Czech University of Life Sciences Prague

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Bachelor Thesis

Determinants Influencing Eco-friendly Behavior in Domestic Tourism within the Czech Republic

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Determinants Influencing Eco-friendly Behavior in Domestic Tourism within the Czech Republic

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Objectives of thesis

The main objective is to figure out how widely are sustainability efforts spread throughout tourist accommodation industry, which is notoriously known for its large footprint on the environment.
Practical goals of the thesis are such as following:

To analyze sustainability trends in businesses throughout comprehensive literature review.

To conduct survey about the usage of sustainability measures throughout accommodation establishments in KRNAP region.

To simulate costs impact analysis of implementation of selected sustainability practices.

Methodology

The methodology of this thesis will be founded on a combination of document analysis, case studies, and empirical research. Initially, it will involve a thorough literature review of articles and academic papers that address environmental sustainable practices within the Czech domestic tourism sector mainly in KRNAP region. This review aims to capture the theoretical foundations and current trends in the field, alongside practical research, which will focus on statistical analysis of sustainability practices of the accommodation establishments that operate in KRNAP region, plus simulation of costs connected with their implementation.

The proposed extent of the thesis

40 pages

Keywords

Sustainable Tourism, Environmental Impact, Accommodation Industry, KRNAP Region, Sustainability Practices, Cost-Benefit Analysis, Czech Domestic Tourism

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Declaration

I declare that I have worked on my bachelor thesis titled " Determinants Influencing Eco-friendly Behavior in Domestic Tourism within the Czech Republic" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break any copyrights.

In Prague on 15.3.   _____

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Determinants Influencing Eco-friendly Behavior in Domestic Tourism within the Czech Republic

Abstract

This thesis is an investigation into the eco-friendly behavior within the hotel industry in the Krkonoše region of the Czech Republic. The research aims to identify the various factors that influence the implementation of sustainable practices, including hotel size, operation duration, geographical location, and management policies. The study employs a mixed-method approach that integrates case studies, surveys, and statistical analyses to provide a detailed understanding of how these factors contribute to hotel sustainability.

The findings of this research indicate that geographical location and local regulations play a significant role in influencing hotels' eco-friendly behaviors. The study reveals that hotels located in areas with strong environmental policies and community values are more likely to implement sustainable practices effectively. Additionally, the research highlights that factors such as hotel size and management gender do not have a significant impact on eco-friendly behavior.

The implications of this research are significant for the hotel industry as it emphasizes the importance of localized environmental policies and community values in promoting sustainable tourism practices. The study provides practical implications for hotels of all sizes and ages, highlighting that sustainability is achievable regardless of a hotel's size or age. The research also calls for regional initiatives that promote sustainability and suggests further research into the complex relationship between different factors and eco-friendly practices. Overall, this study contributes to a deeper understanding of sustainable tourism and provides a framework for enhancing environmental stewardship within the Czech tourism sector. The results of this thesis can serve as a guide for hotels, policymakers, and other stakeholders to promote sustainable tourism practices in the Krkonoše region and beyond.

Keywords: Sustainable Tourism, Environmental Impact, Accommodation Industry, KRNAP Region, Sustainability Practices, Cost Analysis, Czech Domestic Tourism, Sustainability, Eco-friendly Behavior,

Faktory ovlivňující ekologicky šetrné chování v domácím cestovním ruchu v České republice

Abstrakt

Tato diplomová práce je šetřením ekologicky šetrného chování v hotelovém průmyslu Krkonošského regionu České republiky. Výzkum má za cíl identifikovat faktory, ovlivňující implementaci udržitelných praktik, včetně velikosti hotelu, doby provozu, geografické polohy a politik řízení. Studie využívá kombinovaný metodologický přístup, který integruje případové studie, průzkumy a statistické analýzy, aby poskytla podrobné pochopení toho, jak tyto faktory přispívají k udržitelnosti hotelů.

Zjištění tohoto výzkumu ukazují, že geografická poloha a místní předpisy hrají významnou roli při ovlivňování ekologicky šetrného chování hotelů. Studie odhaluje, že hotely nacházející se v oblastech s pevnými environmentálními politikami a společenskými hodnotami jsou pravděpodobnější k účinné implementaci udržitelných praktik. Navíc výzkum zdůrazňuje, že faktory jako velikost hotelu a pohlaví řízení nemají významný dopad na ekologicky šetrné chování.

Výsledky tohoto výzkumu, zdůrazňují důležitost místních environmentálních politik a společenských hodnot při podpoře udržitelných turistických praktik. Studie poskytuje praktické implikace pro hotely bezohledu na jejich velikost, a nebo stáří, což zdůrazňuje, že udržitelnost je dosažitelná pro valnou většinu podniků. Výzkum také vyzývá k regionálním iniciativám, které podporují udržitelnost, a navrhuje další šetření těchto faktorů.

Celkově tato studie přispívá k hlubšímu porozumění udržitelného cestovního ruchu a poskytuje rámec pro zlepšení environmentálního managementu v českém turistickém sektoru.

Klíčová slova: Udržitelný cestovní ruch, Environmentální dopad, Ubytovací průmysl, Krkonošský region, Praktiky udržitelnosti, Analýza nákladů, Český vnitrostátní cestovní ruch, Udržitelnost, Ekologicky-šetrné chování.

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Introduction

The tourism industry has been facing increasing pressure to adopt environmentally friendly practices in response to global environmental challenges. This shift towards sustainability is particularly relevant in countries like the Czech Republic, where domestic tourism plays a significant role in the economy and environmental preservation. The purpose of this thesis is to investigate and analyze the factors that either help or slow down the implementation of environmentally friendly practices in tourism accommodations in the Czech Republic. The study will examine various factors, such as the impact of hotel size, the length of time it has been in operation, its geographical location, management policies, and local sustainability regulations. By exploring these aspects, this research aims to provide insights into how the tourism industry can improve its environmental stewardship while maintaining economic growth. The research will adopt a mixed-method approach that includes case studies, surveys, and statistical evaluations. It combines a thorough literature review with empirical analysis to achieve its objectives. The focus of the practical part of this thesis is on the Krkonoše National Park area, where it offers a detailed examination of current practices and attitudes towards sustainability in local hotels. The goal of this study is to enhance our understanding of the various factors that influence eco-friendly behavior in the Czech tourism sector.

1 Objectives and Methodology

1.1 Objectives

The main objective is to determine how widely sustainability efforts are spread throughout the tourist accommodation industry in the Czech Republic, which is notoriously known for its large footprint on the environment. The practical goals of the thesis are the following:

- To analyze current pressures shaping the implementation of sustainability practices in businesses through a comprehensive literature review.
- To conduct a survey about the usage of sustainability measures throughout accommodation establishments located within and outside of the KRNAP region.
- To simulate cost impact analysis of implementation of selected sustainability practices.

1.2 Methodology

The methodology of this thesis will be founded on a combination of document analysis, case studies, and empirical research. Initially, it will involve a thorough literature review of articles and academic papers that address environmentally sustainable practices within the Czech domestic tourism sector, mainly in the KRNAP region. This review aims to capture the theoretical foundations and current trends in the field alongside practical research, which will focus on statistical analysis of sustainability practices of the accommodation establishments operating in the KRNAP region and simulation of costs connected with their implementation.

2 Literature Review

2.1 Understanding of Environmental Sustainability

The concept of sustainability has emerged due to the rising awareness of environmental issues such as rising temperatures, lower quality of air and water, and noticeable climate changes. (Goni et al., 2021) This trend began manifesting during the 90s and has been putting significant incentives on governments and organizations to ensure they conduct their operations as "cleanly" as possible. (Tian & Martin, 2012) This means establishing new strategies or aligning theirs to the Sustainable Development Goals (SD-G) outlined by the United Nations in "United Nations 2030," which is world-widely recognized and acknowledged (Fet, 2023). He furthermore states that *"In terms of business, the SDGs include, amongst others, an obligation for industry to adhere to in order to realize SD standards."*(Fet, 2023) *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*(Cassen, 1987) This way of thinking about sustainability is known as the Brundtland Commission and is considered the predecessor to current Sustainability standards. Nowadays, we have acknowledged that it is necessary to focus on more than just meeting the needs of the present and the future. Sustainable development has to meet the triple bottom line consisting of:

- Social needs
- Environmental needs
- Economic needs

also commonly referred to as "people, planet, and profit. "(Fet, 2023; Goni et al., 2021; Tian & Martin, 2012). The triple bottom line can be understood as a dynamic balance that must be maintained between human activities, technologies, environmental capacities, living standards, goals and values, and human requirements. (Fet, 2023; Usubiaga-Liaño & Ekins, 2021) This implies that nowadays, business performance is no longer solely measured by economic success but is also viewed through an environmentally social lens, in other words, how they influence the surrounding world and how they are influenced by it. It points us in the direction of Corporate social responsibility (CSR), which is a term often used interchangeably with sustainability but should be viewed more as an extension of it (Aagaard, 2016).*"Corporate social responsibility includes the economic, legal, ethical, and philanthropic expectations that society has to organizations at a given moment in time."*(Carroll & Shabana, 2010). In contrast, the World Business Council for Sustainable

Development defines sustainable development as *"The business community's continued commitment to behave ethically and contribute to economic development and at the same time improving the quality of life for the employees and their families as well as for the local community and society as a whole"* (Aagaard, 2016; Holme et al., 2000)

2.1.1 Definition and Importance of Environmental Sustainability

Environmental sustainability in business is increasingly recognized as a crucial element for long-term success. Tjahjadi emphasizes the significant influence of business strategy on environmental sustainability performance, highlighting the crucial role of environmental management processes in mediating this relationship. Their research in Indonesian manufacturing micro, small, and medium enterprises (MSMEs) demonstrates that *"business strategy affects environmental sustainability performance" (Tjahjadi et al., 2023).* Click or tap here to enter text. Underlining the importance of strategic decisions in achieving sustainable outcomes. In The hospitality sector, Duric and Topler discuss the growing importance of environmental sustainability as a key competitive factor in the hotel business. They highlight the critical role of performance and environmental sustainability indicators in enhancing hotel competitiveness, indicating a shift towards more sustainable operational practices. (Duric & Topler, 2021) Furthermore, the research by Alsahlawi on Saudi-listed firms reveals a complex relationship between environmental sustainability disclosure and stock returns. (Alsahlawi et al., 2021) Their findings suggest that while environmental disclosure is crucial, it does not always align with investor valuation, indicating a need for greater market recognition of sustainability efforts. Lastly, Dias, in their study on small agricultural businesses, highlights the positive influence of entrepreneurial orientation and commitment to environmental sustainability on both environmental and financial performance. (Dias et al., 2021) This underscores the benefits of sustainability commitment in sectors with significant environmental impacts, like agriculture. Together, these studies show us how businesses adopt environmental sustainability, strategic decision-making, industry-specific practices, and the importance of market recognition for sustainability efforts.

2.1.2 Key Elements of Environmental Sustainability

To identify key elements that encourage long-term user engagement and foster pro-environmental behaviors, Wang and Yao conducted a comprehensive study on this gamified

application. The research revealed that certain gamification design elements, particularly those closely linked with environmental sustainability, significantly impact user attitudes towards Ant Forest. They write, *"The results emphasize the significant impact of gamification design elements that are highly correlated with environmental sustainability (i.e., green context, pro-environmental behaviors, plant a tree) in Ant Forest."* (Wang & Yao, 2020) This indicates that elements like green context and activities directly related to environmental conservation motivate users toward sustainable actions. The study also noted that virtual and official rewards greatly enhance user satisfaction, while aspects related to social interaction and competition were deemed less necessary. (Wang & Yao, 2020) This research provides valuable insights into how gamification can be effectively used to promote environmental sustainability. In the context of landscape planning, Festus underscores the interrelationship between landscaping and sustainable development in his article. FestusThe study highlights that sustainable landscape planning should be prioritized in development projects due to its significant positive impacts on the environment, outweighing the negative impacts. (Festus, 2014) This aligns with the broader understanding that practical environmental sustainability involves a balance between development and ecological preservation. Kashmanian then focuses on the corporate aspect, discussing the critical elements of a corporate environmental sustainability strategy. (Kashmanian et al., 2014) Mainly, they argued that businesses must integrate sustainability into their core operations and decision-making processes, reflecting a shift from traditional profit-centric models to more holistic, environmentally conscious practices, which all more up-to-date literature supports (Aagaard, 2016; Bocken, 2021; Fet, 2023). Lastly, a study conducted by Brito and Terzieva explores the importance of sustainability in event management, particularly in music festivals. They identify visionary leadership, authenticity, and strategic partnerships as crucial for generating social and environmental value in events. This study highlights the role of leadership and collaboration in driving sustainable practices in various sectors. (de Brito & Terzieva, 2016)

2.2 Business Models and the Environment

As Vargas states in his publication, "*Incentive-based environmental sustainability regulations improve efficiency and policy flexibility. Voluntary environmental sustainability regulation motivates firms. Incentive-based environmental sustainability regulations and voluntary environmental sustainability regulations do not promote technology governance*

capabilities. Voluntary environmental sustainability regulations actively participate in meeting environmental sustainability goals. " (Vargas-Hernandez et al., 2023). He further proclaims that the implementation of voluntary environmental sustainability regulations has a weaker effect than command-based and incentive-based environmental sustainability regulations and that it has to be improved with the addition of proactive and supportive actions from governments. (Vargas-Hernandez et al., 2023) Boyle describes the existence of a socio-ecosystem and the need for the projects to meet nonmonetary goals, like education, socio-economic development, and environmental sustainability protection. He claims that this socio-ecosystem approach involves many trade-offs, with a clear vision and direction toward sustainability created by close monitoring and active management. (Boyle et al., 2001) Vargas also adds that "*Organization-level and firms at the same industry-level facing the same external environmental sustainability context have different responses.*"(Vargas-Hernandez et al., 2023) Chesbrough adds the context of "Technological advance force," which forces companies to adopt new business models and, therefore, makes them more responsive to the dynamic changes in the socio-environment. (Chesbrough, 2007) Fet claims that all this, in combination, leads to the sustainable development of organizations, which is crucial to achieving Environmental sustainability. (Fet, 2023)

2.2.1 Traditional Business Models and Their Environmental Impact

The shift from traditional business models towards sustainable practices is increasingly recognized as essential in the current business landscape**.** Cardeal highlights the complexity of integrating sustainability into business models, emphasizing the need to balance economic, social, and environmental objectives. They propose a model that assesses business sustainability, particularly in the context of additive manufacturing in aircraft maintenance, showcasing how traditional industries can evolve toward more sustainable practices. (Cardeal et al., 2020) Similarly, Carpentiere discusses the innovative business models for Smart Cities, addressing traditional processes' inefficiencies and unsustainable environmental impacts. They suggest that digital technologies can lead to significant resource savings and improved business operations, thereby contributing to the environmental sustainability of urban ecosystems. (Carpentiere et al., 2023) Furthermore, Chambost emphasizes the importance of strategic investments in biorefinery projects and departs from traditional decision-making by focusing on sustainable business models that consider environmental impacts alongside economic returns. (Chambost et al., 2018) These

Studies underscore the growing awareness and necessity for traditional business models to adapt and align their processes with sustainable practices, balancing monetary and nonmonetary socio-environmental goals.

2.2.2 Need for Change: The Role of Businesses in Environmental Protection

The need for businesses to actively engage in environmental protection is increasingly evident and is almost viewed as common knowledge nowadays. Vázques points to the significance of green human resource management (GHRM) in translating stakeholder pressures into effective environmental protection practices.
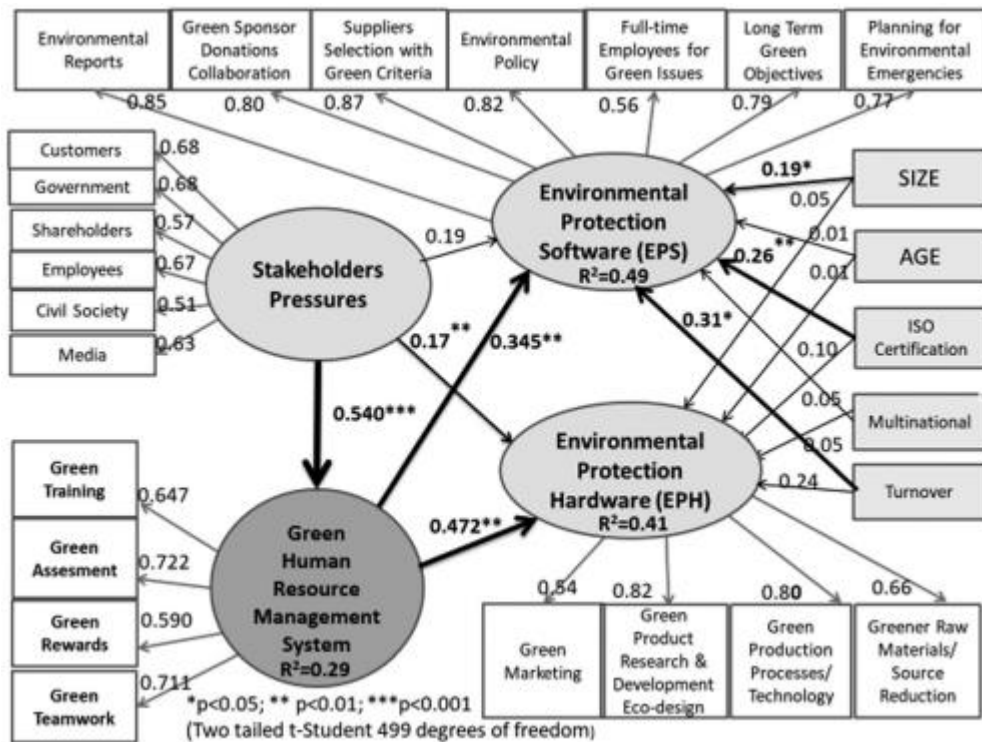
Figure 1 Theoretical model of satisfaction of stakeholders' greening demands. (Vázquez-Brust et al., 2023)

They emphasize the need for a balanced implementation of environmental protection hardware (EPH) and software (EPS) driven by GHRM to meet the greening demands of stakeholders. (Vázquez-Brust et al., 2023) Kong further delves into how business strategies influence firms' environmental actions, revealing that firms with prospector strategies are more proactive in environmental protection than those with defender strategies, especially in contexts of financial constraints and strict environmental regulations. (Kong et al., 2020) Panda and Ray highlight the positive impact of corporate social responsibility (CSR) and environmental protection measures on the financial performance of Indian businesses, suggesting that investments in environmental and pollution control, in addition to CSR,

significantly boost market recognition and share prices. (Panda & Ray, 2023) Yang discusses the role of family business succession in environmental investment, emphasizing the influence of external factors like government regulations and market competition on this relationship. (Yang et al., 2022) Furthermore, his findings correspond to the Vargasses theory discussed before.

2.2.3 Environmentally Sustainable Business Models

Recent advancements in sustainable business practices have led to the emergence of diverse models that prioritize environmental stewardship alongside economic viability. Opitz, in their exploration of Green Business Process Management (GBPM), emphasizes the necessity for organizations to develop specific capabilities to effectively implement GBPM, thereby integrating environmental sustainability into core business processes. Complementing this, (MAASSEN, 2013) work on enhancing the traditional business model canvas with sustainable elements illustrates the critical need for businesses to adapt their operations to green energy and environmentally friendly processes, ensuring a 'clean' production and consumption cycle. (Opitz et al., 2014) Furthermore, Jolnik and Niesten's study on ecopreneurs' business models in the organic food industry reveals how these models, which blend environmental goals with profitability, transform environmental challenges into business opportunities, particularly in the mass market. This approach is instrumental in creating value for environmentally conscious consumers, showcasing a paradigm shift in how businesses address environmental sustainability. (Jolink & Niesten, 2015) However, it's important to note that the effectiveness of ESBMs varies depending on the industry and context. There are practical challenges to implementing ESBMs effectively, as demonstrated in the literature. It's important to understand these models and consider the specific requirements of different business sectors. While ESBMs have the potential to be effective, some limitations suggest the need for continuous adaptation and innovation in their implementation. (Fet, 2023)

2.3 Eco-friendly Tourism Practices

The tourism and hospitality sectors have been facing increasing environmental challenges, especially in South Asian countries. To address this, there is a critical need for environmentally friendly practices that can help mitigate ecological imbalances and global warming. Alam emphasizes the significance of sustainable strategies like effective waste

management and pollution reduction, which are vital for the long-term viability and ethical progress of the tourism industry, particularly in developing regions where environmental impacts are most severe. Such initiatives are not just a fleeting trend but a fundamental necessity for transitioning towards more sustainable tourism frameworks. However, there are several challenges hindering the adoption of eco-friendly initiatives in South Asia. These include inadequate infrastructure, a lack of modern recreational facilities, and significant security issues. Other challenges include deficient governmental planning, insufficient marketing, and low levels of tourism awareness. Political instability exacerbates these problems, making it even more challenging to implement sustainable practices in the region. (Alam et al., n.d.) The study by Rawashdeh and Al-Ababneh dives into the consumer side of eco-friendly tourism by analyzing international guests' perceptions of green practices in Jordanian hotels. Their research reveals a positive correlation between tourists' perceptions of environmental practices and their willingness to give preferable treatment to eco-labeled hotels. This finding is significant as it highlights the growing consumer demand for sustainable travel options and the potential market advantage for hotels that successfully implement eco-friendly practices into their day-to-day operations. The study's focus on eco-label criteria, including energy, water, waste, and community support, provides a comprehensive framework for hotels aiming to enhance their environmental performance. (Rawashdeh & Al-Ababneh, 2021) Turker's study contributes to the discussion on tourists' perceptions of green practices in eco-friendly hotels in the Antalya region of Turkey. The findings emphasize the growing importance of sustainable business practices within the hotel industry, including eco-labeling and environmental management systems. The study suggests that attention to ecological issues has gained momentum, reflecting a broader shift toward sustainable development in business and academic communities. This transition towards eco-friendly tourism practices is becoming more common on a global level, driven by regulatory pressures and consumer demand for sustainable travel experiences. (Turker et al., 2014) In their research, Chand and Garge explore the eco-friendly practices adopted by the Indian hotel industry and their implications for future growth. Their study identifies specific sustainable practices crucial for the industry's development, such as water and energy preservation measures and waste reduction initiatives. It not only describes the current state of eco-friendly initiatives within Indian hotels but also highlights their potential to contribute to broader environmental and economic objectives. (Chand & Garge, n.d.) The hotel industry's emphasis on sustainable growth reflects a larger trend toward integrating

environmental considerations into business strategies. Gökdeniz provides a practical example of sustainable tourism practices through a case study of scenic hotels. His research shows how the Swedish hotel chain has implemented various sustainable practices daily, such as solar energy for hot water, recycling of kitchen and bathroom water, non-use of plastic bottles, utilization of waste for community benefits, guest information on green management, environmentally friendly cleaning products, biological treatment, and garbage separation systems, heat loss prevention, Greening Hotels certification, the establishment of an energy power plant. Scandic's commitment to sustainability is not just a part of its corporate marketing strategy. Still, it is integrated into every possible area of operation, demonstrating the sustainability and benefits of such practices in the hospitality sector. (Ayhan Gökdeniz et al., n.d.) The case study serves as a benchmark for other businesses in the industry, showing that sustainability efforts can lead to profitability and serve as a significant competitive advantage. Collectively, the articles demonstrate the current state and potential of eco-friendly tourism practices across different regions and market segments; there is a clear shift towards sustainability driven by consumer demand and environmental stewardship. These studies emphasize the importance of integrating green practices into the core strategies of tourism and hospitality businesses, demonstrating the dual benefits of environmental protection and business success.

2.3.1 Eco-friendly Tourism Practices in the Czech Republic

The Czech Republic's tourism sector is facing the dual challenge of promoting tourism growth while ensuring environmental sustainability. Examining eco-friendly tourism practices highlights both areas of outstanding achievement and significant room for improvement. Ryglová's study shows that despite the growing trend towards sustainability, accommodation providers in the Czech Republic have a relatively low awareness and adoption of eco-labels. This lack of adoption is due to communication and education gaps regarding the benefits and processes of obtaining eco-certifications. While there is a positive trend toward adopting green practices, the implementation is slowed by a lack of comprehensive understanding and support. Therefore, there is a need for a more robust framework and incentives from both governmental and non-governmental bodies to encourage and make possible the adoption of eco-friendly practices. (Ryglová, 2007) Furthermore, the study by Lasisi suggests that eco-innovation can play a vital role in achieving carbon neutrality within the Czech tourism sector. However, the absence of

concrete findings highlights a research gap in eco-innovation applications in this area. Therefore, there is a need for more targeted research and practical case studies demonstrating how eco-innovation can be implemented within the tourism industry. The critical point here is the need for an approach that integrates eco-innovation into the core of tourism development plans, aligning it with the global trend of carbon neutrality. (Lasisi et al., 2022) The research conducted by Malíčková primarily focuses on Slovakia but can provide valuable insights that are also applicable to the Czech Republic, particularly regarding sustainable golf tourism. The study emphasizes the importance of reducing plastic usage within golf resorts, which can serve as an effective model of environmental stewardship that could be implemented in both countries. However, Malíčková warns that implementing such practices across borders requires careful consideration of the local environmental, cultural, and economic contexts. (Malíčková, 2023) This study highlights the potential for cross-regional learning and adaptation in sustainable tourism practices. Lastly, Stuchlíková´s research within the Moravian-Silesian region underscores a significant shift towards eco-friendly tourism against a backdrop of industrial activity. The main findings reveal an increasing implementation of sustainable practices in accommodation and catering facilities, driven by regional efforts to rebrand as an environmentally friendly destination. However, "juxtaposing" industrial heritage with eco-tourism presents unique challenges and opportunities for sustainable development. The critical lesson here is the importance of regional specificity in applying sustainable tourism practices, necessitating tailored strategies that address local environmental issues while leveraging unique cultural and natural resources. (Stuchlikova & Botlikova, 2020) After evaluating the provided data, it is evident that the Czech Republic is encouraging eco-conscious tourism. Nevertheless, a significant requirement remains for heightened awareness, education, and deliberate execution of sustainable methods. A comprehensive strategy that includes policy reform, stakeholder participation, and collaboration between the public and private sectors is essential for advancing sustainable tourism. The journey towards eco-friendly tourism in the Czech Republic is continuous, providing ample prospects for innovation and improvement and setting an example for sustainable tourism practices.

2.3.2 Critical Evaluation of Cultural and Geographical Influences on Eco-friendly Tourism in the Czech Republic

The Czech Republic's integration of eco-tourism into its cultural and geographical framework is a complex issue, as shown by comparative regional studies. In a relevant analysis within the Slovak-Polish borderlands, Peter and Wiktor identified a significant transition from traditional agriculture to rural and cottage tourism, indicating a shift towards sustainable practices. This transition highlights a potential path for the Czech Republic, suggesting that *"the development of cottage tourism and rural tourism...is, besides agrotourism, the most prominent representative of ecotourism."* (Peter & Wiktor, 2018) However, this comparison also raises questions about whether similar shifts are feasible or currently in progress within the Czech context, given its unique socio-economic dynamics and cultural heritage.(Peter & Wiktor, 2018) In their 2024 study, Kozáková examines the environmental responsibilities of corporations in the Visegrad region. The study highlights significant disparities in eco-friendly initiatives, particularly between the Czech Republic and its neighboring countries. The research indicates that there are statistically significant differences in the areas of eco-friendly transportation solutions and investments in green technologies, indicating a varied commitment to environmental CSR activities across the region.(Kozáková et al., 2024) This finding critically reflects on the Czech Republic's corporate sector's role in supporting eco-friendly tourism and whether current efforts align with broader environmental and cultural sustainability goals. Rudý and Kubíková conducted an assessment of the tourism situation in the Visegrad Four countries, including the Czech Republic, based on sustainability indexes. Their study offers a wide perspective on the region's performance. However, to develop actionable eco-friendly tourism practices, it is crucial to understand how these sustainability measures can be implemented in the Czech Republic. The study's approach to identifying the economic and environmental performance of the region, in connection with the eco-innovation index, environmental performance index, and overall score according to sustainable development goals, provides a framework for further exploration. (Rudý & Kubíková, 2024) However, diving deeper into specific cultural and geographical adaptations within Czech eco-tourism strategies is essential. The use of marketing tools in analyzing the tourism market in the Czech Republic, as discussed in a study by Dušek, offers a data-driven approach to understanding consumer behavior. Although the study provides valuable insights into spending trends, a critical gap exists in connecting these trends with sustainable tourism practices. The authors make note of the

"trends in expenditures for hospitality and tourism services" (Dušek et al., 2019) but fail to explore the link between these expenditures and the promotion of eco-friendly practices. (Dušek et al., 2019) After considering the cultural and geographical factors that affect eco-friendly tourism in the Czech Republic, it is obvious that sustainable practices are being incorporated into the region, but there is still room for improvement. Although there is evidence of a shift from traditional tourism to rural and cottage tourism, pointing towards eco-tourism, the country is still lagging behind neighboring nations in terms of eco-friendly initiatives. The corporate sector's commitment to environmental CSR activities is also inconsistent, indicating the need for businesses to increase their support for eco-friendly tourism. While sustainability indices offer a broad view of regional performance, there is a need for more comprehensive research into the Czech Republic's unique cultural and geographical adaptations to ensure effective eco-tourism strategies. Additionally, current research suggests a disconnect between consumer spending trends and the promotion of sustainable tourism practices, emphasizing the importance of targeted research to align consumer behavior with sustainable development goals in the Czech tourism sector.

2.3.3 Policy and Economic Factors Influencing Eco-friendly Tourism in the Czech Republic

As demonstrated by regional and international studies, the Czech Republic's strategy for promoting eco-friendly tourism is influenced by various policy and economic factors. Malíčková's research on sustainable golf tourism in Slovakia provides a relevant example for the Czech context, highlighting the crucial role of environmental sustainability measures within the tourism industry. Malíčková observes that measures like the mandatory deposit system have effectively reduced plastic waste on golf courses, a practice that can be adopted in the Czech Republic to address pollution in tourist areas. This approach addresses environmental concerns and aligns with global sustainability trends, suggesting a pathway for policy adaptation in the Czech Republic's tourism sector. The research emphasizes the importance of incorporating eco-friendly practices such as water conservation and energy efficiency to ensure the long-term sustainability of tourism destinations. (Malíčková, 2023) In a comparative study, Stemberk investigates the factors influencing visitor numbers to national parks in the Czech Republic, Germany, and Austria. Their analysis reveals that increased financial budgets correlate with higher visitor numbers, suggesting that investment in park infrastructure and services can enhance tourist experiences while promoting eco-

friendly practices. Conversely, the study finds a negative correlation between the number of employees and visitor numbers, indicating that overstaffing may detract from the natural appeal of these protected areas. (Stemberk et al., 2018) This finding highlights the importance of efficient resource management and suggests that Czech national parks could benefit from optimized staffing levels and focused financial investments to improve visitor satisfaction and environmental sustainability. The historical analysis conducted by Guzmán sheds light on the economic changes that have impacted the tourism sector in the Czech Republic. The study examines the effects of neoliberal economic policies that were put in place after the dissolution of Czechoslovakia, particularly the privatization efforts that led to the growth of tourism in Prague. While these policies helped develop a thriving service sector and reduce unemployment in the capital, they also created regional disparities and neglected sustainable tourism development outside urban areas. Guzmán's research suggests that current economic policies should adopt a more balanced development approach, ensuring that eco-friendly tourism initiatives receive sufficient support across all regions of the Czech Republic. This could involve revisiting the effects of privatization and promoting policies that encourage sustainable practices beyond Prague. (Guzman, 2019)

In summary, key considerations from regional and international contexts affect the impact of policy and economic factors on eco-friendly tourism in the Czech Republic. Research shows that it is beneficial to implement environmental sustainability measures, as seen in Slovakia's golf tourism sector. This suggests opportunities for policy adaptation in Czech tourism practices, particularly in pollution reduction and sustainability measures. Furthermore, investing in national park infrastructure seems to positively influence visitor numbers, indicating that optimized resource management could enhance eco-tourism experiences while ensuring environmental protection. Additionally, the economic shift post-Czechoslovakia's dissolution has resulted in Prague's tourism growth at the expense of regional sustainability.

3 Practical Part

3.1 Introduction to the Practical Part

3.1.1 Purpose of the Practical Research

In the practical aspect of this thesis, we plan to put into practice the theoretical discussion on the real-life operations of hotels located in the Krkonoše region. The objective is to assess the degree of environmental sustainability of these hotels and to determine what forces have a significant impact on their sustainable practices.

3.1.2 Structure of The Practical Part

The following sections are designed to outline the research process. We will begin by discussing the methodology, including the survey's design, the hotel managers selected as participants, and the criteria used in their selection. Next, we will move on to the data collection phase, which involves using structured surveys to gather information about sustainability in practice. We will then use statistical techniques, such as ANOVA, Welch's ANOVA, and Linear regression analysis, to analyze the data and examine the proposed hypotheses. We will interpret the results within the context and consider their implications for the current and future state of the hotel industry. Finally, we will combine our research's theoretical and practical insights, providing actionable recommendations and suggestions for future research.

3.2 Methodology

3.2.1 Survey Design and Sampling Framework

The study was designed to provide a comprehensive assessment of the hotels' environmental sustainability in the Krkonoše region. The study aimed to investigate whether there was a significant difference in sustainability practices between the hotels within the KRNAP-protected area and those outside it. The study's primary objective was to determine the extent to which the hotels in the Krkonoše region are committed to sustainable practices. To achieve this objective, a diverse sample of hotels was selected from both categories. These were evaluated based on various criteria, such as energy efficiency, water conservation, waste management, and sustainable procurement practices. The study provides

insight into the different approaches hotels in the region take towards environmental sustainability and the monetary burden connected with them.

3.2.2 Participant Selection Criteria

The selection of participants was a crucial step in the research design, which focused on hotel managers. This was because they are typically aware of the specific environmental policies and practices of their establishments. The criteria for their inclusion were multifaceted, as the managers needed to have direct involvement with or knowledge of their hotel's sustainability initiatives. They also needed to be willing to provide detailed information on these practices. The selection process aimed to encompass a diverse range of hotels in terms of size, clientele, and service offerings to ensure that the results were representative of the industry within the region.

3.2.3 Survey Instrumentation and Data Handling

The survey was structured in a way so that it elicits qualitative and quantitative data on various sustainability indicators, ranging from energy and water conservation measures to waste management and local sourcing initiatives. The data collection process was conducted through structured questionnaires, ensuring consistency and reliability in the responses across the different participants. Subsequently, the collected data were prepared and coded for statistical analysis, following the standards necessary for the subsequent hypothesis testing.

3.2.4 Data Preparation and Coding for Statistical Analysis

Data was collected for this study through a structured survey that focused on various eco-friendly practices and participants' perceptions. Once the data was collected, responses were entered into an Excel document to ensure data integrity and facilitate structured analysis. A unique aspect of the data preparation involved the creation of a coefficient called the "Greenness Quotient." This coefficient was developed to quantify the eco-friendliness exhibited by the survey responses based on predefined criteria derived from a comprehensive review of literature on green practices. Points were assigned to answers that met these criteria, with the number of points reflecting the environmental impact of each practice, as documented in the literature. This method transformed qualitative survey responses into a quantitative scale of 'greenness,' enabling statistical analysis. All analyses were conducted

against this Greenness Quotient or its adjusted variants to ensure correctness in the statistical evaluation. In instances where a dependent variable was initially employed in calculating the Greenness Quotient, such variables were omitted from the model to prevent multicollinearity issues. This approach maintained the integrity of the statistical models. It allowed for an objective assessment of the relationships between various factors and the overall eco-friendliness as quantified by the Greenness Quotient. The resulting dataset, thus prepared and encoded, served as the foundation for subsequent statistical analyses to uncover significant patterns and insights regarding eco-friendly behaviors and practices.

3.3 Statistical Analysis

In the practical part, statistical analyses were conducted to test hypotheses regarding the factors influencing the implementation of green practices within hotels. This part of the thesis presents the analytical process undertaken for the hypothesis concerning hotel size and the adoption of green practices.

3.3.1 Hotel Size and Green Practices

3.3.1.1 Statistical Test Utilized

To investigate the hypothesis, we utilized a linear regression analysis to determine whether there is a statistically significant relationship between the size of a hotel, indicated by the number of beds, and the extent of its green practices. This method was chosen for its ability to measure the magnitude and direction of the possible correlation.

3.3.1.2 Hypotheses Formulation

Null Hypothesis (H0): $\beta_1 = 0$. This means there is no statistically significant linear relationship between the size of a hotel and the diversity of green practices adopted by the hotel. In other words, the size of a hotel does not significantly predict the diversity of its green initiatives.

Alternative Hypothesis (H1): $\beta_1 \neq 0$. This means there is a statistically significant linear relationship between the size of a hotel and the diversity of green practices adopted by the hotel. Specifically, the size of a hotel significantly predicts the diversity of its green initiatives.

3.3.1.3 Presentation of Analytical Results

Model: MODEL1
Dependent Variable: GREENESS Qoeficient GREENESS Qoeficient

Number of Observations Read	30
Number of Observations Used	30

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	135.51707	135.51707	0.34	0.5653
Error	28	11204	400.13749		
Corrected Total	29	11339			

Root MSE	20.00344	R-Square	0.0120
Dependent Mean	87.43333	Adj R-Sq	-0.0233
Coeff Var	22.87850		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	90.23124	6.03757	14.94	<.0001
Přibližný počet lůžek / Ap	Přibližný počet lůžek / Approximate number of beds	1	-0.08496	0.14598	-0.58	0.5653

Table 1 Data output from the SaS model evaluating the relationship between hotel size and its greenness.

Based on the results of the regression analysis, it was found that only 1.20% of the variance in the implementation of green practices could be accounted for by the hotel size, as indicated by the low R-squared statistic of 0.0120. Additionally, the inclusion of the number of beds as a variable did not enhance the model's predictive power, as evidenced by the negative Adjusted R-squared value of -0.0233. The ANOVA results showed that the model does not significantly fit the data concerning the GREENESS Coefficient, with an F Value of 0.34 and a p-value of 0.5653, which surpasses the standard significance threshold.

3.3.1.4 Interpretation of Findings

The study aimed to investigate the connection between a hotel's size and its engagement in environmentally friendly practices. The analysis conducted produced some interesting results. Based on the linear regression model used, the number of beds in a hotel, which was used to measure its size, only accounts for 1.20% of the variance in adopting green practices. This indicates that hotel size is not a significant predictor of adopting green practices within the context of the data set. Additionally, the ANOVA results showed no statistically significant relationship between hotel size and green practices. The p-value, which far exceeds the conventional alpha level of 0.05, indicates no correlation between the two variables studied. These findings challenge the assumption that larger hotels would implement a broader range of green initiatives due to their potentially greater resources and

Stakeholder pressure. Instead, the results suggest that other factors, such as management policies, customer demographics, or geographic location, may significantly influence a hotel's green practices more than its size. The unexpected lack of correlation calls for re-evaluating targeted strategies to enhance the environmental sustainability of hotels. Policymakers and industry leaders should develop more tailored approaches that address hotels' specific needs and circumstances, regardless of their size. This interpretation highlights the complexity of environmental sustainability in the hospitality industry and the need for a more nuanced understanding of the factors that drive green practices. Future research should explore beyond the confines of hotel size to uncover the influences that motivate adopting green practices within this sector.

3.3.2 Operation Durations and Green Practices

3.3.2.1 Statistical Test Utilized

To scrutinize the relationship between the operational duration of hotels and their adoption of green practices, for this purpose, we split the hotels into three categories based on their operation length (0-10, 11-20, 20+); our investigation employed ANOVA (Analysis of Variance) and Welch's ANOVA. These statistical methods were selected for their effectiveness in discerning the differences in means across several distinct groups, thereby allowing an intricate examination of the variances both within and amongst these categories.

3.3.2.2 Hypotheses Formulation

Null Hypothesis (H0): $\mu 1 = \mu 2 = \mu 3 = ... = \mu k$. This implies there is no significant difference in the average number of green practices adopted by hotels of varying operational durations. Essentially, the operational duration categories of hotels do not significantly affect the average number of green practices they adopt.

Alternative Hypothesis (H1): At least one group's mean is different from the others.

This means there is at least one operational duration category of hotels that has a significantly different average number of green practices compared to the other categories.

3.3.2.3 Presentation of Analytical Results

Class Level Information

Class	Levels	Values
category	3	1 2 3

Number of Observations Read	30
Number of Observations Used	30

Dependent Variable: GREENESS Qoeficient GREENESS Qoeficient

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	843.31655	421.65828	1.08	0.3523
Error	27	10496.05012	388.74260		
Corrected Total	29	11339.36667			

R-Square	Coeff Var	Root MSE	GREENESS Qoeficient Mean
0.074371	22.55039	19.71656	87.43333

Source	DF	Type I SS	Mean Square	F Value	Pr > F
category	2	843.3165501	421.6582751	1.08	0.3523

Source	DF	Type III SS	Mean Square	F Value	Pr > F
category	2	843.3165501	421.6582751	1.08	0.3523

Levene's Test for Homogeneity of GREENESS Qoeficient Variance
ANOVA of Squared Deviations from Group Means

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
category	2	1716617	858309	3.87	0.0333
Error	27	5989405	221830		

Welch's ANOVA for GREENESS Qoeficient

Source	DF	F Value	Pr > F
category	2.0000	2.05	0.1657
Error	14.1007		

Level of category	N	GREENESS Qoeficient Mean	Std Dev
1	6	95.1666667	13.0754222
2	11	89.9090909	27.0201945
3	13	81.7692308	13.9651581

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

category	GREENESS Qoeficient LSMEAN	LSMEAN Number
1	95.1666667	1
2	89.9090909	2
3	81.7692308	3

Table 2 The output data for our model examining the relationship between the length of operation of a hotel and its greenness displayed in the ANOVA SAS output.

Our ANOVA analysis revealed that there were no significant differences in the adoption of green practices across various operational lengths or classifications considered in this study. The p-values obtained from our initial ANOVA test (0.3523) and Welch's ANOVA test (0.1657) showed that there was no significant variability in the level of green practices among the groups, even when accounting for potential sample size differences. This contradicts our original expectation of finding significant differences across groups and indicates that the level of green practice adoption is relatively uniform across the different operational lengths or classifications considered in this study.

3.3.2.4 Interpretation of Findings

The purpose of this study was to find out if there is a correlation between the length of time a hotel has been operating and its commitment to environmentally friendly practices. After analyzing the data using ANOVA and Welch's ANOVA, we found that the duration of hotel operations has little impact on their implementation of eco-friendly measures. This means that the length of time a hotel has been operating does not necessarily predict the adoption of green practices. The statistical analysis did not show a direct connection between how long a hotel has been operating and its environmental efforts, which goes against what we initially thought. The high p-values, which are greater than the standard threshold of 0.05, suggest that the longevity of a hotel does not necessarily lead to a higher adoption of eco-friendly practices. This contradicts the belief that hotels that have been around for longer tend to have more significant eco-friendly efforts due to accumulated resources or societal expectations. What this means is that external factors like management decisions, customer demographics, or the location of the hotel may have a more significant impact on their green practices than the length of time they've been operating.

3.3.3 Geographical Influence on Green Practices

3.3.3.1 Statistical Test Utilized

This part of study aimed to investigate whether there is a correlation between the geographic location of hotels, mainly being located within Krnap, or outside of it, and their engagement with green practices. To achieve this, we used ANOVA (Analysis of Variance) as our statistical method. We chose ANOVA because it is effective in comparing the means of green practice adoption across different geographic categories. This allowed us to explore in detail how location impacts environmental initiatives.

3.3.3.2 Hypotheses Formulation

Null Hypothesis (H0): μ1 = μ2 = ... = μk. This states that there is no significant difference in the level of environmentally friendly practices among hotels based on their physical location. Essentially, the hypothesis suggests that the geographical context does not significantly influence the implementation of green practices in hotels.

Alternative Hypothesis (H1): At least one group mean is different. This suggests that there is a significant difference in the level of sustainable practices based on the hotels' geographical location. It implies that a hotel's location significantly impacts its adoption of environmentally friendly practices.

3.3.3.3 Presentation of Analytical Results

Class Level Information

Class	Levels	Values
Place category	2	1 2

Number of Observations Read	30
Number of Observations Used	30

Dependent Variable: GREENESS Qoeficient GREENESS Qoeficient

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1457.90060	1457.90060	4.13	0.0517
Error	28	9881.46606	352.90950		
Corrected Total	29	11339.36667			

R-Square	Coeff Var	Root MSE	GREENESS Qoeficient Mean
0.128570	21.48595	18.78589	87.43333

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Place category	1	1457.900603	1457.900603	4.13	0.0517

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Place category	1	1457.900603	1457.900603	4.13	0.0517

Levene's Test for Homogeneity of GREENESS Qoeficient Variance
ANOVA of Squared Deviations from Group Means

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Place category	1	2612.9	2612.9	0.01	0.9254
Error	28	8197417	292765		

Welch's ANOVA for GREENESS Qoeficient

Source	DF	F Value	Pr > F
Place category	1.0000	4.15	0.0518
Error	26.2251		

Level of Place category	N	GREENESS Qoeficient Mean	Std Dev
1	17	93.5294118	18.9377851
2	13	79.4615385	18.5814217

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

Place category	GREENESS Qoeficient LSMEAN	H0:LSMean1=LSMean2 Pr > |t|
1	93.5294118	0.0517
2	79.4615385	

Table 3 The output data for our model examining the relationship between the geographical location of a hotel and its greenness displayed in the ANOVA SAS output.

Our analysis began with a traditional ANOVA test, which revealed a noticeable difference in the adoption of green practices among hotels based on their location. The p-value for this difference was just above the conventional threshold of significance at 0.0517. Although this p-value is slightly higher than the standard cutoff, it still indicates a meaningful trend where geographical location might influence environmental practices. It's important to note that hotels located within the Krkonoše National Park (KRNAP) had a higher average GREENESS coefficient of 93.53 compared to the hotels located outside KRNAP, which had an average of 79.46. This difference in mean values suggests that hotels located within the park tend to engage more in green practices than those located outside of it. To ensure the accuracy of our ANOVA findings, we also conducted Levene's Test for Equality of Variances. This test reported a p-value of 0.9254, which is significantly higher than the standard significance level. This confirms that there is equal variance across the two groups, supporting the assumption that the detected differences in the average GREENESS coefficients between the geographical categories are not due to random chance. This also strengthens the argument that geographic location plays a crucial role in shaping environmental practices among hotels.

3.3.3.4 Interpretation of Findings

This analysis examines the relationship between a hotel's location and eco-friendly practices. In particular, we focus on hotels in the Krkonoše National Park (KRNAP) area, particularly Malá Úpa, to demonstrate how geography affects environmental efforts. Our statistical findings suggest that a hotel's geographic location influences its green initiatives. This is especially evident in areas like KRNAP, where strict environmental regulations and eco-friendly tourism incentives set a high sustainability standard. The legal and cultural framework in KRNAP pushes hotels towards greener practices, aligning with our analysis that location matters in environmental stewardship. Malá Úpa is a prime example of this. Winning multiple 'Green Village' awards in the Czech Republic demonstrates the community's dedication to sustainability. This reinforces our observations from the literature, stating that, when strict regulations meet community engagement, green practices flourish. This analysis findings suggest that embracing sustainability requires understanding and adapting to local conditions. In regions like KRNAP, where the environmental bar is set high, hotels have adapted and enhanced their sustainability practices to comply with rules. This illustrates the point that local factors, from regulations to community culture, play

critical roles in shaping sustainability efforts. Therefore, this study suggests a broader lesson for the hotel industry: in order to drive substantial improvements in sustainability practices, location-specific approaches are necessary instead of focusing on large-scale nationwide policies. The example of KRNAP, enriched by Malá Úpa's successes, provides a compelling case for considering the context of scale and geography in environmental strategies. In summary, our findings underscore the importance of geographical context in environmental strategies.s.

3.3.4 Influence of Management Gender on Sustainability Implementation

3.3.4.1 Statistical Test Utilized

In this section, we will explore whether the gender of hotel management affects the adoption of sustainable practices. We will be using ANOVA (Analysis of Variance) to identify any differences in sustainability initiatives that may be attributed to management gender. This statistical method will help us evaluate how eco-friendly practices are being implemented across different genders of hotel management in the industry.

3.3.4.2 Hypotheses Formulation

Null Hypothesis (H0): $\mu_1 = \mu_2 = ... = \mu_k$. This states that there is no significant difference in the adoption of sustainable practices among hotels based on the gender of their management. In other words, the hypothesis suggests that the gender of hotel management does not significantly influence the implementation of sustainable practices in hotels.

Alternative Hypothesis (H1): At least one group mean is different. This suggests that there is a significant difference in the adoption of sustainable practices based on the gender of hotel management. It implies that the gender of management may have a significant impact on the implementation of environmentally friendly practices in hotels.

3.3.4.3 Presentation of Analytical Results

Levene's Test for Homogeneity of GREENESS Qoeficient Variance
ANOVA of Squared Deviations from Group Means

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Pohlaví	1	1055.1	1055.1	0.00	0.9546
Error	28	8968529	320305		

Welch's ANOVA for GREENESS Qoeficient

Source	DF	F Value	Pr > F
Pohlaví	1.0000	0.00	0.9830
Error	14.9694		

Level of Pohlaví	N	GREENESS Qoeficient	
		Mean	Std Dev
Muž / Male	9	87.5555556	20.3722306
Žena / Woman	21	87.3809524	20.0236765

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

Pohlaví	GREENESS Qoeficient LSMEAN	H0:LSMean1=LSMean2 Pr > |t|
Muž / Male	87.5555556	0.9828
Žena / Woman	87.3809524	

Class Level Information

Class	Levels	Values
Pohlaví	2	Muž / Male Žena / Woman

Number of Observations Read	30
Number of Observations Used	30

Dependent Variable: GREENESS Qoeficient GREENESS Qoeficient

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	0.19206	0.19206	0.00	0.9828
Error	28	11339.17460	404.97052		
Corrected Total	29	11339.36667			

R-Square	Coeff Var	Root MSE	GREENESS Qoeficient Mean
0.000017	23.01626	20.12388	87.43333

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Pohlaví	1	0.19206349	0.19206349	0.00	0.9828

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Pohlaví	1	0.19206349	0.19206349	0.00	0.9828

Table 4The output data for our model examining the relationship between the gender of a hotel manager and its greenness displayed in the ANOVA SAS output.

Our study aimed to analyze the effect of management gender (male or female) on the adoption of green practices within hotel management. The results showed that there is no significant difference in green practices based on the gender of management. The ANOVA analysis produced a p-value of 0.9828, which is above the conventional threshold for statistical significance. The model's F-value was also reported as 0.00, further supporting the conclusion that the gender of management does not impact the level of environmental sustainability practices adopted. Additionally, Levene's Test for Homogeneity of Variances was conducted to determine if variances in green practice scores between different management genders were homogenous. The test yielded a high p-value of 0.9546, confirming that there is homogeneity in the variances. This result ensures the validity of the ANOVA results.

3.3.4.4 Interpretation of Findings

Our analysis indicates that the gender of hotel management does not significantly influence the implementation of sustainable practices. Our ANOVA results, with a p-value well above the traditional threshold, reveal no statistically significant differences based on management gender. This suggests that other factors, beyond gender, are more influential in determining a hotel's commitment to sustainability. The analysis concludes that there is no significant difference in the adoption of energy-saving measures between newer and older hotels.

3.3.5 Energy Efficiency in Hotels of Different Management Ages

3.3.5.1 Statistical Test Utilized

We conducted a regression analysis to investigate whether the age of hotel managers affects their implementation of green measures. This statistical approach aimed to determine if younger managers are more likely to adopt modern sustainable technologies compared to their older counterparts.

3.3.5.2 Hypotheses Formulation

Null Hypothesis (H0): $\beta 1 = 0$, which means that there is no statistically significant relationship between the age of hotel managers and the adoption of green in hotels.

Alternative Hypothesis (H1): β1 ≠ 0, indicating that there is a statistically significant relationship between the age of hotel managers and the implementation of green practices in hotels. This suggests that the age of hotel managers could influence the adoption of energy-saving measures.

3.3.5.3 Presentation of Analytical Results

Model: MODEL1
Dependent Variable: GREENESS Qoeficient GREENESS Qoeficient

Number of Observations Read	30
Number of Observations Used	30

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	382.40902	382.40902	0.98	0.3314
Error	28	10957	391.31992		
Corrected Total	29	11339			

Root MSE	19.78181	R-Square	0.0337
Dependent Mean	87.43333	Adj R-Sq	-0.0008
Coeff Var	22.62502		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	65.40700	22.57230	2.90	0.0072
Věk / Age	Věk / Age	1	0.44230	0.44742	0.99	0.3314

Table 5 Data output from the SaS model evaluating the relationship between hotel manager age and its greenness.

The regression analysis involved observing 30 hotel managers from different age groups to determine whether their age had any significant impact on the adoption of energy-saving initiatives in their hotels. The results showed that there was no significant correlation between the managers' age and the green practices implemented in their hotels. The F value of 0.98 and a p-value of 0.3314 indicated that the age of the hotel managers had minimal influence on the variance in energy-saving practices among hotels. The R-squared value further supported this conclusion, indicating that the effect was insignificant.

3.3.5.4 Interpretation of Findings

Based on the statistical evaluation, it has been concluded that there is no significant correlation between the age of hotel managers and the integration of new green technologies in their establishments. This implies that incorporating green technologies in hotels does not depend significantly on the age of the managers. Rather, there are other pivotal factors that

determine a hotel's commitment to sustainability. The outcome of the evaluation contradicts our assumption that younger managers are more inclined towards sustainability. Instead, it highlights the fact that there is a broad spectrum of influences that affect the implementation of eco-friendly practices in the hotel industry.

3.3.6 Investigation on Local Sourcing and Sustainable Practices

3.3.6.1 Statistical Test Utilized

This section aims to explore the relationship between a hotel's commitment to sourcing locally and its overall sustainable practices. We will use ANOVA to determine if there is a significant correlation between a hotel's dedication to local sourcing and its adoption of sustainable measures within the surrounding area.

3.3.6.2 Hypotheses Formulation

Null Hypothesis (H0): μ1 = μ2 = ... = μk. This states that there is no significant difference in the level of engagement in wider sustainable practices among hotels based on their commitment to local sourcing. Essentially, the hypothesis suggests that the degree of commitment to local sourcing does not significantly influence the implementation of broader sustainability initiatives in hotels.

Alternative Hypothesis (H1): At least one group mean is different. This suggests that there is a significant difference in the level of sustainable practices based on the commitment to local sourcing of the hotels. It implies that the commitment of a hotel to local sourcing has a significant impact on its adoption of broader environmentally friendly practices.

3.3.6.3 Presentation of Analytical Results

Class Level Information

Class	Levels	Values
6/11 Místní dodavatelé: Dáv	4	2 3 4 5

Number of Observations Read	30
Number of Observations Used	29

Dependent Variable: greeness adjusted for local supp greeness adjusted for local supply

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	1624.37600	541.45867	1.48	0.2436
Error	25	9134.93434	365.39737		
Corrected Total	28	10759.31034			

R-Square	Coeff Var	Root MSE	greeness adjusted for local supp Mean
0.150974	23.96653	19.11537	79.75862

Source	DF	Type I SS	Mean Square	F Value	Pr > F
6/11 Místní dodavate	3	1624.376001	541.458667	1.48	0.2436

Source	DF	Type III SS	Mean Square	F Value	Pr > F
6/11 Místní dodavate	3	1624.376001	541.458667	1.48	0.2436

Levene's Test for Homogeneity of greeness adjusted for local supp Variance
ANOVA of Squared Deviations from Group Means

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
6/11 Místní dodavate	2	870038	435019	1.99	0.1577
Error	25	5463358	218534		

Welch's ANOVA for greeness adjusted for local supp

Source	DF	F Value	Pr > F
6/11 Místní dodavate	2.0000	0.28	0.7611
Error	14.2332		

Level of		greeness adjusted for local supp	
6/11 Místní dodavatelé: Dáv	N	Mean	Std Dev
2	1	42.0000000	.
3	11	78.3636364	13.4258909
4	9	82.1111111	25.4236329
5	8	83.7500000	17.5722996

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

6/11 Místní dodavatelé: Dáv	greeness adjusted for local supp LSMEAN	LSMEAN Number
2	42.0000000	1
3	78.3636364	2
4	82.1111111	3
5	83.7500000	4

Least Squares Means for effect 6/11 Místní dodavate
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: greeness adjusted for local supp

i/j	1	2	3	4
1		0.2873	0.2183	0.1941
2	0.2873		0.9716	0.9291
3	0.2183	0.9716		0.9980
4	0.1941	0.9291	0.9980	

Table 6 The output data for our model examining the relationship between the local sourcing and its greenness displayed in the ANOVA SAS output.

According to our regression model, the degree of local sourcing can account for around 15.10% of the variation in sustainable practices, which is reflected by an R-squared value of 0.1510. However, after adjusting for other factors, the predictive power seems less significant, as indicated by the adjusted R-squared value of 0.053. Moreover, the ANOVA analysis suggests that the differences are not statistically significant at conventional levels, with an F-statistic of 1.48 and a p-value of 0.2436.

3.3.6.4 Interpretation of Findings

Although our initial analysis indicated a possible link between a commitment to local sourcing and the adoption of sustainable practices, our findings' lack of statistical significance means that we cannot reject the null hypothesis. This suggests that, within our dataset, the degree of commitment to local sourcing does not conclusively impact the extent of regional sustainable practices. This could indicate that while local sourcing is a component of sustainable practices, it is not a large determinant of sustainability within the hotel industry. The complexity of factors that contribute to sustainable practices extends beyond local sourcing.

3.3.7 Connection Between Waste Management and Energy Conservation

We are investigating whether advanced waste management practices are related to the adoption of sophisticated energy-saving measures in hotels. To examine this possible connection, we used regression analysis, a statistical method that is good at exploring relationships between variables. Our goal was to measure the link between waste management and energy-saving initiatives.

3.3.7.1 Hypotheses Formulation

Null Hypothesis (H0): $\beta1 = 0$. This posits that there is no statistically significant association between the complexity of waste management practices and the implementation of innovative energy-saving methods. It suggests that waste management complexity does not significantly impact the adoption of energy conservation strategies in the context being studied.

Alternative Hypothesis (H1): $\beta1 \neq 0$. This proposes that there is a statistically significant positive correlation between the sophistication of waste management practices and the

adoption of energy conservation strategies. This implies that an increase in waste management complexity is associated with an increase in the implementation of innovative energy-saving methods.

3.3.7.2 Presentation of Analytical Results

Model: MODEL1
Dependent Variable: Waste Waste

Number of Observations Read	30
Number of Observations Used	30

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.22072	1.22072	0.77	0.3869
Error	28	44.24595	1.58021		
Corrected Total	29	45.46667			

Root MSE	1.25707	R-Square	0.0268
Dependent Mean	4.46667	Adj R-Sq	-0.0079
Coeff Var	28.14325		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	3.89990	0.68446	5.70	<.0001
Energy	Energy	1	0.18684	0.21258	0.88	0.3869

Table 7 Data output from the SaS model evaluating the relationship between hotel waste management and its energy conservation measures.

Based on our analysis using regression, we obtained an F-value of 0.77 and a p-value of 0.3869. The p-value, which is higher than the standard significance level, suggests that there is insufficient evidence to reject the null hypothesis. This means that, within our dataset, there is no statistically significant connection between waste management complexity and energy-saving measures.

3.3.7.3 Interpretation of Findings

After conducting statistical analysis, we have found that there is a more complex relationship between advanced waste management and energy-saving practices than we initially thought. Our model has only been able to explain a minimal variance, as indicated by the low R-squared value of 2.68% and a negative adjusted R-squared value. These results suggest that our model has limited capacity to clearly delineate the relationship between advanced waste management and energy-saving practices. After reviewing the data, we accept the null hypothesis since there is no significant evidence to support a correlation between waste management sophistication and the use of innovative energy-saving technologies.

3.3.8 Exploring the Relationship Between Water Conservation and Energy Efficiency

3.3.8.1 Statistical Test Utilized

Our investigation examines how water conservation and energy-saving practices in hotels may positively influence each other. We use regression analysis to explore this synergistic relationship.

3.3.8.2 Hypotheses Formulation

Null Hypothesis (H0): $\beta 1 = 0$. This states that there is no statistically significant link between the intricacy of waste management practices and the implementation of innovative energy-saving techniques. It suggests that the complexity of waste management does not significantly influence the adoption of energy conservation strategies in the studied context.

Alternative Hypothesis (H1): $\beta 1 \neq 0$. This proposes that there is a statistically significant and positive correlation between the sophistication of waste management practices and the adoption of energy conservation strategies. This implies that an increase in the intricacy of waste management is associated with an increase in the implementation of innovative energy-saving techniques.

3.3.8.3 Presentation of Analytical Results

Model: MODEL1
Dependent Variable: Water Water

Number of Observations Read	30
Number of Observations Used	30

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	3.84824	3.84824	3.23	0.0831
Error	28	33.35176	1.19113		
Corrected Total	29	37.20000			

Root MSE	1.09139	R-Square	0.1034
Dependent Mean	1.40000	Adj R-Sq	0.0714
Coeff Var	77.95650		

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	0.39371	0.59425	0.66	0.5131
Energy	Energy	1	0.33174	0.18457	1.80	0.0831

Table 8 Data output from the SaS model evaluating the relationship between water conservation and energy saving measures.

After conducting a regression analysis for our model, which aimed to understand the relationship between energy-saving measures and water conservation practices within hotels, we found that the F-value was 3.23, and the corresponding p-value was 0.0831. Although the p-value is close to the conventional significance level of 0.05, it is still greater than it. Therefore, we cannot conclusively reject the null hypothesis, even though there is some indication of a relationship between energy-saving measures and water conservation practices.

3.3.8.4 Interpretation of Findings

Our findings do not fully support the alternative hypothesis but suggest a potential link between water conservation efforts and energy-saving practices. About 10.34% of the variance in water conservation efforts may be explained by energy-saving practices. However, the adjusted R-squared value, which is 7.14%, indicates that caution is needed when interpreting the results. A deeper examination of the data is necessary. In summary, our data does not conclusively prove a significant correlation between water conservation and energy-saving practices, but the trends we observed encourage further discussion on the interconnectivity of sustainable practices in the hotel industry.

3.4 Cost of implementation of Heat-pump

In this section, we will take a closer look at a hotel's financial and energy savings that resulted from the installation of a heat pump system. This system is known for its high initial costs, but it offers significant long-term savings and is an eco-friendly measure. The hotel, situated in a mountainous region, had a high demand for heating, especially during winter. In 2011, the hotel invested 300,000 CZK in a heat pump system. However, it is important to note that this initial cost does not account for inflation over the years. In addition to the purchase price, approximately 200,000 CZK was spent on maintenance from 2011 to the present. This case study demonstrates the practical benefits of sustainable investments in the hotel industry.

3.4.1 Financial and Energy Savings Simulation

We have simulated the amount of energy that can be saved using a heat pump based on today's energy prices. The data collected over 48 months starting from 2011 showed that there were significant savings in energy measured in kilowatt-hours. The findings from this period were as follows:
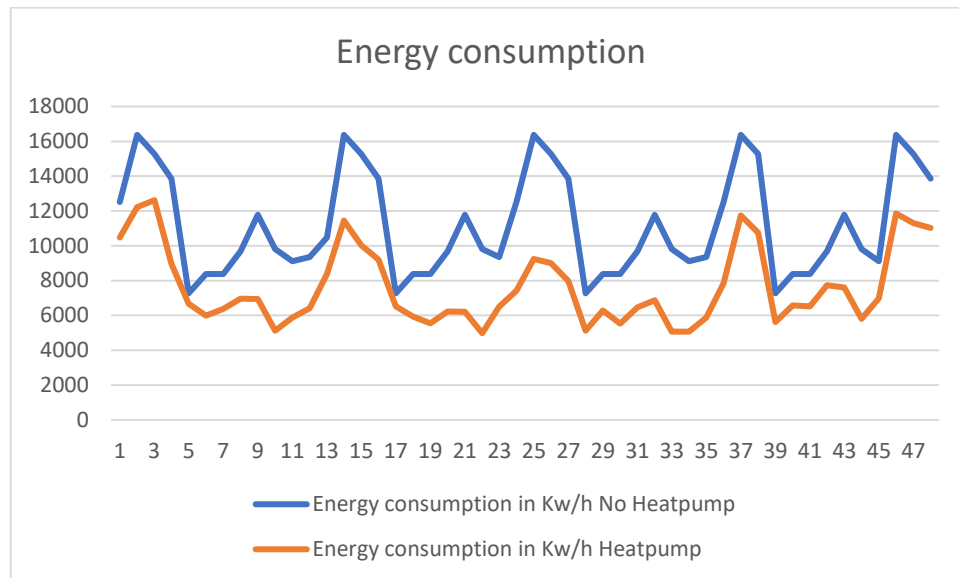
Graph 1 of energy consumption of establishment throughout the observed period.

- Total energy saved: 171,362 kWh
- Reduction in carbon footprint: 66.659 T (based on the Czech carbon cost of 0.398 kg/kWh)
- Overall estimated savings in today's market: 1,182,397.8 CZK (Based on current kW/h + distribution contract price of said company)

We have applied the simulation of potential savings to the actual energy consumption data from the past, taking into account the current energy rates. This approach provides us with a unique perspective on the financial feasibility of green technology in today's economic climate.

3.4.2 Percent Savings and Cost-Benefit Analysis
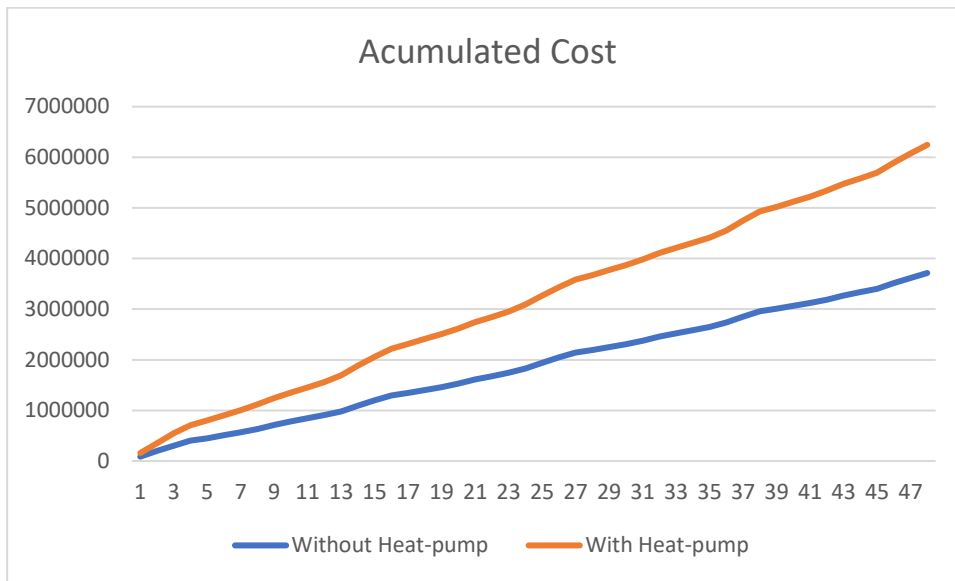
Graph 2 Graph showcases the simulation of accumulated costs in the months of the two scenarios.

The analysis shows that using a heat pump has financial benefits. The original total expenditure without a heat pump was 3,714,214.8 CZK. However, the simulated total expenditure with a heat pump was only 2,531,817 CZK, resulting in approximately 31.79% savings from heat pump implementation. These figures demonstrate that the heat pump is a cost-effective solution, especially with the current energy prices. The savings not only reflect lower energy consumption but also a significant reduction in the hotel's carbon footprint.

3.4.3 Considerations and Implications

It is important to note that the data used for the simulation is from 2011, and current energy prices were used to estimate savings. Therefore, the presented data represents a hypothetical scenario based on actual past energy usage. Furthermore, the analysis does not fully consider external factors, such as the gradual increase in temperatures due to global warming over the past two decades, which could also contribute to reduced heating requirements. Despite these limitations, the findings provide compelling evidence of the financial and environmental benefits of integrating sustainable technologies, such as heat pumps, in hotel operations. Although the initial investment may seem costly, the long-term savings, especially when applied to today's energy prices, highlight the economic and ecological advantages of such measures. This case study is a valuable resource for hoteliers considering implementing similar green practices. It emphasizes the importance of forward-thinking and sustainable decision-making in the hospitality industry, demonstrating how

environmental initiatives can lead to significant financial benefits and reduced environmental impact. This comprehensive section covers the initial costs, the methodology used to estimate savings, and the implications of these findings for the hotel industry and sustainable practices. It aligns with the broader themes of your thesis and provides a detailed look at the practical application and benefits of green technologies in hospitality.

4 Results and Discussion

In this section, the primary results of the empirical analysis carried out in the Krkonoše region are presented. These results are discussed in the context of the theoretical framework established in the earlier chapters of the thesis. The main goal was to identify the factors that determine eco-friendly behavior in domestic tourism, with a particular focus on the hotel industry in the Czech Republic.

4.1.1 Overall Results and Hypotheses Testing

Based on our analysis, there is no significant correlation between the size of hotels and their implementation of eco-friendly practices. This finding challenges our initial hypothesis, which suggested that larger hotels are more likely to adopt green measures due to their better resources and higher public visibility. Our study reveals that other factors, such as management commitment or customer demand, might be more crucial in the adoption of green practices. Interestingly, our research also found that hotels located within the Krkonoše National Park were more likely to implement eco-friendly practices. This finding suggests that regulations and community standards specific to a location can significantly influence environmental behavior in the hotel industry. This result supports the theory that institutional pressures encourage organizational behavior towards sustainability. It is worth noting that the duration of operation and gender of the management did not significantly affect the eco-friendly practices of hotels. These results suggest that sustainability goes beyond conventional demographic and operational boundaries, indicating a shift in the industry's norms and values towards more comprehensive environmental stewardship.

4.1.2 Theoretical Implications

The findings of this study contribute to our understanding of the factors that affect eco-friendly behavior in the hospitality industry. The study shows that the size and duration of hotel operations may not have as significant an impact as we previously theorized. This suggests that sustainability efforts can be adopted by all hotels, regardless of their size or how long they have been in operation. The study also highlights the influence of geographical location and associated regulations and cultures in driving organizational change. Thus, it emphasizes the importance of localized environmental policies and community values in shaping business practices.

4.1.3 Practical Implications for the Hotel Industry

The research findings indicate that hotel managers in the Czech Republic can adopt environmentally sustainable practices regardless of the size or age of their establishments. This is a positive indication for small and medium-sized businesses that want to contribute to environmental sustainability. It is also important to note that the location plays a significant role in encouraging eco-friendly practices. Therefore, there is a need for regional policies and initiatives that promote sustainable behavior. These could include the development of green certifications, incentives for sustainable practices, and educational campaigns tailored to specific regional contexts.

4.1.4 Limitations and Future Research

Although this study provides useful insights, it has some limitations due to its focus on the hotel industry and its small geographical scope. It would be beneficial to extend these findings to other sectors within domestic tourism or explore other regions within the Czech Republic and beyond for a better understanding of sustainable practices in the hospitality industry. Furthermore, there is a need for further investigation to comprehend the reasons behind the non-significant findings related to hotel size and operation duration. Qualitative studies or mixed-method approaches could provide more profound insights into the barriers and facilitators of sustainable practices in the hospitality sector.

5 Conclusion

As we approach the conclusion of this thesis, it is essential to reflect on the insights we gained from our investigation into the sustainability practices in the hotel industry of the Krkonoše region. The following sections will summarize the core findings from our practical research and examine how these contribute to the initial objectives. This conclusion combines the theoretical underpinnings with empirical evidence, providing a clear understanding of the environmental sustainability landscape in the hospitality sector. Here, we will consolidate our understanding, challenge preconceived notions, and lay the groundwork for future inquiries into sustainable hotel management.

5.1 Key findings of the practical research

The practical research conducted within the hotel sector of the Krkonoše region has revealed valuable data regarding the adoption of sustainable practices. The findings give an insight into the current state of environmental sustainability in the area. Firstly, it was observed that the Krkonoše National Park's (KRNAP) protective influence has fostered a better environment for sustainable practices in local hotels. This implies that policies and the cultural emphasis on sustainability in protected areas could positively impact business practices. Secondly, the research indicated that there is no clear correlation between a hotel's size or how long it has been in operation and its engagement with green practices. This suggests that there might be other more significant factors at play, such as management's environmental commitment or specific local challenges and opportunities that drive the adoption of sustainability measures. Moreover, our study explored the relationship between local sourcing and wider sustainable practices. Although we did not find a definitive statistical relationship, the trend suggests that local sourcing is a part of the broader sustainability landscape, which may merit further exploration. Regarding the influence of management's gender on sustainability, our findings suggest that this aspect does not significantly affect the implementation of green practices. This indicates that other aspects, such as corporate culture or individual values, are more crucial in driving sustainability efforts. Additionally, our examination into whether newer hotels adopt modern energy-saving measures more than older establishments did not show significant results. This challenges the assumption that newer establishments are inherently more inclined toward sustainability. The research touched upon the possible interconnectedness between various

sustainability domains, like waste management and energy conservation. However, definitive conclusions couldn't be drawn due to the exploratory nature of this study. Lastly, implementing green practices can benefit the environment while resulting in cost savings for businesses. This is showcased by the analysis of the cost and savings of implementing a heat pump. It points to some green practices being beneficial even for smaller and less committed companies.

5.2 Practical part contribution to the overall thesis objectives.

The practical section of my thesis makes a significant contribution towards achieving the objectives set at the beginning of my academic journey. By combining theoretical concepts with empirical findings, my research provides insights into the complex realities of sustainable practices in the hotel industry of Krkonoše. The research that was discussed earlier may not be revolutionary, but it provides a solid foundation for understanding the current approaches to environmental sustainability in the region. Based on real-world scenarios, this investigation complements the theoretical discussions presented earlier in the thesis by providing a grounding in actual industry practices and regional specifics. The study has a particular focus on a specific region to demonstrate how being in a protected area can impact business practices, and the information gathered could be useful for other regions with similar environmental concerns. The study's findings challenge some commonly held beliefs about sustainability in the hotel industry, such as the impact of hotel size or management gender. They suggest that the relationship between green practices and these factors is more complex than previously thought. Lastly, this research opens the door for further studies. It highlights areas where data was inconclusive, or trends were observed without statistical backing. Future research could build on this foundation, exploring these trends in more detail or using different methodologies. In essence, while this research may not revolutionize the field, it adds valuable pieces to the puzzle of understanding sustainability in the hospitality industry, particularly in the context of the Krkonoše region.

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7   List of pictures, tables, graphs and abbreviations

7.1   List of pictures

7.2   List of tables

7.3   List of graphs

Appendix

The questionnaire utilized in the research

Udržitelné praktiky podniků v Krkonoších
Lukáš Semerád

Rád bych tímto upřímně každému, kdo si našel čas na vyplnění tohoto dotazníku. Vaše pohledy a informace jsou pro můj výzkum nepostradatelné. Velmi si vážím Vašeho zapojení a času, který jste tomu věnovali.

Věk / Age

[   ]

Pohlaví

○ Muž / Male
○ Žena / Woman
○ Ostatní / Other
○ Nechci uvádět / Rather not say

Lokace / Location

○ Malá Úpa
○ Pec pod Sněžkou
○ Velká Úpa

Od kterého roku provozujete ubytovací zařízení / From what year have you been operating

[   ]

Přibližný počet lůžek / Approximate number of beds

[   ]

1/10 Udržitelnostní postupy: Naše společnost má dokumentované postupy zaměřené na environmentální udržitelnost.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

2/10 Úspora energií: Tyto praktiky pro šetření energií jsou součástí provozu našeho podniku.

- [ ] LED nebo jiné úsporné osvětlení
- [ ] Nákup úsporných spotřebičů
- [ ] Časovače pro osvštlení
- [ ] Tepelné čerpadlo
- [ ] Využití solárních panelů
- [ ] Tepelná rekuperace odpadních vod
- [ ] Rekuperace vzduchu
- [ ] Jiné

3/10 Odpadové hospodářství: V zařízení třídíme tyto druhy odpadů.

- [ ] Plast
- [ ] Papír
- [ ] Sklo
- [ ] Bio odpad
- [ ] Elektronika
- [ ] Jiné

3/10 Odpadové hospodářství: Věnujeme se snižování odpadu a recyklaci.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

4/10 Úspora vody: Tyto praktiky pro šetření vody jsou součástí provozu našeho hotelu.

- [ ] Nízko-průtokková zařízení
- [ ] Programy opětovného používání ložního prádla
- [ ] Programy pro zvyšování povědomí hostů
- [ ] Systémy zachycování dešťové vody
- [ ] Oddělení užitkové a pitné vody (např. více zdrojů vody)
- [ ] Použití rostlin odolných vůči suchu v krajinných úpravách ke snížení potřeby zalévání
- [ ] Jiné

5/10 Místní dodavatelé: Dáváme přednost nákupu od místních a udržitelných zdrojů, aby se snížila uhlíková stopa.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

6/10 Školení zaměstnanců: Náš personál je školen v oblasti praktik udržitelnosti.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

7/10 Udržitelná doprava: Podporujeme využívání udržitelných dopravních možností (např. půjčovny kol, dobíjecí stanice pro elektrická vozidla) pro naše hosty.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

8/10 Zapojení do komunity: Aktivně se účastníme místních environmentálních iniciativ a přispíváme k udržitelnostním cílům komunity.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

9/10 Zapojení hostů: Máme zavedené programy pro zapojení hostů do našich aktivit v oblasti udržitelnosti (např. vzdělávací materiály, účast na místních událostech zaměřených na udržitelnost).

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

10/10 Neustálé zlepšování: Pravidelně přehodnocujeme a aktualizujeme naše praktiky udržitelnosti, abychom zajistili neustálé zlepšování a soulad s nejnovějšími standardy.

(1) (2) (3) (4) (5)

Nesouhlasím   Souhlasím

Submit

Data for cost implementation analysis

Data VČE

	Pmax VT kW	Pmax NT kW	spotřeba kWh	spotřeba VT kWh	spotřeba NT kWh
2010-09	29	46	8281	3703	4578
2010-10	25	46	8772	5728	3044
2010-11	21	46	8405	6338	2067
2010-12	27	54	12511	8455	4056
2011-01	31	51	16372	10235	6137
2011-02	34	50	15283	9480	5803
2011-03	33	55	13855	9184	4671
2011-04	26	45	7270	4716	2554
2011-05	24	37	8376	4451	3925
2011-06	26	33	8372	3570	4802
2011-07	29	35	9692	4421	5271
2011-08	31	35	11777	6273	5504
2011-09	28	34	9806	5549	4257
2011-10	29	31	9111	5828	3283
2011-11	26	49	9362	6395	2967
2011-12	35	54	10473	4605	5868
2011-01	31	51	16372	10235	6137
2011-02	34	50	15283	9480	5803
2011-03	33	55	13855	9184	4671
2011-04	26	45	7270	4716	2554
2011-05	24	37	8376	4451	3925
2011-06	26	33	8372	3570	4802
2011-07	29	35	9692	4421	5271
2011-08	31	35	11777	6273	5504
2011-09	28	34	9806	5549	4257
2011-10	29	31	9111	5828	3283
2011-11	26	49	9362	6395	2967
2010-12	27	54	12511	8455	4056
2011-01	31	51	16372	10235	6137
2011-02	34	50	15283	9480	5803
2011-03	33	55	13855	9184	4671
2011-04	26	45	7270	4716	2554
2011-05	24	37	8376	4451	3925
2011-06	26	33	8372	3570	4802
2011-07	29	35	9692	4421	5271
2011-08	31	35	11777	6273	5504
2011-09	28	34	9806	5549	4257
2011-10	29	31	9111	5828	3283
2011-11	26	49	9362	6395	2967
2010-12	27	54	12511	8455	4056
2011-01	31	51	16372	10235	6137
2011-02	34	50	15283	9480	5803
2011-03	33	55	13855	9184	4671
2011-04	26	45	7270	4716	2554
2011-05	24	37	8376	4451	3925
2011-06	26	33	8372	3570	4802
2011-07	29	35	9692	4421	5271
2011-08	31	35	11777	6273	5504
2011-09	28	34	9806	5549	4257
2011-10	29	31	9111	5828	3283
2011-11	26	49	9362	6395	2967
2010-12	27	54	12511	8455	4056
suma za rok			**694866**	**413159**	**281707**

Data VČE

	Pmax VT kW	Pmax NT kW	spotřeba kWh	spotřeba VT kWh	spotřeba NT kWh
2011-09					
2011-10					
2011-11					
2011-12	35	54	10473	5868	4605
2012-01	37	45	12224	9067	3157
2012-02	37	56	12621	8334	4287
2012-03	36		8966	6813	2153
2012-04	27		6667	4766	1901
2012-05	31		5985	4618	1367
2012-06	29		6382	5060	1322
2012-07	28		6955	5618	1337
2012-08	26		6945	5632	1313
2012-09	30		5125	3944	1181
2012-10	27	27	5878	4243	1635
2012-11	27	27	6411	4473	1938
2012-12	29	34	8373	5569	2804
2013-01	30	36	11446	7690	3756
2013-02	28	28	10026	6863	3163
2013-03	34	34	9211	6333	2878
2013-04	26	36	6515	4498	2017
2013-05	26	26	5939	4572	1367
2013-06	24	36	5552	3607	1945
2013-07	29	29	6235	5443	792
2013-08	26	26	6214	5348	866
2013-09	22	22	4979	3879	1100
2013-10					
2013-11	25	29	6511	4555	1956
2013-12	31	31	7417	5511	1906
2014-01	34	34	9245	7092	2153
2014-02	31	33	9011	6642	2369
2014-03	29	29	7976	6006	1970
2014-04	29	29	5117	3412	1705
2014-05	29	29	6273	4627	1646
2014-06	27	27	5529	4361	1168
2014-07	28	28	6466	5262	1204
2014-08	30	30	6867	5524	1343
2014-09	29	29	5064	3830	1234
2014-10	25	25	5077	3638	1439
2014-11	25	25	5869	4178	1691
2014-12	35	35	7852	5766	2086
2015-01	37	37	11750	8715	3035
2015-02	36	36	10750	7551	3199
2015-03					
2015-04	28	28	5620	3740	1880
2015-05	32	32	6585	4802	1783
2015-06	28	28	6521	5005	1516
2015-07	32	32	7730	6295	1435
2015-08	32	32	7610	6371	1239
2015-09	32	32	5803	4259	1544
2015-10	32	32	6981	4999	1982
2015-11					
2015-12					
2016-01	36	36	11849	8200	3649
2016-02	36	36	11301	7639	3662
2016-03	33	33	11034	7066	3968
2016-04					
2016-05					
2016-06					
2016-07					
2016-08					
2016-09					
2016-10					
2016-11					
2016-12					
suma za rok			**366930**	**267284**	**99646**
spotřeba celkem			603,859 Kč	489,664 Kč	114,194 Kč

Rozdíl spotřeby oproti předešlému roku

celkem	VT	NT	cena VT	cena VT	cena NT	cena NT	distribuce	distribuce	celkem
kWh	kWh	kWh		Kč/kWh		Kč/kWh		Kč/kWh	
-2038	-2587	549	-4,618 Kč	1.785	596 Kč	1.086	-1,423 Kč	0.698	-5,445 Kč
-4148	-1168	-2980	-2,140 Kč	1.832	-3,415 Kč	1.146	-2,964 Kč	0.714	-8,519 Kč
-2662	-1146	-1516	-2,099 Kč	1.832	-1,737 Kč	1.146	-1,859 Kč	0.698	-5,696 Kč
-4889	-2371	-2518	-4,344 Kč	1.832	-2,886 Kč	1.146	-3,333 Kč	0.692	-10,563 Kč
-603	50	-653	92 Kč	1.832	-748 Kč	1.146	-419 Kč	0.698	-1,076 Kč
-2391	167	-2558	306 Kč	1.832	-2,931 Kč	1.146	-1,536 Kč	0.643	-4,162 Kč
-1990	1490	-3480	2,730 Kč	1.832	-3,988 Kč	1.146	-1,279 Kč	0.643	-2,537 Kč
-2737	1197	-3934	2,193 Kč	1.832	-4,508 Kč	1.146	-1,758 Kč	0.642	-4,074 Kč
-4832	-641	-4191	-1,174 Kč	1.832	-4,803 Kč	1.146	-3,104 Kč	0.642	-9,081 Kč
-4681	-1605	-3076	-2,940 Kč	1.832	-3,525 Kč	1.146	-3,007 Kč	0.642	-9,472 Kč
-3233	-1585	-1648	-2,904 Kč	1.832	-1,889 Kč	1.146	-2,165 Kč	0.670	-6,958 Kč
-2951	-1922	-1029	-3,521 Kč	1.832	-1,179 Kč	1.146	-1,896 Kč	0.642	-6,596 Kč
-2100	964	-3064	1,766 Kč	1.832	-3,511 Kč	1.146	-1,349 Kč	0.642	-3,094 Kč
-4926	-2545	-2381	-4,662 Kč	1.832	-2,729 Kč	1.146	-3,928 Kč	0.797	-11,319 Kč
-5257	-2617	-2640	-4,794 Kč	1.832	-3,025 Kč	1.146	-4,192 Kč	0.797	-12,011 Kč
-4644	-2851	-1793	-5,223 Kč	1.832	-2,055 Kč	1.146	-3,703 Kč	0.797	-10,981 Kč
-755	-218	-537	-399 Kč	1.832	-615 Kč	1.146	-602 Kč	0.798	-1,617 Kč
-2437	121	-2558	222 Kč	1.832	-2,931 Kč	1.146	-1,946 Kč	0.798	-4,656 Kč
-2820	37	-2857	68 Kč	1.832	-3,274 Kč	1.146	-2,253 Kč	0.799	-5,459 Kč
-3457	1022	-4479	1,872 Kč	1.832	-5,133 Kč	1.146	-2,761 Kč	0.799	-6,022 Kč
-5563	-925	-4638	-1,695 Kč	1.832	-5,315 Kč	1.146	-4,443 Kč	0.799	-11,453 Kč
-4827	-1670	-3157	-3,059 Kč	1.832	-3,618 Kč	1.146	-3,857 Kč	0.799	-10,534 Kč
-2851	-1840	-1011	-3,371 Kč	1.832	-1,159 Kč	1.146	-2,276 Kč	0.798	-6,806 Kč
-5094	-2944	-2150	-5,393 Kč	1.832	-2,464 Kč	1.146	-4,063 Kč	0.798	-11,920 Kč
-7127	-3143	-3984	-4,356 Kč	1.386	-3,482 Kč	0.874	-4,831 Kč	0.678	-12,669 Kč
-6272	-2838	-3434	-3,933 Kč	1.386	-3,001 Kč	0.874	-4,252 Kč	0.678	-11,187 Kč
-5879	-3178	-2701	-4,405 Kč	1.386	-2,361 Kč	0.874	-3,987 Kč	0.678	-10,752 Kč
-2153	-1304	-849	-1,807 Kč	1.386	-742 Kč	0.874	-1,593 Kč	0.740	-4,143 Kč
-2103	176	-2279	244 Kč	1.386	-1,992 Kč	0.874	-1,428 Kč	0.679	-3,176 Kč
-2843	791	-3634	1,096 Kč	1.386	-3,176 Kč	0.874	-1,932 Kč	0.680	-4,012 Kč
-3226	841	-4067	1,166 Kč	1.386	-3,555 Kč	0.874	-2,188 Kč	0.678	-4,577 Kč
-4910	-749	-4161	-1,038 Kč	1.386	-3,637 Kč	0.874	-3,336 Kč	0.679	-8,010 Kč
-4742	-1719	-3023	-2,383 Kč	1.386	-2,642 Kč	0.874	-3,221 Kč	0.679	-8,246 Kč
-4034	-2190	-1844	-3,035 Kč	1.386	-1,612 Kč	0.874	-2,733 Kč	0.678	-7,380 Kč
-3493	-2217	-1276	-3,073 Kč	1.386	-1,115 Kč	0.874	-2,562 Kč	0.733	-6,750 Kč
-4659	-2689	-1970	-3,727 Kč	1.386	-1,722 Kč	0.874	-3,419 Kč	0.734	-8,868 Kč
-4622	-1520	-3102	-2,046 Kč	1.346	-2,634 Kč	0.849	-3,289 Kč	0.712	-7,969 Kč
-4533	-1929	-2604	-2,596 Kč	1.346	-2,211 Kč	0.849	-2,980 Kč	0.657	-7,788 Kč
-1650	-976	-674	-1,314 Kč	1.346	-572 Kč	0.849	-1,175 Kč	0.712	-3,061 Kč
-1791	351	-2142	472 Kč	1.346	-1,819 Kč	0.849	-1,182 Kč	0.660	-2,528 Kč
-1851	1435	-3286	1,932 Kč	1.346	-2,790 Kč	0.849	-1,218 Kč	0.658	-2,077 Kč
-1962	1874	-3836	2,522 Kč	1.346	-3,257 Kč	0.849	-1,290 Kč	0.657	-2,024 Kč
-4167	98	-4265	132 Kč	1.346	-3,621 Kč	0.849	-2,740 Kč	0.658	-6,229 Kč
-4003	-1290	-2713	-1,736 Kč	1.346	-2,303 Kč	0.849	-2,865 Kč	0.716	-6,904 Kč
-2130	-829	-1301	-1,116 Kč	1.346	-1,105 Kč	0.849	-1,516 Kč	0.712	-3,736 Kč
-4523	-2035	-2488	-2,340 Kč	1.15	-1,655 Kč	0.665	-2,883 Kč	0.637	-6,878 Kč
-3982	-1841	-2141	-2,117 Kč	1.15	-1,424 Kč	0.665	-2,538 Kč	0.637	-6,079 Kč
-2821	-2118	-703	-2,436 Kč	1.15	-467 Kč	0.665	-1,798 Kč	0.637	-4,701 Kč
-171362	-50586	-120776							-319,794 Kč