CUSTOMER PERSPECTIVE ON ENVIRONMENTAL PROGRAMS IN HOTELS: THE COMPARATIVE CASE STUDY OF FINNISH & RUSSIAN CUSTOMERS

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ABSTRACT

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Rapid development of tourism worldwide has driven the implementation of environmental programs by tourist accommodation businesses. The environmental program is not only the way to protect the environment but to develop strong relationships with company’s customers, improve customer experience and enhance sales. That is why it is important to know customer opinions on environmental programs and how their presence influences consumer behavior and decision-making process. This research paper investigates the opinions of customers of Finnish hotel Scandic Patria regarding the environmental program in different contexts. Special attention is put towards investigation of variations in opinions of Finnish and Russian customers by mean of empirical research which is conducted quantitatively by using questionnaire method. The results of the research have demonstrated that the opinions of Finnish and Russian customers towards the environmental program don’t differ fundamentally but there are some important distinctions. The research contributes to the theory since it defines the place of the environmental program in consumer decision-making process of selecting a hotel and establishes relationships with other influencing parameters. From practical viewpoint, the research results can significantly help properties’ owners to undertake justified managerial decisions towards the environmental programs and communicate environmental messages to customers more efficiently.
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1 INTRODUCTION

1.1 Research background and research gap

Since recent times, tourism industry has been showing rapid growth, providing tourism-based economy countries with revenue, creating job opportunities, boosting infrastructure, foreign cultural exchange. However, mass tourism development with tourist accommodation service companies has resulted in such issues as environmental degradation, biodiversity loss, climate change, ozone layer depletion, cultural heritage losses and economic dependence (UNESCO, 2014). Thus, the actions are needed from companies to become more environmentally friendly.

On a positive note, there is an increasing interest towards environmentally sustainable development among tourist accommodation businesses nowadays. A strong indicator of such interest is a popularity of the environmental programs and the accelerated intentions of hotels to promote the environmental sustainability within society. However, many of tourist accommodation service companies implement the environmental practices without proper understanding of the strategic objectives and the outcomes on how the environmental programs can influence one of hotel’s most important stakeholder group – customers, customer experience, as well as hotels’ revenues and other essential business parameters (Berezan et al., 2014). Many green investments are now considered to be a standard aspect of hotels’ operations, regardless of cost or customer satisfaction considerations (Bruns-Smith et al., 2015).

Thus, following this rise in tourist accommodation service sector’s interest in environmental programs, there is the practical interest and importance to study influence of the environmental programs on customers - how the environmental programs influence consumer decision-making process when they choose a hotel in different contexts, is the customer pro-environmental behavior a reliable predictor for environmental programs’ importance in accommodations, how many customers are actually aware of environmental initiatives undertaken by hotels, which environmental measures are important and unimportant from a customer’s perspective, as well as other important parameters, such as perception of prices in hotels with the environmental programs. Every tourist
accommodation service business must possess the information on customers in order to run environmental programs efficiently and cost-effectively.

In contemporary academic literature, there has already been scientific researches on customer perception of the environmental program in hotels based on various customer contexts – gender, age, education, type of tourist accommodation preferred and more (Bruns-Smith et al., 2015; Susskind & Verma, 2011). Those studies have demonstrated that the implementation of the environmental program in hotels increase overall guests’ satisfaction and generally guests are interested to participate in the environmental programs, and some customers would even agree to pay premium to support the environmental programs, even though customers don’t normally select hotels based on their environmental programs. However, there has been very few studies comparing the perception of the environmental programs by guests coming from different countries, and the current paper aims to close this research gap.

The relationships between the environmental program and customer perception may be dependent on such customer-related context as country of origin – for some customers the environmental program can be advantageous, for some detrimental, other customers may be indifferent to the environmental program in a hotel. Thus, tourist accommodation service companies that have guests from different countries with various backgrounds and personal trails, motivations and needs in services - just as the current research’s case company, Scandic Patria - should pay close attention to this customer attribute when implementing the environmental program and communicating it to customers. Therefore, the deeper study of environmental program’s perception by customers in various contexts is needed.

This cross-country comparable study is interesting in terms of academia because it will provide better understanding of consumer purchasing behavior and attitudes to environmentally sustainable initiatives of the hotel’s customers coming from two neighboring but significantly different in all ways countries – Finland and Russia. From the practical viewpoint, the tourist accommodation service companies’ managers will receive valuable information on customer patterns of behavior and will undertake decisions regarding the environmental program based on reliable and valid information. These
academic and practical importance and not sufficient investigations of the environmental program’s topic based on cross-country approach justify the reasons of the thesis topic’s choice.

1.2 Research objectives and questions

In the contemporary world constantly changing towards sustainable development, tourist accommodation service companies tend to follow tendency and implement environmental programs into their business practices. However, the implementation of the environmental program in hotels is complicated and can be successful or unsuccessful depending on many factors including how the environmental programs are perceived by customers. The environmental program is partly about sacrificing comfort and convenience for the sake of the environmental wellbeing (Robinot & Giannelloni, 2010; Sheehan, 2007; Ahn & Pearce, 2013). Therefore, the environmental program in hotels is rather controversial theme and the balance must be found by hotels.

The aim of the thesis is to investigate the customer perception of environmental program’s importance in decision making process when selecting a tourist accommodation, customer awareness on environmental measures, importance of environmental measures, and customer propensity to pay premium for having the environmental program in different contexts. Thus, independent variables for the research are the nationality of the customers, other consumer socio-demographic parameters and consumer travel-related parameters, and the strengths of consumer pro-environmental behavior.

The study is based on the single case company and the study’s primary objective is to answer the following research question: How does the implementation of environmental programs by hotels influence customer decision-making process of choosing a tourist accommodation service company? In order to answer the main research question, the following five research sub questions must be answered:

1. RQ1: How does the presence of environmental programs compared to other motivation factors (location, price, interior, services, promotion, reward program, brand name, reputation) influence consumer purchasing decision?
2. **RQ2:** How does the consumer pro-environmental behavior influence environmental program’s perceived importance among other hotel features by Finnish and Russian customers?

3. **RQ3:** How the environmental program among other motivation factors is perceived by hotel customers with different socio-demographic and travel-related profiles?

4. **RQ4:** What are the environmental measures with the highest perceived importance and value from hotel customers’ viewpoint?

5. **RQ5:** Does the presence of the environmental program make customers ready to pay premium price for accommodation services? If yes, how much?

Thus, answering those five research sub questions would help to figure out the answer for the main research question.

### 1.3 Research strategy and organizing the study

The research is made around three notions (concepts) – environmental aspect of sustainable development, tourist accommodation service sector and consumer behavior – consumer decision-making process. The research starts with the literature review. Thus, in the literature review chapter, the general information about sustainable development is provided, followed by environmentally sustainable development and contemporary environmental issues in tourist accommodation service sector and environmental measures and best environmental practices. Lastly, the theoretical background to consumer decision-making process in selecting a tourist accommodation is provided. The information from previous relevant studies drawing consumer attitude towards environmental programs in accommodations underwent analysis to propose research questions’ hypotheses.

The methodology chapter outlines the research framework used for the current study with the theoretical framework, the research questions, corresponding hypotheses derived from secondary information and previous studies, and the research scope and limitations. Next, the chapter provides comprehensive information on the research case accommodation
company – Scandic Patria and information on research respondents – customers. The strategy used in the research is a survey. The information is collected with a questionnaire. The research questions’ design process and variables measurement are described in the chapter. The relationship between the environmental program's perception and customer characteristics is examined using statistical quantitative methods and techniques. Information on research reliability and validity of data is critically estimated in the paper.

The results and analysis chapter aim to demonstrate the outcome by methods of descriptive statistics, correlation, t-test, chi-square test and ANOVA test. The chapter provides comprehensive and visualized outcomes and discuss the outcomes by comparing them with existed and previously done scientific researches’ outcomes and by explaining the findings that were not initially expected. Lastly, based on the obtained results, recommendations are provided to the case company and other companies to whom the results might also be applicable on how to implement and run the environmental program in the most efficient way. The conclusion is summarizing the research findings and provide possible directions for further researches on the chosen area.

### 1.4 Research scope and limitations

The current study is focused on investigating the Scandic Patria Hotel’s environmental program’s influence on Russian and Finnish consumers’ decision-making process on hotel choice in of Lappeenranta, Finland. The Scandic Patria was chosen as the case company because, aside from having Finnish customers, the hotel also attracts many Russian customers due to the location close to the state border. The research has been carried out using survey method. 67 Russian and Finnish customers have been surveyed. The survey respondents mainly belong to the middle class and have middle level of income and can afford travelling and staying in the 4-star hotel. People represent different age groups and travel mainly with family or friends. Since the customer surveying stage was held during the weekends, the researcher managed to collect answers mainly from leisure and shopping travelers, which has made it not possible to compare answers of leisure travelers with other groups of travelers, e.g. business, education or health travelers. Regarding the theoretical framework, it considers consumer decision-making process but doesn’t disclose
information processing mechanism and some other variables which might influence consumer decision-making process when choosing a hotel.
2 LITERATURE REVIEW

This chapter intends to provide the analytical overview of the scientific literature on sustainable development, environmental strategies and customers’ opinions with the reference to the tourist accommodation service sector.

2.1 Environmental sustainability in hotels

The paragraph aims to examine sustainable development science and determine its place and relevance for tourist accommodation service sector. The first subparagraph defines sustainable development through its three aspects and its transformation over time. The second subparagraph considers contemporary sustainable development challenges in tourist accommodation service sector with the emphasis on the environmental aspect.

2.1.1 Theoretical background of sustainable development

In the early 1980s, the dilemma between human development, population growth and environment has encouraged the emergence of the concept of sustainable development (Our Common Journey, 1999). The World Commission on Environmental Development has defined sustainable development as “development that meets the needs of the present without comprising the ability of future generations to meet their own needs” (WCED, 1987). This classic definition of sustainable development is concentrated on intergenerational equality in terms of resources and ecosystem services access. Nevertheless, sustainable development is not only about conservation of resources, sustainable development is more about dynamic and adoptive changes towards making contemporary development practices less detrimental (Thiele, 2013).

Sustainable development incorporates three major aspects: economic, environmental and social (WCED, 1987). In this meaning, economic aspect refers to economic growth, profit, job creation, ability to pay taxes and salaries. Environmental aspect supports ecosystem wellbeing, biodiversity, resources conservation. Social aspect stays for social equality, good human health, reduced hunger and poverty, proper access to medication and other social services. (Kemp & Martens, 2007). The major goal of sustainable development is to
find right balance between economic, environmental and social dimensions (WCED, 1987). Sustainable development can only be achieved when economic, environmental and social systems are not contradictory to each other.

Figure 2.1 Sustainable development “triple bottom line”.

Even though the concept of sustainable development was framed only thirty years ago, the desire of people to live sustainably exists since the time immemorial. Leslie Paul Thiele (2013) in his book “Sustainability” provides historical advancement of sustainable development: from single and local issues, such as deforestation (Carlowitz, 1713), landscapes and watersheds degradation (Marsh, 1864), wildness loss (Muir, 1874) through understanding of humankind as a part of interconnected ecological web (Leopold, 1949) the humanity faced such important issues as population growth (Ehrlich, 1968; Meadows at. al, 1972) environmental degradation as the result of technological development and increased consumption (Commoner, 1971; Brown, 1981), climate change (UNCED, 1992) and social wellbeing (UNCSD, 2012) on the global scale.

Following the history line of sustainable development, clearly, the society transformation is accelerating at exponential rate, the sustainable development issues are becoming more complex and global, the scope expands from local environmental management to multidimensional and interconnected fields – society, economy, technology, ecology, culture, government. These evidences confirm the fact that the transition towards sustainable development is inevitable, sustainable development requires attention and involvement of and every individual and organization on local, national and global levels, including business sector.
Currently, the following sustainability development goals are declared by United Nations as an orienteers for the year 2030: to eliminate poverty and hunger, ensure good health and well-being, provide quality education, achieve gender equality, ensure affordability of clean water and sanitation for all, provide access to energy sources, promote economic growth and decent work opportunities, build infrastructure, sustainable industrialization and innovation, decrease inequalities, create sustainable and safe cities and communities, promote responsible production and consumption, reduce impact on climate change, conserve water resources, ensure sustainability of ecosystem and biodiversity, guarantee peace, justice and strong institutions, strengthen partnership for the goals achievement (United Nations, 2015).

2.1.2 The environmental issues in hotels

The World Tourism Organization definition of sustainable tourism is based on the definition of sustainable development from Brundtland Report (WCED, 1987). According to UN & WTO (2005), sustainable tourism development is development that “meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems”.

The Green Hotels Association (2014) defined green hotels as “environmentally friendly properties whose managers are eager to institute programs that save water, save energy, and reduce solid waste—while saving money—to help protect our one and only earth”. Accommodation facilities are known for their dramatic environmental impact. Tourist accommodations place a burden on the planet by making negative impact on such important categories are energy and water consumption, air quality, solid waste and hazardous emissions (Stottler, 2015).

Energy

Accommodation facilities consume immense amount of energy from non-renewable resources. There are many reasons why energy should be reduced in consumption. Since the total world energy demand is projected to increase by 28% between 2015 and 2040.
(IEO, 2017), the energy resources depletion is the possible consequence unless other measures are undertaken. Another obvious reason is about pollutants emitted from fossil fuels and endanger human health and environment. Moreover, carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and other emissions which are sourced from fossil fuels influence climate change provoking greenhouse effect and global warming.

Tourist accommodation services generate electricity to support such important service categories as lighting, heating, refrigeration, ventilation and power-consuming appliances. Fuel is another sort of energy which is mainly applied for transportation and heating and represented by gas, oil, petrol, diesel and steam (Environmental Management for Hotels, 2008a).

Despite relatively long payback period, accommodation facilities can improve their energy performance by implementing nuclear power, co-generation processes of heat and power and renewable energy sources, such as solar energy, wind and water power, geothermal and biomass energy and other sources. They also should take control over energy consumption and spend it wisely (Environmental Management for Hotels, 2008b).

**Water**

Fresh water is the most essential and precious component sustaining the entire life. Water is scarce resource and its volume is limited to support a certain amount of population. Since water resources are distributed unevenly due to geographic and economic peculiarities, some people treat fresh water as something given for granted (developed industrial countries) while some (disadvantageous and rural areas) suffer from obstructed access to water reserves. Only 2.5 per cent of water on the planet is suitable for drinking and two-thirds of it is represented in the form of ice and permanent snow cover (Shiklomanov, 1993).

Nevertheless, the demand for fresh water is ever-increasing and outweigh the supply. Population growth, urbanisation, agricultural and industrial development strongly influence water contamination and depletion. Moreover, such interrelated environmental challenges as climate change and deforestation reinforce water degradation. Hence, the likelihood of possible water crisis is considered seriously nowadays.
In accommodation services, consumption of fresh water is largely used to provide bathroom, laundry, swimming pools, food preparation, cleaning and maintenance and irrigation services. Generally, water makes up approximately 10 per cent of utility bills of an average accommodation business and this is another reason to reduce water consumption. Accommodation facilities need to find balance between conserving valuable water sources and, at the same time, ensuring sufficient water supply for their guests. (Environmental Management for Hotels, 2008c).

Waste
Rapid economic and industrial development, growing affluence of population and increased consumption trends contribute to generation of large amounts of waste. Accommodation facilities dispose large amount of waste generated by guests and waste from owned items, such as furniture, equipment, appliances and other categories of solid waste. Depending on the original material, waste is classified as organic, paper and cardboard, glass, metal, plastic and more. An average accommodation site produces roughly one kilogram of solid waste per guest per night where 30 per cent is suitable for recovery and recycling. (Environmental Management for Hotels, 2018d)

Properly executed waste management at accommodation sites promotes saving of materials and energy, reduction of waste disposal costs, avoiding hazardous emissions, compliance with legislation, conservation of lands and surrounding environment. Resource-efficient approach to purchased goods and materials involves gaining new products through recycling of products in existence, reusing, reselling or donating things, reducing consumption by using available goods more efficiently, implementing technologies for collecting and separating waste as well as technologies for safer waste disposal (especially - hazardous waste like batteries, paints, insecticides and pesticides), purchasing goods made from degradable materials. Implementation of waste management programs could reduce 30 to 50 per cent of negative environmental impact for an average accommodation. (Styles at al., 2013)

Air quality & Emissions
Air pollution is one more serious environmental issues to take into consideration. Deteriorating air quality is compromised by hazardous chemicals and harmful emissions
released from human industrial activities and some other natural processes (fires, storms and more). Toxic emissions contribute to global warming and climate change, air pollution, biodiversity degradation, ozone layer depletion and human health problems – allergies, asthma, lung cancer and more. Hence, tourists’ accommodations must take control over indoor and outdoor air quality.

At accommodation sights, air pollutants and emissions are sourced from cleaning solvents, paints and varnishes, pesticides, dusty surfaces, furniture, leaking combustion equipment, smoking, transportation, respiration and more. To tackle indoor and outdoor air quality deterioration problems, the following measurements should be undertaken: eliminate hazardous emissions at source, provide proper air-conditioning and ventilation, introduce internal air purification systems, regular cleaning, prohibit smoking inside accommodation, decrease energy consumption, reduce emissions from burning fossil fuels. (Environmental Management for Hotels, 2008e)

To summarize, currently the tourist accommodation service sector is surrounded by various environmental challenges. To maintain environmental sustainability purposeful actions are strongly required from both hoteliers and customers.

### 2.2 Common environmental practices in hotels

Green marketing can be defined as a company’s efforts at designing, promoting, pricing and distributing products that cause no harm to environment while, at the same time, satisfying needs of customers and society (Ashrafi, 2014). Sustainable development has been largely incorporated into marketing activities of companies where sometimes marketing-oriented actions are placed before real assistance to the environment which is called “greenwashing” (Ashrafi, 2014). Nevertheless, not every business realizes that sustainable development positively influences the market performance. This paragraph aims to review common sustainable development strategies and programs applied by tourist accommodation service companies.
2.2.1 Eco-labeling and certifications

Eco-labelling in tourist accommodation service sector is represented by a logotype awarded by a responsible committee to accommodations when they meet certain criteria usually including energy and water consumption, use of detergents, waste management, consumption of locally made products and more. Eco-labelling is a marketing activity aiming to confirm to customers that an accommodation service stays for sustainable development and implements green practices into the daily life. Most of eco-certifications cost money because they require external auditors to carry out the analysis of a property to reveal its sustainable position. (Kis-Orloczki, 2012)

In this paragraph, the most popular and widespread eco-certifications will be identified - International Organization for Standardization, Green Key Global, Green Globe, Energy Star, LEED, Green Tourism Business Scheme, Nordic Swan and others.

*International Organization for Standardization*

International Organization for Standardization (ISO) is an independent, non-governmental body which establishes standards for companies to operate in a way assuring products and services quality, safety and efficiency (ISO, 2017). ISO 14000 represents international standards of the environmental management that can be implemented by tourist accommodation properties. ISO 14001:2004 proposes the actual requirements to the environmental management system at accommodation properties. Other ISO standards referring to tourist accommodations incorporate ISO 9001:2000 for quality management, ISO 22000 for food safety and ISO/PAS 28000:2005 for supply chain security, OHSAS 18001 for health & safety management system. (Environmental Management for Hotels, 2008a)

*Green Key Global*

Green Key Global is leading corporate social responsibility certification which appeals to the lodging industry. Green Key Global is concentrated in North America with 1923 accommodation properties – members of the program. According to the Green Key Eco-Rating Program, tourist accommodation properties are given from 1 to 5 keys (rewards) based on their environmental performance and how they meet program requirements. Assessment is completed in accordance with five major operational areas including
corporate environmental management, housekeeping, food & beverage operations, conference & meeting facilities and engineering. The program also covers nine areas of sustainable practices: energy conservation, water conservation, solid waste management, hazardous waste management, indoor air quality, community outreach, building infrastructure, land use and environmental management. After an audit procedure is completed and the award is given, the accommodation receives guidance on how to maintain and improve their level of key. (Gaggioli, 2015)

*Green Globe*

The Green Globe certifies sustainable performances of tourism businesses including accommodation properties. The Green Globe comprises 44 criteria accompanied by 380 compliance indicators which are dependent on certification type, geographical location and more factors. The Green Globe Standard has taken for the basis following standards and agreements: Global Sustainable Tourism Criteria, Agenda 21 and principles for Sustainable Development introduced at the Earth Summit in 1992, ISO 9001, 14001 and 19011. Criteria cover aspects of sustainable management, social and economic aspects, environmental issues and cultural heritage. Green Globe certification provide members with an opportunity to take part in training which improves environmental position of a business. Certifications are awarded on an annual basis with standards updating two times a year. (Green Globe, 2017)

*Energy Star*

The tourist accommodation service industry heavily relies on energy therefore Energy Star program which is created in 1999 by Environmental Protection Agency in United States is very appealing. Every property can receive Energy Star certification with a score of 1 to 100 where score 50 represents average performance and score 75 and more exceptional performance. Tourist accommodation service centers can adopt Energy Star to estimate the energy efficiency of their properties, implement an energy management strategy, find out new ways to save energy, reduce costs, reduce greenhouse gas emissions, earn recognition and communicate their energy-saving efforts to the community. (Gaggioli, 2015)
**LEED**

LEED, or Leadership in Energy and Environmental Design, is the well-known and widely used world green building rating system including tourist accommodation buildings. LEED provides the standards helping to create cost and resource-efficient buildings with low environmental impact and no negative effect on human health. There are five rating systems: Building Design and Construction, Interior Design and Construction, Building Operations and Maintenance, Neighborhood Development and Homes. The points are awarding according to following principles: Certified 40-49 points, Silver 50-59, Gold 60-79, and Platinum over 80 points. LEED certification can be applied to new accommodation buildings or buildings right after renovation. (LEED, 2017)

**Green Tourism Business Scheme**

Green Tourism Business Scheme is the sustainable tourism certification scheme with over 2300 members around United Kingdom, Ireland, and Canada. The program aims to help tourist businesses including accommodations to address environmental impact and reduce costs. The program's criteria comprise 150 measurements united into ten areas that are: compliance with environmental legislation, environmental management inside a property, relationship with stakeholders and local communities, energy efficiency, water efficiency, purchasing behavior, waste treatment, transportation policies, natural and cultural heritage preservation, innovative approach towards sustainable development. According to audit results on sustainability performance, accommodation businesses can receive rewards: bronze for good commitment, silver for excellent commitment or gold for outstanding commitment. (Green Tourism, 2017)

**Nordic Swan**

Nordic Swan is the eco-label established in 1989 by the Nordic Council of Ministers to assure sustainable consumption - energy and water consumption, use of renewable energy sources, reduced use of chemicals, reduced waste, decreased climate impact and more. Nordic swan ecolabel has one of the strictest lists of criteria. Nordic Swan ecolabel can be awarded in five Nordic countries - Norway, Sweden, Finland, Iceland, and Denmark. (Kis-Orločzki, 2012)
Overall, despite of having slightly different criteria and regional peculiarities, all green labels and certification programs aim to prove environmental commitment of a company, provide education on further sustainability improvement and help customers in choosing an accommodation with more environmentally friendly policies.

2.2.2 Environmental strategies and measures

Tourist accommodation service companies have been creating their sustainable development programs composed of various independent procedures and incorporated into entire marketing strategy. Relying on the world best practices of sustainable development at the tourist accommodation sites, this subparagraph provides a comprehensive review of efficient and favorable strategic schemes.

*Environmental accounting and reporting*

Environmental accounting and reporting is a substantial element of accommodation tourist environmental management system. The purpose of environmental accounting is to prepare the information on environment costs and to report the data to stakeholders. Disclosure of environmental information ensures a business’s environmental responsibility and transparency. Collecting and measuring environmental costs is fairly complicated process, however, once environmental costs are counted, further decision-making process is simple and clear for a company. Environmental accounting assists in environmental costs optimization and financial performance improvement. (Janković & Krivačić, 2014)

*Energy-related strategies*

Currently, market provides plenty of efficient up to date technology solutions enabling energy preservation at tourist accommodation sites. First, business owners may need to apply electricity meters to different site locations and figure out the most energy-intensive accommodation areas. This approach is efficient in a sense that by measuring current level of energy consumption managers can carry our benchmarking (comparing results to industry standards, competitive or own performance) and set quantitative goals for the future.
There are many means by which energy consumption can be reduced: timers or occupancy sensors automatically reducing lighting or air conditioning time, energy-saving LED and fluorescent lamps, low energy-class equipment and appliances, efficient HVAC systems, solar or wind alternatives partially compensating non-renewable energy sources, energy recovering equipment and many more. Towel and linen reuse programs would also help to decrease the energy amount used to wash sheets and towels resulting in lower carbon footprints. (Green Hotelier, 2016)

**Water-related strategies**

Technological advancements enable water consumption shortening at tourist accommodation sites. By analogy with energy consumption monitoring, water meters installed in every accommodation areas facilitate water consumption monitoring efficiency. Locations with high water consumption should be equipped with water saving devices including water pressure regulators, sensor self-closing taps, low-flush toilets and others (Zein, 2008). Accommodation facilities can benefit from harvesting rainwater, greywater (from domestic operations) and blackwater (sewage) and treating them for further reuse e.g. in irrigation (Goldstein & Primlani, 2012). Accommodation guests can positively influence water resources conservation by being involved into towel and linen reuse programs not requesting new towels each day (Green Hotelier, 2016). Investing in water saving and treatment technologies preserves water resources as well as reduces financial expenses.

**Air and noise-related strategies**

Indoor and outdoor air quality at tourist accommodation sites has a direct influence on human health and comfort. Air quality can be improved by eliminating or reducing pollutants at the source stage; purchasing only furniture and materials emitting low amount of volatile organic compounds (VOC) to diminish the concentration of air contaminates; installing air ventilation, filtration and purification systems of high efficiency; regular vacuum cleaning; replacing chemical cleaning substances with environmentally friendly alternatives; using indoor and outdoor plants which absorb pollutants; implementing no-smoking policy; using cleaner burning fuels and renewables; using lighter and smaller automobiles (Environmental Management for Hotels, 2008e).
Noise pollution can cause psychological, physiological and physical influences on human health significantly deteriorating quality of life, decreasing employee productivity and guest welfare. Noise can be sourced from traffic, construction, entertainment and events, sport and leisure, equipment and systems, working employees, guest rooms and bathrooms and many more. In most problematic accommodation areas unnecessary noise can be reduced by minimizing noisy activities in nighttime and weekends, restricting television or music sound volume; investing in efficient sound insulation systems; ensuring equipment and vehicles are running silently. (Environmental Management for Hotels, 2008e)

Waste-related strategies
Tourist accommodations implement the variety of technological solutions to reduce, reuse, and recycle wastes minimizing its detrimental impact on nature. Technologies for tracking and monitoring the waste thrown away provide information regarding areas where the most of waste is appeared (Green Hotelier, 2016). For instance, LeanPath technology can track food wasted, analyze associated environmental and financial impact and propose optimizations to improve decision making process on waste management (LeanPath, 2018). Tourist accommodations can go paperless and by using cloud technologies for keeping documents dramatically reduce the amount of wasted paper (Green Hotelier, 2016). After the waste amount has been shrunk to a minimum, composting and pulping technologies reduce the volume of the waste remaining.

Green building design and construction
In the tourist accommodation service sector, green building design and construction usually include selection of sustainable sites (usually with developed infrastructure, away from high-risk areas and no disturbance to wildlife or local communities); solar building orientation which reduces the need for lighting; sustainably furnished, healthy, quality and satisfying indoor spaces and landscaping; using environmentally friendly and durable construction and furnishing materials (nontoxic, cradle to cradle materials or materials from recycled sources); storm water runoff building design; natural cross-ventilation, increased efficiency by saving energy, water, and other resources; installing onsite renewable energy generators; and educating accommodation inhabitants about efficiency and conservation (Ahn & Pearce, 2013).
There are various methods that can be applied to ensure that accommodation sustainability is compliant with standards (Baker, 2005). Life Cycle Assessment (LCA) is used to assess environmental performance of a building throughout the lifetime considering associated inputs and outputs. Whole Life Costing is applied to quantify the financial value of a building over its whole life to balance capital expenses and revenue. Design Quality Indicators (DQI) exists in the form of online questionnaire and is used by stakeholders to assess building performance at any construction or exploitation stage. Overall, tourist accommodation buildings should be created in harmony with surrounding environment and provide comfort and enjoyment for their guests.

*Purchasing policy*

Responsible purchasing policy at tourist accommodation sites aims to diminish the negative environmental impact of excessive consumption, to improve supply chain efficiency and to encourage the development of locally made organic products (Zein, 2008). Sustainable procurement incorporates the selection of environmentally friendly and socially responsible suppliers based on supporting evidences and documentation; prevalence of local suppliers within short transportation distance; purchasing fair trade products; decreasing usage of package materials or giving preference to recyclable package; buying a bulk of products from a single supplier; purchasing energy and water efficient, non-toxic, hypoallergenic, biodegradable, recyclable products; purchasing quality and long life products (Green Hotelier, 2012). The basic principle of sustainable procurement is assessing all environmental, social and financial costs associated with a purchase from “cradle” to “grave” (Green Hotelier, 2012).

*Human resources management*

Training programs for employee education on sustainability can facilitate their improved performance, high level of satisfaction and retention. Accommodation sites often organize environmental and sustainable development events to explain the advantages of green strategies and technologies. Tourist accommodation facilities can also facilitate social sustainability development by providing sustainable jobs with various social benefits for their employees.
To summarize, there are plenty of popular and effective strategic environmental measures aiming to enhance sustainable development that can be implemented by companies operating in tourist accommodation service sector. Therefore, every company can adopt sustainable activities that are compliant with its business goals. Sustainable development is a creative and consistent process and it shouldn’t be limited to such factors as budget, business size, timing or others. Correct sustainable activities will result in positive changes for both businesses and guests.

2.3 Consumer behavior in tourist accommodation service sector

Consumer behavior is “the study of how individuals, groups, and organizations select, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and wants” (Solomon, 1995). Knowing patterns of consumer behavior across logging industry is essential since it provides companies with an opportunity to forecast consumer intentions and responses to marketing mix. Understanding customer motivation and values leads to competitive advantage because a company can satisfy consumer wants better than competitors. The paragraph aims to provide an overview to consumer decision-making process and opinions on environmental programs in tourist accommodation service sector.

2.3.1 Consumer decision-making process of hotel selection

The commonly accepted model of consumer decision-making process incorporates five separate stages: problem recognition, information search, evaluation of alternatives, purchase decision and post-purchase behavior. According to Kotler & Keller (2012), consumers make decisions based on consumer psychology, consumer characteristics, marketing stimuli and other stimuli.
Consumer decision-making process

Consumer decision-making process begins when a buyer recognizes a need of making a choice among various hotel options when planning business trip or family vacations. Consumer is driven by various motives: seeking a sleeping place, comfort and convenience, or prestigious services. After the need recognition, a consumer begins to search for information: when a purchase is inexpensive and unimportant, searching process is quick and customer involvement is low (for example, when choosing a hostel to stay overnight). However, when choosing among expensive holiday resorts, costs of undertaking a bad decision are high and consumer is intensively involved into problem solving activity (Sirakaya & Woodside, 2004). Further, a consumer evaluates options based on desired hotel attributes and strength of belief in possession by a hotel of those specific attributes. A consumer makes his purchasing decisions based on comparing preselected options and gives preference to an option responding chosen criteria best. When consumer starts using accommodation services, he makes a choice reevaluation and expresses satisfaction when accommodation service exceeds expectations, or dissatisfaction when opposite is true. (Oktadiana & Kurnia, 2011)

Consumer characteristics: cultural, social and personal

Variations in why people with different backgrounds undertake different buying decisions are explained by differences in culture, subculture and social class. Culture is “the sum of learned beliefs, values and customs that serve to direct the consumer behavior of members of a particular society” and subculture is narrower and incorporates nationalities, religions
races, geographic regions and more (Kotler & Keller, 2012). Social classes are permanent and ordered divisions measured by income, wealth, education, occupation, whose members share similar values, interests, and behaviors (Kotler et al., 2005).

There have been many researches investigating the influence of culture on consumer buying behavior in tourism industry. For instance, the study on characteristics of respondents visiting Korea (Kim et al., 2005) suggests that motives were different for western and eastern travelers: Americans and Australians were motivated by culture and history, while Chinese and Japanize were motivated by dinning & shopping and leisure & gaming activities. Another study (Richard, 2016) on consumer hotel choice in Ghana have discovered that consumer behavior regarding hotel choice was strongly influenced by religion and traditional beliefs. Thus, the role of culture is extremely important in consumer decision making process.

Social factors are represented by reference groups, aspiration groups, membership groups, dissociative groups, opinion leaders, family, social roles and social statuses. (Kotler & Keller, 2012). Values of social status influence consumer behavior: prestigious social status owners usually spend more time for leisure or business travel, stay in expensive hotels and demand prestigious services, compared to other people down to social stratification ladder, who travel considerably less and cheaply. Another example: travel and tourism agencies are interested in hiring opinion leaders because those people have power to convince customers to purchase company’s services (Sirakaya & Woodside, 2004).

Personal factors include individual characteristics, such as gender, age, occupation, values, and others. Hotel management is aware of how those characteristics impact consumer accommodation purchasing decision. Joie de Vivre boutique hotels introduced an online personality matchmaker to help match guests to the most suitable hotels. (Kotler & Keller, 2012). In fact, people give varied importance and value to diverse hotel features and make accommodation choices according to subjective personal preferences and tastes.
**Consumer psychology: motivation, perceived value, learning and memory**

Many motivation theories are applicable to explain consumer motives in selecting a hotel. In tourism industry, motives for choosing a destination are framed into “push” and “pull” theory (Crompton, 1979). “Push” (driving) factors namely are: escape from a perceived mundane environment, exploration and evaluation of self, relaxation, prestige, regression, enhancement of kinship relationships and facilitation of social interaction. “Pull” (attracting) factors were defined novelty and education. The theory is applied only to leisure travelers choosing a destination and doesn’t investigate customer motivation in the lodging industry.

Another approach is reported in research paper by Gilbert (1992): traveler motivation there is broken down by categories of traveling purposes. Visiting family, friends or relatives, spending leisure time, studying, business or work, shopping and other stimuli are considered as primary motives for guest arriving and demanding accommodation services. This theory is much more related to the current research.

Teberner (2014) approached Maslow’s hierarchy of needs to demonstrate how logging industry can satisfy various consumer needs. Consumer moves up to pyramid after meeting inferior needs to reach further goals. Thus, in accommodation businesses physiological needs can be seen as access to warm water, sleeping place, cooling. Safety needs include location, lockers, safe and secure booking. Social needs can be satisfied by providing collective areas, food & beverage areas, smoking areas. Fulfilment of esteem needs is achieved through gaining access to SPA, wellness center, conference room, prestigious brand name. Lastly, self-actualization needs are satisfied by being a hotel manager. The top need can also be met through guest involvement in a hotel environmental program.

Customer perceived value (CPV) is the difference between the prospective customer’s evaluation of benefits (economic, functional, and psychological benefits) and the costs of an offering (including monetary, time, energy, and psychological costs) and the perceived alternatives (Kotler & Keller, 2012). Nowadays consumers are much better educated and informed to make evaluation of market alternatives to pick superior ones. Customers estimate which accommodation offer will deliver the most perceived value make a choice.
Another important process is learning which means changes in customer behavior arising from experience. Most of human behavior is learned (Kotler & Keller, 2012), including a hotel selection process - people undertake their decisions based on previous experience. When a customer stay in a hotel was good, a customer forms a positive experience. Memory’s function comes up sooner or later: when a customer would need to select an accommodation later, he or she would rely on positive or negative memories about previous stay.

**Marketing stimuli: product, price, place, promotion**

Product features are important determinants of consumer decision. The research by Dube & Renaghan revealed 10 common features driving customers’ purchasing decisions. Property location (which also determines the place in marketing mix) is the primary influencer of consumer purchasing decision, followed by brand name and reputation. The physical appearance of public spaces and guest room design were ranked 3rd and 4th respectively. The 5th important feature is value for money, 6th and 7th are functional (e.g. efficient check in) and interpersonal services (e.g. friendly personal) respectively. Marketing stimuli e.g. reward programs occupy 8th position in importance while food & beverage services and quality standards are listed in the end. (Dube & Renaghan, 2000).

The hotel price has a significant impact on how a consumer behaves. Consumer behavior in price context is explained by many theories: expected utility theory (von Neumann & Morgenstern, 1947), prospect theory (Kahneman & Tversky, 1972), regret theory (Bell, 1982), theory of reasoned action (Ajzen & Fishbein, 1980), theory of planned behavior (Ajzen, 1985). Conclusion is that consumers make rational choices to maximize values and gains and minimize possible losses. The correlation between perceived price, perceived service quality and customer satisfaction is strong; consumers are aware when price doesn’t meet promises, and they become dissatisfied (Bojanic, 1996). Thus, accommodations need to evaluate provided services correctly and manage consumer expectations honestly to attract and retain customers.

Nowadays promotion influences customer hotel selection process. Discounts, reward programs and other bonuses can stimulate consumers to prefer one hotel option over another. Media technologies play an important role since media aggregates important
information for consumers information sources, such as online reviews, blogs, articles and others. Overall, consumer decision-making process when selecting an accommodation is complicated process and influenced by many factors; hotel management must know their customers to persuade them to make favorable for their business purchasing decision.

2.3.2 Drawing green consumer profile

Green marketing targets the consumer segment that expresses environmental consciousness and motivated by environmentally sustainable goods and services. Environmentally concerned customers consistently participate in ecological activities and demonstrates ecological behavior through their actions. Many studies have been done towards investigation of green consumerism and consumer opinions on environmental programs in logging industry.

Consumer social, demographic and stay-related parameters in selecting green hotels

As mentioned in previous paragraph, gender, age, country, education and stay-related parameters, such as lengths, purpose, accommodation type, strongly influence consumer propensity to select an environmentally friendly hotel and participate in environmental programs.

The survey by Center for Hospitality Research (Bruns-Smith at al., 2015) suggests that guests who had high education, older age and female gender expressed stronger involvement into accommodations’ environmental programs. Similarly, the study by Siu-Wa Chan (2014) claims that older than average and wealthy customers are more capable of processing environmental information and behave in pro-environmental way because they have high education.

The perception of environmental activities varies by country. Results from cross-cultural study among Mexican and American respondents show variations in views of green hotels: Americans expressed more concern about functional aspects of environmental sustainability, such as “conserve energy,” “conserve water,” “recycling,” and “linen policy”, while Mexicans were more familiar with emotional aspects of conservation, including such parameters as “peaceful,” “natural,” and “comfort” (Berezan at al., 2014).
Therefore, management should consider sociocultural background of their guests before implementing any environmental practices.

Considering characteristics related to stay, a greater level of involvement in green programs is expressed by guests who had long stay and upscale accommodations, compared to those guests who had midscale & economy accommodations (Bruns-Smith et al., 2015). Also, guests who attended conferences or meetings in a hotel were more likely to participate in environmental programs (Bruns-Smith et al., 2015). Analyzing travel purposes, the survey of business and leisure travelers suggests that business travelers usually have a stronger pro-environmental behavior compared to leisure travelers (Millar, 2012).

*Environmental awareness and behavior: inconsistency*

Social trends are changing consumer behavior: customers are becoming more educated and aware of environmental issues - they consider environmental parameters more frequently than ever when selecting an accommodation. Deloitte Consumer Survey (2008) has found that contemporary customers expect hotels to have some green features. Increasing social concerns for the natural environment are predictors for pro-environmental behavior and selecting a hotel which pursue conservation and environmental commitment goals (Han et al., 2011). Gao, Mattila, and Lee (2016) concluded that personal values, attitudes, environmental knowledge, awareness and perceived gains influence consumer behavioral intentions toward green hotels and restaurants.

Despite consumer general positive attitude towards environmental programs in hotels, some studies reviled inconsistence between consumer attitudes and environmental actions. According to survey among Taiwan hotel customers, many have expressed awareness and desire to support environment. However, few of them undertake practical measures. (Tsai & Tsai, 2008)

Also, managers need to keep in mind that consumers are much more likely to participate in environmental programs when some incentives are offered. Over 80% of guests who don’t take part in environmental programs reported that they would change their mind when some reward (e.g. meal voucher) is offered (Bruns-Smith et al., 2015). Respondents from
other study named discounts as the most popular incentive for environmental commitment (Berezan et al., 2014). Researchers have noticed that the desire for discounts as incentives for environmental behavior and, at the same time, considerations to pay premium to support green activities in a hotel are contradictory which might be caused by social desirability bias (Berezan et al., 2014).

Environmental programs among other accommodations’ features: guests’ prospective

Generally, important hotel features have been extensively researched using a variety of methods. Important parameters include location, service variety and quality, room, physical appearance, security, food & beverage, price vs. quality, brand name and image, marketing, and green efforts. Green practices and environmental commitment features started to figure in research papers relatively recently - from the year 2001. (Berezen et al., 2014)

According to survey by Bruns-Smith and others (2015), guests are ready to participate in environmental programs, however, green operations in selecting an accommodation is not as important as value for money or location (Bruns-Smith et al., 2015). As a rule, accommodation customers are more attentive to location, room, amenities, food & beverage, and environmental commitment is not the major reason for guest coming. According to research by Kasim (2004), many guests select an accommodation based on price, quality of service, and physical attractiveness, rather than environmental attributes. Sometimes guests prefer some nongreen features, e.g. single packed soaps, fresh towels, and unrestrained air conditioners, hence, sometimes competitive advantage cannot be gained from green movement (Kasim, 2004).

Environmental programs: finding a right balance

Importance and guests’ satisfaction with accommodations’ environmental programs varies from one to another activity. The Deloitte Consumer Survey (2008) defined the following green programs as most important from customers’ prospective: recycling (77%), energy-efficient lighting (74%), energy-efficient windows (59%), towel & linen reuse program (52%), environmentally safe cleaning products (49%), in-room water saving devices and green landscaping. Due to increased consumer environmental awareness, some environmental features are expected to be seen and some are considered as advantageous:
for example, linens and towel reuse is seen as basic feature, while renewable energy
generation and use is considered as a superior characteristic, increasing customer
satisfaction (Robinot & Giannelloni, 2010).

Environmental programs are known for their conservation efforts which places controversy
on guest experience and comfort. According to Sheehan (2007), “sustainability is about
fulfilling our guests’ current dreams and desires without sacrificing future generations’
dreams and desires. The objective is to achieve sustainability without making it about
sacrifice”. However, sophisticated attributes of expensive accommodations, such as
spacious rooms, warmed swimming pools, sophisticated furniture are not
compatible with
accommodation green practices. (Ahn & Pearce, 2013). Also, implicating guests into towel
& linen reuse program instead of washing the towels or linens every day, offering low-
flow faucets, showerheads, and urinals can create inconvenience
for consumers (Rahman
& Reynolds, 2017). For example, the study shows that more customers are satisfied with
hotel recycling activities, compared to towel & linen reuse programs, mainly due to high
service expectations (Berezan et al., 2014). Hence, tourist accommodations should
implement only green programs that improve guest satisfaction.

Green consumer values – biospheric, altruistic and egoistic

Rahman & Reynolds (2017) have proposed a conceptual model of green hotel patronage.
Consumer willingness to select environmental accommodation is dependent on three
inherent values – biospheric, altruistic and egoistic.

Consumers with biospheric values are ones who really concerned about environment. They
demonstrate environmentally conscious behavior and participate in accommodations’
environmental practices, sometimes ready to pay premium and sacrifice a certain level of
convenience, e.g. reusing towels, due to enhanced ecocentric attitude. Consumers who are
motivated by altruism show environmentally responsible behavior in accommodation
context because they are concerned about common wellbeing, doing “good” without a
reward. Altruistic consumers are ready to sacrifice convenience and pay premium, even
being aware of green hotels reducing expenses through implementing environmental
programs. However, a recent study has shown that consumers would not participate in
environmental programs when they realize that an accommodation only pursue cost-saving
motive. In contrast, egoistic values indicate that people prefer environmentally friendly goods, in particular – accommodations, to improve personal reputation and social status, achieve common encouragement and recognition, boost self-satisfaction. Thus, “showcase” motives are reliable predictors of peoples’ environmental consciousness and commitment. However, those people are not ready to sacrifice much: they would give preference to comfort and convenience over accommodations’ “green” features when it comes to serious contribution. (Rahman & Reynolds, 2017)

Pricing and perceived value

The decision-making processes regarding selection of an environmentally friendly hotel underlines not only an intention to purchase, but also a readiness to pay a premium price and to make sacrifices for alternative products that often have a superior quality (Berezen et al., 2014). The theory of planned behavior is used to explain such features of green consumer behavior as paying premium prices for a green hotel, intention to visit a green hotel, and intention to revisit a green hotel (Rahman & Reynolds, 2017).

Bohdanowicz (2003) showed that 75% of accommodation guests prefer ecolabeled hotels over ordinary alternatives, with 25% willing to pay a premium. Deloitte Consumer Survey (2008) concluded that 28% of guests would pay up to 10% more for green accommodations. Kuminoff and others figured out that on average guests would pay between $9–$26 premium for a standard room in a green hotel (Kuminoff et al., 2010). According to Berezen and others, roughly 40% (37.6% and 37%, respectively) would pay between $1 and $5, or between $6 and $10 more. (Berezen et al., 2014)

Strategies of setting premium prices are successful in action when marketed correctly and consumers receive personal benefits from it. For instance, Scandic hotels offered a unique 95% biodegradable room and charged 10-percent higher room rate. As a result, guests demand this room more often compared to standard rooms because they desire to receive unique experience by living in environmentally friendly room. (Bruns-Smith et al., 2015)

In conclusion, tourist accommodation service companies seeking positive customer responses towards their sustainable development movements need to take following thoughts into consideration. Companies need to ensure that environmental actions are
clearly communicated to guests, employees and other relevant audiences. Consumers perceive environmental information positively when they receive accurate and trustworthy explanation of how environmental programs benefits society and personally them. Moreover, accommodations must implement only those environmental programs that create personal value for their customers and don’t diminish customer comfort and satisfaction. Therefore, accommodation businesses should thoroughly choose environmental programs to meet customer expectations. Also, since environmental programs are beneficial for hotels all around, businesses must learn how to overcome consumers reluctance to pay increased room rates because of green practices.
3 RESEARCH FRAMEWORK AND METHODOLOGY

To achieve the research objectives, customers of the case company Scandic Patria Hotel have been surveyed by using paper questionnaires during their stay in the hotel. Thus, a mix of case study and quantitative method was employed to receive results. The research process has been divided into three main stages: literature review (concepts of environmental sustainable development, green marketing and consumer behavior in tourist accommodation business), case study of Scandic Patria Hotel’s environmental program and, lastly, the customer survey. The theoretical framework has been introduced to keep the research well-structured and managed better. The analysis of the information obtained was done by using various MS Excel tools and the results were reported.

3.1 Research framework

The research framework incorporates the theoretical framework, the research questions, hypotheses, the scope and limitations. Research questions has been designed to reveal the dependence between studied variables and answer main research question. The research hypotheses were suggested relying on the results of the previously done studies that were considered in the literature review section.

3.1.1 Theoretical framework

The theoretical framework of the research is relied on the consumer decision-making process model and the important elements influencing consumer hotel choice. The theoretical framework includes consumer-related inputs, namely consumer pro-environmental behavior – consumer environmental awareness and consciousness, consumer socio-demographic and travel-related characteristics, perceived service value and perceived price; service-related characteristics, namely service features including stimuli and environmental measures. Obviously, consumer decision-making process is influenced by many more factors, however, the current theoretical framework includes only those parameters that are directly related to the research questions. The research variables and connections among them are considered below.
Consumer decision-making process has been amply described in the literature review part and it consists of five steps, including stages: need recognition, information search, evaluations of alternatives, purchase and post-purchase behavior. Consumer decision-making process is a base in the theoretical framework, that is influenced by various parameters. In turn, the consumer decision is considered as the outcome from decision-making process of a hotel choice.

Consumer pro-environmental behavior is related to consumer pro-environmental mindset and behavior: how much in general people are aware and concerned about environmental issues and which pro-environmental actions they undertake in their daily life to promote environmental wellbeing and ecological thriving. From the literature review part, it has been discovered that people with greater level of pro-environmental awareness and behavior tend to pay greater attention and importance towards environmental attributes of products and services they purchase. Thus, consumer environmental awareness and consciousness relates to preferences of services with positive environmental characteristics.

Consumer perceived value is a difference between a prospective customer's evaluation of the benefits and costs of one product when compared with others. In other words, consumer perceived value is the estimated value that a customer perceives to obtain from buying a product. In tourist accommodation context, consumer perceived value is influenced by the presence or the absence of certain service attributes, and the current research aims to find out whether environmental programs (and which ones) enhance consumer perceived value.

Consumer perceived price is a fair price that consumer considers acceptable to pay for an accommodation with certain features and characteristics. Thus, consumer perceived value of tourist accommodation services is related to consumer perceived price a consumer is willing to pay. The relation between consumer perceived value and consumer perceived price is dual and reverse: greater perceived value of a service makes consumers ready to pay higher prices, and when consumers pay a certain price level for a certain service, it means, from consumer’s viewpoint, that the service quality and service value meet the declared price level.
Environmental program is a program implemented by tourist accommodation service companies (in the current research, the case company is Scandic Partia Hotel) to enhance environmental wellbeing and use a program as a green marketing instrument to attract and retain customers. In terms of customer attraction, environmental programs are considered as complementary “services” aiming to improve customer perception of a hotel and enhance consumer perceived value. Environmental program is considered as the part of stimuli that influence consumer decision.

Environmental measures – separate environmental actions undertaken by a tourist accommodation service company. The different environmental measures incorporated into one environmental program cause heterogeneous customer attitude regarding importance and necessity for a hotel to implement this measure into its environmental program. Saying simply, different environmental measures valued differently by hotel customers. Thus, it is essential to draw the connection between a certain measure and increased or diminished customer value so that the hotel would be aware of what environmental measures to implement into the environmental program.

![Theoretical Framework for the Research.](image)

Figure 3.1 Theoretical Framework for the Research.
Thus, since all needed elements of the theoretical framework are defined and explained, further section will provide research questions and hypotheses based on reviewed scientific papers that were written previously.

### 3.1.2 Research questions and research hypotheses

The research questions have been defined, answering which the research goal can be considered as achieved. Research questions are carefully chosen to answer the main research question: How does the implementation of environmental programs by hotels influence customer decision-making process of choosing a tourist accommodation service company? Thus, research questions and corresponding hypotheses are listed in this subparagraph.

**RQ1:** How does the presence of environmental programs compared to other motivation factors (location, price, interior, services, promotion, reward program, brand name, reputation) influence consumer purchasing decision?

The reviewed scientific research articles suggest that environmental programs are among the last things a typical customer considers when selecting an accommodation to stay in. Based on the discovered information, price, service quality, value for money, services, interior are the most important hotel features and environmental program, unfortunately, is not among guests’ most popular and desired preferences. However, nowadays guests even expect accommodations to have certain environmental measures that don’t improve customer’s perceived value but taken for granted. Therefore, the research hypotheses 1 can be defined as follows:

**H1:** Environmental programs are only seen as a complementary “services” and don’t define guest’s hotel choice, when compared to location, price and other features and don’t depend on consumers’ nationalities.

**RQ2:** How does the consumer pro-environmental behavior influence environmental program’s perceived importance among other hotel features by Finnish and Russian customers?
Based on reviewing the previous studies, it can be concluded that consumers’ environmental awareness, consciousness and pro-environmental behavior serve as the trustworthy precursor for consumers’ perceived importance of the hotel’s environmental commitment and the environmental program’s presence. Also, environmental awareness among Finnish consumers is supposed to be higher compared to Russian consumers, mainly due to country peculiarities. Therefore, considering those factors, the research hypotheses 2 is defined as follows:

**H2:** Finnish consumers tend to have stronger pro-environmental behavior, environmental awareness and consciousness and therefore they tend to rate the environmental program as more important influencing factor compared to Russian customers who tend to be less environmentally sensitive.

**RQ3:** How the environmental program among other motivation factors is perceived by hotel customers with different socio-demographic and travel-related profiles?

There have been many studies made to describe the profile of “green consumer”. Aside from consumer country of origin, there are plenty of demographic, social, and travel-related parameters correlating with perceived importance of the hotel’s environmental program. Based on the previous discoveries, the research hypotheses 3 is stated as follows:

**H3:** Consumers who stay in hotels more often, for business purposes, female, more aged, travel with companions, would rate environmental programs as more influencing factor compared to customer with opposite demographic, social and travel-related profiles.

**RQ4:** What are the environmental measures with the highest perceived importance and value from hotel customers’ viewpoint?

Based on reviewing various environmental programs, measures undertaken by the Scandic Patria Hotel can be divided into two broad categories – measures that by definition need some customer involvement or take some customer comfort and convenience away (namely, linen and towel reuse program, restraining water flow in showers, separating waste, banning plastic bags and single packaged shampoos, not serving endangered species
of fish, etc.), and measures that don’t demand any customer efforts and add convenience (namely, energy efficient light bulbs, efficient flow toilets, renewable energy generation and use, little chemicals in cleaning, having ecolabel certificate, offering organic food & beverage, etc.). Most likely, most customers don’t tend to sacrifice (or sacrifice much) of comfort and convenience to support environment, therefore the research hypotheses number 4 can be defined as follows:

**H4: The environmental measures in the hotel that require consumer involvement or sacrifice comfort and convenience for the sake of environmental support will receive lower scores of importance from guests than those measures that don’t require any commitment as well as those directly enhancing consumer experience.**

**RQ5: Does the presence of the environmental program make customers ready to pay premium price for accommodation services? If yes, how much?**

When choosing an accommodation and considering saving options, rational consumers tend to pay only those hotel features they really need and want, while feeling better about not having hotel features that are not crucial and, hence, not paying for them. Thus, consumers with strong environmental attitude would tend to pay premium to support the hotel’s environmental program, and obviously not very much. Also, since in Finland people are more aware of environmental issues and Finnish and Russian income level differs widely, the propensity to pay premium for having the environmental program would be different as well.

**H5: Only the third of surveyed customers would agree to pay more, and the majority of those would be ready to pay up to 10% more and very few up to 20% more from the current prices. The proportion of Finnish customers would be higher among those who agreed to pay premium.**

Answering those research questions and testing proposed research hypotheses that are based on reviewing previously made studies and general observations, the main research goal can be considered as achieved. Obviously, the current research has a scope and certain limitations that are described in the following subparagraph.
3.2 Research context

The research context includes surveying customers of the case company Scandic Patria Hotel during their stay in the hotel. The paragraph provides information on the Scandic Patria Hotel, its environmental program and measures and hotel’s customers.

3.2.1 Environmental program in Scandic Patria Hotel

Scandic Hotels Group was founded in the year 1963. Scandic is the largest hotel operator in the Nordic region with the network of 280 hotels, 55,000 rooms and about 9928 employees in six countries and the annual sales of SEK 14.6 billion (2017). Scandic operates in the mid-market segment and about 70% of revenue comes from business travelers and conferences, while remaining 30% comes from leisure travelers. Scandic is a pioneer within CSR and most of hotels are certified according to the Nordic Ecolabel’s new requirements. (Scandic Hotels Group, 2018)

The Scandic Patria Hotel is the 4-star hotel which has been constructed in the year 1991 and belongs to Scandic Hotels Group. Scandic Patria Hotel is favorably situated in the center of Lappeenranta near the lake Saimaa, the Port of Lappeenranta, the Fortress of Lappeenranta and the shopping streets. Convenient location attracts tourists from Russia. (Scandic Hotels, 2018)

The Scandic Patria Hotel offers plenty of services and facilities to their guests. Aside from stylish and comfortable well-equipped rooms, there are the Torilla restaurant, lobby bar, convenient outside or garage parking lot, bikes for rent, 5 meeting rooms and meeting facilities, modern gym and sauna, pool – jacuzzi, free wi-fi connection, in-room service, pet friendly rooms and more. The Scandic Patria Hotel is certified with the Nordic Swan Ecolabel. (Scandic Hotels, 2018)

Corporate Social Responsibility has always been a part of Scandic Hotels Group. In 1993, Scandic launched their Sustainability Program to support environment which has the prominent place in Scandic’s operations today. It was Scandic who introduced the towel and linen reuse program which has now become the standard in the hotel industry around the world. Scandic Patria Hotel, as the part of Scandic Hotels Group, undertakes various
measures to conserve environmental resources and foster ecological thriving. The major environmental measures that are included into Scandic’s environmental program are considered further (Scandic Hotels, 2017).

Guiding Principles
Scandic works continually to reduce the company’s negative impact on the environment and every process in the company undergoes careful assessment with consideration of possible environmental harm. Scandic believes that businesses should be responsible for environmental challenges and undertake initiatives to tackle them. Scandic promotes development of environmentally friendly technologies alongside with reducing carbon emissions, greenhouse gases and other sources of environmental pollution.

Energy
Scandic Hotels are continuously working towards lowering the energy consumption through identifying most energy-consuming sources and proposing measures on how the energy can be saved. Scandic Hotels preserve energy through implementing energy-efficient equipment, heating and cooling system, low-energy lights bulbs and other measures.

Greenhouse gasses
Scandic Hotels are implementing measures to reduce carbon dioxide emissions. In hotels, emission reduction goals are established, and emission volume is constantly measured and tracked. Scandic Hotels take control over fossil fuel usage and, when possible, fossil fuel is replaced by “green” energy from renewable sources which is generated and used by Scandic Hotels.

Transportation and travel
Scandic Hotels consider environmental impact when choosing ways of transportation and travelling. Scandic Hotels give preferences to environmentally friendly vehicles with low carbon dioxide emissions. Environmental costs of transportation are taken into account when choosing suppliers: the preference is usually given to the closest supplier option.
**Sustainable design and materials**

Scandic Hotels give preference in design and construction to materials with low environmental impact, low amount of resources used and sustainable lifecycle, complying with principles of circular economy. Scandic Hotels implement furniture pieces into interior that are composed of renewable raw materials or made of recycled materials. Materials are recovered when the hotels are renovated to eliminate amount of waste.

**Endangered species and biodiversity**

Scandic Hotels purchase only those products that don’t contain raw materials or parts from endangered animal and plant species. For example, Scandic Hotels are guided by Sustainable Seafood Guide introduced by the WWF and don’t serve endangered species fish. Scandic Hotels restrict usage of palm oil and wood from virgin forests and rainforests.

**Waste**

Scandic Hotels continuously measure and evaluate the amount of waste generated and propose new ways of how waste can be reduced. Scandic Hotels minimized usage of unnecessary packaging materials and banned usage of single packaged soaps, shampoos and disposable plastic bags, offering their guests soap and shampoo in refillable dispensers instead. Scandic Hotels encourage their guests to separate waste. Scandic Hotels strive to recycle and reuse products and materials to the greatest extent possible by sending waste to recycling modern waste management facilities to minimize environmental impact.

**Water use**

Scandic aims to reduce water use by measuring consumption and analyzing how water consumption can be reduced. Scandic Hotels have introduced water efficient low flow showerheads and wash basins, dual and low flush toilets and water-efficient dish washers.

**Chemicals and hazardous substances**

Scandic Hotels aim to reduce and minimize the amount of chemicals and dangerous substances to protect human health and the environment. Scandic Hotels reduces amount of chemicals when cleaning and giving preference to eco-labelled cleaning products. Scandic’s goal is to make as little as possible chemicals to reach wastewater.
Responsible procurement

Scandic Hotels choose their suppliers carefully: before signing supply contracts, a potential supplier undergoes screening procedure to ensure that a supplier meets necessary requirements of Scandic’s Code of Conduct for Suppliers. Employees at Scandic Hotels are educated for responsible procurement methods.

Certification and labelling

Scandic Hotels that are located in Norway, Sweden, Denmark and Finland are certified according to the Nordic Ecolabel. Other hotels which are located outside of Norway, Sweden, Denmark or Finland are certified according to analogical ecolabels, for example EU Ecolabel or Green Globe.

Thus, Scandic Hotels, in particular Scandic Patria Hotel, introduce wide spectrum of environmental measures and follow strict environmental requirements documented by Nordic Swan Ecolabel.

3.2.2 Customers in Scandic Patria Hotel

Scandic Hotels’ customers come from nearby Nordic countries, as well as from Germany and Russia followed by the US and the UK. The main corporate customer group at Scandic Hotels is composed of business travelers (about 70% of revenue) and leisure travelers – groups (tourist groups, families, companies of friends), sport associations and individual leisure travelers (about 30% of revenue). Scandic Hotels have many loyal customers: over 35% of bookings comes from loyalty programs – Scandic Friends’ members. (Scandic Hotels Group, 2018)

Scandic Patria Hotel has the broad customer base who come other cities of Finland than Lappeenranta and from abroad. Aside from Finnish customers, the second largest customer group comes from border state – Russia, mainly from Saint-Petersburg and Leningrad district.

Based on researcher observations, Russian customer group at Scandic Patria Hotel is very active during weekend and holiday season. Russian customers usually come as families
with children, as couples or as groups of friends to stay at Scandic Patria Hotel during non-working days. Thus, the decision on hotel choice is usually undertaken by groups of people. The main purpose of Russian guests’ arrival is considered to be leisure: enjoying city entertainments, being on the nature, shopping in nearby centers, visiting restaurants and more.

3.3 Survey process and questionnaire

The paragraph provides information about the survey process and the questionnaire in detail. The paragraph explains why the certain set of questions was chosen to be included into the questionnaire, how the variables were measured, as well as reliability and validity of the respondents’ answers.

3.3.1 Survey process

The entire survey process of customers in Scandic Patria Hotel comprises the following elements: defining the survey objectives, developing the sample frame, and specifying the strategy for the data collection, and, after that, conducting the responses’ analyses.

The current survey’s objective is to receive the sufficient number Scandic Patria Hotel’s customers’ answers on questions through handing our questionnaire papers and collecting filled papers back. The survey sample includes the Scandic Patria Hotel’s customers of any nationality and gender, who are adults and those who stay in the hotel during the survey period.

The survey was handled during the three busiest days at the Scandic Patria Hotel – Friday 9\textsuperscript{th} of March, Saturday 10\textsuperscript{th} of March, and Wednesday 14\textsuperscript{th} of March. The surveyed covered mainly leisure and shopping travelers because the main survey period coincided with weekends and holidays dedicated to the International Women's Day, 8\textsuperscript{th} of March 2018. Therefore, there has been large inflow of Russian customers during Friday 9\textsuperscript{th} of March and Saturday 10\textsuperscript{th} of March, while most of Finnish customers surveyed arrived on Saturday 10\textsuperscript{th} of March and on Wednesday 14\textsuperscript{th} of March.
The face-to-face survey method implying questionnaire handling directly to customers was chosen because customers are generally willing to respond with higher probability when someone is appealing to them personally. Also, based on previous experience in other hotels, very few customers answer to questionnaires left in their rooms.

According to the chosen face-to-face survey strategy, the researcher (the author of this thesis paper) personally handed out the survey questionnaire papers to the hotel’s customers when they were arriving at the reception for the check in. After the check in process was finished, the researcher comes to the customers and briefly explains the survey purpose, hands out questionnaire papers and provides instructions on how to fill the papers. As for returning papers, the customers were offered two options – they could return the answered questionnaires to the researcher, or to the reception if the researcher was not in the hotel at that moment.

The survey took place at the Scandic Patria Hotel in the lobby area near the reception. The researcher stayed behind a stand – a table with the survey questionnaire papers and pencils in case if some of respondents would want to provide answers right away. However, since the questionnaire was rather complex and not too short, most of the respondents were willing to take the questionnaire with them to the room perhaps to have more time to think of the answers properly and have a rest after their travelling.

The paper questionnaires have A4 format and questions were situated on both paper sides. The survey questionnaires have been originally designed in English language and further translated to Finnish and Russian languages for customer convenience. The researcher believes that the respondents feel better about answering questions on their own language. Also, the level of English language knowledge among Russian customers is considerably lower when compared to, for example, Finnish customers, therefore the translation was necessary. The translations to the local languages has been done as accurate as possible to deliver the original meaning of questions.

In total, there have been 130 questionnaires printed out and handed out. Generally, people were willing to take part in the survey and very few rejected to fill survey papers, referring to the busyness and lack of interest at that moment. Since there were many families and
group of tourists coming during the survey days, every member of a group received their own separate questionnaire paper to answer. Overall, 67 questionnaire papers with responses have been returned, therefore the response rate among the hotel’s customers equals 51.1%, which is very good result for the survey method in general.

Out of all 67 questionnaires collected back, 30 questionnaires belong to the respondents from Russia, 35 questionnaires were filled by respondents from Finland and only 2 questionnaires were answered by respondents from other countries - Switzerland and Sweden. Therefore, it means that distribution of answers by nationality is even (logically, that there have been slightly more questionnaires filled by Finnish customers since the hotel is located in Finland) which is very favorable for the further analysis.

Overall, when people were explained the questionnaire purpose (answering questions about the environment and environmental program at Scandic Patria Hotel) and were provided with the papers, many people felt enthusiastic and interested in the study and some said that this is the important topic of current interest. Since the responses were positive, it already might be stated that in general both Finnish and Russian consumers are recognizing environmental sustainability in a hotel as important and valuable thing.

3.3.2 Questionnaire design and measurement of variables

The questionnaire has been designed based on the external secondary data available and internal secondary data for the environmental program which has been provided by Scandic Patria Hotel. Overall, the questionnaire is composed of 11 comprehensive questions with various types of answers – multiple choice, open answer, semantic differential scale, and Likert scale.

Questions 1, 2, 3 in the questionnaire are travel-related and stay-related question with multiple answer option. Those questions are introductory and easy to answer; therefore, those questions were placed at the questionnaire’s beginning. The question 1 aimed to reveal how often a respondent stays in a hotel on average - 1 time in a year or less, 2-4 times in a year, 5 or more times in a year. The question 2 aimed to find out the purpose of the current travel – leisure, business, shopping, visiting family or friends, education,
healthcare or transit. The question 3 aimed to reveal whether a respondent travels alone or with family, partner, friends or colleagues. The questions were asked since the travel-related parameters might influence consumer pro-environmental behavior and perceived importance of the environmental program among other stimuli when choosing an accommodation.

The question 4 aimed to gather the information on respondents’ general pro-environmental behavior. The set of five separate questions was chosen. Respondents answers how often do they follow statements – a) I turn off any lights and unplug electronic appliances that I am not using; b) I buy organic products; c) I turn off the faucet when I brush my teeth or wash dishes; d) To travel short distances, I prefer to walk or use a bike; e) I separate and recycle waste. The respondents were asked to provide their answers based on 5-value semantic differential scale where 1 - Never, 2 - Rarely, 3 - Sometimes, 4 - Often, 5 – Always. This information is desirable to compare answers of customers with strong and weak pro-environmental behavior on the perceived importance of the environmental program in decision-making process, as well as customer propensity to pay premium for the environmental program.

The question 5 aimed to reveal what factors have influenced consumer decision-making process of hotel choice. The respondents were offered to rate each potential influencing factor – location, price, design and interior, services and facilities, reviews, recommendations and promotion, environmental program, reward program, brand, reparation, by giving scores from 1 (lowest influence) to 5 (higher influence) to each of the hotel attributes. This question aimed to find out what are the most influencing and, therefore, important hotel characteristics for customers and what is the place of the environmental program among them.

The questions 6a and 6b were related to the Scandic Patria Hotel’s environmental program and the environmental measures. The questions aimed to reveal respondents’ awareness on those environmental measures and the perceived importance of each environmental measure. Overall, based on internal secondary sources, 13 most prominent environmental measures were chosen to be included into the questionnaire’s list. The question 6a required customers to mark the environmental measures that they know are implemented by
Scandic Patria Hotel. One environmental measure namely “charging stations for electric cars” falls out from the list since it is not implemented yet by Scandic Patria Hotel. The measure was included into the list to lower the risks of social bias. Analyzing the respondents’ awareness on that measure, the researcher concludes on the honesty of the overall answers. The question 6b required respondents to rate each environmental measure by giving scores from 1 (not important at all) to 5 (extremely important). Thus, this question aimed to reveal customer opinions on importance of different environmental measures included into the Scandic Patria Hotel’s environmental program.

The question 7 aimed to find out whether customers want to pay premium prices to support the environmental activities initiated by Scandic Patria Hotel. Customers may answer “yes” or “no”. Customers answering “yes” then indicate how much more they are willing to pay to support the environmental program. Respondents may choose between “10% or less”, “20%”, “30%”, “40%”, “50% or more”. This question aims to find out how many customers would pay premium and how much more compared to the normal price.

Lastly, the general questions 8, 9, 10, 11 for independent variables - respondent’s gender, age, country of origin, the highest completed education was included. The questions were placed at the questionnaire’s end since those questions are sensitive, and people feel reluctant to answer them.

### 3.3.3 Data analysis

The current subparagraph provides information on the methods used for the data analysis to answer each specific research question. The respondents’ data has been analyzed using the following statistical methods: arithmetic mean, standard deviation, correlation analysis, student’s t-test, ANOVA test, and Chi-square test. Further, for each research question the corresponding survey’s questions, analysis process, and statistical methods used are presented:

**RQ1: How does the presence of environmental programs compared to other motivation factors (location, price, interior, services, promotion, reward program, brand name, reputation) influence consumer purchasing decision?**
The respondents’ information which was gathered from the questionnaire’s question 5 was used for answering the research question 1. The arithmetic means and standard deviations were calculated for each of hotel’s parameter. The metrics were calculated across the entire sample and across groups of Russian and Finnish customers and compared further. After that, the hotel’s parameters were ranked by importance and the position of the environmental program among other parameters was defined.

**RQ2:** How does the consumer pro-environmental behavior influence environmental program’s perceived importance among other hotel features by Finnish and Russian customers?

To answer the research question 2, the information received on question 4 (customer pro-environmental behavior) and on question 5 (the environmental program’s importance) was used. To calculate customer pro-environmental behavior, the set of five questions was used and the arithmetic means were calculated to receive the individual scores for pro-environmental behavior. Further, the overall score for pro-environmental behavior was calculated in total and by country using arithmetic means. Next, the correlation analysis was conducted to reveal the connection existence between consumer pro-environmental behavior and environmental program’s importance in total and by county.

**RQ3:** How the environmental program among other motivation factors is perceived by hotel customers with different socio-demographic and travel-related profiles?

To answer the research question 3, the information received on the question 5 (the environmental program’s importance) and the questions 1, 2, 3, 8, 9, 10, 11 was used. To compare the differences among customer groups with opposite characteristics and to conclude on difference’s significance the two-sample two-tail t-test with equal variation was performed (for two groups) and the ANOVA test was used (for more than two groups).

**RQ4:** What are the environmental measures with the highest perceived importance and value from hotel customers’ viewpoint?
To answer the research question 4, the information received on the questions 6a and 6b was used. For each environmental measure the percentage of those customer who are aware of a measure was calculated and further ranked starting with a program with the highest awareness score and finishing with a program with the lowest awareness score. To measure the environmental measure’s importance, the arithmetic means and the standard deviations were calculated for each environmental measure in total and for Finnish and Russian customers separately. Then, the environmental measures were ranked based on the scores for the importance from the highest to the lowest score.

**RQ5: Does the presence of the environmental program make customers ready to pay premium price for accommodation services? If yes, how much?**

To answer the research question 5, the information received on the questions 7 (paying premium) and on the questions 1, 2, 3, 4, 5, 8, 9, 10, 11 was used. Then, the percentage of people who agreed to pay premium for having the environmental program was calculated. Next, the ANOVA test was conducted to see whether there is the difference in the scores for the environmental program’s importance and the pro-environmental behavior between two customer groups – those who would pay premium and those who wouldn’t pay. Then, the chi-square test was performed to see whether there is statistically significant difference among customer groups with various demographic, social and travel-related profiles in paying premium for having the environmental program.

### 3.3.4 Data reliability and validity

Since customer relations and opinions towards the environmental program in the hotel cannot be observed directly, the errors might arise from customer self-assessment through the questionnaire method. The subjective nature of the research topic creates problems in the matter of reliability and validity of the data collected. Thus, random and systematic errors of measurement may influence the obtained results of the investigation.

Regarding reliability of the results, the sample size of 67 respondents is enough to make conclusions about the general tendencies and patterns. However, this sample size might not be very sufficient to compare behaviors of respondents with the different parameters within
this sample. For instance, if moving further, the sample size was not big enough to receive reliable percentage of business travelers and other groups of travelers to compare them with leisure travelers. For the same reason, customers travelling with friends and colleagues were united into one single group (based non-family parameter) since there were not enough of reliable data on each of the customer groups.

Speaking generally, the external validity of the results (applicability of the results to other customer groups then surveyed) might be under questions since customers surveyed belonged to the certain nationalities, had a certain income level, most of them were coming for leisure purpose. The results are only applicable to other tourist accommodation service companies with similar attributes and customer groups similar to those surveyed in Scandic Patria hotel.

Reliability also applies to the individual measures. Indeed, the environmentally sustainable development, the environmental program and environmental measures and their associated topics are complicated for ordinary customers to shape strong and uniform opinions without a chance of reconsidering. The respondent answers e.g. on environmental measure’s importance might be influenced by the situation, by the customer mood, by whether a customer was answering the questionnaire alone or together with companions and so on. Thus, the possibility of the same respondents giving different answers if they would be surveyed other times still exists.

Regarding results’ validity, since the environmentally sustainable development and the environmental program are complicated issues, it was a challenge to measure customer opinions and relation to the program by choosing the correct and representative questions. For instance, customer pro-environmental behavior was measured as the mean score for the set of five questions. The results for each single respondent and therefore the overall results might possibly be different if other five questions were asked. Thus, more Finnish customers are involved in recycling and separating waste compared to Russian customers since waste separation practices are much more common and they are required to separate waste.
The other errors might arise for a reason that the propensity to answer of those customers who are interested in the sustainable development topic and the environmental program is higher, therefore the results might be biased. Also, the error might arise from the researcher’s influence since the questionnaires were distributed through personal researcher’s contact with the potential respondents, and therefore the percentage of “positive” results might be exaggerated.

To conclude, the research framework and methodology chapter provides comprehensive information on the research theories and research methods used – questionnaire and case study, where the case company and the customers are presented, and questions are designed to reach the research goals. The research design counts on limitations and possible validity and reliability errors. The chapter defines the five research questions and five corresponding hypotheses based on the previous studies that will be tested further.
4 RESULTS AND DISCUSSION

4.1 Survey results

4.1.1 Background of respondents

To begin with providing the insights into the respondents and the answers, the figure 4.1 and the figure 4.2 represent the percentage of customers surveyed based on their socio-demographic and travel-related characteristics.

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![Figure 4.1](image1)

**Figure 4.1** Respondents participating in the survey broken down by gender, age, country of origin, and education.

![Figure 4.2](image2)

**Figure 4.2** Respondents participating in the survey broken down by frequency of stay in a hotel in a year, reason to travel, and travel companion.

It can be concluded that male and female respondents, as well as Finnish and Russian respondents are represented equally. Respondents surveyed belong to various age groups
and have various educational backgrounds. Since the survey was mainly conducted during the weekend, most respondents came for leisure and stayed in the hotel with families and partners. Also, most of customers surveyed are experienced hotel service users since the frequency of stay for many respondents is over 2 times in a year.

4.1.2 Hotel selection criteria

The table 4.1 provides information on the environmental program’s importance in consumer purchasing decision alongside with other important hotel parameters (stimuli).

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Finland</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Location</td>
<td>4.46</td>
<td>0.71</td>
<td>4.42</td>
</tr>
<tr>
<td>Price</td>
<td>3.97</td>
<td>1.08</td>
<td>3.97</td>
</tr>
<tr>
<td>Design and Interior</td>
<td>3.61</td>
<td>0.96</td>
<td>3.67</td>
</tr>
<tr>
<td>Services and Facilities</td>
<td>3.50</td>
<td>0.91</td>
<td>3.38</td>
</tr>
<tr>
<td>Reviews, recommendations,</td>
<td>3.67</td>
<td>1.14</td>
<td>3.35</td>
</tr>
<tr>
<td>promo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental program</td>
<td>2.95</td>
<td>1.19</td>
<td>3.03</td>
</tr>
<tr>
<td>Reward program</td>
<td>3.18</td>
<td>1.37</td>
<td>3.50</td>
</tr>
<tr>
<td>Brand</td>
<td>3.41</td>
<td>1.16</td>
<td>3.27</td>
</tr>
<tr>
<td>Reputation</td>
<td>4.22</td>
<td>0.79</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Thus, importance of the environmental program in Scandic Patria hotel is rated $M = 2.95$, where $M = 3.03$ for Finnish customers, and $M = 2.90$ for Russian customers. At the first glance, Finnish respondents evaluate environmental program slightly higher than Russian customers (the statistical significance of means’ difference is calculated further). Also, there is the noticeable variation in respondents’ answers regarding the environmental program compared to other hotel parameters. For both Finnish and Russian customers, the variation in answers regarding the environmental program is the second highest ($SD = 1.18$ for Finnish; $SD = 1.24$ for Russians; overall $SD = 1.19$), and only followed by opinions’ variation for reward program (overall $SD = 1.37$). Thus, the environmental program is ambiguous and uncertain topic for customers.
The figure 4.3 provides information on customer rating of the importance of the hotel parameters. The location, reputation and price are chosen as the most important parameters (M = 4.46, M = 4.22, and M = 3.97 respectively). Reviews, recommendations and promotion, design and interior, and services and facilities (M = 3.67, M = 3.61, and M = 3.50 respectively) received the medium scores for importance. By contrast, brand, reward program, and environmental program (M = 3.41, M = 3.18, and M = 2.95 respectively) are ranked at the end of ranking list. The answers among Finnish and Russian customers were distributed in similar way, only minor differences regarding certain parameters are observed.

Table 4.2: Consumer pro-environmental behavior and importance of the environmental program when choosing Scandic Patria hotel.

<table>
<thead>
<tr>
<th></th>
<th>4A mean</th>
<th>4B mean</th>
<th>4C mean</th>
<th>4D mean</th>
<th>4E mean</th>
<th>Total mean</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3.93</td>
<td>2.89</td>
<td>3.66</td>
<td>4.11</td>
<td>3.39</td>
<td>3.60</td>
<td>0.43</td>
</tr>
<tr>
<td>Finland</td>
<td>4.28</td>
<td>2.66</td>
<td>4.34</td>
<td>3.86</td>
<td>4.34</td>
<td>3.87</td>
<td>0.23</td>
</tr>
<tr>
<td>Russia</td>
<td>3.57</td>
<td>3.07</td>
<td>2.97</td>
<td>4.37</td>
<td>2.47</td>
<td>3.29</td>
<td>0.62</td>
</tr>
</tbody>
</table>

The table 4.2 shows the consumer mean scores for pro-environmental behavior calculated by each of five questions and in total. Overall, the mean score for pro-environmental behavior among Finnish customers (M = 3.87) outnumbered the mean score for pro-
environmental behavior among Russian customers (M = 3.29). The further analysis (table 4.3) approves that the difference between means is statistically significant.

Table 4.3  The significance of the mean difference for pro-environmental behavior among Finnish and Russian customers.

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Variance</th>
<th>df</th>
<th>t crit</th>
<th>t-value</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finnish</td>
<td>35</td>
<td>3.874</td>
<td>0.188</td>
<td>63</td>
<td>1.998</td>
<td>4.169</td>
<td>9.527E-05</td>
</tr>
<tr>
<td>Russian</td>
<td>30</td>
<td>3.287</td>
<td>0.476</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 4.2 shows the correlation indexes for consumer pro-environmental behavior and environmental program importance in choosing Scandic Patria hotel. The correlation index for pro-environmental behavior and the environmental program importance is positive and it equals to 0.43 (low to moderate). The correlation index calculated for Finnish customers is low (0.23) and calculated for Russian customers is moderate (0.62). Generally, enhanced pro-environmental behavior among customers moderately correlate with environmental program’s importance in choosing Scandic Patria.

Table 4.4  The t-test comparing the environmental program’s importance between customer groups broken down by country of origin, gender and education.

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Variance</th>
<th>df</th>
<th>t crit</th>
<th>t-value</th>
<th>P-value</th>
<th>H0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finnish</td>
<td>30</td>
<td>3.000</td>
<td>1.379</td>
<td>57</td>
<td>2.002</td>
<td>0.218</td>
<td>0.828</td>
<td>not rejected</td>
</tr>
<tr>
<td>Russian</td>
<td>29</td>
<td>2.931</td>
<td>1.566</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>2.536</td>
<td>1.221</td>
<td>59</td>
<td>2.001</td>
<td>2.632</td>
<td>0.011</td>
<td>rejected</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>3.303</td>
<td>1.343</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low education</td>
<td>20</td>
<td>3.200</td>
<td>1.642</td>
<td>59</td>
<td>2.001</td>
<td>1.146</td>
<td>0.256</td>
<td>not rejected</td>
</tr>
<tr>
<td>High education</td>
<td>41</td>
<td>2.829</td>
<td>1.295</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 4.4 complements the results gained for the table 4.1 by comparing the environmental program’s importance mean scores among Finnish and Russian customers. Since the mean difference M = 3 and M = 2.93 is not significant, Finnish and Russian customers consider the environmental programs equally when deciding on Scandic Patria Hotel.
The customers from lower education group (secondary school, high school, or college) rated the environmental program with $M = 3.2$, and customers from higher education group (bachelor’s degree, master’s degree, or PhD) rated the environmental program with $M = 2.83$ in importance. The mean difference though is not statistically significant, and customers see the environmental program’s importance equally regardless education backgrounds.

The environmental program is more important for female customers ($M = 3.3$) compared to male customers ($M = 2.54$) because the mean difference is statistically significant. Concluding, in this research the environmental program’s importance is not influenced by respondents’ country of origin, age, but influenced by gender.

Further, the tables 4.5, 4.6, and 4.7 provide information on the environmental program’s importance variance among respondents from various age groups, with various travel-related characteristics – frequency of stay in a hotel and travel companion.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-value</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.093</td>
<td>3</td>
<td>0.364</td>
<td>0.248</td>
<td>0.862</td>
<td>2.766</td>
</tr>
<tr>
<td>Within Groups</td>
<td>83.759</td>
<td>57</td>
<td>1.469</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>84.852</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Even though the mean scores are different for customers from different age groups, this variance is not statistically significant. Hence, based on the current study, people treat the environmental program equally regardless the age when selecting Scandic Patria.
Customers who stay in a hotel once in a year or less expressed lower environmental program’s importance (M = 2.65) compared to more experienced hotel visitors (M = 3.0 and M = 2.96). However, the variance between customer groups is not statistically significant, and there is no visible difference among customer opinions on the environmental program’s importance divided by frequency of stay in a hotel in a year.

Customers travelling alone and customers travelling with friends or colleagues reported higher environmental program’s importance (M = 3.22 and M = 3.1 respectively) compared with customers travelling with family or partner (M = 2.84 and M = 2.88 respectively). However, the variations between groups are not statistically significant. Regardless of travelling companion, consumers consider the environmental program’s importance in the same way when making the purchasing decision in favor of Scandic Patria.
4.1.3 Consumer awareness and importance of environmental measures

Next, to investigate customer awareness about environmental measures undertaken by Scandic Patria, the bar chart in figure 4.4 shows the proportion of customers who are assured that a certain environmental measure is implemented by Scandic Patria.

![Bar chart showing guest awareness on environmental measures in Scandic Patria.]

Figure 4.4 Guest awareness on the environmental measures in Scandic Patria.

Generally, customers surveyed are not well aware on the environmental measures. Thus, linen and towel reuse program (32.84%), energy efficient light bulbs (32.84%), separating and recycling waste (29.85%), low flush toilets (25.37%), sustainable food and beverage (22.34%) were reported as the most known environmental measures. Then, banning disposable plastic bags (19.40%), ecolabel certificate (19.40%), restrained water flow in shower (14.93%), reduced chemicals in cleaning (13.43%), and using renewable & recycled materials (11.94%) were reported. Lastly, banning components from endangered species (7.46%), renewable energy (5.97%), and charging stations for electric cars (1.49%) were reported as least known environmental measures.
The figure 4.5 provides information on customer’s evaluation of the environmental measures’ importance. Based on results, the most important environmental measures reported by customers are separating and recycling waste (M = 4.03), sustainable food and beverage (M = 3.90), banning disposable plastic (M = 3.78), reducing chemicals in cleaning (M = 3.75), banning components from endangered species (M = 3.67). The moderate scores for the importance are assigned to the usage of renewable & recycled materials (M = 3.53), renewable energy (M = 3.45), energy efficient light bulbs (M = 3.40), ecolabel certificate (M = 3.34), low flow toilets (M = 3.11). Lastly, linen and towel reuse program (M = 3.00), restrained waterflow in showers (M = 2.74) and charging stations for electric cars (M = 2.53) received the lowest scores for importance.
The combination of customer awareness and the importance of the environmental measures in Scandic Patria.

The figure 4.6 above demonstrates how customer awareness on environmental measures correspond with the importance environmental measures from customers’ prospective. Thus, separating and recycling waste is important and known environmental measure, which cannot be concluded on other environmental measures. Sustainable food & beverage, banning disposable plastic, reducing chemicals in cleaning, banning components from endangered species, renewable and recycled materials, renewable energy demonstrate greater gap between awareness and importance. For linen and towel reuse program, consumer awareness is greater than perceived importance. Thus, customer awareness on environmental measures doesn’t generally correspond to perceived importance of environmental measures.

4.1.4 Consumer propensity to pay for the environmental program

The table 4.8 and the figure 4.7 provide information on perceived price and guests’ readiness to pay premium for having the environmental program in Scandic Patria.
Table 4.8 Readiness of guests to pay premium for having the environmental program in Scandic Patria.

<table>
<thead>
<tr>
<th></th>
<th>Not paying</th>
<th>10% or less</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50% or more</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>32.84%</td>
<td>44.78%</td>
<td>20.90%</td>
<td>1.49%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Finnish</strong></td>
<td>31.43%</td>
<td>40.00%</td>
<td>25.71%</td>
<td>2.86%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>Russian</strong></td>
<td>36.67%</td>
<td>50.00%</td>
<td>13.33%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Figure 4.7 Readiness of guests to pay premium for having the environmental program in Scandic Patria hotel.

Just one third - 32.84% of customers surveyed are not ready to pay premium to support the environmental program in the hotel. By country of origin, 31.43% of those are guests from Finland and 36.67% of those are guests from Russia. Every second customer from Russia agrees to pay 10% premium, while for Finnish customers this number equals to 40%. More Finnish customers (25.71%) are ready to pay over 20% and the small minority would pay 30%. Comparing to Russian customers, approximately only one guest out of ten guests (13.33%) would pay 20% more. Summing up, 67.16% of customers would pay premium – up to 10% or 20% for having environmental program in Scandic Patria.

Thus, the table 4.9 below represents the statistical significance of differences among customer groups regarding the propensity to pay premium for having the environmental program in Scandic Patria. The analysis evidences that there is no statistically significant difference among customers from Finland and Russia, as well as among other customer groups. The differences are only observed between customer groups divided by customer age.
Table 4.9 The chi-square test comparing the propensity to pay premium between customer groups broken down by various parameters.

<table>
<thead>
<tr>
<th>Criterium</th>
<th>Group</th>
<th>Paying premium</th>
<th>Not paying premium</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of origin</td>
<td></td>
<td></td>
<td></td>
<td>0.656</td>
</tr>
<tr>
<td>Finland</td>
<td>24</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>19</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td>0.656</td>
</tr>
<tr>
<td>Male</td>
<td>18</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td>0.029</td>
</tr>
<tr>
<td>≤ 30</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-45</td>
<td>15</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-60</td>
<td>9</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤ 61</td>
<td>12</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td>0.667</td>
</tr>
<tr>
<td>Low</td>
<td>14</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>31</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
<td>0.285</td>
</tr>
<tr>
<td>1 time or less in a year</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 times to 4 times in a year</td>
<td>20</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>over 5 times in a year</td>
<td>21</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Companion</td>
<td></td>
<td></td>
<td></td>
<td>0.604</td>
</tr>
<tr>
<td>Alone</td>
<td>9</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>15</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>13</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends or colleagues</td>
<td>8</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table 4.10 below shows that there is no statistically significant difference among customer groups who are paying and who are not paying premium regarding the environmental program’s importance. However, there is the statistically significant difference among customer groups who are paying and who are not paying premium regarding the pro-environmental behavior. Thus, strong pro-environmental behavior is the predictor for customers paying premium.
The t-test comparing the strength of pro-environmental behavior and the environmental program’s importance between customer groups who would and who wouldn’t pay premium for the environmental program in Scandic Patria.

<table>
<thead>
<tr>
<th>Group</th>
<th>Count</th>
<th>Mean</th>
<th>Variance</th>
<th>df</th>
<th>t crit</th>
<th>t-value</th>
<th>P-value</th>
<th>HO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EP importance</strong></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
<td>1.997</td>
<td>0.163</td>
<td>0.871</td>
<td>not rejected</td>
</tr>
<tr>
<td>Paying premium</td>
<td>45</td>
<td>2.667</td>
<td>2.454</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not paying premium</td>
<td>22</td>
<td>2.727</td>
<td>1.160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pro-environmental behavior</strong></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
<td>1.997</td>
<td>3.104</td>
<td>0.003</td>
<td>rejected</td>
</tr>
<tr>
<td>Paying premium</td>
<td>45</td>
<td>3.769</td>
<td>0.311</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not paying premium</td>
<td>22</td>
<td>3.291</td>
<td>0.433</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2 Discussion of the research findings

The purpose of the current paragraph is to interpret and describe the significance of the research findings, to compare and combine them with previous knowledge about the research problem and to provide new deeper and more profound insights into the research theme.

Generally, the survey results on consumer evaluation of the hotel parameters’ importance appeared to be close to what was initially expected by the researcher. The results correspond rather well with existing knowledge extracted from the previous studies. The majority of surveyed customers (both Finnish and Russian) reported location (1st ranking place), reputation (2nd ranking place), and price (3rd ranking place) as primary reasons for the hotel choice. Indeed, Scandic Patria hotel is conveniently situated in the city center of Lappeenranta, the hotel has sound image and reputation, and room rates meet the quality well.

When comparing with previous research results, Dube & Renaghan (2000) also have identified location and brand and reputation as two most influencing parameters, when quality standards were placed last (quality standards carry common meaning with the environmental program in this sense, therefore the comparison is applicable). In the current
research, brand and reputation were grouped as diverse categories and brand appeared to be in low priority. Thus, hotel customers don’t perceive brand and reputation in the same way.

Considering the variations among Finnish and Russian customer groups, reputation was reported by Russian customers as noticeably stronger influencing parameter than by Finnish customers. Russian customers are more influenced by reviews, recommendations and promotion, service and brand compared to customers from Finland. By contrast, Finnish customers consider reward program as more significant factor, compared to Russian counterparts. The possible explanation to the differences can be that Scandic hotels are primary located in Nordic countries, therefore Finnish customers are much more likely to be participants of the reward program, and therefore they consider the reward program as more significant factor. By contrast, Russian customers travel abroad where uncertainty and risks are higher, therefore they choose reputable accommodation under known brand, relying on various sources of information - guests reviews, recommendations and promotions.

As it was predicted, Russian and Finnish customers don’t consider the environmental program as a parameter defining their tourist accommodation choice. However, moving further to analysis of environmental measures’ importance and paying premium preferences, most of customers are ready to pay premium to support the environmental program, and on average, customers gave scores above “3” to environmental measures, meaning that those are important. This observation indicates that customers already expect the hotel to run the environmental programs. This suggestion is reinforced by Deloitte Consumer Survey (2008), where customers reported their expectations regarding the environmental program in hotels. Thus, the environmental program nowadays is considered by most customers as one of “hygiene” factors rather than one of “motivators”. The environmental program is expected to be included in the service by default.

Thus, based on the obtained results, the research hypotheses number one which says that the environmental program in hotels is only perceived as a complementary “service” and doesn’t depend on customer’s country of origin must be accepted.
Connecting consumer pro-environmental behavior and the environmental program’s importance, the results support the assumption that Finnish customers undertake environmentally supportive actions more frequently compared to Russian customers. One explanation could be that environmental awareness, consciousness and environmental protection are more widespread in Finland compared to Russia. Thus, it would be logical to suggest that customers from Finland evaluate environmental programs’ importance higher compared to Russian customers. However, the pro-environmental mindset of Finnish customers weakly correlates with the perceived importance of the environmental program. In contrast, for Russians, this correlation is moderate.

When analyzing consumer pro-environmental behavior by each separate question, Finnish customers received higher scores on saving water and electricity and separating and recycling waste. Thus, it is known that Finnish customers are required to separate waste. They also might undertake water and electricity saving measures not only to support the environment, but to save money. In the proposal is true, the chosen survey questions are weak to conclude on pro-environmental behavior of customers, while positive answers on current questions don’t necessarily mean strong pro-environmental behavior. Therefore, the weakness of correlation between the pro-environmental behavior and the environmental program’s importance for Finnish customers can also be justified by overestimated mean due to ambiguous interpretation of the answers on questions.

By contrast, Russian customers scored higher on purchasing organic products and travelling shorter distances by walking or using bicycles. In Finland, based on observations made by the researcher, organic products are much more expensive compared to organic options in Russia. Also, in Russia even in such big cities as Saint Petersburg open markets are available where customers can buy organic products. The higher propensity of Russian people to overcome short distances by waking or using bicycle can be explained by the situation where many important city objects - e.g. groceries are closely located to each other. Same cannot be concluded on some destinations in Finland where people need to use transport to overcome longer distances.

The hypothesis number two which says that Finnish customers compared to Russian customers tend to behave in more pro-environmental way and therefore they tend to rate
the environmental program as more important influencing factor can be accepted only partly, since greater pro-environmental behavior of Finnish customers doesn’t influence the perceived importance of the environmental program.

Based on the results extracted from the current study, the environmental program’s importance in consumer decision-making process is not connected to customers’ country of origin, age, education, frequency of hotel stays, or travel companions. However, the research has discovered that female customers (\(M = 3.3\)) see the environmental program as more important influencing factor in choosing a hotel compared to male counterparts (\(M = 2.54\)).

The research made by Bruns-Smith and others (2015) also reinforces the conclusion on the variation between male and female customers on the environmental program’s importance. However, this study also indicates that education and age are reliable predictors for stronger involvement into environmental programs run by accommodations. The general study by Mainieri and others (2013) on the influence of environmental concern on consumer behavior received conclusions similar to the current research: when shopping, women are more likely than men to consider environmental issues in their purchases, while age, education, and income were not related to any behavioral changes.

There has not been enough information to compare leisure travelers and business travelers and other customer groups divided by the travel purpose because the most of answers were provided by customers coming to the hotel for leisure purpose. This direction can be used in further researches on the environmental program in Scandic Hotels.

Thus, the hypothesis number three which says that consumers with different demographic, social and travel-related profiles would rate the environmental program’s importance in hotel choice differently can be accepted only partly, since the difference in environmental program’s perceived importance has been revealed only between gender groups.

One of the primary purposes in the current study was to determine consumer awareness on the environmental measures implemented by Scandic Patria hotel. Generally, the awareness among respondents is seen as low to medium, since only 42% of customers
surveyed marked at minimum one of the environmental measures as known in the questionnaire. Saying it in other words, 58% of customers are not aware of the environmental measures and, therefore, very possibly - on the environmental program implemented by Scandic Patria hotel. Or perhaps, customers are aware of the presence of the environmental program, however, they express low interest in familiarizing themselves with the environmental measures included into the environmental program.

Generally, customers reported the most common, “easy” and “generic” environmental measures implemented in most environmentally sustainable accommodations - linen and towel reuse program (32.84%), energy saving light bulbs (32.84%) separating & recycling waste (29.85%), as most known in Scandic Patria hotel. Thus, most of customers expressed low awareness on such “advanced” measures as renewable energy generation and use (7.46%) and banning components from endangered animal and plant species (5.97%). Only 19.40% of respondents were aware of that Scandic Patria hotel is certified with Nordic Swan ecolabel.

On a positive note, only one of respondents has named charging stations for electric cars as the known environmental measure. Therefore, this indicates lower chances for social desirability bias in the current research. Also, only 14.93% of respondents reported restraining waterflow in showers and water basins as known environmental measure, which means that 85% of customers don’t notice any difference and, therefore, not experience inconveniences caused by such controversial and, at the same time, important saving environmental measure.

Research results show that in general Russian customers were more aware of each environmental measure (excluding linen and towel reuse program), compared to Finnish customers. It was originally planned that Finnish customers would demonstrate higher awareness on the environmental measures since they stay in the domestic hotel and their general environmental awareness and pro-environmental behavior levels are higher than those of Russians. In particular, Russians were much more aware of sustainable food & beverage (36.67% against 11.43%), ecolabel certificate (30.00% against 11.43%), energy efficient light bulbs (40.00% against 28.57%), renewable & recycled materials (20.00%
against 5.71%), banning components from endangered species (13.33\% against 2.86\%), and reducing chemicals in cleaning (20.00\% against 8.57\%).

The unexpected results can be justified by the assumption that the Russian customers were more dedicated to answering the questionnaire, or more enthusiastic and interested to take part in the research organized abroad. Moreover, when planning to stay in a hotel overseas, the process of undertaking the decision on a hotel is more involving compared choosing a domestic hotel, since it is associated with higher uncertainty and risks. Therefore, the Russian customers tend to receive more information in advance and the information on environmental program and environmental measures could have been consumed among other relevant information.

It is noteworthy that the importance of environmental measures reported by hotel guests is seen according to the certain tendency. The environmental measures directly enhancing consumer experience e.g. sustainable food and beverage offers ($M = 3.90$) and reducing chemicals in cleaning ($M = 3.75$) have received high scores in importance, just as it has been proposed by the research hypothesis number four. In the same sense, charging stations for electric cars have received the lowest score in importance ($M = 2.53$) because this environmental measure doesn’t yet create use for customers since very few nowadays possess electric cars. The environmental measures that imply sacrifice comfort and convenience for environmental support e.g. restrained workflow in showers ($M = 2.74$) and linen and towel reuse program ($M = 3.0$), have received lower scores in importance, which was also stated by the research hypothesis.

The research hypothesis number four suggests that the environmental measures that require customer involvement and personal action would receive low scores in importance. However, contrary to this suggestion, the measure on separating and recycling waste ($M = 4.03$) has received the top score in importance, which means that customers want to separate waste and be personally involved in doing “good”. Also, banning disposable plastic goods ($M = 3.78$) and components from endangered animal and plant species ($M = 3.67$) have gained high scores in importance. This particular outcome can be explained by advanced moral and ethics of customers surveyed. Thus, the research hypothesis number four can be accepted only partly.
The notable variances in opinions of Russian and Finnish customers regarding the importance of certain environmental measures have emerged. For Russian customers, more important is to have sustainable food and beverage offers ($M = 4.33$ against $M = 3.48$), ban disposable plastic ($M = 4.00$ against $M = 3.61$), reduce chemicals in cleaning ($M = 3.92$ against $M = 3.64$) and have ecolabel certificate ($M = 3.48$ against $M = 3.27$) compared to Finnish customers. Contrarywise, Finnish customers consider restraining waterflow in showers and water basins ($M = 3.24$ against $M = 2.11$), low flush toilets ($M = 3.50$ against $M = 2.52$) and linen and towel reuse program ($M = 3.32$ against $M = 2.63$) as significantly more important programs when compared to Russian customers. Thus, in summary, when staying in a hotel, guests from Russia want to sacrifice much less than guests from Finland to support the environment.

When combining and comparing customer awareness on the environmental measures and environmental measures’ importance from customer’s prospective, some inconsistence arises, since awareness mismatches importance. The perfect state for any hotel would be the high customer awareness on important measures (more importance measure – more awareness) and decreased customer awareness on unimportant and destructive measures (customers don’t know measures which may deteriorate their experience). In the current study, renewable energy ($M = 3.53; 11.94\%$), banning components from endangered animal and plant species ($M = 3.67; 7.46\%$), reducing chemicals in cleaning ($M = 3.75; 13.43\%$), renewable & recycled materials ($M = 3.53; 11.94\%$), and linen and towel reuse program ($M = 3.00; 32\%$) were not corresponding to the desired pattern. The aforementioned “mismatching” environmental measures were chosen in comparison to other environmental measures where awareness more or less meets the importance e.g. separating and recycling waste ($M = 4.03; 29.85\%$) where high importance correspond with comparably high customer awareness.

When it comes to the customer propensity to pay premium to support the environmental program, it was believed that most customers won’t accept increased room rates. However, the survey outcome is rather unexpected, since 67.16\% of customers would agree to pay premium for having the environmental program in the hotel. The customers agreed to pay not more than 10-20\% from the current room rate and there Russian and Finnish customers were distributed equally. Since customers are ready to pay premium, the environmental
program increases the monetary value of the hotel and creates sensible personal value for the hotel guests. All in all, the research hypothesis number five can be rejected.

Referring to the other studies with similar research questions, in 2003 Bohdanowicz stated that 25% of guests would pay premium, Deloitte Consumer Survey from 2008 concluded on 28%, the study by Berezen from 2014 claimed for 40%. Thus, the world is becoming more and more environmentally friendly and people develop environmental consciousness and pro-environmental behavior. In 2018, more people consider environmental parameters of products and services when undertaking purchasing decision than ever. Thus, the 67% of customers who are ready to pay premium is rather positive research outcome. Also, the positive survey results partially can be explained by the research design and the interviewer’s indirect influence through personal and engaging communications with the respondents which might have caused some respondent bias.

The variance between groups of Russian and Finnish customers is seen as marginal and, based on chi-square analysis outcome, not significant. Therefore, regardless of the country of origin, most of customers would accept higher room rates. In the current research, Finnish customers are more generous, since 25.71% would pay 20% for the environmental program, when for Russian customers this percentage is 13.33%. Perhaps, Finland is wealthier country and customers from Finland usually have higher personal income compared to customers from Russia.

When making the comparison between customer groups with various social, demographic and travel-related profiles regarding their propensity to pay premium price for having the environmental program in the hotel, there are no significant variations has been noticed between the groups, except the customer groups which is broken down by respondent age. Thus, 90% customers who are younger than 30 would pay premium price. They are followed by 75% of customers aged between 31 and 45, and 75% of customers over 60 who would accept higher room rates. Lastly, only 43% of customers who are 45-60 years old would pay premium to support the environmental program in the hotel. The pattern is rather unexpected, since younger customers usually have less of disposable income, but they are well informed on the environmental challenges. Perhaps, the research on large
respondent sample needed to make trustworthy conclusions regarding age influence on the perceived price.

Further, the analysis has shown that there is no significant difference in the environmental program’s perceived importance in decision making between groups of customers who would agree to pay higher room rate for having the environmental program in the hotel and between the group of customers who wouldn’t agree. Therefore, customer propensity to pay higher room rate doesn’t depend on customer perceived importance of the environmental program in the hotel.

Contrariwise, the analysis has shown that among those who would pay premium price there are more customers with higher personal pro-environmental behavior scores, when among those who refused to pay premium more customers with lower pro-environmental behavior scores. Therefore, consumer pro-environmental behavior is the predictor for their propensity to pay premium to support the environmental program in the hotel.
5 CONCLUSION

The aim of the current research was to investigate the customer perception of environmental program’s importance in decision making process when selecting a tourist accommodation, customer awareness on environmental measures, importance of environmental measures, and customer propensity to pay premium for having the environmental program in different customer-related contexts, putting special importance to cross-country context of the study. The research question was divided into five sub-questions, the hypotheses for which have been developed and tested. The main results of the study have been showed and discussed in the previous chapter.

5.1 Summary of findings

Summarizing main research findings, neither customers from Finland nor customers from Russia select accommodations based on the environmental program, which corresponds well with previous researches (Bruns-Smith et al., 2015; Dube & Renaghan, 2000). Although the pro-environmental behavior of Finnish customers is stronger when compared to pro-environmental behavior of Russian customers, for Finnish customers the strength of pro-environmental behavior is weaker predictor for the environmental program’s importance when compared to Russian customers, where strength of pro-environmental behavior is more reliable predictor for the environmental program’s importance. Overall, customer pro-environmental behavior positively and moderately correlates with the environmental program’s importance when selecting accommodations. Among other consumer parameters influencing the environmental program’s importance, only gender is seen as significant factor, as females tend to give higher importance to the environmental program compared to males. The awareness on environmental measures at Scandic Patria can be characterized as below average, and for Russian customers the awareness was surprisingly higher compared to Finnish customers. The environmental measures have received unequal importance: measures that create direct value and require action and moral duties have received higher importance scores compared to measures about sacrificing convenience. To support environment, Russian guests want to sacrifice less compared to Finnish guests. Generally, many customers are unaware of environmental measures that they consider important in hotels. 67.16% of customers agree to pay
premium for having the environmental program, and there were no variations among Finnish and Russian customers noticed. Age and consumer pro-environmental behavior, unlike the environmental program’s importance, were discovered to be predicting parameters for customers willing to pay premium.

5.2 Theoretical contribution

The thesis has revealed relationships between environmental program, consumer socio-demographic and consumer travel-related parameters, and consumer decision-making process in different contexts. The developed framework and the empirical results of the research make new theoretical contribution to the research topic.

First, the theories of consumer behavior and consumer decision-making process have been applied to develop new framework explaining the quality of relationship between consumer socio-demographic and travel-related parameters and the environmental program in the tourist accommodation service company. The existing theoretical frameworks (Kotler, Howarth-Sheth, Engel-Blackwell-Kollat models) on consumer behavior have been adopted by the researcher to propose new model of consumer decision-making process on hotel selection, where place for the environmental program among other variables has been identified and connections between variables were established for further empirical testing.

The empirical study identified important relationships among variables which haven’t been identified by other studies or different empirical results have been obtained. For instance, there haven’t been many similar cross-country studies on environmental programs, comparing variations of opinions regarding the environmental program of customers coming from different countries. Also, interesting and new finding was that pro-environmental behavior is strong predictor for customers paying premium for having the environmental program, and that environmental measures’ importance doesn’t go hand in hand with customer awareness on those measures. The study has discovered fresh and up-to-date information on how many guests and how much are they willing to pay for the environmental program in accommodations. After all, the empirical results once again proved existing findings on customer selection of accommodations, where the environmental program is not among guests’ priorities.
By analogy with Finnish and Russian customers the empirical results may be applicable to other customers coming from countries with developed and emerging markets.

5.3 Practical contribution and recommendations

Aside from theoretical contributions, the research results can be applied to managerial practices. The environmental program implemented by tourist accommodation service companies can create sensible benefits for customers, as well as for businesses e.g. increase in booking through differentiating the property, customer readiness to pay premium prices, increased customer satisfaction and loyalty. Based on the research outcomes, there are measures that should be undertaken to increase customer awareness on environmental program’s measures and improve customer pro-environmental behavior to make the environmental program more effective.

Customer pro-environmental behavior should be improved since the pro-environmental behavior is seen as moderate predictor for the environmental program’s importance when selecting accommodation, and strong predictor for paying premium prices for having the environmental program. On the positive trend, the world is currently moving towards sustainable development and more people are becoming aware of the environmental issues. This means that in the near future customers would be much more interested in purchasing environmentally friendly products and services including hotel services. Thus, the development of environmental programs in hotels is the contemporary challenge and the requirement for staying competitive.

The accommodation company must make sure that the environmental program is communicated to and understood by customers. According to the Green hotelier website: “Many sustainability messages fail because they are just put out as a list of facts without thought to how they might be received” (Green hotelier, 2018). For efficient communication, the hotel must provide information to guests about sensible difference the environmental program makes for customers and the entire society instead of listing the incorporated environmental measures. When communicating about complicated issues e.g. carbon emissions, it is advisable to use simple, concise and understandable language or “make it visual or relate facts and figures to something tangible” (Green Hotelier, 2018).
Since many guests from Russia also see the importance of the environmental program, it is advisable to translate the information on the environmental programs to Russian language and other relevant languages of countries where many guests come from.

The communication can take place through many communication channels. The company’s website, social networks and other online platforms are efficient places to share the messages about the environmental program. The tourist accommodation companies should have the information about the environmental activities on the website’s separate page. There should be informative description to each environmental measure and how these measures contribute to guests' improved experience, e.g. through offering organic food and beverage to improve customers’ health or through using environmentally friendly cleaning detergents to enhance the indoor air quality. There the accommodation property can demonstrate the company’s awards and certificates, e.g. Nordic Swan ecolabel and others. The power of social media for tourist accommodation service companies shouldn’t be underestimated: there companies can reach many potential customers and communicate their sustainable environmental measures in precisely and on continuous basis and engage people into discussion, simultaneously forming the emotional attachment and loyalty to the hotel’s brand. It is also important and necessary to add the information on the environmental program to the booking websites since this attribute can be an advantage when guests decide to choose one accommodation property over another.

The accommodation property can take advantage of in-hotel spaces to present the information on the environmental program. The informative signs e.g. reminders to switch electronic appliances off when leaving can be placed in guest rooms and some public areas. The accommodation service companies can provide in-room information booklets to inform customers about the environmental program and demonstrate the achievements. Thus, there are many creative ways to encourage guests to do environmentally friendly actions and to engage guests into the environmental programs using the accommodation’s spaces.

The tourist accommodation service companies can educate their customers about the environmental program and measures through organizing the events in their conference rooms dedicated to the environmental issues or devoted to the environmental occasions e.g.
international environmental events, such as Earth Hour, World Ocean Day, and others. This is a good opportunity to entertain guests, enhance their loyalty to the environmental program and environmentally friendly products, and create worthy reason for publicity. Moreover, some incentives and rewards can be offered to promote customer engagement into the environmental program. For instance, hotels can offer coffee vouchers or small discounts to those guests who agreed to participate in the environmental program.

5.4 Directions for further research

The thesis limitations are forming directions for further research. The research framework is rather concise, and it considers consumer decision-making process but doesn’t disclose information processing mechanism and some other internal (consumer-related) and external (service-related) variables which might influence consumer decision-making process when selecting an accommodation for touristic purposes. For instance, the current research didn’t manage to compare environmental program’s perception between leisure and business travelers due to insufficient sample size. Therefore, more research is needed.

Also, the study has been done based on the case company with the specific customer type, and the results might not be fully applicable for other tourist accommodation service companies. Therefore, more research is needed on businesses whose parameters are different from the case company’s features. It would be interesting and scientifically important to carry out similar studies for upscaled properties (5-star hotels) or downscaled properties (1,2,3-star hotels), as well as for other types of tourist accommodations e.g. hostels, guest houses, apartments and others to see whether there is significant difference.

And lastly, this cross-country research was carried out to compare differences between Russian and Finnish customers, but this direction can be taken by other researchers to compare customers from other countries than Russia and Finland. The world is increasingly becoming more global and international travelling nowadays is common, so tourist accommodation service companies who have international customers must know information on customers’ attitude towards the environmental program.
REFERENCES


Green Hotels Association (2014)


# Customer Survey on Environmental Program in Scandic Hotels

**LUT**
Lappeenranta University of Technology

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1. **On average, how often do you stay in a hotel?**  
   - 1 time in a year or less  
   - 2-4 times in a year  
   - 5 or more times in a year

2. **What is the main purpose of your current travel (you can pick more than one)?**  
   - Business or work  
   - Leisure  
   - Visiting family or friends  
   - Shopping  
   - Education  
   - Healthcare  
   - Transit

3. **Who do you currently travel with?**  
   - Alone  
   - Family  
   - Partner  
   - Friends  
   - Colleagues

4. **How often do you follow the statements below? Please, circle your answer.**  
   - 1 - Never, 2 - Rarely, 3 - Sometimes, 4 - Often, 5 - Always.  
   
   a) I turn off any lights and unplug electronic appliances that I am not using  
   b) I buy organic products  
   c) I turn off the faucet when I brush my teeth or wash dishes  
   d) To travel short distances, I prefer to walk or use a bike  
   e) I separate and recycle waste

5. **Why did you choose to stay at Scandic Hotel? Please, explain what influenced your decision by giving your score from 1 (lowest influence) to 5 (highest influence) to each of these hotel attributes.**

   - Location  
   - Price  
   - Design and interior  
   - Services and facilities  
   - Reviews, recommendations or promotions  
   - Environmental program  
   - Reward program  
   - Brand  
   - Reputation

---

Please turn the page
6a) Which of these environmental activities are implemented by Scandic Hotels? Please, tick the box on the left side if you know that those activities are implemented.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not important at all</th>
<th>Somewhat important</th>
<th>Important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linen and towel reuse program</td>
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<tr>
<td>Energy efficient light bulbs</td>
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<tr>
<td>Restraining water flow in showers and in the wash basins</td>
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<tr>
<td>Using water efficient dual flush and low flow toilets</td>
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<tr>
<td>Generation and use of renewable wind and water energy</td>
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<tr>
<td>Products made of renewable raw materials and recycled materials</td>
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<tr>
<td>Banning disposable plastic bags and packages e.g. plastic water bottles</td>
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<tr>
<td>Separating and recycling waste</td>
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<tr>
<td>Using minimum amount of chemicals in cleaning</td>
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<tr>
<td>Banning products that contain materials from endangered species e.g. wood</td>
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<tr>
<td>from rainforests, endangered fish, palm oil</td>
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<td>Charging stations for electric cars</td>
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<tr>
<td>Offering sustainable food and beverage e.g. organic and local</td>
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<tr>
<td>Having ecolabel certificates</td>
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</tbody>
</table>

6b) How important are these activities in a hotel for you? Please, tick the box on the right side.

7. Would you be willing to pay higher room rate to support environment programs in hotels?
   - Yes, I would be ready to pay more for room rate (mark on the scale how much)
   - 10% or less
   - 20%
   - 30%
   - 40%
   - 50% or more
   - No

8. Your gender
   - Male
   - Female

9. Your age

10. Your home country

11. Your highest completed education
    - Secondary school
    - High school
    - College or similar
    - Bachelor’s degree
    - Master’s degree
    - PhD

Thank you for your answers!
Asiakaskysely
Scandic Hotellien
ympäristöohjelmasta

1. Kuinka usein yövit hotelleissa?
   o 1 kerran vuodessa tai harvemmin
   o 2-4 kertaa vuodessa
   o 5 kertaa vuodessa tai useammin

2. Mikä on tämän matkani päätarkoitus (voit valita tarvittaessa useamman kuin yhden vaihtoehton)?
   o Työmatka
   o Lomaparrain/vapaa-aika
   o Vierailu ystävien tai perheen luokse
   o Shoppailu
   o Opiskelu
   o Terveydenhoito
   o Kautakulku

3. Kenen kanssa matkustat?
   o Yksin
   o Perheen kanssa
   o Kollegoiden kanssa
   o Ystävien kanssa
   o Kumpaan

4. Kuinka usein toimit seuraavien välittömiä mukauksia?
   1 - En ikään, 2 - Harvoin, 3 - Silläin, 4 - Usein, 5 - Aina
   a) Sammutan valot ja irrotaan johdot sähkölaitteista, kun en tarvitse niitä
   b) Ostan luomuutotteita
   c) Suljen vesihanaston pestessäni hampaitani tai tiskatessani
   d) Kuljen lyhyet matkat käveillä tai pyörällä
   e) Lajitteleen jätteet ja kierrätän

   Sijainti
   Hinto
   Tyylitys ja sisustus
   Palvelut ja laitteet
   Arvostelut, suosittelut ja kampanjat
   Ympäristöohjelma
   Kanta-asiakaspalvelu
   Brändi
   Maine ja luotettavuus

Käännä sivua
### APPENDIX 2

<table>
<thead>
<tr>
<th>Tekstitekijä</th>
<th>Scandic Hotellissa</th>
</tr>
</thead>
<tbody>
<tr>
<td>6a)</td>
<td>Mitä seuraavista ympäristötoistoja ja -ohjelmista tiedät Scandic Hotellien toteuttavan? Merkitse rasti vasemmalle puolelle, jos tiedät, että kyseinen ympäristöteko tai -ohjelma toteutuu Scandic Hotellissa.</td>
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<tr>
<td>employee's name</td>
<td>Isakainen</td>
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<td></td>
<td>Tyrkin</td>
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<td></td>
<td>Hyvän tärkeä</td>
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<td></td>
<td>Brittaini tähdet</td>
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<tr>
<td>Petivaatteiden ja pyyhkeiden uudelleenkäyttö (pesukertojen vähentäminen)</td>
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<tr>
<td>Energiassaistäliampujen käyttö</td>
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<tr>
<td>Veden virtauksen rajoittaminen siinuksissa ja hanoissa</td>
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<tr>
<td>Vettä säästäviä vessojen käyttö (tyhjennysken vesimäärien valitsin)</td>
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<tr>
<td>Uusutilauvan energian käyttö ja/tai tuottaminen</td>
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<tr>
<td>Uusutilauvista ja kierrätetyistä materiaaleista tehtyjen tuotteiden käyttäminen</td>
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<tr>
<td>Muovipussejen ja pakkausten väittäminen</td>
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<tr>
<td>Jätteiden lajittelemiseen ja kierrätys</td>
<td></td>
</tr>
<tr>
<td>Kamikoalien käytön vähentäminen silvauskessa</td>
<td></td>
</tr>
<tr>
<td>Uhanalaisten lajien ja materiaalien käytöstä kieltäytyminen, kuten puurakenteiden, sodemetsistä, palauksesta ja uhanalaiset merenelävät</td>
<td></td>
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<tr>
<td>Sähköautojen latauspaisteet</td>
<td></td>
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<tr>
<td>Passikoitten ja luomutuotteiden suosimin ruoilla ja juomissa</td>
<td></td>
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<tr>
<td>Ympäristösertifikaatit ja -merkinnät</td>
<td></td>
</tr>
</tbody>
</table>

7. Olisitko valmis maksamaan enemmän hotellihuoneesta tukeaksesi hotellien ympäristöohjelmia?
   - Kyllä, olen valmis maksamaan enemmän (ympäröi, kiihka paljon)
   - 10% tai vähemmän
   - 20%
   - 30%
   - 40%
   - 50% tai enemmän
   - En

8. Sukupuolesi
   - Mies
   - Nainen

9. Ikäsi

10. Kotimaasi (jos muu kuin Suomi)

11. Korkein suorittamasi koulutus
   - Peruskoulu
   - Lukio
   - Ammattikoulu
   - Asempli korkeakoulututkinto
   - Yliempi korkeakoulututkinto
   - Tohtorin tutkinto

Kiitos vastauksistasi!
Программа экологического развития в отелях Scandic - исследование мнений гостей

LUT
Lappeenranta
University of Technology

1. В среднем, как часто Вы останавливаетесь в отелях?
   - 1 раз в год или реже
   - 2-4 раза в год
   - 5 раз в год или чаще

2. Какова Ваша главная цель настоящего визита? (выберите один или несколько вариантов)
   - Работа или бизнес
   - Отдых
   - Встреча с семьей или друзьями
   - Покупки
   - Учёба
   - Здоровье
   - Транзит

3. С кем Вы путешествуете в настоящий момент?
   - Самостоятельно
   - Семья
   - Друзья
   - Партер
   - Коллеги

4. Как часто вы следуете нижеперечисленным утверждениям? Пожалуйста, выберите один вариант среди предложенных: 1 - Никогда, 2 - Редко, 3 - Иногда, 4 - Часто, 5 - Всегда
   a) Я выключаю свет и электроприборы из розеток, которые не использую
   b) Я покупаю органические (экологически чистые, натуральные) продукты
   в) Я выключаю воду, когда чишу зубы или мою посуду
   г) Я преодолеваю недлинные расстояния пешком или на велосипеде
   д) Я разделяю мусор, а также по возможности использую отходы вторичного

5. Почему вы выбрали отель Scandic? Оцените влияние каждого нижеперечисленного фактора на Ваш выбор отеля по шкале от 1 - наименьшее влияние до 5 - наибольшее влияние
   a) Месторасположение
   б) Цена
   в) Дизайн и интерьер
   г) Набор услуг
   д) Отзывы, рекомендации или реклама
   е) Программа экологического развития
   ж) Бонусная программа
   з) Бренд
   и) Репутация

Пожалуйста, переверните страницу
6. а) Насколько хорошо Вы знаете экологические программы, которые применяются отелями Scandic? Пожалуйста, в окошке слева отметьте те программы, которые на Ваш взгляд осуществляются в отелях Scandic.

<table>
<thead>
<tr>
<th>Применяются отелями Scandic</th>
<th>Абсолютно не важно</th>
<th>Не очень важно</th>
<th>Делово важно</th>
<th>Очень важно</th>
<th>Абсолютно важно</th>
</tr>
</thead>
<tbody>
<tr>
<td>Программа повторного использования полотенец и постельного белья</td>
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<tr>
<td>Ограничение напора воды в душах и умывальнике с целью сохранения водных ресурсов</td>
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<tr>
<td>Двухнапочечный эффективный сливной механизм для унитазов, экономящих водные ресурсы</td>
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<tr>
<td>Производство и использование возобновляемой энергии ветра и воды</td>
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<tr>
<td>Использование продуктов, сделанных из переработанных материалов или возобновляемых материалов</td>
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<tr>
<td>Отказ от использования одноразовых пластиковых пакетов и упаковок</td>
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<tr>
<td>Раздельный сбор отходов, переработка, повторное использование</td>
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<tr>
<td>Сведение к минимуму химических чистящих веществ во время уборки</td>
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<tr>
<td>Отказ от использования продуктов, содержащих компоненты исчезающих видов животных и растений, например, древесины из тропических лесов, польского мыла, исчезающих видов рыбы</td>
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<tr>
<td>Наличие стационарных площадок для подзарядки электромобилей</td>
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<tr>
<td>Наличие в меню натуральных блюд и напитков</td>
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<tr>
<td>Наличие экологических сертификатов</td>
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7. Согласны ли Вы заплатить более высокую цену за номер в отеле с экологической программой, чтобы поддерживать инициативу отеля в отношении экологического развития?

- Да, я согласен заплатить за номер в отеле с экологической программой более высокую цену (пожалуйста, отметьте на шкале, насколько более высокую цену Вы готовы заплатить от настоящей цены)

<table>
<thead>
<tr>
<th></th>
<th>10% или менее</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50% или более</th>
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<tr>
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</tbody>
</table>
- Нет, я не согласен

8. Ваш пол

- Мужской
- Женский

9. Ваш возраст

10. Ваша страна рождения

11. Ваше оконченное образование

- Основная школа (5 - 9 классы)
- Старшие классы (10 - 11 классы)
- Среднее профессиональное образование (колледж, техникум)
- Университет (бакалавриат)
- Университет (специалитет, магистратура)
- Университет (аспирантура и выше)

Благодарим Вас за ответы!