Value co-creation for planetary wellbeing and regenerative service development — rethinking national park stewardship

Mirkka Helkkula

2023 Laurea

Laurea University of Applied Sciences

Value co-creation for planetary wellbeing and regenerative service development — rethinking national park stewardship

Mirkka Helkkula
Service Innovation and Design
Master's thesis
December 2023

Value co-creation for planetary wellbeing and regenerative service development —

rethinking national park stewardship

The purpose of this thesis is to gain a better understanding of value co-creation for planetary wellbeing in the context of regenerative service development. Addressing complex societal challenges, like biodiversity loss, requires challenging a human-centric paradigm of service design and applying a planet-positive approach that takes planetary wellbeing and nonhuman stakeholders into consideration in the design process and promotes the regeneration of natural ecosystems.

The increased demand for nature tourism and the accelerating biodiversity loss calls for tourism services that support the regeneration of destinations. In Finland, the government organisation Metsähallitus has an important role in safeguarding national parks and other protected nature areas and creating opportunities for sustainable tourism.

The objective of this thesis is to develop a regenerative tourism service concept that engages stakeholders in value co-creation for planetary wellbeing. To create such a concept, strategies, including mindset changes and design practices, need to be identified.

The knowledge base is derived from the Transition Design (TD) framework and so-called planet-positive design approaches, including the concepts of planetary wellbeing and regenerative design. These approaches are combined with a service-dominant logic for value co-creation, emphasising all stakeholders' pivotal role in contributing to positive outcomes for the planet and each other. In addition, the concepts of eco-literacy and stewardship are discussed and adopted. TD ties together the different theoretical dimensions needed for designing for societal transitions.

The research-based development work leans on a mix of service design methods and tools and qualitative research methods. During the design process, partner and customer interviews were conducted at various stages. Co-creative workshop methods were also employed in creative co-design events to collaboratively build a shared understanding of problems and ensure that the perspectives of stakeholders, including nature as a stakeholder, were taken into account in the solution development. Content analysis was used to analyse the qualitative data.

The developed regenerative service concept invites travellers and citizen-customers to engage in conservation activities, reducing biodiversity loss in Nuuksio National Park. Participants contribute positively to the destination while learning about biodiversity and ways to restore ecosystems. The solution emphasises the role of Metsähallitus as an enabler of regenerative tourism and the role of partners as environmental educators and catalysts of change. The value propositions were created for each stakeholder to emphasise the need for mutual benefit for all stakeholders. The results suggest that recognising both partners and customers as national park stewards could encourage stakeholders to take more responsibility for caring for common nature areas. Furthermore, service design can provide methods and tools for enhancing the inner sustainability and eco-literacy of organisations and individuals and boost the cultural transformation needed to shift from sustainability to regeneration.

Keywords: planet-positive design, planetary wellbeing, value co-creation, regenerative service development, eco-literacy

Mirkka Helkkula

Kansallispuistojen uudistava luontomatkailu: Arvon yhteisluonti ja planeetan hyvinvointi uudistavien palveluiden kehittämisen ytimessä

Tämän opinnäytetyön tarkoitus on ymmärtää paremmin planeetan hyvinvointia edistävää yhteistä arvonluontia uudistavan palvelukehityksen kontekstissa. Globaalien yhteiskunnallisten haasteiden, kuten luontokadon ratkaiseminen vaatii ihmiskeskeisen muotoilun haastamista ja niin kutsuttua planeettapositiivista lähestymistapaa, joka edistää luonnon ekosysteemien uudistamista ja huomioi planeetan hyvinvoinnin ja myös muut toimijat kuin ihmiset sidosryhmänä osana palvelumuotoiluprosessia.

Lisääntynyt kiinnostus luontomatkailua kohtaan ja kiihtyvä luontokato edellyttävät matkailupalveluita, jotka edistävät kohteiden uudistamista. Suomessa Metsähallituksella on tärkeä rooli huolehtia kansallispuistoista ja muista suojelluista luontoalueista ja luoda mahdollisuuksia kestävälle matkailulle.

Tämän opinnäytetyön tavoitteena on kehittää uudistavan matkailun palvelukonsepti, joka sitouttaa sidosryhmiä osallistumaan yhteiseen arvonluontiin planetaarisen hyvinvoinnin puolesta. Palvelukonseptin luomista varten tunnistettiin siihen tarvittavia strategioita, kuten muutoksia ajattelutavoissa sekä muotoilukäytännöissä.

Opinnäytetyön tietopohjana on käytetty Siirtymämuotoilun viitekehystä ja niin kutsuttuja planeettapositiivisia muotoilun lähestymistapoja, kuten planetaarisen hyvinvoinnin ja uudistavan muotoilun käsitteitä. Nämä lähestymistavat yhdistettiin palvelukeskeiseen arvonluonnin logiikkaan sen korostamiseksi, että kaikilla sidosryhmillä on keskeinen rooli tuottaa arvoa planeetalle sekä toisilleen. Lisäksi työssä sovelletaan luonnonlukutaidon ja luonnonhoidon käsitteitä. Siirtymämuotoilu nitoo yhteen teoreettiset ulottuvuudet, joita tarvitaan yhteiskunnallisten siirtymien muotoiluun.

Tämä tutkimuksellinen kehittämistyö hyödyntää palvelumuotoilumenetelmiä ja -työkaluja sekä laadullisen tutkimuksen menetelmiä. Palvelumuotoiluprosessin aikana toteutettiin sekä asiakas- että kumppanihaastatteluja. Lisäksi yhteiskehittämisen menetelmiä, kuten luovia yhteiskehittämisen tilaisuuksia, järjestettiin yhteisen ymmärryksen rakentamiseksi, ongelmien tunnistamiseksi ja sen varmistamiseksi, että eri sidosryhmien näkökulmat, mukaan lukien luonto toimijana, huomioitiin palvelun kehittämisessä. Laadullinen aineisto analysoitiin sisällönanalyysilla.

Kehitetty uudistavan matkailun konsepti kutsuu matkailijoita ja kansalaisasiakkaita ottamaan osaa luontokadon hillitsemiseen osallistumalla luonnonhoitoon Nuuksion kansallispuistossa. Osallistujat pääsevät vaikuttamaan positiivisesti matkailukohteeseen samalla kun he oppivat luonnon monimuotoisuudesta ja tavoista auttaa luonnon ekosysteemejä palautumaan. Palvelukonsepti korostaa Metsähallituksen roolia uudistavan matkailun mahdollistajana ja kumppanien roolia ympäristökasvattajina ja muutoksen ajureina. Arvolupaukset luotiin kaikille sidosryhmille korostamaan tasavertaista arvonluontia kaikille osapuolille. Tulokset viittaavat siihen, että sekä kumppaneiden että asiakkaiden tunnistaminen kansallispuiston luonnon hoitajiksi voisi kannustaa sidosryhmiä kiinnostumaan enemmän yhteisten luontoalueiden huolehtimisesta. Palvelumuotoilu voi tarjota menetelmiä ja työkaluja tukemaan henkilökohtaista sisäistä muutosta, jonka kestävän kehityksen ja uudistavien palveluiden edistäminen vaatii, sekä lisäämään niin organisaatioiden kuin yksilöidenkin luonnonlukutaitoa sekä kulttuurista muutosta, jota tarvitaan yhteiskunnalliseen siirtymään kestävyydestä uudistamiseen.

Asiasanat: planeettapositiivinen muotoilu, planetaarinen hyvinvointi, yhteinen arvonluonti, uudistava pal-velukehitys, luonnonlukutaito, luontopositiivisuus

Contents

1   Introduction

Climate change and biodiversity loss are complex, evolving, and urgent grand challenges of our times, and they have growing effects on our lives. Contemporary organisations across sectors are increasingly expected to address these so-called "wicked problems" as a part of their service development and sustainability actions. Wicked problems are large-scale systemic problems that are hard to define, connected to other similarly complicated problems and impossible to solve with conventional, linear problem-solving methods (Rittel and Webber 1973). Biodiversity loss, or nature loss as sometimes called, is a pivotal example of a problem that is inherently wicked and constantly evolving (e.g., Sharman & Mlambo 2012, 274). Biodiversity loss means that the variety of species on the Earth are decreasing at an alarming rate. This ecological crisis harms and threatens both wellbeing of humans and nonhumans, the whole planetary wellbeing.

As wicked problems are impossible to solve by one entity alone, solutions require working together with the whole network of stakeholders (e.g., Irwin 2018). The changing circumstances and the complexity call for a holistic approach that involves multiple stakeholders to address the problems and find innovative ways to tackle them.

This thesis is a research-based development work that explores through a concrete development case how service design can support organisations in value co-creation for planetary wellbeing and creating regenerative services that restore and regenerate the biodiversity of ecosystems. Human-centricity, customer-centricity, and customer experience, especially in the context of business settings, have been traditionally on the focus of modern service design and service development. Yet, designing for complex environmental challenges requires challenging this human-centric paradigm of service design and applying a more planet-positive and regenerative approach, which takes nonhuman stakeholders and the planet into consideration in the design process and promotes regeneration of natural resources and social systems.

The Nature Positive Initiative is advocating globally for urgent action to halt and reverse biodiversity loss, aiming to transform the continuous decline in biodiversity to the global state of "nature positive" by 2030 (Figure 1). This goal is equivalent to the United Nations' net goal for carbon neutrality and an equitable world, and all these three goals are equally important to achieve as none of them can achieved alone. (Locke et al. 2021.) The European Union's Biodiversity strategy has a similar goal to "put Europe's biodiversity on the path to recovery by 2030 for the benefit of people, climate and the planet" (European Commission n.d -a).

In Finland, a national biodiversity strategy and action plan extending to the year 2035 is currently being developed after the previous global and national strategy failed to meet its goals to halt the nature loss by 2020. The strategy draft leans on a similar goal and timeline as the Nature Positive Initiative, proposing that Finland would halt the biodiversity loss by 2030 and become nature-positive by 2035 (Ympäristöministeriö 2023).

There are many challenges in the transition to nature-positive era. First, only in Finland, 11,9% of species and 48% of habitat types are endangered, and 60% of the state of nature types have already been lost (Ympäristöministeriö 2023). Furthermore, it is recognised that the emergency state of nature has failed to gain the attention of the public and politicians, possibly due to the complexity of the topic and the fact that the changes in the natural ecosystems are very slow and even more difficult to observe than those of climate change (Kangas & Lyytimäki 2020, 236-237). Furthermore, media has been covering remarkably less biodiversity loss than it has debated about the consequences and implications of climate change, even though biodiversity loss is closely connected to climate change, and it is seen to cause similarly alarming, long-term consequences that can be catastrophic to the life in the planet (Kangas & Lyytimäki 2020, 233-235).

The Global Goal for Nature acknowledges that some loss of nature will be unavoidable due to human activities, still underlining the need for scientifically informed mitigation to minimise and compensate for these losses. Strategies for biodiversity conservation include halting the loss of species through conservation efforts, protecting the remaining natural systems, and restoring human-impacted landscapes, such as disappeared meadows that urgently require rewilding and ecological restoration. (Locke et al. 2021, 3.)
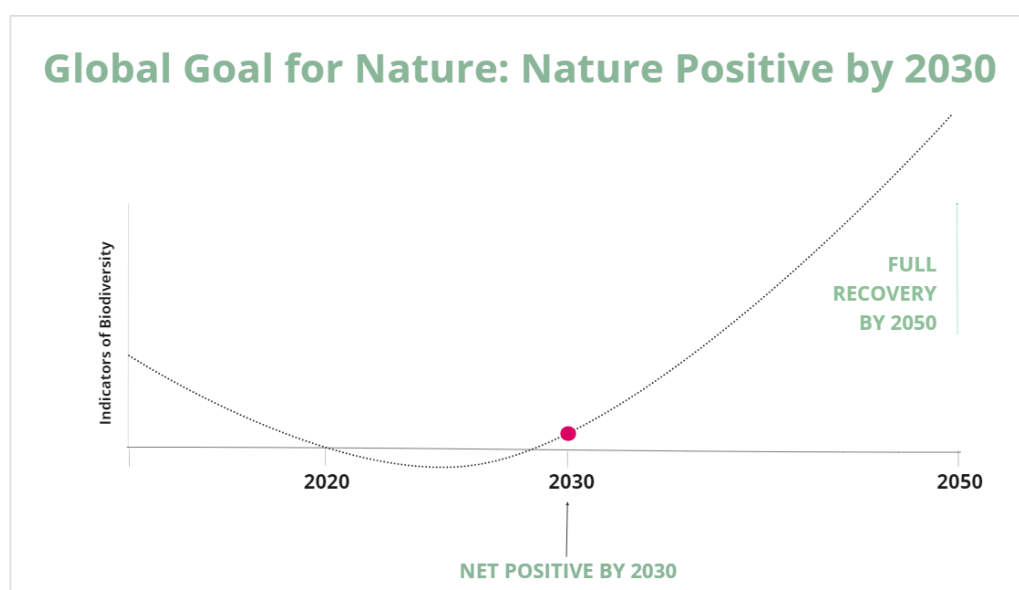

Figure 1: Trajectory of nature positive by 2030 (adapted from Locke et al. 2021, 4).

The whole humanity is in many ways dependent on nature and its ecosystems, and this inter-connectedness of the health of natural systems and human health is also recognised in the public health community. Therefore, investments in biodiversity can be seen as investments in human health. (Marselle et al. 2021.)

Contemporary businesses are facing more requirements related to corporate social responsibility as new standards and laws in the European Union are implemented regarding sustainability reporting. Starting in 2024, the new Corporate Sustainability Reporting Directive (CSRD) mandates that all large and listed companies in the EU will have to disclose data on the sustainability impact of their actions. The new directive covers all relevant ESG reporting elements (environmental, social and governance). The goal of these changes is to help consumers, investors, and stakeholders in general to evaluate the sustainability performance of businesses. (European Commission n.d. -b)

One of the fastest-growing tourism sectors, nature tourism, is an industry which holds a key position in tackling biodiversity loss (e.g., World Travel and Tourism Council 2022). The industry is in some ways even more dependent on natural resources and the existence of nature destinations to attract visitors than other industries. At the same time, the growing popularity of nature tourism, especially after the COVID-19 pandemic, increasingly damages the ecosystems and wildlife in the destinations. There is an urgent need for a large-scale transition to regenerative tourism that seeks to nurture and create a positive impact with the help of travellers instead of tourism that only aims to avoid harm. Similarly to the Global Goal for Nature, regenerative tourism aims to create a net positive impact on nature while at the same time generating value for people and social systems (Dredge 2022, 270).

World Travel and Tourism Council (2022) has already recognised private sector businesses as crucial game changers in driving the Global Goal for Nature and the transition of the whole society's relationship to nature. Even though the nature tourism businesses are enthusiastic about supporting the nature-positive agenda, the industry lacks an understanding of key concepts and ways to act and monitor the impact. (World Travel and Tourism Council 2022, 5-15.)

The purpose of this thesis is to gain a better understanding of value co-creation for planetary wellbeing in the context of regenerative service development. The development task was to develop a regenerative service concept for the public sector authority that manages the national parks and other protected land and water areas in Finland. At the core of the service development was the need to engage more stakeholders, especially nature enterprises, as value co-creators for regenerative tourism. Therefore, the aim of this thesis is to identify strategies, including mindset changes and design practices, needed for creating the

regenerative tourism service concept. The outcome of this thesis concentrates on the value creation and value propositions of the service concept to narrow the focus of the thesis.

In this thesis, the *term* nature enterprises or nature businesses is used to refer to tourism businesses operating in the context of national parks. They are not exclusively eco-tourism businesses but include a broad range of different businesses that provide their services to people visiting the national parks. An alternative concept that is often used to refer to this kind of companies is nature-based companies, but it was discarded for clarity. The concept of nature-based solutions (NbS) is used increasingly to refer to strategies, interventions and solutions that harness natural resources to tackle environmental or societal challenges, like climate change (e.g., Rice 2020). Therefore, in the context of this thesis, nature enterprises were considered a more neutral term to refer to businesses operating in national parks.

This research-based development work follows a service design approach which is further introduced in chapter 3. The research-based approach to development means — besides solving problems and developing new or improved solutions — research orientation, systematic data gathering and analysis, critical mindset and aim to produce new knowledge for the benefit of the organisation (Moilanen et al. 2022, 30-33).

Conceptual clarifications

Service development for the regeneration of natural systems or "regenerative service development" to drive societal transitions is a relatively new field in design, and therefore there is no established terminology nor set ways for designing. Thus, it is essential to take a transdisciplinary approach, especially in relation to understanding the theories of change, how change happens, and making the implicit ideas of change visible (Irwin 2015).

The terms nature-positive, planet-positive, and regenerative are often used interchangeably, e.g., in relation to tourism. All these concepts can be used to refer to human actions and their relationship to nature when emphasising creating a net positive impact on nature. However, it is worth noting that all these terms are prone to greenwashing; making bold environmental claims without evidence. Therefore, this thesis aims to use these concepts with this awareness, aiming to provide more clear definitions.

So-called 'planet-positive design' is used as an umbrella concept for describing design approaches that generate value for planetary wellbeing and drive the Global Goal for Nature. Thus, the planet-positive design approach encapsulates the various dimensions of the knowledge basis of this thesis, including planetary wellbeing and regenerative service development. Planetary wellbeing is a state where the Earth's system and ecosystem functions remain unharmed, enabling the sustainable coexistence of diverse life forms, including humans. (Kortetmäki et al. 2021).

Furthermore, planet-positive is used instead of nature-positive because it better describes the interconnectedness of human health and the health of nature systems, thus covering better the concept of planetary wellbeing. Moreover, several emerging design approaches are already using terms such as "planet-centric" or "earth-centric". However, nature-positive is a term that people in the field of tourism use and thus it is already used in the industry more than planet-positivity. Therefore, it is also present in this research-based development work, especially when referring to the Global Goal for Nature.

The concept of regeneration is prone to similar misuse. By definition, regeneration refers to strengthening the vitality of living systems, supporting their innate capacity for revival. In this thesis, regenerative organisations, services, or solutions are defined by their actions for the benefit of planetary wellbeing. These organisations recognise the interconnectedness of human health and the health of the planet, actively promote and strengthen their value propositions for planetary wellbeing and strive to have a positive impact on all stakeholders (Konietzko et al. 2023, 384).

Value co-creation that stems from the service-dominant logic is a central concept in this thesis. It is used for describing how organisations should provide value to their stakeholders. Value exchange between the customer and the service provider is a fundamental element of services. The concept of value co-creation is used to describe this exchange, emphasising the collaborative and participatory aspect of the process of creating value throughout the service interaction (Lusch & Vargo 2014). The modern view of value co-creation involves multiple stakeholders that exchange value within a multi-stakeholder ecosystem (Vargo & Lusch 2016; Pera, Occhiocupo & Clarke 2016). This thesis follows this holistic perspective to the service-dominant logic for value co-creation, emphasising that all stakeholders hold a pivotal role in contributing to positive outcomes for the planet and each other.

The structure of the thesis

This thesis consists of five chapters. In the introduction section, the background for the research is presented and the development task, purpose and aim are introduced. The introductory chapter is followed by the knowledge base of the research-based development work in the second chapter. It presents the theoretical context of the thesis and further introduces the key concepts and theories utilised in this thesis. The third chapter covers research-based development work in practise and explains what it involved using service design as an approach. Moreover, it describes the service design process that was followed and argues for the general choices of methods and tools that were used during this research-based development work. The fifth chapter presents the results that aim to respond to the research questions introduced in the beginning. In the end, chapter 6, weaves together the conclusions and reflections of this project.

1.1 Overview of the case organisation

This research-based development work was conducted for and in collaboration with Metsähallitus Parks & Wildlife Finland (later Metsähallitus P&WF or case organisation) and The Finnish Nature Centre Haltia in the Nuuksio National Park in Southern Finland. Metsähallitus (in English "forest government") is a state-owned, unincorporated enterprise that uses, manages, and protects state-owned land and water areas in Finland. Metsähallitus has a duty to contribute to state revenue. Metsähallitus is divided into three business units: Parks and Wildlife Finland, Metsähallitus Property Development and Metsähallitus Forestry Ltd.

The commissioner of this research-based development work, Metsähallitus Parks & Wildlife Finland has an important role in safeguarding the biodiversity of protected nature areas, including, among others, Lapland's wilderness areas and 41 national parks in Finland. The unit is structured based on the regions of Finland. The unit carries out a diverse range of work managing protected areas, promoting natural wellbeing services, protecting nature and cultural heritage sites, and creating opportunities for sustainable enterprise within the protected areas. Moreover, Metsähallitus, Parks & Wildlife Finland oversees public administration services such as fishing and hunting permits. The services of Metsähallitus Parks & Wildlife Finland are mainly funded by the national government. (Metsähallitus Parks & Wildlife n.d.)

In recent years, the popularity of national parks has risen steadily. This so-called "outdoor boom" emerged during the COVID-19 pandemic. Compared to the year 2019, the visitor numbers in national parks have increased 14 per cent in total. Since then, Metsähallitus has invested with the support of external funds in strengthening the structures and developing tourism services in the national parks. (Metsähallitus 2023a.)

Metsähallitus P&WF has several offices and nature and visitor centres around Finland. One of the centres is the Finnish Nature Centre Haltia which is located in Espoo within a short distance from the capital. The Finnish Nature Centre Haltia is a popular attraction for nature tourists and a meeting hub for outdoor enthusiasts. The centre offers nature exhibitions, hiking-related equipment rental services, nature-related events and local food. Moreover, it organises a Nature School and environmental education activities for schools. The Finnish Nature Centre Haltia is also a gateway to Nuuksio National Park, a tourist destination rich in biodiversity. Nuuksio National Park was established in 1994 and it has approximately 300,000 visitors yearly. The park has marked trails for hiking and skiing and places for camping and grilling. Nuuksio National Park is protected for its lake-highland nature and its diverse population of endangered and threatened species, such as the Siberian flying squirrel and woodlark.

With a wide range of activities, including habitat restoration and ecological management work, Metsähallitus works to ensure the biodiversity of the land and water areas it manages. The conservation work of protected areas is one of the core duties of Metsähallitus

(Metsähallitus 2023b). According to the Metsähallitus' value creation model (Figure 2), Metsähallitus creates "added value for nature, people and society" and considers the mega-trends and stakeholder expectations in their mission, vision, and strategy for the future.
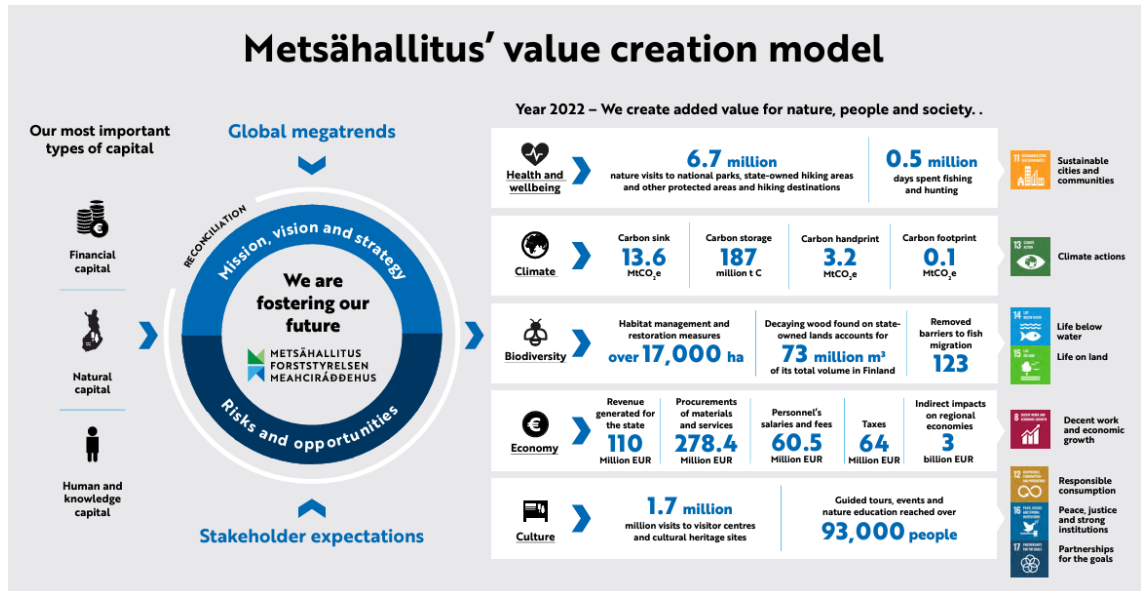

Figure 2: Metsähallitus' value creation model in the annual and sustainability report 2022 (Metsähallitus 2023b, 16).

Overall, Metsähallitus emphasises the importance of its partnerships and collaboration with a variety of stakeholders (Metsähallitus 2023b). The organisation has a long tradition of engaging different stakeholders for managing and taking care of the national parks and nature conservation sites. Since the early 2000s, Metsähallitus P&WF has worked in cooperation with the Criminal Sanctions Institute (RISE), to offer rehabilitative work activities for prisoners as caretakers of national parks and nature conservation sites (Epressi 2023). Metsähallitus also collaborates closely with WWF (World Wide Fund for Nature) to organise restoration camps for volunteers. During one camp, volunteers usually spend 3-8 days restoring natural areas, such as meadows and heathlands and eradicating ecologically damaging alien species. Metsähallitus also has Junior Ranger activities which involve educational programs for children about caring for the national park.

Besides these activities, individual travellers have been able to take part in shepherding weeks, a concept that Metsähallitus P&WF developed in 2007 (Metsähallitus volunteer shepherds, n.d.). A volunteer shepherd spends a week on an old farm located in protected nature areas, caring for the animals that maintain the valuable landscapes of the nature reserve. The shepherd's duty is to provide sheep, cattle or horses fresh water and herd them from one pasture to the next so that the grazing animals get food and keep the meadow open. The shepherds pay a fee to cover each location's maintenance costs and nature management

expenses. Shepherding weeks are only available for a limited number of people each summer, as the shepherds are selected by a draw among thousands of applications. Thus, there is a growing need for enabling more participation in the conservation work of national parks. So far there have not been many ways that individual organisations or national park visitors could have participated in the conservation and restoration work. This research-based development work as part of this thesis is aiming to fill that gap.

Metsähallitus is committed to promoting sustainable tourism in the national parks and enabling their stakeholders, local nature enterprises and other travel companies, to develop and provide even more sustainable nature tourism and experiences in the future. Metsähallitus has cooperation agreements with various parties regarding the services provided in the national park. When signing the contract, the local companies commit to following sustainable nature tourism principles while operating in the national park.

1.2 Research and development objectives

The purpose of this thesis is to gain a better understanding of value co-creation for planetary wellbeing in the context of regenerative service development.

The work is commissioned by Metsähallitus Parks & Wildlife Finland. One of the core duties of the case organisation is to actively reduce biodiversity loss. In the future, Metsähallitus aims to involve even more of their stakeholders, including local nature entrepreneurs and their common customers; international travellers and so-called "citizen-customers", to actively tackle biodiversity loss and participate in conservation activities. However, the case organisation lacks a model for developing these new regenerative tourism services. Therefore, the development task and objective of this research-based development work was to develop a regenerative service concept that engages stakeholders, both partners and customers, in value co-creation for planetary wellbeing. To create such a concept, strategies, including mindset changes and design practices, needed to be identified. This thesis focuses on developing the service concept from the point of view of value creation and value propositions.

The main development question is: **How the case organisation can facilitate value co-creation for planetary wellbeing in regenerative service development?**

To explore this, following sub-questions are investigated:

1. How the case organisation can support partners in overcoming barriers and harnessing motivators to develop sustainable and regenerative tourism services while meeting customer expectations for the planet-positive, regenerative services?

2. How value co-creation for planetary wellbeing can be considered in regenerative service development?

2   Knowledge base for designing planet-positive, regenerative services

While the importance of design in addressing global challenges such as climate change has been acknowledged, there is still a need for design to shift its focus towards more environmental concerns and planetary health (Bohn et al. 2022). This section introduces the key concepts of the thesis and discusses relevant theories related to regenerative service development and so-called planet-positive design approaches. The aim is to establish a knowledge base that supports the research-based development work and builds the foundation for generating new knowledge in the process.

The section begins with the concept of wicked problem and planetary wellbeing, then introduces the Transition Design (TD) framework, the shift needed beyond sustainability to regeneration, and then further explains some key concepts in the field of regenerative design. Next, the role of value co-creation and service dominant-logic in service development logic is being explored. At the end of the chapter, the synthesis of the knowledge base and a theoretical framework of this thesis is presented.

2.1   Design for planetary wellbeing

Traditionally, design has been based on the human-centric approach, with a focus on building empathy for human stakeholders, for example, customers and employees. In addition, a significant portion of the design has been focused on solving problems of the business world, particularly in the context of industry and capitalism (i.e., Udoewa 2022). The holistic, human-centric design thinking approach that emphasises empathy, creativity and collaboration was first popularised by a design and innovation consultancy IDEO to help organisations innovate and create social or organisational change (Brown & Katz 2009). Design thinking process is highly iterative, meaning that the knowledge and perspectives are being questioned and gained throughout the design process.

Today, there is a growing emphasis on using design to address a broader range of societal and environmental challenges, so-called wicked problems or grand challenges of our time. For example, Martin Sharman and Musa C. Mlambo (2012, 274) state that an essential step in understanding and tackling global biodiversity loss is to define and treat it as a "wicked problem".

Rittel and Webber (1973) were the first to introduce the term "wicked problem" to refer to the type of emerging societal problems that were hard to define and not solvable with conventional problem-solving methods. Compared to natural sciences and engineering problems, they stated that all problems in social policy and planning are "inherently wicked" (Rittel and Webber 1973, 160). In their paper, Rittel and Webber describe wicked problems with 10 characteristics (Figure 3).

No clear definition

Problems are never completely solved

Solutions are not right or wrong, but concecuences of them are good or bad

There is no ultimate test for solutions

All attempts to solutions have effects that may not be reversible

Wicked problems

No clear solution or even clear set of possible solutions

Every problem is unique

Every problem is connected to another problem or may be a symptom of another problem

Multiple and conflicting explanations and views of a problem

The problem solver is accountable and has no right to be wrong
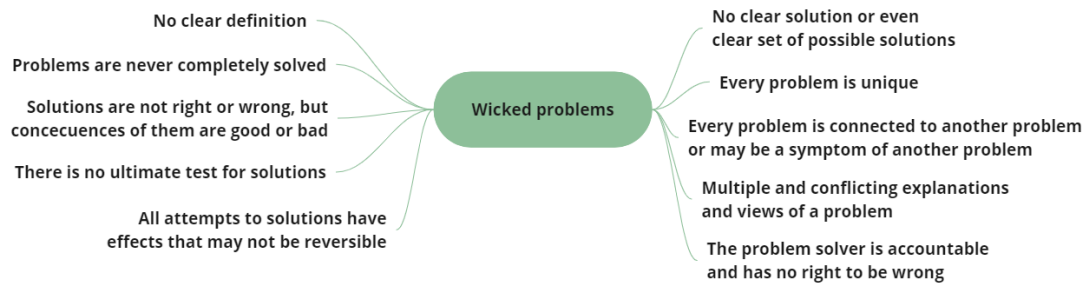
Figure 3: 10 Characteristics of wicked problems (adapted from Rittel & Webber, 1973).

These characteristics have later been modified and revised for the use of different disciplines. Nowadays the concept of a wicked problem is used to especially describe complex societal problems that are complicated and ill-defined, for example, poverty, sustainability, or climate change (i.e., IDF 2023).

It is recognised that design thinking and the practise of design is especially valuable for addressing and working with wicked problems (Bender-Salazar 2023). In fact, the need for design thinking increases as the level of uncertainty and complexity of a problem grows (Hillner 2018). In the field of design, complex issues have brought emerging design approaches aiming to provide solutions, such as "design for sustainability", "design for social innovation" and "design for social impact" or "social design" (Manzini & Coad 2015; Smeenk 2022; Andrews 2010). However, these design approaches have continued to follow the human-centric paradigm and generally focused on human experience. Moreover, even existing frameworks of Sustainable Development are built on addressing issues impacting people and benefiting humankind (Kortetmäki et al. 2021).

Perhaps consequently, in the context of the United Nations' Sustainable Development Goals (SDGs), especially health themes have been under the interest of designers but less so environmental concerns and planetary health (Bohn et al. 2022). Hupkes (2020, 1) explains that anthropocentrism of design is problematic because the dominance of human experience and values are linked to the causes of climate change, and it reinforces the false idea of the world that excludes nonhuman values and experiences.

According to Kortetmäki, Puurtinen, Salo, Aro, Baumeister et al. (2021), the need to conceptualise wellbeing in a more nonanthropogenic and systemic way is evident. They propose a concept of planetary wellbeing to support a more holistic and systemic understanding of wellbeing. Planetary wellbeing emphasises the interdependency and interconnectedness between the wellbeing of human beings and the wellbeing of the planet Earth and its species and ecosystems — a view that highlights the balanced wellbeing of all living and its importance for

sustaining life and ecosystem processes. Planetary wellbeing is a state where the Earth's system and ecosystem functions remain unharmed and allow for the sustainable existence of diverse life forms, including humans. The concept combines ecological and social equality aspects and thus serves to address also the consequences that human actions have to the environment. (Kortetmäki et al. 2021, 2–3.)

As the team of Kortetmäki propose in their article, this thesis uses the concept of planetary wellbeing as a supplementary lens that enables more planet-centric thinking and consideration of satisfying human needs without compromising the wellbeing or needs of nonhuman actors and entities (Kortetmäki 2021, 6-7). Consequently, it requires taking into account the perspective and needs of nonhuman actors in the design process.

2.2 Transition Design – Accelerating societal transitions

Besides the need for expanding the way of thinking from human to non-human species, solving wicked problems requires thinking in long horizons and understanding transitional change. To answer this need, there is an emerging approach of Transition Design for addressing twenty-first century wicked problems and enabling transitions towards more sustainable futures. (Irwin 2015; Irwin 2018). The founder of the Transition Design approach, Terry Irwin (2015, 231) places the new design practice on a continuum of earlier design approaches, after service design and design for social innovation. While service design focuses on designing experiences usually in the business context, the emerging discipline of Transition Design challenges people's lifestyles and aims to provide long-term societal solutions that are place-based and create positive social and environmental change. (Irwin 2015, 231-232.) In other words, wicked problems in Transition Design, although global in nature, should always be addressed in the local context in the natural world.

Richard Buchanan (1992) illustrates in his Four Orders of Design theory how design has evolved from creating tangible things to intangible systemic change. The theory explains how the design challenges may vary from designing a visual element or a physical artefact to designing a complex social change or pathways through the system. Thus, the theory can also help in exploring and defining the nature and the scope of a design challenge or project. The fourth order of design is for designing and solving wicked and complex problems: the design in complex systems and environments.

According to John Body and Nina Terrey (2019, 23), these "the fourth order designers" need to aim to understand and find ways to create systemic change, and in order to work with these complex issues, they need to be able to zoom between the different levels of systems, varying from individual perspective, the cohorts of individuals (users who share similar experiences) and the strategic, systemic level. Richard Buchanan (2019) points out that it is not possible for people to experience the system but rather to experience personal pathways

through the complexity of a system. Therefore, the focus of design in solving complex problems should be on understanding and constructing those personal actions and transition pathways through the system. This requires understanding people's role as catalysts of change instead of focusing on solely analysing or designing the system. This is also the focus of the Transition Design which aims to design those pathways and systems interventions that aim to radically changing the direction of societies.

The Transition Design framework proposes including four areas or elements in the design process when accelerating societal transitions. The areas are 1. Visions of transitions, 2. Theories of Change, 3. Mindset/posture, and 4. New ways of designing. Vision refers to envisioning future possibilities; how the future would look like for example in terms of lifestyles and how the needs of the people would be met in those visions. Theories of Change haves a key role in driving change because it recognises that it is crucial to challenge our ideas related to change itself and look for theories outside the design practice to understand how change happens in complex systems. Therefore, Theories of Change require exploring, gathering, and learning from the co-evolving transdisciplinary body of knowledge to better understand the dynamics of change. In addition, as the third element suggests, a new kind of reflective mindset is needed to live through transition and build the change in the foundation of a new mindset or worldview. Lastly, the visions, transforming mindset and new knowledge will all lead to new kinds of design approaches that arise from ongoing learning. (Irwin 2015, 233-235, 237.)

It should be noted that in this thesis Theory of Change does not refer to a method that is applied especially by non-governmental organisations or organisations for social change to demonstrate their work for impact especially in the context of funding applications. Referring to this use, Carey, Sides, and Dorn (2022, 4) criticise the traditional Theory of Change (ToC) method for its linear model that is usually illustrated in a format of diagrams (mapping inputs, activities, outputs, and outcomes). Carey, Sides & Dorn (2022) further argue that designers and design teams who design for complex transitions should not use these kinds of simplified models but instead focus on being conscious and explicit about the transition process, and continuously reflect on the connection between their actions and outcomes. Moreover, they underline that it is relevant for designers to recognise that any way of designing, and especially Transition Design, is inherently a theory of change as it entails ideas about how sustainable change happens. (Carey, Sides & Dorn 2022, 3-5.) Following this idea, this research-based development work aims to make the implicit ideas of change visible by recognising the different perspectives each stakeholder holds. Moreover, this thesis follows the idea of Irwin (2015) and considers Theories of Change as a transdisciplinary knowledge base for understanding what is needed for change.

2.3   Doing more – From sustainable to regenerative

The aforementioned Transition Design approach is applied in this thesis to better understand the ways design can create societal change and transitions. Likewise, several governmental institutions, technology businesses and design consultancies have taken initiatives to develop alternative design process models and toolkits for better understanding systemic problems or taking sustainability into account when designing products and services. One of the best-known examples of such is probably the Design Council's Systemic design framework (Design Council 2021), which is introduced more thoroughly in chapter 3.1. Similarly, Finnish IT consultancy Vincit (2020) has created a Planet-Centric Design (PCD) toolkit to support designing sustainable digital services and products. The toolkit combines systemic thinking and responsible design principles that aim to guide the design team to take circular resource use into account in the design process and consider ways to enable sustainable behaviour of users. The toolkit is designed to serve business purposes and it supports businesses to reduce harmful environmental impact (for example CO_2 emissions) of products and services.

Social innovation non-profit organisation Social Town makes a distinction between Planet-Centric Design (PCD) and another trending design approach, Earth-Centered Design (ECD). While Planet-Centric Design (PCD) seeks to take into account the whole product lifecycle aiming to reduce the impact on the environment and ecosystems, e.g., waste generation or use of planetary resources by innovation and technology, Earth-Centered Design (ECD) leans more on the idea of the planet as living ecosystem and it focuses on creating sustainable practices and products that are "in harmony with nature". (The Social Town 2023.) Interestingly, Väätäjä and Tiihinen (2022, 799) have used the earlier mentioned PCD toolkit in the context of higher education and they place the Planet-Centric Design hierarchically under the Earth-Centered Design. Therefore, it seems that they consider Earth-Centered Design as a wider umbrella concept or framework initiated by the design community and PCD as a more practical approach. However, these contradictory views demonstrate well how these novel approaches remain still under development and how there is a need to establish a clearer terminology. Also, Väätäjä and Tiihinen emphasise how there is very little research done related to these emerging design approaches (Väätäjä & Tiihinen 2022, 799).

The approaches that mainly focus on sustainable design or design for sustainable development have been criticised to be insufficient in tackling climate change and biodiversity loss as they focus on minimising harm to the environment instead of restoring or regenerating long-lasting positive impact (i.e., Wilson & Bhamra 2020; Bellato et al. 2022a). This has created an emerging trend of regenerative perspectives, especially in the fields of architecture, tourism, and ecological design, that take one step further to support the ecosystem's ability to renew itself, and people's and the planet's ability to address the current and future needs. In other words, there is a need for an approach that thrives for net positive impact.

Bill Reed is a pioneer in regenerative development and design in the built environment. However, his framework and concepts are well applicable to the field of service design, as the same paradigm shift is needed in every industry. Reed describes the shift from sustainability to regeneration as a "cultural leap" that requires whole systems thinking, recognising that natural systems and human cultures are deeply connected. To shift to regeneration, society must follow a trajectory from conventional design via "green design" and sustainable design, towards restorative design and finally to regenerative design (Figure 4). Reed highlights the importance of healing the damage human beings have caused as a crucial step toward achieving planetary health. (Reed 2007, 676-677). It is worth noting that sustainable solutions are still needed, but the overall goals should be moved further and beyond the sustainable level to become positive.
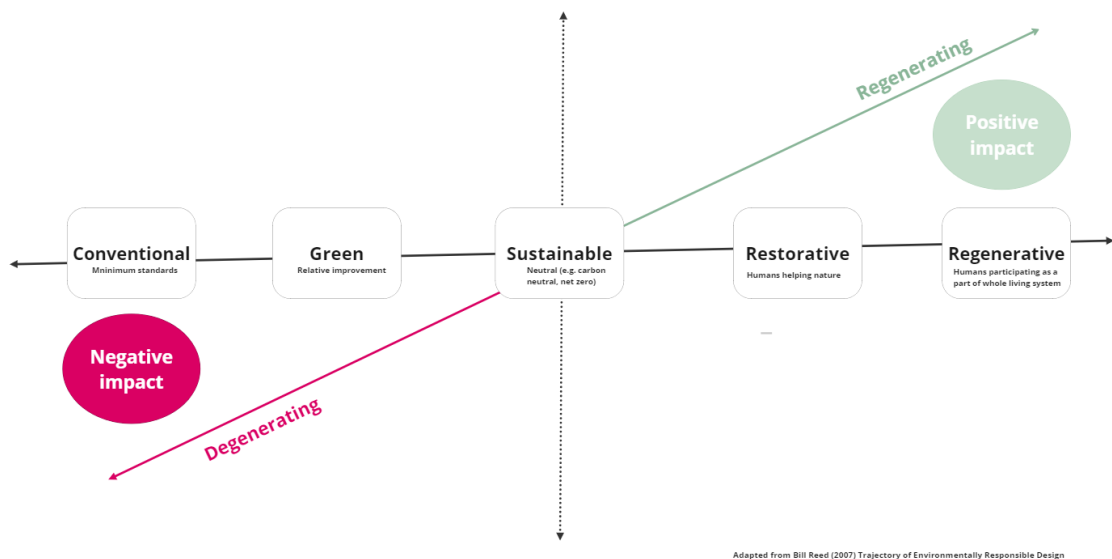

Figure 4: Trajectory to regeneration (adapted from Reed 2007).

Regenerative tourism

Regenerative approach has also been emerging in the field of tourism. Regenerative tourism aims to ensure that travel and tourism have a net positive impact on people, places, and nature while helping social and ecological systems thrive (Dredge 2022, 270). This thesis follows the definition of regenerative tourism.

Regenerative perspectives are seen originating from the knowledge, worldviews and wisdom of Indigenous people and local communities and it's considered important in regenerative tourism to include the perspectives and voices of the local communities whenever possible (Bellato et al. 2022a, 4). Also, Global Initiative for Regenerative Tourism (Turismo Regenerativo 2023) practitioners highlight the three-folded relationships of regenerative tourism: the relationship with the individual itself, with others and with non-humans (the Earth). In

contrast to a more dominant sustainable tourism paradigm that sees tourism as an industry that works with top-down logic and aims to minimise socio-ecological damage, the regenerative tourism approaches are place-based and the solutions are co-created with local people, governments, and enterprises (Bellato et al. 2022a, 10).

Planet-based approach involves gaining understanding of the specific place as a context for the design. This requires a continuous cycle of learning about the place, to better understand what contributes to the wellbeing of its human and natural systems and what role humans can play in regeneration (Reed 2007, 678). In other words, it means exploring the value exchange between the different stakeholders and systems through understanding the needs of the whole system better. Reed (2007, 679) recommends developing 'a story of a place' and integrating it into the design process to foster a connection between people and the place. Translated into service design methods, this could involve creating empathy towards the place and its ecosystems through ecological storytelling (e.g., Talgorn & Ullerup 2023).

In the context of organisations, it is still less clear what regenerative thinking means in practice or how a regenerative business model differs from a circular or sustainable business model, partly because they have overlapping perspectives, and because the ambiguity of the concept raises a risk for industries to use the concept for greenwashing (Konietzko, Das & Bocken 2023, 373). However, a team of Konietzko (Konietzko, Das & Bocken 2023, 384) list three key principles of regenerative organisations:

- The organisation recognises the interconnectedness of human health and the health of the planet (a single socio-ecological entity).
- The organisation delivers a value proposition of planetary health and societal wellbeing that commits to serving nature and society.
- The organisation strives to have a positive influence on all stakeholders (nature, customers, partners, investors etc.) and give back more than it takes.

In this research-based development work, designing with a regenerative approach follows these principles.

2.4 Stewardship – People's role in guarding and nurturing nature and the planet

As explained earlier in chapter 2.1, traditionally the design traditions are based heavily on human-centricity. It is important to note that there is no need to abandon this paradigm even though designing for the planet. Many of the sustainable design approaches build upon traditional holistic design foundations while incorporating new elements. For instance, in circular economy design, it is recognised that consumer behaviour is a vital component of the system, and a commitment from users or consumer behaviour change are essential factors for designing circular business models (Wastling et al. 2018).

Similarly, Daniel Christian Wahl (2006) recognises ecological and social literacy as a key component in driving responsible and active citizenship for guarding and caring the planetary wellbeing. In his PhD, Wahl (2005, 6) builds upon the concept of ecological literacy or eco-literacy, originally coined by David Orr in 1992, to describe a deep understanding of nature as a complex, interconnected and ever-changing system in which humans are an integral part. He points out that eco-literacy is crucial for 21st century designers but also for whole humanity and every individual to learn from nature and be better prepared to face the sustainability crisis. In addition, Wahl sees that increased eco-literacy combined with ethical considerations can lead to a broader sense of empathy that goes beyond social groups and species and helps achieve higher ecological awareness (Wahl 2005, 15). In the context of regenerative organisations, supporting eco-literacy and thriving with nature requires organisations to invest in activities where the employees can deepen their relationship with nature and spend time in nature as that is seen as beneficial for their own wellbeing as well (Konietzko, Das & Bocken 2023, 381).

Leah V. Gibbons (2020) suggests a shift to a regenerative sustainability (RS) paradigm that meets the sustainability development goals and goes beyond them. Instead of conserving environmental resources for human benefit, the goal is to make living systems thrive with a holistic worldview, co-creation, combining inner and outer sustainability and placing emphasis on changing fundamental aspects of systems to drive transformative progress at various levels. In this transformation, inner sustainability has a key role, referring to the internal mindset shift needed in one's values, beliefs, and worldviews (Gibbons 2020, 5).

Thus, inner sustainability is a similar concept to eco-literacy, but it also covers the change of worldview for adopting a regenerative mindset. Regenerative sustainability insightfully demonstrates how shifting towards a regenerative mindset do not require abandoning the Sustainable Development Goals (SDGs) or the overall focus on sustainability. Instead, sustainability is included within regenerative internal journey as one crucial step. Therefore, it still makes sense e.g., to refer to sustainable choices or developing sustainable tourism as they are still valid goals and actions in the lives of people. Not everything can be regenerative. For example, SDGs can serve as intermediate milestones for organisations and systems, facilitating the transition from degenerative and unstainable practices to regenerative ones (Gibbons 2020, 14).

It could be concluded that to apply a regenerative approach to the development of tourism destinations, all stakeholders (e.g., local businesses and customers) need to enhance their eco-literacy and inner sustainability. This has already been recognised in the field of tourism as well. For example, Dredge (2022) acknowledges that key factors in the transition to regenerative tourism is a mindset shift in thinking "we" instead of "me" and building compassion, empathy, and collaboration. Furthermore, it is recognised that the stakeholders should adapt

to a new role to contribute to and guard the planetary wellbeing of the destination (Bellato et al. 2022b, 315). One of the core tasks of stakeholders and businesses in regenerative development is so-called "destination stewardship", which means taking responsibility for protecting, restoring, and regenerating the destination (Bellato et al. 2022b, 320-321.) Especially local tourism operators (e.g., nature entrepreneurs in destination) are considered as essential "catalysts of change and stewards of regenerative tourism systems" (Bellato et al. 2022a, 8).

The concept of stewardship has been used especially in conservation policy to refer to sustainable management of ecosystems and the conscious use of natural resources. At the core of the concept lies the idea of people as stewards of nature and that there is a need to nurture and care for nature as a whole. (Mathevet, Bousquet & Raymond 2018, 2.)

It should be acknowledged that there are several meanings and uses of the stewardship concept across different disciplines as it may refer to motivation, ethic, action, or outcome related to ways people view, act, and care for the landscapes and natural resources (Enqvist, West, Masterson, Haider, Svedin et al. 2018). Stewardship can also be a problematic concept as it has been used in the field of environmental policies to emphasise humans' supervision, dominance, and power over nature. Thus, it may contribute to the anthropocentric, human-centric worldview. However, Mathevet et al. (2018), argue that in the recent years, the concept of stewardship has evolved to portray more how people can serve and care the nature, and thus it is well suitable to describe the change needed in our relationship to nature.

Enqvist et al. (2018, 23-24) recommend that the concept of stewardship serves best as an interdisciplinary tool for increasing collaboration and dialogue to understand the different meanings that stewardship can mean to different people from civic participation to individual volunteering or generation of profit. It can tie together for example psychological and environmental perspectives (e.g., biodiversity outcomes) and organisational participation. The team of Enqvist (2018, 24) propose a framework to link together these multiple, partly overlapping dimensions of stewardship:

- **Care** refers to emotional connection and feelings of responsibility towards the cause.
- **Knowledge** refers to understanding and information related to the systems that are being cared for.
- **Agency** refers to the most used meaning of stewardship as active doing. It involves the capabilities of people and organisations to act and create impact.

It is worth noting that the earlier-mentioned concept of inner sustainability could represent the dimension of care and eco-literacy could represent the knowledge dimension of stewardship. In conclusion, this thesis the concept of stewardship is used to refer to how individuals can take more responsibility in caring for nature in the context of the national parks but also

the internal transformation needed in ethical values (inner sustainability) and the need for knowledge to support stewardship (eco-literacy). Thus, the concept is used to underline the need for all three dimensions of stewardship.

Bill Reed (2007) proposes taking a place-based approach to regenerative design because it is an efficient way to strengthen people's understanding of complex ecological systems and frame their understanding of planetary issues and system-level challenges to a more manageable format. He suggests creating a 'story of the place' to provide people with a meaningful context and framework for learning and evolving together with the environment. He argues that storytelling and rituals can help strengthen a connection with a place and thus enable restorative and regenerative design. (Reed 2007, 677-680.) Thus, supporting eco-literacy with place-based storytelling may increase people's care towards planetary issues and their commitment to feeling and taking stewardship of the place's wellbeing.

It is worth noting that the service developed during this thesis can be considered as a form of voluntourism, a type of tourism merging business-driven tourism and volunteering. Kabil, Priatmoko, Farkas, Karpati & Dávid (2023) recognise voluntourism as a promising but potentially complicated sector within the tourism industry because it mixes different activities and involves cross-sectoral collaboration. Moreover, previously the industry has been criticised for its potential negative impacts on local communities, e.g short term volunteering do not provide long-term benefits or the lack of engaging local communities. Thus, the need for transparency when developing voluntourism practices is evident. Therefore, Kabil et al. (2023) recommend applying Business Model Canvas to better define the service concept and avoid clashes between different elements of the service, stating that it is especially important to identify and clarify different roles of stakeholders in the service.

2.5   Value co-creation with and for people and the planet

As recognised earlier, diverse stakeholders like citizen-customers, businesses or other organisations, and non-human stakeholders such as the local ecosystem play an integral role in the regenerative design, and in general value co-creation. Together they construct a comprehensive network of mutually beneficial connections (e.g., Bill Reed 2007).

It is important to note that modern-day consumers and customers are recognised as increasingly networked, informed, and active in participating in service development (Prahalad & Ramaswamy 2004). This is true also for citizens who increasingly expect the same level of service and quality from governmental services as they expect from private sector enterprises (Ansell & Torfing 2021, 11).

This thesis refers to citizens as citizen-customers to stay aligned with the customer-centricity and Service-Dominant Logic of service design. The foundational theory in service design,

Lusch and Vargo's (Vargo & Lusch 2004; Lusch & Vargo 2014) Service-Dominant Logic, S-D logic, emphasises the customer experience and involves customers and other stakeholders in the design and service delivery process. The theory represents the major shift in perspective from the traditional product-centred "Goods-Dominant Logic" (G-D logic) that is focused on the exchange of tangible products to a logic that emphasises value co-creation. According to the service-dominant logic, value is always co-created through interactions between service providers and customers and realised when customers use and experience the service. This paradigm shift has been an important basis of service design in the late 20th and the beginning of the 21st century. However, it should be noted that there are still companies and organisations that are focusing on products instead of services. Yet even these companies should incorporate service-dominant logic and tailor their value propositions to align with customers' perceptions and preferences because from a consumption perspective they can be considered "service firms" (Grönroos 2008, 309).

Pine & Gilmore (2011) argue in their book that the world has already shifted beyond products and services into the "Experience Economy", and to compete in the markets, businesses need to differentiate by staging memorable, transformative, and engaging experiences for their customers. Interestingly, it is also suggested that the next type of economy could be a mission or purpose-driven economy where people seek to develop themselves and fulfil a bigger purpose (e.g., Hurst 2016).

Prahalad and Ramaswamy (2004) point out that value co-creation with customers does not mean providing one-size-fits-all solutions. Instead, it involves empowering customers to collaboratively co-create and customise their experiences in ways that best meet their unique circumstances. In practice, this can and often should involve the creation of 'experience environments' where customers can actively shape and tailor the experiences to suit their personalised situations. (Prahalad & Ramaswamy 2004, 5-8.) Following the idea, this thesis sees national parks as prime examples of experience environments where individuals can select the ways they wish to participate in co-creating value for themselves and the planet.

Besides customers, suppliers and other stakeholders can contribute resources, expertise, innovation, and collaboration opportunities that may enhance the overall value proposition, the communicated statement(s) of how a service may benefit a customer, or as in the context of this thesis, the nature and society more widely. Overall, the multi-actor or ecosystem perspective on value co-creation has become more prominent in recent years, highlighting value co-creation by multiple actors instead of only one service provider (Vargo & Lusch 2016; Pera, Occhiocupo & Clarke 2016). This thesis follows this multistakeholder perspective to the service-dominant logic for value co-creation, emphasising that all stakeholders hold a pivotal role in contributing to positive outcomes for the planet and each other.

Anne Vorre Hansen (2019) criticises the concept of value co-creation for the lack of critical evaluation and the tendency to emphasise the positive side of service interaction. Hansen proposes increasing the use of its counter-concept, "value co-destruction", to increase understanding that the service interactions are always negotiated and not just created, and thus they may also lead to misunderstandings, conflicts and value destruction (Hansen 2019, 81). Especially in the context of multi-stakeholder value co-creation, it is possible that the different actors have sometimes conflicting agendas and interests.

It should be noted that the partners of the case organisation could also be referred to as customers, since they are paying for using the resources and services at the national parks, such as renting out the cabins and paying national park visitor fees for their own customers. However, in this thesis, they are referred to as partners of the case organisation or nature entrepreneurs to make a distinction between the end-customers of the case organisation that are referred to as customers. Yet, it is still relevant to remember that from the point of view of service-dominant logic, the case organisation is expected to apply the same emphasis in customer experience towards their partners than to citizen-customers.

2.6   Summary of the knowledge base and synthesis of the theoretical framework

This knowledge base has focused on gathering a better understanding of the elements needed for designing for regenerative service development. This thesis uses the Transition Design (TD) framework to tie together the different theoretical dimensions needed for designing for societal transitions (Irwin 2015).

Furthermore, the thesis builds on so-called planet-positive approaches, including the concepts of regenerative design and planetary wellbeing to refer to design that supports planetary wellbeing and societal transitions beyond the net zero, sustainable level. As demonstrated earlier, planet-centricity as a concept is not very clear nor used systematically in the field of design. Additionally, it may cause unnecessary confrontations and comparisons to the traditional human-centric paradigm of service design. However, as stated in this chapter, planet-positivity, planetary wellbeing, and regenerative design can all be additional layers of human-centric design. The services can still be looked at and developed from the perspective of people if the positive value the service brings to non-human stakeholders and the planet is also considered. Therefore, the important step to design for the planet is to take the foundations of human-centric design and build on top of it towards a more holistic view that includes planetary wellbeing.

In a central role in this thesis and in planet-positive design is a service-dominant logic for value co-creation, emphasising all stakeholders' pivotal role in contributing to positive and mutual outcomes for the planet and each other.

In summary, value co-creation for people and planet requires combining both the understanding of planetary wellbeing and the regenerative approach to the traditional service-dominant logic and customer-centricity of service design. According to literature, strengthening mutual value co-creation between all stakeholders in the design process and supporting people's eco-literacy, planetary stewardship as well as the relationship to the place can all enhance value co-creation for planetary wellbeing. To drive a major societal and cultural transition to regeneration, the different theoretical dimensions of Transition Design are necessary in the design process. All of these theoretical perspectives are combined in the Figure 5 and explained below.
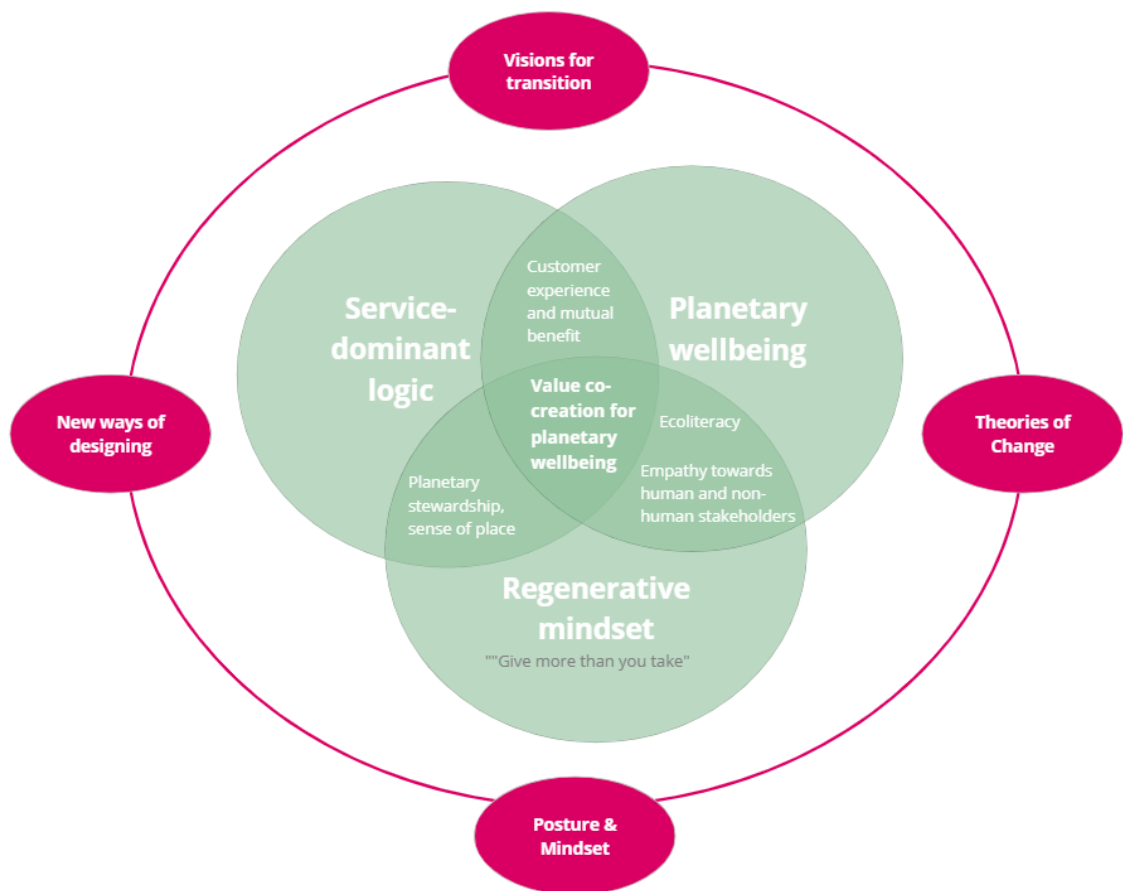
Figure 5: Framework for designing regenerative and planet-positive services with value for all stakeholders combined with the four key elements of Transition Design (Irwin 2015).

The value co-creation is placed at the core of the theoretical framework (Figure 5) to emphasise the importance of mutual value co-creation between different actors and customer experience in service development. To acknowledge and strengthen the value co-creation for the planet, both the perspectives of planetary wellbeing and a mindset shift to regeneration are needed. The concepts of eco-literacy, sense of place, planetary stewardship are all contributing to this transition and underlining the importance of people's relationship with nature

and the planet. The mutual value co-creation requires also increasing empathy towards all stakeholders, including non-human stakeholders. The four surrounding elements are the four areas of Transition Design framework (Visions of transition, Theories of Change, New Ways of Designing and Posture & Mindset). The TD framework ties together all the different theoretical dimensions needed for designing for societal transitions as described by Irwin (2015).

3   Development process and methodical choices

This thesis applies a research-based development work approach. Research-based develop-
ment work aims to solve real-life problems and create new practices or processes, services,
and solutions for organisations. Additionally, it aims to create new knowledge about prevail-
ing practices in working life to better understand them and develop alternative solutions. Re-
search-based development work can be seen as located between traditional scientific re-
search and general organisational development that is usually based on people's practical
knowledge of solving working life problems. Research-based development work stems from
practical problems while leaning on versatile data that is gathered systematically using sev-
eral different methods and then evaluated critically harnessing both practice and theory. At
its core, development work involves an active interaction with different stakeholders during
the different stages of the project. (Moilanen, Ojasalo & Ritalahti 2022, 29-31.)

The methodological approach plays a crucial role in research-based development work. There
are several different approaches (Figure 6), including case study, action research, construc-
tive research, service design and innovation production (Moilanen et al. 2022, 51). Case study
as an approach focuses on creating in-depth insights instead of advancing change. In action
research, a group of people find out together how to solve a problem and drive change. The
constructive research approach is similarly flexible as service design and innovation produc-
tion, but it is most useful when the outcome or solution is not innovation or service but for
example training material. The innovation production approach can be used when the aim is
to develop and implement something novel, such as a new product, service, or model. The
service design approach focuses especially on creating value for service users and customers
through understanding their needs and improving the service experience with a range of de-
sign tools and methods. (Moilanen et al. 2022, 51, 52, 85, 108.

Figure 6. Approaches to research-based development work placed in a continuum of Research
and Development (Moilanen et al. 2022, 51).

As the team of Moilanen (2022, 50) proposes, the approach for this thesis was decided based
on the development task. This development work could have benefited from other ap-
proaches, but service design was chosen as an approach as the principal aim was to develop a
value-based service concept. Furthermore, one of the goals was to discover how planet-posi-
tive design principles and perspectives could be integrated into the service design process.

The Transition Design framework that was introduced in the previous chapter, is used to support the understanding of the transitions and Theories of Change in this thesis as an additional layer. However, it's not used as a methodological approach but more for supporting the theory and knowledge base.

After selecting an approach, it is important to choose methods that support the development task. The same methods can be used for different approaches, but all choices should be guided by the chosen approach and the development work task (Moilanen et al. 2022, 68). The next chapter will introduce service design as an approach. The following chapter after that will describe the development work process and methods and tools that were used during the project.

3.1   Service design as an approach

This research-based development work follows a service design approach. Service design is used increasingly for developing services and processes in the variety of organisations from companies to public sector organisations. It is possible to apply service design to all levels of service development within an organisation, for instance for developing business models, service concepts, organisational culture, or processes. (Moilanen et al. 2022, 93.) As explained in chapter 3.5., modern service-dominant logic is based on understanding of and empathising with the customer's and other stakeholders' needs and situations and providing services that meet those needs. Applying this service logic and customer orientation in general is one of the most fundamental characteristics of service design (Moilanen et al. 2022, 94). However, service design has increasingly a growing role in delivering positive social impact and it can be seen as having an important role in breaking preconceptions and showing more people how widely design can be used (Andrews 2010, 88).

Stickdorn & Schneider (2010, 29) describe service design in their book 'This is Service Design Thinking' as an interdisciplinary approach that uses different methods and tools of different disciplines and has several definitions across academia and design agencies. In the book, customer-centricity and design as 'a way of thinking' are highlighted. In their second book, 'This is Service Design Doing' (Stickdorn, Hormess, Lawrence & Schneider 2018, 26) there are still multiple definitions for service but they also outline their definition of service design as "human-centered, collaborative, interdisciplinary, iterative approach which uses research, prototyping, and a set of easily understood activities and visualization tools to create and orchestrate experiences that meet the needs of the business, the user and other stakeholders." This definition is based on the principles of service design as human-centered, collaborative, iterative, sequential (visual and interrelated), authentic and holistic practice (Stickdorn et al. 2018, 16). The evolution from mainly customer-centricity to human-centricity describes well the constant change and transformation in service design practices and how the service

design approach has integrated more holistic thinking during the recent years, also giving more emphasis on the perspectives of other stakeholders besides customers.

Service design is guided not only by its principles but also by processes and a wide range of methods and tools. There are several frameworks and process models of service design, although they often follow a similar phasing. According to Stickdorn et al. (2018, 84-87), different service design processes contain usually between three to seven different stages, but all of them lean on the service design principles and have the same core pattern of switching perspectives between divergent (exploring and creating perspectives and options) and convergent (selecting, making decisions, and taking action) thinking and doing.

One of the most well-known and most used process models of service design is the so-called Double Diamond model (Figure 7) popularised by the British Design Council in 2004. In 2019, it was updated with added elements, such as design principles and putting more emphasis on the non-linear nature of the design process. The design process is driven by four design principles: people-centredness, visual and inclusive communication, collaboration and co-creation and iteration. The Double Diamond model is visualised in the shape of two diamonds, and it includes four phases that are Discover, Define, Develop, and Deliver. It is typical for the design process to contain several iterative rounds or a need to return to the beginning to redefine the problem. (Design Council 2023.)
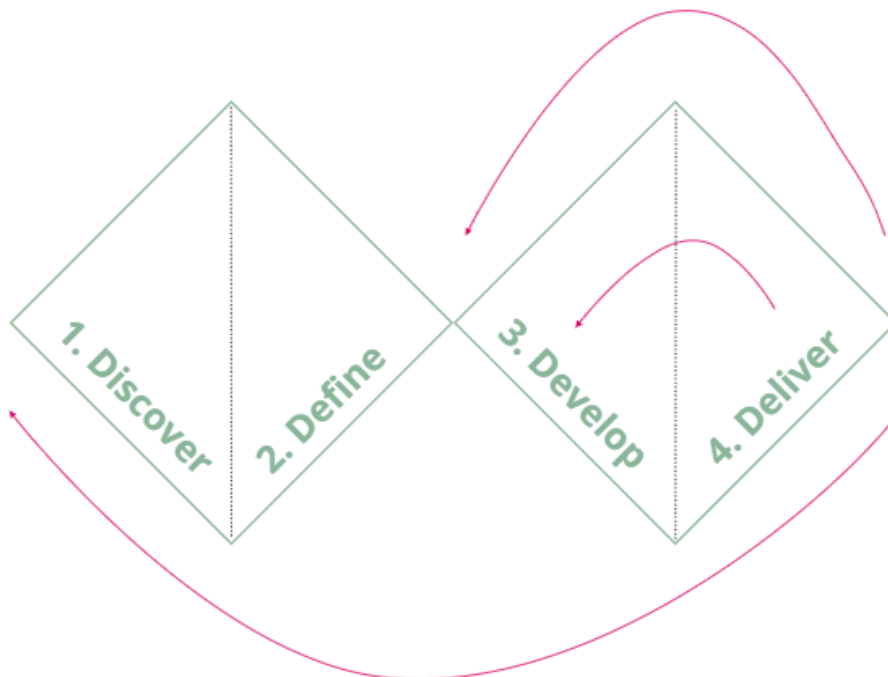

Figure 7: Simplified model of Double Diamond process (Adapted from Design Council 2023).

There are also other development models for the design process. For example, in the book 'This is Design Thinking', the design process is modelled with four iterative steps that are Explore, Create, Reflect, and Implement (Stickdorn & Schneider 2010, 126). Likewise, most of the design process models share the same emphasis on fast iterative loops of different stages, starting from data collection and research, moving into collaborative ideation and then to the creation of solution models that are being tested (Moilanen et al. 2022, 96). Nowadays, also foresight research is frequently applied to development work, especially combined with the service design approach (Moilanen et al. 2022, 53). Although imagining alternative futures or analysing future trends, for example, could have been valuable additions to this project, their exclusion was an intentional choice to narrow the focus of the project.

The Design Council has also acknowledged a need for a new, more advanced framework with a better fit for solving systemic problems, such as creating new policies (Design Council 2021, 7). Therefore, it has published an updated framework of the service design process for a systemic design called Systemic Design Framework. This framework builds on top of the Double Diamond model, with revised phases of Explore, Reframe, Create and Catalyse and with added elements around the design process for Orientation and Vision setting, Connections and Relationships, Leadership and Storytelling and Continuing the Journey. Moreover, the framework includes recommendations for considerations to be done during the design process and updated principles for systemic design. (Design Council 2021, 43-46.)

Even though one could argue that the Design Council's new framework might seem more appropriate for this development work's theme, this research-based development work follows the traditional Double Diamond model and its discover-define-develop-deliver approach. There are several reasons for this. First, the starting point of this research-based development work was to better understand the needs and perspectives of entrepreneurs for developing sustainable travel practices within national parks, and therefore the traditional people-centred framework seemed a suitable approach at the beginning of the thesis to understand their needs. Secondly, applying a more advanced systemic design framework would require high design maturity from the organisation and as the framework suggests, strong visionary leadership and adapting new kinds of design roles. Thirdly, as Smeenk (2022, 153) argues, designers are not yet ready or being trained to work in networks and design systemic change. Fourthly, it is equally worth exploring if the universally used Double Diamond model could be harnessed for planet-positive and regenerative service development.

Therefore, it was a practical decision to follow the traditional discover-define-develop-deliver model and find out if it could be possible to integrate planetary wellbeing and regenerative perspectives as an additional lens to this core process of service design as Kortetmäki et al. (2021) propose. Therefore, this thesis also follows the recommendation of the Systemic

Design framework to consider the natural ecosystems as stakeholders in the design process and communicate and commit to the values that the service is driving.

It should also be noted that even though awareness of the need to consider the nonhuman stakeholders in the design process is rising, there is still a lack of tools and methods for bringing these perspectives into design practices (Veselova, Gaziulusoy, & Lohmann 2022, 2). Due to this shortage of established methods and tools, this research-based development work took an experimental approach to the subject. The starting point for choosing the methodology that would consider nonhuman stakeholders was raised in the Develop stage when the design team wanted to understand the needs and perspectives of the local ecosystem or nature in terms of biodiversity loss to create value propositions for increasing planetary wellbeing. Therefore, it was decided to experiment with filling the value proposition canvas with a stakeholder profile and value map for nature as a stakeholder. Value proposition canvas and more general value proposition design are used to create, test, and improve value propositions and help in creating a shared understanding of value creation in the organisation (Osterwalder, Pigneur, Bernarda & Smith 2014). This experimentation with the value proposition canvas is explained in more detail in chapter 3.2.3.

3.2 Development work process

This chapter describes the development work process in practice. It explores the four phases of Double Diamond and covers the methods and tools used in each phase. The last phase, Deliver, is only partly included in this thesis due to the time limitations. However, at the end of this report, there are suggestions for continuing the service development.

The research-based development work process, its stages, methods, and tools have been compiled in Figure 8.

Service design relies on a variety of methods and tools for gathering information and visualising it. Methods are wider approaches, such as contextual interviews, ethnography, or prototyping, while tools are more concrete models based on similar templates or a common structure (Stickdorn et al. 2018, 37).

In service design, it is normal to use several research methods to gather data and to develop an understanding of the issue. This principle of triangulation supports viewing the same phenomenon from different angles and improves the accuracy of data (Stickdorn et al. 2017, 106-107). Research methods are typically either quantitative (e.g., surveys) or qualitative (e.g., interviews, observations, workshops) methods but both of these methods can also be mixed together. Quantitative methods are used for testing the hypothesis or a theory, and qualitative methods serve best for understanding new issues and topics (Moilanen et al. 2022, 134).
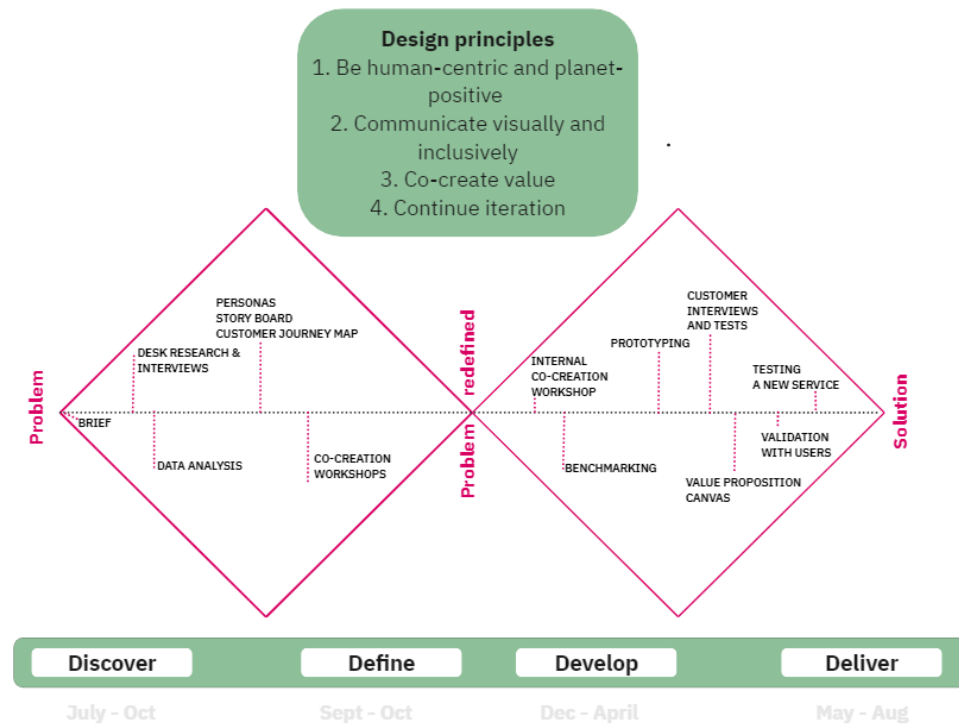
Figure 8: Methods and tools used during the Double Diamond process.

Especially qualitative research has an important role in design because it enables a gaining understanding of human behaviour and other social and cultural aspects. Moreover, qualitative research can provide insights into, e.g., how a service fits into the life of a user or a customer and what motivations and needs they have for using the service, thus offering valuable business insights in way that traditional market research could not do (Cooper et al. 2014, 33). This thesis seeks to gain this kind of deeper insights and qualitative understanding which is why mainly qualitative methods are applied.

The methods and tools used during this research-based development work are basic resources of service design, including interviews, personas, empathy map, value proposition canvas and co-creation with stakeholders. Some of them will be discussed in more detail because of their role in this development work, others are only covered briefly.

Often different tools and methods are developed for specific purposes or to be used in certain stages of the design process for acquiring certain types of data or for supporting e.g., concept building in the modelling and testing phase (Moilanen et al. 2022, 99-100). However, there is no one "right" or "wrong" way to apply service design methods and tools because experimentation is a vital part of service design and thus any combination of tools and methods can be successful as long as it helps explore, develop, and testing ideas (Stickdorn & Schneider 2010, 148.).

As described in the previous chapter, the service design process is always iterative. In practice it means that, for instance, research is not only limited to the first stage of the development work but done during the various stages of the development process. Therefore, data is acquired and analysed on several occasions during the development work.

The development work process started in the autumn of 2022 and continued until the summer of 2023. Due to the seasonal nature of the developed service concept, the customer testing in a real-life environment was only possible to organise during the summer month of July.

The principles of good research ethics and responsible conduct of research were followed in this thesis (TENK 2023). An agreement of the collaboration was signed between the contact person of the case organisation and the author of the thesis. During the whole research-based development work, all processing of personal data was handled in accordance with GDPR (General Data Protection Regulation). Prior to conducting interviews, participants were asked for their consent, informed about the research focus, interview themes, data privacy, voluntary participation, and their right to withdraw at any point.

The original interview data was stored in the online cloud service which only the author of this thesis had access. The workshop and more processed data were stored on two different Miro boards. One board was used as a platform for co-creation sessions and prior to the workshops, access was granted to the participants and the access to the board was again restricted after the workshop. The content analysis was conducted on the private Miro board. Once the research and analysis were done, all stored personal data was removed. The key insights and reports compiled during the thesis were shared with the case organisation.

3.2.1 Discover

Discover phase can also be described as the exploration or insight phase which is by nature divergent, aiming to expand perspectives and ideas (Stickdorn et al. 2018, 88-89). This phase aims to also understand the service context and the environment surrounding the business or the client organisation, in other words, the context (Miettinen & Koivisto 2009, 13).

The first step in the service design process is to understand the existing culture and goals of the development organisation and identify what the problem or need is from the perspective of the service organisation. After that, the problem should be viewed and clearly understood from the perspective of the customers/users and their situation. Only after gaining this information, it is possible to start uncovering and identifying the core problem. (Stickdorn & Schneider 2010, 128.) In practice, it is necessary to conduct pre-research before interviews or workshops with stakeholders (Stickdorn & Schneider 2010, 67). In this study, this pre-research phase is called desk research.

Desk research

The development work started with gaining an overview of the case organisation and gathering existing data and insights related to the topic. This pre-research phase, so-called desk research is based on secondary research data and it should always be conducted before the actual research takes place (Stickdorn et al. 2018, 117-119). Desk research for this project included getting to know the terminology and topical issues related to sustainable and responsible travel in the case organisation, research and media. Furthermore, existing research and other material, such as strategy roadmaps, reports, and press releases were collected to the infinity board Miro as background materials.

At the beginning of the project, a steering group was established for the project. It consisted of five internal stakeholders of the case organisation, from Metsähallitus Parks & Wildlife unit. They were representing different roles, e.g., service design, sustainability, and partnerships.

This background material included partnership survey results gathered and analysed by a consultancy company Digitalist in 2022 for the case organisation. Based on the survey insights, a partnership model had been created to support the collaboration with nature enterprises. The existing materials also consisted of the national park visitor profiles (in Finnish Retkeilijäprofiilit) that had been created in the case organisation's service design project in 2021 (Nylund 2021).
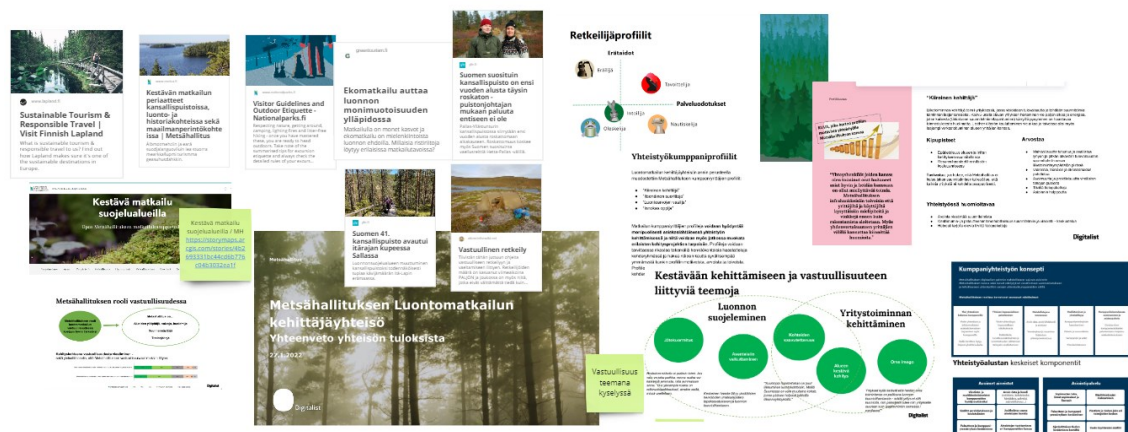

Figure 9: Some secondary research data sources and existing insights gathered in Miro board.

(Auto)ethnographic lens

Autoethnography is often used in service design, especially in the early stages in the format of short visits to service context or situations where designers are exploring the experience themselves (Stickdorn et al. 2018, 119). These designer's or other person's personal

experiences are usually written and recorded in a format of a diary or a story (Moilanen et al. 2022, 152). Contextual perspective is important to better understand customers and the whole service environment (Moilanen et al. 2022, 97).

During the whole extent of the development project, the author of this thesis visited several Finnish National Parks and other protected nature areas, including Nuuksio National Park, Meiko Nature Reserve, Lake Iso-Melkutin and Liesjärvi National Park and Saana Trail in the Malla National Park in the Finnish Lapland. Also, during the project timeframe, the author did an 8-day hiking trip to Swedish Lapland along the popular King's Trail, a shorter visit to a Granada UNESCO Geopark and the Caminito del Rey route in Southern Spain and several day hikes in the popular nature destinations in the Lofoten Islands in Norway in summer 2022. Moreover, several other national parks in Finland and abroad were familiar to the author prior to the project. Even though these unstructured field visits cannot be officially considered as (auto)ethnographic fieldwork as they were not systemically recorded, this embodied knowledge and lived experience helped gain contextual understanding and a wider perspective to the issues that many national parks and nature areas are facing in terms of sustainable and responsible travel. Since the author wanted to be aware of not to design for herself, therefore more emphasis was given to the other methods and the unstructured observation and site visits were only to support this type of contextual understanding especially in the Discover stage.

Interviews with partners

The existing partnership survey provided insights about the perspectives and wishes partners had towards the partnership with the case organisation in general, but it covered only briefly their relationship, attitudes, emotions, or current practices related to sustainable and responsible tourism. Therefore, it was necessary to acquire this deeper insight after the initial desk research. An important part of the service design process is to "get into the shoes of customers" and to be able to empathise with them, so gaining this perspective was essential (Design Council 2015). In the context of service-dominant logic, also partner companies can be seen as customers of the case organisation and therefore, this insight was created using tools that are usually used for creating customer insights in service design.

Semistructured interviews was chosen as the first method for gathering this data since interviews make it possible to collect deeper qualitative insights quickly. Semistructured interviews allow the interviewer to change the order of the questions or ask further questions if they arise in the situation. (Moilanen et al. 2022, 136, 139.) However, it is important to serve the purpose of the research and aim to find meaningful answers that help understanding what kind of meanings people give to the topic at hand (Tuomi & Sarajärvi 2018, 88). As the qualitative research seeks to gain understanding of a specific subject, therefore it is usually best

to interview people who know about the topic and that it is relevant to them (Tuomi & Sarajärvi 2018, 98).

The participants were recruited through the contacts of the case organisation, directly contacting the nature businesses around Finland and through outdoor-themed and nature business-related social media groups. In the beginning, it was discussed with the case organisation whether recruiting participants for the interviews should only be limited to a specific area in Finland to match better with the region-based organisational structure of the case organisation, but then it was agreed that for gaining customer understanding at this stage, the location was not a relevant factor. This turned out to be a good strategy as it enabled a wider scope at the beginning of the study, which can be seen as overall beneficial in the Discover phase.

In total, 10 qualitative semistructured interviews were conducted and recorded with the consent of the participants. This was a sufficient number of informants, because during the interviews, the same perspectives and experiences were mentioned repeatedly, suggesting saturation of the data. In qualitative research, this is usually a sign that there is enough data for analysis (Tuomi & Sarajärvi 2018, 100).

Prior to the interviews, research consents from the participants were acquired, and the participants were informed about the research focus and interview themes, data privacy and the voluntary nature of the research and their right to any moment withdraw from the study. All the interviews were conducted remotely using the virtual conferencing tool Teams due to the scattered locations of entrepreneurs around Finland. Nine out of ten interviewees were nature entrepreneurs or other travel businesses with nature-related activities within national parks, and one was a sustainability expert working in a travel company. All the companies that participated were already partners of the case organisation and they had signed a cooperation contract. However, the contract types were varying regarding the length and type of contract, as others had solely contracts for the right of use land and water areas and others had longer and wider rental agreements for, i.e., entire resorts.

It should be noted that the chosen entrepreneurs were likely to have an increased understanding and interest towards sustainable tourism and higher motivation towards responsible tourism practices in general as they were interested in participating in the research-based development work in the first place. However, from the perspective of service design and co-creation, this can be a positive and fruitful starting point, since as Sanders and Stappers (2008, 12) point out, effective participation in the design process requires individuals to have both a passion for the topic and knowledge in the area. Thus, it is important to find people who are committed to the common mission.

The interviews followed a field guide prepared by the thesis author (Attachment 1). A field guide is a necessary preparatory step before interviews, a document containing information about the structure of the interview and questions and other details to be covered (Portigal 2013, 39).

In summary, the interview questions focused on the following themes:

1. The overall description of business activities within the national park
2. Sustainable practices of the company
3. Mindsets towards sustainable/responsible tourism
4. Recognised barriers to the sustainable/responsible tourism in national parks
5. Pains and gains of entrepreneurs for driving and improving sustainable/responsible tourism in national parks
6. Need for support from the case organisation and expectations for the partnership related to sustainable/responsible tourism

Sensemaking and analysing the interview data

After gathering data, it needs to be organised and analysed. In service design, this so-called 'sensemaking', making sense of data, is often done in a more flexible way than in the academic world and visualisation techniques and different templates are used to identify common patterns and possible gaps every time new data has been collected. (Stickdorn et al. 2018, 111.) As this is research-based development work, a deeper, more systemic way of analysing data related to research questions was also necessary. However, it should be noted that combining the academic ways of analysing and service design's sensemaking can be challenging because in real-life development work projects, there are usually limited timeframes and resources for analysing data, and due to the multiple methods and iteration rounds of service design process, also the amount of data can be overwhelmingly large. Therefore, this work was also balanced with drawing the line between which data should be analysed with content analysis and which data could be synthesised and visualised based on the sensemaking methods of service design. Therefore, content analysis was only conducted in the later stage of the study, when it was clearer what the final focus of the research questions would be. This does not mean that the sensemaking was done less carelessly, but the process was simply different. To differentiate these two ways of analysing, the concept of sensemaking is used to describe the more practical "service design way" of organising, visualising data, and creating insights and content analysis to a more academic way of analysing data.

Content analysis is one of the most common methods for analysing qualitative data the academia. The aim of the content analysis is to search for meanings in the data that match the development work task. (Moilanen et al. 2022, 171.) Compared to sensemaking, content analysis involves codifying the transcribed interviews or other research data with (coloured) tags

or labels (Stickdorn et al. 2018, 111). In this development work, inductive, data-based content analysis was utilised, which means that the relevant, development task-related content snippets were recognised among Miro post-its and then similarities were identified, clustered and new categories created and named (Tuomi & Sarajärvi, 2018 122-123).

In the early phase of development work, the primary goal was to gather insights and understand the wider problem space before defining a specific problem. Therefore, the data was first organised with sensemaking after the interviews. Every interview was first transcribed into a separate document. This was an important preparatory step also for the content analysis at a later stage because prior to qualitative analysis, it is important to transfer the raw data (e.g., interviews) to written format (Moilanen et al. 2022, 171).

Affinity mapping

The content of the interviews was taken to a virtual whiteboard Miro in post-its, tagged based on the data source for sensemaking and to enable later content analysis. After that, the interview data was categorised into groups with affinity mapping technique based on common themes of the interviews, such as the value of responsibility, sustainability certificates, problems in nature tourism, mindset, responsibility as actions, entrepreneurs' roles within a national park, barriers to the sustainable tourism, current collaboration with Metsähallitus, wishes for collaboration with Metsähallitus, responsible/sustainable travel as customer experience. Another clustering was done in the format of a Problem wall based on the pains (problems) of entrepreneurs to subthemes of cultural differences, lack of resources, lack of supporting structures and services, problems within national parks and mindset towards responsibility.
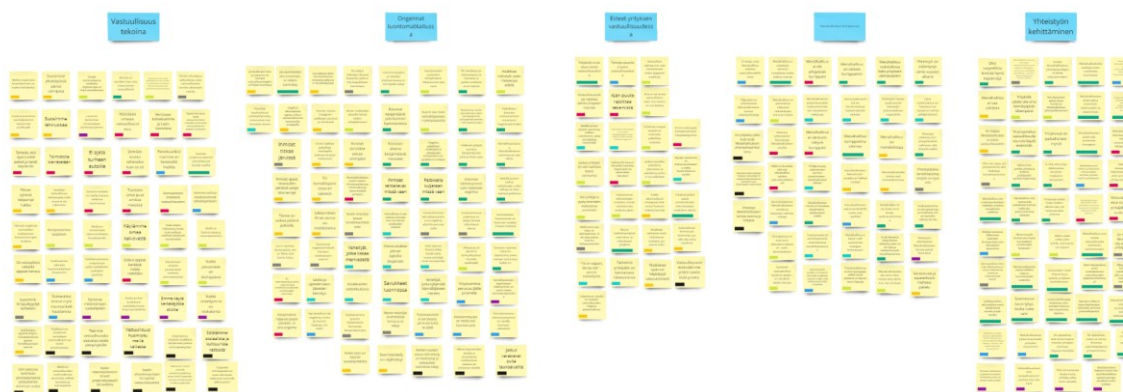

Figure 10: Identifying common themes in the Define phase in Miro board.

Visualising insights: Personas, empathy map, storyboards and customer journey map

After sensemaking and learning from data, it is important to visualise the findings to make complex processes and structures visible and more tangible (Stickdorn & Schneider 2010, 129). Moreover, narrative visualisations and storytelling enable to empathise with users and see the problem more clearly (Lupton 2017, 38).

For this, empathy maps, personas, customer journey maps and storyboards were used as tools to visualise the gathered partner insights to the case organisation and other stakeholders participating in the development project. These tools formulated a background material for the two workshops that took place in the second stage of the design process.

Based on the data gathered in the Discover phase, partner personas, an empathy map, a storyboard and a partner sustainability journey map were created in order to communicate easily the research insights to the case organisation and to begin developing ideas in the workshops in the next stage.

The empathy map method helps increase empathy towards users and helps the whole design team understand the users more profoundly. Easy-to-use empathy map can be built based on the hypothetical archetype of a user or real user insights. The empathy map gives an overview of the customer's life context, behaviours, goals, and concerns. (Ferreira et al. 2015.) The empathy map (Figure 11) was used in this stage based on real customer insights.

Personas are perhaps one of the most used visualisation models in service design. Originated from interaction design, personas are user archetypes, models of groups of users and their descriptive behaviours, thoughts, desires, and sources of frustrations (Cooper et al. 2014, 62). The benefits of creating and using personas include, among others, strengthening the shared understanding of the design team about the user/customer needs and guiding better design solutions. They should not be mixed with stereotypes, since the personas are derived from and synthesised based on the research data, and thus they represent real people's emotions and needs. (Cooper et al. 2014, 64-66.) Personas can be co-created in a workshop and help facilitate empathy towards the specific customer groups, or created and visualised by a designer as in this thesis, to support bringing insights into other parts of the design process (Stickdorn & Schneider 2010, 179). In total, 4 profiles were created based on the data collected in the Discover phase.

Storyboards are another visualisation technique (Figure 10). It is a set of pictures or drawings often in comic-strip format that, for example, illustrates the service situation. Storyboards can communicate imaginary or a real-life situation. In the context of workshops, designer-made storyboards can be used to encourage discussion about the topic (Stickdorn & Schneider 2010, 186-187). A storyboard and an empathy map were created to visualise the experience

the partners had in implementing and developing sustainable tourism and responsible travel practices in national parks.
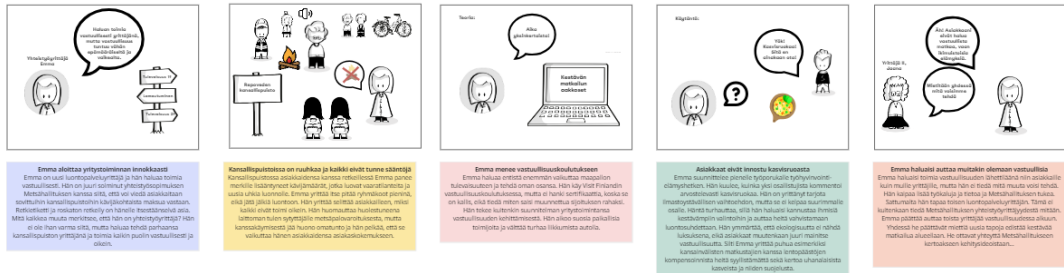
Figure 11: Storyboard used to communicate the viewpoint of the businesses in the national parks.
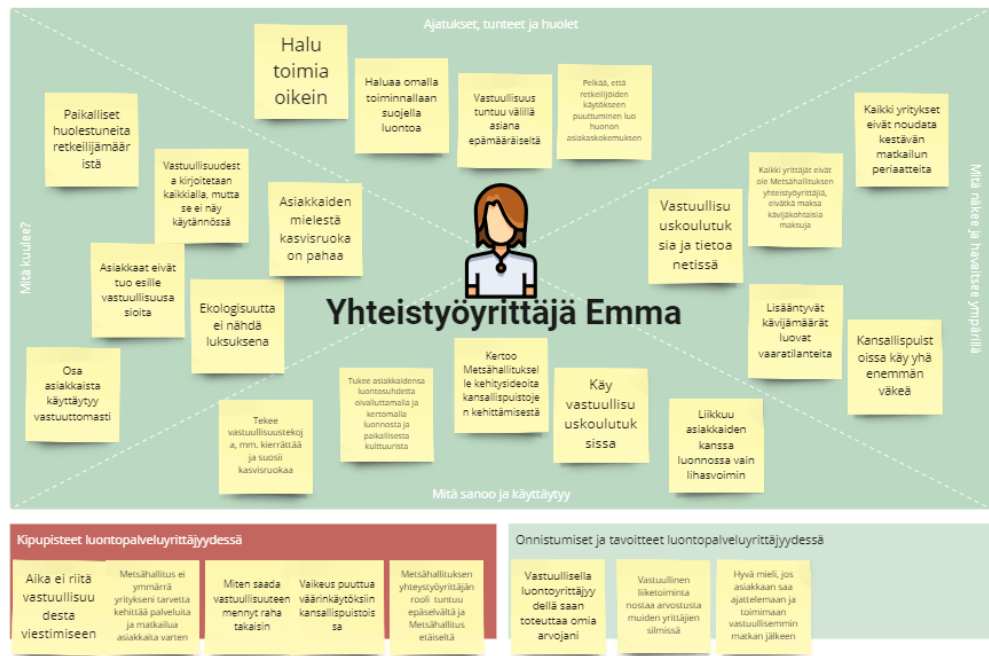
Figure 12: Empathy map of nature entrepreneur based on the interview insights.

Figure 13: Partner insights crystallised in a format of a persona.

Customer journey maps support the visualising the holistic service experience and touchpoints where the customer interacts with the service (Stickdorn & Schneider 2010, 158). This kind of visualisation model was adapted to better convey and visualise the different stages of the re-sponsibility journey that the entrepreneurs were taking or expected to take. The entrepre-neur's responsibility journey was created based on the insights that demonstrated that the needs of the nature businesses were different depending on the stage or level of the sustaina-bility of their business.
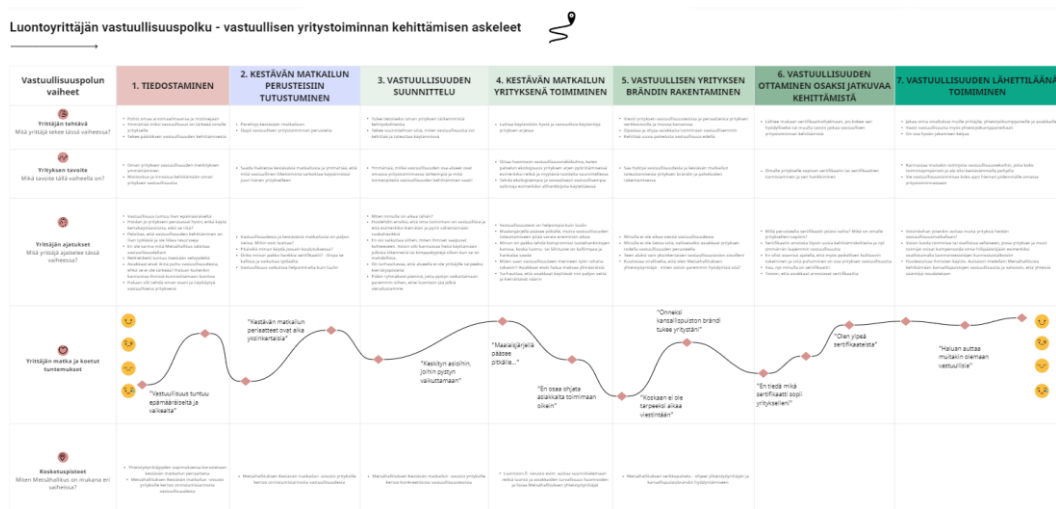

Figure 14: Responsibility journey of nature entrepreneur.

3.2.2 Define

Due to the iterative and complex nature of the service design process, it is not easy (nor necessary) to put a clear line where one stage of the design process ends, and another begins. For example, the original Framework for Innovation (Double Diamond model) places the co-designing in the third diamond (Design Council 2023). In this development work, redefining the problem took place at the end of the Define stage.

In other service design processes, the second stage is often described as the creation or ideation stage and in this development work, it would have perhaps been more suitable to name it as that. According to Stickdorn & Schneider (2010, 130-131), the goal of the second stage in the service design process is to create as many ideas as possible. Expressed another way, this stage is all about failing early and learning together. In this stage workshops and other co-creative or collaborative methods are used to feed ideation and creative problem-solving (Moilanen et al. 2022, 98).

Overall, at the heart of addressing all kinds of design problems lies interdisciplinary collaboration and co-creation and it should not be limited to only one stage of the design. Its importance has also been recognised in driving regenerative transformations and developing regenerative tourism (Gibbons 2020; Dredge 2022). Especially more complex design issues require participation, input, and expertise from multiple stakeholders, such as experts, policymakers and local communities or other relevant affected individuals. However, collaboration between different stakeholders with conflicting interests can be hard, and especially multi-stakeholder collaborations require empathy towards each other's perspectives from all people who are involved in the co-design process (Smeenk 2019, 24). Thus, co-designing does not only mean creating empathy towards end-users of the service but also towards all the different actors and perspectives in the design process, like towards nature as in the context of this research-based development work.

In summary, the goal of co-creation sessions and ideation workshops is to bring multiple perspectives to the design process. The results of the workshop are then usually further discussed and developed among the core design team who will continue the design process (Stickdorn & Schneider 2010, 199).

Co-creation workshop 1

After gaining the initial interview insights, a 2-hour virtual ideation workshop with partners and the case organisation was planned and organised in October 2022. The objective of the workshop was to develop ideas and solutions for how the entrepreneurs could take a more active role in developing sustainable and responsible nature travel in national parks alongside the case organisation. The thesis author's role was to plan and facilitate the workshop.

The ideation workshop was organised as a virtual event in Teams due to the scattered locations of the participants. In the workshop, there were participating 5 nature entrepreneurs, 1 citizen-customer, a service designer and a sustainability expert from the case organisation.

The first ideation workshop with partners was built to include both divergent and convergent activities to make sure that a wide range of ideas were explored creatively while ensuring that the ones that are selected are relevant. Therefore, in divergent phases, idea generation was encouraged and in convergent phases, the best ideas were evaluated and selected. Ideation workshop leans on brainstorming: generating ideas together in a group (Moilanen et al. 2022, 194).

The participants were sent the agenda and the partner personas as background material prior to the workshop. The workshop started with a warm-up introduction to getting to know each other and it was also meant to help get familiar with the Miro platform, a virtual whiteboard that enables realtime collaboration in a shared workspace. A second warm-up exercise encouraged us to think together about what kind of mindset was needed for transformation to sustainable tourism. After the warm-ups, the storyboard based on the nature entrepreneurs' painpoints in developing sustainable tourism in national parks was presented to the participants as a conversation starter. While listening to the story, the participants were encouraged to brainstorm and make notes of more painpoints and share them on the Miro wall. Then, the topic was discussed briefly and more painpoints and experiences were added to the frame. The next task was to turn problems into "How might we" questions on another Miro frame. After that, the HMW virtual sticky notes were clustered, and categories named. Miro's silent voting function was used to choose which questions to work on within the brainwriting stage.

Brainwriting is another idea generation method where individuals are simultaneously writing down ideas silently, then move on to another topic and continue developing the ideas generated by the previous person. This method intends to allow everyone to participate equally. (Moilanen et al. 2022, 195.) In the workshop, the task was to ideate to answer the 4 different HMW questions that were voted in the earlier phase. The brainwriting continued until everyone had been able to share and grow the ideas of the others.

In the last activity, the most promising ideas were brought to the Idea portfolio and arranged based on two variables: impact and feasibility. Participants discussed the possible solutions and the most prominent ideas were chosen. Lastly, the workshop was concluded with a feedback collection.
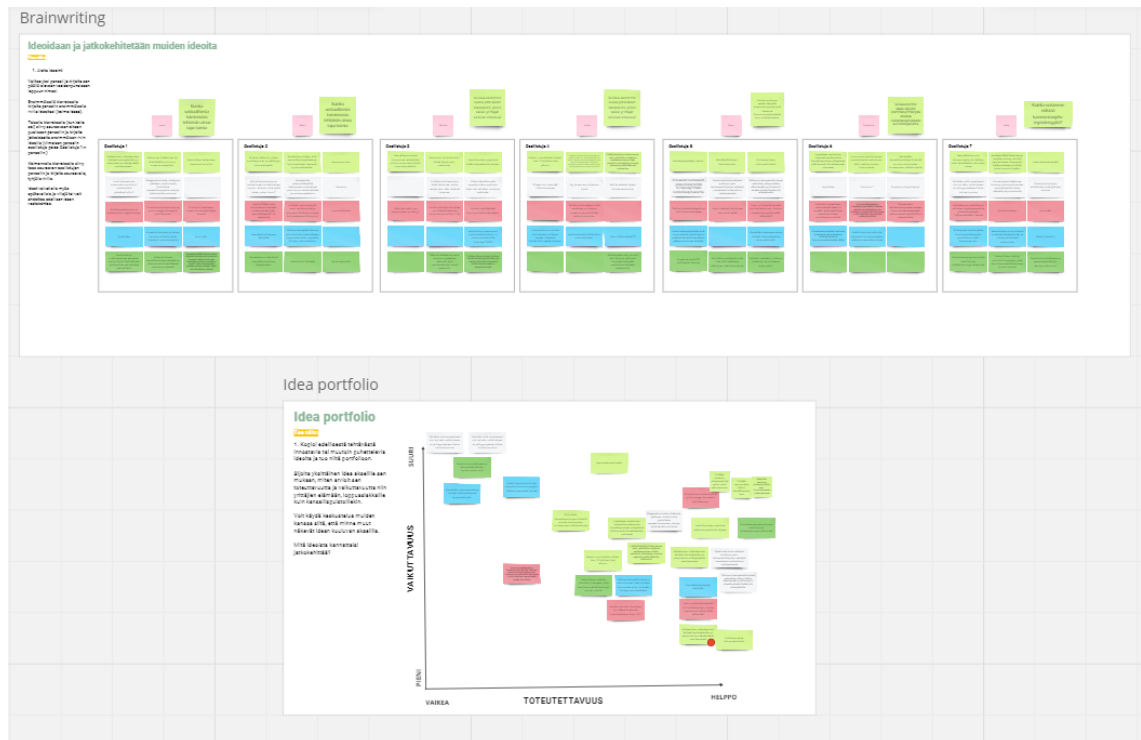
Figure 15: Ideation methods used in the co-creation workshop.

Due to the limited 2-hour timeframe available, the ideation workshop resulted as quite an intense session as there was a strict schedule for each activity. This was reflected also in the feedback, as participants mentioned that there could have been more time for discussion. However, the goal of the idea sessions is to generate plenty of ideas in a short timeframe and in that the workshop succeeded.

Co-creation workshop 2: redefining the development task

In the second co-creation workshop, which was also organised as a virtual event, there were five members from the original design team present representing different functions of the case organisation, including service design, sustainability, partnerships, management of the parks and The Finnish Nature Centre Haltia. The objective of the workshop was to communicate the insights from the design research, redefine the challenge and start developing solutions.

At the beginning of the workshop, the research insights from the interviews were presented and summarised to the participants. Then the design challenge was discussed and redefined together based on the insights. It was highlighted that the nature enterprises should be considered as equal partners of the case organisation. The focus of the rest of the session was set to commenting and ideating more solutions for supporting the value co-creation with the entrepreneurs.

Next, a brainstorming session was organised. The workshop participants were asked to add their own solution ideas to the Miro frame that already included some selected ideas from the first workshop. Then the ideas were clustered under four themes and the categories named (network building, communication, education, and tools/service) and discussed (Figure 16). It was decided that the development project should focus on designing a regenerative service concept. This was an idea that had been already discussed between the case organisation and with one nature entrepreneur, but the project had not been initiated nor planned in more de-tailed. Now the insights validated the partners' need for this new kind of collaboration through the service concept as a way to strengthen their role within national parks. Next, quick visions and news headlines were created for the year 2030 when the service would be in use and businesses and travellers would help the case organisation to tackle biodiversity loss.
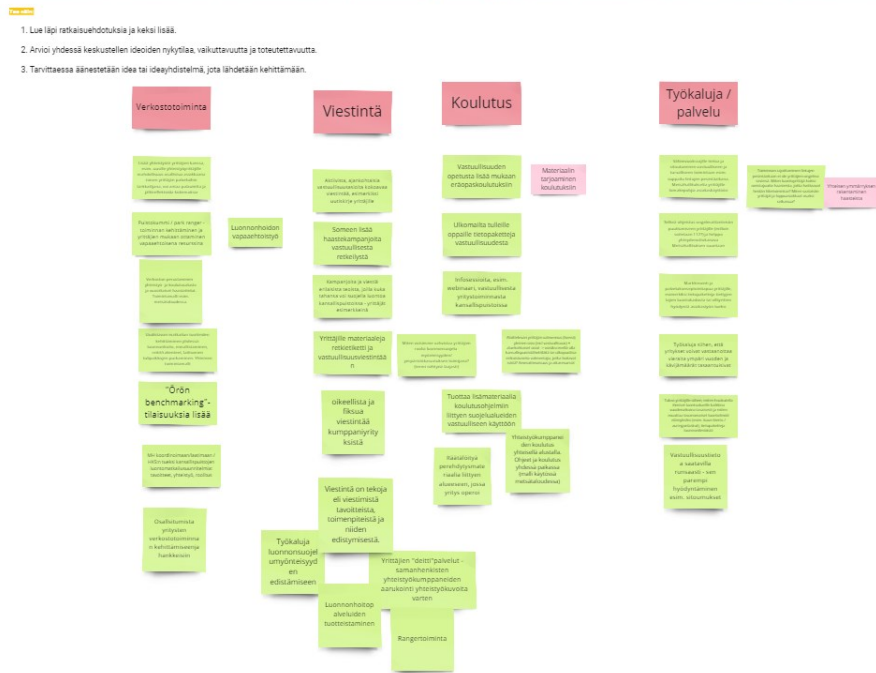
Figure 16: Ideation session results from the second workshop.

3.2.3   Develop

After the development task had been redefined and the first vision of the service concept ideated, it was time to develop the regenerative service concept further and put it to the test. Partly, the Develop stage was already initiated during the workshops when the first ideas of the service concept were developed and visualised.

The thesis author made a field visit to a Haltia Lake Lodge in Espoo in January 2023 in order to meet the business partner of the case organisation with whom it had been agreed to de-velop and test the new service in practice in the context of Nuuksio National Park. Haltia

Lake Lodge is a nature hotel established in 2021. The hotel is a pioneer in sustainable travel, and it has been selected as Europe's most environmentally friendly hotel in the World Boutique Awards Competition in 2022 (STT 2022). The hotel is located within Nuuksio National Park next to the Finnish Nature Centre Haltia. Later in this thesis, Haltia Lake Lodge is referred to a partner organisation or nature entrepreneur like other partners unless otherwise stated.

It should be noted that during this development stage, an external service designer was appointed to work on the project on behalf of Haltia Lake Lodge to support the business in designing the customer touchpoints of the service. In a complex collaboration project like this, it was a welcome addition. In practise, this person was involved in designing the service experience that the traveller had in the hotel (before and after the regenerative service experience), thus focusing on the practical travel arrangements from the point of view of the entrepreneur. It was decided that the author of this thesis would instead focus on designing the service concept from the standpoint of the value co-creation with and for all stakeholders, thus concentrating especially on understanding how the service can provide mutually benefiting value to all actors and how the case organisation can support stakeholders in this value co-creation. Narrowing the scope of the thesis was also important in order to make the thesis more manageable. At this point, a lot of data had already been gathered and it was important to be able to utilise it in the analysis.

In the Develop stage of the service design process model, the goal is to make the service idea more concrete and test it with different participants, such as customers (Moilanen et al 2022, 98). Therefore, the plan was to put together an initial service concept and test it during the summer of 2023 with a real customer group. In service design, this kind of high-fidelity service testing refers to as contextual prototyping or piloting when the testing takes place in the actual service environment, e.g., in a tourism destination (Stickdorn et al. 2018, 221-222).

The practical development stage continued with a live meeting at Haltia Nature Center in January 2022. Besides the thesis writer, another service designer and the case organisation representatives, there were also field workers from the Nuuksio National Park. They were introduced to the project because they have the best expertise related to the practical ecological and conservations needs of the national park. Therefore, they had a crucial role in collaboration.

In this meeting, an initial idea of the service concept, roles and responsibilities and the necessary next steps were discussed. The author of this thesis proposed to gather customer insights to develop the value proposition prototype to customers. This was crucial because a strong value proposition is considered a valuable first step when starting prototyping a new service (Stickdorn et al. 2018, 214). Moreover, due to the redefined focus of the development

task, there had not been any end-customer insights collected in earlier stages. Instead, the insight stage had focused on creating insights on the business partners of the case organisation as they were considered as customers of partnership services. However, a redefined design problem set a need to acquire customer expectations and better understand their needs for regenerative tourism services. Compared to the initial research that was explorative and inductive, research conducted for testing is usually deductive with an aim to test a hypothesis or theory (Stickdorn et al. 2018, 114).

Benchmarking

When the focus of the development task was redefined to develop a regenerative service, it became necessary to return to Discover phase and build an understanding of regenerative travel and to benchmark regenerative tourism practices. For this, desk research was done again to gather different information sources into a frame in Miro (Figure 17). The information was used to build understanding of regenerative travel.
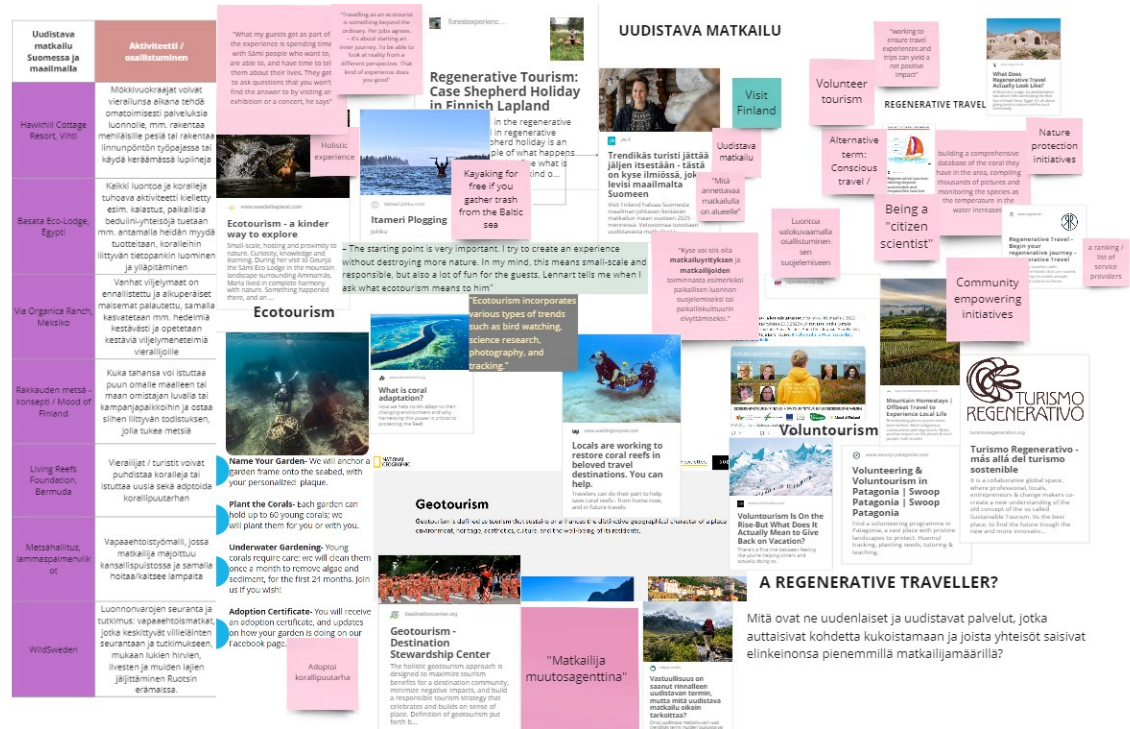
Figure 17: Benchmarking and desk research on regenerative and eco-travel experiences in Finland and abroad gathered on Miro.

Customer interviews and value proposition canvases

A field guide was prepared for the customer interviews similarly as for the partner interviews (Attachment 2). It included background questions related to sustainable tourism and description of the potential "Planet-positive nature holiday" and further questions related to the

service concept. In total, three quick customer interviews were conducted to assess the concept idea. Two of the customers were Finnish and one Austrian traveller.

Interview insights were organised as empathy maps based on each interview data. In the following co-creation session, the interview insights were further used for preparing a value proposition canvas based on the interview with an Austrian traveller as his profile was considered the most relevant from the point of view of the entrepreneur. Two people from the partner organisation and an environmental education expert from the case organisation were participating in the co-creation session to enhance the value propositions. The partly speculative storyboard was prepared prior to the workshop to visualise the elements of customer experience based on the customer profile of Enthusiast which is one of the customer personas that the service design unit of Metsähallitus has created (Nylund 2021). In other words, the storyboard was again used to inspire to look at things from the perspective of the customer (e.g. Stickdorn & Schneider 2010, 186-187).
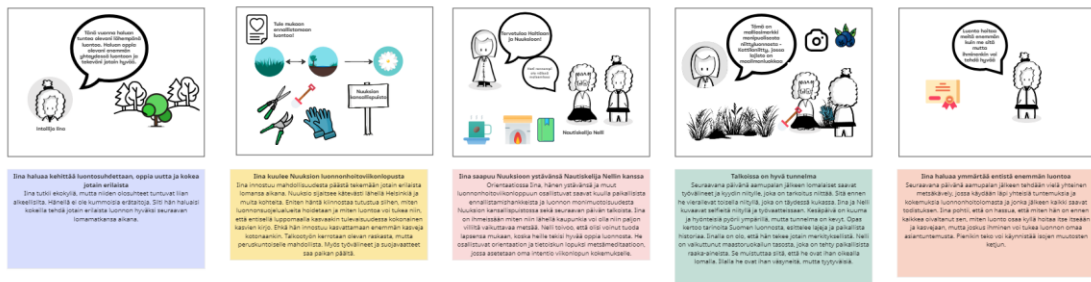
Figure 18: Storyboard to visualise a customer journey in conservation activity.

In this session, a value proposition canvas was also prepared for nature to consider as a stakeholder, for example, the Design Council (2021) recommends. In hindsight, it was crucial that there was an environmental educator from the case organisation participating in the session. Without her eco-literacy skills, it could have been possibly harder to see the perspective of nature from so many different perspectives. On the other hand, the whole point of the activity was to challenge participants to think about the needs and goals of nature and recognise aspects that could ease its painpoints or help it thrive. In the future, it would be interesting to use the same approach with a group of people with a lower level of eco-literacy and environmental understanding.

Figure 19: Value proposition canvas for nature as a stakeholder.

Testing the concept with a digital community in LeanLab

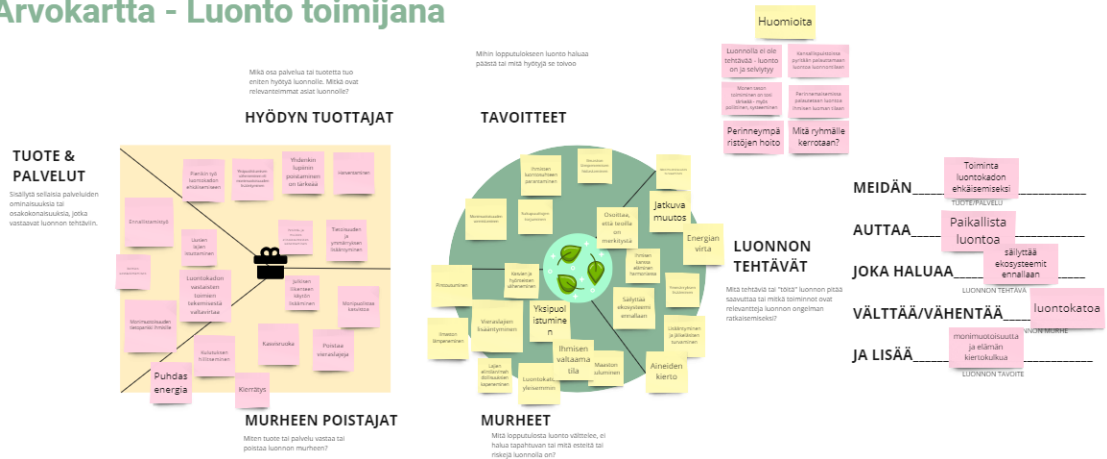The case organisation hosts a digital citizen-customer community for service design purposes that consists of outdoor enthusiasts and people interested in developing nature travel in Finland. The community is managed through the customer collaboration hub LeanLab platform where it is possible to create polls, surveys, and forums for different topics. The digital community was harnessed to test the desirability and perceived customer value of the service concept in the early stage. The testing was organised in collaboration with the service design unit of the case organisation.

Service advertisement was used as a prototyping method. Service advertisement involves preparing an advertisement mock-up in a format of online ads, video or other type of advertisement and collecting feedback from people (Stickdorn et al. 2018, 237). The created advertisement was a simplified poster describing the planet-positive holiday in Nuuksio.

The poster was published in the digital platform of the case organisation along with a mini survey and invitation to participate in discussion. The members were encouraged to share their thoughts and feelings about what in the concept worked, what did not and ideas about how the concept should be further developed.

Figure 20: The customer testing with the digital community.

The testing took place in May 2023 during a two-week period. In total, 100 responses were collected. The reply percentage was 9%. The thesis author worked as a facilitator of the conversation, replying to the questions of the community members, and encouraging them to contribute more. Approximately 1100 community members were invited to participate in commenting on the new service concept. Two days before the discussion area was closed, a reminder invitation was sent to those who had not yet participated.

The data gathered from the testing was included in the second stage of the content analysis (chapter 3.2.4.).

Contextual prototyping in Nuuksio national park — Conservation of a meadow with the Aalto University ARTS summer school participants in 12th of August 2023

In service design, it is essential to test service concepts in real-life situations or circumstances that are close to reality to help to test and include important emotional elements to the value proposition. This kind of testing refer to contextual prototyping. (Stickdorn & Schneider 2010, 133.) Moreover, the importance of a place-based approach is highlighted in transition design and regenerative design (Irwin 2015; Reed 2007). Therefore, it was crucial to test the service concept in the national park with real customers.

On the 12th of August 2023, a group of international Aalto University ARTS Summer school students participated in the conservation of an old agricultural land in the Nuuksio National Park. The focus of the contextual prototyping was to test the volunteering activity as an experience itself, not as a part of a longer stay in the national park.

A group of 18 students, their coordinator and 2 travel agents from Germany spent two hours restoring a meadow area in the Nuuksio National Park. On a bus journey from Haltia Lake Lodge to the conservation site, the biodiversity guide who was leading the group during the activity gave a quick overview of the mission and background information related to Nuuksio National Park and its nature. On-site, the biodiversity guide gave information related to tools and safety issues, e.g., how to protect the skin with clothing against ticks, the importance of tick inspection later in the day and the use of tools. Protective gloves were shared with each participant. The use of the scythe was carefully explained. The group was divided into smaller groups that were dedicated to doing one task at a time. The groups changed the task every 15 minutes so that everyone was able to try different activities. The volunteer group's activities included mowing hay with a scythe, raking, setting up hay poles, lifting raked hay onto the poles, and removing willows from the meadow. Several short breaks were included in the session.

Participant observation and short interviews were conducted during the activity. In addition, data related to the experience was gathered from the participants with a survey form after the activity (Attachment 3). The author of the thesis also participated in the conservation activity.

3.2.4   Further data analysis

As described in chapter 3.2.1., two types of approaches have been used for organising, visualising, and analysing data during this research-based development work. Besides service design's "sensemaking" that was used to organise and visualise findings quickly in earlier stages during the practical development work, a more throughout content analysis was conducted after all data was gathered and it had become clear what the research questions that would guide the analysis process were. As defined earlier, content analysis is a method for finding how meanings in the data respond to the development work task (Moilanen et al. 2022, 171). The content analysis phase was conducted in two distinct parts, as different data was needed for analysing data related to different research questions. During both phases, inductive (data-based) content analysis was utilised, meaning that development task and research questions related content snippets were identified from the data and coded with descriptive theme tags, then further clustered and new categories named (Tuomi & Sarajärvi, 2018 122-123).

During the first content analysis round, the data was gathered from the interviews of the Discover phase and from two first co-creation workshops. Everything was gathered in the same Miro board in the format of virtual sticky notes. Next, the relevant sticky notes were marked with colours and symbols (due to the lack of sufficient amount of sticky notes colours) based on the recognised codes. This meant reducing the amount of data, as only relevant content was marked. Three types of patterns / meanings were searched from the data based on the initial research questions:

1. Barriers to developing sustainable and responsible nature tourism (10 codes recognised)
2. Motivators for developing sustainable and responsible nature tourism (6 codes recognised)
3. Ways that the case organisation could support value co-creation for people and the planet (7 codes recognised)

Figure 21: Content analysis stage of coding in Miro.

Next, the virtual sticky notes marked with codes were clustered in groups, and the codes were revised. After that the virtual sticky notes groups were further organised in thematic categories and the categories named (Figure 21). These categories are further presented and interpreted in results in chapters 4 and 5.

Figure 22: Content analysis stage of creating new categorisations in Miro.

In the second content analysis round, the aim was to analyse the data gathered during the testing phase to find out customer expectations and feedback for the regenerative service concept. Again, the data gathered from the customer interviews, third workshop, LeanLab platform results and the piloting day was taken to the Miro board. Customer interviews, work-shops and survey and observation data had already been reduced and organised in the format of the virtual sticky notes during the earlier stages of the research-based development work, but the LeanLab results needed to undergo this same process. Therefore, the LeanLab results were first taken as raw texts to Miro board and reduced and codified based on the three types of patterns/meanings related to the development task to evaluate the service concept:

1. Expectations towards service experience (7 codes recognised)
2. Motivators of participation (strengths of the value proposition) (7 codes recognised)
3. Barriers to the participation (weaknesses of the value proposition) (3 codes recognised)
4. Ideas for developing the service experience (3 codes recognised)

The data from other sources, e.g., customer experiences and feedback from the conservation day was then codified based on the same logic and added to the analysis. Similarly, as in the first round, the next task was to cluster the code groups further and name the new categories.

The goal of the second round of data analysis was to analyse the customer expectations towards planet-positive experiences and customer experiences related to the regenerative

service concept. In data analysis, it was identified what elements in regenerative service created value for the customers, which elements hindered it and what would further enhance the value for customers. The data was collected based on the different methods used in testing the regenerative service concept.

4   Results

This chapter presents the results and insights of this research-based development work with the purpose of gaining a better understanding how value co-creation for planetary wellbeing can be facilitated and supported in the context of regenerative service development. During this research-based development work, service design methods and tools were used to gain this understanding.

Prior to developing the new service concept, it was crucial to better understand the current situation of the partnership and the barriers and motivations of partners for developing sustainable and regenerative tourism. This understanding was gathered with qualitative research methods such as desk research, interviews and workshops as presented in the earlier chapter.

The chapter follows the Double Diamond process model and the order the insights were gathered. The first section is based on the interview and workshop insights and partner experiences, and then the questions related to customer expectations and experience are explored based on the results of the analysis of the testing phase of the developed service concept. The chapter ends with a proposal of a regenerative service concept.

The main research question was: **How can the case organisation facilitate value co-creation with stakeholders for planetary wellbeing?**

In this result chapter, the following sub-question is responded: How the case organisation can support partners in overcoming barriers and harnessing motivators to develop sustainable and regenerative tourism services, while meeting customer expectations for planet-positive, regenerative experiences? The second sub-question will be replied in the conclusions.

This development work started with a kick-off meeting with the case organisation where it was decided that the initial focus of the development task would be to find out how the case organisation could better support and guide their partners, nature entrepreneurs and other travel companies, towards more sustainable travel practices. The assumption was that the entrepreneurs were not implementing sufficiently sustainable and responsible tourism practices in the national parks as it had been recognised that many entrepreneurs did not have a contract with the case organisation even though it was communicated as mandatory to run any business activity inside the national park. Therefore, the starting point of the development work was to explore by using service design methods and tools how the case organisation could enable and strengthen the role of local nature enterprises as partners in sustainable nature tourism, and how those partners could better serve also their common customers, the visitors of the national parks.

Based on the desk research, it was recognised that the case organisation had already taken steps to improve their collaboration and communication with the partners. In collaboration with a consultancy company Digitalist, a new partnership model has been developed based on a partnership survey conducted in January 2022. Based on the partnership model, the following perspectives has been established to guide the role of the case organisation in supporting the partners:

1. Unified and equal service experience for partners
2. Serving the common end customer
3. Acting as an enabler
4. Participation and community: increasing partner understanding and co-creation
5. Improving partner experience and service

Furthermore, in the case organisation's strategy work, it was acknowledged that the case organisation was expected to play the role of a forerunner of sustainable tourism and share information with its stakeholders. In relation to partners, the case organisation was seen as acting as an enabler of nature tourism in national parks. To strengthen this role, a digital website *Sustainable tourism in protected areas - Guide for Metsähallitus tourism partners* was developed. The guide communicates the principles of sustainable tourism in protected natural areas and shares information, like sustainability monitoring methods and video interviews with partners that have committed to the principles and promote sustainable tourism.

In summary, the existing material provided insights into the perspectives and wishes that the case organisation had towards partners and some understanding on how partners saw their collaboration with the case organisation. However, there was less knowledge and understanding of the partner's struggles and motivations to develop sustainable tourism in national parks. Therefore, the next step was to gain that understanding.

It should be noted that in themes 1 and 2, the term sustainable tourism is used instead of regenerative tourism, as sustainable tourism is a more familiar term for entrepreneurs and describes better their perspective.

4.1   Theme 1: Barriers of sustainable and regenerative tourism in national parks

Based on the 10 interviews conducted with the nature businesses and co-creation workshop with partners, three issues were recognised as barriers for developing sustainable tourism in national parks. It should be noted that all businesses saw the matter of developing sustainable tourism as a wider issue than only their own business practice. The recognised barriers for developing sustainable tourism were:

- Overcrowded nature destinations and unsustainable behaviour

- Environmental apathy and change resistance
- Concern for profitability over sustainability

Next, these three barriers are further described.

Overcrowded nature destinations and unsustainable behaviour

As the amount of the visitors to the national parks have been increasing remarkably since COVID-19, entrepreneurs have observed a growing pressure on the local environment and a rising number of problems related to limited infrastructure in popular destinations, such as reckless parking and problems with toilets. Most notably in the light of the analysed data, there has been a surge of unsustainable behaviour, like individual travellers ignoring the regional forest fire warnings and making a wildfire regardless of the restrictions in the area or camping in forbidden areas. Also, other types of unsustainable or irresponsible behaviour, such as littering or riding bikes on paths that were only marked for hikers, were reported in the interviews. According to the interview data, the problem was not so much related to the organised tourism groups as they were under the supervision of the entrepreneurs or nature guides but the people who were visiting independently in the national parks. However, many businesses in the national park are providing accommodation, food, and rental services and therefore their customers are independent travellers. The interview and workshop data also suggest that Finnish people seem to perceive their nature relationship as more positive and less harmful than it is, and this lack of awareness or reflection is causing problems also in the field of nature tourism.

Challenges to guide travellers to act responsibly

This type of unsustainable or irresponsible behaviour left the partners of the case organisation puzzled as they did not have guidance about whether they should intervene and guide travellers to act more responsibly. For example, one partner was not sure what to do if a customer who had been seen violating rules of the national park, would want to rent a kayak. These types of situations were common especially for the businesses in the more popular national parks, posing a moral dilemma to entrepreneurs.

Some entrepreneurs had tried to intervene in situations where visitors had broken the rules of the national parks or the forest fire warnings, but they were afraid of creating a negative atmosphere and evoke feelings that could impact the customer experience and the reputation of the company. It was also recognised that some businesses were generally afraid that their customers would feel that they were pushing or imposing "eco-beliefs" onto them or judging people for their choices and that this kind of guidance might be perceived negatively.

Inexperienced nature travellers

Moreover, it was recognised that there was especially a rising number of inexperienced nature travellers, people who had found outdoors and national parks after COVID-19 lockdowns but who had not used to spend time outdoors. Several entrepreneurs whose customers were mainly international travellers stated that a significant portion of their customers were afraid of nature, including a growing number of Finns. Consequently, it was acknowledged that the need for advice and information varies a lot based on different customer groups and their relationship to nature.

Environmental apathy and change resistance

The second barrier that was recognised in the data was environmental apathy and change resistance. In the context of this project, environmental apathy refers to a lack of interest, enthusiasm, or concern towards environmental issues and ecological and conservation matters. It can manifest as a lack of motivation to engage in sustainable practices or support conservation efforts. It was recognised that environmental apathy and change resistance can manifest in both the entrepreneurs' and customers' attitudes and behaviour.

Behind this lack of interest can be seen a lack of awareness, understanding and knowledge related to sustainable practices and sustainability overall. By some partners, sustainability was considered as a too abstract concept to apply in the field of tourism and terminology was difficult and confusing. The practical guidance like the Outdoor etiquette was seen as more comprehensible and self-evident to follow in national parks. However, knowledge related to sustainability varied remarkably between interviewees since companies had different needs based on what phase they were on their own sustainability journey. This was visualised during the development work in the persona profiles and customer journey canvas that was adapted for illustrating the journey of an entrepreneur in developing sustainability.

The lack of awareness and interest was present in the observations of the interviewed partners who had witnessed several other businesses that did not have contracts with the case organisation or who did not seem to care about sustainable practices. In addition, there were several mentions of foreign nature guides who were not following the common practices or instructions of the national parks. Moreover, one interviewee argued that "sustainability doesn't matter in the big picture when you look at the developing countries". It was also a recurring theme to argue that the company does not need to prioritise sustainability because the small group sizes ensure minimal impact on nature. Many entrepreneurs also saw that the biggest problem in the field of sustainable nature travel was infrastructure and the lack of public transport connections. This kind of blaming or justifying attitude may communicate about real issues, but it can also be a way to shift attention to external factors and things that are not in the hands of the individual. For example, pointing out problems like lack of

waste management solutions could be seen as a form of resistance to change as it could indicate that the individual does not want to reflect on their own behaviour and choices related to sustainability.

However, the most prominent experience was that the customers did not talk about or did not seem to be interested in sustainable travel. All partners said that their customers do not ask or care about the ecological impact of the services or sustainable certificates nor they are actively making sustainable choices. One entrepreneur saw that their customers see ecological services as the opposite of luxury, and another pointed out that most people do not want to make sustainable choices in their holidays, e.g., in restaurants. "No one wants to have a responsible holiday, it's not a thing," one participant said. In the data, this type of eco-ignorance was interpreted as a possible form of environmental apathy.

Concern for profitability over sustainability

The third identified barrier in the analysed data was the partners' concern for profitability over sustainability. Even companies that have built their business on sustainable practices, need to first and foremost to think of their business model and profitability. This concern was discussed in the data. It was especially evident in relation to sustainability certificates. Especially, smaller companies were struggling with the rising sustainability standards that are monitored through expensive certificate programs. The threat of these green certificates becoming mandatory caused stress and anxiety to entrepreneurs. However, most partners also underlined that the case organisation cannot demand sustainability certificates from its partners due to the inclusivity principles. They also claimed that the sustainability standards of certificates are remarkably higher than what the principles case organisation expect from the partners. Moreover, several companies emphasised that their sustainability efforts, especially sustainability communication, were limited due to the lack of time and resources. In summary, most entrepreneurs asserted that they struggled to make sustainability profitable and turn the abstract sustainable requirements into profitable business models and activities.

4.2   Theme 2: The motivators for developing sustainable and regenerative tourism

Besides barriers and hindrances of sustainable tourism, the data was analysed to recognise what gains or motivators partners had for developing sustainable tourism. First, it should be acknowledged that regardless of the previously mentioned barriers to sustainable tourism, most of the nature tourism companies that participated in the development project could be considered to be already advanced in implementing sustainable tourism principles and practices. For example, several businesses have already acquired sustainability certificates or participated to the Visit Finland's Sustainable Travel Finland programme (STF) which supports companies and destinations to harness more sustainable practices (STF n.d.). On the other hand, most interviewed companies did not have sustainability certificates, but they had made

efforts to evaluate and develop their sustainable practices and communicate their principles to their customers, e.g., on their webpage.

Only two companies asserted that they did not need to think too much about their sustainability, as the group sizes were so small, stating that their activities barely had any impact on destinations. Regardless of these differing perspectives, it could be concluded that most nature businesses aim to do their best to be as sustainable and "green" as possible and that they actively seek ways to develop more sustainable or regenerative travel practices. For example, they were making active efforts to keep their impact to the environment as small as possible by following a zero-waste and leave-no-trace approach in organised group activities such as nature tours. In addition, customers were encouraged to make environmental choices, such as saving water in the showers and using public transport or shared rides when possible. One eco-lodge provided accommodation without showers and with the use of composting toilets and served organic and vegetarian food. At least two companies with several sustainable certificates also calculated and compensated for their carbon emissions. Overall, the companies with sustainable certificates communicated a more holistic view of sustainability, also considering the wellbeing of the employees and local communities.

Three common motivators were recognised in the interview and workshop data.

- **Inner sustainability as a motivator for commitment to protecting nature**
- **Passion for spreading awareness and good practices to other businesses and customers**
- **Sustainability as a business value**

These are further presented below.

Inner sustainability as a motivator for commitment to protecting nature

Several businesses hold a strong opinion that it is self-evident and crucial for a nature tourism business to act sustainably and that the whole starting point for their business is to appreciate nature and minimise its impact on the environment. It is part of their personal and business values and mission. In the context of national parks, they defended the protection of vulnerable nature and ecosystems from people as the most important sustainability matter in the state-owned national parks and other protected nature areas.

From the data, it was identified that several entrepreneurs had strong personal values and an internal drive to promote sustainability. In this thesis, this kind of internally driven value base for sustainability, whether it is individual's or company's values, is referred to as inner sustainability as opposed to external aspects of sustainability like built environments or policies

(Gibbons 2020, 5). In the data, it was recognised that inner sustainability was a strong indicator that sustainable practices were developed and followed in the business.

Especially in a couple of smaller businesses, entrepreneurs were aware that sustainability was inherently intertwined with their own values. For example, one interviewee affirmed that his motivation for conducting sustainable business was based on his moral principles of doing things right. Another entrepreneur illustrated that their philosophy in running nature tours was to explain to the customers that they should aim to be the best possible guests in nature areas, honouring nature and local communities with respect.

Also, the current situation in the world with accelerating nature loss and climate change was given as motivators to act responsibly. Another entrepreneur had built the whole business on the philosophy of slow travel that leans on respecting environmental values. The interviewed sustainability expert emphasised that sustainable tourism was heavily a matter of attitude and mindset, describing developing sustainable practices as a journey that one needs to begin but cannot be finished.

In the warm-up activity of the first co-creation workshop, it was brought up that developing sustainable travel requires a value-based approach, willingness to actively improve one's own behaviour and seeing nature as something else than solely as an instrument or platform of resources and profit.

Passion for spreading awareness and good practices to other businesses and customers

Another common motivator was entrepreneurs' willingness to spread awareness related to the best practices of sustainable tourism and help their customers respect and love nature. Several companies reflected that their core task was to improve the natural relationship of their customers. Therefore, it was considered as a minimum effort that the company should share information with their customers related to following Outdoor etiquette in national parks and e.g., zero-waste approach. However, the best way to spread awareness was considered to lead by example, which meant simply taking care that the company was doing their business as sustainably as possible.

Several companies already demanded sustainability from their own partners and actively put effort in teaching their customers to act responsibly when travelling or visiting national parks. One company provided sustainability training to other companies and mentored them to reduce their carbon footprint. Passion for spreading awareness and good practices was also illustrated in the following examples. For example, one entrepreneur regarded it as a win if she was able to impact the worldview of the customer by showing that acting responsibly did not mean losing something but gaining. Another entrepreneur wanted to inspire customers to make their eating habits more sustainable by providing tasty vegetarian food. One

entrepreneur was happy with how sustainability certificate programs had enabled everyone in the company to improve their behaviour and give new tools to evaluate the sustainability of products they used.

Sustainability as a business value

The third recognised common motivator was seeing sustainability as a business value and something desirable to customers. One entrepreneur argued that it was more likely for a business to thrive and survive if the business was built sustainably. It was also noted that there are already travel operators that choose the destinations and partners based on the sustainability certificates. Moreover, among the participants who saw sustainability as a business value, it was common to believe that sustainability was also valued by customers. However, it was acknowledged that there is still limited evidence or information available about how the sustainability of the destination impacts the choice of travellers. Regardless of this especially the companies with sustainability certificates wanted to believe that the certificates did strengthen the image of the company. One entrepreneur had observed that small-scale sustainable choices in tours within national parks, so-called "coffee cup sustainability", were making customers feel good and trusting the organiser more.

Based on the analysed data, seeing sustainability as a business value requires seeing sustainability as an opportunity for developing new business models and thinking differently, "outside-the-box thinking". For example, one entrepreneur stated that it is possible to sell services that do not harm nature. Another ideated new kinds of travel experiences that would strengthen people's relationship with nature, affirming that there would be demand for courses or retreats to improve one's relationship with nature and animals. Also, regenerative travel experiences were discussed, as means to give the traveller the possibility to contribute to the wellbeing of the national park. However, entrepreneurs were also aware that it was likely that customers did not dream about sustainable travel as such but foremost were looking for new experiences.

4.3   Theme 3: Supporting nature businesses' emerging role as national park stewards

In the data analysis, the following emerging themes were identified as potential strategies through which the case organisation could support partners in value co-creation with the aim to provide transformative experiences for their common end-customers while at the same time contributing positive value to ecosystems in national parks.

- Recognising the role of partner organisations as value co-creators for people and planet
- Strengthening the collaboration of the whole network

- Providing tools and best practices to support customer-centric and planet-positive service development

Recognising the role of partner organisations as value co-creators for people and planet

The role of businesses as stewards of national parks

One of the most prominent themes in the whole data set was a need for understanding nature businesses' important role as environmental educators, sustainability and nature conservation advocates and national park stewards. This perspective was strengthened during the whole project, especially after it was decided that the redefined development target was to develop a service concept that would support partner organisations' role in providing regenerative tourism experiences in collaboration with the case organisation.

In the interviews conducted in the Discover phase, entrepreneurs' perception of themselves as an important and special resource and key actors within national parks, was highlighted. Entrepreneurs regarded that as partners of the case organisation, they represented the national park and, that they were, in some ways, responsible for maintaining and "guarding" it. Furthermore, they considered themselves important actors within the national parks since they had important local expertise and knowledge and experience related to serving common customers. Furthermore, entrepreneurs asserted that due to these factors, they were able to observe and monitor the visitors and witness misbehaviour and problems in infrastructure. Many entrepreneurs verified this with examples of how they had already adopted a voluntary position to report problems to the case organisation or guiding people, e.g., to use the marked trails for bikes or camp in designated tent sites. Most of the entrepreneurs were not involved as official national park rangers but several thought that they could take that kind of a role in the future.

Furthermore, as already mentioned in chapter 4.2, most entrepreneurs described that it felt a natural role for them to share information about nature while they or their nature guides were experiencing nature side by side with their customers. One entrepreneur emphasised the crucial role of guides, stating, "the guide is like a divine being for inexperienced foreign travellers that are afraid of nature". Entrepreneurs describe this responsible position as a fruitful starting point for environmental education, although often it meant that more focus had to be put on basic safety instructions, e.g., related to proper clothing and other equipment in nature.

It was also brought up that some entrepreneurs felt that their role in the national parks was undervalued by the case organisation. They saw that the case organisation did not value their contribution to providing services to the common end customers in the national parks. Regardless of this, most interviewed entrepreneurs concluded that they wished to be even more

involved in protecting national parks and developing sustainable tourism for the benefit of all. This indicates that the partners are willing to take an even bigger role in tackling the sustainability issues in national parks, such as curbing biodiversity loss with conservation efforts and providing transformative experiences to their customers as a chance to improve the sustainability of the destination. Moreover, all the interviewees were interested in putting more emphasis on educating the visitors, especially with the support of the case organisation.

Promoting planet-positivity and the needs of nature

In the workshop data, an emerging theme among both entrepreneurs and case organisation was the common mission and interest in supporting "nature positivity" or "positive attitude towards nature" through environmental education and shifting perspective in tourism to regenerative thinking: what tourism can give to the destination so that the ecosystems and people in the destination would have a positive impact? In the workshops when solutions were ideated, there were many emerging ideas to emphasise the importance of national parks to safeguard biodiversity and increase the understanding of the meaning of biodiversity to maintain life and people's wellbeing.

As established earlier, this thesis uses the term planet-positivity to refer to the positive impact tourism can create on ecosystems and more generally on planetary wellbeing. In data analysis, the shared aim to increase this planet-positive attitude was combined with an overall positive, solution-oriented mindset, which was recognised as an important element and requirement for encouraging more planet-positive attitudes among stakeholders. In the development stage, this perspective was further explored when the regenerative service ideas were discussed and illustrated. It was identified that it is crucial to show positive examples of environmental actions and give new forms of participation that further encourage people from children to adults to learn about caring nature and empathise with it. For example, the importance of positive communications campaigns was underlined when developing solutions in the stakeholder workshop. In addition, entrepreneur interviews validated this perspective referring to how they have managed to support the transformation of the customer's relationship with nature by providing them with emotional experiences of connecting with nature, e.g., by touching a tree mindfully or while walking barefoot in the forest. Another factor that was recognised as potentially increasing customer's engagement to restorative or regenerative activities was making evidence-based information more available. For example, there could be more information to show how every saved firewood in the national park led to more living trees in the forests. The case organisation could promote this type of planet-positive awareness and actions by recognising the businesses' role as value co-creators and national park stewards that have important capacity, knowledge, and motivation to transform end-customers' relationship to nature.

Strengthening the collaboration of the whole network

As identified in the desk research at the beginning of the project, the case organisation has an important role as an enabler of sustainable tourism in national parks and other protected nature areas. In order to further support this role and to shift to regenerative tourism, it was discovered in the analysis, that the case organisation should strengthen its role as partner and facilitator of the sustainable tourism network. In the interviews, the case organisation was described as an enabler but also as "a big brother with whom it is possible to have constructive discussion".

The data analysis demonstrated that entrepreneurs expect the case organisation to have a more open dialogue with them to better understand their perspective and needs. Furthermore, entrepreneurs stated that there was a need to clarify the roles and responsibilities of the case organisation and entrepreneurs, especially in partnerships where partners were renting and maintaining whole resorts and land areas. This need for clear roles and responsibilities between the case organisation and entrepreneur was also evident in the process of developing a regenerative service concept that required more frequent and clear communication prior to organising the piloting of the conservation activity in Nuuksio National Park.

In addition, entrepreneurs expect more facilitation of networks and that the case organisation would bring entrepreneurs together to discuss and share best practices related to sustainable tourism and opportunities for new service development. It was suggested that there could be monthly meetings to facilitate information sharing within the network of stakeholders. The need for network building was also demonstrated in the stakeholder workshop as one entrepreneur took the initiative to gather contact information of the workshop participants to further discuss together and share best practices in a separate meeting.

Providing tools and best practices to support customer-centric and planet-positive service development

In content analysis, it was identified that to support value co-creation with stakeholders, the case organisation should provide tools and best practices to support customer-centric and planet-positive service development. Besides adapting and generating a planet-positive and regenerative mindset, the case organisation should actively seek to understand the business perspective of their partners. One entrepreneur described that besides protecting nature, the case organisation has a key role in improving accessibility and inclusivity of national park infrastructure to better serve their common customers. Moreover, entrepreneurs emphasised that it would be important to them that the case organisation would understand the customer-centricity of their services as well as the seasonal nature of tourism and how it affects their business.

Furthermore, supporting value co-creation for people and the planet as an enabler would mean that case organisations would share information related to developing sustainable and regenerative tourism in national parks. This could involve providing info sessions, information kits, packages, or playbooks to support environmental education and eco-literacy, e.g., related to invasive alien species, the benefits of wild herbs, or better understanding of natural ecosystems in national parks and activities to restore them. It was identified that the entrepreneurs needed support, especially for creating regenerative services as they missed the knowledge related to the ecological and ecosystem needs of the national parks and recognised what interventions can make a positive impact on nature.

Moreover, the entrepreneurs valued sustainability training and support in marketing. In addition, it was recognised that the case organisation should be more involved in wilderness guide education programmes and provide accessible information and instructions to foreign guides that guide tourist groups in the Finnish national parks.

4.4   Theme 4: Regenerative services and customer value

The goal of the second round of data analysis was to understand elements that contribute to or hinder customer value in regenerative service experiences, or as the service was named in the testing phase, "the planet-positive conservation holiday". In data analysis, it was identified what elements in regenerative service created value for customers and which elements hindered it. The data was collected from the testing phase of the regenerative service concept.

The original value proposition that was co-created in the third workshop based on the initial customer suggested that a planet-positive conservation holiday would provide a traveller:

- A new kind of meaningful travelling experience that increases the understanding of the importance of biodiversity.
- A meaningful activity and a mission for a holiday and experience of how one can impact to the wellbeing of nature and the planet.
- A different kind of wellbeing and nature care holiday with a break from daily routines and stress.

Next, based on the concept testing and analysis, the elements that create value for customers or hinder it are explored based on the customer testing. Also, opportunities for further improvement are identified and presented.

Elements of the value proposition that create value for customer

Meaningful mission: People want to impact nature loss by doing something concrete

In the data analysed from the testing phase, it was evident that there was an interest towards regenerative services in the national park among customers. For example, the customer community of the LeanLab platform found the mission for curbing biodiversity loss important and meaningful. 64 % of respondents confirmed in the survey that they would be interested in participating in conservation activities in the national park if they could get more information about it. 7,7 % of respondents were ready to "book the service immediately". Arguments included, among others, that "each person owes something to nature and that's why it is important to dedicate a moment to give something back". It was also considered important to strengthen people's relationship with nature. Respondents expressed concern about the sustainability of popular nature destinations and anticipated that conservation efforts could be one way to restore them. They believed that participating in regenerative activities could help them feel that it is possible to do something good for nature. However, it was also recognised as an important motivating element that there should be information shared prior to the activity to communicate what kind of impact or difference an individual's efforts can make.

Regenerative service supports eco-literacy and gives customers tools to care for nature

Based on the customer experience feedback (surveys, observations and interviews) from the conservation day with the Aalto University international summer school participants in August 2023, participants indeed felt inspired and that they had contributed to something important. The whole group were impressed by the amount of work they did in a short period of time. One participant remarked that "it is important to be able to feel that you are giving back to the world". Participants also reported that they had learned about biodiversity, the importance of conservation work and the use of traditional Finnish methods to take care of the meadow. They reflected that the activity was easier and more entertaining than they expected. A couple of participants described the experience as transformational and that they would participate again if they were given a chance. In development ideas, participants wished to have visual educational material to support the understanding of biodiversity loss and to learn more about the place. It was also suggested that the activity could be combined with a theoretical lesson prior to the activity. In addition, the participants were interested in monitoring the long-term impact of their work. They wished to have a website or other communications channel to be able to see how the restored meadow would look in the future.

Similarly, based on the customer interviews and the feedback from the LeanLab platform, it was stated that the regenerative service should focus on providing a learning experience related to biodiversity loss and teaching the methods to restore and take care of nature areas. Nature guide's important role was recognised in motivating the participants and helping them in understanding the complex connections and processes of ecosystems. Based on these

insights, it can be concluded that putting more emphasis on building participant's eco-literacy in regenerative service experience would create more value for customers.

Elements of the value proposition that hinder value

Conservation work is considered as work, not as a holiday

An emerging theme in the data analysed from the LeanLab platform and customer interviews was respondents' resistance towards working during their holiday. In the service advertisement prototype, the service concept was named "Planet-positive conservation holiday", thus suggesting that the activity would be done while the customer is spending a holiday in the national park. Several respondents opposed the concept, making it clear that the regenerative service experience should not be mixed with a holiday. In total, 17 % of respondents chose in the LeanLab survey a response option which stated that "I consider the mission important, but I do not want to work during my holidays". In the discussions, several respondents clarified that, if the experience were to take place during the holiday, there should be more focus on providing luxury, rest, and wellbeing and the volunteering should form only a small moment of the whole holiday. However, this made respondents question the meaningfulness of the experience as they saw that it would not be enough to make a difference in nature during a short time period. The concept was also compared to the case organisation's existing concept, the Shepherd holiday experience. Shepherd holiday was described more as a holiday since the contribution as shepherd only involved giving water to sheep and monitoring them. The respondents also claimed that the shepherd's holiday idea (customer value) was in the fact that it allowed people to spend time in a unique location where they would not have access otherwise.

One respondent suggested that the regenerative activity should perhaps be reframed and marketed as a course instead of a holiday. Arguments stated that in the context of a course "doing something by hand would not feel like work but learning something new". Moreover, it was discussed that if the participants did not know anything about the subject, it would be more natural to emphasise the aspects of learning about ways and activities for caring for nature. In the interviews, people were also emphasising that they were looking for new adventures and transformational experiences in their travels.

Commercialism raises questions and resistance

Similarly, respondents in the LeanLab platform raised a concern about the price of the activity. It should be noted that the service advertisement did not include price, but it was mentioned that the "high-level holiday package" would include luxury accommodation in eco-lodge, food, and other activities. The participant would not pay thus for volunteering but instead for the whole holiday package. On the conservation day with Aalto University students,

this dilemma was not present as they participated in the activity as a part of their educational program.

Respondents felt contradicted that the holiday would include volunteer work and they would still need to pay for the service. It was argued that nature can be helped, e.g., lupins to be eradicated, for free. Thus, a recurring theme was the desire for voluntourism experiences to be cost-free or include a significant discount for accommodation, reflecting a sentiment that contributing to environmental causes should not come with a financial cost. Another concern was that the organiser of the activity was a private enterprise. This raised questions and ethical concerns for transparency, as respondents believed that conservation work in the format of voluntourism activity was exploiting the desire to do good for profit.

Behind this sentiment can be identified the idea that the customers consider that volunteer work should always be reciprocal. The respondents underlined that especially in Finland the spirit of community work or volunteering demands that the participants are provided with free food or paid back in some other way.

Opportunities for value enhancement

Recognition or reward as a way to give back to the customer

Respondents in the LeanLab platform and customer interviews suggested that it would be easier for them to understand the need to pay for the accommodation services if there would be a significant discount or other recognition in exchange for volunteering. They offered examples of what value the organiser could exchange to make the experience more appealing to customers. It was proposed that the food could be free for volunteers or there could be free kayak or bike renting or other "bonus" activities in the national park. Others were suggesting a certificate for participants as a recognition or planting a dedicated tree for volunteers within the national park. It was also emphasised among several respondents that without some value-adding extra bonus or reward, they would rather choose to go for a walk in the forest, stating that "the concept is missing the element that makes people want to do it". In contrast to this, there were also a couple of respondents who affirmed that for them, it would be enough to feel good after working hard and seeing their contribution.

It is worth noting that based on the analysis, several people had participated before in conservation efforts organised by non-profit organisations, such as conservation camps and days activities organised by WWF, and that those experiences had included free food and accommodation. Thus, this experience was impacting their expectations towards the new concept. Another example of planet-positive activity is also Itämeri Plogging project sponsored by several enterprises that allows people to kayak for free if they collect trash from the sea while kayaking (Itämeri Plogging n.d.). In the LeanLab platform it was also suggested as one option

to seek more business partners to sponsor the conservation work and thus enable less costs and adding a reward for participants.

A need for a more inclusive and easier way to participate to planet-positive activities

Lastly, an emerging theme among the data collected during the testing phase was citizen-customers' willingness to have a more inclusive and accessible way to engage in planet-positive activities in national parks. Many respondents expressed the desire to participate in the restoration activities while they visited the national park for recreation. Others noted that they did not want to participate in group activities as they did not feel comfortable being in a group and felt worried about the group dynamics.

Some respondents raised concerns that as a public sector organisation, the case organisation should provide an inclusive, low-cost activity that would allow anyone to participate without investing in a high-cost holiday. They were worried that the planet-positive holiday targeted to international tourists would lead to a situation where only higher socio-economic groups could participate. In fact, they felt it was the case organisation's responsibility to enable visitors' participation in taking care of the public nature. Several respondents underlined that they wanted to help nature in national parks and fight against nature loss but while doing so, they would rather have a simple accommodation or stay the night in their caravan or in a tent. It was also emphasised that it would be important to include a family-friendly option as an activity to support the eco-literacy of children. One interviewed parent also saw the concept of regenerative service appealing in case it would help keep youth away from their phones. It was also suggested that the case organisation could start providing bins for invasive species and creating campaigns to call people to act more for nature.

4.5   Regenerative service concept from the value co-creation perspective

During this research-based development work with Metsähallitus, Parks & Wildlife Finland, an initial regenerative service concept was ideated, prototyped, and tested with customers in a digital community and through contextual prototyping in Nuuksio National Park with a group of international students as described in the chapter 3.2.3. The initial co-created service concept can be found in attachments (Attachment 4). This service concept does not include the detailed operational side as that part of the service concept is not yet thoroughly developed. Thus, it is considered as the next steps in the project that Metsähallitus and the Haltia Lake Lodge will continue to develop in collaboration.

This result section focuses on presenting the key outcome of this thesis: the enhanced value creation elements and value propositions for the planet (local ecosystem and society), customers, partners, and public authority (the case organisation). The perspective of mutually benefiting value co-creation was especially emphasised in the service development, and

therefore also the outcome of the thesis focuses on it. Moreover, also the research results confirmed that prior to developing the service concept further, it would be essential to look more deeply to the value co-creation elements and better understand what elements may hinder and what elements strengthen the value for each stakeholder.

Below, the key elements of the value creation and value propositions are presented in the format of a regenerative service concept canvas (Figure 21), which is formulated based on the value creation and value proposition elements of Business Model Canvas (Osterwalder & Pigneur 2010). Value creation represents the feasibility of the service (what is needed to create value) and value proposition desirability of the service (do customers/planet/partners want and need the service). To underline the need for mutual benefit for all stakeholders, the value propositions are included for every stakeholder.

REGENERATIVE SERVICE CONCEPT: NUUKSIO NATIONAL PARK STEWARDSHIP

Our mission is to empower individuals to actively participate in regenerative conservation activities, enhancing the eco-literacy of all stakeholders and creating a positive impact on the ecosystems in the national park.

VALUE CREATION		VALUE PROPOSITION			
KEY STAKEHOLDERS	**EARLY ADAPTERS**	**VALUE FOR THE PLANET**	**VALUE FOR CUSTOMERS**	**VALUE FOR PARTNERS**	**VALUE FOR PUBLIC AUTHORITY**
• Public authority of the national park (Metsähallitus, Parks & Wildlife Finland) • Entrepreneur that provides tourism services within the national park (Haltia Lake Lodge)	• International travellers • Workplace communities • Student groups	• Seasonal nature conservation work and other restoring activities in national park with guided tourist groups support the local nature and its ecosystems (e.g. wildflower meadow maintenance), eradicate harmful alien species like lupins, reduce nature loss and restore the balance of the vulnerable circle of life. • National Park Stewardship increases the awareness of the nature loss and promotes nature and planet-positivity.	• Planet-positive stewardship experience offers an inspiring and a concrete way to impact positively to nature and learn about ecosystems and ways humans can care for nature and reduce nature loss. • The experience helps feeling empathy and connection with nature, gives hope and reduces environmental apathy and anxiety. • Being a National Park Steward for a day offers an unique reward to volunteers, e.g. discount or coupon to the local regenerative businesses.	• A new partnership model offers new business opportunities in regenerative tourism and enables developing regenerative nature tourism activities in the national park. • Tools and good practises to support environmental education and increasing the eco-literacy of international travellers and citizen-customers. • Provides a way to strengthen company's inner sustainability journey and commitment to sustainable and regenerative values.	• A new partnership model provides an additional mean to implement National Biodiversity Strategy of Finland by increasing public awareness, eco-literacy and harnessing travellers' efforts to reduce biodiversity loss. • Regenerative service strengthens the role of the public authority in meeting their goals of promoting tourism, supporting the local economy, enabling entrepreneurship, and ensuring the sustainability of nature tourism in national parks.
KEY ACTIVITIES	**KEY RESOURCES AND CAPABILITIES**				
• Tour planning and execution • Service development (business model, customer experience) • Designing educational materials • Collaboration with experts • Monitoring and assessing the impact to local ecosystems • Communications • Building of the volunteer bonus/reward system	• National Park field workers • Expert nature guides / biodiversity educators • Educational materials about eco-literacy and biodiversity loss • Capacity building for the partners • Operational management • Sponsorship collaboration for building a volunteer reward system, e.g. discount in rental services				

Figure 23: Value creation and value propositions of the regenerative service concept illustrated with the elements of the Business Model Canvas (BMC) (adapted from Osterwalder & Pigneur 2010).

The enhanced value propositions for each stakeholder:

The value proposition for the planet

Seasonal nature conservation work and other restoring activities in national parks with guided tourist groups support the local nature and its ecosystems (e.g., wildflower meadow

maintenance), eradicate alien species like lupins, reduce nature loss and restore the balance of the vulnerable circle of life.

National Park Stewardship increases the awareness of nature loss and promotes nature and planet-positivity.

Value proposition for customers

Planet-positive stewardship experience offers an inspiring and concrete way to impact positively to nature and learn about ecosystems and ways humans can care for nature and reduce nature loss.

The experience helps feel empathy and connection with nature, gives hope and reduces environmental apathy and anxiety.

Being a National Park Steward for a day offers a unique reward to volunteers, e.g., a discount or coupon to the local regenerative businesses.

The value proposition for partners

A new partnership model offers new business opportunities in regenerative tourism and enables the developing of regenerative nature tourism activities in the national park.

Collaboration gives access to tools and good practices to support environmental education and increase the eco-literacy of international travellers and citizen-customers.

Hosting a regenerative service provides a way to strengthen the company's inner sustainability journey and commitment to sustainable and regenerative values.

Value proposition for public authority (the case organisation)

A new partnership model provides an additional means to implement the National Biodiversity Strategy of Finland by increasing public awareness, eco-literacy, and harnessing travellers' efforts to reduce and halt biodiversity loss.

Regenerative service strengthens the role of the public authority in meeting their goals of promoting regenerative tourism, supporting the local economy, enabling entrepreneurship, and ensuring the sustainability of nature tourism in national parks.

Key activities, resources, and capabilities in value creation

Key activities, resources, and capabilities include managing the operational level of the regenerative services, including communications activities and tour operations. Moreover, the

prerequisite is to involve the national park environmental experts and field workers to share their knowledge related to place-based restoration needs of the local ecosystems within the national park and assist in organising conservation activities.

It is also crucial to strengthen the collaboration between the key stakeholders and capacity building with partners. Another key activity in value creation is hiring and training nature guides and biodiversity experts to guide the customers or alternatively, train the partners to act as biodiversity guides. In addition, educational materials are needed related to eco-literacy, biodiversity loss and for explaining how actions (positive and negative) of humans can impact nature. Moreover, further service development is needed to iterate the service concept, scale it to other national parks and create an inclusive reward system for volunteers.

5   Conclusions and reflections

In this final chapter, the key results of this thesis are explored in the light of the knowledge base and theoretical framework. In addition, the research-based development work and its methodological choices are assessed, and reflections are shared. Lastly, ideas for further development are presented and discussed.

The purpose of this thesis was to gain a better understanding of value co-creation for planetary wellbeing in the context of regenerative service development. The objective of this thesis was to develop a regenerative tourism service concept that engages stakeholders in value co-creation for planetary wellbeing. To create such a concept, strategies, including mindset changes and design practices, needed to be identified.

The main development question was: How the case organisation can facilitate value co-creation for planetary wellbeing in regenerative service development?

The following sub-questions were guiding the research-based development work:

1. How the case organisation can support partners in overcoming barriers and harnessing motivators to develop sustainable and regenerative tourism services while meeting customer expectations for planet-positive, regenerative experiences?
2. How value co-creation for planetary wellbeing can be considered in the service development process?

The knowledge base of this thesis was derived from the Transition Design (TD) framework and so-called planet-positive design approaches, including the concepts of planetary wellbeing and regenerative design. These approaches were combined with a service-dominant logic for value co-creation, emphasising that all stakeholders play a crucial role in contributing to a positive impact on the planet and each other.

This thesis has followed the three key principles of regenerative organisations to define regenerative service. According to Konietzko, Das & Bocken (2023, 384) regenerative organisations (and thus regenerative services) recognise the interconnectedness of human health and the health of the planet (single socio-ecological entity), deliver a value proposition of planetary health and societal wellbeing, and strive to have a positive influence on all stakeholders (nature, customers, partners, investors etc.) and give back more than it takes. This thesis presents as a principal outcome a regenerative service concept (chapter 4.5.) that aims to follow these principles.

Theory of Change: Shift to regeneration

The Transition Design framework emphasises the importance of defining the Theories of Change when designing major societal transitions (Irwin 2015). As mentioned in the knowledge base of this thesis, any way of designing, and especially The Transition Design, should be considered inherently as a Theory of Change itself (Carey, Sides & Dorn 2022, 3-5). Besides TD and the design process followed in this thesis, the most central Theory of Change in this thesis is the recognition of the need for a paradigm shift in the transition from sustainability to regeneration (Bill Reed 2007; Bellato et al. 2022a). This shift to regeneration is guided by a transdisciplinary knowledge base of this thesis and by identifying different strategies that are crucial in the transition to regenerative service development and supporting value co-creation for planetary wellbeing. Next, these identified strategies are presented and discussed.

Identified key strategies:

- **Recognition of enterprises and customers as stewards of national parks** to better support the common vision and the stakeholders' role in caring for nature and tackling biodiversity loss by restoring and regenerating ecosystems.
- **Strengthening the capacity of partners as catalysts of change and environmental educators**, by strengthening the collaboration of the whole partner network and by providing tools and best practices for developing regenerative, customer-centric and planet-positive services.
- **Promoting a regenerative, planet-positive mindset to the whole value network** through supporting the eco-literacy skills of all stakeholders, including the employees of the case organisation, and through including the perspective of nature as a stakeholder in service development to increase empathy and enhance the inner sustainability of people and organisations.

These service development strategies that harness service design methods and tools can enhance the inner sustainability and eco-literacy of organisations and individuals and boost the cultural transformation needed to shift from sustainability to regeneration. The identified strategies follow the four areas of Transition Design: Vision, Theories of Change, New ways of designing and Mindset shift as together evolving areas of knowledge, action, and self-reflection (Irwin 2015).

Rethinking stewardship in national parks

As the research findings of this thesis demonstrate, the case organisation should recognise both the nature enterprises and customers as "national park stewards" and enable and encourage them to take responsibility of protecting and restoring the destinations. As

mentioned in the knowledge base, this role of guarding planetary wellbeing is recognised as one of the key aspects of "destination stewardship" that drives regenerative tourism (Bellato et al. 2022b, 320-321.) Especially the businesses offering tourism services could take a leading role as "catalysts of change" as Bellato et al. further propose (Bellato et al. 2022a, 8). This was verified in the results of this thesis when the partners of the case organisation showed motivation for taking a bigger role in environmental education and guiding their customers and visitors in national parks to understand the importance of environmental actions. They also underlined that they wished to have more recognition as important actors within national parks.

The case organisation would need to not only allow this role to the nature enterprises, but it would be also beneficial to provide the partners more opportunities for open dialogue, networking and capacity building related to eco-literacy and environmental education. The best practices and tools should be gathered, co-created, and shared among all stakeholders. Furthermore, results indicate that it would be important to acknowledge and fight against environmental apathy which was recognised as a common mindset and barrier to sustainable practices among customers and also among some entrepreneurs.

However, instead of blaming people for a lack of concern for the environment in front of overwhelming global problems, it would be important to normalise different environmental feelings and emotional reactions and help people shift from learned helplessness to environmental action. This is essential because it is recognised that regardless of feeling concerned for the environment or having eco-anxiety e.g., related to climate change or biodiversity loss, learned helplessness is a common barrier to environmental action (Landry, Gifford, Milfont, Weeks & Arnocky 2018). Thus, even emotional reactions that are interpreted as apathy might indicate more of a state of being overwhelmed. In conclusion, the results of this thesis suggest that enabling more ways to participate in tackling biodiversity loss and climate change and showing the impact of people's efforts could provide ways to reduce learned helplessness.

As described in the knowledge base, Enqvist et al. (2018, 24) link together three dimensions of stewardship: agency, knowledge, and care:

- **Care** refers to emotional connection and feelings of responsibility towards the cause.
- **Knowledge** refers to understanding and information related to the systems that are being cared for.
- **Agency** refers to the most used meaning of stewardship as active doing. It can be seen as referring to the capabilities of people and organisations to act and create impact.

All three dimensions were identified in the results in this thesis, confirming that all these three dimensions are necessary to enable stewardship in national parks and to facilitate value co-creation for planetary wellbeing. Next, the dimension of care as inner sustainability and empathy and the dimension of knowledge as eco-literacy in the context of the research-based development work are explored further.

The mindset change: inner sustainability as a key driver for stewardship

The research insights and theory basis of this thesis demonstrate (e.g., Konietzko, Das & Bocken 2023, 384) that developing both sustainable and regenerative tourism calls for a change of a mindset towards the planet and nature, a more positive, regenerative mindset of "giving more than taking". Without a doubt, the role of an open mindset is a crucial element in every design process as it is at the very core of design to seeks to create new solutions. However, the Transition Design approach calls for a radically new kind of reflective mindset as a foundation for accelerating transitional change (Irwin 2015).

Moreover, as Enqvist et al. (2018, 23-24) point out, it is worth being aware that people give different meanings to stewardship, and it is usual that individuals and groups of people have different motivators for acting for caring the natural resources. Thus, cultivating inner sustainability involves everyone challenging their worldviews and being open to understanding each other's perspectives, including the perspective of nature. Recognising this inner-driven perspective on stewardship and regenerative tourism is important to be able to provide value for all stakeholders. In this research, these multifaceted meanings, and varying levels of inner sustainability of different stakeholders were also identified in the data, and they were considered when developing value propositions.

The findings indicate that among stakeholders, both customers and partners and the companies they represent, hold very different levels of inner sustainability. Some people take serving nature for granted, for others developing the sustainability of their business is something that is more something mandatory in order for them to continue the business.

It can be concluded that the case organisation, with a responsibility to protect natural ecosystems and biodiversity in state-owned lands, should actively seek new ways to seed and facilitate empathy, hope and a positive mindset towards nature and planetary wellbeing among all stakeholders. This further requires that the case organisation would not aim to monitor sustainable tourism but rather would adopt a new role of so-called "ecosystem orchestrator-enabler" to navigate the joint journey towards a nature and planet-positive Finland. Orchestrators of ecosystems are considered leaders who do not lean on "command-and-control" governance but instead rely on persuasion to align participants' voluntary contributions to benefit the whole ecosystem and its purpose (Autio 2022).

Eco-literacy as a key citizen skill of the 21st century

The research findings of this thesis demonstrate that becoming eco-literate is crucial to customers and partners to be able to act as biodiversity stewards for national parks and nature more general. It involves learning to better understand ecosystems and how to recognise harmful changes or impacts (e.g., caused by human or invasive species) and the long-term and complex changes in the environment. As emphasised in the knowledge base, eco-literacy combined with inner sustainability can also be beneficial as a means to evoke empathy towards different species and social groups (Wahl 2005, 15). This is important because the health of the ecosystems have direct consequences for human health (e.g., Marselle et al. 2021).

If eco-literacy is indeed so crucial for the whole humanity, as Daniel Christian Wahl (2006) recognises and the results of this thesis suggest, environmental education should be a joint effort of different industries and sectors. However, the recognition of eco-literacy in societies varies and the research seems to be focused on environmental education at schools. One positive step is that education experts have already listed environmental literacy as one of the key skills of the 21st-century to succeed in life, work, and citizenship in the Framework for 21st Century Learning (Partnership for 21st Century Skills 2019). The importance of eco-literacy is also increasingly considered a crucial skill for designers (e.g., Valenzuela-Chapetón 2023; Wahl 2006).

Therefore, it is obvious that the need for eco-literacy goes beyond the context of regenerative tourism. However, as Metsähallitus holds an important duty to reducing the biodiversity loss in Finland and paving the way towards a nature-positive Finland, recognising the importance of eco-literacy and promoting environmental education as part of their work would be a crucial step in developing regenerative nature tourism. Especially in times of economic turbulence, it becomes fundamental to work increasingly in collaboration with a wide range of stakeholders, such as experts in education, non-profit organisations, and enterprises for this common goal of bringing learning and transformational experiences also in the field of tourism. Therefore, it would be important to share this understanding to other sectors as well, including decision-makers.

The new ways of designing — recognising nature as a stakeholder

Transition Design framework used in this thesis proposes to actively seek new ways of designing as a crucial area when designing for societal transitions (Irwin 2018). In the context of this thesis, the emphasis has especially given in consideration of the multiple ways design can encourage stakeholders to create value for planetary wellbeing.

In this research-based development work, the planet or nature, specifically the local ecosystem of the Nuuksio National Park, was considered one of the key stakeholders as part of the design process. This approach is less conventional in human-centric service design and service development, although there are a growing number of recommendations to include more non-human stakeholders or planetary perspectives in the design process (e.g., Kortetmäki 2021; Design Council 2021; Talgorn & Ullerup 2023). Taking the perspective of nonhuman stakeholders into account is especially important in the context of designing for systemic change and societal transitions, e.g., when designing interventions for biodiversity loss like in this thesis. However, the author of this thesis recognises a growing potential in including nonhuman stakeholders also in the design projects where animals play a key role within the service as a service user, e.g., veterinary or animal training services.

The perspective of nature as a stakeholder was included in the Develop stage of the design process when value propositions were developed in a co-creation workshop. At that stage, it became crucial to understand what value the regenerative service concept and other stakeholders could create for nature and what were the biggest "painpoints" from the perspective of nature.

Veselova (2023) notes that including nonhuman stakeholders can benefit the design process in three ways: by challenging the harmful unsustainable systems and structures, by shifting collective mindsets towards the common cause, and by creating solutions that are better aligned with sustainability. In this thesis, especially the two latter aspects were particularly evident.

Since the value proposition canvas was originally designed for human stakeholders, the workshop participants commented first that they felt a little strange to consider nature as an actor and trying to imagine what its painpoints, gains and jobs-to-be-done would be. However, they were open-minded to test the new approach. It turned out that considering the perspective of nature as a stakeholder provided a fast way to crystallise the common goal and the root cause that the team had struggled to address. Moreover, designing the value proposition for the planet also supported designing the value proposition for the customer and other stakeholders. The participants seemed inspired by the design activity and saw that the approach was useful for building a shared understanding.

It is worth noting that one of the participants in the co-creation workshop was an environmental educator from the case organisation who normally works with school children to teach them about nature. The person also leads educative conservation activities in national parks. This may have impacted the success of the design method as other participants felt more confident in suggesting the potential perspectives of nature while the environmental educator supported them to interpret better the needs of nature. The crucial role of the nature & biodiversity guide was also highlighted in the customer experiences of the conservation activity.

It was considered valuable that the guide was able to explain the complex relationships within the ecosystems and the interventions humans could take for caring nature. The author of this thesis had a similar experience because discussions with people with a high level of eco-literacy, like the nature guide and the fieldworkers of the national park, helped making gradually more sense of the needs of the local nature and learn more about the complex issues of the ecosystems in general. These people have years' experience of observing the changes that take a long time to happen.

These experiences suggest that it could be beneficial to include highly eco-literate people in the design process as interpreters of non-human stakeholders and complex natural systems. In the future in the context of regenerative tourism, nature enterprises could take this role if they have built their eco-literacy and have the capacity for environmental education. The results suggest that already many nature enterprises are willing to take more role in educating their customers and partners on biodiversity issues.

Unlike the other stakeholders, nonhuman stakeholders cannot participate in the co-design events, nor they cannot be interviewed like human stakeholders. Therefore, it is essential to invent more creative and experimental ways to understand the needs of the nonhuman stakeholders and include their perspectives in the design process. Therefore, it is crucial to collaborate with the people who have the knowledge to support this understanding and may increase the eco-literacy of other stakeholders. In the worst-case scenario, with the lack of scientific-based information about other species and ecosystems, the design team may end up making bold and potentially harmful assumptions about the needs of nonhuman stakeholders or even whole ecosystems.

Furthermore, Root-Bernstein, Douglas, Smith et al. (2013) point out that people tend to anthropomorphise a very broad variety of species, also plants and this tendency can be harnessed beneficially as a tool in the conservation work. Anthropomorphising means acknowledging similarities between people and "the anthropomorphised object", or nonhuman stakeholder, as defined in the context of this thesis. It can also mean speaking metaphorically about the nonhuman stakeholder. Anthropomorphising the nonhuman species is criticised because it could also lead to e.g., adding negative human features to non-human species. Thus, it is important to be careful when giving human features to nonhuman stakeholders. However, these dangers are considered less harmful than not including the perspective of nonhuman stakeholders at all or not using empathetic anthropomorphism as a tool for creating empathy and understanding towards nonhuman stakeholders. (Root-Bernstein et al. 2013.) Thus, even though it is good to be critical when bringing nature or other nonhuman stakeholders as actors or "characters" into the design process, even more caution should be applied if those stakeholders are excluded totally from the process.

In conclusion, this inspiring although limited design experience of including a perspective of nonhuman stakeholders in the design process with the support of design tools and the people who can work as "interpreters of nature" verifies that considering nature as a stakeholder can be beneficial for the design project, especially when it is crucial to better understand nature and complex ecosystems. The experience of the design team in this research-based development work suggests that this approach may increase the understanding of planetary wellbeing and build the eco-literacy of the participants and empathy towards nature and ecosystems, thus supporting value co-creation for planetary wellbeing.

5.1   Learnings and reflections

In this subchapter, this research-based development work and its process is assessed from various perspectives.

This research-based development work has been a multifaceted, sometimes frustrating but exciting journey to unknown fields, for the author of the thesis but also undoubtedly for the whole design team, as regenerative tourism and overall regenerative services are standing on an emerging field without established design methods or tools. In many ways, the topic of tackling biodiversity loss stands on no one's land, and yet everyone's. This describes perhaps best the nature of the challenge.

This research-based development work followed a traditional Double Diamond model, adding new elements like the consideration of nature as a stakeholder along the way. It is difficult to estimate how the process, or the outcome would have looked if another service design process model, e.g., Design Council's Systemic Design Framework, would have been applied (Design Council 2021). Discover-define-develop-deliver approach was guiding the process to focus on understanding the partners' perspective in the early stages of the design process. In hindsight, it would have probably proved beneficial to start the design process with a shared vision setting (like in the Systemic Design Framework) where all the stakeholders, including different experts of the case organisation, citizens and nature and other travel enterprises would step into the same space and co-create a vision of the future together already in the beginning. However, a focus on the needs of partners made it possible to get a good overview of the complex issues of, for instance, misbehaviour in national parks or environmental apathy, that are causing trouble in the field of tourism from the perspective of humans. This deep insight into the enterprises' (and at the same time customer's) reality also provided a good foundation for supporting the partners' role as value co-creators.

This thesis has underlined the role of value co-creation, emphasising that all stakeholders play a pivotal role in regenerative service development contributing to positive outcomes for the planet and each other. However, a couple of words should be said about the level of co-creation during this research-based development work. First, co-creation should not merely

aim to enhance societal participation in predesigned processes, but it should be a continuous open dialogue that engages relevant stakeholders and citizens (Ansell & Torfing 2021, 7). In retrospect, more citizen-customers, decision-makers, and field experts or other environmental experts from the case organisation would have been important to be involved in the co-creation throughout the development process. These people could have helped ensure that the ideas would have been more relevant for the benefit of the nature and case organisation and that the customer perspective would have been considered more strongly in the beginning. Moreover, a stronger emphasis on co-creation would have been important, because, as Irwin (2015, 969) highlights in the Transition Design approach, enabling stakeholders to find a shared definition of the problem and its complexities and connections, is crucial prior to designing interventions.

Thus, bringing all stakeholders into the same space would have enabled a common understanding of the issues. Now the participation and commitment of the steering group of the case organisation along the process was varying and people who participated in different stages of the design process were constantly changing. For example, from the initial steering group, several people were not participating in the later stages of the development process. This was partly due to the structure of the organisation. Since the case organisation and the areas of responsibilities are organised based on regions, it meant that when it was decided to develop a solution and test it in the Nuuksio National Park, the work shifted its focus on collaborating with the Finnish Nature Centre Haltia and the people responsible for the Nuuksio National Park and other parks in the coastal area of Finland. Perhaps this change of people could have been avoided by making it more clear already in the beginning that the participation, and commitment of certain experts and decision-makers from the case organisation was crucial throughout the process. However, it should be further acknowledged that it was often challenging to find common times with the managerial staff of the case organisation even for organising smaller meetings. These realities impacted remarkably the design process and the availability of the people to contribute to and engage more systematically in co-creation.

It could be concluded that the varying level of participation and the selected design process led to a situation where it took a longer time to establish and name a shared definition of the design problem. As explained earlier in this chapter, only after the value propositions were made, it became clear that the design solution would tackle biodiversity loss. Prior to that, it was clear that the regenerative service concept would help the enterprises to participate in creating a positive impact for nature of the national park, but the issue was not considered from the point of view of the nature or ecosystem, or at least it was not explicitly named. However, most stakeholders were likely implicitly aware of the biodiversity loss as an urgent crisis of nature, and that drove their overall concern for the environment. Nevertheless, they were not saying it explicitly. Remarkably, it was essential to create a value proposition for nature as a stakeholder before the problem from the perspective of the planetary wellbeing

was defined. If the starting point of the research-based development work would have been a shared mission to find ways to tackle biodiversity loss or create place-based insights related to nature as a stakeholder, this would have probably impacted considerably also to the process and methods used during the design process, probably some ways streamlining the process of defining the problem from more systemic perspective. However, this design process demonstrated that even following the traditional Double Diamond design process model, which is usually used for human-centric design it is possible to find new ways of designing and generating value for all stakeholders, when new elements are added to the design process, like planet-positive perspective and consideration of nonhuman stakeholders. It could be concluded that there is still room and need for human-centric approaches that help organisations to understand the perspectives of human stakeholders and recognise opportunities to guide people to be change makers while co-creating authentic value for themselves as customers.

Lastly, this research-based development work has also challenged the nature relationship of the thesis author. Undoubtedly, this project has increased the author's level of eco-literacy, as even the nearby nature seems suddenly much more complex, an intriguing web of complicated relationships. The design process has also raised new questions related to humans' relationship with the planet. Do we as humans have the right to decide which species are harmful and in which context? Why one species can be defined as a harmful, invasive alien species in one place but elsewhere it is welcome? Can humans be considered invasive species? Where goes the limit of caring and patronising nature? These quite provocative questions could be interesting starting points for complex moral discussions. However, instead of emphasising potentially conflicting perspectives, it is more important to find common ground and solution-oriented perspectives. Therefore, there is a need for using more planet-positive design approaches that bridge the gap between the human and natural world and provide these shared spaces for collaboration and a set of tools for awakening empathy towards all stakeholders.

Further takeaways and reflections

One learning takeaway was related to the differences of analysis in service design approach and content analysis. It was interesting to compare the sensemaking approach of service design that was done during the early stages of the development work and the results of the research-based content analysis conducted at a later stage. Both approaches provided valuable insights, and they were also in line with each other. However, content analysis provided remarkably deeper findings and meanings that would not have been possible with a more superficial sensemaking. This argues for the importance of aiming to use more systemic methods in organisations when developing services. Any insights can be valuable but in order to go deeper, especially more structured content analysis methods can provide deeper, more evidence-based insights.

It should be noted that conducting this thesis in two languages posed some challenges. The collaboration with the case organisation and stakeholders was done mainly in Finnish, excluding a couple of customer interviews and contextual prototyping. In Finnish, it is not similarly common to use the term "sustainability" as it is in English to refer to sustainability of an organisation. In fact, often the broader term "vastuullisuus/ vastuullinen matkailu" (responsibility / responsible tourism) is used, especially in the context of businesses and individuals and their responsibility to do their part. This terminological jungle became an even bigger challenge when everything was needed to translate to English for this report. However, it has been a strategic choice to use the terms sustainability, sustainable tourism, and regenerative tourism to communicate the shared nature of environmental challenges instead of highlighting solely the responsibility of a company or an individual. Moreover, an emphasis has been placed on creating a new paradigm of regenerative tourism, and thus the most terminological choices that are clarified at the beginning of this report are limited to the context of regenerative services and planet-positive approaches.

5.2   Future perspectives

In this final chapter 5.2., the results of this thesis are discussed with a perspective on the future, including possible next steps for the further development of the regenerative service concept and the application of the findings in a wider context.

The next step would be to continue developing the service concept with the delivery phase of the design process. Since this thesis's research-based development work only covered value creation and value propositions aspect of the BMC, it would be necessary to develop the missing elements of the business model canvas, as Kabil et al. (2023) recommend for voluntourism business concepts in order to clarify the different roles of the stakeholders and make sure that the operational model will work in practise and is transparent to customers. As research findings suggest, people might consider the business-driven volunteering activities suspicious. Thus, it is important to communicate clearly the purpose of the partnership and the reason behind the public-private partnership in organising a voluntourism activity. Therefore, the crucial next step would be to continue developing the business model canvas together with nature enterprises and customers. Moreover, it would be crucial to apply BMC if the service is scaled to other national parks and new partnerships, as every new context require defining the roles of the different stakeholders and experts separately. Moreover, when developing the service in other national parks, it is crucial to take a place-based approach and aim to understand the needs of the local ecosystem.

As findings show, there is a need to further enhance the final value propositions for customers and consider ways to reward the customers for their actions for nature. This may be different in the context where the participant is not expected to pay to participate in the experience,

i.e., if people are participating in the conservation activity as part of their employee retreat. As research findings show, customers do not consider that the regenerative service is desirable enough that they would pay for it or for a holiday package that includes the experience if the only "reward" they get would be joy for helping the planet. In short, they expect a higher value proposition. If the value proposition is not enhanced, there is a risk of "value co-destruction" where the service is not perceived as mutually beneficial (Hansen 2019).

Furthermore, there is a need to develop alternative regenerative service concepts within national parks that enable more inclusive ways of participation to tackle biodiversity loss, especially for people from lower socio-economical background. This is crucial because especially citizen-customers expect inclusive services from the governmental organisation. Moreover, as already recognised, tackling wicked problems, like biodiversity loss, should be a joint effort in society and should thus not only be limited to a niche market for high-income tourists. The research findings further suggest that especially the citizen-customers consider that it should be their "right as citizens" to be able to participate in such an important common cause.

In collaboration with the nature entrepreneurs and customers, the case organisation could continue designing more regenerative service concepts, such as "first aid courses for nature", combining the small acts for nature while building the eco-literacy of people. There are also many options for regenerative "self-service" concepts that were acknowledged in the results. They may work best in the context of national parks where most people tend to go on self-organised trips. This could be done, for example, by harnessing digital technology and gamification, encouraging people to collect points when doing small actions to nature, like gathering information related to ecosystems with citizen-science initiatives. Through co-creative brainstorming, it is possible to find more ways to engage nature entrepreneurs to participate in organising also these kinds of experiences and find ways to co-create value for all stakeholders. These types of concepts would strengthen the idea of national parks as "experience environments", a concept introduced by Prahalad and Ramaswamy (2004, 5-8). In the experience environment, customers can actively tailor their experiences to suit their personalised situations, selecting the ways they wish to participate in co-creating value for themselves and the planet.

In this thesis, the Transition Design framework was not followed as a design process but considered more like an additional theoretical model that helps understand the nature of societal transitions and interventions. The three phases (Figure 24) of the Transition Design suggest that designing for societal transition is a continuous cycle of reflecting on the present moment and future visions, designing interventions, and then waiting and observing to see how the system responds (Irwin 2018). In this context, the regenerative service concept that was developed can be considered as one design intervention with the potential to impact to a larger shift from sustainability to regeneration in the society. The model highlights how, a

planet-positive design aiming at regeneration and planetary wellbeing, is "a journey one needs to begin but which does not have an end". One interviewee used this description when discussing the need for organisations to develop their sustainability but is it perhaps even more true with regeneration as a goal. The mindset shift and vision setting to regeneration extends the future goal and makes it visible that contemporary organisations should contribute to planetary wellbeing positively by doing more than simply avoiding negative impacts. This should be a continuous effort.
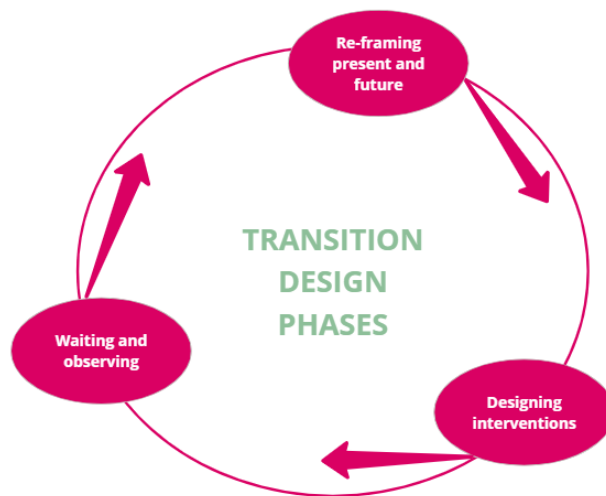
Figure 24: Transition design phases (Irwin 2018).

As recognised at the beginning of this thesis, terms like regenerative service include a risk for unintended greenwashing, making environmental claims without evidence. Therefore, it is important to be transparent about the intended aspirations of each intervention and find ways to monitor the change. One way to strengthen the transparency of the regenerative service concept developed in this thesis would be to develop a "story of the place" as Reed (2007, 678) proposes. This has already been an intent of the case organisation, and it has been discussed that there could be a webpage for demonstrating the impact that travellers have made possible, including before and after photos of the restored or regenerated places such as the meadow in Nuuksio National Park.

Incorporating place-based approach to design even more thoroughly is important because it can help strengthen the connection between the people and the place (Reed 2007, 679). Thus, for future development, it could be valuable to take the place-based approach into account already from the beginning of the development project in order to monitor the change from the beginning. There is also a need to develop design toolkits for planet-positive and place-based design to understand better what are all the environmental, cultural, and economic aspects that need to be considered when aiming to strengthen the planetary wellbeing

of a place. Perhaps the service and transition designers need to lend and blend even more tools with other disciplines, such as social sciences, environmental sciences, and urban design.

In the course of this thesis, numerous lessons were learned about designing regenerative services and, more broadly, related to the cultural shift needed towards regeneration. The insights gained through the research and design process can hopefully benefit other organisations seeking ways to give back to the planet and harness service design for mutual value co-creation for regeneration. The gained understanding of value co-creation with and for stakeholders and the identified strategies to support it could be applied to other contexts and other organisations as well. After all, the need to boost eco-literacy and stewardship for nature is evident in every sector, in order the societies to meet the Global Goal for Nature by 2030 (Locke et al. 2021).

The companies have already a growing societal pressure to communicate their sustainability performance, also in the level of the European legislation due to the new Corporate Sustainability Reporting Directive (e.g., European Commission n.d. -b). However, to begin their journey towards regeneration, organisations need first to become aware of the shift needed beyond sustainability. The dominant paradigm across society is heavily focused on avoiding negative impact rather than aiming to leave a positive ecological handprint by actively restoring and supporting the ecosystems to regenerate. To embrace this goal, the organisations should adapt a fundamental mindset shift in their inner sustainability and start seeking new, more holistic ways of collaborating with their stakeholders to find solutions that provide value to all stakeholders. In addition, or perhaps most crucially, the organisations should seek to include the perspective of the nature and other nonhuman stakeholders to any development project that impacts the wellbeing of the ecosystems. It could mean aiming to understand how the services and products of the organisation could provide value to these stakeholders, e.g., by designing value propositions, as done in this thesis.

As environmental designers Berg, Manninen and Vanni (2023) write, especially designers should be positioned on the frontline of the sustainability challenge, even though it is likely to be our hardest and most demanding design challenge ever. On a positive note, this thesis suggests that service design can indeed provide methods and tools for enhancing the inner sustainability and eco-literacy of organisations and individuals and boosting the cultural transformation needed to shift from sustainability to regeneration. While continuous learning and the development of methods and tools for planet-positive design are still crucial, the beating heart of the journey is the collective commitment to becoming stewards of nature — as individuals, as organisations, and as societies.

References

Printed

Andrews, K. 2010. Social design: delivering positive social impact" in Stickdorn, M. & Schneider, J. (eds.) 2010. *This is service design thinking: Basics - tools - cases*. Amsterdam: BIS Publishers. p. 88.

Ansell, C., & Torfing, J. 2021. Public governance as co-creation: A strategy for revitalizing the public sector and rejuvenating democracy. (1 ed.) Cambridge University Press. Cambridge Studies in Comparative Public Policy https://doi.org/10.1017/9781108765381

Brown, T., & Katz, B. 2009. Change by design: how design thinking transforms organizations and inspires innovation. Harper Business.

Hurst, A. 2016. The Purpose Economy, Expanded and Updated: How Your Desire for Impact, Personal Growth and Community Is Changing the World. Elevate.

Kangas, H.-L., & Lyytimäki, J. 2020. Luontoa vaivaa viestintävaje. In Elämän verkko. Luonnon monimuotoisuutta edistämässä. pp. 233-247. Eds. Hanna Mattila. Gaudeamus.

Lupton, E. 2017. Design is storytelling. Cooper Hewitt.

Lusch, R. & Vargo, S. 2014. Service-Dominant Logic: Premises, Perspectives, Possibilities. Cambridge University Press.

Miettinen, S. & Koivisto, M. (eds.) 2009, Designing Services with Innovative Methods. Keuruu: Otava Book Printing Ltd.

Moilanen, Ojasalo, K., T. & Ritalahti, J. 2022. Methods for development work: new kinds of competencies in business operations.

Osterwalder, A., & Pigneur, Y. 2010. Business model generation. John Wiley & Sons.

Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. 2014. Value Proposition Design: How to Create Products and Services Customers Want. John Wiley & Sons.

Pine, B. J., & Gilmore, J. H. 2011. The Experience Economy: Work is Theatre & Every Business a Stage. Updated Edition. Harvard Business Review Press.

Portigal, S. 2013. Interviewing Users: How to Uncover Compelling Insights. Rosenfeld Media.

Stickdorn, M. & Schneider, J. (eds.) 2010. This is service design thinking: Basics - tools - cases. Amsterdam: BIS Publishers.

Stickdorn, M., Lawrence, A., Hormess, M. E. & Schneider, J. 2018. This is service design doing: Applying service design thinking in the real world: a practitioner's hand-book. Sebastopol, CA: O'Reilly Media, Inc.

Tuomi, J. & Sarajärvi, A. 2018. Laadullinen tutkimus ja sisällönanalyysi. Uudistettu laitos. Helsinki: Kustannusosakeyhtiö Tammi.

Digital references

Autio, E. (2022) Orchestrating ecosystems: a multi-layered framework, Innovation, 24:1, 96-109, https://doi.org/10.1080/14479338.2021.1919120

Bellato, L., Frantzeskaki, N., & Nygaard, C.A. 2022a. Regenerative tourism: a conceptual framework leveraging theory and practice, Tourism Geographies, 1-21. (published later in print Tourism Geographies, 25:4) https://doi.org/10.1080/14616688.2022.2044376

Bellato, L., Frantzeskaki, N., Briceño Fiebig, C., Pollock, A., Dens, E. and Reed, B. 2022b. "Transformative roles in tourism: adopting living systems' thinking for regenerative futures", Journal of Tourism Futures, Vol. 8 No. 3, pp. 312-329. https://doi.org/10.1108/JTF-11-2021-0256

Bender-Salazar, R. 2023. Design thinking as an effective method for problem-setting and needfinding for entrepreneurial teams addressing wicked problems. J Innov Entrep 12, 24. https://doi.org/10.1186/s13731-023-00291-2

Berg, E., Manninen, R & Vanni, L. 2023, Tarjolla: vuosisadan tärkein muotoilutoimeksianto. Ornamo. Accessed 25 November 2023. https://www.ornamo.fi/artikkeli/tarjolla-vuosisadan-tarkein-muotoilutoimeksianto/

Body, J., & Terrey, N. 2019. Design for a Better Future: A guide to designing in complex systems (1st ed.). Routledge. https://doi.org/10.4324/9781315163918

Bohn, P.R., Konig, E., Tonetto, L.M., and de Souza Libanio, C. 2022. Design contributions in generating innovative solutions for human and planetary health, in Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba, J., Lloyd, P. (eds.), DRS2022: Bilbao, 25 June - 3 July, Bilbao, Spain. https://doi.org/10.21606/drs.2022.346

Buchanan, R. 1992. Wicked Problems in Design Thinking. Design Issues, 8(2), 5–21. https://doi.org/10.2307/1511637

Buchanan, R. 2019. Systems Thinking and Design Thinking: The Search for Principles in the World We Are Making, She Ji: The Journal of Design, Economics, and Innovation, Volume 5, Issue 2, Pages 85-104, ISSN 2405-8726, https://doi.org/10.1016/j.sheji.2019.04.001.

Carey, H., Sides, M., and Dorn, E. 2022. Articulating theories of change towards more just and transformative design practices, in Lockton, D., Lenzi, S., Hekkert, P., Oak, A., Sádaba,

J., Lloyd, P. (eds.), DRS2022: Bilbao, 25 June - 3 July, Bilbao, Spain.
https://doi.org/10.21606/drs.2022.626

Cooper, A, Reimann, R, Cronin, D, & Noessel, C. 2014. About Face: The Essentials of Interaction Design, John Wiley & Sons, Incorporated. Accessed 27 November 2023. ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/laurea/detail.action?docID=1762072.

Design Council. 2015. Design Methods Step 1: Discover. Accessed 29 October 2023.
https://www.designcouncil.org.uk/news-opinion/design-methods-step-1-discover

Design Council. 2021. Beyond net zero: A systemic design approach. Accessed 29 October 2023. https://www.designcouncil.org.uk/our-resources/systemic-design-framework/

Design Council. 2023. Framework for innovation. Accessed 29 October 2023.
https://www.designcouncil.org.uk/our-resources/framework-for-innovation/

Enqvist, J., West, S., Masterson, V., Haider, L., Svedin, U., & Tengö, M. 2018. Stewardship as a boundary object for sustainability research: Linking care, knowledge, and agency. Landscape and Urban Planning, 179, 17-37. https://doi.org/10.1016/j.landurbplan.2018.07.005

Epressi. Vangit työssä luonnon hyväksi: Metsähallituksen ja Rikosseuraamuslaitoksen yhteistyö vahvistuu. Metsähallituksen ja Rikosseuraamuslaitoksen yhteistiedote. Accessed 16 July 2023. https://www.epressi.com/tiedotteet/ymparisto-ja-luonto/vangit-tyossa-luonnon-hyvaksi-metsahallituksen-ja-rikosseuraamuslaitoksen-yhteistyo-vahvistuu.html Read 31.8.2023

European Commission. No date - a. Biodiversity Strategy for 2030. Accessed 21 November 2023. https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

European Commission. No date - b. Corporate Sustainability Reporting. Accessed 21 November 2023. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

Ferreira, B. & Silva, W. & Oliveira, E. & Conte, T. 2015. Designing Personas with Empathy Map. In: Proceedings of the 27th International Conference on Software Engineering and Knowledge Engineering (SEKE 2015) http://dx.doi.org/10.18293/SEKE2015-152

Dredge, D. 2022. Regenerative tourism: transforming mindsets, systems, and practices. Journal of Tourism Futures, Vol. 8 No. 3, pp. 269-281. https://doi.org/10.1108/JTF-01-2022-0015

Gibbons, L.V. 2020. Regenerative — The New Sustainable? Sustainability, 12(13), 5483. pp. 1-19. https://doi.org/10.3390/su12135483

Grönroos, Christian. 2008. Service Logic Revisited: Who Creates Value? And Who Co-creates?. European Business Review. 20. 298-314. http://dx.doi.org/10.1108/09555340810886585

Hansen, A. 2019. Value co-creation in service marketing: A critical (re)view. International Journal of Innovation Studies, 3(4), pp 73-83. http://dx.doi.org/10.1016/j.ijis.2019.12.001

Hillner, M. 2018. Design Thinking — A Buzzword or the Holy Grail of Design? International Conference on Engineering and Product Design Education 6 & 7 September 2018, Dyson School of Design Engineering, Imperial College, London.
http://dx.doi.org/10.13140/RG.2.2.16450.68808

IDF - Interaction Design Foundation, Wicked problems. Accessed 21 September 2023.
https://www.interaction-design.org/literature/topics/wicked-problems

Irwin, T. 2015. Transition Design: A Proposal for a New Area of Design Practice, Study, and Research. Design and Culture. 7. pp. 229-246.
https://doi.org/10.1080/17547075.2015.1051829

Irwin, T. 2018. The Emerging Transition Design Approach. Cuadernos del Centro de Estudios de Diseño y Comunicación. https://www.researchgate.net/publication/346038483_The_Emerging_Transition_Design_Approach

Itämeri Plogging. No date. Accessed 28 November 2023. https://itameri.johku.com/

Kabil, M., Priatmoko, S., Farkas, T., Karpati, J., & Dávid, L. D. D. 2023. The underdog effect: Towards a conceptual framework for enhancing voluntourism. Journal of Outdoor Recreation and Tourism, 42, 100609. ISSN 2213-780. https://doi.org/10.1016/j.jort.2023.100609

Konietzko, J. & Das, A. & Bocken, N. 2023. Towards regenerative business models: A necessary shift? Sustainable Production and Consumption. 38. pp. 372-388.
https://doi.org/10.1016/j.spc.2023.04.014

Kortetmäki, T., Puurtinen, M., Salo, M., Aro, R., Baumeister, S., Duflot, R., Elo, M., Halme, P., Husu, H.-M., Huttunen, S., Hyvönen, K., Karkulehto, S., Kataja-aho, S., Keskinen, K. E., Kulmunki, I., Mäkinen, T., Näyhä, A., Okkolin, M.-A., Perälä, T., Purhonen, J., Raatikainen, K. J., Raippalinna, L.-M., Salonen, K., Savolainen, K., & Kotiaho, J. S. 2021. Planetary well-being. Humanit Soc Sci Commun, 8, 258. https://doi.org/10.1057/s41599-021-00899-3

Landry, N., Gifford, R., Milfont, T. L., Weeks, A., Arnocky, S. 2018. Learned helplessness moderates the relationship between environmental concern and behavior. Journal of Environmental Psychology, 55, 18-22. https://doi.org/10.1016/j.jenvp.2017.12.003

Locke, H. Rockström, J., Bakker, P., Bapna, M., Gough, Lambertini, M., Morris, J., Polman, P., Samper, S., Sanjayan, M., et al. 2021. A Nature-Positive World: The Global Goal for Nature (Yellowstone to Yukon Conservation Initiative which sponsors the IUCN World Commission on Protected Areas beyond the Aichi Targets Task Force. https://library.wcs.org/doi/ctl/view/mid/33065/pubid/DMX3974900000.aspx

Manzini, E., & Coad, R. 2015. Design, When Everybody Designs: An Introduction to Design for Social Innovation. The MIT Press. http://www.jstor.org/stable/j.ctt17kk7sv

Marselle, M. R., Hartig, T., Cox, D. T. C., de Bell, S., Knapp, S., Lindley, S., Triguero-Mas, M., Böhning-Gaese, K., Braubach, M., Cook, P. A., de Vries, S., Heintz-Buschart, A., Hofmann, M., Irvine, K. N., Kabisch, N., Kolek, F., Kraemer, R., Markevych, I., Martens, D., Müller, R., Nieuwenhuijsen, M., Potts, J. M., Stadler, J., Walton, S., Warber, S. L., & Bonn, A. 2021. Pathways linking biodiversity to human health: A conceptual framework. Environment International, 150, 106420. https://doi.org/10.1016/j.envint.2021.106420.

Mathevet, R, Raymond, C & Bousquet, F 2018, 'The concept of stewardship in sustainability science and conservation biology', Biological Conservation, vol. 217, pp. 363-370. https://doi.org/10.1016/j.biocon.2017.10.015

Metsähallitus volunteer shepherds. No date. Shepherd for a Week – Popular Volunteer Work for Valuable Landscapes. Metsähallitus. Accessed 30 September 2023. https://www.metsa.fi/en/nature-and-heritage/habitats/semi-natural-grasslands/volunteer-shepherds/

Metsähallitus P&W. No date. Parks & Wildlife Finland. Business Units. Accessed 9 November 2023. https://www.metsa.fi/en/about-us/organisation/business-units/parkswildlife-finland

Metsähallitus. 2023a. Popularity of National Parks Increasing: New and Renovated Sites Attracting More Visitors. Accessed 20 November 2023 https://www.metsa.fi/en/press-releases/popularity-of-national-parks-increasing-new-and-renovated-sites-attracting-more-visitors/

Metsähallitus. 2023b. Metsähallitus Annual and Responsibility Report 2022: Towards a carbon neutral, ecologically sustainable, and equal society. Accessed 20 November 2023. https://julkaisut.metsa.fi/en/publications/show/2847

Nylund, S. 2021. Retkeilijäprofiilit. Metsähallitus. Accessed 15 November 2023. https://julkaisut.metsa.fi/julkaisut/show/2609

Partnership for 21st Century Skills (P21). 2019. Framework for 21st Century Learning. Accessed 18 November 2023. http://www.p21.org/our-work/p21-framework

Pera, R., Occhiocupo, N. and Clarke, J. (2016) Motives and Resources for Value Co-Creation in a Multi-Stakeholder Ecosystem: A Managerial Perspective. Journal of Business Research, 69, 4033-4041. https://doi.org/10.1016/j.jbusres.2016.03.047

Prahalad, C.K., & Ramaswamy, V. 2004. Co-Creation Experiences: The Next Practice in Value Creation. Journal of Interactive Marketing, 18(3), 5-14. https://doi.org/10.1002/dir.20015

Reed, Bill. 2007. Shifting from 'sustainability' to regeneration, Building Research & Information, 35:6, 674-680, https://doi.org/10.1080/09613210701475753

Rice, L. 2020. Nature-based solutions for urban development and tourism. International Journal of Tourism Cities, Vol. 6 No. 2, pp. 431-448. https://doi.org/10.1108/IJTC-05-2019-0069

Rittel, H.W.J., Webber, M.M. 1973 Dilemmas in a general theory of planning. Policy Sci 4, 155–169. https://doi.org/10.1007/BF01405730

Root-Bernstein, M., Douglas, L., Smith, A. et al. 2013. Anthropomorphized species as tools for conservation: utility beyond prosocial, intelligent and suffering species. Biodivers Conserv 22, 1577–1589. https://doi.org/10.1007/s10531-013-0494-4

Sanders, E., & Stappers, P. J. 2008. Co-creation and the New Landscapes of Design. CoDesign, 4, 5-18. http://dx.doi.org/10.1080/15710880701875068

Sharman, M. & Mlambo, M. 2012. Wicked: The Problem of Biodiversity Loss. GAIA - Ecological Perspectives for Science and Society. 21. http://dx.doi.org/10.14512/gaia.21.4.10

Smeenk, W. 2022. Societal impact design: Empathic and systemic co-design as a driver for change. In Applied Design Research (1st Edition) CRC Press. eBook ISBN: 9781003265924. https://www.taylorfrancis.com/chapters/oa-edit/10.1201/9781003265924-13/societal-impact-design-wina-smeenk

STT. 2022. Euroopan ympäristöystävällisin hotelli löytyy Nuuksiosta. 9 November 2022. Accessed 27 November 2023. https://www.sttinfo.fi/tiedote/69956769/euroopan-ymparistoystavallisin-hotelli-loytyy-nuuksiosta

Sustainable Travel Finland (STF no date). Accessed 28 November 2023. https://www.visitfinland.fi/en/liiketoiminnan-kehittaminen/vastuullinen-matkailu/sustainable-travel-finland

Talgorn, E., Ullerup, H. 2023. Invoking 'Empathy for the Planet' through Participatory Ecological Storytelling: From Human-Centered to Planet-Centered Design. Sustainability 2023, 15, 7794. https://doi.org/10.3390/su15107794

The Social Town. 2023. Planet Centered design and Earth Centered design. 10 April 2023. Accessed 5 November 2023. https://www.linkedin.com/pulse/planet-centered-design-earth-thesocialtown/

TENK - Finnish National Board on Research Integrity. 2023. The Finnish Code of Conduct for Research Integrity and Procedures for Handling Alleged Violations of Research Integrity in Finland. Accessed 10 November 2023. https://tenk.fi/sites/default/files/2023-05/RI_Guidelines_2023.pdf

Turismo Regenerativo. 2023. Global Regenerative Tourism initiative. Regenerative Tourism. Accessed 7 October 2023. https://turismoregenerativo.org/

Udoewa, V. 2022. Radical Participatory Design: Awareness of Participation. Journal of Awareness-Based Systems Change, 2(2), 59–84. https://doi.org/10.47061/jasc.v2i2.3816 (https://jabsc.org/index.php/jabsc/article/view/3816/4200)

Valenzuela-Chapetón, C. 2023. Design and ecoliteracy: Developing a Design and Sustainability Course with 21st-century Relevance. Revista Latinoamericana de Estudios Educativos (México), 53(1), 101-126. https://doi.org/10.48102/rlee.2023.53.1.541

Vargo, S.L., & Lusch, R.F. 2004. Evolving to a New Dominant Logic for Marketing. Journal of Marketing, 68(1), 1-17. https://doi.org/10.1509/jmkg.68.1.1.24036

Vargo, S.L., & Lusch, R.F. 2016. Institutions and axioms: an extension and update of service-dominant logic. Journal of the Academy of Marketing Science, 44(1), 5-23. https://doi.org/10.1007/s11747-015-0456-3

Vincit. 2020. Planet-Centric Design (PCD). Accessed 30 September 2023. https://planetcentricdesign.com/

Veselova, E., Gaziulusoy, I., & Lohmann, J. 2022. Mediating the needs of human and natural nonhuman stakeholders: Towards a design methodological framework. In D. Lockton, S. Lenzi, P. Hekkert, A. Oak, J. Sádaba, & P. Lloyd (Eds.), The Design Research Society Conference (DRS2022) (Proceedings of DRS). Design Research Society. https://doi.org/10.21606/drs.2022.524

Veselova, E. 2023. Designing with Nature for Sustainability: Towards a critical approach for including natural nonhuman stakeholders in collaborative and participatory design when designing for sustainability (Doctoral dissertation). https://aaltodoc.aalto.fi/handle/123456789/121317

Väätäjä, H. K. & Tihinen, M. K. (2022). Developing future working life competencies with earth-centered design. In H-M. Järvinen, S. Silvestre, A. Llorens & B. Nagy (eds.), Proceedings of the SEFI 50th Annual Conference 2022: Towards a new future in engineering education, new scenarios that European alliances of tech universities open up, pp. 797-805. DOI:10.5821/conference-9788412322262.1436. http://hdl.handle.net/2117/383906

Wahl, D. C. 2005. Eco-literacy, Ethics, and Aesthetics in Natural Design: The Artificial as an Expression of Appropriate Participation in Natural Process. In European Academy of Design Conference: Design System Evolution (Paper No. 92, pp. 1-18), Bremen, Germany.

Wahl, D. C. 2006. Design for Human and Planetary Health: A Holistic/Integral Approach to Complexity and Sustainability (Doctoral dissertation, Centre for the Study of Natural Design, University of Dundee, Scotland).

Wastling, T., Charnley, F., & Moreno, M. 2018. Design for Circular Behaviour: Considering Users in a Circular Economy. Sustainability, 10(6), 1743. https://doi.org/10.3390/su10061743

Wilson, G.T., & Bhamra, T. 2020. Design for Sustainability: The Need for a New Agenda. Sustainability, 12(9), 3615. https://doi.org/10.3390/su12093615.

World Travel and Tourism Council (WTTC). 2022. Nature-Positive Travel and Tourism. Travelling in Harmony with Nature. Accessed 21 November 2023. https://wttc.org/Portals/0/Documents/Reports/2022/Nature-Positive-Travel-And-Tourism.pdf

Ympäristöministeriö (2022). Kansallinen luonnon monimuotoisuusstrategia: Lausunnoille – Luontokato pysäytettävä vuoteen 2030 mennessä. Accessed 19 November 2023 https://ym.fi/-/kansallinen-luonnon-monimuotoisuusstrategia-lausunnoille-luontokato-pysaytettava-vuoteen-2030-mennessa

Unpublished

Hupkes, T. 2020. Non-anthropocentric Design Thinking: Shifting focus to earthling needs through speculative contextualization, continuous re-evaluation, and a focus on long-term service-based relationships, supported by PaaS viability (Master's thesis, KTH, School of Electrical Engineering and Computer Science). https://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-279591

Figures

Attachments

Attachment 1: **Field guide / partner interviews (in Finnish)**

Haastattelun tavoite: ymmärtää paremmin yritysten käsitystä kestävästä matkailusta, vastuullisuudesta ja vastuullisuuden haasteista kansallis- ja luonnonpuistoissa sekä heidän odotuksista yhteistyölle Metsähallituksen kanssa

Yritystoiminta

Kertoisitko yrityksestänne/yrityksestäsi? Minkä alan yritys, koko, sijainti?
Minkälaista toimintaa teillä on kansallispuistoissa / luonnonsuojelualueilla?

Vastuullinen / kestävä matkailu kansallis-/luonnonpuistoissa
Mitä kuvailisit vastuullisuus/kestävyys kysymyksiä kansallispuistoissa? Mikä on mielestäsi suurin haaste tai ongelma nykyisessä toimintaympäristössä?
Miten omassa yritystoiminnassa on huomioitu vastuullisuuskysymykset ja kestävä matkailu?
Onko teillä ympäristösertifikaatteja? Minkälaisia? Miten suhtaudut niihin?
Miten yrityksessänne ymmärretään vastuullisuus, entä kestävä matkailu?
Ovatko yrityksesi asiakkaat ottaneet esille vastuullisuuteen liittyviä teemoja? Mitä ja miten?
Entä ilmastonmuutokseen liittyviä teemoja tai huolia?
Onko teillä vastuullisuuteen / kestävyyteen liittyvää asiakaslupausta tai tavoitetta?
Miten uskot, että asiakkaasi näkevät vastuullisuustoimintanne?
Uskotko, että kuluttajat vaativat näyttöä vastuullisuudesta yrityksiltä entistä enemmän?

Yritykset kansallispuistoissa
Mitä vastuullisuustekoja / kestävyystekoja kansallispuistoissa / luonnonsuojelualueilla toimivilta yrityksiltä voi mielestäsi odottaa?
Miten näet, että yrittäjät voisivat toiminnassaan paremmin huolehtia luonnosta?
Miten yritys voi tukea asiakkaan luontosuhdetta? Kuuluuko se yritykselle?
Huomioitteko te paikallisia sosiaalisia kysymyksiä toiminnassanne? Miten?
Voivatko vastuullisuusteot tai -puhe vaikuttaa negatiivisesti asiakaskokemukseen? Miten?

Yhteistyö Metsähallituksen kanssa
Onko yrityksesi Metsähallituksen sopimuskumppani?
Miten aktiivisesti teet yhteistyötä Metsähallituksen kanssa? Millaisena koet yhteistyön? (Miltä se tuntuu?)
Minkälaisena koet Metsähallituksen roolin suhteessa yrityksiin?
Onko sinulle selvää, että mitä Metsähallitus odottaa yrityskumppaneidensa vastuullisuudelta?
Oletko saanut Metsähallitukselta tukea yrityksesi vastuullisuuteen?
Pitäisikö Metsähallituksen arvioida yritysten vastuullisuutta? (Miten? Jos ei, niin miksi ei)
Mittaatteko omaa vastuullisuuttanne?
Minkälaista tukea odotat Metsähallitukselta tai toivoisit lisää?
Mikä motivoisi sinua yrittäjänä tekemään entistä enemmän vastuullisuustekoja ja viestimään niistä tai muuten kehittämään toimintaa kestävästi?

Attachment 2: **Customer interviews field guide (In English)**

The goal of the interview: to understand better the needs and expectations of the travellers and get feedback for the initial idea of the "Nature Care Holiday"

Background questions

What kind of traveller are you?
What are the most typical kinds of travels you have had?
What are important factors to you when you plan your next destination?
Do you do nature tourism? E.g., visit National Parks?
How would you describe your relationship to nature?

Regenerative travel & sustainability

Do you consider yourself as a responsible tourist? Why yes /or no?
Do you consider your carbon footprint when you travel?
If you do nature tourism, do you consider the wellbeing of the environment?
Have you heard about regenerative travel / tourism?
Do you know what is it? *(Regenerative travel or tourism is a form of ecotourism where the traveller contributes to the local destination positively doing something concrete, e.g., volunteering in environmental conservation)*
What do you think of regenerative tourism? Do you see it as something that you would be interested in? Why/ why not?

Case example

Imagine that you would travel to Finland for a holiday. There is a local accommodation and nature services company that is located within one of the most popular National Parks, The National Park of Nuuksio (located within 30 minutes from the capital of Helsinki).

The local company provides high quality cabin lodge accommodation and nature experiences. One of their newest experience package is Nature Care Holiday weekend where they have partnered with the authorities of the National Park of Nuuksio to provide travellers a holiday where they can participate in restoring the local nature areas while learning about the importance of biodiversity.

The Nature Care Holiday includes an experience where you can participate in restoring the biodiversity in the area. In a group activity, you are taken to the old farmland inside the National Park that needs some work in order to be transformed back into a blossoming meadow with rare species. During the experience, you visit one of the already restored meadows to see why it makes a difference to restore these land areas.

You would volunteer with your group for 2-4 hours to make an impact, e.g., by mowing and learning how to do the haystack. The tools are provided, and your tour guide will share many local stories about the history of traditional Finnish farming during the experience. The whole experience also includes an orientation where you will learn about the efforts that are needed for guarding the diversity in the park.

Questions related to the service concept

How does this experience sound to you?
Which part of the experience you like the best?
What don't you like?
How would the experience make you feel?
What would you improve?

Attachment 3: **Participant survey form**

PARTICIPANT SURVEY FORM

A pilot project of the planet-positive conservation holiday in Nuuksio national park - 12th of August 2023

METSÄHALLITUS FORSTSTYRELSEN MEAHCIRÁĐĐEHUS

HALTIA LAKE LODGE

How satisfied you are with the experience?

😆 ⬜ 🙂 ⬜ 🙂 ⬜ 🙁 ⬜ ☹️ ⬜

What did you like?

What things do you wish that were different?

What did you learn from the experience?

Questions or ideas for developing the experience

Please leave your contact details if you allow us to contact you later for further questions about your experience. All collected data will be used anonymously for research purposes.

Name

Email

Attachment 4: **Planet-positive conservation holiday service concept**

**METSÄHALLITUS
FORSTSTYRELSEN
MEAHCIRÁĐĐEHUS**

PLANET-POSITIVE CONSERVATION HOLIDAY IN THE NUUKSIO NATIONAL PARK

A RENEGERATIVE TRAVEL CONCEPT FOR REVERSING BIODIVERSITY LOSS

NATURE CONSERVATION PROTECTS BIODIVERSITY

- The Finnish government-owned Metsähallitus Wildlife & Parks is responsible for the protection of habitats, species and historical sites in state-owned lands, such as national parks and nature reserves in Finland.
- In a partnership with a local entrepreneur Haltia Lake Lodge, Metsähallitus is piloting a new regenerative travel concept to promote and develop sustainable tourism in protected areas. The aim is to involve travellers to participate in the conservation work against nature loss.

REGENERATIVE TRAVEL

> **REGENERATIVE TRAVEL AIMS TO IMPACT POSITIVELY ON THE TRAVEL DESTINATIONS, LOCAL COMMUNITIES AND SOCIETY. FROM THE TRAVELLER'S POINT OF VIEW, REGENERATIVE TRAVEL COULD BE DEFINED AS TOURISM WHERE VISITORS TRAVEL WITH A MINDSET TO LEAVE A DESTINATION BETTER THAN IT WAS BEFORE THEY ARRIVED.**
>
> FINNISH ASSOCIATION FOR FAIR TOURISM

OUR MISSION: REVERSE NATURE LOSS TOGETHER

WILDLIFE CONSERVATION HOLIDAY IN THE NATIONAL PARK

A TRAVELLER PARTICIPATES IN THE LOCAL CONSERVATION WORK

WE OFFER A TRAVELLER A MEANINGUL AND IMPACTFUL WAY TO TAKE PART IN REVERSING NATURE LOSS AND BOOSTING BIODIVERSITY IN THE NATIONAL PARK.

INCREASE AWARENESS

THE NEW TRAVEL EXPERIENCE COMBINED WITH ENVIRONMENTAL EDUCATION HELP A TRAVELLER BETTER UNDERSTAND THE RISKS OF BIODIVERSITY LOSS AND THE OPPORTUNITIES TO TAKE ACTION AGAINST IT.

INNOVATING A NEW SERVICE CONCEPT TOGETHER

WE DEVELOP AND TEST A NEW TRAVEL CONCEPT WHICH WE WANT TO SPREAD TO OTHER PROTECTED AREAS IN FINLAND AND BEYOND.

KEY PARTNERS

METSÄHALLITUS

Metsähallitus arranges a work site where nature is restored and conserved. Metsähallitus provides tools and training for instructors/guides and recognition to the travellers for their efforts. Metsähallitus monitors the effectiveness of the conservation work for biodiversity.

HALTIA LAKE LODGE

A local nature tourism entrepreneur in the Nuuksio National Park plans and designs a group holiday package. The entrepreneur coordinates the program (including accommodation, activities, food and delivery services) and hires a professional guide to lead the group during the conservation work.

WHAT A CONSERVATION HOLIDAYS GIVES TO A TRAVELLER?

- A NEW KIND OF MEANINGFUL TRAVELLING EXPERIENCE THAT INCREASES THE UNDERSTANDING OF THE IMPORTANCE OF BIODIVERSITY AND HOW IT IS POSSIBLE TO REVERSE THE NATURE LOSS IN AN INDIVIDUAL AND SOCIETAL LEVEL.
- A MEANINGFUL ACTIVITY AND A MISSION FOR A HOLIDAY AND EXPERIENCE OF HOW ONE CAN IMPACT TO THE WELLBEING OF THE NATURE AND THE PLANET.
- HELPS FEELING LESS CLIMATE ANXIETY AND FLIGHT SHAME.
- IS A DIFFERENT KIND OF WELLBEING AND NATURE CARE HOLIDAY WITH A BREAK FROM DAILY ROUTINES AND STRESS.

> " I WOULD LOVE TO BE A PROMOTER OF BIODIVERSITY. I WANT TO PROTECT NATURE, BECAUSE IT'S OUR COMMON LEGACY. "
>
> CUSTOMER INTERVIEWS

Planet-positive conservation holiday concept

NATURE CONSERVATION FOLLOWS THE SEASONS

GETTING RID OF LUPINS
Lupin is an invasive plant that can crowd native species out of their habitats. It is important to remove them from the national parks. The best timing for removal is early summer.

MOWING A WILDFLOWER MEADOW
The meadow flora can be diversified by mowing it yearly. The best time for mowing the meadows is July.

BUILDING A TRADITIONAL FENCE
A traditional Finnish fence (e.g. roundpole fence) creates an oasis for beneficial decomposers and insects. The fence can best be built from May to September.

The conservation works are planned according to the restoration needs of Metsähallitus sites.

HOW CONSERVATION WORK IMPACTS ON NATURE LOSS?

MORE SPACE FOR MORE SPECIES
Restoration work removes invasive species that take habitat from other plants.

PROTECTS ENDANGERED SPECIES
The restoration of marshes and meadows restores the home of many endangered species.

CONNECTING WITH NATURE
The traveller gets a personal experience of promoting the wellbeing of nature and their own wellbeing.

THE CHAMPIONS OF CARBON CAPTURE
Versatile green environments, such as traditional meadows, are effective carbon sinks.

AWARENESS INCREASES
Travellers spread the message about the importance of biodiversity and gain an understanding of nature loss and tips on what they can do to impact more.

> **"** NUUKSIO NATIONAL PARK IS A GATEWAY TO THE FINNISH NATURE AND TRADITIONAL LANDSCAPES. THE WILD NATURE LIES IMPRESSIVELY CLOSE TO THE CAPITAL OF HELSINKI. NUUKSIO IS AN EXCELLENT PLACE TO GET TO KNOW AND PARTICIPATE IN CONSERVATION WORK THAT MAKES A DIFFERENCE. **"**
>
> CUSTOMER INTERVIEWS

A PILOT IN THE NUUKSIO NATIONAL PARK IN 2023

A TRAVEL PACKAGE
A nature conservation holiday weekend tailored for group travellers, including one day for conservation work.

WORK SITE
Mowing a meadow in Tyynelä in Nuuksio National Park. An old meadow can be turned into a lush place with more diversified species.

TARGET GROUP
A group of international students arriving at Haltia Lake Lodge through Aalto University ARTS Summer School.

TIMING
The best time is around mid July and August when the seeds of most meadow species have matured.