38 the most.

39 *00:03:48 Interviewer*

40 And then the customers are like is there like a customer profile or something like?

41 00:03:58 W2

42 Yeah, we have a bit of everything. Nationalities, of course Germans.

43 00:04:03 Interviewer

44 Germans are everywhere.

45 00:04:06 W2

46 Yeah, exactly. So Germans is our top like number of clients then it would be, I believe like
47 French, French people. Then we have a lot of Dutch, we have Spanish and Portuguese, some
48 Italians. Mainly Europe, we have some Americans as well, but mainly Europe.

49 And yeah, like usually mainly adults, sometimes we have families, but since we have small
50 RIBs, small zodiacs, we can also not take like really young kids so our minimum, it's like 5-6
51 years cause then they don't handle the boat. So yeah.

52 00:04:55 Interviewer

53 Yeah. And then I mean, for my research, it's interesting if like the people that are going to on
54 your trips are like aware of marine conservation issues or like environmentally conscious and
55 something like this.

56 00:05:09 W2

57 Most of them yes, I think so. They choose, even already the clients that come to the Azores they
58 are looking for something wild and for something that it's not like massive tourism. So they are
59 really looking for something like authentic and sustainable, I believe.

60 And with whale watching, we have a bit of everything, of course we have those idiots that don't
61 know the difference of a cetacean and fish. Well, its OK, but for us its strange. But I think most
62 of the people they are aware, OK. And then yeah, it's part of our work to also increase the
63 environmental awareness and we focus a lot on this.

64 00:05:54 Interviewer

65 Yeah, exactly like on your website I saw the different topics like that you contribute to respon-
66 sible and respectful tourism, education and conservation and research. Like maybe could you
67 explain what kind of different projects you are doing?

68 00:06:16 W2

69 OK, so starting with all the clients, as soon as they arrive, we give them a briefing. Usually, I
70 think most of whale watching companies are doing this. So like 15-20 minutes. A little bit of
71 knowledge about what's happening on the oceans, what we can expect when it's always only on
72 TV or what is real life and a bit about like Biology 101 about cetaceans.

73 Then during our tours we always have one skipper and one guide. And this guide is most of the
74 time the biologist. And he's explaining a lot of things on the animals.

75 And we had a lot of feedback of the clients saying that we are one of the most like informative
76 tours, not only compared to in the Azores but also many times they go whale watching else-
77 where and they say our tours are very complete in these terms. Something that I think we do it
78 a bit different than most other companies is when we come back, we give them another

79 debriefing. I think this is something very unique, I don't know any other operators that do it.
80 Well, some might do it like shortly, but we take the people again and we do a little bit of a sum
81 up of what happened in the ocean. You know, sometimes it's bad weather. It's a lot of things
82 happening. So they calm down, they have a drink with us, we offer a drink. And we are there
83 with them saying "OK, this is the species that we've seen this morning. Or this afternoon, this
84 was the behaviour. And this happened, this happened." So a bit of a take-home-message, you
85 know.

86 *00:07:59 Interviewer*

87 OK. Yeah, that's really interesting. Like I've been to two different way watching trips so far,
88 like not in Portugal and I never had this briefing. So yeah.

89 *00:08:10 W2*

90 Yeah, I think it's important because they have a lot of information, they see everything. But then
91 like to put those ideas in their head and to like to go away with these messages is good, is good.

92 A lot of people like we asked "Which species did you see when you did whale watching?" Well,
93 they don't know really what to answer. Yeah. So in this case, like we say again, which were the
94 species. And we even give the certificates with the species that they've seen. So they can take a
95 souvenir basically, and they can keep collecting new species. And it's something like a game.
96 You know everyone loves games.

97 *00:09:40 Interviewer*

98 And then it also increases the engagement with the ocean or like with the species of the people,
99 I guess so do you think this also contributes to like more action? Like increased action towards
100 conservation of the clients?

101 *00:10:03 W2*

102 Yeah, I definitely believe. And I'm actually also a conservation biologist. I did my master on
103 conservation biology, so I totally believe that if people know more and they have, yeah, more
104 connection when they see more and they have more information, they will connect more and
105 this way they will protect more. This is for sure.

106 We also take a lot of plastic from the ocean, like whenever we can. This also like puts people
107 involved in conservation. Yeah.

108 So we do that for all the clients, and we also provide like every day of the weekdays, so five
109 times a week we have a different talk in the evening. So all our clients, all our clients and even
110 if they are not clients, we announced this in our shop, we give free talks. And it's about the
111 whole subject. Like of course we talk about the whales and dolphins. Yeah, but we also have a
112 talk about turtles. We have a talk about birds. We have a talk about our photo ID project. We
113 have a talk about whales and dolphins. And we have also a slide show with photographs. So
114 its mainly for our weekly clients, but its open for everyone. They can see every day a different
115 presentation totally free, which I believe is also very important.

116 *00:11:22 Interviewer*

117 Yeah. And it's also for like local people, like the community?

118 *00:11:37 W2*

119 Yes, it's open for everyone. Yeah, well, usually we do it in English because it's getting more
120 people because our clients are usually not Portuguese. But of course, local people, if they un-
121 derstand English or I did it already once, like a school asked us to do it in Portuguese. OK, so I
122 changed my presentation, and I did it only in Portuguese for some Portuguese people. So yeah,
123 we are open to do that as well.

124 *00:12:00 Interviewer*

125 Yeah. And is there also like engagement coming from the community, like from local people?

126 *00:12:11 W2*

127 Yeah, a lot. They help in the beach clean-ups, and they are very happy to follow our projects.
128 Then we can go through the projects that we are engaged also. Like this is I talked about what
129 every client of us gets, but besides this we give a lot of data to projects. We do a lot of photo-
130 ID. Mainly on sperm whales. With the sperm whales we put all of our photos of photo-ID in
131 our website. I don't know if you saw that.

132 *00:12:47 Interviewer*

133 Yeah, I saw there's like a photo identification.

134 *00:12:51 W2*

135 Yeah. So we have from every year all the photos that we took that are good for photo-ID we
136 put there. So anyone can use it. So it's also public. So it's good for like master students that
137 wants to do the work on identifying individuals, they can use our photos there for everyone. We
138 also give all of these photos to Lisa Steiner and she's matching the sperm whales since the
139 beginning. Not since the beginning, but it's more than 30 years now. She's doing all this from
140 all around the Azores. And we gave all the photos to her. Also, with humpback whales we give
141 the photos to her also for rissol dolphins. We also have this partnership with the Dutch lady, and
142 I don't know if you heard about Sky, that it's from North Atlantic Foundation. It's research
143 institute for rissol dolphins here in Pico, quite close to us. In the next village. And she's also
144 working just in Rissols. Well, not just, but focusing on Rissols since more than twenty years
145 now, so she knows these Rissols Dolphins like by heart. When she sees them, she says its like
146 A, B or C. And we send our photos also to her and we are always collaborating with her.

147 Then now this year, we are starting to put all our Photo-ID photos also on Happy Whale, I don't
148 know if you heard about this platform.

149 *00:14:37 Interviewer*

150 Yeah, I think I've heard it.

151 *00:14:39 W2*

152 Yeah. It's open for everyone. Then there is like, I think scientists validating the data so we can
153 put our photos there as well. We started already. For photo ID also with the blue whales we give
154 to Richard Sears. Richard Sears is this expert on blue whales. That is working in collaboration
155 with us like also for ages. So we collect a lot of photos.

156 Then we also collect a lot of other data like from some years now, some groups from the Uni-
157 versity of São Miguel, they asked us to collect cephalopod samples. So squids and octopus,
158 whenever they are floating. Usually this is the food for sperm whales, Rossils and big whales,

159 so they want us to catch a little sample to put on alcohol and then they collect it, and they take
160 the DNA. So this is also helping a lot of research on the deep divers diet.

161 We also are in collaboration with the Costa project. This is a turtle project in Faial. We are
162 tagging turtles. So they give us the tags and we tag them, and we put the information, and we
163 give it them at the end of the year. And some years ago they were asking us to catch the little
164 young ones, the baby turtles, because then they take it to Faial, and they put the microsatellites.

165 *00:16:29 Interviewer*

166 So for tracking?

167 *00:16:31 W2*

168 Yeah, yeah, correct. When they are really young, it's called in science "the lost years of turtles",
169 because no one really knows exactly where they go and what they are doing. We know that they
170 are around here, and they are just feeding and growing old until they get mature, but no one
171 exactly knows where they are going. So this is another project that we also contribute to, not
172 with samples but with data and with the turtles actually also.

173 And then we also have, sometimes you're taking also data from our sightings to this platform
174 that it's called "Monicet". They developed a really good app for an Android. So we can go on
175 our trips and record every sighting that we have, and we can add different variables, like their
176 behaviour, so a lot of things and then it's taken there. Now the app, unfortunately, is down. So
177 they are working on it. But we used to take a lot of data from it. Yeah, I think from the research
178 projects that we are contributing, I think that's it.

179 *00:17:45 Interviewer*

180 Yeah. I mean, that's a lot.

181 *00:17:52 W2*

182 I hope I didn't forget any. But yeah, it's a lot of things, but we are at sea every day so obviously
183 we can collect a lot of data. It's not always easy. Because we are not a science project, we are
184 not a Science Centre, so we don't go out for this. Our priority are the clients. With cold weather
185 then it gets really difficult to take extra data like this. But whenever we can, yeah, we do it.

186 *00:18:19 Interviewer*

187 And then like on the trips, you do it during the time where the tourists are looking at the animals
188 and everything, you just take the data, or do you also have to take more time to take the data
189 and then the tourists have to agree with this somehow?

190 *00:18:39 W2*

191 No, we do it all mingled like it's actually part of the experience. People usually enjoy. Well,
192 some data we take it let's say quietly, they are not even aware that we are taking data, but others
193 like if we catch a turtle that we are tagging, they're being part of this. And this I think it's even
194 more rewarding for people. They know that their money is contributing for science, and they
195 are very excited of course. Like you see all the animals in the ocean, you are in the boat, then
196 you have the animal, right next to it, people, they love taking pictures and see it closer of course.
197 And then like, we explain more things, because we have the example there. And then we explain
198 what we are doing and why we are doing it and what is the results that the research projects get

199 from it and then we have the information, we also can provide more information based on sci-
200 entific data. And they are happy to be a part of this, and I think it's very important.

201 *00:19:49 Interviewer*

202 Yeah. Yeah. It's like a holistic experience for them.

203 *00:19:53 W2*

204 Exactly. And the photos also, many times we are taking photos and say, OK, this is not just for
205 fun or just to have nice pictures. It can be also, but it's also contributing for science, so we will
206 also link these photos with GPS data and the time and hour. The time and date I mean, and so
207 it's also contributing, and they feel happy of course.

208 *00:20:20 Interviewer*

209 Happy. Yeah. And are they themselves also contributing to this, like, as citizen science? So their
210 photos are also included?

211 *00:20:27 W2*

212 Yeah, sometimes. Well, not as much as we would like, but this thing with Happy Whale, we are
213 also working on it. OK, so we are trying also for them to contribute. So if they have nice pic-
214 tures, we tell them they can send this to us or go directly to Happy Whale because it's an open
215 platform. And this way we can also contribute.

216 And then there are some clients that we are like frequently clients. They come year after year
217 and they also know about all the projects we have, and they also like send us a lot of pictures
218 yeah that we can then use it. Yeah, use it with their credits, with their names on it but it happens,
219 it happens that they contribute, yeah.

220 *00:21:15 Interviewer*

221 Oh, OK. Nice. Yes. And like, how do you as a company manage all of these activities that you're
222 doing? Because it's not like yeah, part of the business, it's like something on top kind of. And I
223 heard from other organisations that sometimes it's difficult to like to manage these things be-
224 cause yeah, as you said before, the customer is the main priority.

225 *00:21:46 W2*

226 If I were like in a utopic world, we will have an extra person there with us, taking the data and
227 this is the best and sometimes we have internships, so we are not paying this person and so we
228 can manage like this. Usually for the interns, we provide food and house, and they can take the
229 data, it's much easier. If not with that we don't promise nothing basically. And we take as much
230 as we can with our resources.

231 Also we have off season. So I'm the one taking care of a lot of data that we managed before,
232 and I take the winter mainly to do it. Sometimes it's unfortunately, it would be better to update
233 the data like in real life. Then, like, it's not possible, you would have to have two jobs, basically.
234 So we use the winter time to do that.

235 *00:22:54 Interviewer*

236 OK. So yeah, there's like not enough staff kind of to.

237 00:23:00 W2

238 Exactly. Yeah, not ideal because, because we don't get money from it. We get money from the
239 trips, clients are paying to watch. So this is our priority to show them and to make the most
240 pleasant experience for them. And then we can take data apart, if it like increases their experi-
241 ence even better, then it's good. Otherwise it's when we have a bit of free time, even during the
242 trips, like sometimes it's really difficult.

243 00:23:40 Interviewer

244 From my research I found out that people like the tourists when they are involved in this con-
245 servation work or just experiencing it. They are more encouraged to also donate to like organi-
246 sations or something to that work for this cause. Like do you advertise anything like this as well
247 on the trips?

248 00:24:04 W2

249 No, we don't advertise to donate. No, actually we never did it. We advertise the projects. When
250 we are doing like this turtle or the catching squid samples or like taking photos, we tell which
251 organisations are taking care of this data and then we are like "ah ok, we then like see where
252 this turtle is going or know the results of this project", or anything. So we advertise their like
253 social media pages or their websites, where they are updating their results on this, and they can
254 continue to follow the work. And if the companies, the organisations have a donation part then,
255 yeah, like it's up to them you know, we just share it.

256 00:26:05 Interviewer

257 And then I want to ask like as I said before, I've been talking to like people from the different
258 islands and I heard from some that sometimes it's difficult to have like a cooperation among the
259 Azores, like for example with different like businesses, whale watching operators or something
260 to support each other. Because it's like so spread out and there are like different problems on all
261 the different islands. How is your opinion on that?

262 00:26:51 W2

263 Yeah, there is a lot of competition. And a lot of not cooperation. Which sucks for science be-
264 cause cooperation is leading science forward. But there's also this with conservation projects,
265 so also between them they don't share the data. So it's also not going forward. I mean in terms
266 of our relationship with science, we take the data that we can, and we provide to them. Like
267 competition with other businesses, like we're watching companies of course we have, but I think
268 it's not so much intervening like interfering with the work we can contribute for science.

269 00:27:46 Interviewer

270 That's good. So yeah, your cooperation is mainly with the university or the conservation organ-
271 isations.

272 00:27:59 W2

273 Yeah, exactly. Many data that we take, we put it public like the sperm whales photo-ID. We also
274 have our statistics like whatever we see in our sightings we publish it. So yeah, we don't try to
275 keep it secret. Of course we have competition like in terms of the businesses of selling trips.
276 Yeah, but the rest like when it comes to conservation with the science, yeah, we share it.

277 00:28:57 Interviewer

278 Yeah. Nice. And do you feel like there's a support from the tourism industry in general, like the
279 Tourism Ministry or something like that, that they support conservation through tourism?

280 00:29:16 W2

281 I think so. I think so. Well, we don't get no extra money for doing this for conservation. Just our
282 clients that are paying this, indirectly. But I think in general like tourist operators they are con-
283 tributing, I think it's general. Because it's also benefiting the business itself. So of course if we
284 do it like too much, we will stop having the product of what we sell, so that's also a bit of
285 interest in this. It's again money. But I think also a lot of companies, they have biologists in-
286 volved either in the top process, or like a little bit lower, but they all like are happy to contribute.
287 So yeah, I don't know about the government. Of course, there are some legislations to protect
288 these animals and some Code of Conducts by law.

289 I think we should have more fiscalisations, so we should control more, things to be respecting
290 because we do what we think it's better and we do a lot like, for example the Code of Conduct
291 we do like it's said. But we see a lot of other companies not acting like this. And we can say
292 something, but then it's up to them. Like if there is no control, they can say it's not them. So it's
293 one word against the other. So of course, sometimes the information is disregarded. So what we
294 can do is try to like the best we can, and I think we should have someone on land checking like
295 the number of boats around the animals, the approaches to the animals that the skippers are
296 doing because anyone can be a skipper. But to approach animals correctly it needs a bit of
297 knowledge and experience. This needs to pass and if we all do a good job it's better for every-
298 one. Some people they are too greedy, but they don't have consequences.

299 00:31:57 Interviewer

300 So OK, so yeah, there's the law, but then there's nothing to enforce it somehow.

301 00:32:03 W2

302 Yeah, exactly. This exactly what is missing, a lot. To be fair, here in Pico we are not many
303 companies, we are just three companies, so not many boats. And we try to manage like with the
304 companies that work here. But sometimes you go to places that have a lot of boats and we see
305 it's not well.

306 00:32:33 Interviewer

307 OK. And I also heard that the like there's a discussion at the moment to increase the marine
308 protected areas in the Azores. And do you think that like the tourism operators can put more
309 pressure on the government to go through with it?

310 00:33:13 W2

311 Sorry, I really need to go to soon.

312 00:33:15 Interviewer

313 OK. Yeah. Just let me know if you don't have time anymore, then it's fine.

314 00:33:21 W2

315 It's finishing now?

316 00:33:24 Interviewer

317 I mean, yeah, I just like the last question that I always ask would be like, yeah, do you think
318 that the tourism industry can put more pressure on these regulations and like, what do you wish
319 for the tourism industry in the Azores as well as like the future development, kind of how can
320 it improve?

321 00:33:45 W2

322 Ohh that's a good question. I believe we can make a lot of pressure like people are more aware
323 and they see also, we explain how it is to be well done and they understand this and then they
324 can identify when it's not well done, and they can speak out. Like when you're choosing a
325 company, for example, see how they do things and what they are providing not only to you, but
326 to the animals basically. And also you can point out negative things that they are doing and the
327 more we speak the more we can change things. So I think the tourists, they are the ones that are
328 putting money on this. They are the ones that are financing this, and so for them, by the simple
329 choice of the company, it's already influencing the direction of the way tourism is done.

330 But also to speak out and to put like reviews for example, to even go to the government and
331 like have the things written, it's a very powerful tool that they have to speak about it. And yeah,
332 about that marine conservation areas, I think it's definitely very important around here. We
333 know this is one of the best places in the world for marine mammals. We know this, this is sure.
334 So of course, like the more we can protect the better. And it's difficult because of the mentality
335 around here it's still very like old school, but we have a lot to win with this.

336 Sorry to be a bit in a rush now.

337 00:35:50 Interviewer

338 No, no, no worries. I mean, we talked already for 30 minutes, so I definitely got a lot of infor-
339 mation. So thank you.

340 00:35:56 W2

341 You have still some questions. Uh, we can do it another day or ask me through something.
342 Maybe I can answer like my voice message or so it's like now I have to go, but I can have no
343 problem. Yeah.

344 00:35:59 Interviewer

345 Oh, OK. Thank you. Then have a nice day on the on the sea.

346 00:36:18 W2

347 Thank you very much. So good luck with your study.

1 A.3.8 Interview 8, Participant D6, 09.05.2024

2 *00:00:48 Interviewer*

3 Yeah. OK. And yeah, the first question that I always ask like just as an introduction is like could
4 you give a short description about your company? Like how long has it been operating in the
5 Azores and what is the main product that you are selling?

6 *00:01:05 D6*

7 OK. So we have been operating for around 30 years. OK, I don't, I don't know exactly the year
8 of foundation of the business itself, but I think on Internet you can find the exact year when the
9 business was found, but it's around almost 30 years.

10 So our boss, he's a commercial diver. He started his business more related to scuba diving itself,
11 offering tours and offering this type of products related to scuba diving. But naturally and be-
12 cause of the natural demands for whale watching tours right now whale watching is the biggest
13 source of income of our business. Although we still offer whale watching tours, charter tours or
14 like private tours for people that want to rent a boat, we also do, for instance, transfers from
15 island to island from time to time for people that need that tours around the island and then
16 yeah, scuba diving. Scuba diving, which we have, let's say three different products. One would
17 be, the first will be the shore diving, which is normal diving happening around nearby the har-
18 bour in the venues that are more well known in shore diving. And then we have the most remote
19 kind of diving also mostly expensive and intensive in terms of logistics, which is the open water
20 dives. The open water, I mean the oceanic like the manta rays, diving with the manta rays in the
21 Princess Alice Bank, which is a sea mount located 90 kilometres away from shore to the west.
22 And we have shark diving as well as you know. Happening in three different locations, let's say.
23 One is about 20 nautical miles away from the harbour and the other two roughly about 6 to 8
24 miles of distance.

25 *00:04:17 Interviewer*

26 But the main thing is whale watching at the moment?

27 *00:04:19 D6*

28 Whale watching at the moment, I think there is, all the companies in the Azores, at least in the
29 central group that are operating as whale watching tour. And I think the main source of their
30 income is whale watching. That is, that is an absolute, I'm 100% sure of this that I'm telling
31 you.

32 *00:04:50 Interviewer*

33 And has this been like a development in recent years or has this always been the case that whale
34 watching the number one thing?

35 *00:05:03 D6*

36 Well, you see, I as I told you, we started activities more as a diving operator. Yeah, and nowa-
37 days, the biggest part of the business is related to whale watching. So these might answer your
38 question. Meaning that yeah, whale watching has been, in the last maybe 20 years or so, getting
39 a bigger importance in terms of ecotourism than the other types of activities.

40 *00:05:42 Interviewer*

41 OK, nice. And then yeah, I'm focusing on marine conservation. So how does your company
42 contribute to marine conservation like in which areas do you contribute to this as a business?

43 *00:06:03 D6*

44 OK, this might be a little bit more complex question to answer, yeah. And in the sense that any
45 business that you will talk to there will always be some kind of help and involvement in science.

46 However, science its never the main thing because you see a business is a business. Yeah, and
47 making science is making science. So this to me, for instance, because we have some neigh-
48 bours that are Naturalist. I don't know if you heard of them or if you read about them. Or if you
49 contacted them. But Naturalist is a business. And they say they do a lot of research. And they
50 do, a little bit, its true. But when you want to make money, and probably as a German, you
51 understand this better than me, you have to divide things. You cannot make money out of sci-
52 ence. Because otherwise every scientist will be rich and that is not true.

53 Meaning when you want to do science, you have to find funds to fund your science, right? OK,
54 this being said, how do businesses of ecotourism help in marine conservation? I think the most
55 important factor for it's like educating people and bringing the people, the clients, the tourists
56 to a close contact to nature that they usually don't have access to. So when you see taking people
57 to see whales, most of the people that for instance are travelling around the ocean, are like
58 sailing the ocean and living on boats for let's say, 20 years of their lives, when they arrive in the
59 Azores they trust us, the companies, that we take them to see the whales. And even they spend
60 all the time in the sea, they don't see them often. Meaning that the logistics of this type of
61 activities like whale watching in the Azores, as you might know already, that we rely on a sys-
62 tem of lookouts that are on land looking with their googles and trying to identify where the
63 animals are, and then we contact with them and via radio VHF, which is a radio canal. And so
64 they can orientate us towards the animals. So this is why we have almost 100% sighting cue.

65 Meaning a whale watching operator has the means and creates almost 100% of opportunity for
66 anyone that wants to see whales that they actually go and see whales. Otherwise this is almost
67 like finding what is called finding a needle on a haystack. It's very hard that you on yourself,
68 you pick a boat, you go out in the ocean and without any cue, without any orientation, you will
69 find a whale there in the ocean, waiting for you, so you can be able to arrive near and to see it
70 and to observe it.

71 *00:10:30 Interviewer*

72 I'm just wondering, like, how can the people from the lands see the whales?

73 *00:10:45 D6*

74 Because it's because it's very experienced people, they are, they are usually located in conspic-
75 uous locations. So in a high mount, an area with a very good and wide visibility, they can see
76 up to sometimes 30 kilometres in front of them. And 30 kilometres for each side, so they cover
77 very, very, very big, area of the ocean and they have very powerful binoculars, and they have
78 also the experience to understand what can be an animal, what is not. Depending on the condi-
79 tions. This is so powerful in the sense that their ability to understand and to see animals is so
80 good that they can even sometimes tell the sex of the animals because of the shape. Because if
81 they are with calves or not, if they are alone for the side, or for certain types of behaviours. So
82 they do a very important task these lookouts very important it's called vigia. And this is inherited

83 from the time that we had whale hunting in the Azores. So the technique to find the animals is
84 the same.

85 So now, getting a little bit backwards to try to answer your question. This type of information
86 I'm giving you now, we give it in our briefings. So, so clients and tourists that arrive in the
87 Azores and they go on whale watching tours, in most of the places that they go, they have access
88 to this information and to this knowledge that they understand how it's possible for us to take
89 them out in the sea and to show them the animals and to show them the wildlife. They also get
90 the briefing, and they understand what is happening. So in this sense, I think there is a good
91 contribution in terms of what is marine conservation because you really touch the heart of the
92 people when you can show them these animals and you can explain them how it's possible to
93 do so, and you do that in a respectful manner, you give them access to something that is ex-
94 traordinary in the sense that there is no many people in the world that have access to the possi-
95 bility to go and see whales. You might think that this is a maybe an easy thing to do. But if you
96 walk around the street and Lisbon and ask quite randomly, how many people have seen whales,
97 probably you get much more negative answers than positive.

98 *00:14:14 Interviewer*

99 Yeah, yeah. Also, a lot of the Portuguese people from Lisbon that I know they have also not
100 been to the Azores.

101 *00:14:23 D6*

102 OK, you see? And so I think it's important. However, so we also contribute to marine conser-
103 vation in the sense that usually all the companies they have biologists on board. So it's the
104 biologists that also do they interpret for the tourists what they are seeing. And there is also data
105 being retrieved. For instance we have Lisa Steiner.

106 *00:14:56 Interviewer*

107 Ah, yeah, yeah, I've heard of her.

108 *00:15:07 D6*

109 Lisa Steiner, she has been studying sperm whales for almost 30 years, and while she's on board,
110 she's also retreating data for their own research and their own purpose.

111 *00:15:22 Interviewer*

112 OK, so with photo identification?

113 *00:15:27 D6*

114 Yes. For instance, for photo identification. Me if I have a camera. I also do that, and I share that
115 with Lisa's other colleagues. Like Ana Vezoquo, that is also a biologist. She also does that. And
116 we often register the species that we saw that we see, to create maps of sightings. So we know
117 the places where we see the animals, the season of the year, we have a kind of a reference for
118 abundance, and we also share this data with the university, with anyone that is interested in
119 having this. So in this sense there is also these, let's say, science and citizen science happening,
120 and that is contributing to collect data and understanding about wildlife.

121 *00:16:23 Interviewer*

122 Yeah, OK. And also the clients like the tourists when they are on the boats while the photo
123 identification or the data collection is taking place, they are also being involved in this process,
124 so they kind of more understand it?

125 *00:16:42 D6*

126 I wouldn't say. I wouldn't say that they are involved, but they can understand that this is hap-
127 pening. It's an obvious thing that is happening because the biologists, they take the big cameras
128 and they retrieve their data and we always explain people what we do, what we don't, that we
129 are collecting data for certain purposes. So the tourists, they understand that there is also this
130 activity going onboard.

131 *00:17:25 Interviewer*

132 Yeah, so this could also then encourage more like thinking about conservation maybe for the
133 tourists?

134 *00:17:33 D6*

135 Absolutely, absolutely. Whenever you are showing nature to people, I think you encourage peo-
136 ple to take, to take responsibility and care about their actions to so that we conserve it. So I
137 think it just comes naturally, that part.

138 *00:17:56 Interviewer*

139 Nice. And then you also cooperate with universities for the data collection?

140 *00:18:03 D6*

141 Yes, yes. And usually also there are researchers that are doing just like you do. In different
142 fields, retreating data about sharks, retrieving that about cetaceans, retrieving data about the
143 money that is expended by tourists. What kind of tourists are seeing? How this money then has
144 like feedback loops in other levels of the tourism, just like in restaurants, for the people that
145 find hotels. So all these multiple levels that whale watching, and shark diving and diving are
146 affecting, the tourists want the assets. All of these has been monitored and it's been studied.

147 *00:19:12 Interviewer*

148 So yeah, do you think that there's like a like cooperation between the different operators as well
149 to kind of support each other and these measures?

150 *00:19:25 D6*

151 Well, if I can tell you for my experience in Faial, yes. I cannot tell by the experience in other
152 islands, but between Faial and Pico, yes, there is cooperation in terms of at least of helping the
153 business happening in a fluid way. Because sometimes imagine we only have two clients and
154 it's not financially interesting to go out with his boat. So we give these clients to our partners.
155 The opposite is also true. Sometimes if you have overbooking, you can rent boats from the other
156 companies, so there is this type of cooperation in terms of business. In terms of science itself, I
157 would say yes, sometimes, but it's not something that you see happening every day. Maybe
158 someone make photos of a family of sperm whales and Lisa for instance, that is a researcher,
159 very interested in that, may retrieve data from other businesses. So I would say yes.

160 *00:20:53 Interviewer*

161 OK. And then I was also wondering about like the connection to the community like the local
162 people who are living on the islands. Are you working with them as well, like to educate them
163 also and to raise awareness among the communities?

164 *00:21:16 D6*

165 This is also a complex question, and I have to answer in different levels for you to understand
166 more or less the reality. I will say that in Faial Island one of the few people that are actually
167 really doing this work of trying to get the locals, to show the locals what they have in their own
168 backyard, let's say, is our diving teacher. Because he was raised in a humble manner. He was
169 born in in the island of Pico. And besides his business abilities, he has also a very human ap-
170 proach to the business. So often he offers in very cheap conditions and with special prices and
171 even like people with disabilities and young people offering the opportunity to go and see
172 whales at very, very low prices or even offering.

173 *00:22:54 Interviewer*

174 So it's very inclusive.

175 *00:22:54 D6*

176 So and this is only he doing. I know because I've been working for already five seasons in Faial.
177 And I know that there are no other businesses doing that. So yes, he makes an effort to keep
178 this human side on his business to offer the possibility for people that don't have access, nor-
179 mally access to that either financially or because of the education. To yes, to take people and to
180 sensitivise the people for what they have. To get more involved in this education, so at least
181 from his side, I'm telling you, yes. For the others, not that I have seen, but maybe it can happen
182 in a way that I'm not aware.

183 *00:23:58 Interviewer*

184 Yeah, yeah, yeah. I think I talked to one operator as well who did, like presentations in schools
185 or like, yeah, for locals as well. But yeah, it's a different kind of engagement.

186 *00:24:18 D6*

187 Yeah. Unfortunately I think in Faial this doesn't happen as much as it should. Because this is
188 our type of products that are still a little bit elitist. Tourism is always a little bit elitist. You are
189 not going to to make tourism if you can't afford it. But yes, I would say, I would say that some
190 businesses maybe are doing this from our side, that's a certainty every year he takes students
191 and yes, people with disabilities and to see these animals and so they can try to comprehend the
192 environment where they live.

193 *00:25:18 Interviewer*

194 Yeah, that's important, I think to connect the locals with the local nature as well.

195 *00:25:26 D6*

196 Yes, but, but you know, you know what? It's strange that this doesn't happen more naturally.
197 Because of there is, I don't know if you are aware, but Azores is one of the poorest regions in
198 Europe and also one of the most remote. Yeah, so you can understand that there is a little bit
199 under development of ecological awareness. Even though we are one of the most wilderness
200 and wild regions in Europe.

201 But there is not this connection, maybe because the families and the people are very connected
202 but more to the rural activities. Like producing cattle, which is one of the main activities pro-
203 ducing milk. So they are connected to the nature this way, but not with the wilderness, not with
204 the ocean, not with the species they have around them. They don't understand it.

205 *00:26:40 Interviewer*

206 OK. But there's also a big fishing industry in the Azores, right? Like a lot of fishers?

207 *00:26:48 D6*

208 Not very big, not very big. That might be a misunderstanding, that there are a lot of fisheries in
209 the Azores. But it's not really true. There is of course fishing, but the Azorean fleet is mainly
210 traditional fishing fleets. We do have like high seas fishing fleets with a bigger capacity and a
211 bigger capacity of fishing effort. But it's mainland fishing fleets, like the Spanish fleets or the
212 Portuguese longline fleets. It's not really something that is naturally from the Azores.

213 *00:27:41 Interviewer*

214 Yeah. OK. So yeah, the local people are more involved on like on land activities and not on the
215 sea?

216 *00:27:49 D6*

217 Yes, there is fishing, but it's a small fishing fleet and it's rather, it's very locally operating and
218 nearby it's traditional fishing. But it doesn't have a very big impact. They don't catch like very,
219 very, very big numbers, it's not industrial.

220 *00:28:15 Interviewer*

221 OK, so it's only for self-sustaining then?

222 *00:28:21 D6*

223 Yes, mostly, and local markets I would say.

224 *00:28:28 Interviewer*

225 So yeah, you think like the challenges like to just sum up this part is that there's like still a bit
226 like underdevelopment and not financial resources maybe to connect like the people of the na-
227 ture?

228 *00:28:51 D6*

229 Yeah. Well, if you understand that, I will say there is a gradient of understanding nature. One if
230 you are really from a very well-developed country, if you have the financial resources to give
231 you time and the ability to explore nature, you have a good understanding of it. If you are living
232 just on the survival mode like you live in underdeveloped or just developing countries. Maybe
233 you don't have that much time and possibility of connecting to nature. Maybe some people will,
234 but most of the people they are concerned with surviving, not with understanding nature. And
235 then of course if you think about a tribe in the Amazon. Maybe they don't have any type of
236 financial development, but they have the full understanding of nature. So you have a certain
237 type of gradient. And I would say the Azores is sitting in between of these two realities, right?
238 We are, as I told you, it's one of the poorest regions in Europe and the most remote. So you have

239 this nature around yourself that you have to deal with, but you don't have the education and the
240 financial resources to explore it and to understand it at its best.

241 *00:30:49 Interviewer*

242 Yeah. But do you think the tourism industry is like bringing economic development as well to
243 the Azores?

244 *00:30:59 D6*

245 Yes, but I don't know if this is totally sustainable. In the sense that when you develop tourism,
246 or only tourism, when your focus is on developing tourism, you are developing for a very small
247 amount of people, right? You are developing the logistics and the infrastructures for the rich
248 and for the people that can afford tourism, not really, the development is not touching all the
249 parts of society and the community in that sense.

250 *00:31:50 Interviewer*

251 Yeah. So it's like the companies that are involved in tourism, like the money stays there and
252 doesn't go to the rest of the people?

253 *00:31:59 D6*

254 Yes, quite often that's what is happening. And then because tourism activities usually are very
255 seasonal.

256 *00:32:14 Interviewer*

257 But like the diving season is only in the summer months, I guess. But the whale watching season
258 is also full year, right?

259 *00:32:24 D6*

260 All year? No, usually the tourism in the Azores operates from April till maybe end of October.
261 This is the window. Which doesn't mean that there will not be one boat operating in winter, but
262 usually the conditions are so hard that it's not feasible. But let's say for instance in Faial you
263 will not find any boat going out to try to make whale watching between November and end of
264 March. Or end of February, maybe March if you have a good day, someone can try to go out,
265 but it's yeah, it's maybe it's a six-month season or whale watching.

266 *00:33:20 Interviewer*

267 Yeah. And then in the winter months, there are like other tourism activities happening on land?

268 *00:33:26 D6*

269 Well, if you like to do trekking. If you like to walk in nature, yes. But besides that you don't
270 have many things to do, to see one museum or two. But that's pretty much what's around to do
271 because you know, there are usually no conditions.

272 *00:33:57 Interviewer*

273 Yeah. OK. And like I've seen that the Azores itself, like the destination, is being advertised as
274 like a sustainable destination and also that like different certifications and so on. Do you think
275 this is true? How would you judge this statement?

276 00:34:22 D6

277 That's a very good question. Because, you see, it's easy, it's easy to call yourself sustainable
278 when you are, when you are underdeveloped. Because if you don't have infrastructures, if you
279 don't have industry, if you don't have means that are actually really polluting our constraining
280 that sustainability, then it's easy to call yourself sustainable. Of course, you live in every in a
281 remote island that has been for centuries only dedicated to creating cattle and has been isolated
282 from the rest of the world. It's easy to call yourself sustainable. However, there are things that
283 can be done that are not happening.

284 If you really want to call Azores a sustainable place in all areas possible which we know it's
285 good topic, but there are certain types that hinder it, for instance: we have been in the Azores
286 receiving a lot of cruise ships. And they are paying a fee to dock, of course, because a cruise
287 ship when you want to dock it somewhere you have to pay it. It's normal and natural. But I think
288 this money that is arriving, for instance in the company that controls the harbours in Azores is
289 not then being used for maybe underwater cleaning of the harbour. And this is one of the fights,
290 let's call it that way, that I've been having since I arrived in the Azores. Which is the fact that
291 the harbour companies and the government institutions, they are relying on volunteers. To from
292 time to time, make underwater clean-ups so they can show on the picture, but then the real
293 problem is maintaining because the effects and the size of the one underwater cleaning are
294 maybe solving one or 2% of the scale of the real problem. So of course they are selling, the
295 Azores is selling itself as a very sustainable destination, but I don't think that is completely true.
296 I think it's just consequence of the location of being underdeveloped and not really because they
297 are doing a good job to execute that and to really be sustainable and to really an example in that
298 sense.

299 00:38:10 Interviewer

300 Yeah. OK. So do you think like when there are more tourists coming this like label as sustain-
301 able will also like disappear then because if there are no actions to keep it up?

302 00:38:19 D6

303 You see, it will be very hard for the Azores to develop a mass tourism like southern Spain or
304 the Canary Islands. And it is because of many reasons. One is the climate. So you have six to
305 seven or maybe eight months that is not very friendly for you to be in the Azores. So you'll
306 never have them there. There will be 8 months of the year where you don't have mass tourism.

307 So this is one of the first things. Another one is the remoteness, because it's quite far from land,
308 it's not easy to reach. And you don't have the proper infrastructures to receive a lot of flights for
309 instance. The connection between islands by boat is also kind of not very well developed. So
310 there are a lot of constraints to sustain a lot of tourists. Yeah. So right now, one of the big
311 constraints of how many tourists the Azores can receive is related to the number of beds you
312 can offer for rentals. You see? So there are these constraints that are also in some way helping
313 to keep tourism at an acceptable level while not spoiling what is there.

314 00:40:00 Interviewer

315 Yeah, yeah, yeah, I guess. Like mass tourism is also not necessarily the goal, I guess. Because
316 then it's also destructing.

317 00:40:12 D6

318 Well, the problem is that it is the goal. But the goal is constraint. It is a problem, because it's we
319 are Portuguese and then in Portugal the last 20-30 years, we are we have just been focusing in
320 developing tourism and as a product and not really other parts of the society and of development
321 like technology or industries, we mostly focus, our industry is tourism.

322 *00:40:53 Interviewer*

323 Yeah. So for the whole country you mean?

324 *00:40:58 D6*

325 Yes. Also for the whole country and the Azores is also true. People focus, the developments of
326 Azores is based on tourism on nothing else. Unfortunately. So this is why I'm telling you that
327 it's easy for the Azores to tell that they are trying to be that they are very sustainable destination
328 when they're not. And but they still can keep this type of label because of all the constraints that
329 they have. Because it's remote because there are not enough beds because there is not enough
330 infrastructure like proper airports to receive the international flights and so forth.

331 *00:41:58 Interviewer*

332 I think we already talked a lot about all the different topics. I just wanted to talk a bit about
333 shark tourism as well, because this is like from my point of view, it's like a very specific way
334 of like protecting specific species like the blue shark and the mako shark from overfishing. And
335 yeah, it's like a product where the conservation impact is really obvious kind of, I guess. Like
336 what is your opinion about this? And yeah, I also heard that like from some diving operators
337 that they are supporting shark diving because of this. And from some diving operators that they
338 are not doing it because they say that it changes the shark's behaviour and that also it attracts
339 fishermen to the locations where sharks are. So yeah, maybe can you tell me your perspective
340 from your company about this product?

341 *00:43:06 D6*

342 Of course. So first you maybe you can write there on a piece of paper. I have personally I have
343 my own project regarding this which is called consharkvation. OK, I can write you afterward
344 in the message consharkvation.org.

345 And a little bit of what I can tell you is also written there. But I'm going to try to give you a
346 short overview of what think about that. So at this moment, the shark diving is not in any way
347 helping the conservation efforts and the shark diving is not really protecting sharks from issues.
348 It's not protecting because of many reasons. First, because the locations where shark diving is
349 happening. They are not very good locations for fisheries, so shark diving and fisheries, they
350 don't overlap in space.

351 *00:44:37 Interviewer*

352 So if the shark driving would happen in the locations of the fisheries, then it would have an
353 effect. But in this way, it's not.

354 *00:44:45 D6*

355 No, because the fisheries on sharks and where the impact happens is done over the 100 or the
356 200 nautical miles. So and we are diving for sharks at six miles or maybe 20, not even. So it's
357 very far from the 100 or the 200 nautical miles. So they don't overlap in space. So whoever tells
358 you that they are changing and attracting sharks to an area, and they don't want to do that

359 because of fisheries, it's because they don't understand the reality. The type of fisheries that are
360 catching sharks like Blues and Makos are being done over the hundreds nautical miles, in the
361 two hundreds, in the in the outer skirts of the exclusive economical zone of the Azores. And
362 even in the High Seas.

363 *00:45:50 Interviewer*

364 OK. Yeah. So these are also then the industrial fisheries and not the traditional ones from the
365 Azores?

366 *00:45:57 D6*

367 Yes, yes, yes. There is no one in the traditional fisheries like catching sharks. First, because they
368 don't have economical interest in small numbers. So in that sense they don't overlap.

369 Then what I think can be the role of a shark diving is the same as it happens with the whale
370 watching. You know, because when you bring people in contact with the reality and when you
371 bring people to see the animals and they can experience being in the wilderness with these
372 animals and seeing them, this is the only way that then people can be aware of their presence
373 of their importance. Maybe not in a scientific way, but in an emotional way. Yeah, and making
374 them more sensitive to and aware of the problems of conservation, because once you dive with
375 the shark, you want to make sure that you will have sharks to dive for all your life. It's a little
376 bit egoistic, but its true.

377 *00:47:21 Interviewer*

378 Yeah. It's like a very specific experience, I guess so.

379 *00:47:27 D6*

380 It is. But once again, just like whale watching, it is an elitist experience. Once again, it's just the
381 same thought experiment. Try to go in the middle of Lisbon downtown and ask how many
382 people have dived with sharks or have seen sharks in the wild, right?

383 *00:47:47 Interviewer*

384 Yeah, yeah, it will be even less.

385 *00:47:51 D6*

386 It will be even less. The problem regarding shark conservation, well. Resuming the importance
387 of sharp diving right now, in comparison with fisheries and how that can contribute for shark
388 conservation is to make the government, for instance, the regional government or the local gov-
389 ernments or even the European Union, to understand what the real value of a shark is alive
390 versus one shark being sold in the fish market. I can tell you like a really rough estimate, so you
391 have some numbers and how you can look for this information.

392 So, one shark right now, for instance, a blue shark that weighs, let's say 100 or 120 kilos, is
393 being sold at about 20 to €30 the full carcass. In a fishing market, imagine Vigo. Vigo in Galicia,
394 which is the most important fishing market in probably Europe. So one blue shark can be sold
395 at 20-30 euros, a grown-up adult. While the same animal if you take only one diver to see this
396 animal alive, you can make maybe 10 times more the value for one sighting. Because one diver
397 is maybe paying €165 or €175 to go for shark diving if you talk about one client. Of course,
398 from that you have to retrieve the logistic value, right? The gas you expand, the chumming. But

399 this is for you to understand that you never take only one client. You take at least four or five
400 or six or maybe 10 clients to see one shark or two or three or four sharks.

401 So, first, when you think of the shark as a resource that you can repeat, the possibility of seeing
402 this in the wild because it has been proved recently that they have a local preference that they
403 return to the same points year after year. You see one single shark, you can multiply the revenue
404 from €165 for one diver for maybe 10/20/30 divers the same year and maybe if you multiply
405 that for 2, 3, 4, 6 years like some sharks have been seen, you can see that the value that you can
406 retrieve from a shark alive it can be more than 1000 times from what you can retrieve if you
407 sell the shark in the market.

408 *00:51:20 Interviewer*

409 It's way more, yeah.

410 *00:51:34 D6*

411 I don't know if this little insight gives answers your question, but you see most of the times
412 when we go shark diving, we take on average 6-7, maybe 8 people. We can do that maybe
413 around, I will say, 50 shark dives per year. If there are enough divers. So you can multiply that
414 value. And then you can also understand that there are other businesses in Pico and Faial doing
415 shark diving. And then they will have probably the same kind of volume.

416 *00:52:23 Interviewer*

417 Ok, and it's always the same sharks that are in this area, you mean?

418 *00:52:31 D6*

419 OK, not exactly, not exactly the same sharks, but a study that we are doing now, I am doing and
420 another people in university are doing, is trying to understand how much really these animals
421 they repeat. But it's not that they are residents, because they do migrations in the whole ocean.
422 But sometimes they repeat some animals, sometimes I don't know. I'll say maybe 5% of the
423 animals, we can understand that sometimes we've seen it because they have very obvious marks.
424 So it's not animals that are residents because this happens in the open ocean, you understand?

425 *00:53:33 Interviewer*

426 Yeah. It's like a migratory species. And what do you think about the aspect that changes the
427 sharks' behaviour? Like I heard that usually they are in depths of like 100 metres around that.
428 And then if you are chumming them, they have to come up to the surface?

429 *00:53:59 D6*

430 No. So OK, I can answer you that in a in a more like clear way. First because I'm a biologist.
431 Yeah, I did my thesis on blue sharks. And I'm also interested in their behaviour. So the blue
432 sharks they are exothermic, meaning that they are like the snakes and lizards. They do not pro-
433 duce they their own body heat like mammals do. OK, so to boost their metabolism they have to
434 dive, they have to come to the surface to warm their body in warmer waters. So they have like
435 a pattern of diving 2 times a day that they go foraging in the depths between these hundred, as
436 you told me, 200, maybe 300 meters, and then they have to come up again to recover and to
437 heat up again. So their metabolism accelerates again.

438 So the blue sharks, they have this pattern, so you are not changing the behaviour with the chum-
439 ming. So the chumming has a quite limited geographical effect, right? We can say maybe, 2
440 miles 3 miles that you can retrieve the shark to the chumm box if they get nearby, so it's not
441 that influential. And the and the area of action of the shark is so big, in this sense. It's not like a
442 fish that is hiding in a burrow. They are always swimming. They don't sleep, they keep wander-
443 ing around and foraging.

444 So you so you see, 50 times a year, or maybe if you multiply that for the shark cooperation, we
445 have 300 sharp boxes per year in the Azores, or even 500. In a very short period of time, which
446 will say it's two to three months of operation. It's not, I would say it's not enough to change the
447 behaviour of the shark because this is not an ongoing effort. It's not like an all year, even because
448 the animals are not there all year.

449 So if you change behaviour, of course you change behaviour. Of course you have a little bit of
450 impact because there is no such thing as a human activity, like tourism that doesn't have an
451 impact on animals. That happens also in whale watching.

452 However, what you have to do is you have to choose what kind of impact do you want to have.
453 Do you prefer retrieving and killing an animal and selling it for €20, or would you prefer to
454 having an impact or maybe a little change of behaviour of an animal, that is, I would say innoc-
455 uous because it's not going to kill the animal and it's not going to really change it's behaviour
456 in in the way he's searching for foods and it's not feeding the animal, so it's not, it's not that we
457 are artificially feeding the animal. So of course there will be a change of behaviour, but it's
458 momentarily. It's a specific moment and it's not affecting on the long run.

459 *00:58:07 Interviewer*

460 OK. Yeah. And the effect, like the positive effect that like shark diving can have is bigger than
461 the negative impact of course?

462 *00:58:25 D6*

463 Yeah. I think so. You still have an impact, but you are not killing an animal. You still can repeat
464 that experience and for the the community of like the remote islands, this can have a positive
465 financial impact in many other levels like bringing people that are interested in seeing blue
466 sharks going there and they leave money in hotels, they leave money because they need to go
467 to the restaurant, they have to go to the groceries so the impact is multi level it's not happening
468 only on the operators, right?

469 *00:59:04 Interviewer*

470 And is this like is the demand for this activity increasing at the moment?

471 *00:59:11 D6*

472 Yes. I think as far as I understood. The Azores, in the last decade it was the fastest growing,
473 shark diving industry in the world. But also, because the way we do shark diving is very spe-
474 cific, and it's not replicated in other ways. Like if you want to dive with tiger sharks or if you
475 want to see the hammer heads or wherever in other parts of the world is not the same type of
476 logistics, it's not the same type of animals. So different types of animals, they need different
477 ways, different locations, also different type of logistics. So everything has to be adapted to the
478 local reality.

479 *01:00:01 Interviewer*

480 Yeah, I heard it's like the only place where this kind of diving was possible. It's because of the
481 like the sight, the visibility in the water?

482 *01:00:14 D6*

483 So this is not totally true, because you can do this type of shark diving also in South Africa, you
484 can do that in in Baja California, Mexico, you can also do that in the gulf of Biscay, Basque
485 country. There are some people trying to do this from Ireland, other people trying to do this
486 from Catalonia into the Mediterranean. Wherever you have blue sharks, you can do this stuff.

487 *01:00:52 Interviewer*

488 OK. I haven't heard of the other destinations like the industry is not that evolved there yet.

489 *01:01:01 D6*

490 No, exactly, there they are trying to develop these. They are trying to get some kind of con-
491 sistency. Yeah, in in South Africa, actually, I think they have a very good consistency for that.
492 I'm not the right person to talk to you about what's happening in South Africa, but I can give
493 you some names.

494 *01:01:31 Interviewer*

495 Yeah, sure. Like if you can send them to me, it would be nice. OK, perfect. Yeah, I think we
496 talked a lot, and I asked all my questions actually that I have at the moment. Yeah, if you have
497 any other things that you want to share about this topic, then please do.

498 *01:02:07 D6*

499 Let's say that shark diving itself as you know, sometimes you can also see mako sharks. Mako
500 sharks are an endangered species. Last year we have been trying to develop a little bit of shark
501 tours for smooth hammer heads, that have a nursery in the north part of the island. So the shark
502 diving products in Faial are not exclusive to blue sharks. There are some other things that can
503 be explored. And of course in shark diving you can also include the idea diving with the manta
504 rays because the manta rays are also elasmobranch. They are part of the same of big family,
505 let's say and they also attract a lot of tourists right in the island of Santa Maria. From Faial and
506 from Pico we go to the Princess Alice bank. So shark diving, if you think about it on a broader
507 sense, it's broader than just thinking about diving with the blue sharks. Many species that can
508 be seen, different kind of venues. And it's still on development. We don't know where it's going
509 to end.

510 *01:03:54 Interviewer*

511 Yeah. I also saw there's like a snorkelling with whale sharks as well in Santa Maria, I think?

512 *01:04:01 D6*

513 Yeah, occasionally it's possible, but yeah, you can also consider that as shark diving.

514 *01:04:17 Interviewer*

515 Like maybe what's your hope for the future of this tourism industry?

516 *01:04:29 D6*

517 I think the tourism in the Azores, the development will be slow. Like the rest of the tourism,
518 once again, just because of the constraints. Because it's remote, because the climate is not ideal.
519 Because you only have a short window during the year, so this is the reason why the develop-
520 ment of tourism there it can be labelled as sustainable, but I would say that the label is due to
521 the constraint above any other thing. And so I'm expecting that it will keep just a normal pace.
522 It's not going to happen any big boost.

523 *01:05:31 Interviewer*

524 Yeah, ok. Thank you for the whole talk like, yeah, it was really a lot of information.

525 *01:05:42 D6*

526 Yes, of course. No worries. I understood that you still have a little bit of time to do that. So if
527 you afterwards you have any more questions you can if you want you can write it down to our
528 e-mail. And when we have time, we answer you back.

529 *01:06:27 Interviewer*

530 Yeah. OK. If I have some more questions, then I will let you know or write to the office.

531 *01:06:34 D6*

532 Yes. So anytime feel free to write.

533 *01:06:35 Interviewer*

534 OK, perfect. Thank you. Yeah. Thank you so much.

535 *01:06:53 D6*

536 You're welcome. It's a pleasure. Bye, bye.

A.3.9 Interview 9, Participant W3, 16.05.2024

00:00:05 Interviewer

Yeah. OK. Perfect. So yeah, maybe as like an introduction question, could you give a short description about your company? Like how long has it been in the Azores and what is the main product that you are selling?

00:00:20 W3

OK. I'm the owner of the business and in the third generation. The third generation of the shop, but the 4th generation of the business. My great-grandfather changed the place where he used to have the business and he came to this street where we are now, and here he still kept selling what he used to sell in the other place. Then 1918, my grandfather closed that shop and opened next door the first Café.

In that time, the Azores were important for the communication of the world. There were many cables, underwater cables and telegraph from all over the world, foreign companies. Companies from America, from Italy, and one from Germany. And the Italians and Germans influenced a lot of the islands in a cultural way but also in sports. And that's why in the Azores and they moved away from the old sports. And that's why there are other sports here than in the rest of the country. We still have one of the oldest clubs of Portugal, because of that. And my grandfather used to play different kind of sports, soccer, tennis, volleyball.

So we have always been a café where we sell drinks, but we always had the original approach from my great-grandfather, we have always sold things made on the island, like handicrafts for the souvenir shop and such things. But because in the Azores, started in the 19th century, we started whaling. The local people started to use the teeth and the jawbone to do artefacts.

We have a special way on the Azores, especially with the Americans. Because a lot of Northern Europe, like England, like France like Poland, they made money all around the island. But it was the Americans that started to invite us, the Azorean people, to work with them on their ships. Because at the end 19th century, when they live near Boston they go on a trip of 3-4 years long. To go to the Pacific they must go first to that part of the Atlantic and to go South, they go first to the Azores, then to Madeira, then to Cape Verde, Brazil, Cape Hoorn and then to the Pacific. And this trip would take 2-4 years long. It was so hard. And there were not a lot of people in America that wanted to do it for that long time. So they started to invite the people from the poor islands to come with them. They would say, "Come with us and try to go to America. Work with us for four years and then it will be legal to stay there".

The Azores are still poor, but at that time they were very poor, so the people started to go on these ships. And then now we have learned how to whale. On the main book about whaling "Moby Dick", a classic American book, they speak about the Azores at some point on the ship. And then in the end, many of the crews were Azorean people, and even some captains were Azorean captains.

The main reason for whaling it was always the oil. It was used all over Europe. In the beginning was just used for street lights in the big cities like New York, Boston, Lisbon, London. It was very common that the light was with oil from the whale. Then with the industrial revolution, with other things they started to use that oil. And that's what they used to do with the whaling oil, now they don't do that, they use petrol. And this was the main reason why we have the whaling. And onboard of the whaling boats, when there was no wind, they would stop in the

middle of the ocean because it was no power boats, it was sailing boats. And when there is no wind, you cannot move. And to occupy the time, they taught the crew to do the scrimshaw. The art of engraving the teeth. And became as a vision that the only thing that belongs to the whalers was the jawbone and the teeth. They used this material to do artifacts. So when they arrived in the harbour, they would exchange them, or they sell them if they were any good. On the Azores, when we started whaling, we started to do the same kind of thing. But the difference was that in the Azores, instead of the whalers, other people started doing it. The people were used to work with their hands. And that's why the work that we started to do here was much better quality.

Whaling in the Azores was very important. All the islands did whaling, and it was the main industry of the Azores for 50 years at least. But after 1960, after the big eruption here on the island, the big volcano, people lost their houses, they refused to work. And the United States they opened their doors. It was very easy to go to America. From a population of 35.000 people, a few years after, we were only 15.000. Half of the people went to America. And whaling started to go down, it became less and less. And my father started to believe that whaling was going to be finished, not because there were less whales, but they had to stop because no people wanted to go whaling. Because first of all, it's a dangerous activity, people get killed, people get hurt. And the whalers were always poor, they were always poor, all their life. Even if they catch more whales, they were always poor. For six months of the year, they were buying things on credit, on small shops. My father went around the islands to buy things from the whalers, for the shop and he found out they were very poor, and they were so happy to see him. Because they needed the money to pay for things from the shops right away.

It's sad to do this whaling, it's not good. They are poor all the time. And he was right, because a few years after the volcano, just three islands were still whaling. It was Pico, Faial and Flores. Then Flores stopped whaling in 1975. Pico stopped in 1980. And Faial stopped in 1984. When we stopped whaling there was just one boat left. One boat and seven people aboard, and four on the power boat and maybe a dozen in the whaling factory. It was not a big activity anymore.

00:11:23 Interviewer

Yeah, but there was also a law, right? Like a law that was forbidden to do whaling?

00:11:29 W3

But the law came after. Just 25 years before there were 40 boats. 40 boats just on this island. In 25 years we came from 40 boats to only one. It was not anymore important. It was always very hard to sell the oil. The last country to buy the oil was Spain. They still had a market for oil. And the oil was the most important thing for whaling. That's why when we stopped whaling in 1984 it was not anymore, a big problem. And five years later we started to do whale watching. Everybody is more happy now with whale watching than with whaling. Because we are getting more money with whale-watching than with whaling.

There was an organisation, now foundation for Animal Welfare Board. To study the whales and they were trying to convince us you must start to do whale-watching, because that's the future. And they were right, because it was nothing new in the world. And we started with whale-watching. And now it is a very important activity, almost all the islands are doing whale-watching. When there was the law for us to stop whaling, we already stopped. It was in 1986 when the law came out. The law came out a few years later, we created also some rules for whale-watching, and it's also a good example for the world what we have done here.

88 *00:14:00 Interviewer*

89 It's a really, really nice process where you can see that animals when they are alive and you can
90 do tourism with it, there's more economic value than dead animals.

91 *00:14:16 W3*

92 And also every year we find out there is more and more whales and dolphins.

93 *00:14:23 Interviewer*

94 Ok, so the numbers are increasing?

95 *00:14:27 W3*

96 When we started whale-watching maybe 90% of the of the trips you see whales. Now it's 98-
97 99% of the trips you see whales.

98 *00:14:38 Interviewer*

99 Oh wow. And you think it's because of the transition of the economy?

100 *00:14:46 W3*

101 Yeah, now it's already 30 years or even more 40 years that we stopped whaling. After 40 years
102 you already see the difference. Of course the whales still have problems. They still have the
103 pollution of the sea, they have the all the noise. It's not so good for them. But we can feel that
104 they are more and more all the time, and we can feel that they are not so afraid of the men of
105 the boats. We can see the difference. And we are happy that we were able to change from one
106 thing to the other. Like I told you, it happens in a very natural way. The thing is we never killed
107 whales for pleasure. It was not an activity that we did it for fun.

108 *00:15:47 Interviewer*

109 Yeah. No, it's for economic reasons.

110 *00:15:51 W3*

111 For economic reasons, because we got money for killing them. And now I think it's we are
112 happy with this new situation. There is a limit of the number of boats. On the Azores. We cannot
113 have more boats than what we have now. Of course in the future this can change. But right now,
114 I think we have enough licences for whale-watching what I believe, maybe it will happen in the
115 future then we will have bigger boats.

116 *00:16:39 Interviewer*

117 Ah OK. So with more people?

118 *00:16:44 W3*

119 In the zodiac we take 12 people. Myself, I started with the zodiac, but then I went to a catamaran
120 of 60 people and then I went for a catamaran of 45 people. But there are catamarans in other
121 islands, like São Miguel, that take more than 100 people.

122 Yes, I think this is the solution. Because we find out that if you can take more people in a bigger
123 boat, it's less stress that you can do for whale-watching. It's better than dozens of zodiacs, be-
124 cause they make very bad noise underwater. It's not good for the whales. Because the zodiacs

125 are high frequency motor, very high speed. The others are inside motors, they are not like this.
126 The first boat they had, it was even more silent than everything. It was the water jet. And this
127 is even less noise in the water. When you have a motor inside of the boat, it's much better for
128 the whales. This was studied by people from the university. I compare the zodiac with the mos-
129 quito. They are smaller than the flies, but mosquitos make much more noise than the flies. When
130 they fly around you, you don't hear the fly, but the mosquito you can hear. Because it's much
131 higher frequency. It's the same with the zodiacs and the boats with the inside motor, but it's a
132 question of time.

133 Some islands, like São Miguel, they're able to go more in that direction because they have much
134 more tourists, they have more, much bigger hotels. Whereas we have three hotels. Of course
135 some private houses, but hotels are just three. It's not a big problem. For we don't need to have
136 bigger boats now. But in the future if tourism goes up, maybe you need to have more. But I
137 think it's important that we don't have more boats, but maybe to have less boats but bigger. I
138 think it would be better. But let's see how it will go. Right now, I think most of the companies
139 are not able to go to a much more bigger boat. Because it's much more expensive, of course.
140 It's lots of money to have a bigger boat.

141 *00:19:45 Interviewer*

142 OK. And do you like, want more tourism in Faial as well or in the Azores in general? Like do
143 you think it would be good for the destination if the tourism would increase?

144 *00:20:01 W3*

145 I'm not sure. It's São Miguel. The rest of the islands, we are very much far away. Like I told you
146 in the beginning, people used to live here were about 30,000 people. Now we are 15,000. I don't
147 know with tourists how many we have more, but I don't think we have more than 2000-3000
148 people. That's why I don't think we are very touristic. Of course, for me it's not just a question
149 of the number. It's the question of if we have capacity to get the employers to work on the
150 restaurants, on the hotels. Because already now it's very hard for us to get people to work in the
151 restaurants, and hotels and other things about tourism. We have people from outside, from Bra-
152 zil, from Asia, from Africa, from Cape Verde. It's true that the islands they can grow more.
153 There is space for that. You can already feel that in certain places, maybe it's already a bit too
154 much. But if you go to any other islands, like Madeira, then you are still very much lower
155 compared to that number.

156 And many people don't know that Madeira is smaller than São Miguel. If you ask any Portu-
157 guese "Which Island is the biggest island of Portugal?", 90% of the people will tell Madeira.
158 No, it's not true. Because every day on television when they show the weather forecast you can
159 see Madeira in the big position, big on the map. And the Azores are small islands, but no, São
160 Miguel is bigger. Not much, much bigger than Madeira.

161 We still have, I believe, even in São Miguel, we still have poor people. I read that the islands
162 need to get richer. That's true, the islands are still poor. It is still some of the poorest Islands of
163 Europe. I don't know if tourism should be the solution. We need to develop other activities that
164 make us richer. It's not easy. I don't know how it's going to be, but I hope that you get richer.
165 Also with tourism, of course. Because the Islands are pretty, very nice. And it's safe, it's good.
166 But it would be nice to have other things because if there's a problem in the world, in Europe,
167 tourism is always the first thing that goes down and then we are in trouble. If you depend too
168 much on tourism, it's not a very good situation.

169 00:23:57 Interviewer

170 Yeah, it's not safe. Yeah, it's not stable.

171 00:24:03 W3

172 And I'm sure that the government of the Azores, they are trying all the time to find a few other
173 businesses. Especially in the islands. And of course, the Azores it's 50 years after the Revolution
174 in Portugal this year, it was 1974. It's a big difference between how it was before.

175 First of all, everything had improved on the islands. On the mainland it was getting better, it
176 was much, much better on the islands. Because the islands were very much forgotten about the
177 government. Now we have our own government and resources over there and things are much
178 better now in all levels. But we still need to get better, more rich. I hope that this happens in the
179 future. Before 1974, everyone was going to America. Almost all the Azorean people have rela-
180 tives in America. In the main land, everyone went to Europe, to France, to Germany, to England,
181 but in the Azores, everyone went to America. Since then the people are immigrating more. Be-
182 cause it is easier to go, some young people go to Europe. Because they get much more money
183 than here. Myself, I like you very much to live on the islands. I feel very happy to live here. Of
184 course, I like to travel to go see the world. But I'll be also more happy if the islands get more
185 rich, because it is still poor.

186 00:26:05 Interviewer

187 OK. Well, thank you.

188 00:26:09 W3

189 And the government also has news, because we are getting 10% and then officially 30% of
190 marine protected areas around the islands. They want the Azores to be part of the Hope area.
191 And it's very important too. Of course, there's always some fishermen that do not agree. They
192 do not like the idea of protected areas. But I believe like for us with whale-watching, we can
193 see the difference. Like we had no whales and now we have more whales, and we are all getting
194 more money. I believe, that if there are protected areas, maybe for some time it will be less fish
195 to catch. But after 30 years, there will be more fish again. And if there is less fish to catch than
196 the price of the fish will be higher. They'll catch less, but they'll get the same amount of money.

197 I think that's a good thing that they're doing on the islands. So to have areas along the islands
198 where there is no fishing. And there are always a few examples, and they're feeling that the
199 results are good.

200 00:27:52 Interviewer

201 Yeah. OK. And do you think that the marine tourism industry like also scuba diving for example,
202 if there are a lot of tourists coming to the island because of that, that it puts pressure on the
203 government to increase the protected areas maybe?

204 00:28:14 W3

205 I think that also protected areas are nice for that, because you can go to take the tourists to dive.
206 This is not the problem. One of the problems that we have right now since a few years is a plant
207 that is coming to the shore. This is something to take care of. They have arrived already in the
208 Azores. And this is a big problem in the islands because this plant is almost everywhere. On the
209 beaches, on the rocks. We don't know how this will change. There's time to study. But it's a big

210 problem. They're spending lots of money to clean the beaches from it. So of that seaweed we
211 are not able to swim. And people who dive, they say that there is less fish here. That's a big
212 problem. I don't know how it's going to be, maybe because of the water is getting warmer. We
213 don't know exactly. And there is not yet any solution for that problem. I don't know, of course,
214 this is because of the human activities, because of the global warming, I don't know really. It's
215 already arrived here. That's a big problem.

216 *00:29:51 Interviewer*

217 Like you can feel that the areas are changing, kind of like the ecosystem is changing?

218 *00:29:58 W3*

219 Yes.

220 *00:30:02 Interviewer*

221 And you said you are also like cooperating with the universities to conduct research on like
222 marine conservation, right?

223 *00:30:12 W3*

224 Yes. We always try to give them the information they need. And for the projects that they are
225 doing, we try to connect with them. We are always open to work with them. We have always a
226 marine biologist onboard with us, on every trip that we do. I think it's always important to have
227 more and more information. I can tell us about our future. In the end it will be good for every-
228 one.

229 Of course, nowadays whale-watching is not just the one species of whale. Like when it was
230 whaling, we just cared about this one species. Now we care about all the species. And there are
231 25 species on the Azores. Everything is important. Even the turtles and the birds. Now, the
232 whale-watching we care about the whales and the dolphins and all present life. It's important to
233 show for the clients and to show everything really.

234 *00:31:41 Interviewer*

235 And do you think the tourists are also interested in everything?

236 *00:31:48 W3*

237 Of course, they always like to see a whale or a blue whale. Or just dolphins. It's even a very
238 fantastic trip, just with dolphins. They want always to say that they have seen whales. But when
239 we show whales, we also want to show them dolphins and everything else. Sometimes we find
240 pieces of squids. And sometimes they are at the surface, and we are trying to catch this for the
241 university, for them to study. If we see a small turtle, we try to catch it and try to put a tracker
242 on the turtle too for to know what they are doing. Now, whale-watching is part of that. I'm sure
243 there is that whale-watching is good.

244 Also with Pico we share the same lighthouse for the people that guide us. Some of them they
245 have worked for the whalers. But now its already the new generation. The one who is looking
246 out, is the son of a whaler.

247 *00:34:10 Interviewer*

248 You said, this thought of marine protection, for example, is around the whole island, in the
249 minds of the people. Also like in the communities that are not necessarily working for whale-
250 watching, like also the other people that are living on the islands. Do you think it's also apparent
251 there in the thoughts?

252 *00:34:33 W3*

253 Yes, yes, most of the people. Now, because the schools they speak about this in each generation
254 people that live now and are 40 years old, when they were born, we already stopped whaling.
255 The only people that sometimes speak about whaling, is the very old people, with 80 years old
256 or more. Because their life was that. But I normally tell them: "It is not your mind that is speak-
257 ing. It's your heart." It was like you were 20 years old or 30 years old, you were young and
258 strong, and you were able to kill whales. But then I tell them "Why did you stop whaling?"
259 Because it was not good anymore. They were changing to tuna for fishing, because this was
260 better.

261 Because all the islands stopped before it was forbidden. Why they stopped before? Because it
262 was not anymore good for whaling. Of course, if they did not stop, the law will come, and they
263 will stop. There is just one sad story, and I don't like to speak about that. It's the story that they
264 killed a whale after we stopped whaling. In 1996. And this it was a big, big mistake and I feel
265 ashamed, that's why I don't speak normally about this whale. It was killed in Pico. This was a
266 big mistake. And this made them lose 100,000€. At this time it was not euros yet, it was escudos.
267 And this a lot of money that they have lost because Europe gave money to the whalers because
268 they had to stop whaling. But because they killed that whale, it did not happen. So the Azores
269 have lost this money. So it's a sad story.

270 Like I told you, when they tell me they miss whaling, I understand that. Because it is what they
271 did when they were young and powerful. They were healthy. But if they were nowadays, they
272 would not want to kill them. They would prefer to go out to see them. Because people now they
273 pay 70-80€ to see whales. We go out for four hours and in the afternoon, we can go out again.
274 And they get 60€ from one person. And that's why it's much better what we're doing now.

275 And believe me, my family, we have lived from the products of the whales. I have one of the
276 biggest collections of whale teeth. Because after the volcano, my father realised it was important
277 to start to collect them. We afforded to sell 1-2 and we started to collect them. 25 years later
278 when we stopped whaling, we already had a collection. And after this we opened the museum.
279 Now, it's one of the biggest in the world. But I am happy that we stopped whaling. This is part
280 of our history. We have done a good job and good art with this material, with the teeth and with
281 the bone, but it's the past. Yeah. Now there's something new. Things have changed.

282 *00:39:18 Interviewer*

283 Yeah, that's really an inspiring story. Thank you for all the information. It was really a lot,
284 especially like about the history of the Azores. I haven't had that much information about it yet.
285 So yeah, it's really helpful.

286 *00:39:39 W3*

287 If you need something else, if I forgot to speak about something you just call and send a message
288 to us.

289 *00:39:48 Interviewer*

290 Perfect. Thank you.

291 *00:39:52 W3*

292 No problem.

293 *00:39:53 Interviewer*

294 OK. Yeah. Thank you so much. Thank you. Bye

Annex B: Review Analysis

B.1 Dictionary

Theme	Explanation	subcategory	words	Based on
Educational value	Did the customer experience educational value?	Learning	information explain informative briefing learn interesting explanation fact educational education science interpretation	(R. Ballantyne et al., 2007)
		Observation	see spot close photo picture video explore natural interact / interaction observation discover realistic	(R. Ballantyne et al., 2007)
	Did the guide engage the customer in education?	Communication	guide knowledgeable professional show marine biologist knowledge passionate enthusiastic competent attention attentive teach energetic	(R. Ballantyne et al., 2007)
Customer perception of operators ecological	Is the customer aware of ecological issues and	Environmental knowledge connected to marine	wildlife / wild environment pick marine life	list of environmental issues related to the

awareness and customer's own environmental awareness	thus recognizes environmentally friendly behaviour of the operator?	conservation issues	conservation protect plastic trash collection preserve ecosystem recycling	marine environment, adapted from (Despotović et al., 2021)
	Environmental knowledge connected to animal welfare	Animal welfare	respect care responsible ethical health wellbeing correct welfare unethical code of conduct guideline	(Webster, 2005), adapted to literature review
		Animal harm	close swimming with dolphins disturb noise whaling chase chasing injury interfere disrupt fishing exploit	(Webster, 2005), adapted to literature review
	Environmental values		concern support value aware sustainability conscious ecological minimise environmentally-friendly initiative engagement	(Despotović et al., 2021)
Engagement of customer	Did the customer feel engaged in the activity?	Cognitive engagement	think consider involve convince	(Hollebeek et al., 2014)

			inspiring encourage reflect encouraging find out rethink adapt convincing inspire	
		Positive emotional engagement	friendly enjoy fun unforgettable happy unique exciting excited satisfy extraordinary satisfaction	(R. Ballantyne et al., 2007)
		Negative emotional engagement	disappointed stress uncomfortable disappointment regret aggressive unhappy uninvolved unfriendly	(R. Ballantyne et al., 2007) Adapted to case study
		Safety	helpful safe safety secure security unsafe emergency crowd crowded	(Hollebeek et al., 2014) adapted to case study

B.2 Topic Analysis – Whale-Watching Tourism

Whale watching data

total reviews	591
discussed topics	610
how often were the topics discussed	7108

		Frequency analysis		Sentiment analysis	
Dictionary Topics frequency	word	total	percent of total reviews	Sentiment	Average
Educational Value - Communication		354	59.90%	344	1.502
	guide	167	28.26%		
	knowledgeable	97	16.41%		
	professional	81	13.71%		
	show	50	8.46%		
	marine biologist	43	7.28%		
	knowledge	31	5.25%		
	passionate	16	2.71%		
	enthusiastic	14	2.37%		
	competent	8	1.35%		
	attention	7	1.18%		
	attentive	6	1.02%		
	teach	3	0.51%		
	energetic	0	0.00%		
Educational Value - Learning		198	33.50%	156	1.200
	information	53	8.97%		
	explain	42	7.11%		
	informative	41	6.94%		
	briefing	40	6.77%		
	learn	24	4.06%		
	interesting	23	3.89%		
	explanation	15	2.54%		
	fact	12	2.03%		
	educational	8	1.35%		
	education	3	0.51%		
	science	1	0.17%		
	interpretation	0	0.00%		
Educational Value - Observation		435	73.60%	109	0.703
	see	262	44.33%		

	spot	96	16.24%	
	close	46	7.78%	
	photo	17	2.88%	
	picture	14	2.37%	
	video	13	2.20%	
	explore	7	1.18%	
	natural	6	1.02%	
	interact / inter- action	6	1.02%	
	observation	2	0.34%	
	discover	2	0.34%	
	realistic	1	0.17%	
Ecological awareness - environmental knowledge animal harm		93	15.74%	9 0.333
	close	46	7.78%	
	swimming with dolphins	24	4.06%	
	disturb	20	3.38%	
	noise	7	1.18%	
	whaling	6	1.02%	
	chase	4	0.68%	
	chasing	3	0.51%	
	injury	1	0.17%	
	interfere	1	0.17%	
	disrupt	1	0.17%	
	fishing	1	0.17%	
	exploit	0	0.00%	
Ecological awareness - environmental knowledge animal welfare		72	12.18%	74 1.175
	respect	36	6.09%	
	care	34	5.75%	
	responsible	15	2.54%	
	ethical	8	1.35%	
	health	3	0.51%	
	wellbeing	2	0.34%	
	correct	2	0.34%	
	welfare	1	0.17%	
	unethical	0	0.00%	
	code of con- duct	0	0.00%	
	guideline	0	0.00%	
Ecological awareness - Environmental knowledge marine		110	18.61%	25 0.833
	wildlife / wild	36	6.09%	
	environment	26	4.40%	
	pick	16	2.71%	
	marine life	12	2.03%	

	conservation	12	2.03%	
	protect	8	1.35%	
	plastic	6	1.02%	
	trash	2	0.34%	
	collection	1	0.17%	
	preserve	1	0.17%	
	ecosystem	1	0.17%	
	recycling	0	0.00%	
Ecological awareness - Environmental values		40	6.77%	26 1.083
	concern	9	1.52%	
	support	9	1.52%	
	value	7	1.18%	
	aware	6	1.02%	
	sustainability	4	0.68%	
	conscious	4	0.68%	
	ecological	3	0.51%	
	minimise	1	0.17%	
	environmen- tally- friendly	0	0.00%	
	initiative	0	0.00%	
	engagement	0	0.00%	
Customer engagement - cognitive		59	9.98%	11 0.478
	think	28	4.74%	
	consider	15	2.54%	
	involve	5	0.85%	
	convince	2	0.34%	
	inspiring	2	0.34%	
	encourage	2	0.34%	
	reflect	1	0.17%	
	encouraging	1	0.17%	
	find out	0	0.00%	
	rethink	0	0.00%	
	adapt	0	0.00%	
	convincing	0	0.00%	
	inspire	0	0.00%	
Customer engagement - emotional negative		36	6.09%	-17 0.630
	disappointed	16	2.71%	
	stress	10	1.69%	
	uncomfortable	4	0.68%	
	disappoint- ment	3	0.51%	
	regret	3	0.51%	
	aggressive	2	0.34%	
	unhappy	1	0.17%	
	uninvolved	0	0.00%	

unfriendly	0	0.00%		
Customer engagement - emotional positive	246	41.62%	309	1.355
friendly	124	20.98%		
enjoy	64	10.83%		
fun	49	8.29%		
unforgettable	16	2.71%		
happy	15	2.54%		
unique	12	2.03%		
exciting	10	1.69%		
excited	6	1.02%		
satisfy	4	0.68%		
extraordinary	2	0.34%		
satisfaction	1	0.17%		
Customer engagement - safety	92	15.57%	129	1.433
helpful	40	6.77%		
safe	28	4.74%		
safety	26	4.40%		
secure	3	0.51%		
security	1	0.17%		
unsafe	1	0.17%		
emergency	1	0.17%		
crowd	0	0.00%		
crowded	0	0.00%		

B.3 Topic Analysis – Diving Tourism

Diving data

total reviews	851
discussed topics	910
how often were the topics discussed	8769

		Frequency analysis		Sentiment analysis	
Dictionary Topics frequency	word	re-views	% of total re-views	Sum	Average
Educational Value - Communication		411	48.30%	482	1.555
	professional	185	21.74%		
	guide	106	12.46%		
	knowledgeable	70	8.23%		
	show	44	5.17%		
	attentive	25	2.94%		
	knowledge	23	2.70%		
	marine biologist	20	2.35%		
	enthusiastic	18	2.12%		
	attention	16	1.88%		
	passionate	12	1.41%		
	teach	12	1.41%		
	competent	11	1.29%		
	energetic	0	0.00%		
Educational Value - Learning		160	18.80%	134	1.136
	learn	48	5.64%		
	interesting	27	3.17%		
	briefing	27	3.17%		
	information	18	2.12%		
	informative	10	1.18%		
	explanation	9	1.06%		
	fact	3	0.35%		
	educational	2	0.24%		
	education	2	0.24%		
	explain	1	0.12%		
	interpretation	0	0.00%		
	science	0	0.00%		
Educational Value - Observation		390	45.83%	259	1.066
	spot	228	26.79%		
	see	113	13.28%		
	close	18	2.12%		
	explore	11	1.29%		
	discover	11	1.29%		

	natural	7	0.82%	
	picture	7	0.82%	
	photo	2	0.24%	
	video	2	0.24%	
	interact	2	0.24%	
	observe	1	0.12%	
	realistic	0	0.00%	
	observation	0	0.00%	
	interaction	0	0.00%	
Ecological awareness - environmental knowledge				-
animal harm		25	2.94%	-2 0.143
	close	18	2.12%	
	fishing	2	0.24%	
	chasing	1	0.12%	
	chase	1	0.12%	
	noise	1	0.12%	
	injury	1	0.12%	
	swimming with dol-			
	phins	1	0.12%	
	exploit	0	0.00%	
	disturb	0	0.00%	
	interfere	0	0.00%	
	disrupt	0	0.00%	
	whaling	0	0.00%	
Ecological awareness - environmental knowledge				
animal welfare		84	9.87%	76 1.118
	care	63	7.40%	
	respect	9	1.06%	
	responsible	4	0.47%	
	health	4	0.47%	
	correct	2	0.24%	
	guideline	2	0.24%	
	ethical	0	0.00%	
	unethical	0	0.00%	
	wellbeing	0	0.00%	
	welfare	0	0.00%	
	code of conduct	0	0.00%	
Ecological awareness - Environmental knowledge				
marine		73	8.58%	21 0.808
	marine life	34	4.00%	
	pick	20	2.35%	
	environment	19	2.23%	
	protect	4	0.47%	
	wild	4	0.47%	
	conservation	2	0.24%	
	trash	1	0.12%	
	preserve	1	0.12%	

	ecosystem	1	0.12%	
	plastic	0	0.00%	
	collection	0	0.00%	
	recycling	0	0.00%	
Ecological awareness - Environmental values		39	4.58%	17 0.708
	support	11	1.29%	
	aware	8	0.94%	
	value	7	0.82%	
	concern	6	0.71%	
	conscious	4	0.47%	
	sustainability	3	0.35%	
	initiative	3	0.35%	
	sustainable	2	0.24%	
	environmentally- friendly	0	0.00%	
	engagement	0	0.00%	
	minimise	0	0.00%	
	ecological	0	0.00%	
Customer engagement - cog- nitive		63	7.40%	17 0.654
	think	28	3.29%	
	consider	11	1.29%	
	encouraging	4	0.47%	
	adapt	3	0.35%	
	encourage	3	0.35%	
	involve	3	0.35%	
	convince	2	0.24%	
	inspire	2	0.24%	
	reflect	1	0.12%	
	inspiring	1	0.12%	
	engage	1	0.12%	
	find out	0	0.00%	
	rethink	0	0.00%	
	convincing	0	0.00%	
	engaging	0	0.00%	
Customer engagement - emotional negative		33	3.88%	-8 0.308
	stress	8	0.94%	
	regret	7	0.82%	
	disappointed	6	0.71%	
	unhappy	2	0.24%	
	disappointment	2	0.24%	
	uncomfortable	1	0.12%	
	aggressive	1	0.12%	
	uninvolved	0	0.00%	
	unfriendly	0	0.00%	
Customer engagement - emotional positive		398	46.77%	515 1.392

	friendly	210	24.68%		
	fun	118	13.87%		
	enjoy	95	11.16%		
	happy	34	4.00%		
	unforgettable	19	2.23%		
	satisfy	8	0.94%		
	unique	7	0.82%		
	exciting	4	0.47%		
	extraordinary	3	0.35%		
	satisfaction	2	0.24%		
	excited	0	0.00%		
Customer engagement - safety		279	32.78%	413	1.518
	helpful	127	14.92%		
	safe	91	10.69%		
	safety	68	7.99%		
	secure	12	1.41%		
	security	6	0.71%		
	unsafe	3	0.35%		
	crowd	2	0.24%		
	emergency	2	0.24%		

B.4 Sentiment Analysis – Whale-Watching Tourism

1	Educational Value - Communication	1.502
2	Customer engagement - safety	1.433
3	Customer engagement - emotional positive	1.355
4	Educational Value - Learning	1.200
5	Ecological awareness - environmental knowledge animal welfare	1.175
6	Ecological awareness - Environmental values	1.083
7	Ecological awareness - Environmental knowledge marine	0.833
8	Educational Value - Observation	0.703
9	Customer engagement - cognitive	0.478
10	Ecological awareness - environmental knowledge animal harm	0.333
11	Customer engagement - emotional negative	-0.630

B.5 Sentiment Analysis – Diving Tourism

1	Educational Value - Communication	1.555
2	Customer engagement - safety	1.518
3	Customer engagement - emotional positive	1.392
4	Educational Value - Learning	1.136
5	Ecological awareness - environmental knowledge animal welfare	1.118
6	Educational Value - Observation	1.066
7	Ecological awareness - Environmental knowledge marine	0.808
8	Ecological awareness - Environmental values	0.708
9	Customer engagement - cognitive	0.654
10	Ecological awareness - environmental knowledge animal harm	-0.143
11	Customer engagement - emotional negative	-0.308

B.6 Examples of Tourist Reviews

Whale-watching reviews

Great experience! If you care about the animals but still want to do such a trip, choose XXX! Caring and experienced team - impressive how they work together with the whale-watchers on-shore.

We booked whale watching and it was quite alright. From the same company we saw the tour "Swimming with Dolphins"! It was terrible! They chased the dolphins with a boat, drove over the herd and then kicked people out and called it Swimming with Dolphins! Don't do something like that, it's terrible for the animals! If you love animals, let them live in peace and enjoy them from afar!

As committed whale lovers, all of us, this trip was a big deal and we had all read Philip Hoare's book Leviathan which mentions this area for whale watching. We arrived in this lovely seafront fishing village and were very happy with the accommodation and location.

We loved whale and dolphin watching with XXX, and would highly recommend to anyone visiting Pico island. The boat is small, and made for a unique way to explore the ocean; you are essentially getting a semi-private experience. The guides were passionate and informative. We especially appreciated the thoughtful and ethical mindset of the company that included a debrief at the end of the experience. Very well worth the money!

We had a fantastic whale watching trip with XXX! Going out in the RIB boats, we could come incredibly close to the majestic whales without disturbing them. We were fortunate enough to come upon a number of Sei whales and dolphins, feeding on a school of tuna - it was like watching a live version of a National Geographic documentary! Of course, while they cannot promise a repeat of this experience - as they say, it is not a zoo - the whale watching trip with XXX definitely recommendable.

Diving reviews

We had such a wonderful time diving with XXX! Our Divemaster Michel was amazing! Everyone who works there is so incredibly friendly and helpful. They genuinely care about your dive experience. If we are in the area again we will definitely go back there!

35 XXX diving are very friendly and have a great set up. They are very efficient and the boat is
36 close by so minimal walking with gear. There are toilets and showers also very close. They
37 made us feel very welcome and their gear was fantastic even had dry gear for us to change into
38 on our second dive. I would highly recommend.

39

40 Lovely diving. The crew were super helpful and friendly. Dives were well planned and Our
41 dive guide showed us loads of nudibranch. Highly recommend.