

CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES

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CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES

Master's Thesis

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DECLARATION

This thesis is a product of my own work and is not the result of anything done in collaboration.

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Student Signature

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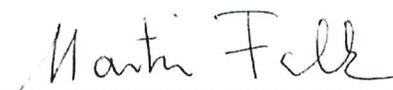
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The undersigned certify that they have read, and recommend to the Department of Recreation and Tourism Management for acceptance, the thesis titled "CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES" submitted by Eshu Karwal in partial fulfilment of the requirements for the degree of Masters of Arts in Sustainable Leisure Management.



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ABSTRACT

Whale watching is an integral part of the Vancouver Island tourism industry. From the supply side, the practices of operators are essential towards the sustainability of the whale watching industry. This research explores the sustainable practices stated on the whale watching operators' websites. The research questions of the study are A) What are the online sustainable practices of Vancouver Island whale watching operators. B) Similarities and variances in online sustainable practices between Vancouver Island and New Zealand whale watching operators. Five hypotheses are drawn from the literature to answer the research questions. The first four focus on the sustainable practices of Vancouver Island operators, and the fifth hypothesis focusses on comparing the practices between two contexts. Data is collected from 30 Vancouver Island operators websites and analysed, and then compared with results from a previous New Zealand (54 operators) study. Findings indicate that Vancouver Island operators have adopted many sustainable practices as part of their operations. Furthermore, New Zealand and Vancouver Island operators both display similar sustainable practices. Vancouver Island operators are active in adopting local community contributions and education and research, among other practices. Whereas, New Zealand operators are more advanced in adopting sustainable practices such as eco-labels, overall energy efficiency, and waste management. The results of the study can be used by stakeholder groups such as new and upcoming whale watch operators and the local government bodies to improve the standards of whale watching industry in their respective regions.

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CHAPTER 1 INTRODUCTION

1.1 Background

Whale watching is an essential part of the British Columbia tourism industry. Located on the west coast of British Columbia is Vancouver Island. It seats the provincial capital of Victoria and offers tours to witness marine wildlife through its multiple locations. Approximately 22,000 grey whales migrate through the straits near the island between March and May (O'Connor, Campbell, Cortez, & Knowles, p. 202, 2009). Over the years, Vancouver Island has attracted thousands of whale watching visitors and generated revenues for operators and job opportunities for its local population.

With the global moratorium on whaling by International Whaling Commission, whale watching is introduced as a sustainable alternative to whaling for using cetaceans among coastal communities (Mayer et al., 2018; Silva, 2015, p. 197). It is a non-consumptive use of whales for recreational purposes. Whales are marine mammals which are at the top of the marine life food chain. They play a vital role in nutrient recycling for the marine ecosystems (Department of the Environment, Water, Heritage, & the Arts [DEWHA], 2010; Shore, 1999). Whale watching as a tourism activity depends on the availability of cetaceans in a particular location (Lambert, Hunter, Pierce, & MacLeod, 2010; Duffus, 1996) and marine life as a common-pool resource risk overexploited (Mayer et al., 2018). The increasing popularity of whale watching tours has led to an increasing number of operators and boats (Seely, Osborne, Koski, & Larson, 2017). With overlapping activities by whale-watch boats on the same resource (whales), it is becoming increasingly important to establish accountability and take preventive actions for whale watching sustainability.

Issues which hinder its sustainability impairs whale watching industry. Numerous studies

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report that the whale watching operations impact behavioural patterns of whales and alter their breeding, feeding, and surfacing times (New et al., 2015; Hoyt & Parsons, 2014; Wearing, Cunningham, Schweinsberg, & Jobberns, 2014; Parsons, 2012). Change in cetacean behaviour accounts to the platforms used by the whale watching operators. Parsons and Brown (2017) mention that cetaceans get affected by vehicle proximity, noise, and speed. Changes in cetacean behaviour calibrates to an amalgamation of reasons. These reasons are due to pollution, vehicle traffic, noise, food source, non-compliance of guidelines, seasonality, climate change (Seely et al., 2017; Parsons, 2012; Erbe, 2001), and it is vital to understand what practices whale watching businesses adapt to sustain their industry. The sustainability of whale watching industry attributes to the sustainable practices undertaken by the whale watch operators together with environmental-friendly practices used to make their operations sustainable.

Adoption of sustainable practices is fundamental to the whale watch industry. Operators undertake various practices to support local economies and promote environmental friendliness through their tours. Marine environments are finite resources, and environmentally friendly practices often differ as per context, values associated within the respective local marine ecosystems (Hoyt & Parsons, 2014; Wearing, et al., 2014). Even though the sustainable practices may differ according to the context, the overall practices may be deemed similar from a broader perspective. For example, practices such as fuel-efficiency, following viewing regulations, information on public accessibility, engaging the local community, promoting plastic ban, donating towards conservation, and contributing to research, may be followed even in varying contexts. Other practices, such as the introduction of eco-labels and environment management schemes, show that operators want to make a positive contribution to their marine ecosystems (Pancer, McShane, & Noseworthy, 2017).

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The circular economy practices are also widespread among firms. The circular economy focuses both on saving material and energy in the production process and managing waste by repairing, reusing, and recycling products (Bruel, Kronenberg, Troussier, & Guillaume, 2019; de Jesus & Mendonça, 2018). The circular economy approach is a crucial element for the greening of the economy and is, therefore, at the center of the environmental policy debate. Firms increasingly adopt environmental management systems and certifications to make their operations green. However, there is a concern about greenwashing. Greenwashing refers to poor environmental performance on one side and positive information about their environmental performance on the other (Delmas & Burbano, 2011, p. 67). Falsification of environmental practices is undertaken to mislead customers about a firm's environmental contributions. Also, firms equate tourism impacts with tourists rather than themselves (Vernon, Essex, Pinder, & Curry, 2003, p. 65), and operators use environmental management systems for marketing their products rather than relay practices which improve their environmental performance (Testa, Boiral, & Iraldo, 2018).

Creating a social conscience among stakeholders such as participants, operators, and local community fuels long-term sustainability of the whale watch industry (New et al., 2015). In order to achieve that, first, an understanding of the whale watch operators' contributions is necessary. Online medium such as websites serves as an essential tool for communicating information about a business. It is an important marketing tool for whale watch operators to attract prospective clientele (Cristobal-Fransi, Daries, Serra-Cantalops, Ramón-Cardona, & Zorzano, 2018). Prevalence of internet has made it possible for customers to learn and access information about remote ecotourism sites (Lai & Shafer, 2005, p. 144), and make plans to visit them. Ecotourism as a concept aims to promote local culture, protect the local environment, and

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support the local community, however, its application by operators is contested (Das & Chatterjee, 2015; Lai & Shafer, 2005). Ecotourism influenced by the demand side and is about the participants rather than business operators. How operators demonstrate their sustainable business practices online is not explicitly known. Not all operators report their sustainable practices, and the information found on websites is often limited (Lai & Shafer, 2005).

Whale watching businesses are micro-small enterprises. Small and medium-sized firms have less than 250 employees, whereas micro-sized firms have 10 or fewer employees (Vernon et al., 2003, p. 50). Micro-enterprises face various barriers to implement sustainable environmental practices as compared to larger ones. They argue to have limited impact on the environment and limited capacity to influence change (Vernon et al., 2003, p. 50). Furthermore, Vernon et al. (2003) found that micro-small firms had limited awareness of their individual and collective impact on environmental sustainability (p. 65). Micro-small firms such as whale watching are fundamental to the local coastal communities and even with limited capacities whale watching operators practice different environment-friendly techniques. These contributions are essential to the coastal communities. Therefore, the purpose of this study is to explore the sustainable practices of whale watching operators. The data is taken from websites of the whale watching firms.

This is an empirical study which collects data from the websites of Vancouver Island whale watch operators. Data is collected and analysed through content analysis. Then a comparison is constructed with the results from a previous similar study by Sun and Luck (2015) in New Zealand. Data analysis of Vancouver Island operators' websites is built on the New Zealand study. There have been studies that investigated development, growth, and potential of the whale watching industry in other regions (Ryan et al., 2018; Peake, 2011; Cisneros-

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Montemayor, Sumaila, Kaschner, & Pauly, 2010; Parsons et al., 2003). However, comparing operators from two mature whale watching regions based on empirical evidence is novel and has not been attempted. This research offers a broader perspective on the supply side of the whale watching industry and covers operator attributes such as eco-labels, regulations, environment-friendly practices, local community contributions, education, and research. The research is into two-fold with research questions. A) What are the online sustainable practices of Vancouver Island whale watching operators? B) Are there any differences/ similarities in the sustainable practices between Vancouver Island and New Zealand whale watch operators? A total of 30 Vancouver Island operators' websites is evaluated through content analysis, and then a comparison with the results of 54 New Zealand operators' websites is made. Furthermore, the adoption of sustainable practices on websites is explored through the diffusion of innovation.

Diffusion of innovation helps to understand how a specific target group adopts innovations over time (Robinson, 2009). Adoption of an innovation depends on factors such as relative advantage, compatibility, simplicity of use, trialability, and observable results (Robinson, 2009; Rogers, 1995, p. 250). These five factors regulate the majority variation in adoption (Rogers, 1995). Furthermore, Robinson (2009) mentioned that the user groups for such innovations could be broken down according to their inclination towards a particular innovation with each having its disposition (p. 4). For this study, diffusion of innovation theory is relevant as the adoption of environmentally friendly practices among whale watching businesses is observed. Also, the presence of other management interventions such as eco-labels, waste management, fuel efficiency, monitoring performance is explored.

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new, developing whale-watch countries and also by operators who are new to the industry. The contributions and practices mentioned can be detailed and incorporated by such operators according to their respective contexts. Third, this knowledge can help assist local government organisations and tourism bodies in tourism planning. Local government organisations and tourism bodies are essential stakeholders in the whale watch industry, and they can use the information to develop policy implications for improving standards of whale watching in their respective regions. To better explore this research, the following key terms are included.

1.2 Key terms

Whale watching

Whale watching is natural resource-based tourism. It is an essential part of coastal communities around the world. Whale watch relies on the act of observing cetaceans in their natural habitat (Parsons et al., 2003). There are three ways to experience whale watching, land, air, and platforms (Hoyt & Parsons, 2014, p.60; Hoyt, 2001). Platforms or boat-based whale watching is the most common way of watching marine life globally (Elejabeitia, Urquiola, Verborgh, & Stephanis, 2013, p. 4). This study considers boat platforms used by commercial whale watching operators.

Sustainability

The definition of sustainability is highly contested (Moore, Mascarenhas, Bain, & Straus, 2017; Santillo, 2007), and varies according to the context it applies. For the purposes of this study, sustainability in whale watching industry refers to the practices undertaken by whale watching operators to reduce their negative impact on the marine ecosystems. There are three broad categories of sustainable practices in whale watching. With respect to vessel management practices, species being observed, and promoting education with a contribution to research

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(Silva, 2015; Hoyt & Parsons, 2014, p. 68; Lambert et al., 2010, p. 411; Stamation, 2008). The three categories links to the three pillars of sustainability: environmental, economic, and social. Vessel management practices relate to environmental sustainability, species observed is connected to economic sustainability, and promoting education with a contribution to research is linked to social sustainability. This study focuses on environmental and social sustainability.

Cetaceans

Cetaceans are marine mammals available in a particular marine ecosystem. Each marine ecosystem has its own unique set of marine life. Cetaceans comprise of marine animals such as whales, dolphins, and porpoises (Jacobs & Harms, 2014; Shore, 1999).

CHAPTER 2 CONCEPTUAL BACKGROUND AND LITERATURE REVIEW

This chapter will define whale watching, the evolution from whaling, commercial whale watch operators, sustainable practices in whale watching, and attributes of whale watch operators. Furthermore, it will list the research gap and develop hypotheses from the literature to answer the research questions.

2.1 Whale Watching

2.1.1 Definition

The economic benefits of whale watching industry are known worldwide. As of 2009, it is worth \$1 billion per annum (Lambert et al., 2010). There are three ways to experience whale watching; land-based, boat-based, and aerial (Hoyt & Parsons, 2014, p.60; Hoyt, 2001), of which boat-based is the most common way of observing cetaceans in the wild (Hoyt, 2001, p. 4). Whale watching is classified on its intended purpose, such as commercial or recreational (Hoyt & Parsons, 2014). Commercial whale watching is when participants pay an enterprise (or an operator) to see cetaceans in their natural habitat (New, 2016; Hoyt & Parsons, 2014, p. 60) and recreational whale watching is when personal vehicle is used for whale watching without any compensation (New, 2016). This literature review will focus on commercial whale watching.

2.1.2 Commercial whale watch operators.

Commercial whale watch operators are businesses or individuals who undertake whale watching for a fee (New, 2016; Hoyt & Parsons, 2014, p. 60). The crew generally consists of a Captain also known as “Skipper” and a “marine naturalist guide,” there may be additional members depending on the size of the vessel used. Whale watching operators are micro-small scale business operators, and they rely on the availability of cetaceans in a particular marine environment (Lambert et al., 2010; Duffus, 1996). Operators run from coastal areas which give

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easy access to water bodies and from where they can observe cetaceans in the wild. They connect with other operators through a radio network which helps know the locations of whales.

2.1.3 Whale watch evolution

There is a paradigm shift between the usage of cetaceans. The evolution of the whale watching industry started with a moratorium on hunting whales. Current knowledge offers the ideology that the non-consumptive practice of whale watching is better than the hunting practice of whaling (Higham, Bejder, Allen, Corksen, & Lusseau, 2016; Silva, 2015). Whaling is considered a consumptive practice. However, there are few countries such as Iceland, Japan, and Norway where both whaling and whale watching still co-exist (Bertulli, Leeney, Barreau, & Matassa, 2016; Cunningham, Huijbens, & Wearing, 2012). The need to protect marine life has forced countries around the world to suspend whaling and adopt whale watching as a sustainable alternative (Cunningham et al., 2012; Cisneros-Montemayor et al., 2010).

2.1.4 A Non-consumptive activity.

The shift in ideology has developed whale watching as a non-consumptive activity. Instead of being hunted with harpoons, they are pursued with cameras (Silva, 2015; Shore, 1999, p. 4). However, not everyone seems to agree on it, and scholars argue about the positioning of whale watching. On one side, it is alleged to be a consumptive activity, as any human-wildlife interaction exacerbates whale populations and their behaviour (Higham et al., 2016; New, 2016). On the other hand, it is argued that whale watching increases environmental awareness, educates on cetacean populations, and promotes positive participant behaviour through participation (Silva, 2015; Wearing, et al., 2014), and hence be classified as a non-consumptive activity. Human interactions on whale watch trips alone cannot be singled out as the pivotal reason for the change in whale populations. Other causes such as availability of food source, changing ocean

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currents, migration patterns, pollution, also influence whale populations and behaviour (Meynecke, Richards, & Sahin, 2017; New et al., 2015; Frink, 2014; Lambert et al., 2010; Duffus, 1996). The economic benefits worldwide often overthrow negative impacts and tilt the focus towards classifying it as a non-consumptive activity. Global development of whale watching helps to emphasise the importance of this industry.

Table 1.1 Growth of regional whale watch industries

Region	Whale watchers		Regional AAGR	Number of countries		2008 Direct Expenditure millions	2008 Total Expenditure millions
	1998	2008		1998	2008		
Africa and Middle East	1,552,250	1,361,330	-1.3%	13	22	\$31.7	\$163.5
Europe	418,332	828,115	7.1%	18	22	\$32.3	\$97.6
Asia	215,465	1,055,781	17.2%	13	20	\$21.6	\$65.9
Oceania, Pacific Islands and Antarctica	976,063	2,477,200	9.8%	12	17	\$117.2	\$327.9
North America	5,500,654	6,256,277	1.3%	4	4	\$566.2	\$1,192.6
Central America and Caribbean	90,720	301,616	12.8%	19	23	\$19.5	\$53.8
South America	266,712	696,900	10.1%	8	11	\$84.2	\$211.8
GLOBAL TOTAL:	9,020,196	12,977,218	3.7%	87	119	\$872.7	\$2,113.1

Source: O'Connor et al., 2009

2.1.5 International Development of whale watching.

According to IFAW (2009), there are approximately 119 countries which promote whale watching around the world. In 2008, the whale watch industry contributed \$2.1 billion in revenue through expenditure and created 13,200 jobs across the 119 countries (O'Connor et al., 2009).

Figure 1 shows the spread of whale watching participating nations worldwide in 2008 (O'Connor et al., 2009). Table 1.1 shows the economic growth of regional whale watch industries. A comparison from 1998 to 2008 shows that total expenditure generated through whale watching doubled to \$2.1 billion (IFAW, 2009). The average annual growth rate (AAGR) for the North

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America region (1.3%) is less than the global (3.7%). Other regions such as Asia (17.2%) and Central America, the Carribean (12.8%) are faster growing.

2.1.6 Whale watching in British Columbia and New Zealand

Differences	Toothed whales (Odontocetes)	Baleen whales (Mysticetes)
Blowholes	Single	Two or Paired
Teeth	Yes	No
Examples	Sperm whale, the killer whale (or Orca), all dolphins and porpoises	Northern right whale, Blue whale, humpback whales, mink whales, and the Pacific grey whales

North America is a well-established whale watch industry, and it represents nearly half of all whale watching tourists worldwide (Hoyt & Parson, 2014, p.60). Table 1.1 shows that in 2008, over 6.2 million participants visited North America for whale watching (IFAW, 2009; O'Connor et al., 2009). Furthermore, the same year, approximately 0.43 million participants were noted, generating 118 million dollars in total expenditure in British Columbia (O'Connor et al., 2009, p. 202). In British Columbia, whale watching runs from at least eleven coastal locations (Hoyt, 2001; Fisheries and Oceans Canada [DFO], n.d.-a), of which at least 47 whale watch companies operate (Hoyt, 2001, p. 29). The number of Vancouver Island operators' websites in this study is thirty (n=30). Similar to Vancouver Island, New Zealand is a well-developed market which offers whale watching from at least nine locations across the north and south islands (O'Connor et al., 2009, p. 186). In 2008, there were approximately 0.54 million participants with a total expenditure of about 80 million dollars (O'Connor et al., 2009, p. 187). The number of New Zealand whale and dolphin watch operators' websites studied is fifty-four (n=54).

2.1.7 Cetaceans.

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Cetaceans are a group of marine animals consisting of whales, dolphins, and porpoises (Jacobs & Harms, 2014; Shore, 1999), and are specific to a particular geographical context. There are approximately 80 endangered species of cetaceans known around the world (Shore, 1999; www.wwf.panda.org) out of which 17 species are off the coast of British Columbia (Shore, 1999). Cetaceans are further classified into two distinct groups, toothed whales and baleen whales. Among cetaceans, whales are part of the dolphin family and are the dominant attraction due to the sheer size, and they stay in groups or pods (Fisheries and Oceans Canada [DFO], n.d.-b).

Table 1.2 Classification of different cetaceans.

Note: Reprinted from Shore, V. (1999). Whales dolphins and porpoises of British Columbia, Canada. Retrieved from <http://www.dfo-mpo.gc.ca/Library/241969.pdf>

Whales stay in pods and are identifiable by their dorsal fins, tails. Dr. Michael Biggs, a Canadian marine biologist, who first started keeping track of the whales and introduced the first population census which is still being followed today (J. Hildering, guest lecture, September 25, 2018). In British Columbia waters, species such as grey whales, humpback whales, killer whales, minke whales, Pacific white-sided dolphins, Dall's porpoise, and harbour porpoise can be generally spotted (Shore, 1999). Others such as Blue whales, Fin whales, Sei whales, Northern Right whales, and False killer whales are a rare sight (Shore, 1999). Cetaceans such as Hector's dolphins, sperm whales, dusky dolphins, bottlenose dolphins are common in New Zealand waters (O'Connor et al., 2009, p. 190).

The killer whale is the largest member of the dolphin family (Shore, 1999). There are two critically endangered species identified by the Department of Fisheries and Oceans Canada, the

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northern resident killer whales and the southern resident killer whale. The northern resident killer whale can be found in the Johnstone Strait, whereas Southern resident killer whale is prevalent in the Haro Strait (Shore, 1999; www.dfo-mpa.gc.ca). Special Action plans, recovery strategies have been introduced for the protection of these two critically endangered species (www.dfo-mpa.gc.ca). Hector's dolphins are endemic to New Zealand waters and are the biggest attraction (www.doc.govt.nz).

2.1.8 Sustainable practices in whale watching.

As detailed above in section 1.2, the definition of sustainability is highly contested (Moore, Mascarenhas, Bain, & Straus, 2017; Santillo, 2007), and varies according to the context it applies. For the purposes of this study, sustainability in whale watching industry refers to the practices undertaken by whale watching operators to reduce their negative impact on the marine ecosystems. These include: vessel management practices, species being observed, and promoting education with a contribution to research (Silva, 2015; Hoyt & Parsons, 2014, p. 68; Lambert et al., 2010, p. 411; Stamation, 2008).

Vessel management. The environmental sustainability of whale watching operations relies on vessel management. Vessel management deals with the type of vessel used, fuel, vessel capacity, speed, and approach in whale watching (Elejabeitia et al., 2013, p. 4; Kessler & Harcourt, 2013, p. 14). It further includes guidelines to be followed by all whale watching boats while approaching, observing cetaceans. The viewing guidelines generally revolve around things such as safe distance, time spent viewing, the engine idle, overcrowding (www.dfo-mpa.gc.ca). In Canada, these regulations get established by the Department of Fisheries and Oceans, Canada. For New Zealand, the Department of Conservation sets the regulations for whale and dolphin watching (www.doc.govt.nz). Even though guidelines may vary depending on the context and

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species observed, the overall aim of them is to manage whale watch sustainability by minimising the potential negative impact (Amerson & Parsons, 2018).

Species being observed. For operators' economic sustainability, it is essential to understand the group of cetaceans on whom they base their businesses. According to Lambert et al., (2010), whale watch operators' who base their business on migratory populations are more prone to face economic issues than those who base it on resident populations. Endangered species often have stricter regulations. One example is British Columbia's southern resident killer whale. They have more stringent distance guidelines compared to other whale species, porpoise, or dolphins (www.dfo-mpa.gc.ca). It is vital that whale watch operators can differentiate between species and follow appropriate guidelines concerning each species. These distinctions can help fix their operations' economic sustainability, and further help them plan their tour interpretation programs better.

Promoting education with a contribution to research. Social sustainability of the whale watching industry attributes to the research and education of cetacean populations in the respective marine ecosystems. One of the ways whale watch operators promote education on their tours is by introducing tour interpretive programs to the participants. Tour interpretation programs can be visual or verbal (Parsons & Brown, 2017; Lück, 2015), and exclusive to a particular whale watching operator. These programs can be before or while undertaking a whale watching tour. However, there is disagreement on the efficacy of interpretive programs and their influence on participants (Malcolm, Dagostino, & Ortega, 2017; Parsons & Brown, 2017), effective interpretive programs raise conservation and awareness of marine ecosystems for participants (García-Cegarra & Pacheco, 2017). Interpretive programs are an essential part of the whale watching industry.

2.2 Whale watching operator attributes

Operators attributes are specific to a particular context. Whale watching destinations are in natural settings, and establishing attributes can help managers, owners to make effective management decisions (Abdurahman et al., 2016, p. 361). Though overall contributions are similar, attributes may differ based on the perspective of stakeholders within a particular destination. Boyd, Butler, and Haider (1995) had previously identified characteristics such as naturalness, wildlife, cultural heritage, landscape, and community in a forest-based ecotourism location. For businesses, attributes from a service quality perspective seem the most relevant as it influences tourists' tour intention (Ban & Ramsaran, 2017; Wang, Wei, & Zhu, 2017; Abdurahman et al., 2016). Following operators' attributes are covered in this research.

2.2.1 Environment friendly practices

Tourism is a significant contributor to global climate change (Lenzen, et al., 2018; Lambert et al., 2010). The increasing levels of the carbon footprint from tourism activities is a concern for the tourism industry and the businesses associated with it. Lenzen, et al. (2018) estimated that the tourism industry alone accounted for 8% of the global carbon footprint from the year 2009 to 2013. The rise in demand for tourism activities, especially in coastal locations, increases carbon emissions affecting the local ecosystems (Ortega, Dagostino, & Massam, 2013). Increase in tourism demand further adds pressure on tourism companies to reduce their greenhouse gas emissions and operate in a sustainable manner (Dolnicar, & Leisch, 2008). Tourism operators use environmental-friendly practices to make their operations green.

Green operations focus on reducing greenhouse gas emissions and making business operations sustainable. In the whale watching industry, environment-friendly practices help to reduce the carbon footprint even before the actual whale watching tour begins. For example,

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some practices of the operators such as online booking system, information on accessibility through public transport, energy efficiency, recycling of waste, eco-friendly fuel, and plastic ban, contribute to promote green operations for the whale watching industry. Kleindorfer, Singhal, & Wassenhove (2005) mentioned that businesses use environmentally friendly practices to make their products and services green. These environmentally friendly practices help reduce the carbon footprint for both employers and customers and contribute positively to the sustainable development of tourism.

An environmental indicator is essential for sustainable tourism development. It helps to evaluate and measure the sustainable development of tourism in a particular context (Torres-Delgado & Palomeque, 2014; Choi & Sirakaya, 2006). Though there is a debate on how to establish sustainable indicators, they generally incorporate the three broad dimensions of sustainable tourism; economic, social, and environmental (Torres-Delgado & Palomeque, 2014, p. 123; Choi & Sirakaya, 2006, p. 1279). Environmental indicators confirm to evaluate the performance of businesses towards the local environment. Eco-labelling is one such voluntary method used by firms to certify or label their best environmental practices (Buckley, Font, & ebrary, 2001, p. 27). Firms use management interventions such as eco-labelling to measure environmental performance and improve the sustainability standards of business operations.

Eco-label. Eco-label is a mark or logo that reflects green practices adopted by a business to showcase its commitment towards the environment. It encourages environment-friendly consumption decisions (Baumeister & Onkila, 2017, p. 1369; Pancer et al., 2017, p. 162; Galarraga Gallastegui, 2002, p. 316), by offering technical information to individuals (Gössling & Buckley, 2016). Eco-labels influence customer choice, behaviour, and marketing to create awareness about a prevalent issue and steps taken by businesses to counter them (Buckley, 2002,

p. 185; Galarraga Gallastegui, 2002). Local businesses, large corporations, environmental groups, not for profit organisations, or governments, can create eco-labels. There are 400 over eco-labels approximately (Castka & Corbett, 2016, p. 311) and 113 in Canada (www.ecolabelindex.com). Ideally, one eco-label should be enough. However, to be beneficial in varying contexts eco-labels are created with confluence to the local perspectives (Gössling & Buckley, 2016; Buckley, 2002).

2.2.2 Contributing to the local community

Tourism activities generate economic value for the local economy. Whale watching is a fast-growing industry and holds the potential to contribute to local populations, promote conservation, and sustainable practice (Cunningham et al., 2012; www.ifaw.org). The benefits of whale watching to the local community is as follows.

Economic benefits of whale watching. Whale watching helps to empower local economies. Cisneros-Montemayor et al. (2010) estimated the whale watching industry to add over 2.5 billion USD and support close to 19,000 jobs worldwide annually (p. 1275). The multiplier effect that the whale watch tourism generates is essential for the local economy. Tourism generates revenue for local establishments such as restaurants, lodging. Table 1.1 mentions that there has been a 3.7% average annual growth rate of participants between 1998 and 2008 worldwide (O'Connor et al., 2009). In Canada, 923,804 participants were making a direct expenditure of 27.33 million dollar (Hoyt, 2001). Apart from the economic benefits, there are socio-cultural benefits associated with the whale watch industry.

Socio-cultural benefits. Demand for offering services helps in the development of local communities. Whale watching attracts tourists to the local communities in coastal areas. Unlike major cities, these local communities do not have the necessary infrastructure. Whale watching

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has the potential to help improve employment, facilities, and infrastructure of the local economies (Elejabeitia et al., 2013). Furthermore, local economies also get the opportunity to create awareness about their culture, food, tradition, thereby helping to grow and sustain themselves. Examples of whale watch destinations such as Lajes and Taiji show that local heritage is used to generate tourism revenue (Silva, 2015; Cunningham et al., 2012, p. 153).

2.2.3 Education and research

Conservation and Education. Whale watching supports conservation of local marine life. It helps create awareness around marine biology and ecosystems (García-Cegarra & Pacheco, 2017; Christensen, Needham, & Rowe, 2009). There is criticism for hunting whales in the whaling era. However, it should be acknowledged that because of it, the knowledge and understanding regarding the biology of cetaceans have improved (Shore, 1999). Educational programs is a novel way to create awareness (Choi & Sirakaya, 2006, p. 1284; Orams, 1996), and to promote pro-environmental attitudes must be part of all whale watching trips (Parsons & Brown, 2017; Curtin, 2003, p. 186). The information tourists gain during a whale watching trips can raise awareness about the marine ecosystem observed.

Contribution to research. Research on water requires staff hours, which comes with its cost implications. Whale watching boats help in collecting and recording data of the cetaceans (Currie, Stack, & Kaufman, 2018; Parsons & Brown, 2017). This data is used for scientific research to advance knowledge about the marine life within the marine ecosystems (Elejabeitia et al., 2013, p. 2). Marine mammals rely on acoustics for different behaviours such as communication, navigation, hunting, echolocation, and detecting predators (Veirs, Veirs, & Wood, 2016; Houghton et al., 2015; Erbe, 2001, p. 14). Research opportunities on whale watching trips help to investigate further impacts of anthropogenic activities on the cetaceans

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along with the current practices of the whale watching operators. Whale watching improves knowledge and contributes to scientific research.

2.3 Research gap(s)

Whale watching industry needs to address several sustainability issues concerning operations, local environment, and observed animals. Primary research has been in terms of whale watching impacts, benefits, and challenges in different contexts (Brenner, Mayer, & Stadler, 2016; Hoyt & Parsons, 2014; Parsons, 2012; O'Connor et al., 2009; Hoyt, 2001). The need to understand attention to natural settings from the supply side in whale watching industry is paramount. Interviewing operators in each context and then making a comparison is time and cost inductive process. However, an online comparison of website data can be a possible solution to save time and money.

Moreover, an online study which focusses on the ecotourism attributes of whale and dolphin watching operators in New Zealand exists (Sun & Lück, 2015). However, no similar online study is available that focusses on Vancouver Island whale watch operators. Also, there is no previous study which compares whale watching operators across two distinct contexts. So, this study tries to fill this gap in research. The hypotheses developed from the literature to answer the research questions follows.

2.4 Hypotheses

The hypothesis section is in two parts. First four hypotheses are for the sustainable online practices of Vancouver Island whale watching operators. The final hypothesis compares sustainable online practices between Vancouver Island and New Zealand whale watch operators, respectively. Each hypothesis is derived from the literature and mentioned below.

H1: Few operators provide information on environmentally friendly practices.

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Disclosure of environment-friendly practices by organisations is voluntary (Burlea-Schiopoiu & Popa, 2013). They may choose to disclose their environment-friendly practices due to various reasons. Adoption of environment-friendly practices is due to factors such as a firm's size, type of ownership, and stakeholder pressures (Darnall & Edwards, 2006; Cormier & Gordon, 2001). These pressures are more prevalent in large corporations, which are more visible and subject to public scrutiny (Darnall, Henriques, & Sadorsky, 2010; Cormier & Gordon, 2001, p. 607). Smaller firms are more prone to local stakeholder pressures (Darnall et al., 2010, p. 1073), and provide limited information on their environment-friendly practices. So few operators offer information on environment-friendly practices.

H2: Few operators have an eco-label or eco-certification.

Eco-labelling is beneficial for tourism operators. Eco-labelling helps tourism firms to promote sustainable consumption practices (Buckley, R., Font, & ebrary, 2001, p. 27). Eco-labels provide information and influence individuals to undertake responsible environmental behaviour (Gössling & Buckley, 2016; Esparon, Gyuris, & Stoeckl, 2014; Chen, 2011). The development of eco-labels in the whale watching industry is still at an early stage. Eco-labels are used primarily as a marketing tool by organisations (Klein & Dodds, 2018; Testa et al., 2018, p. 303). For beaches, there is a blue flag, a popular eco-label widely used across the world to indicate sustainable, clean, and safe beaches (Klein & Dodds, 2018, p. 39). However, there is no one particular eco-label which the operators can follow in the whale watching industry. Eco-labels are voluntary, and operators adapt to them on their own accord. So few operators have an eco-label or eco-certification.

H3: Few operators report information on the treatment of whales.

Overcrowding and non-compliance of regulations by whale watching boats affect the

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cetaceans. Non-compliance of strictures by whale-watching boats alters behavioural patterns among the cetaceans (Amerson & Parsons, 2018; Parsons & Brown, 2017; Seely et al., 2017; New et al., 2015; Hoyt & Parsons, 2014; Wearing, et al., 2014; Kessler & Harcourt, 2013; Parsons, 2012). Marine life, such as cetaceans, are the driving force of the industry, and viewing regulations is a foundational part of all whale watching operations (Kessler & Harcourt, 2013, p. 14). However, rapid growth in the whale watching industry had led to an increase in the number of whale-watch boats and operators (Seely et al., 2017). Also, observing the same species by multiple whale watching vessels at a time adds pressure on the cetacean. The rapid increase in whale watching boats does not mean all operators are aware of the regulations. Whale watching firms in Canada do not have to apply for a specific whale watching permit to view cetaceans (Amerson & Parsons, 2018, p. 1363). So few operators report information on the treatment of whales.

H4: Few operators monitor their company's operations.

A formal environment management system increases business productivity and improves overall performance (Melnik, Sroufe, & Calantone, 2003, p. 344). There may be obstacles to adopting environmental management systems. For example, the size of a firm is an essential factor that influences the adoption of environmental management systems (Darnall et al., 2010, p. 1074; Cormier & Gordon, 2001). Larger firms have higher capital resources (Vernon et al., 2003), compared to micro-small firms. Micro-small whale watching firms with limited capital potential may be susceptible to such costs. So few operators monitor their company's operations.

H5: Different contexts influences adoption of different sustainable practices.

Whale watching firms are rooted in the local context (Russo & Tencati, 2009, p. 350), and sustainable practices differ accordingly. Internal factors with a business influence the

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adoption of sustainable practices (Darnall et al., 2010, p. 1074; Cormier & Gordon, 2001).

However, being a part of the local community, whale watching firms are also influenced by numerous external factors. Factors such as socio-cultural norms, marine species, and regulations, can influence sustainable practices within a context,(Kornilaki & Font, 2019, p. 185; Amerson & Parsons, 2018, p. 1363). Also, a sustainable practice adopted in a particular context may not necessarily be adopted the same way in another context. Hence, for comparing the sustainable online practices of Vancouver Island and New Zealand whale watch operators, respectively, the following sub-hypotheses are developed.

H5a: Contributions to the local communities differ in two contexts.

H5b: Few operators promote education and research on their websites and tours.

H5c: Environmental friendly practices of operators differ in the two contexts.

CHAPTER 3 METHODOLOGY

This section describes the study context, paradigm, and the research approach used for answering the research questions. The research is best explored through an interpretive research paradigm, using a qualitative methods approach to investigate the sustainable online practices of the whale watching operators in Vancouver Island and New Zealand through their websites.

3.1 Study setting

The location of this study is Vancouver Island, British Columbia, and New Zealand. Vancouver Island is known best for watching the killer whales due to its unique location. Primarily whale watching from Vancouver Island happens from three main areas namely, Haro Strait near Victoria, Johnstone and Queen Charlotte straits on northeast Vancouver Island, and west coast of Vancouver Island near Tofino and Ucluelet (DFO, n.d.-a). According to the Department of Fisheries and Oceans Canada, there are about 164 charter and cruise operators which offer wildlife-based tours. Out of which 120 primarily focus on whale watching, 60 of them solely focus on whale watching in British Columbia (DFO, n.d.-a, para. 1), and approximately 29 operators offer whale watching off Vancouver Island (Hoyt, 2001, p. 29).

New Zealand is also a prime whale watching destination, much like British Columbia. Whale watching and dolphin watching tours operate from nine locations across north and south islands approximately (O'Connor et al., 2009, p. 186). Nearly half of all whale and dolphin watching in New Zealand takes place from two locations, Kaikoura and Akaroa (O'Connor et al., 2009, p. 189). Kaikoura is a well-known whale watching community.

3.2 Interpretive Research Paradigm

Websites are a way through which whale watching operators share their lived experiences. Interpretive research paradigm understands the perspectives of the subject under

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study (Mackenzie & Knipe, 2006). For this research, the subject of study is the websites. Twenty-one Vancouver Island whale watching operators (70%) classify as a family-owned business. They offer details about their business practices and the services provided. Information such as tour details, pricing, booking and cancellation policy, type of boat, marine wildlife, sustainable practices, local culture, public accessibility, promoting local businesses, among others is available.

3.3 Qualitative Research Approach

Qualitative research is a form of interpretive research (Stake, 2010). It involves the human dimension and the reasons why things occur in a particular way. The data collected and analysed in qualitative research is about people's lived experiences (Creswell, 2014; Saldana, 2011), as compared to the quantitative approach. Influencing pro-environment behaviour requires to study populations, their values, and attitudes. Qualitative research can help give insight into such details by exploring the lived experiences (Stake, 2010). So qualitative research approach seems most appropriate for the text of operators websites.

3.4 Content Analysis

Content analysis is a widely used qualitative research approach technique (Kim & Kuljis, 2010; Hsieh & Shannon, 2005; Marshall & Rossman, 1999, p. 97). It is an analysis technique through which different forms of communication data can be categorised in codes to establish themes (Saldana, 2011; Hsieh & Shannon, 2005, p. 1278). Content analysis works with either qualitative or quantitative data (Elo & Kyngäs, 2008; www.writing.colostate.edu). There are three types of content analysis; conventional, directed, and summative (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). The conventional content analysis defines codes during analysis and is less structured (Hsieh & Shannon, 2005, p. 1279). Directed is more structured than conventional,

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with codes being pre-determined (Hsieh & Shannon, 2005, p. 1281). Finally, summative focus on discovering a range of meanings a word can have. Each research approach technique offers a set of opportunities and challenges (Hsieh & Shannon, 2005, p. 1283). The advantages and disadvantages of content analysis are further listed.

The content analysis approach is clinical. It takes less time compared to the other traditional ways of data collection, such as interviews, surveys, and focus groups (Kim & Kuljis, 2010). Content analysis is an unobtrusive research method, and data collected is without disrupting the subjects under study. Compared to web content analysis, other qualitative research techniques such as online surveys may be subject to participant bias (Milner, Doherty, Winter, & Rice, 2017). As firms try to over-report their environmental-friendly practices (Delmas & Burbano, 2011).

Furthermore, the collection of data can be a tedious process, especially as time can be a crucial resource in research. The content analysis helps to collect data economically (Kim & Kuljis, 2010), which helps save time in the overall research process. Another advantage of this research approach is that it helps to analyse large amounts of text (Benfield & Szlemko, 2006). Which can further help researchers spend less time to collect data and more time to analyse it. Even with these advantages, there are a few disadvantages to this approach.

Content analysis of websites has its limits as not all whale watching firms report their sustainability practices on the websites. Sustainability issues concerning the change in cetacean behaviour due to vessel noise disturbance and fuel emissions (Seely et al., 2017; Houghton et al., 2015) can be challenging to understand by website content analysis. Other methods such as observations, or using technical instruments may be required. One of the potential challenges in website content analysis is the dynamics of the content itself (Kim & Kuljis, 2010, p. 370). That

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limits the potential of undertaking longitudinal studies on such data, as online content is changeable with a few keystrokes. Even though collecting a large amount of data is an advantage, the data collected is usually unstructured (Kim & Kuljis, 2010, p. 369). Organising such data into themes can be a tedious process. This research utilises a directed content analysis technique. The following section elaborates the data collection technique for the study.

3.5 Data collection

Primary data from the whale watch operators' website is collected. According to Hox and Boeije (2005), primary data is the data collected for particular research which uses methods suitable for that research (p. 593). An internet-based data collection helps to reduce the time taken in the process of collecting data (Benfield & Szlemko, 2006), as all data is readily available. To explore the environment-friendly practices and their presence on operators, primary data from operators' websites is collected. There are two well-known whale watch operator associations, Pacific Whale Watch Association (PWWA) and North Island Marine Mammal Stewardship Association (NIMMSA) on Vancouver Island. Together they hold 23 of the British Columbia whale watch operators.

Out of 23 operators, 16 are on Vancouver Island. Moreover, an internet search using a mix of keywords such as whale watch operators, British Columbia, Vancouver Island, Tofino, whale tours, was done. These keywords were applied on search engines such as Google and Yahoo and metasearch engine such as Tripadvisor. This was done to make sure operators who are not part of the two associations do not get left out. There were approximately 14 whale watch operators who were not part of either PWWA or NIMMSA. These operators were majorly from areas such as Tofino and Ucluelet. In total, 31 whale watching operators' websites were found offering whale watching tours on Vancouver Island. During the data collection, one of the

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operators shut down its operations, so a total of 30 whale watching operators' websites is studied. Appendix 1 mentions the names of those whale watch operators.

Furthermore, a study conducted by Sun and Lück, (2015) had collected New Zealand whale and dolphin watch operators' website data. Secondary data from their research was checked and updated and later used for comparison with Vancouver Island operators websites. Appendix 2 mentions the operator names and websites from New Zealand. Out of the original 64 websites analysed in the previous study, a total of 54 New Zealand whale and dolphin operators websites were found active. The data from all the websites, Vancouver Island and New Zealand, were collected and analysed in January and February 2019, respectively.

3.6 Data analysis

Phases	Description
1. Familiarising with data	Reading and re-reading the data and noting down initial codes
2. Generate initial codes	Coding interesting data across entire data set, collating data relevant to each code
3. Searching for themes	Collating codes into themes, gathering data relevant to each potential theme
4. Review themes	Check if themes work in relation to coded extracts from phase 1 and 2
5. Defining and naming themes	Generating clear definitions and names for each theme
6. Report	Final analysis connecting back to literature and research questions.

The thematic data analysis procedure is utilised to interpret the data. According to Clarke and Braun (2017), "thematic analysis is a method of identifying, analysing, and interpreting patterns of meanings or themes with qualitative data." The themes drawn are in conjunction with the steps mentioned by Braun and Clarke (2006). Table 1.3 illustrates the steps in the thematic

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data analysis procedure.

Initial themes for Vancouver Island operators' websites is drawn using the distinctions made in the online New Zealand study. It helped in defining the textual data of Vancouver Island websites and provided a structure for further analysis. Later on, the themes were changed and drawn in conjunction with the hypotheses formed in the literature review. Data is analysed and segmented into six broad categories. These are environment-friendly practices, eco-labels, operations, regulations and traffic, local community contribution, and education and research. The secondary data from the New Zealand study was updated for comparison purposes. Further on, a comparison table for the two regions was constructed based on attributes segmented in the New Zealand study. It was done to ease the comparison between the two contexts.

Table 1.3 Thematic analysis steps

Note: Reprinted from Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa

CHAPTER 4 RESULTS

Table 1.4 Results of Vancouver Island Operators Websites

Environment friendly practices	Eco-friendly fuel: Eleven operators claim to use bio-fuel, fuel efficient vessels	40%
	Public accessibility: Eighteen operators mention public parking or/and public transport information	60%
	Online booking: A greater number, twenty four operators offer online registration and booking	80%
	Marine waste discharge: Only two operators state they discharge marine oils sustainably	6.6%
	Marine debris cleaning: Three operators claim to take part in debris cleaning activities	10%
	Reduce plastic use: Eight promote plastic ban and provide information on reducing plastic use	26.6%
Eco-label	Three operators are certified Green label businesses	10%
Regulations and Traffic	Whale watch regulations: Twelve operators mention whale watching guidelines	40%
	Pricing for congestion: Four operators mention off-season, custom tour pricing	13.3%
Monitoring	Monitor Company's operations: Five whale watch operators which account for monitor and evaluate their business operations	16.6%
Local community contribution	Local vessels: Ten operators mention that they operate with locally built vessels	33.3%
	Promote local businesses: Large part of the operators promote other local businesses such as accommodation, restaurants	73.3%
	Local culture introduction: More than half, eighteen operators introduce local culture on their websites	60%
	Hire local staff members: Half (15 nos.) of the operators hire staff members from local community	50%

Table 1.4 Results of Vancouver Island Operators Websites

Education and research	Observed wildlife listed: All operators focus to provide marine wildlife information in their respective locales	100%
	Education on tours: Education on tours is a top priority with all operators promoting educational learning	100%
	Donations: Twenty operators charge conservation fee on their tours and contribute to different initiatives	66.6%
	Research: Little over half of the operators assist in or are part of a research organisation	53.3%

This section highlights the results of the data collected from whale watch websites of both regions. It lists the outcomes according to the hypotheses enumerated in chapter 2 literature review. First, it will present the results from the data of Vancouver Island operators’ websites (n=30) in conjunction with the hypotheses H1 to H4. Second, it will display the data updated from the New Zealand operator websites (n=54) in a tabular form. Finally, it will present a results comparison between both the contexts according to the final hypothesis H5. All the data from the websites were collected and analysed in January and February 2019, for Vancouver Island and New Zealand websites, respectively.

4.1 Results of Vancouver Island Operators

Hypothesis 1: Few operators mention environment friendly practices.

The environment-friendly practices of Vancouver Island operators include public accessibility, online booking systems, marine waste discharge, marine debris cleaning, and reduce plastic use. Among the environment-friendly practices noted, public accessibility information and online booking systems were the highest, with 60% and 80% of the operators utilising it, respectively. Practices such as adopting eco-friendly fuel (40%) for operations and reducing plastic use (26.6%) came in after that. Remaining environmental friendly practices,

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marine waste discharge (6.6%) and marine debris cleaning (10%) included limited adoption from the operators. The following section reports all of these environment-friendly practice results.

Eco-friendly fuel. A total of eleven operators (40%) claim to use eco-friendly fuel or eco-friendly vessels during their tours. The interpretation of eco-friendly fuel is between operators using biofuel to power up their boats and the type of engine which promotes fuel efficiency. For example, Springtide Charters clearly states that they run their vessels on biofuel. Other operators such as 50°North Adventures and Campbell River Whale Watching mention that they have eco-friendly engines which exceed Environment Protection Agency standards. One interesting observation on Eagle Wing tours is that it plans to convert to hybrid and or electric engines.

Public accessibility. Eighteen operators (60%) offer public accessibility information on their websites. This information includes a mix of parking information, public transport, and driving instructions. Vancouver Island is connected to the mainland by air or sea at Victoria, Nanaimo, and Tofino primarily. It is difficult for all the locations to be well connected directly. Private bus operators offer services to connect locations on the Island. Driving directions, google map locations, and parking information is more prevalent than public transport on websites. Discovery Marine Safari in Campbell River, for example, mentions that it can be reached through availing services of a private bus service operator, and also offers driving directions and parking information.

Online booking system. Twenty-four Vancouver Island operators (80%) provide online booking system facility on their websites. Operators offer booking calendar with tour availability to ease customer bookings. It further helps to reduce unnecessary queues onsite along with the paper stacks for the whale watch firms.

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Marine waste discharge. Only two operators (6.6%) give out information about marine fuel, oil discharge. Eagle Wing Tours states, “All of our used oil for the motors gets recycled at an appropriate facility.” Springtide mentions that all the maintenance work on their boats happens in the environment-friendly boatyard to limit the release of toxins in the environment.

Marine debris cleaning. Only three or 10% of the total operators state that they clean marine debris in their natural environment. For example, the Vancouver Island Whale Watch reported that they carry a plastic removal kit on their vessels to remove marine debris.

Reduce plastic use. Eight operators, which accounts for 26.6%, promote plastic ban and provide information on reducing single plastic usage on their websites. Campbell River Whale Watching, another operator, uses reusable containers for all its packed lunches.

Hypothesis 2: Few operators have an eco-label.

The adoption of eco-labels among Vancouver Island whale watching operators is still in the early stages. Only three Vancouver Island whale watching operators (10%) displayed an eco-label or a green business certification on their websites. Even though three operators posted eco-label(s) on their websites, there is no one single eco-label employed unanimously. Out of the three operators, Campbell River Whale Watching and Orca Spirit Adventures, hold Green Tourism Canada Silver and Gold label respectively. Ocean Outfitters and Orca Spirit Adventures mention Vancouver Island Green Business Certification (VIGBC). Green Tourism Canada is an eco-label for tourism and hospitality businesses across Canada (www.greentourismcanada.ca) whereas VIGBC is a label that acknowledges firms on Vancouver Island, which reduce their environmental impacts (www.vigbc.ca).

Hypothesis 3: Few operators report information on treatment of whales and dolphins.

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Treatment of whales attributes to the management practices used by operators as part of their operations while observing cetaceans. These are performed to reduce the negative impacts on cetacean populations. These categories are whale watch regulations and pricing for congestion. Both of these categories remain essential for the treatment of whales.

Whale watch regulations. It is confounding to note that more than half of the Vancouver Island operators do not offer information about whale watching regulations on their websites. Twelve operators mention whale watching guidelines accounting for 40% of the total operators. Few operators who are part of voluntary organisations such as Pacific Whale Watch Association (PWWA) or North Island Marine Mammal Stewardship Association (NIMMSA) mention their interpretation of whale watching guidelines. For example, Eagle Eye Adventures suggests detailed vessel guidelines for boaters, paddlers, and viewers. It also displays a graphic description of vessel approach and speed for viewing. Few operators such as Discovery Marine Safaris, Jamie's Whaling Station and Adventure Centres follow the regulations endorsed by the Department of Fisheries and Oceans.

Pricing for congestion. Four operators (13.3%) mention pricing for congestion, pricing during the off-season. It is not surprising considering the majority of operators do not run their tours in the off-season. One operator, Adventures by HIP, mentions lower pricing for their offseason tours and the other three mention differential pricing by offering or clubbing different products together. It is not a true reflection of how operators create pricing, keeping the congestion in mind. Majority of operators mention a fixed price for their operating season and do not have an offseason pricing.

Hypothesis 4: Few operators monitor their company's performance.

Five operators monitor, evaluate their company's operations. It shows that there is a lack

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of adoption of monitoring among Vancouver Island whale watching operators (16.6%). Only one operator, Eagle Wing Tours, provides detailed information about their company’s performance. They also mention to measure their carbon footprint and provide a carbon reduction strategy in their annual sustainability report. Three operators monitoring their performance overlap with eco-labels. For example, Ocean Outfitters states, “Carbon neutral since 2015”, and that they offset their carbon footprint with Offsetters, a carbon-management solution company that helps companies across Canada offset their environmental impact (www.offsetters.ca). Though only one operator mentions a detailed annual sustainability report, the remainder operators are contributing by measuring their environmental impact through offsetting carbon footprint or by applying for eco-labels.

4.2 Results of New Zealand whale watching operators

Table 1.5 Updated Results of New Zealand Operators Websites

Ecotour Operator: Twenty Six mention they offer ecotours, which accounts for 48.1% of all New Zealand operators		48.1%
Ecolabel: Thirty Six operators display Qualmark logo on their websites		66.6%
Purchasing and Operations	Purchasing local products: Eight operators buy local products	14.8%
	Environment friendly products: Thirteen operators state that they use biodegradable products	24%
	Renewable energy: Three operators mention that they utilise renewable energy	5.5%
	Promoting energy efficiency: Twelve operators indicate they practice energy efficiency	22.2%
	Monitoring: Ten operators inform that they monitor their operations	18.5%
Staff Management	Hiring local staff: Nine hire staff members from the local community	16.6%

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Table 1.5 Updated Results of New Zealand Operators Websites

	Staff training: Nine provide training for their staff members	16.6%
Education	Wildlife introduction: All operators introduce information on wildlife observed in their respective ecosystem	100%
	Education during tours: More than half, thirty one, claim to offer education to customers on their tours	57.4%
Waste Control	Waste reduction: Sixteen operators mention they reduce their waste	29.6%
	Reusing: Twelve operators mention they reuse their waste	22.2%
	Recycling: Nineteen operators are committed to recycle their waste, which is relatively higher than other waste control measures	35%
Conservation Work	Cultural respect and preservation: Sixteen operators introduce local heritage information	29.6%
	Donations: Twenty two operators make contributions for conservation work through donations, which is relatively higher	40.7%
	Cleaning up shores: Nine operators mention they clean up beaches	16.6%
	Planting trees: Eight operators state they plant trees for conserving their natural environment	14.8%

Out of the total 64 websites of New Zealand operators listed by a previous study (Sun & Lück, 2015), ten websites were found to be obsolete due to reasons such as not available, no longer offering services, or closed down operations. The data for the remainder 54 websites was updated in February 2019 and collated under Table 1.5. The following section will mention the results based on the findings. Furthermore, section 4.3 includes the comparison between the two contexts and the results for the final hypothesis H5 of this study.

4.3 Comparison Results between Vancouver Island and New Zealand operators

Most of the attributes between Vancouver Island and New Zealand operators were found to be similar and comparable. However, there were few attributes which overlapped, and few were missing in both the data, respectively. These were attributes such as promote local business, information on public accessibility, use of a local vessel, for New Zealand operators and waste control measures, planting trees among Vancouver Island operators. Table 1.6 compiles the general comparison data of the two regions. The comparison table is created, keeping Vancouver Island operators’ attributes as the base. Further, this section mentions the results for the comparison hypothesis between Vancouver Island and New Zealand whale watching operators.

Hypothesis 5 Different context influences adoption of different sustainable practices.

Hypothesis 5a: Contribution to the local communities differ in the two contexts.

Contributions towards the local community were found to be different in the two contexts. The overall contributions found in the Vancouver Island operators results were higher than the New Zealand operators results. There are four categories in local community contributions, namely, use of locally built vessels, promotion of local businesses, introduction to local culture, and hiring staff from the local community. Each of the contributions to the local community individually compares further.

Table 1.6 Comparison Results Vancouver Island and New Zealand operators

Headings		Vancouver Island	New Zealand
Regulations		40%	48.1
Local Community contribution	Local vessels	33.3%	12.9%
	Promote local businesses	70%	50%
	Local culture information	60%	44.4%

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Table 1.6 Comparison Results Vancouver Island and New Zealand operators

	Hiring local staff	50%	16.6%
Education and Research	Wildlife introduction	100%	100%
	Education during tours	100%	57.4%
	Donations	66.6%	40.7%
	Contribute to research	53.3%	15.4%
Environment friendly practices	Public Accessibilty	60%	44.4%
	Online registration	80%	70.3%
	Planting trees	16.6%	14.8%
	Environment friendly products	20%	24%
	Eco-label	10%	66%
	Waste Control		
	Waste Reduction	23.3%	29.6%
	Recycle	20%	35%
Reusing	20%	22.2%	
Marine debris cleaning	10%	16.6%	
Promote Energy Efficiency	40% (only fuel efficiency)	22.2%	

Local vessels. The number of Vancouver Island operators whose tours are carried out on locally built vessels is ten (or 33.3% of the total). Few operators, for example, West Coast Aquatic Safaris, Five star whales, and BC Tours mention that their boats are purposely designed and locally built keeping in mind the local ecology.

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For the New Zealand operators, a statistic for purchasing local products is available on websites. There were eight operators (14.8%) who acknowledge purchasing locally sourced products as part of their operations. Operators employ the use of local products while preparing meals for their customers. For example, Abel Tasman Charters contributes to the local economy by preparing meals from local produce. Furthermore, Akaroa Dolphins and Abel Tasman Wilson's Experiences state that they use local products wherever possible. Purchasing local products ensures operators' commitment to contribute to the local community. The statistic for the use of locally built vessel was added and updated in the comparison results table. There were seven New Zealand (12.9%) operators confirming to using locally made boats for their tours. In comparison, both these statistics were found to be lower than the one found for Vancouver Island operators.

Promote local businesses. Nearly three-quarters of the Vancouver Island operators (73.3%) offer information about other local businesses such as accommodations, restaurants, or activities. For example, Aboriginal Journeys in Campbell River provides links to local accommodations, other adventure excursions, sport fishing, and first nations information. Furthermore, Mackay Whale Watching in Port McNeil and Remote Passages Marine Excursions in Tofino also offers links to accommodations such as bed and breakfasts, hotels, and campsites. Promote local business contribution was added and updated in the New Zealand results section for comparison. Surprisingly, a similar trend was observed, with half of New Zealand operators (50%) choosing to promote local businesses such as accommodations, activities, and restaurants. It infers that the whale watching companies understand the relevance of tourism and its multiplier effect for their respective local communities. New Zealand operators results were found to be lower in comparison to the Vancouver Island operators.

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Local culture introduction. Eighteen Vancouver Island whale watching operators offer local cultural and historical information on their websites, which is 60% of the total operators. For example, The Whale Centre in Tofino gives an account of the Tofino region by describing the history of initial settlements by the First Nations, British and Spanish. It further mentions the current prevalent surf culture of Tofino. Another operator, Aboriginal Journeys, offers a complete section on the Laichwiltach people's history and local west coast history.

New Zealand operators' data included local cultural respect and preservation as part of the conservation work initially. However, the initial statistic (29.6%) increases to 44.4% when cultural respect and preservation switch to local culture introduction for comparison purposes. Few New Zealand operators give detailed accounts of Maori cultural heritage. Some such as Dive! Tutaka and Back to Nature Tours have embedded local Maori values like Manaakitanga and Kaitiakitanga into their business operations.

Hire local staff. Half of the Vancouver Island operators (50%) mention that they hire staff members from its local community. Few operators include detail qualifications of their staff members, whereas only a few mention the names and positions of their crew members. BC Whale Tours in Victoria, for example, state that its crew consists of captains, marine biologists, and local naturalists.

New Zealand study included hiring local staff (16.6%) along with staff training (16.6%) under staff management. New Zealand operators participate in training programs or certifications while few mention that they train their employees in local history. For example, Fullers Great Sights caters to educating their guides about the local culture and history. Akaroa Dolphins mentions that its' staff is trained under Project Jonah marine mammal media program to reduce the risk of emergencies. Few other operators such as Seal Swim Kaikoura and Abel Tasman

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Charters mention that their skippers are SMART operator certified. Though New Zealand operators hire local staff and offer staff training, both statistics were significantly less than Vancouver Island (50%) operators. It conveys the fact that Vancouver Island operators are more involved with their local community in hiring local staff members.

Hypothesis 5b Education and research differ in the two contexts.

It is incredible to note that all operators understand the relevance of education. Whale watching businesses depend on marine animals, understandably that all operators (Vancouver Island and New Zealand) introduce local marine wildlife through their websites, respectively. Interestingly, there is a disparity for education during tours. All Vancouver Island operators (100%) mention they offer education as part of their tours compared to little over half of the New Zealand operators (57.4%). These results, along with a contribution to research and donation, are discussed below.

Observed wildlife listed. All Vancouver Island whale watching operators (100%) provide an introduction to the wildlife observed in their respective marine ecosystems. Some include a detailed description of the wildlife whereas some merely list it on their website. For example, Sooke Whale Watching mentions glimpses of wildlife in their website gallery, whereas Vancouver Island Whale Watch offers detailed information such as scientific name, description, behaviour on the marine wildlife and ecosystem. One interesting observation is that Vancouver Island operators use blogs to promote their whale watching tours to give a realistic understanding of trips to the prospective participants.

There was similar information on wildlife observed for the New Zealand whale watching operators. Though the information primarily differed because of the different species found in New Zealand and Vancouver Island, respectively. Some operators have detailed information on

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their websites whereas some lists the wildlife available. For example, Fox II Sailing in Akaroa mentions that customers may come across Hector dolphins, Yellow-eyed Penguins, New Zealand fur seals, Albatross, among others. Jucy Cruise gives a full description of wildlife observed in the Milford Sound marine ecology. Also, few operators such as Dolphin Encounter Kaikoura connect their website to social media platforms to showcase the wildlife.

Education on tours. Education is a vital part of the whale watching industry. It increases awareness about the pristine natural settings among participants. Unlike wildlife introduction, a little over half (57.4%) of the New Zealand operators mention that they provide education on tours, compared to all Vancouver Island operators (100%). Few New Zealand operators use education on tours as a tool to create awareness among customers about potential impacts on marine wildlife. For example, Seal Swim Kaikoura mentions that one of its objectives for the year 2018 and 2019 is to create awareness about the threats to oceans by single-use plastics among customers, employees, and community. Furthermore, Back to Nature Tours mentions that through they inform customers about local wildlife disturbances, and contribute to minimising the impacts on wildlife.

Donations. Twenty operators Vancouver Island operators (66%) charge a conservation fee. Vancouver Island operators direct the conservation fee towards environmental initiatives and non-governmental organisations, respectively. Operators contribute to initiatives or organisations in their local environment. For example, Pacific Salmon Foundation, Centre for Whale Research, Raincoast Education Society, are few of the initiatives Vancouver Island operators choose to contribute. One operator also mentions that it has adopted a killer whale at the Vancouver Aquarium. Vancouver Island operators provide the most towards donations among all other practices.

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Compared to that, twenty-two New Zealand operators (40.7%) contribute to conservation through donations. This practice is more as compared to cleaning up beaches and cultural preservation among New Zealand operators. Donations occur through two ways, financial contributions to various conservation organisations such as the Department of Conservation, Kaikoura Ocean Research Institute, and second, donation of time and labour. For example, Dolphin Blue has adopted Hector's dolphin under the WWF New Zealand's Adopt a Hector's dolphin project. Another operator, Aurora Charters donates to Stewart Island Raikura Community and Environment Trust (SIRCET) for reintroduction and survival of native birds. Back to Nature Tours donates 100 labour to Sinclair Wetlands, home to 60 different bird species.

Research. Sixteen Vancouver Island operators (53.3%) mention that they contribute to research non-monetarily through relaying photographic evidence of sightings, collecting samples, adopting a marine mammal, and writing guidelines. For example, Ocean EcoVentures mentions that it offers photographs taken on tours to local and international researchers. Another operator, Orca Spirit Adventures Group, collects data on killer whale behaviour and movement patterns along with fecal samples for diet analysis. Few operators focus on a particular species' research such as Prince of Whales which focusses on Southern Resident Killer Whale research. Also, Dan, the owner of Springtide Charters, has contributed by writing vessel guidelines for viewing multiple Vancouver Island marine mammals.

In comparison, eight New Zealand operators (14.8%) contribute to research. Primarily these operators collect data and share it with the government organisations such as the Department of Conservation for further research in the whale watching industry. For example, Glass Bottom Boat Whitianga contributes research data to the Department of Conservation and Orca research trust.

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Hypothesis 5c Environment-friendly practices differ in the two contexts.

Environment-friendly practices between both regions are different. The data on few environment-friendly practices had to be updated to make a legible comparison in both the contexts. For New Zealand operators, public accessibility and online booking, whereas, for Vancouver Island practices such as environment-friendly products and planting trees is updated. Further to that, marine debris cleaning in Vancouver Island was compared to beach cleaning in New Zealand data. For the remaining environment-friendly practices, there was limited information or information overlapped. The following section presents the results for each of the environment-friendly practice.

Public accessibility. Eighteen Vancouver Island operators (60%) offer information on public accessibility. Public accessibility information includes information on public transport and parking for the convenience of customers. Compared to the provincial capital, Victoria, which is well-connected by air, surface, and water, other locations on Vancouver Island such as Tofino, Campbell River, Tofino, Ucluelet, Nanaimo, have limited connections. Operators offer information on public transport connections, driving directions, and parking. For example, Archipelago Wildlife Cruises in Ucluelet offers driving directions from Vancouver and Nanaimo, along with a map showing its location and parking spots.

This information was not present in the earlier New Zealand study and updated in the New Zealand results for comparison. There were twenty-four New Zealand operators (44.4%) who offer public accessibility information. Few operators give public transport details with shuttle connections, whereas others mention driving directions and parking information. For example, operators such as Kaikoura Kayaks and Dolphin Encounter include information on intercity shuttle and train connections to reach their businesses, respectively. Though operators

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from both the context provide public accessibility information, it was evident that Vancouver Island operators have adopted this practice more than their New Zealand counterparts.

Online booking system. Online booking systems exhibit a similar trend across both contexts. Vancouver Island was found to be slightly higher. Eighty percent of Vancouver Island operators compared to seventy percent of New Zealand websites. It denotes that both regions have adopted technology and resort to online function as part of their booking procedures. Bookings systems displayed information such as booking dates with a calendar and price per person.

Planting trees. Operators plant trees to reduce carbon footprint. There were similar trends in both contexts. Though for New Zealand few operators also mention practising planting trees in their local environments. This environmental friendly practice was updated in the Vancouver Island operator's data. There were five Vancouver Island operators (16.6%) that offset their carbon footprint through partnering with various organisations or initiatives. For example, Ocean Outfitters offsets its carbon footprint by contributing to the Darkwoods Carbon Project in Selkirk mountains and Quadra Island Forestland Conservation Project. Another operator, The Whale Centre, supports the restoration of the Clayoquot Sound ecosystem.

In New Zealand results, eight operators (14.8%) confirmed to offset carbon footprint through partnering with carbon offsetting initiatives. Operators plant trees to conserve their natural habitat and protect the local biodiversity. For example, E-Ko Tours replants native trees in Marlborough Sound under the Totoras for Totaranui program. A similar step is undertaken by Back to Nature Tours in Sinclair Wetlands. Few other operators such as Dolphin Blue and Wings Over Whales Kaikoura mention that they offset their carbon footprint by planting trees.

Using environment-friendly products. The adoption of environment-friendly products

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among Vancouver Island operators was found to be less compared to the New Zealand operators. Six Vancouver Island operators (20%) mention they use environment-friendly products. For example, Eagle Wings Tours has partnered with a company known as Soap Exchange to source 100% biodegradable products. Other operators such as Campbell River Whale Watching and Prince of Whales mention they use phosphate-free and ocean safe cleaning products, respectively. For New Zealand, there were thirteen operators (24%) that specify to use biodegradable products in their operations. New Zealand Operators such as Dolphin Blue, Back to Nature Tours, and Private Discovery Tours state that they use biodegradable and non-toxic cleaning products for their vehicles. Both the numbers are relatively less and must include more participation to minimise the toxic released in the environment.

Eco- label. There were three Vancouver Island operators (10%) that had eco-labels, eco-certification for their businesses. These labels were, Green Tourism Canada and Vancouver Island Green Business Certification (VIGBC). Compared to that, thirty-six New Zealand operators (66%) display a single eco-label, Qualmark, on their websites. Qualmark is a national quality assurance eco-label that validates New Zealand tourism industry businesses who are trying to impact their environment positively (www.qualmark.co.nz). The prominence of the Qualmark logo on websites recognises the fact that New Zealand operators are committed to principles of conservation. There are various levels in Qualmark eco-label such as gold, silver, bronze, visitor activity endorsed, and star rating for accommodations. Majority operators were found to Qualmark Silver or above the level which conveys their commitment to their local environment and marine ecosystem.

Also, Tourism New Zealand owns the Qualmark eco-label, whereas any government or tourism body do not own VIGBC and Green Tourism Canada. Vancouver Island operators do

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not have a uniform eco-label structure which they could confer to, unlike their New Zealand contemporaries. Vancouver Island operators are still at an early adoption phase with limited operators choosing to adopt an eco-label. The comparison indicates that New Zealand tourism department is much more advanced in designing a single eco-label which can be used by tourism businesses across New Zealand. Adoption of a single eco-label gives credibility and positive representation to New Zealand businesses on a global level.

Waste control. Eight operators in Vancouver Island (26.6%) promote plastic ban and provide information on reducing plastic usage. New Zealand operators, on the other hand, present information on overall waste control through waste reduction (29.6%), reusing (22.2%), and recycling (35%) respectively. Waste control measures are divided into three; waste reduction, recycling, and reusing. The data for Vancouver Island operators include the three waste control measures. However, these measures overlapped with other environment-friendly practices such as monitoring, online booking, done by Vancouver Island operators. The following section mentions each of the waste control measures.

Seven Vancouver Island operators (23.3%) mention they reduce their waste. Only one operator, Orca Spirit Adventures, mentions that they proactively manage their waste, and monitor water consumption, and vessel-use to minimise waste. Other operators offer limited information towards this environment-friendly practice. Some of the information offered overlaps with other sustainable practices. For example, Prince of Whales mentions that they reduce the paper wastage by switching to an online booking system. Another operator, Eagle Wings Tours, suggest that it reduces corporate waste by recycling plastics, cardboard. Compared to that, New Zealand operators offer information on waste control. Sixteen New Zealand operators (29.6%) state that they take steps to reduce their waste. Few operators state policies,

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programs, and values which drive their waste control efforts in the local environment. For example, Dive! Tutaka and Back to Nature Tours list Kaitiakitanga as a core value, which means guardianship and protection. Further to that, limited operators across both contexts offer marine waste discharge information. Pumping fuel effluent at land-based facilities presented similar trends for Vancouver Island operators (6.6%) and New Zealand operators (7.4%) respectively.

Six Vancouver Island operators (20%) mention they recycle products or use recycled products. For example, Ocean Outfitters mention that they have tied up with composting solution Synergy initiative. Another operator, Prince of Whales, specifies that it uses post-consumer recycled paper in its operations. There were nineteen New Zealand operators (35%) commit to recycling waste. Most of these operators mention that they collect rubbish from their tours and recycle it. However, few of them suggest that they make a conscious effort to separate their waste and also teach it to their customers. For example, Abel Tasman Wilson's Experiences follows the Department of Conservation's environmental care code, and mention that it collects litter from Abel Tasman National Park and rubbish from its lodges, and transports it to a recycling facility.

Similar to recycling, there were six Vancouver Island operators (20%) mention to reuse material in their daily operations. For example, Campbell River Whale Watching mention that it packs trip lunches in reusable containers. Another operator, Eagle Wings Tours, has gone a step ahead and provided all its staff members with a stainless steel water bottle to put an end to plastic bottle use. Twelve New Zealand operators (22.2%) claim to reuse items or apply alternative methods to reduce their wastage. Having items which can be used more than once reduces the chance of purchasing it again, which is the case for a single-use item. Some operators show innovative examples of reusing items similar to Vancouver Island. For example, Southern

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Discoveries and Marlborough Sound Adventure pack its lunches in reusable boxes. Another uses milk tokens as tickets instead of regular paper tickets. Abel Tasman Aqua Taxi mentions it uses rainwater harvesting techniques to reuse water for cleaning its vessels. Reusing material curbs the increase in waste production of the operators.

Marine debris and Beach cleaning. Marine debris and beach cleaning in Vancouver Island results compare to cleaning up shores in the New Zealand data results. Three Vancouver Island operators (10%) mentioned that they practice debris cleaning in their local marine environment. For example, Jamies Whaling Station and Adventure Centre supports Clayoquot Cleanup, which helps in marine habitat restoration through a debris removal program in the Clayoquot Sound. For New Zealand, there were nine operators (16.6%) who practised shore cleaning. Some operators take the initiative on themselves while some assist the Department of Conservation in cleaning the beaches. For example, Real Journeys mentions it supports coastal cleanups by providing it vessel and staff. Another operator, Akaroa Dolphins, said it is committed to a safe and clean harbour and removes rubbish on their own. New Zealand operators' contribution towards this environment-friendly practice was slightly higher than Vancouver Island operators.

Promote energy efficiency. Results for Vancouver Island operators data indicate that operators primarily adopt practices to make their vessels efficient by using eco-friendly fuel and fuel-efficient engines. Twelve Vancouver Island operators (40%) mention using bio-diesel, low emission, and less noisy engines to reduce their environmental impact. For example, operators such as Five Star Whale Watching and Sooke Whale Watching mention they use fuel-efficient engines with low emissions and noise for their boats. Another operator, 50°North Adventures, mentions “The 2018 season sees us powered with the worlds most advanced, environmentally

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and eco-friendly outboard engines on the market today”.

Compared to that, New Zealand operators choose to promote overall energy efficiency in their operations by reducing energy consumption, conserving water, and making their vessels fuel-efficient. The data for eco-friendly fuel or vessel was challenging to compare, considering New Zealand operators focussed on promoting overall energy efficiency (22.2%), rather than just fuel-efficiency. For example, White Island Tours lists a comprehensive energy management policy, waste management, and water management policies. Other operators such as Real Journeys and Fullers Great Sights mention applying technological innovation on the engines to boost fuel efficiency and reduce oil consumption. Further to that, three New Zealand operators utilise renewable energy sources for their operations. For example, Carino Sailing and Dolphins and The Sea Kayak company mention using wind energy on their tours. Even though the relative number for New Zealand operators (22.2%) is lower than Vancouver Island operators (40%), the actual adoption of this practice seems more for New Zealand as operators adopt overall energy-efficient practices overall across operations.

CHAPTER 5 DISCUSSION

There are four subsections to the discussion section. First, it will discuss the key findings from the results section. Next, it will present the limitations of the study. Then, it will provide recommendations for future work. Finally, it will offer policy conclusions for operators and the local government and tourism bodies.

5.1 Key findings

Hypothesis 1 Environment-friendly practices

Hypothesis 1 suggested that a few operators mention environment-friendly practices. There are various environment-friendly practices adopted by Vancouver Island whale watching operators, few more popular than the other. So the results found, partially support this hypothesis.

Eco-friendly fuel. Whale watching operators need to consider the type of fuel and the engine they use. Using eco-friendly fuel, bio-fuel, or fuel-efficient boats reduces the risks to marine wildlife. Senigaglia et al. (2016) stated that often cetaceans change their behaviour near whale watching vessels, and exposure to fumes adversely affects the health of whales (Lachmuth, Barrett-Lennard, Steyn, & Milsom, 2011). Majority of Vancouver Island operators (60%) did not report information about fuel efficiency boats or eco-friendly fuel. This observation is surprising, as transport at the destination or to the destination is a significant contributor to the carbon emissions in tourism (Lenzen, et al., 2018). Fuel emissions originating from whale watching vessels is the highest contributor to carbon footprint in the whale watching industry (Anderson & Beddoes, 2018). Options of alternative fuel vehicles in cars is already available. However, the adoption of such technology depends on the interpersonal influence between businesses (Jansson et al., 2017). Technological interventions may be required to

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explore solar or alternative fuel options. Also, operators can take the onus on themselves by adopting the use of bio-fuel, fuel efficiency practices, and promote them among their peers to reduce the effects on the environment.

Public accessibility. Transportation in tourism is among the most significant contributors to greenhouse gas emissions (Lenzen, et al., 2018). Promoting public transport connections to their areas, operators can influence visitors to make environment-friendly choices even before the actual whale watching tour commences. Limiting carbon emissions levels can eventually lead to a reversal in emission trends in destinations (Gössling, Scott, Hall, Feh, & Oe, 2015, p. 210). By merely offering local transport information operators indicate vested interest in reducing greenhouse emissions caused by transportation. Further to that, there may be some locations which have limited, no connection through public transport. For those locations, operators may choose to offer driving directions, maps, and parking information to assist the visitors. Public accessibility information offered by whale watch operators will enable prospective participants in making informed choices about their travel behaviour.

Marine waste discharge. Operators must practice effluent marine waste discharge at designated facilities. Well equipped boatyards can help avoid disposal of marine waste into the marine ecosystems. Also, operators can discard oils, lubricants, and washing boats at boatyards efficiently. Byrnes, Buckley, Howes, & Arthur (2016) mention that it is simpler to control discharges from identifiable sources (p. 383). Though operators may be aware and practising, less than one-tenth Vancouver Island operators (6.6%) include this information on their websites. Operators must report information on what kind of chemicals they use for cleaning their boats, and how they dispose of lubricants and oils. It will help inform community stakeholders about their environment-friendly practices.

Marine debris cleaning and Reduce plastic usage. Plastics is a well-known issue in the oceans. It has been noted that the degradation of plastics in the oceans can take several hundred years (Avio, Gorbi, & Regoli, 2017, p. 2). Even after decomposition, the remaining microplastics can find its way in the marine food chain and affect marine ecosystems (Avio et al., 2017; Plastic debris in the ocean, 2015). Swallowing of plastics by cetaceans mistakenly for food is dangerous and can lead to their death. Even though this information is well known, it was surprising to find majority operators did not participate in beach cleaning or emphasise on plastic ban. Progressing towards plastic-free tours promptly and educating participants about its harmful effects in oceans is not a costly occurrence for operators. Operators can implement, promote, and participate in such initiatives easily.

Hypothesis 2 Eco-labels

Hypothesis 2 suggested few operators have an eco-label, and the results found in the Vancouver Island operators' data support it. Eco-labels provide information and influence individuals to undertake responsible environmental behaviour (Gössling & Buckley, 2016; Chen, 2011). However, the development of eco-labels is still at an early stage in Vancouver Island. Lack of acceptance by the Vancouver Island operators (10%) indicates a different perception of eco-labels benefits. Since most operators (90%) choose not to introduce them, the discussion expands further to investigate factors that influence adoption.

The lack of adoption of the eco-labels attributes to factors such as eco-label cost, perceived benefits, and influence on tourist demand (Karlsson & Dolnicar, 2016; Esparon et al., 2014; Chen, 2011; Buckley, 2002, p. 197) for whale watching businesses. One time or annual costs associated with eco-labels increase business expenses for the whale watching operators, and such costs discourage adoption of an eco-label. Businesses generally weigh the benefits of

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an eco-label from a visitors perspective (Esparon et al., 2014; Buckley, 2002, p. 197). The perceived benefits of eco-labels vary as per the visitor characteristics (Esparon et al., 2014), and the decision to adopt it relies on whether or not the visitors are willing to pay more for it (Buckley, 2002, p. 197). Furthermore, Karlsson and Dolnicar (2016) mention that eco-labels influence demand in specific niche tourist segments and not all the tourists' segments.

Segregating tourists segments may not be ideal for the whale watching businesses, as focusing on a niche segment can impact their economic sustainability, considering whale watching is a seasonal business.

With all the above variables, it is difficult for operators to measure the actual benefits of eco-labels. However, the adoption of an eco-label indicates that operators are committed to employing environmental practices in sustainability. For Vancouver Island, intervention from tourism organisations may be required to promote eco-label adoption among the whale watching operators.

Hypothesis 3 Treatment of whales

Hypothesis 3 suggested a few operators report information on the treatment of whales. Treatment of whales among Vancouver Island operators divides into, whale watching regulations (40%) and pricing for congestion (13.3%). The results found supported this hypothesis, with less than half operators adopting both the practices.

This discernible evidence leads to believe that regulations are not clear, and hence, operators do not report them on websites. The rapid growth in the industry has led to an increase in the number of whale watching boat incidents. Soundwatch Boater Education Program (SBEP), vessel management and public education outreach program on Vancouver Island, reported an increase in boat incidents from 398 to 2621 during the period of 1999 to 2015 (Seely et al.,

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2017). By including regulations on their websites' operators would confer that they are aware and follow them diligently. It will induce less pressure on the whale-watch operators from visitors to get closer to the cetaceans (Mallard, 2019, p. 197). Communicating regulations can help operators set the right expectations for participants (Parsons & Brown, 2017, p. 130) and influence the compliance of guidelines effectively (Mallard, 2019, p. 192). One solution can be to associate legal underpinnings with the regulations (Parsons, 2012).

Whale watch operators must adhere to regulations at all the times, voluntary or enforced. Sometimes local communities lack necessary resources to enforce regulations (Wynveen, Wynveen, & Sutton, 2015; Parsons, 2012, p. 4). However, involving other stakeholders in designing operator based education programs which encourage effective regulation compliance can be part of the solution. For example, The Sustainable Marine Mammals Action in Recreation and Tourism (SMART) operator program is one such initiative created through a partnership between commercial boat operators and the Department of Conservation for the protection of marine mammals of New Zealand (www.doc.govt.nz). This program educates the operators on responsible behaviour around marine wildlife. Creating such a program for Vancouver Island operators may prove to be beneficial.

Administering the increase in boat traffic and crowding in marine environments is imperative. Boat traffic and congestion have been reported as a cause of change in cetacean behaviour (Seely et al., 2017). Cetacean sighted in a particular area is visited by different whale watching operators (as they connect through a radio network). A recent report by SBEP indicates an increase in boat traffic from 63 number of boats in the year 1999 to 96 in the year 2015 (Seely et al., 2017). High demand for wildlife experiences inadvertently increases the impact of whale watching on wildlife populations (Stamation, 2008, p. 211; Shore, 1999). Crowding of whale

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watching boats around cetaceans can lead to unsatisfactory visitor experiences (Bentz, Rodrigues, Dearden, Calado, & Lopes, 2015; Avila-Foucat, Sánchez Vargas, Frisch Jordan, & Ramírez Flores, 2013, p. 16). Furthermore, crowding increases distress levels in cetacean behaviour, which inadvertently affects their livelihood, for example, in the case of Southern Resident Killer Whale (SRKW) populations of Vancouver Island. The 78 SRKW individuals (Fisheries and Oceans Canada [DFO], n.d.-b), are followed by more boats in the peak seasons (Seely et al., 2017; Erbe, 2001). Establishing ecological carrying capacity can be an excellent indicator for local marine ecosystems (Ma et al., 2017).

Hypothesis 4 Monitoring Performance

Hypothesis 4 suggested a few operators monitor their company's performance. The results support this hypothesis as limited numbers of Vancouver Island operators (16.6%) adopt this practice. Having a structure such as an environmental management system may prove to be beneficial for operators. It would promote monitoring operations and thereby improve the productivity of the whale watching businesses.

Environment management systems (EMS) is a strategy employed by businesses to reduce environmental impacts. The concern for environmental impacts has led to an increase in the application of these voluntary systems by businesses to evaluate their environmental performance (Merli & Preziosi, 2018, p. 4532; Ziegler, & Nogareda, 2009, p. 885; Morrow & Rondinelli, 2002). The adoption of an EMS can depend on a firms' internal capacity, values, environment policy along with stakeholder pressures, and the cost of implementation (Darnall et al., 2010; Darnall & Edwards, 2006, p. 301; Halkos & Evangelinos, 2002; Nakamura, Takahashi, & Vertinsky, 2001). Micro-small firms with limited capital potential may be susceptible to such costs. The limited numbers of operators monitoring their operations verify this claim. In the

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context of Vancouver Island, such strategies must be applied by whale watching operators to improve their business performance. Businesses can choose between a formal certified or a formal uncertified EMS structure (Melnyk et al., 2003). Monitoring operations can improve business performance, thereby increasing the productivity of the operators. Furthermore, by reporting their performance and initiatives on their websites, firms can increase the credibility of their business (Braam, Uit de Weerd, Hauck, & Huijbregts, 2016).

Hypothesis 5a Local community contributions.

Hypothesis 5a suggested that contributions to local community differ in the two contexts. There are four categories to operators local community contribution; use of local vessels, promote local businesses, local culture introduction, and hire local staff. The results found to support this hypothesis. The contributions of whale watching operators from both contexts, Vancouver Island and New Zealand, and the adoption levels found were different.

Local populations are important stakeholders for whale watching businesses. Coastal whale watching locations draw visitors to unique natural settings in rural areas with limited job opportunities. Practices such as hiring local people, promoting local culture, and assisting other local businesses, create opportunities for the local economy. Involvement of local populations directly or indirectly helps them obtain benefit from whale watching (Chandel & Mishra, 2016, p. 147; Das & Chatterjee, 2015). It was evident in both contexts that the whale watching businesses actively contribute to their local communities, respectively, with Vancouver Island operators being more active in adopting local community contributions compared to their New Zealand counterparts. According to Curtin (2003), operators can improve their local business linkages and reduce their financial leakages by sourcing locally made products (p. 190). By involving other local businesses in their operations, operators can further add value to the local

community. It can help local populations embrace change and not look at whale watching as a disruption to the current lifestyles.

Hypothesis 5b Education and Research

Hypothesis 5b suggested that education and research differ in the two contexts. Education and research divide into wildlife introduction, education on tours, donations, and contributions to research. Even though the adoption levels of these practices were different, most of the practices in the two contexts were similar. The results partially support this hypothesis.

Environmental stewardship can help protect local marine environments in coastal communities. Whale watch operators can assess the non-use values of marine ecosystems through environmental stewardship practices (Roman et al., 2018). Conservation can be through education, donation, and research. It is incredible to note that both contexts understand the role of education, and introduce marine wildlife on their websites, Vancouver Island (100%) and New Zealand (100%) respectively. Education is an indispensable component of the whale watching industry. Learning about natural ecosystems is essential to influence pro-environmental behaviour. Whale watching trips last around three to four hours and are used as a platform to educate participants about the local marine ecosystems (Lück, 2015). Through tour interpretation programs operators can share the knowledge about marine life with participants.

Further to that, whale watching vessels can be utilised for research opportunities and to collect data on cetaceans (Currie et al., 2018). Environmental stewardship measures the willingness of operators to donate time and money towards marine conservation (Roman et al., 2018, p. 170). Vancouver Island operators' practices include donations to Salmon conservation, endangered southern resident killer whale, and New Zealand includes donations to the protection of Hector dolphins, time and labour for reforestation. Vancouver Island operators are active in

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monetary donations, whereas New Zealand operators are active in donating money, time, and labour. The trends observed were pleasing with operators from both contexts being active in donating and contributing to research. Balance of environmental stewardship practices helps to achieve the desired results of conservation in respective marine environments (Yagatich, Galli Robertson, & Fisher, 2018).

Hypothesis 5c Environment-friendly practice differences

Hypothesis 5c suggested that environment-friendly practices differ in the two contexts. The results partially support this hypothesis. Majority of environment-friendly practices found in both contexts is comparable. Out of the eight environmental-friendly practices, Vancouver Island operators were more active in three. These are the adoption of public accessibility information (60%), online booking (80%), and planting trees (16.6%). Compared to them, New Zealand operators are more active in adoption of environment-friendly products (24%), eco-label (66%), waste reduction (29.6%), recycling (35%), reusing (22.2%), and marine debris cleaning (16.6%). Notably, New Zealand operators focus on overall energy efficiency and waste management and Vancouver Island operators focus on fuel efficiency.

Arguably, micro-small firms have limited impact on the environment. However, their collective impact on the environment is notable (Redmond, Walker, & Wang, 2008, p. 282). The results show that there is a need for a comprehensive waste management strategy among Vancouver Island whale watching operators. Interventions such as separating waste for recycling, discarding single-use items, and practising effluent discharge at proper waste disposal facilities can help reduce waste in the whale watching operations. Business managers, owners, need to adopt appropriate waste management strategies. Measuring direct benefits can influence further adoption of waste management practices and ensure commitment to the local

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environment (Redmond et al., 2008, p. 280-282).

Furthermore, it is noted that the adoption of waste management techniques provides a competitive advantage to businesses (Redmond et al., p. 284). Also, the adoption of strategies to recycle oil, paper, and steel can generate other income for businesses (Redmond et al., 2008, p. 283). So fundamentally, waste management interventions are applied and adopted by whale watching operators.

Energy efficiency is not monitored correctly. Energy efficiency is not considered as valuable as an increase in revenue generation and visitor satisfaction (Coles, Dinan, & Warren, 2016, p. 407). The results from Vancouver Island operators resonate this claim. The data found primarily focus on adoption of interventions such as the use of bio-fuel, fuel-efficient engines, which promote fuel efficiency. In comparison, New Zealand operators go a step further and adopt practices to boost overall energy efficiency. These include practices such as reducing energy consumption, conserving water, and making their vehicles fuel-efficient. As most Vancouver Island operators (83.4%) do not monitor their performance, it is understandable that there is less adoption of the practice. Businesses need to monitor their energy data and imbibe this practice in their operations before investing in higher and must costlier energy solutions such as renewable energy and environmental management systems (Coles et al., 2016, p. 406).

5.2 Limitations

Limitations for this research revolved primarily around the data collected and analysed. To effectively interpret the results of this research, it is vital to acknowledge these limitations. Following are the limitations of the research.

Information on the whale-watch operators was collected online. Department of Conservation in New Zealand registers operators undertaking whale and dolphin viewing under

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the marine mammal viewing permit. Compared to that, there is no governmental organisation registering whale watching operators in Canada. Also, the whale watching guidelines in British Columbia are voluntary and do not require a permit from the government. So getting the data online for operators was difficult.

Vancouver Island operators who do not have websites are not included and hence not a part of this study. Also, later into the research, it was found that few operators in Port McNeil, Vancouver Island got registered with NIMMSA. These operators are not a part of this research. Even though there is proximity to the United States of America (USA) whale watching operators, as they operate in the same locations to the Canadian counterparts, this study excludes USA operators. Furthermore, operators from Vancouver, Steveston located on mainland British Columbia are left out.

Secondary data for New Zealand operators is from a previous study done in New Zealand by Sun and Lück (2015). In the process of updating the results, obsolete websites (ten nos.) found were removed. However, there may be a possibility that few operators got added since 2014. Those New Zealand operators are not known and not included in this research.

This online study analyses the text of the whale watch operator websites. No operator was personally approached or contacted by the researcher. Even though it is unobtrusive research, there may be a variance between the attributes mentioned on websites and actual practices being employed by the operators in both contexts. Some of the information compared overlapped or the data seemed insufficient for a general comparison. For example, energy efficiency and waste control measures were not possible for a general comparison with Vancouver Island operators' data. Energy efficiency had limited information as Vancouver Island operators primarily focussed on fuel-efficiency whereas New Zealand operators focussed

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on overall energy efficiency in their operations. Also, waste control measures in New Zealand operators' results overlapped with other practices such as monitoring in Vancouver Island results.

Lack of updated statistics influenced the data analysis. Whale watching attracts thousands of visitors each year and is a prominent part of the Vancouver Island tourism industry. However, the last reported statistics were in the year 2008 by a study conducted by O'Connor et al. (2009). Tourism Vancouver Island was contacted for updated statistics on the Vancouver Island whale watching industry. However, there were no exclusive statistics found for whale watching. Analysing government published statistics and operators' website data could have helped draw assertions to operators' practices and make the results more credible.

This research did not employ the use of statistical tests. For further discussion, on whether the differences between Vancouver Island and New Zealand whale watching operators are considered significant, statistical tests are required. It is difficult to answer with the descriptive statistics.

Finally, this research covers commercial whale watch operators. As there is no licensing related to whale watching, anyone who owns a boat can access cetaceans in the wild. Accessing such kind of data online is difficult. Thereby, this research excludes the recreational boat owners who have access to the cetaceans populations in the context.

5.3 Recommendations for future research

Adoption of environmental management systems depends on various barriers for micro-small whale watching businesses. Further research through interviewing the owners, managers can highlight barriers which influence adoption decisions in the whale watching firms.

Further studies can use online comparisons across some other contexts, regions, and

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countries, alternatively, between mature and new whale watching destinations. For example, online comparison between the east and west coast of Canada, Canada and Australia. Such comparisons will advance discussions on how the whale watch operators function and how the contributions adopted by them in other contexts contribute to the sustainability of the whale watching industry.

This is a descriptive study which studies the sustainability practices of whale watching firms through website content analysis. Statistical tests to evaluate significant difference in indicators are not applied. Future studies can apply statistical tests for conducting similar comparative studies in different contexts. Such tests can help establish whether or not there is a significant difference between the sustainability practices of operators when comparing two separate contexts.

5.4 Policy conclusions for stakeholders

Whale watch operators.

To ensure business sustainability, whale watching operators must successfully monitor their operations. Operators to ensure that they adopt and monitor sustainability initiatives as part of their daily operations. For example, initiatives such as fuel-efficiency, energy consumption, and water conservation, to be monitored effectively. Monitoring operations will help evaluate the business standing and improve business performance. It will further enable operators to set benchmarks for their businesses. Also, operators must participate in reporting the adopted sustainability initiatives. Corporate sustainability reporting on the websites will create a credible business image and give a competitive edge to the business.

To ensure environmental sustainability, whale watching operators must contribute towards environmental stewardship in the local context. Use environment strategies and

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interventions to influence the protection of the local natural environment and marine ecosystems. Separating waste for recycling, banning the use of plastics, cleaning marine debris, will contribute to protecting the local environment. Also, education is fundamental for environmental stewardship. By offering detailed information on observed marine wildlife before and on the tours, operators can educate participants about the local marine environments.

Promote environmentally responsible travel behaviour among participants. Operators can set the right mindset for tourists by offering information on public accessibility through their websites. Information such as how to reach the business location through public transport, parking availability, and google maps, can help participants make informed choices about their mode of travel. Creating awareness about public accessibility can help contribute to reducing tourism carbon footprint levels. Also, operators need to set an example in pro-environmental behaviour by including information on websites regarding whale watching regulations to ensure that they regulate effective compliance.

Promote and participate in the local community to preserve local culture. Operators can improve their contributions to the local economy by working with local community stakeholders. It can be in terms of promoting other local businesses, hiring local staff, and integrating the use of locally sourced products in the operations. It can help strengthen their position in the community and also create local community linkages.

Local tourism and government organisations.

To have commercial operators, recreational boat users, anyone wishing to undertake whale watching applies for a permit. The need to regulate and monitor whale watching guidelines is pivotal for the sustainability of the industry. Setting up a fee will provide flexibility in funding for the local governmental organisations, as they can apply the proceeds towards

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monitoring operators or solely for the conservation of the local environment. By having a permit system, government organisations can collect statistics about the whale watching industry. These statistics help establish carrying capacity within marine ecosystems, and reduce the potential negative impacts incurred by the increasing number of whale watching boats.

Aim to convert the local community into a sustainable community. It can be done by promoting environmental stewardship practices as a single aim across all stakeholders. DMOs can act as a bridge and work with the whale watching industry and other local stakeholders to promote environmental stewardship within the local communities. Involving local stakeholders can bring a diverse view to a prevalent issue in the local context. Educating and organising environmental drives can enhance civic engagement and can further contribute to the conservation goals within local communities (Yagatich et al., 2018, p. 441). DMOs can organise annual stakeholder meetings, community training programs, and environmental clean-up drives, to help combat local community issues.

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CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES

Appendix 1: Websites of Whale Watching Operators in Vancouver Island

Serial no.	Name of whale watching operators in Vancouver Island	Official websites
1	50 North Adventures	www.50northadventures.com
2	Aboriginal Journeys	https://www.aboriginaljourneys.com
3	Adventure Quest tour	www.adventurequestcanada.ca
4	Adventure Tofino Wildlife tours	www.adventuretofino.com
5	Adventures by HIP	www.adventuresbyhip.com
6	Archipelago cruises	www.archipelagocruises.com
7	BC Whale Tours	www.bcwhaletours.com
8	Campbell river Whale watching	www.campbellriverwhalewatching.com
9	Discovery Marine safaris	www.adventurewhalewatching.com
10	Eagle Eye Adventure	www.eagleyeadventures.com/contact/
11	Eagle Wing Tours	www.eaglewingtours.com
12	Five Star Whale Watching	www.5starwhales.com
13	Jamies Whaling Station and Adventure Centres	www.jamies.com
14	Mackay Whale watching	www.whaletime.com
15	North Island tours	www.northislandtours.ca
16	Ocean Ecoventures	www.oceanecoventures.com
17	Ocean Outfitters	www.oceanoutfitters.bc.ca
18	Orca Spirit Adventures Group	www.orcaspirit.com
19	Prince of Whales Whale Watching	www.princeofwhales.com
20	Remote passages marine excursion	www.remotepassages.com
21	Salt Spring Adventure Co Ltd.	www.saltspringadventures.com
22	Seasmoke whale watching	www.seasmokewhalewatching.com
23	Sooke Whale watching	www.sookewhalewatching.com
24	Sidney Whale Watching	www.sidneywhalewatching.com
25	Springtide Charters	www.victoriawhaletours.com
26	Sub tidal adventures	www.subtidaladventures.com
27	The Whale Centre	www.tofinowhalecentre.com
28	Tofino Whale watching	www.tofinowhales.com

CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES

Serial no.	Name of whale watching operators in Vancouver Island	Official websites
29	Vancouver Island Whale Watch	www.vancouverislandwhalewatch.com
30	West Coast Aquatic Safaris	www.whalesafaris.com

Appendix 2: Websites of whale and dolphin watch operators in New Zealand

S. No.	Name of whale watching operators in New Zealand	Official websites
1	Abel Tasman Aqua Taxi	www.aquataxis.co.nz
2	Abel Tasman Charters	www.abeltasmancharters.co.nz
3	Abel Tasman Sea Shuttle limited	www.abeltasmanseashuttles.co.nz
4	Abel Tasman Wilson's Experiences	www.abeltasman.co.nz
5	Akaroa Dolphins Limited	www.akaroadolphins.co.nz
6	Auckland Dolphin & Whale Safari (2005) Limited	www.exploregroup.co.nz
7	Aurora Charters	www.auroracharteres.co.nz
8	Back to Nature Tours New Zealand Limited	www.backtonaturetours.co.nz
9	Beachcomber Cruises (2006) Limited	www.beachcombercruises.co.nz
10	Black Cat Group 2007 Limited	www.blackcat.co.nz
11	Cave Cruzer Adventures	www.cavecruzer.co.nz
12	Canoes and Kayak Taranaki	www.canoeandkayak.co.nz/contact-us
13	Carino Sailing & Dolphin Adventures	www.sailingdolphins.co.nz
14	Catlins Mohua Park Eco Accommodation (Catlins Scenic and Wildlife Tours)	www.catlins-ecotours.co.nz
15	Collingwood Safari Tours Limited	www.farewellspit.com
16	Cruising Milford Sound Limited	www.jucycruise.co.nz
17	Dive! Tutkaka Limited	www.diving.co.nz
18	Dolphin Blue	www.dolphinblue.co.nz
19	Dolphin Encounter	www.dolphinencounter.co.nz
20	Dolphin Seafaris (NZ) Limited	www.nzdolphin.com
21	E-Ko Tours	www.e-ko.nz
22	Fox 11 Sailing Adventures	www.akaroafoxsail.co.nz
23	Fullers Bay of Islands Limited	www.dolphincruises.co.nz
24	Glass Bottom Boat Whitianga Limited	www.glassbottomboatwhitianga.co.nz

CONTENT ANALYSIS OF WHALE WATCH OPERATORS WEBSITES

S. No.	Name of whale watching operators in New Zealand	Official websites
25	Hollyford Valley Walk Limited	www.hollyfordtrack.com
26	Kahu Kayaks	www.kahukayaks.co.nz
27	Kaikoura Aero Club	www.airkaikoura.co.nz
28	Kaikoura Helicopters	www.worldofwhales.co.nz
29	Kaikoura Marine Tours	www.kaikouramarinetours.co.nz
30	Kaikoura Kayaks	www.kaikourakayaks.co.nz
31	Kaiteriteris Boat Charters	www.sealimousines.com
32	Marahau Sea Kayaks	www.msk.co.nz
33	Marlborough Sounds Adventure	www.marlboroughsounds.co.nz
34	Moeraki Fishing Charters	www.moerakifishingcharters.co.nz
35	Monarch Wildlife Cruises Limited	www.wildlife.co.nz
36	Ngati Koata Trust	www.koata.iwi.nz
37	Nugget View & Kaka Point Motels	www.catlins.co.nz
38	Onuku Farm Hostel	www.onuku.co.nz
39	Pelorus Tours Limited	www.pelorustours.co.nz
40	Private Discovery Tours	www.rdtours.co.nz
41	Rakiura Charters Limited	www.rakiuracharters.co.nz
42	Real Journeys Limited	www.realjourneys.co.nz
43	Ruggedy Range Wildness Experience	www.ruggedyrange.com
44	Sails Ashore/ Talisker Charters	www.sailsashore.co.nz
45	Seal Coast Safari	www.sealcoast.co.nz
46	Seal Swim Kaikoura	www.sealswimkaikoura.co.nz
47	Southern Discoveries	www.southerndiscoveries.co.nz
48	The Sea Kayak Company (2013) Ltd	www.seakayaknz.co.nz
49	Whale Watch Kaikoura Limited	www.whalewatch.co.nz
50	White Island Tours Ltd	www.whiteisland.co.nz
51	Wild Earth Adventures (2003) Ltd	www.wildearth.co.nz
52	Wilderness Guides Marlborough Sounds	www.wildernessguidesnz.com
53	Wilderness Lodge Lake Moeraki	www.wildernesslodge.co.nz
54	Wings Over Whales Kaikoura Ltd	www.whales.co.nz

