



Barriers to implementing environmentally focused sustainability change in organizations

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Organizations have a significant role to play in fighting climate change, as a sustainable economy requires sustainable organizations. Both private and public sector organizations need to move away from traditional operating models to new ways of operating, which require large scale organizational changes. Unfortunately, the majority of organizational change programs fail.

The purpose of this thesis was to generate knowledge about barriers to environmentally focused sustainability change in organizations from the external change agents' perspective. Furthermore, the research focused on identifying the key barriers to sustainability change in organizations, match them with the central phases of the change process and develop understanding of common barriers in each phase. The research will provide organizations with more information about potential barrier they might face in each stage, so they can plan resources accordingly. Change stages with several barriers can be considered critical for success, as the risk of failure increases with the number of potential barriers faced during each phase.

The research questions were (1) what are the key barriers to environmentally focused sustainability change in organizations, (2) which phase of the change process is the most challenging (3) what are the most common barriers in each phase and why?

The study material was collected through interviews with sustainability and change consultants in March 2023. The consultants were involved in one or more of the change process phases within client organizations. The material was analyzed by a thematic analysis approach.

The thesis aimed to enhance knowledge about barriers to environmentally focused sustainability change in organizations which can help them prepare for the upcoming change and ultimately increase the likelihood of permanent and successful change. Additionally, the contribution is to document valuable insights from subject experts within academic literature.

The research validated typical organizational change barriers within the environmental sustainability context and identified additional barriers. The research also identified the planning stage as the most challenging change stage, highlighting the importance of effective change planning. Furthermore, the research articulated some typical mistakes organizations make when implementing change programs. The results also revealed key considerations when preparing for this type of change, which are also presented in the results.

Overall, the research generated new knowledge on environmentally focused sustainability change in organizations, which can help improve the change program success rates.

Keywords: Organizational change, sustainability change, environmental sustainability change process, barriers

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1 Introduction

Climate change and the transition to a more sustainable economy are some of the biggest challenges of humankind. An overwhelming amount of evidence shows how the current way organizations are operated is not sustainable, and significant change is required to meet global sustainability targets.

Organizations have a significant role to play in fighting climate change, as a sustainable economy requires sustainable organizations. Organizations are complex systems, which are intentionally coordinated to achieve a common goal or set of goals. This includes private organizations, such as corporations and businesses, public organizations such as governments, foundations, charities and clubs (Robbins 2001). To become a sustainable organization, many organizations will be required to undergo large-scale organizational change, as most organizations currently have an unsustainable operating model. According to Lozano (2018) organizational sustainability consists of integrating sustainability into all aspects of the organization, such as strategy and management, in addition to assessment and reporting. Eventually, all organizations, especially commercial organizations, will be required to integrate sustainability across the organization, or they will cease to remain competitive.

The history of organizations and sustainability is complex, especially when focusing on commercial organizations, as traditionally fossil fuels and natural resource depletion have been crucial components of economic expansion, and largely to blame for today's current environmental crisis. The creation of modern capitalism was essentially the story of manufacturing firms growing large by employing enormous amounts of fossil fuels: the railroad industry; the oil industry; the electric industry, the chemical industry, the car industry and others. Fast forward to the twenty-first century, many businesses still generate value and economic growth by using fossil fuels and natural resources (Bergquist 2017). The negative impacts of this economic model were highlighted several decades ago, when the United Nations Brundtland Commission report 'Our Common Future' outlined the issue in 1987 (World Commission on Environment and Development (WCED) 1987). The report implies limitations on environmental resources to absorb the effects on human activities, and how better managed resources can make way for a new era of economic growth. The report also appeals to different types of organizations to act within their remit. Public and third sector organizations can create change by influencing policy and by pursuing sustainable supply chains, while the conclusion for private organizations implies that they could no longer regard natural resources as unlimited and usable without liability (WCED 1987; Blowfield 2013).

The report was one of the first indicators that the way organizations are operated needs to change. The report laid the ground work for the Earth Summit in Rio five years later, which

was the largest environmental conference ever organized. Examples of the summit's outcomes include the Convention on Biological Diversity, the Framework Convention on Climate Change, the Rio Declaration on Environment and Development, and Agenda 21, which required countries to draw up a national strategy of sustainable development. The summit also led to the establishment of the UN Commission on Sustainable Development (UN Commission on Sustainable Development 2007).

The summit raised awareness on the subject, and soon sustainability and the need for change was becoming a movement. Only two years after the summit in 1994, Shrivastava and Hart predicted that environmentalism would become a driving force for economic, social and political change by the turn of the century. They predicted that organizations would be required to take a systemic view of the environment-organization relationship and the transformation of the entire organizational design, including competitive strategy, structure, formal systems, organizational processes and culture. (Shrivastava & Hart 1994).

The prediction eventually became a reality and many organizations have woken up to the urgency. This is reflected in the growing number of organizations taking action by embedding sustainability in their mission statements, promoting eco-efficiency practices, following triple bottom line reporting guidelines, and celebrating sustainability achievements in glossy publicity materials. Despite this, as a society we still have a long way to go. The Intergovernmental Panel on Climate Change (IPCC), which is a body of the United Nations charged with advancing scientific knowledge about climate change caused by human activities, states that over the past three decades global warming has continued to accelerate due to human activities continuing to increase greenhouse gas emissions year after year (IPCC 2018).

Making the required changes is not easy, as most change initiatives fail at a rate of around 60-90%, depending on the source (Mosadeghrad & Ansarin 2014; Hughes 2011). However, organizational change involving sustainability is even harder to achieve. Davis-Peccoud, Stone and Tovey (2016) estimated that only 12% of corporate transformation programs and 2% of sustainability programs achieved their aims. They state that sustainability transformation adds another dimension to already challenging organizational change programs. They list some reasons behind failure, including leaders overlooking the difficulties employees face when implementing new behavior and competing targets (business vs sustainability targets). Considering the importance of these programs for the future of humankind, it is critical to understand more about these programs and relevant challenges. This includes information about typical barriers and when they occur so that organizations can learn about and mitigate these barriers. Greater awareness of potential barriers can generate dialogue and knowledge exchange about possible solutions, which can help improve sustainability program success rates.

1.1 Aim and objective

This thesis aims to enhance knowledge about barriers to environmentally focused sustainability change in organizations, with a focus on consolidating and validating previous literature focusing on generic organizational change. In practice, the purpose of this thesis was to validate and identify the key barriers to sustainability change in organizations, match them with the central phases of the change process, and develop understanding of common barriers in each phase. By documenting the results, this study can help prepare organizations for their upcoming change, and ultimately increase the likelihood of permanent and successful environmental sustainability change. Additionally, the contribution is to document valuable insights from sustainability change experts within academic literature.

1.2 Background

This research covers all types of organizations and does not focus on one sector or geographical location. As the aim of this research is to enhance knowledge about barriers to environmentally focused sustainability change in organizations, it was important to ensure the data analysis would be objective and representative of typical barriers. Therefore, it was important to first identify from where to source this information.

The high failure rates have resulted in many organizations seeking external help, either by hiring sustainability change experts or hiring consultants. Over the past decades there has been a growing number of consulting firms specializing in sustainability, transformation, and business change. This suggests that the demand for support services is increasing and that organizations are finding it difficult to handle change (Parry, Kirsch, Carey & Shaw 2014). Consultants are often perceived to have a wider knowledge about any subject and objective views due to their exposure of different organizations and industries. Furthermore, consultants gain in-depth understanding of the issues each organizational experiences by gaining access to confidential and sensitive information in multiple client organizations, which is rarely publicly available due to commercial sensitivities.

Sustainability consulting is a one specialization within the broader consulting industry. Consultants provide expertise advice for clients based on the clients' needs. This can include advice on strategy, marketing, finance, operations and so on (Galea 2017). According to Florzak (1999) consulting industry covers all subject areas that a company can experience challenges with. Consultants fill a gap in internal knowledge or competency, and they can even act as 'hired guns' in difficult situations (Greiner & Metzger 1995).

Due to the broad nature of consulting, the industry has also expanded into sustainability related matters in recent years. Sustainability consultants' services focus on overcoming sustainability challenges, while generating value for the business and its clients. They are often hired to help to make sense of problems the business is not used to dealing with. They

also help clients to uncover new value streams - which can be considered the goal of consulting (Galea 2017). Sustainability consultants may have different titles, however, for this study, sustainability consultants are defined as ‘consultants providing consulting services around sustainability transition and change.’ Examples of sustainability services include strategy development, baselining, roadmaps and strategic initiatives, communication and engagement plans, portfolio management, change impact assessment, culture initiatives, business strategies and value development. It is good to note that some sustainability consultants specialize in the technical aspects of sustainability, providing technical advice to clients. Experts focusing on only this aspect of sustainability have been excluded from this study.

Consultants often have access to commercially sensitive information about their clients, and therefore hold detailed knowledge about the business and the reasons behind their challenges. The experience they have working with several clients is part of the reasons for hiring consultants. The knowledge they hold is not generally publicly available or it is highly sensitive.

After careful consideration, sustainability and change consultants were selected as the source for the research data due to their extensive and broad experience working with organizations. This research does not focus on one type of organization or a specific geography, so it was important to source information which was objective and representing several organization types, industries, and locations. In summary, the research results presented in this study represent the barriers to environmentally focused sustainability change in organizations from the point of view of consultants. By consolidating consultants experience, this research will generate new literature around the subject, which will help achieve the study’s aim of enhancing knowledge about barriers to environmentally focused sustainability change in organizations. The information can then be shared so that businesses can benefit from their experience and improve the success rate of these vital programs.

1.3 Structure of the thesis

This thesis is divided into five chapters. The first chapter introduces the topic and provides background to the data source selected. The background section explains why the data was sourced from consultants, the role of consulting and their perceived value to customers. The second chapter presents the knowledge base for the study. It defines what is sustainability and environmental sustainability, what do they mean within organizational change, organizational change, barriers to change and what is the change agent’s role in the change process. The third chapter covers the research approach and method, explaining the development setting, including data collection and analysis. The fourth chapter presents the research results, and the fifth chapter concludes the thesis with a summary and reflection, including limitation and recommendations for future research.

2 Knowledge Base

This chapter describes the knowledge base for this thesis. Key concepts presented include organizational change, change management and barriers to change. The chapter will also explain key definitions used in this study, such as environmental sustainability and change agents. The topics covered in this chapter present the foundation for the research activities, which are described later in this thesis.

2.1 Defining sustainability and environmental sustainability

Among the most important goals of our time are goals related to sustainability. Dresner (2002) states that the term 'sustainability' was first used in 1974 by the World Council of Churches as an adjective in Sustainable Society. The term was meant to integrate environment and social issues with economics. The term consisted of four principles: (1) Social stability, (2) Food supply, carrying capacity and biodegradation, (3) Reduction of non-renewable resources use, and (4) Human activities that have little or no impact on the global climate (Dresner 2002). A few years later in 1980, the same concept was connected with Sustainable Development in the World Conservation Strategy. The strategy defines sustainability as "For development to be sustainable it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short-term advantages and disadvantages of alternative actions." (IUCN et al., 1980, p. 1). Furthermore, one of the most recognized definitions is by the United Nations Brundtland Commission (1987), where sustainability is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). The definition is widely used even today, for example by the EU Commission. In more recent years, several different definitions have emerged, some with a more business focus. For example, Business Strategies for sustainability development guide by the International Institute for Sustainable Development published in 1992, outlines how sustainable development means following a strategy and integrating activities that are both commercially viable, while making sure there is enough human and natural resources for the future (International Institute for Sustainable Development 1992). Overall, there are several different definitions for sustainability. Most of the definitions have something in common - they all are holistic, and consider three different elements: social, economic, and environmental.

This study focuses on one of the elements of sustainability: environmental sustainability. Like sustainability, environmental sustainability has also several definitions but all of them are related to the natural and ecological environment. The concept covers ecology, biodiversity, and natural environment. Morelli (2011) reviewed several different definitions and ultimately presented one overarching definition for environmental sustainability, which is based on the Brundtland Commission definition for sustainability. Morelli defines environmental

sustainability as “meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them.”

Environmental sustainability is directly linked to one of the biggest challenges facing our world: climate change. IPCC (2018) defines climate change as ‘a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer.’ The Framework Convention on Climate Change (UNFCCC), in its Article 1, provided additional details to climate change by defining it as ‘a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’ (IPCC 2018).

Climate change has already caused irreversible damage to our planet and way of life. The Technical Report for the third Climate Change Risk Assessment (CCRA3) published in 2021, identifies more than 60 climate risks which cut across multiple sectors of our society and pose a threat to everyone. The impacts range from deterioration in soil health and agricultural productivity, which can cause food scarcity and increase world hunger, to reduced water availability affecting alternative energy supplies in some parts of the world. (Betts, Brown, Fung & Lowe 2021.) Environmentally sustainable activities are at the core of limiting our exposure to these risks, like reducing the use of fossil fuels.

2.2 Organizational change and environmental sustainability

Organizations change all the time, and most of the change is unplanned and happens over a long period of time. Most changes are also closely linked to wider changes in the economy, and gradual changes reflect wider changes (Burke 2018). These include the use of the internet and personal devices influencing the move of sales from brick & mortar stores to e-commerce sites.

In addition to unplanned and gradual change, organizations can also decide to implement change proactively. Many scholars even claim that organizations must change and adapt if they want to survive in the ever-competitive economy, especially in the long-term (Burke 2018). This leads several organizations to regularly adopt new ideas, concepts, or behaviors, which influence the whole organization. Changes which influence the whole organization are often referred to as organizational change. Organizational change involves changing its present state and moving towards a future state of operations. The status quo of the business is challenged. An important distinction is that organizational change happens at all levels of the organization, and therefore it involves all employees within the organization. If one team within an organization wants to make changes to their practices, it does not count as organizational change (Burnes 2004). Kotter (1996) even imply that that organizational

change is the same thing as organizational transformation, as his approach to organizational change should lead to organizational transformation.

Organizations are complex systems, which are intentionally coordinated to achieve a common goal or set of goals. This includes private organizations, such as corporations and businesses, public organizations such as governments, foundations, charities, and clubs. They are open systems which receive input from the wider environment they operate in. They transform the inputs, giving them back to the external environment (Robbins 2001; Odor 2018).

Organizations also have clear boundaries, which act as an interface between it and its operating environment. All operations are performed within the boundaries (Odor 2018). This means organizations can influence most things within their boundaries, which can have an impact on the operating environment as a result. Organizations can change the way they operate (within boundaries), changing the way their stakeholders engage with them (external environment). When several organizations change the way they operate, they can change the way the industry operates. Examples of this could be organizations closing customer-facing offices and staff starting to work from home. This has forced customers to engage with these businesses virtually.

Organizational change can have several goals, however some typical goals include performance improvement, prevention or elimination of organizational crisis and enhancing organizational competitiveness in the market. Other common reasons for change programs include changing the vision and mission statements, organizational strategy, organizational cultures, organizational structure, system, techniques of production and leadership style (Isern & Pung 2007; Yang, Xhu & Yi 2009).

One of the major goals of organizational change is to achieve organizational sustainability, and more specifically environmental sustainability. Increasing numbers of organizations have realized the importance of climate change mitigation and are making it a priority. Evidence behind the need for change is growing, creating pressure for public and private organizations to act. This has prompted many organizations to start their transformation journey by pursuing sustainability change within their organizations. As of February 2023, nearly 22,000 businesses have signed the UN Global Compact. The UN Global Compact provides standardized terminology for corporate responsibility and provides guidance for all businesses regardless of size, complexity, or location on the subject. By signing the commitment, the businesses publicly declare their commitment to transform their business principles, making a statement about their business values and benefitting both society and the company's long-term success (UN Global Compact 2023). In theory, this means at least 22,000 businesses globally have commitments to making sustainability change within their organization.

Sustainability change is one type of organizational change, as it challenges the status quo. Tipu (2022) conducted a systematic literature review of 62 peer reviewed articles and defined

sustainability change in organizations based on Stouten et al. (2018) and White (2013) as “the deliberate activities that move an organization from its present state to a desired future state in order to balance environmental, social, and economic concerns.” This thesis focuses on environmental sustainability, and therefore the definition for environmentally focused sustainability change in organizations can be described as “the deliberate activities that move an organization from its present state to a desired future state in order to balance environmental and economic concerns.” The description aligns with Lozano’s (2018) description of organizational sustainability presented above.

When businesses implement environmentally focused sustainability changes, they place focus on public and social gains (by mitigating the challenges faced) over financial gains (increased profits at all costs). Examples of environmental sustainability change in organizations include adopting circular economies within business and removing carbon emissions across business operations. Both examples require strategic thinking at all levels of the business, and it involves changes that can promote a wider change. For example, businesses adapting circular economy principles will only partner with suppliers with similar principles, therefore supporting other sustainable businesses and taking business away from traditional suppliers. Environmentally focused sustainability change in organizations can become a movement and transform whole economies (Saurav & Viney 2020; Davis & Coan 2015).

It is important to note that there are several closely related concepts, such as Corporate Social Responsibility (CSR), however these concepts should not be used interchangeably. For example, CSR is concerned with how a company treats its stakeholders in an ethical or socially responsible manner (Hopkins 2006), while environmentally focused sustainability change in organizations goes beyond stakeholders, and it includes all aspects of the organization.

2.3 Starting point for change

Sveningsson and Sörgärde (2020) suggest there are two types of changes: planned and emergent changes. Planned change has received more attention in academic literature as it explains change as an action followed by objectives and intentions. Planned change is introduced intentionally, and the change process is planned by the organization. Planned change is driven by organizations wanting to change and plan actions accordingly. In planned change, activities and interventions follow several preordained steps that are checked off as the work of organizational change progresses. In contrast to planned change, emerged change is change which grows over a longer space of time, through small and often local initiatives and engagements. Within the literature on emergent change, two broad theoretical orientations can be traced: one that is more descriptive and interpretative (focusing on meanings and understandings) and another that is more prescriptive and tool-oriented

(focusing on how to influence and control). The change types may overlap; however the origin of the change types is fundamentally different (Sveningsson & Sörgärde 2020).

Organizations approach both change types from different point of view, which can influence the change process and phases. The first way is to view change as a rational or strategic decision, where the organization decides to implement change. This suggests change is a linear process, where the initiator can influence the outcome. The second way of viewing change assumes change is an evolutionary selection, where organizations adapt to changes around them. This viewpoint suggests organizations need to change by necessity, regardless of if they want to or not. The major difference between the viewpoints is the time to plan for the change. A rational and strategic decision to change allows organizations to prepare and plan for the change and decide when to change. When organizations are forced to react, there is less time to think and plan about the action, until it might be too late (Flood & Fennel 1995).

Organizational change can be prompted by both internal and external drivers. Internal and external drivers are presented in Table 1 below.

	Internal	External
Change forces	Management philosophy, structure, culture, the system of power control, inadequacy of administrative process, individual/group expectations, person-focused change, structure-focused change, technological change, profitability issues, and resource constraints.	Political forces, the level of technology used, market changes, change in customer needs & preferences, competitor activity, quality and standards, government legislation, political values, and changes in the overall economy

Table 1: Internal and external drivers for change (Wilson 1994; Murthy 2017)

Some academics argue that even the internal drivers for change originate externally. For example, a strategy change is an internal driver but is often prompted by external market conditions. Therefore, understanding external drivers can help anticipate future changes required (Burke & Litwin 1992).

It can be assumed that sustainability change in organizations is no different, and the starting point for change can come from within the origination or externally. However, as the need for sustainability change is largely coming from an external challenge (i.e., climate change),

arguably all change drivers for sustainability change could be considered external. Even when management has changed their philosophy to be more sustainable, it is likely linked to a shift in the individual mindsets on climate change. A review of key drivers for environmentally focused sustainability change in organizations based on literature is presented below.

Political and governmental forces

Political and governmental forces are external drivers for change, and they stem from changes in the political climate and governmental priorities. Changes in political values and the overall economy are part of this force. This can manifest through changes in legislation. Key examples of this are the Sustainable Development Goals (SDGs) and the Paris Agreement. Both agreements are supported by the participants' governments, indicating changes in political priorities nationally.

The SDGs are a set of 17 goals tackling key global challenges by 2030. The goals were announced in 2015 and more than 190 governments have committed to the goals. The goals were ratified by the United Nations as part of Agenda 2030, an agreement to improve global sustainability by 2030. The 17 goals cover all aspects of sustainability, and they function as actionable targets for all sectors within an economy. While governments are the key actors in driving the SDGs, business is an important stakeholder on account of its resources, its ability to innovate, and its scale and reach. (Department of Economic and Social Affairs 2015.) To illustrate, the former UN Secretary General, Ban-Ki-moon, highlighted how important the private sector is for SDGs, "I am counting on the private sector to drive success. Now is the time to mobilize the global business community as never before. The case is clear. Realizing the Sustainable Development Goals will improve the environment for doing business and building markets. Trillions of dollars in public and private funds are to be redirected towards the SDGs, creating huge opportunities for responsible companies to deliver solutions" (UN News 2015).

The Paris Agreement is a legally binding treaty on climate change. It was adopted in 2015 during the Paris 21 COP by 196 parties. The goal of the agreement is to limit global warming to below 2°C, compared to pre-industrial levels. The agreement is still a landmark example of multilateral climate change process, as it was the first time when a binding agreement brought all nations together for a common cause to undertake ambitious efforts to combat climate change and adapt to its effects. From 2024, countries will start to report transparently on actions taken and progress in climate change mitigation, adoption measures and support provided or received through an established enhanced transparency framework (ETF) (United Nations 2015). Many of the activities set by participating governments impact private companies, requiring them to comply and align with the legislative actions. As a result of the agreement, hundreds of CEOs committed to aligning their business targets to keep the

global temperature increase below 2 °C, and more than 50 companies promised to strive for 100 percent renewable energy. (Oxfam 2015.)

Political and governmental forces can also be at a local, regional, and national levels. For example, all large companies and all listed companies (except listed micro-enterprises) in the EU are required disclose information on their risks and opportunities arising from social and environmental issues, and on the impacts of their activities on people and the environment. The law, 'Corporate Sustainability Reporting Directive (DSRD)' (2022/2464/EU) entered into force in early 2023. The law is part of the 'European Green Deal' and it will help investors, civil society organizations, consumers and other stakeholders to evaluate the sustainability performance of companies. The first companies will have to apply the new rules for the first time in the financial year 2024 for reports published in 2025 The law has a direct impact on large organizations operating in the EU (European Commission 2023).

There are several other political and governmental forces, from local plans, national strategies, incentives, and tax breaks for green actions. These incentivize all types of organizations to make environmentally friendly decisions.

Changes in consumer needs and preferences

Consumption-based perspective believes that consumption is the ultimate driver of all production activities and services provided. Consumers generate demand for products and services, and therefore hold significant power in the markets. Consumers evaluate the options and choose the option that most closely meets their needs. Producers need to consider the consumers' preference and continuously improve their options to remain competitive (Bergman 2020). For example, consumers might prefer flavored toothpaste and generate demand for that product. This would mean the sales for flavored toothpaste goes up, while the sales of normal toothpaste go down. If consumers prefer sustainably produced clothing, this will generate demand for sustainably produced clothing brands and create an incentive for companies to meet this demand.

Consumer trends change regularly and are influenced by many factors. Rani (2014) explains that consumer behavior is largely influenced by four major factors: cultural, social, personal and psychological. Cultural factors are part of every society and an important driver of individual behavior. Cultural factors include aspects of wider society and trends within society. Environmental consumption and sustainability are an increasing trend across the globe, with an increasing number of consumers selecting to purchase sustainably produced products and services. To serve these consumers, businesses need to implement the necessary changes in their operations. The more consumers that make the same decision, the bigger the market grows (OECD 2008).

Financial market changes

Clarke, Feiner and Viehs (2015) identify sustainability as a growing trend in the financial markets, moving into the mainstream investment world. Historically, sustainability has been more appropriate for wealthy investors, who were not as worried about making significant financial returns on their investments. However, this has been changing over the past decade as sustainability investment has become a mainstream activity. For example, a United Nations initiative called 'Principles for Responsible Investment' aims to help investors integrate sustainability into their portfolios and was signed more than 1,400 investment organizations who collectively manage about \$60 trillion. The trend is expected to accelerate as industry evidence shows that asset owners and managers consistently require more data on their assets' sustainability performance (Park & Jang 2021). This trend is parity accelerated by changes in consumer trends as more investors demand alternative investment destinations. This acts as a clear indication that companies will need to act more sustainably to attract investments from the growing group of environmentally conscious investors.

Reputation and image

Organizations' reputation and image can be influenced due to several factors; for example: changes in consumer preference, competitor activity, and market changes. All of which are external factors for change. Both concepts are associated with the perception of the organization by its stakeholders. There is variation depending on the type of organization and the industry it operates in; however, typical stakeholders include employees, shareholders, suppliers and customers. (Freeman 1984.)

According to Yan, Espinosa-Cristia, Kumari and Cioca (2022), an organization's image is more about how it affects people's impressions of the company, while its reputation is about how it affects people's perceptions of the firm's products, leadership, and finances. Both a company's image and reputation can have a significant impact on its revenue and profitability. Even if a company is well known, a negative public image might harm its bottom line. A brand can increase its success by hiring image consultants to improve their public image.

The way organizations manage and react to climate change is directly linked with their reputation. Stakeholders want to know organizations care about sustainability and are taking action to mitigate it instead of causing more damage. A systematic literature review of more than 150 relevant articles demonstrated that sustainability is a way to enhance stakeholder acceptance and improve corporate reputation. (Gomez-Trujillo, Velez-Ocampo and Gonzalez-Perez 2020.) One of the typical ways for organizations to do this is to develop an environmental, social and governance (ESG) strategy and report on ESG performance annually. Reputational risk related ESG performance have been found to limit firm growth

opportunities, thus causing long-term business risk. Examples of ESG metrics include carbon emissions, water consumption, waste generation (environment), employee, product, customer related (social) and political lobbying, anti-corruption board diversity (governance). (Fafaliou, Giaka, Konstantios and Polemis, 2022.)

2.4 Change management

Large scale change will impact all aspects of the organizations, and therefore to manage it effectively, dedicated resource and methods are required. The change management term generally refers to the management techniques require to manage the change process. It is a process of managing change activities, rather than one single event or action which is repeated. In practice, change management is about finding the most optimal way to achieve the desired change (Lauer 2021). The individuals managing change are typically responsible for planning, developing, leading, evaluating, assessing, supporting, and sustaining a change implementation. However, it is important to note that change management does not include the interventions nor the methods to derive the change goals, e.g., deciding that the change program goals are not part of change management (Lieder & Rashid 2016; Lauer 2021).

The existence of change management as a concept indicates that a structured approach to change and dedicated tools not only exiting but can also allow effective implementation of change (Teczke, Bespayeva & Bugubayeva 2017). While a structure approach to change management is possible, that does not mean there is consensus on what change management should focus on - people or the organization? Competences or structures? Change management can focus on delivering fundamental change in processes, calling into question the established methods and foundations, or focusing on implementing changes which occur within the organizational development. The second approach aims increasing the efficiency of the company by changing the established norms and values (Teczke et al. 2017). Furthermore, change management and its focus can also be classified according to the direction of change (Teczke et al. 2017):

- The “Theory O” approach views an organization as an evolving learning system. Changes target the development of organizational competencies and abilities. The focus is on the behavioral aspects of the organization and on the bottom-up changes.
- The “Theory E” approach involves changes to the structure of the organization, with a focus on economic performance (or improving the economic performance). This approach usually involves change implementation from the leadership from top to bottom, allowing rapid change management.

Change can also be viewed as a project, where the required change is viewed as a one-time action with a clear starting point and result. This approach is usually favored when significant changes are necessary, such as updating the organizations strategy or restructuring the

business model due to mergers or acquisitions. This approach has an emphasis on managing specific tasks, which make the overall change managed concrete and relatively linear. Disadvantages of the approach include the risk of achieving a wider scale change (e.g. objectives are not met), and the possibility that the origination is not ready for the implantation and a new change project is planned. (Teczke et al. 2017.)

Rousseau and Have (2022) developed a science-based approach to change management in organizations. The duo argues that several organizations make organizational changes based on limited or inaccurate information, which can lead to poor change management. When acting before understanding, the real problem can lead to failed change initiatives. They argue that change implementation is more likely to be successful when using science-based practices and validated evidence from four sources: scientific, organizational, stakeholder, and practitioner experience. This approach differs from many others, as change management activities would be designed based on the problem, rather than predefined steps (Rousseau & Have 2022).

Despite the change management approach selected, all approaches aim to manage the change process to ensure a successful change implementation. By doing this intentionally, it can bring several advantages to originations (Teczke et al. 2017; Kumarasinghe & Dilan 2021):

- Creating a unified organizational approach to change, implying the establishment of all processes, the use of necessary tools, and the formation of a unified system of goals.
- Reducing resistance to change, which results in avoiding a drop in productivity and the occurrence of conflicts.
- Consistency and sustainability of changes accelerates learning, the ability to continuously improve the processes of introducing changes, and development of an organizational development strategy.
- Managed change enables organizations to shift focus and respond to new information quickly.
- Change can be managed centrally with minimal distraction for organizational daily operations.
- Improve the change process, decision making, financial returns and others.

Overall, change management is the process of managing the desired change, which includes controlling and stabilizing the process. Therefore, change management also covers the management of change barriers (Singh, Saeed, & Bertsch 2012).

2.5 Change process and phases

Change occurs as a process, and it includes many events and steps. Understanding the process of change can help in planning for it and support successful implementation of change. The

importance of the process has generated interest in the topic resulting in several different change theories. Teczke et al. (2017) concludes that there is not a right or wrong way of viewing change, and it's not possible to decide which model is the 'best.'

One of the most instrumental theories is from 1947 and was developed by a psychologist named Kurt Lewin. Lewin's model is relatively simple, with only three phases: Unfreezing, Changing and Refreezing. The model explains the forces to maintain the status quo, and what the forces are driving change. It is explained that it is possible to push for change by limiting the forces involved in maintaining the status quo and increasing the forces that drive change. The model also has an emphasis on knowledge sharing and the importance of leadership when going through change. (Lewis 1974.) The three phases are summarized below (Lewis 1974):

- Unfreezing is the first stage, and it is the preparatory stage for change. During this phase the driving forces for change overtake the restraining forces.
- Changing is the middle phase and is the phase when the change happens. During this phase, relevant people have adopted and learned the new systems, structure, and behaviors.
- Refreezing is the last phase, during which the change is reinforced. Reinforcing change can be done through efforts such as feedback and organizational rewards for correct behavior.

While the world has changed since the model was first published, it is still considered relevant and one of the most foundational models for future models. It is one of the simplest changes models and has a strong focus on resistance-reducing tactics. Addressing resistance can lead to a less stressful change process, improving the changes of successful implementation. (Cummings, Bridgeman & Brown 2015.)

Kurt Lewin's three-stage model was foundational to the four-stage model developed by Bullock and Batten (1985). The duo reviewed more than 30 change models and evaluated the models by using a multicriteria model. They conclude that none of the existing models satisfy all the criteria, and therefore they developed a new model that would meet the criteria. The new model consisted of four phases, which are summarized below (Bullock & Batten 1985):

- Exploration phase: becoming aware of the need for change; deciding whether to make specific changes and commit resources to planning the changes; searching for a consultant or facilitator to assist with planning and implementing the changes; establishing a contract with a consultant which defines each party's responsibilities.
- Planning phase: understanding the organizations problem or concern; collecting information to diagnose the problem; establishing change goals and designing appropriate actions to achieve these goals; getting key decision makers to approve and support the proposed changes.

- Action phase: implementing the changes derived from the planning, including arrangements to manage the change process, evaluating the implementation activities, and feeding back the results to make any necessary adjustments.
- Integration phase: consolidating and stabilizing the changes so that they become part of normal everyday operations; reinforcing new behaviors through feedback and reward systems and gradually decreasing reliance on the consultant.

A while after, widely recognized change model was developed by John Kotter. Kotter (1996) introduced his idea for leading change in his successful book 'Leading Change'. Kotter outlined eight phases of change, explaining that the reduced number of phases simplify the change process and creates an illusion that change is simpler and more straightforward. The model was developed based on the phases he felt caused change failure (Kreitner & Kinicki 2007). The eight stages include: establish a sense of urgency, form a powerful guiding coalition, create a vision, communicate the vision, empower others to act on the vision, plan for and create short-term wins, consolidate improvements, and produce more change, institutionalize new approaches. The phases are described briefly below (Kotter 1996):

- Establishing a Sense of Urgency includes explaining the need for change to the relevant stakeholders. Once enough people believe the change is required, this will create a sense of urgency for change.
- Forming a Powerful Guiding Coalition includes creating a group of stakeholders from all parts of the business to champion the change. Members of the group will initiate change within their respective departments and levels, pushing for and championing change. The group should consist of individuals with the required knowledge, skills and authority to ensure successful change.
- Create a Vision is the phase when the shared goal for change is articulated and formalized. Without a clear understanding of the desired end stage, all steps leading to it are more difficult.
- Communicating the Vision includes regularly communicating the new vision (e.g., goal of the change) and reason behind it. The messaging should be clear, so that it can easily be understood even in a short time.
- Empower Others to Act on the Vision, includes removing obstacles to achieve the vision. Before relevant stakeholders can achieve the desired change, barriers need to be removed.
- Plan for and Create Short-term Wins, recognizes periodic wins and those who helped to achieve them. This will ensure relevant people don't get discouraged.
- Consolidate Improvements and Produce More Change, ensures long-term change is built on the smaller milestones. Kotter argues that many change programs fail as 'victory' is declared too early, so building on success is critical for real change.

- Institutionalize New Approaches aims to make changes part of the culture as change can take years to become part of the organization's culture. Long-lasting change therefore needs to be reinforced until it's the standard.

Each phase is considered essential for successful change. Kotter (1996) highlights how change leaders should pay attention to risks at each stage, as skipping phases or taking shortcuts is not possible.

Change process models have also been developed specifically for organizations. For example, Hiriappa (2008) identified four stages of strategic change within a business environment: determining the need for change, determining the obstacles to change, implementing change, and evaluating change. The first phase of the model requires organizations to determine that change is required. It involves analyzing the current situation and articulating the desired outcome. The step can be highly intentional or prompted by the external business environment. The next step is evaluating barriers that hinder the organization's change journey. Evaluating barriers will help overcome them, therefore improving chances of success. The third stage is implementation, which can follow either a top-down or bottom-up approach. This means the change can either be implemented from the senior level, driving change at all levels of the business, or start at the bottom level, eventually resulting in company-wide change. The last stage is the evaluation stage, which happens after the change has been implemented. All the intentional and unintentional impacts are evaluated. (Hiriappa 2008, 194-195.)

Some change models also focus on the people transition, rather than the steps necessary for an organization to achieve change. The most recognized model is the ADKAR model, which was built on the idea that most reasons for change failure are due to the people involved. The AKDAR model was developed based on a study, which looked at around 900 organizations across 59 countries over 14 years. The model was first published in 2003 and includes five actions and outcomes for individual change, which it says are required for a successful organizational change. (Angtyan 2019.) The steps include:

- (A) Awareness of the need for change
- (D) Desire to support the participate in the change
- (K) Knowledge of how to change
- (A) Ability to implement the change
- (R) Reinforcement to sustain the change

The model focuses heavily on the individual change, ensuring individuals involved are ready to make the transition to achieve the change. It is considered a 'softer' approach, as it is highly practical and easily tracked. It is much easier to track individual progress than organizational wide progress. (Angtyan 2019.)

2.6 Barriers to change

Research shows that most change programs fail, with estimations ranging between 70%-90% depending on the source (for example Balogun & Hailey 2004; Daly, Teague & Kitchen 2003). Failed change programs result in significant losses of financial resources, time and morale (Lewis 1999). Failed change programs can extend the change cycle, as organizations are required to start the process from the beginning. Delays in change programs mean longer waiting times until the benefits from successful change programs are unlocked. Therefore, identifying barriers and understanding why sustainability change programs fail is critical. There is no time to waste, as the world needs to move towards a more sustainable business environment.

There is extensive literature discussing organizational change barriers, and many academics have conducted systematic literature reviews of the topic. Many of these literature reviews have identified a long list of detailed barriers. For example, Mosadeghrad and Ansarin (2014) identified more than 50 barriers to organization change and Hagman and Glimskog (2015) identified a total of 90 soft barriers to change. Blanco-Portela, Benayas, Pertierra and Lozano (2017) conducted a systematic literature review and discovered that many barriers are overlapping or are caused by other barriers. For example, poor communication leads to lack of information among employees.

Rather than listing all possible barriers, this section provides an overview of the key barriers to organizational change. As there is limited literature of barriers specific to environmentally focused sustainability, or even sustainability change, this section outlines the current literature of potential barrier organizational change could face in organizations. Sustainability change is one type of change in organizations and is expected to face similar barriers. Information about environmentally focused sustainability barriers is included where available. This literature covers barriers within all industrial and sectoral contexts.

Resistance to change

One of the most quoted barriers to organizational change is the resistance to change, which can be explained as an individual reaction that arises from opposition to change (Folger & Skarlicki 1999). Forms of resistance include boycotting, reduced interest, avoidance, acting against the change, opposing views, strikes, negative perceptions, and attitudes (Coetsee 1999). Piderit (2000) divides resistance to change into three parts: emotional (frustration and aggression, which can influence attitudes), behavior (commission, intentional, inaction), and cognitive (unwillingness and negative thoughts about change).

Not only is resistance one of the most common barriers, but it is also said to be difficult to manage. Bovey and Hede (2001) conducted a study of 500 companies, and they found that most companies have found managing resistance difficult. They argue that resistance is a

natural reaction, as it involves moving from the known state to the unknown. As stakeholders have various capacities, they also have different readiness levels to adjust to change. They conclude that one of the key reasons resistance is difficult to manage is that organizations try to control and minimize resistance, rather than manage it strategically. (Bovey & Hede 2001.)

It is important to note that managers can also resist the change program, creating a barrier for the change. Harrington and Williams (2004) found that unless middle management has an active role in the change program, they might start resisting the change program and react to the uncertainty. Therefore, resistance to change is not only relevant for employees, but also all levels at the organization.

Lack of awareness

All stakeholders involved need to have awareness of the need for change and actions that are required from them. This barrier is closely linked to other barriers, such as employee resistance and poor communication. However, lack of awareness can also be observed individually. Gogate (2018) explains that individuals are likely to accept a change if they know the reasons behind it, what it involves and what the impact is on them. Lack of awareness about the change and necessary steps may cause other barriers, so mitigating that can reduce the likelihood of experiencing other barriers. Greater awareness can help make everyone involved see the benefits of the change, which can help gain wider support for the suggested change. Therefore, making sure everyone is aware of the activities is necessary for successful change implementation. (Elving 2005.)

Absence of clear vision or justification

All stakeholders involved in change will need to be able to visualize the end goal, as the new vision will remain an unknown otherwise. It is not enough that the senior leadership desires changes for them to understand what they want. Employees expect senior leadership to create an improved vision for them, communicate it effectively to them, and work together towards its achievement (Hoag, Ritschard & Cooper 2002.) Furthermore, Kotter (1995) explains how managers are expected to articulate and communicate the new vision to employees and inspire them to apply the changes required to achieve it. Without a clear vision, employees can have difficulty supporting the change. Kotter (1995) also points out that employees are unlikely to make compromises, even when they are frustrated with their situation, unless they know the proposed change is possible. This is difficult to achieve unless the vision and the justification is clear.

Stakeholders will also need to be able to understand the reasons behind the change. Beer (2003) explains that organizations should not start a change program based on temporary situations. This often suggests a low commitment and involvement in the change program,

which suggests it's not a priority of the organizations. Employees will not take the program seriously and will lack the interest to support the change. Organizations should rather analyze the reasons behind the change program clearly, which in return can produce a clear vision for the change.

Within sustainability programs, it is also important to clearly explain sustainability as a concept. Duarte (2015) found that lack of clarity in the sustainability concept is a significant barrier within organizations in Brazil when implementing sustainability changes. When organizations talk about sustainability, employees and other people don't always know what it means. Sustainability is not only one thing, so a lack of a clear definition of what it means can become a barrier to change.

Lack of organizational readiness

Organizational change can be driven due to various reasons, including those related to external pressure. These factors often leave organizations with a limited choice of actions, increasing the effort required for change. According to Weiner (2009), organizational readiness covers a variety of functions required for change, including staff readiness, resource availability and situational factors. Organizations with high readiness are more likely to initiate change, and prioritize it with greater persistence, ultimately improving the chances of successful change implementation. For example, if organizations have internal challenges such as financial, poor leadership and staff issues, change programs should be delayed until things improve. Nevertheless, Weiner (2009) concludes that there is no single way to increase organizational readiness in preparation for change.

Lack of leadership and poor management

Zel (2016) explains that 'leader' and 'manager' are different and have different purposes in a change program. Leaders sit above the management, had should have responsibility of the change and setting the direction. Leadership appoints managers who refer to operational dimensions, such as planning, directing, coordinating and organizing. They manage and execute the change vision, which comes from the leadership. Both roles are critical in the change process, and absence of them can be a barrier for change.

Leaders have a critical role in leading change programs, including communicating the new vision, commitment to the change, motivating employees and providing support to managers in implementation and when mitigation any barriers they face. Evidence shows that change programs are likely to fail if the change programs have inefficient leadership (for example Cummings & Worley 2005). Shvindina (2017) views leaders as 'mediators' between the organizational governance system and the operating environment. They state that leadership is not one clear role, but rather leaders have different roles which all need to be performed to deliver change. For example, it is not enough for leaders to set a clear vision, they also

need to provide guidance and reinforcement in moments of need. Leaders need to play all roles to successfully deliver change.

Evidence also shows that effective leadership has a positive effect on the success of sustainability change programs. Agyeri-Owusu and Okpoti (2019) discovered that higher levels of leadership commitment to green practices enhance both environmentally sustainable operations and firm performance. Their analysis also discovered that increased levels of sustainability within operations improved the firm's performance. Their research provides strong evidence to ensure leadership is committed in the change program, not only for environmental reasons but also for business performance reasons.

Many barriers to change are linked to how the change program is managed. Hrebiniak (2006) conducted a study of more than 200 managers, and discovered that poor management creates stress for employees, which in return can make employees resist change. Poor management also can mean the program does not progress as planned, resulting in wasted resources. Another form of poor management is making the change about the employee's status. Managers may see the change program as a risk of their position and recognition, resulting in excluding the remaining employees from the change program. (Venkatraman 2007.)

It is important to note that poor management and ineffective leadership are often linked as managers look up to the leadership for guidance and support. Poor management is often the result of lack of support from above or lack of training (Longenecker, Simonetti and Sharkey 1999). Ineffective leadership therefore leads to poor management.

Inadequate change planning

Change programs require significant effort from the organizations involved. The activities require careful planning, especially in larger organizations. Newall and Dale (1991) argued that lack of effective planning was the key reason difficulties emerged during change programs in eight UK-based companies. They conclude that poor planning results in poor performance, which leads to program failures. Good planning needs to take into consideration different phases of the change, and plan for techniques and tools to be used at each stage (Mosadeghrad & Ansarin 2014). Detailed planning can therefore prevent various problems, as different methods of overcoming have been planned for.

Competing demands

Many organizations have several targets and goals. Many of these goals exist at the same time, and the organization needs to prioritize and plan how to achieve all goals. It is common that the goals are conflicting, as different departments have different priorities. At an organization level, conflicting goals are often conflicting long-term goals. Longenecker et al (1999) states that conflicting demands influence daily operations, and therefore have a

negative impact on any ongoing organizational change programs. Tappen et al. (2017) evidence supports Longenecker et al. (1999) discoveries, as they found that having several major change initiatives at the same time made implantation difficult. Reasons for this might be difficulty in communicating both goals clearly, and in setting clear expectations for employees.

Rushing change

When organizations realize, they need to change, they often want to see results quickly. Isern and Pung (2006) explain that most change programs start with significant enthusiasm and support, and everyone is excited about the upcoming change. Teams rush to act, just to later discover that change can't be forced and does not happen overnight. When organizations don't deliver change results as quickly as desired, the initial enthusiasm dies off. This can be explained by Kotter's research. Kotter (1995) argued that organizations can't skip steps to achieve successful change. Many organizations think when they have identified the desired change, they can simply implement it. They might skip necessary steps and activities between the steps. Implementing long-term change can take several years (Beer 2003).

Lack of employee involvement and commitment

Employees have a key role in change programs, as they can be both enablers and obstacles to its success. Employee involvement is therefore critical to ensure they act as enablers for change. Lack of employee involvement can result in reduced commitment to the desired change or vision, which can lead the program to fail. Organizations need to ensure employees' needs are met during the change process (Alasadi & Askary 2014). Therefore, change programs need to make sure it has roles and activities for employees.

Scarcity of resources

Change programs require significant resources from the organizations, including time and cost. If organizations have a scarcity of the required resources, this can reduce the likelihood of delivering a successful change program. For example, Newall and Dale (1991) found that shortage of employees is one of the key reasons change programs fail. Organizations should therefore ensure they have enough employees to implement the change effectively. Similarly, if organizations don't have enough funds for the change program, the change program is likely to fail. Organizations need to allocate enough resources for the program, so companies with financial challenges should not begin change programs (Sebastianelli and Tamimi 2003).

Experience of previous failed change initiatives

Many organizations have implemented or attempted to implement other change programs in the past. If past change programs have failed, this can influence employees' attitudes

towards the new change proposed by the organization. Gleeson (2017) explains that employees remember past failures and the sacrifices they made during the process. When employees have experienced failure before, they get discouraged and stop trying. Roberto and Levesque (2005) support this, by stating that if employees have expected failed change programs in the past, they will lose trust in organizational change programs and they are more skeptical of any new initiatives by the same organization. This suggests that positive experiences of change programs will also encourage employee commitment and outlook of new change programs.

Poor communication

Effective communication related to organizational change is critical, but poor communication leads to several problems such as delays and conflict. Kotter (1996) argues that poor communication is one of the key reasons individuals are unable to understand the change vision, and generally the reason why individuals end up resisting the change. Hossan (2015) adds that communication is critical through the change process, however it is more critical in the early stages as individuals need convincing to participate in the change activities. Lack of communication can end up in change failure, which can lead to the whole organization's failure. Longenecker et al. (1999) interviewed 50 managers and found out that poor communication is the number one reason for organizational failure. When internal activities and changes were not communicated, they were not successfully implemented, which ended up causing issues across business operations. In some cases, businesses lost their clients or ran out of funds.

Kumarasinghe and Dilan (2021) states that many organizations struggle to communicate about change programs, even when they have a strong and viable plan for it. Plans are also often communicated too late, to avoid making changes to them. This does not allow enough reaction time from relevant individuals, which threatens the change success.

Lack of resources and capabilities

Successful change program implementation requires relevant stakeholders to have the right resources and capabilities to execute the program. This includes the right skills, expertise, abilities, attitude, knowledge, and other resources. (Huq & Martin 2000.) Providing employees with the right resources, like training and education programs, is therefore critical to securing their commitment to the change targets. Doyle, Claydon and Buchanan (2000) provided additional evidence, through their research from a managerial perspective, and claimed that if middle managers do not have the right expertise or capacity to handle change, it could affect the employees' attitudes towards change.

Structural barriers

Corporate policies and practices are not updated regularly, and sometimes they remain the same for years. Outdated policies can become inconsistent with the aims of the company, and therefore result in misalignment with change programs. (Gill 2003.) An example of this could be when operational performance is reviewed based on financial performance and reward policies are tied to financial results, resulting in conflicting incentives with change behavior and prioritizing sustainability performance. Incompatible policies and practices can therefore become barriers to sustainability change.

Incompetent change agents

Many organizations use change agents to help with the change program, however it is important that the change agent is competent. Change agents (internal and external) are critical to ensure successful change, as they can guide the change process and encourage personnel involved in the change process. Experienced change agents can help ensure a successful implementation of change programs, as they often have experience of similar situations. (Andrews, Cameron & Harris 2008.)

2.7 Change agents' role in the change process

As this study material is sourced from consultants, it is worth discussing the role consultants play in the change process. Background to the consulting industry is included in the instruction section.

People involved in change often belong to three different groups: those who implement the change, those who receive the change, and those in the middle. Change agents are part of the first group, as they are the group that implements the change (Barratt-Pugh, Bahn and Gakere 2012). Change agents have a critical role in the change process, as they can act as objective, unbiased enablers of change. They can also have additional functions such as coaching or mentoring towards the desired change. (Leppitt 2007.) Change agents champion the change and therefore can influence the success of the change.

Change agents can be both internal and external to the organization. The internal change agents are members of the organization, such as employees, while the external change agents are people outside the organization, for example, consultants. Kotter (1995) encourages organizations to use consultants to challenge the status quo. As external change agents, consultants bring a new point of view to the situation while applying lessons learned from previous project assignments. Evidence suggests that consultants possess the knowledge and skills to implement flexible and comprehensive change processes. Consultants may take a flexible approach to problem-solving, generating new and hybrid solutions (Case, Vandenberg & Meredith 1990).

Consultants have the potential to bring value to organizations in a change process, but their role has also been criticized. Based on a literature review by Finchman (2002), consultancies are sometimes considered expensive, ineffective and unimaginative, high-level and not acting based on clients' interests. Consultants sometimes lack the same understanding of how the change process is experienced internally within the organization (Finchman 2002).

Consultants rely on people articulating their challenges and needs accurately. Furthermore, they have in-depth experience of the process from various organizations, which can help them identify key barriers more consistently. Therefore, focusing on consultants' points of view can add valuable findings to this field (Anonymous consultant 2023).

Information about the consultants involved in this study will be presented in the 'Data Collection' collection section.

2.8 Synthesis of the knowledge base

The literature review highlights how sustainability change is a type of organizational change, therefore it can be expected to follow a similar process and phases as other organizational changes. There is no standard roadmap for a successful change program, resulting in several organizational change models. Some models are simple, indicating flexibility and the individual journey each organization goes through. Some models are more detailed, providing more details of the process, making it easier to track progress. All models are only guidelines, and the success of change programs depends on how organizational can mitigate and resolve barriers. In fact, Hallencreutz and Turner (2011) discovered that there is limited evidence behind claims that one model is preferred over others.

Based on the review, the four-phase model by Bullock and Batten (1985) was selected for this study. The review shows that while the actions might differ, most of the models have an emphasis on the planning phase. Bullock and Batten's model recognizes this by including a general planning phase between the exploration and action phases. This can cover all actions relevant for planning change, allowing flexibility and activities suggested in the other models (e.g. steps from Kotter's model and Hiriappa's model before the action of change).

This literature review also presented typical organizational change barriers during the change process. For some of the barriers there is indication of which part of the change process they occur in, but the evidence is not conclusive, so this study has not attempted to allocate barriers based on the phases before conducting the research. Furthermore, the identified barriers are documented in the literature, but it is highly likely that most organizations have additional barriers they face.

The key concepts from the literature review are summarized to facilitate the conversations with the consultants. The summary includes the key definitions from this study, key barriers from the literature review and the change process phases. This is visualized in Figure 1.

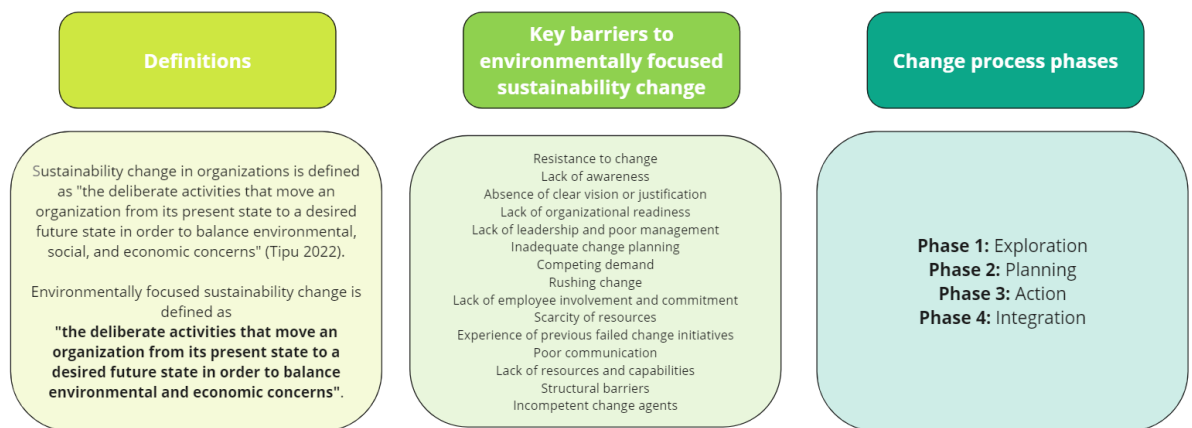


Figure 1: Literature review summary

3 Development Setting

Environmentally focused sustainability change in organizations can be difficult, and its success rate is lower than normal business change programs. There are various possible reasons for this, ranging from typical change barriers to organization-specific ones. Regardless of the source of the barriers, it is critical that all organizations involved in change programs identify and define typical barriers to help organizations prepare for them and allocate resources to overcome these barriers. Additionally, identifying challenging phases in the process can help improve change management efforts. This can help the organization to develop a realistic plan for the change program. Zel (2016) notes how having a well-defined plan for change can help improve change success rates.

Most organizations going through this type of change program have never done it previously. Organizations often have limited experience of what to expect and might find managing barriers and sustainability change difficult. Due to these challenges, many organizations hire external consultants to help them navigate the change or solve challenges they face during the process. Consultants are rarely involved through the whole change process unless the organization has resources for this. For this reason, understanding barriers related to each stage of the change process is useful. When organizations know which stages are more challenging, they can commission consultants at the right stage.

The objective and purpose of this thesis are to validate and identify the key barriers to sustainability change in organizations, match them with the central phases of the change process, and develop understanding of common barriers in each phase. This will help organizations see what to expect in each phase and plan resources accordingly. Phases with several barriers can be considered critical for success, as the risk of failure increases with the number of potential barriers faced during each phase.

The research consists of a literature review for a conceptual framework, followed by the collection of primary data through semi-structured interviews with external change agents. Sustainability consultants were selected to represent external change agents, due to their experience with several change programs within organizations and exposure to several organizations. New knowledge is generated by interviews with sustainability consultants to understand their views on common barriers and critical phases of change. Specific research questions for the study are:

- What are the key barriers to environmentally focused sustainability change in organizations?
- Which phase of the change process is the most challenging?
- What are the most common barriers in each phase and why?

This thesis aims to enhance knowledge about barriers to environmentally focused sustainability change in organizations which can help prepare organizations for the upcoming change, and ultimately increase the likelihood of permanent and successful environmental sustainability change. Additionally, the contribution is to document valuable insights from sustainability change experts within academic literature.

The fundamental objective is to bridge the gap between academic frameworks and intuitive practices, and to increase the likelihood of permanent and successful change initiatives empirically.

3.1 Research approach

Due to the aim of enhancing knowledge around the subject, the research was executed as a research report. This mean it was prepared in a good factual style and fully complying with Laurea's guidelines for written assignments, in addition to written in the language of education. (Laurea University of Applied science 2019.)

This research was executed by following a structured approach, consisting of seven steps. A structured research approach can maximize research efficiency, by maximizing the outcome-to-effort ratio (Kothari 2004; Franklin 2012). The research approach is presented in Figure 2.

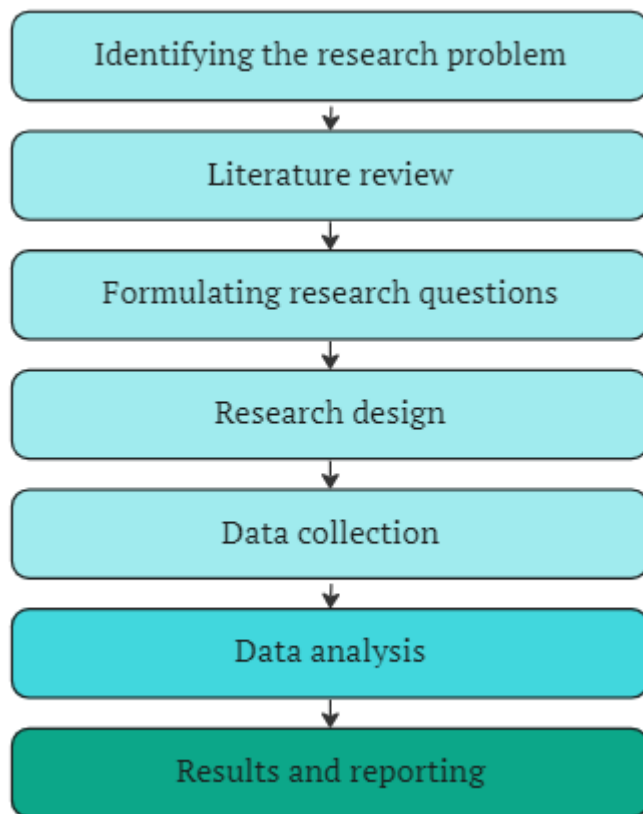


Figure 2: Research approach

The first step in this research was to define the research problem. The research problem was observed by the author in their own working environment as a consultant. The author observed how their clients spend significant amounts of funds hiring consultants, but still failed to achieve desired results. Part of the problem seemed to be that consultants were hired at the wrong stage, sometimes too early, when the client was not sure what they wanted and sometimes too late, when all the important decisions had already been made. This made the author reflect on what stops clients from achieving change, and what the barriers to change are. Based on initial conversations with sustainability experts, the author discovered that there are different barriers based on the stages the client is currently on, and consultants' influence depends on which phase of the change process the client is currently on and what the consultants' scope is. The same consultants are not always present throughout the whole change process with their client. While the author does not work as a sustainability consultant, they felt the importance of the topic and wanted to aid sustainability efforts within organizations by finding ways to improve the success rate of environmentally focused sustainability programs. This narrowed the research problem to barriers and blockers for sustainability change. Once the research problem was identified, the author investigated the general topic to narrow down the research focus. It quickly became clear that the data on environmental change in organizations is relatively limited, and it would be important to generate new knowledge on the subject.

The next step was to conduct a literature review consisting of academic publications, books, journals, online publications, and other peer-reviewed material. The literature review was an imperative part of the research, as it provided the conceptual framework for the research. Furthermore, the literature review was used to formulate specific research questions by identifying gaps in the literature. It is worth noting that research focusing on environmentally focused sustainability change in organizations is relatively scarce, and several knowledge gaps were identified. The research questions were selected based on the research focus, which was determined earlier, and the author's own interest.

The research method, including the data collection and analysis was determined based on the research questions and the literature review. The research utilized the literature review as a foundation for the primary research, which consisted of semi-structured interviews with external change agents. A summary of research methods and analysis techniques are presented in Table 2.

Research type	Research method	Analysis	Source
Desk-based research	Literature review	Synthesis	Electronic and physical peer-reviewed material such as books, journals and articles
Primary research	Semi-structured interviews	Thematic analysis	Sustainability experts and consultants

Table 2: Research methods and analysis techniques

The research approach selected is a qualitative approach, which focuses on the qualitative aspects of any phenomena (Franklin 2012). A qualitative approach is used to answer questions about individuals' or groups' experiences, feelings, thoughts, and perspectives. Therefore, qualitative research aims to discover the subjective views, producing descriptive data rather than quantities of data (Taylor, Bogdan & DeVault 2015). The qualitative portion of this research consists of primary data from semi-structured interviews with sustainability experts and consultants for organizational change. Interviews were selected, as they allow subjects to present a comprehensive view of the topic, generating detailed data on the topic. Interviews are also more relaxing, and allow the opportunity to ask clarifying questions, when necessary. The interviews were conducted as semi-structured, as findings from the literature review were used as a foundation for the interviews. Many researchers have previously used semi-structured interviews when studying organizational change (for example Allen, Jimmieson, Bordia & Irmer 2007).

A qualitative research approach was selected due to the nature of the research questions, requiring descriptive answers and interaction with the consultants. It is critical to understand the fine details of the barriers, relevant change phases and reasons behind it. Furthermore, consultants' knowledge is often commercially sensitive, which could make it more difficult to collect large quantities of data on the topic.

3.2 Data collection

The data collection for this research consisted of desk-based and primary research.

The desk-based research consisted of a literature review of peer-reviewed material, such as academic studies, books, journals, articles, and other publications. The literature review was used to develop a conceptual framework, which was also used as a foundation for the primary research. A conceptual framework is a network of linked topics which together provide a comprehensive understanding of a phenomenon (Jabareen 2009). As the topic combines several different concepts, a conceptual framework was considered appropriate for this research.

The primary data in this study was collected through semi-structured interviews with external change agents, which in this study were sustainability consultants working on organizational change projects. The semi-structured interviews have predefined questions or topics, and all the participants respond generally to the same questions. This approach allows some variation depending on the interview progression, while still ensuring standardization. The ability to ask open ended questions ensures participants can elaborate on their thoughts and experiences, providing depth into the data (Harris & Brown 2010; Taylor, Killick & McGlade 2015; Franklin 2012).

At the beginning of the interview, each participant answered a set of standard questions to record the characteristics of the participants. After that, each participant was sent a link to the Miro board, a prepopulated virtual 'board' with a definition of sustainability and environmental sustainability change, key barriers to change based on the literature review, notes to add additional barriers, and a blank presentation of the change process. This allowed the consultants to interact with the information. The Miro board set out the structure of the interview. This is presented in Figure 3.



Figure 3: Blank 'virtual'board

Once the participant opened the board, the participants were asked to review the definitions provided. They were then asked to review and validate the key barriers identified from the literature and to add additional key barriers they wanted. They were also encouraged to provide additional details and explain their views and give examples. Once all the barriers were mapped, the consultants were asked to move the barriers into the right phase followed by discussion about the barriers, their recurrence, and reasons behind it. To aid the conversation, a set of topics were prepared based on the literature review to generate in-depth conversation about the barriers in each phase and reasons behind their persistent recurrence. The aid questions are included as Appendix 1 (Appendix 1).

Most of the interviews were conducted online via Microsoft Teams, which allowed recording of the sessions. Two interviews were held physically and on one occasion the recording was corrupt. For these interviews the author had to rely on their notes. Microsoft Teams transcribed the virtual interviews automatically, which reduced the risk of misinterpretation of data (Saunders, Lewis & Thornhill 2012). Each of the interviews lasted around 60 minutes.

All the consultants were identified within the author's extended professional network. Before sending invitations, the author reached out to all potential participants to confirm they have experience in the research subject by messaging them via online platforms (Microsoft Teams and LinkedIn). Once this was confirmed, the consultants were invited to participate in the study by sending an invitation by email or via LinkedIn. The invitation letter is included as an appendix (Appendix 2). A total of 11 consultants with the appropriate experience agreed to take part. For more information about the consultants see tables below (Table 3 and Table 4).

Participant	Relevant service expertise	Industry	Years as consultant	Title	Additional information
1	Strategy, Reporting, Gap analysis, Road mapping	Industrial, Production	9	Managing Consultant	Formal knowledge about change process
2	Sustainability, Environment, Climate Change	No industry focus	5	Senior Consultant	No formal knowledge of typical change process
3	Transformation, Sustainability, Net Zero	Industrial and infrastructure	9 years	Associate Consultant	Professional experience managing change on the client side
4	Climate change, sustainable development	Public sector and procurement	10 years	Senior Consultant	Professional experience managing change on the client side
5	Strategy, ESG	Commercial and retail	11 years	Associate Consultant	Professional experience managing change on the client side
6	Transformation, organizational change	No industry focus	9 years	Senior Consultant	No formal knowledge of typical change process

Table 3: Overview of participant consultants

Note: Formal knowledge of change process refers to academic or formally taught knowledge of change process (e.g. degree, certificate, training/ course).

Participant	Relevant service expertise	Industry	Years as consultant	Title	Additional information
7	Decarbonization, transformation, implementation	Built environment	30 years	Technical Director	No formal knowledge of typical change process
8	ESG, Dual Diligence, Implementation	No sector focus	8 years	Associate Consultant	No formal knowledge of typical change process
9	Net Zero, Implementation, Strategy	Transportation	15 years	Associate Director	No formal knowledge of typical change process
10	ESG, Green Finance, Implementation	No sector focus	20 years	Director	No formal knowledge of typical change process
11	Strategy, Implementation,	No sector focus, but working mainly with private sector clients	16 years	Associate Director	Formal knowledge about change process

Table 4: Overview of participant consultants (continued)

Note: Formal knowledge of change process refers to academic or formally taught knowledge of change process (e.g. degree, certificate, training/ course).

3.3 Data management plan

A data management plan was created before primary data collection. The plan aligned with the Laurea's University of Applied Science guidance. This thesis will be published on the Theseus database, and it will be a public document. The study was conducted as part of a degree and was evaluated as part of it. This ensures a fair and objective treatment. All the data collected was kept on the author's Google Drive and Miro account. Only the thesis author had access to the data. The data will be deleted once the thesis is evaluated and published. The data was stored during the full thesis process. No confidential information was included at any time. (Laurea University of Applied science 2019.)

3.4 Data analysis

The literature review material was analysed by synthesizing the information. Synthesis brings the information together, as it extracts content from different sources to create new text. It integrates and connects information from different sources. (Mateos & Sole 2009.)

The primary data collected during the research was analyzed using thematic analysis method with an inductive approach. Thematic analysis consists of systematically organizing the data by identifying patterns in a dataset and grouping the patterns into themes. Once the data is grouped into themes, the researcher draws meaning. The method is generally used in qualitative research as it is a highly flexible way of interpreting data and finding meaning (Majumdar 2018; Braun & Clarke 2006; Braun & Clarke 2012).

An inductive approach is a form of reasoning which is aimed at generated understanding or meaning in complex data by summarizing themes and categories. The approach allows researchers to find frequent, dominant, or significant themes without the restraints imposed by other structured methods. One of the key purposes of the approach is to establish links between the research objectives and key findings from the data. (Thomas 2003.)

Once all the interviews were conducted, the interview data (consisting of transcript of the interviews, virtual 'boards' in Miro and the authors interview notes) were analyzed by using the six-phased approach suggested by Braun and Clarke (2006). The steps are presented in Figure 4.

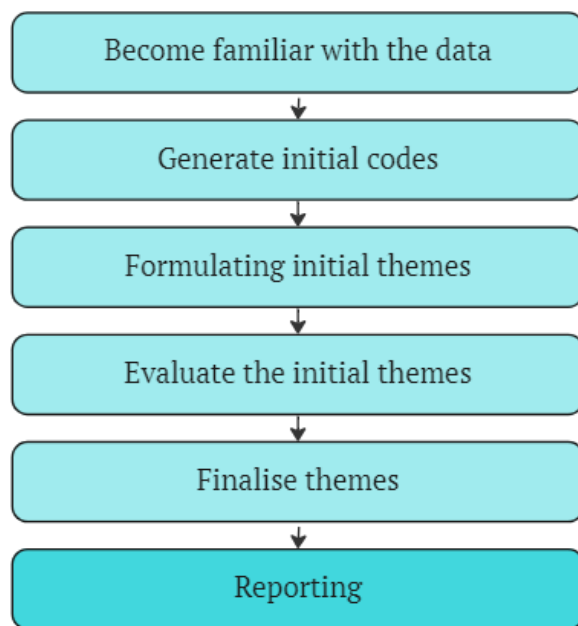


Figure 4: Thematic analysis approach

The first step was to become familiar with the data. This phase involved reading the interview transcripts, interview and Miro board notes several times. Before moving to the next stage, initial thoughts were recorded as suggested by Braun and Clarke (2006). These were recorded by adding comments to the notes. Additionally, some clearly linked topics were highlighted with the same color to record the connection.

Next, the data was arranged in a more systematic way by generating initial codes. Coding helped structure the data according to the research questions. ‘Coding’ is a practice of reducing complex data into smaller pieces of meaning. The coding was done by using line-by-line coding, which is a more inductive approach. In practice, this was done by highlighting the transcripts and other data to identify insights. The line-by-line coding also meant that all the data was reviewed, and the data seemingly irrelevant to the research questions was also coded. The coding was also conducted as open coding, which means that there were no pre-set codes, and the codes were developed and modified during the process. The coding exercises were performed for both the Miro board notes and the interview data (transcripts and notes). A blank Miro board was used to assist with the coding. This board combined the notes from all the interviews.

During the third step, initial themes were identified. A theme is defined as ‘a pattern that captures something significant or interesting about the data and/or research question’ (Braun & Clarke 2006). Braun and Clarke (2006) explain that there are no strict rules about theme identification, as themes are characterized by their significance. Many of the codes were directly linked and created a natural theme, like sustainability rules and regulations in

organizations. These were collated into an initial theme called 'Unclear guidelines.' The theme presented an additional barrier to environmentally focused sustainability change.

After creating the initial themes, it was time to evaluate the themes. During this phase all the initial themes were reviewed, and sense checked. All data relevant to each theme is reviewed to evaluate if the assigned theme supports it. It is important to note that a large part of the conversation focused on confirming the previously identified barriers, which functioned as themes. Data related to these barriers were assigned to support the existing themes, and therefore verifying their presence in environmentally focused sustainability change. Maguire and Delahunt (2017) suggest thinking about the following questions when reviewing the themes:

- Does the theme make sense?
- Does the data support the theme?
- Is the theme too general and can several themes be combined into one?
- Do the themes overlap, and should they be different themes?
- Are there subthemes?
- Are any themes missing?

Once all the themes had been adequately captured, a total of two 'thematic maps' were created. The first thematic map included additional barriers to environmentally focused sustainability change in organizations. The second thematic map included the results from conversation related to common barriers and reasons behind this. Both maps include the sub-themes and key pieces of information related to them. This helps to ensure all information is captured and the themes are appropriate for the data. Both 'thematic maps' are visualized in the results chapter.

Once the maps were complete and all the themes were evaluated, it was time to finalize the themes and "identify the 'essence' of what each theme is about" (Braun & Clarke 2006). In this step it was important to ensure the theme did not just paraphrase the data but identify the reason why the theme is interesting. This was done by generating a story for each theme, which included how it fits in the overall story, and how it related to the research questions. By doing this, each theme was considered individually and in relation to others. (Braun & Clarke 2006.)

The final step was to report the findings. This included writing the results and conclusion section of this report, in such a way that enough evidence of the themes was provided. Braun and Clarke (2006) advise that it is good to select vivid examples or extracts from the data, so the evidence behind the theme is easily demonstrated.

The data analysis method allowed the generation of answers to the research questions set earlier. The question related to identifying key barriers to environmentally focused

sustainability change in organizations was answered by following an inductive approach, where the previous literature was used as guidance when comparing with the consultants' perspectives. This exercise generated a comprehensive list of barriers to environmentally focused sustainability change in organizations. The list consisted of previously identified barriers, which were validated to be relevant in this context, in addition to new barriers based on the consultants' experiences. Furthermore, the consultants mapped the barriers within different change phases, which revealed which part of the change process is the most challenging for organizations. Finally, the thematic analysis combined with the inductive approach was used to analyze the data from the wider conversation around the change phases and barriers. The data was meant to be used to understand why some barriers are more common and the reasons behind that, however during the first interviews it became clear this was the wrong question. This is discussed further in the results section.

4 Results

This chapter presents the research result, which are discussed in three different parts, all related to one of the research questions.

4.1 Barriers to sustainability change

The participants validated most of the barriers which were discovered during the literature review; however, some edits were suggested. The participants explained that some of the barriers identified in the literature were considered outdated. For example, the experts explained that in the past, external stakeholders were a barrier for change as many stakeholders were resistant to change. This, however, has changed, and most stakeholders currently can be catalysts for change as organizational need to comply with stakeholders' requirements. The parts in italic are testimonies gathered during the interviews. They are examples of experts supporting making edits to the barrier description.

“Stakeholders such as suppliers are pushing for these changes as they are also going through this change. They have other clients pushing for it, who have other clients. It's a chain reaction starting from a progressive organization setting the requirements for all.”

“The best suppliers want to stay in the game, and that means for them to change their practices. Once a supplier has made changes to their operations, they don't want to go back, which forces other clients to make changes as well.”

The experts also identified additional barriers to environmentally focused sustainability change in organizations, which were unique to this type of change. The experts highlighted that all organizations will experience some barriers but are unlikely to experience all of them. Organizations should learn about different barriers as it can help them identify them

during the change process. The updated list of barriers, including previously identified barriers and new barriers, are listed in Table 5.

Barrier	Updates to the barrier description
Employee resistance to change from	<p>According to expert interviews, stakeholders are unlikely to resist change. Most stakeholders are more likely to act as catalyst for change and generate pressure for organizations to change.</p> <p>This barrier previously included stakeholder resistance and this was removed based on expert interviews. The description otherwise remains the same as presented in the literature review.</p>
Lack of awareness	Confirmed to be relevant in environmentally focused sustainability change programs.
Inadequate change planning	Confirmed to be relevant in environmentally focused sustainability change programs.
Lack of resources	Based on the expert interviews, ‘lack of resources’ and ‘capabilities’ were split into two different barriers. The description otherwise remains the same as presented in the literature review.
Lack of capabilities	Based on the expert interviews, ‘lack of resources’ and ‘capabilities’ were split into two different barriers. The description otherwise remains the same as presented in the literature review.
Structural barriers	No edits were suggested. However, several experts suggested structural barriers are not a major barrier for environmentally focused sustainability change.
Absence of clear vision or justification	Confirmed to be relevant in environmentally focused sustainability change programs. While most individuals understand the reason behind these programs, organizations fail to articulate the activities they have selected within their change programs.

Table 5: Updated list of barriers to environmentally focused sustainability change

Barrier	Updates to the barrier description
Competing demands	Confirmed to be relevant in environmentally focused sustainability change programs.
Incompetent change agents	Confirmed to be relevant in environmentally focused sustainability change programs.
Lack of organizational readiness	Confirmed to be relevant in environmentally focused sustainability change programs.
Rushing change	Confirmed to be relevant in environmentally focused sustainability change programs.
Experience of previously failed change initiatives	Confirmed to be relevant in environmentally focused sustainability change programs.
Lack of leadership and poor management	Confirmed to be relevant in environmentally-sustainability change programs.
Lack of employee involvement and commitment	Confirmed to be relevant in environmentally focused sustainability change programs.
Poor communication	Confirmed to be relevant in environmentally focused sustainability change programs.
Unclear guidelines	Additional barrier identified for environmentally focused sustainability change programs.
Lack of targeted incentives at all scales	Additional barrier identified for environmentally focused sustainability change programs.
Inadequate measures of success	Additional barrier identified for environmentally focused sustainability change programs.

Table 6: Updated list of barriers to environmentally focused sustainability change (continued)

The thematic analysis of the interviews uncovered three themes of key concepts, which represent potential barriers to environmentally focused sustainability change in organizations. The clusters and relevant sub-themes determined the thematic map of this research. The thematic map is presented in Figure 5 below.

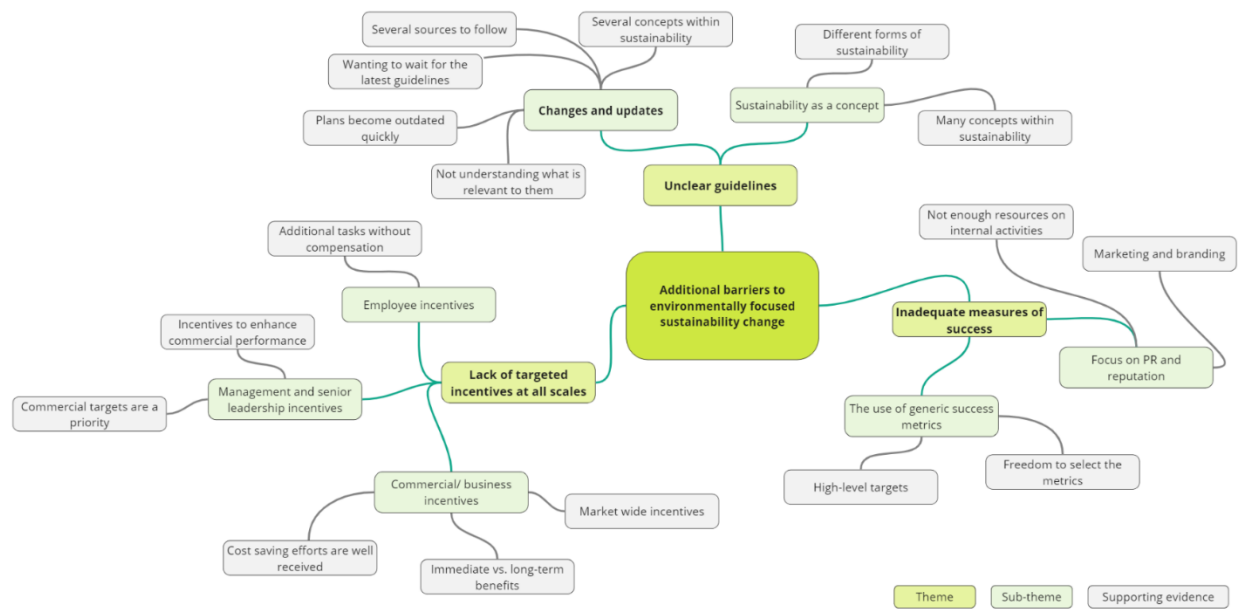


Figure 5: Thematic map presenting additional barriers

The components of the thematic map are further described below and demonstrated utilizing quotes from the consultant interviews.

Additional barrier (Theme 1) - Unclear guidelines

Unclear guidelines were highlighted as a clear barrier to change, and it was mentioned in nearly every interview. Unclear guidelines are primarily related to consistent changes, updates, and the concept of sustainability. The guidelines published by the public sector are unclear, with no clear direction what organizations should do, or they are updated so often that organizations don't have time to act. This, combined with the confusion around the concept of sustainability, can be a barrier for organizations who are starting their change journey. The 'Unclear guidelines' barrier consists of two sub-themes, which are summarized below.

Subtheme 1 - Changes and updates

Sustainability is still a new topic in many organizations, individuals and even for many governments. Governments release several guidelines and policies which organizations are expected to follow, with regular edits and updates. Implementing changes takes time, and many organizations struggle to make progress with constant changes to the guidelines. Organizations also want to wait for the latest guidelines, so they don't need to make changes to the plan, which delays them acting. Bowen and Rydge (2011) also argue that the connection between climate-change, fiscal, and monetary policies may threaten the long-term credibility of climate-change policies. For example, governments may be tempted to change certain climate policies in the hopes of gaining short-term political gains. This may be confusing for organizations, not understanding why new policies are introduced so quickly (Bowen & Rydge 2011). When the guidelines are not clear or organizations can't rely on them, all the decisions made within the organizations are impacted. For example, one of the participants noted:

"Sometimes new guidelines are published when a client is halfway through publishing their strategy. This creates additional costs for them to make sure it aligns. But the space is moving so quickly, clients should not worry about this - there will always be new guidelines."

Another participant explained how client organizations become discouraged when they need to make changes or updates to their sustainability plans. Change takes time, so they might have been preparing for the plan for several months. The participant explained:

"Some clients have prepared a plan, which by the time it's launched, is outdated. It has not aligned with the latest guidance, which is really discouraging....This primarily happens in smaller organizations, which don't have dedicated sustainability teams."

Unclear guidelines and regular updates may also make it difficult for organizations to know which regulation applies to them. If organizations operate in one specific industry, they might not understand which regulation applies. One participant described the following:

“I have had clients who don’t understand why they need to align with biodiversity guidelines, explaining that they don’t have anything to do with biodiversity. One client was working in cosmetics and did not understand the link... The guidelines don’t make links between industries clear.”

The lack of unclear guidelines may delay organization’s ability to act, despite the risk of non-compliance. With several updates and regulations, it is unlikely that monitoring and evaluation practices are keeping up with the changes. It is not possible for individuals to act if they don’t understand what is required from them. Parker (2000) explains how policymakers sometimes feel pressures to issue new regulations or expand existing ones to cover unforeseen circumstances, address new problems and close loopholes. As the sustainability industry moves so quickly, with new information discovered almost daily, it is no wonder that organizations feel overwhelmed. One of the study participants noted:

“Clients choose to not act, as it’s overwhelming. They are waiting for clear guidance which they can easily follow and be sure they have done it correctly. Not all clients have funds to hire consultants.”

Subtheme 2 - Sustainability as a concept

Sustainability is still a new concept for many organizations and many still don’t understand it. This can make implementing it difficult. There are several related and similar concepts, and organizations don’t know how everything is related. Many individuals use the term ‘sustainability’ without full understanding of the meaning, or they don’t use the term correctly. Because of the concepts semantic ambiguity, when people have conversations about sustainability, they are not talking about the same thing (Duarte 2015). This has created a situation where organizations are not sure what they should do when they are asked about sustainability. When organizations are not clear what they aim to achieve, the change program is likely to fail. For example, organizations need to be clear what expertise they require and what do they mean when they talk about sustainability goals. One participant explained:

“Clients don’t know what they need, and management group is like ‘ooh sustainability - sounds important, let’s hire someone to look into this’. But then, they don’t know what skills they need or what they want them to do.”

Another participant explained that organizations remain in the early stages of change process for a long time, as are not sure what they should do. Organizations are told to take sustainability seriously, but unless they have technical expertise, they are unable to make the required decisions. The problem still causes issues through the change process. This may show as lack of leadership in an organization, which is another barrier validated during the interviews.

“It’s not as simple as that. The client won’t know what to ask for because the client doesn’t know what should be done. That will be a problem all the way through. They won’t challenge or they’re less likely to challenge how things are done now.”

Additional barriers (Theme 2) - Lack of targeted incentives at all scales

Incentives are an important way to encourage and enforce change. They support change processes at all scales. Lack of targeted incentives at all scales represents an important barrier for successful change implementation. Within the lack of targeted incentives at all scales theme, three main subthemes were identified as the most paramount:

Subtheme 1 - Employee incentives

Employees are at the center of successful change initiatives, but often change is imposed on them. Even when employees are involved in the change process, they lack the incentive to change their behavior. This could be due to various reasons, including lack of time or capabilities. In many cases employees are asked to perform or learn new tasks without additional compensation, while still expected to perform their original tasks to the same standards. Bocken and Geradts (2020) also argues that organizations focus on short-term benefits motivated by a short-term incentive system at the operational level. There is limited reward for employees to support sustainability change, with often varied long-term benefits. Therefore, employees are unlikely to change their behavior, which will result in change program failure. Quotes from the interviews include:

“Employees are asked to take on new tasks and change how they do things without the time and resources to do it. Many are expected to do additional tasks in addition to their day jobs. They are accountable for their normal tasks, which is their priority”.

“Clients assume employees are happy to do extra to achieve sustainability targets. This just is not true, you know. Employees don’t want to give their free time and money to make the change happen. Some companies don’t budget the time or the funds required. For example, we had a client asking employees to write reports monthly on supplier sustainability progress. But why would they? They were asked to do this without no additional pay, no direct benefits to them.”

Subtheme 2 - Management and senior leadership incentives

Management and senior leadership support is critical to drive sustainability change in organizations. However, they are often rewarded based on meeting commercial targets. This incentivizes decision makers to prioritize activities that lead to improved commercial performance, rather than improved environmental performance. Many decision makers receive regular bonuses, which depends on how well they meet their set targets. Even when sustainability targets are part of the incentives' framework, organizations might find ways to avoid holding individuals accountable. Ensuring the management and senior leadership incentives support the sustainability change agenda is critical as Derchi, Zoni and Dossi (2021) found that linking senior leaderships compensation to CSR goals produced positive results only after three years. Sustainability performance also continued to improve during the following years. Prioritizing commercial targets can hurt the long-term sustainability agenda, as explained by one of the participating consultants:

“If a decision maker’s annual bonus depends on meeting commercial targets, that is their priority. Any other tasks and goals are important, but won’t be actioned if they threaten the commercial goals. So you have wrong measures of success.”

When organization decision makers prioritize commercial targets, that will cause additional barriers across the program. They normally don’t allocate enough resources, nor do they provide the support needed to achieve the targets. Failure to implement these programs is not considered important, as the same decision makers will still celebrate meeting their annual commercial targets. One of the participating consultants explained how managers’ priorities may impact the change program:

“When we get involved, we can quickly see what the managers’ priorities are. Managers that want to get things just done and are driven by reporting to stakeholders, often the reasons for urgency, don’t care about the strategy achievability. They want things that sound good and publish them quickly. Managers who take the time and want to do things right are the clients who have no commercial targets. These could be governmental clients, as they really want to bring real change into their organizations.”

Subtheme 3 - Commercial/business incentives

The business case for environmental change is becoming clearer, with many organizations implementing sustainability programs and practices which have immediate impacts such as renewable energy sources and waste-related practices. There still is a lack of incentives targeting wider scale organizational change, targeting commercial and business operations. Bocken and Geradts (2020) points out how many private organizations focus on short-term growth, which is closely linked to maximizing shareholder value. They aim to capture

immediate profits to satisfy shareholders who demand quick returns, which dominates decision making. One of the participating consultants explained the situation as following:

“The business case to make organization-wide changes often relies on future benefits. This is not attractive enough for most clients, as they still have shareholders to report to.”

While most organizations know the disbenefits of climate change, they want to also understand how they benefit from the changes they make directly. It is not enough to know that the temperature remains the same in 30 years, they want to know the direct benefit today. Organizational value short-term benefits over long-term benefits. Two of the participating consultants explained:

“Organizations are interested and want to take action, but they want to know clear benefits for them.”

“Businesses do the bare minimum to say they have done something or they will take action if there is a business case for it. This is why you see so many clients doing changes which bring them cost savings. But there is no strong incentive for them to change their whole operations.”

The lack of commercial and business incentives is a barrier across the markets. Individual organizations can mitigate the barrier by standing out, however it is always riskier to do something that others are not doing. Organizations want to avoid uncertainties to avoid poor financial performance and therefore most decisions within organizations are driven by avoiding risks. Supporting quotes from the interviews are included below.

“Clients need a push to make the change - either they need to be forced or incentivized. At the moment there is not enough incentive for organizations to make the change. This is even more important during uncertain economic times.”

“You know clients don't have the incentive to change things unless everyone in the market works together. We're all dealing with the same problem.”

Additional barriers (Theme 3) - Inadequate measures of success

Organizations set out targets, and the success of these targets is tracked through different success metrics. The same happens with any change programs, including environmentally focused sustainability change programs. The interviews revealed that the currently used measures of success are outdated, largely because organizations use generic measurements, or organizations focus on the PR and reputational aspects of the program. All this slows down progress at micro and macro level. Bénabou and Tirole (2010) shows how some organizations want to avoid negative ‘events’ related to sustainability, and therefore decide on easily

achievable targets. This will help them achieve positive results and celebrate success. Some organizations may decide to have stricter targets, however it may take them longer to achieve them and this gives them less public exposure. Within the inadequate measures of success, two main subthemes were identified: generic measures of success and focus on PR and reputation.

Subtheme 1 - Generic measures of success

Organizations going through environmental change programs set out success metrics to evaluate the program progress. These metrics can determine the specific activities the organization is going to implement, or the success metrics are planned based on the activities. In many situations, the metrics implemented are high level and generic, which means they are easily reached, but no real change has been achieved. Furthermore, there is currently no global standardization of success measures, so organizations can decide on which aspect of sustainability they want to action. This can also tie back to Theme 2, as most employees are held responsible for reaching set success metrics. They have an incentive to make the metrics achievable. One of the participating consultants explain:

“Some clients have very generic KPIs, such as reduce carbon emissions or reduce business travel - but they don’t actually set out by how much or what action are you targeting. The target is too big and not personal, so no one really takes ownership of it.”

Sometimes setting generic measures of success may harm clients, as they are not achievable. If clients don’t know which targets are relevant for them, they won’t understand how to achieve them. Some organizations set the targets correctly, but not specific enough for them to become meaningful. This could cause them failing to meet the targets, creating poor publicity. Supporting quotes from the interviews are included below.

And you know, some clients lack the expertise to do detailed and science-based targets and KPIs, so they do what they think is right. Some even end up copying generic targets from regulations and governments. But it’s not specific to the client which is a problem.”

“I have had clients request ‘improved sustainability’ as a success metric - which can mean anything. I mean, where do you even start with this metric?”

“Most clients have the freedom to set out what they measure and report on, and most of their clients never go and check. There should be some standardization so you can expect all clients in one industry working towards the same goal.”

Subtheme 2 - Focus on PR and reputation

Climate change is a major topic across the globe and there is pressure for organizations to act against climate change. One of the key drivers for environmentally focused sustainability change is reputation protectiveness, as organizations want to at least be perceived to be acting. Organizations who pursue an environmental change program to protect their reputation or to gain positive PR are likely to fail, as the change program is motivated by the wrong reasons. Lyon and Maxwell (2011) propose a relevant term 'greenwashing', which describes selective disclosure of positive information about an organization's social or environmental actions, without describing the complete picture, to generate an overly positive image. Organizations may pursue a publicity campaign around sustainability, however this could not be considered an environmentally focused sustainability change. Decisions in these situations are made to achieve different objectives. Supporting quotes from the interview are included in italic below.

"Clients are very focused on PR and how it looks to clients and shareholders. Many decisions are taken based on how it looks to the outside - these clients struggle most when implementing the program."

"If all actions taken is just to look good, nothing will stick. Employees won't support it and there will be gaps in the plan. They never invest enough resource to get their house in order if it's all for show."

4.2 Challenging phase during the change process

The experts identified the planning phase as the most challenging phase during the change process. The experts collectively identified 15 barriers during the planning phase, including several sub-themes within each barrier. Based on the number of barriers, the planning phase is only slightly more challenging, as the experts identified only one more barrier in the planning phase compared to the action phase. The experts explain that the planning phase was seen as the critical phase, as if the phase is done correctly, the action and implementation phases will be easier. This was said to improve the success rate of the desired change. Most challenges at the later stages can normally be tracked down to the planning phase. The experts explained that many organizations proceed to the action phase precariously, and face significant barriers at later stages, many eventually resulting in change failure. When asked directly which phase is the most challenging, all experts identified the planning phase as the most challenging one. Supporting quotes from the interview are included in italic below.

"If a client has invested in the planning, rest of the activities will be natural progression."

“It all comes together in the action phase - any barrier you face here is because of poor planning.”

“Most barriers are first identified in the planning phase. Unless they are addressed, they will end up causing failure at later phases.”

Clients can definitely do the exploration themselves. Where [consultants] are most useful is the planning phase. This is where they struggle and try to take shortcuts. Then they try to hire us again later, when it's too late. Many clients don't realize that taking the time to plan the activities is absolutely necessary.”

The experts also generally agreed that the exploration phase was the easiest phase. The experts identified 12 barriers to the exploration phase. They explained that this is a stage where they don't necessarily need to hire consultants, as they don't know their business and industry the best. It's better if clients have done most of the exploration themselves, and then consultants help bring it all together during the planning phase. One consultant explained:

“I think clients can do this themselves, they don't need us. Clients will always know their own organizations better than us. We get better results with well-informed clients who have done some of the exploration themselves.”

Based on the interviews, most of the barriers could be observed during each of the phases, suggesting that the barriers are cross-cutting. This was also confirmed during the interviews, as the experts explained that some barriers can be persistent during all phases. Especially when organizations don't take action to remove or mitigate the barriers, the same barriers will remain until the last phase, finally blocking successful change implementation. For example, if an organization has bad communication at the early stages and does nothing to improve the situation, the same barrier will be present at all phases. All the barriers across the phases are presented in Table 7.

Change phase	Exploration phase	Planning phase	Action phase	Integration phase
Number of barriers	12	15	14	12
Barriers observed	<p>Absence of clear vision or justification</p> <p>Competing demands</p> <p>Experience of previous failed change initiatives</p> <p>Incompetent change agents</p> <p>Lack of awareness</p> <p>Lack of employee involvement and commitment</p> <p>Lack of leadership and poor management</p> <p>Lack of organizational readiness</p> <p>Lack of resources and capabilities</p> <p>Poor communications</p> <p>Rushing change</p> <p>Structural barriers</p>	<p>Absence of clear vision or justification</p> <p>Competing demands</p> <p>Employee/stakeholder resistance to change</p> <p>Experience of previously failed change initiatives</p> <p>Inadequate change planning</p> <p>Incompetent change agents</p> <p>Lack of awareness</p> <p>Lack of employee involvement and commitment</p> <p>Lack of leadership and poor management</p> <p>Lack of organizational readiness</p> <p>Lack of resources and capabilities</p> <p>Poor communication</p> <p>Rushing change</p> <p>Structural barriers</p> <p>Unclear guidelines</p>	<p>Absence of clear vision or justification</p> <p>Competing demands</p> <p>Employee/stakeholder resistance to change</p> <p>Experience of previous failed change initiatives</p> <p>Inadequate change planning</p> <p>Inadequate measures of success</p> <p>Incompetent change agents</p> <p>Lack of employee involvement and commitment</p> <p>Lack of employee involvement and commitment</p> <p>Lack of leadership and poor management</p> <p>Lack of leadership and poor management</p> <p>Lack of employee involvement and commitment</p> <p>Lack of leadership and poor management</p> <p>Lack of resources and capabilities</p> <p>Lack of organizational readiness</p> <p>Lack of resources and capabilities</p> <p>Lack of targeted incentives at all scales</p> <p>Poor communication</p> <p>Rushing change</p>	<p>Competing demands</p> <p>Employee/stakeholder resistance to change</p> <p>Experience of previous failed change initiatives</p> <p>Incompetent change agents</p> <p>Lack of awareness</p> <p>Lack of employee involvement and commitment</p> <p>Lack of leadership and poor management</p> <p>Lack of resources and capabilities</p> <p>Poor communication</p> <p>Rushing change</p> <p>Structural barriers</p> <p>Unclear guidelines</p>

Table 7: Barriers observed in each change phase

4.3 Common barriers and reasons behind them

Based on the interviews, the concept of common barriers is highly contradictory. The first two interview participants explained that they don't feel comfortable identifying common barriers to the different change phases. They explained that it all depends on the organization and their internal capabilities. Some organizations might have prepared for the change for years before articulating the vision and the related actions. They are therefore likely to face different barriers than an organization which has just started to think about the outcomes. Answering the question could give a false account of typical barriers, directing organizations to focus on it unnecessarily. The barriers which each organization will face depend on a range of factors. The consultants stated that they would not feel comfortable identifying the common barriers, knowing they would be written in this thesis. They explained something that seems minor in most organizations, can become a major barrier in some organizations for varied reasons. One consultant explained:

“They can all be deal breakers or just minor bumps, it really depends on the organizations. Some clients have major communication teams, so they might not struggle with communication. The same company might not have internal training programs, so rolling out that could become a challenge.”

The consultants suggested to record common or key mistakes organizations make, as knowing the mistakes other organizations have made can be useful when planning your own change program. From the third interview onwards, the experts were asked about typical mistakes during a change process.

The thematic analysis of the interviews uncovered four themes of key concepts, which represents typical mistakes in environmentally focused sustainability change programs in organizations. No sub-themes were identified for the typical mistakes discovered. The thematic map is presented in

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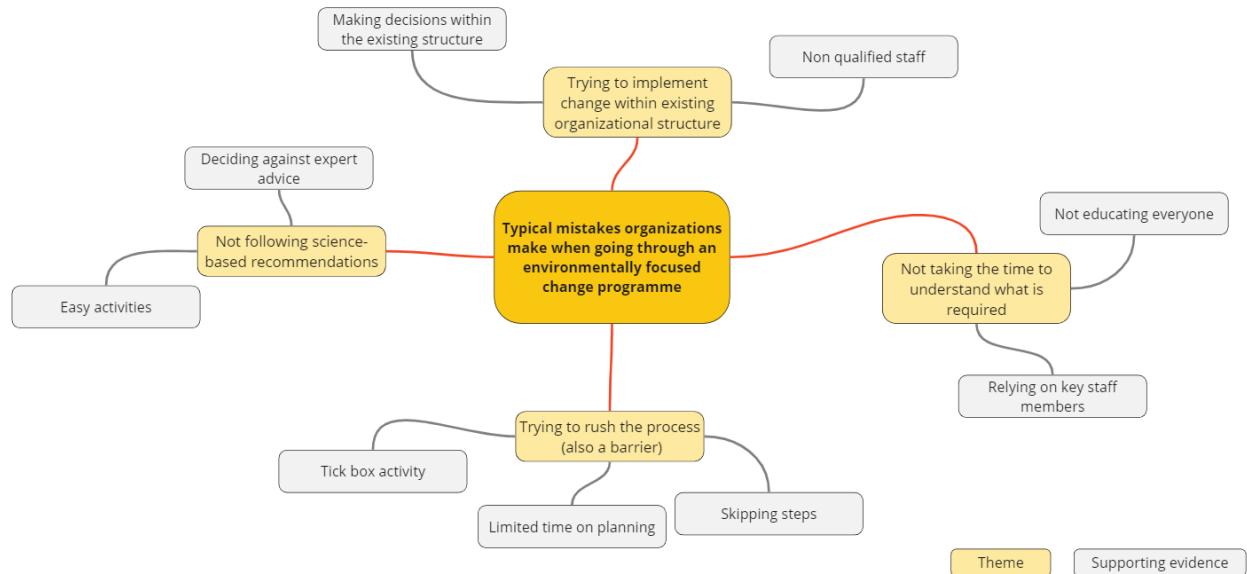


Figure 6: Thematic map presenting typical mistakes

The components of the thematic map are further described below and demonstrate utilizing quotes from the interviews with consultants.

Typical mistake (Theme 1) - Trying to implement change within existing organizational structure

Organizations trying to implement change within an existing organizational structure was highlighted as a typical mistake during environmentally focused change programs. Organizations start their change journey without changing how decisions are made, the governance structure, or staffing requirements. In reality, they are not willing to go through a complete organizational change. Quotes from the consultants are included below.

“They want actions on climate change and stuff to fit into their current ways of making decisions and current ways of making a business case, the current way of making a day-to-day-decision. And really, they need to do it the other way around. They need to change how their organizations work and function because their organizations are not set up to deal with this problem - almost no organization is. So instead of saying ‘I’ll deal with this when it makes sense for my current incentives, my current structure, my current decision making processes,’ they should be saying, ‘no, we need to change things. If we’re not getting result, we need to change how we do everything.’”

“Some champion from the project management team is asked to implement things, but they don’t have any experience in environmental programs. They report to someone who has no experience in this, and so on. They need to change internal structures to allow cross cutting teams working on all parts of the organization.”

“In the future, everyone needs to be carbon literate. Not just the sustainability department, but everyone, so sustainability is baked into the organization, day-to-day decision making in the long-term.”

Typical mistake (Theme 2) - Not taking the time to understand what is required

Some organizations don't understand that sustainability impacts all parts of the organization, and everyone should understand the basics behind it. It is not enough to have an internal sustainability team or hire external support, if most of the staff does not understand what is required. This mistake is closely related to a previously identified barrier related to 'Lack of capabilities'. The difference is when organizations don't create the opportunity for staff to educate themselves and the change program only relies on selected team members. When the team members move on, organizations will struggle and many change programs end there. Organizations rely on someone doing all the changes, without realizing these change programs will impact all parts of the operations. Some of the consultants noted:

“People don't understand what they're implementing and therefore it just becomes a secondary document. They don't realize the kind of the changes needed an organizational level.”

“If you are not educating your staff in sustainability, any activity you propose just becomes a tick box exercise. They won't make the connection between what they do and the desired outcome.”

“They rely too much on one person instead on a process and the whole House of Cards can come tumbling down when somebody leaves.”

Another consultant highlighted how organizations realize the capabilities this type of change program requires. The tasks are assigned to individuals without any knowledge or relevant experience. This could lead to other challenges and barriers during the change process. One consultant's view on the situation is below:

“I find a lot of time, you get a lot of either kind of project offices or investment staff who try and transition into, environmental sustainability, but then there's lack of understanding as to what's actually important. You know, it's not just an overarching policy document, it's the implementation monitoring of it.”

Typical mistake (Theme 3) - Trying to rush the process

Rushing the change process was previously identified as a barrier to change programs, however it was also identified as a mistake. When organizations consciously decide to accelerate the phases, it becomes a mistake which can cause the whole program to fail. The direct quotes below exemplify this theme's main ideas.

“If they plan to do change quickly but if you do things too quickly or if you don't have the right framework set up, then it's difficult to bring everybody along in the change.”

“Rushing change normally shows clients are not as committed to the program, so it's no wonder when the program fails. Clients make this mistake when they don't fully understand the importance of the activities, or the scale of actions required.”

“Tick-box-activity culture in some countries is a mistake, as they will eventually need to come back and do this. They just waste time and money rushing it the first time.”

“People spend too little time planning the activities, so they just kind of decide what to do as they proceed. They don't have a plan in place to guide the actions.”

Typical mistake (Theme 4) - Not following science-based recommendations

Environmentally focused sustainability change in organizations requires science-based actions, as otherwise the efforts don't mean anything. It is important to implement activities which support wider goals and contribute to climate change mitigation. Some organizations, however, decide against science-based recommendations. If the change program activities are not based on science-based recommendations, it is not possible to achieve meaningful change. The activities in that case lose meaning and could be considered to support other targets such as improving reputations. Organizations don't always know what science-based recommendations mean or how extensive changes are required to achieve them. One consultant explained:

“Clients sometimes want us to approve and recommend what they wanted to do in the first case, without any science backing it. They don't want to do the hard thing and want to go against expert advice. Some clients even shop around consultants until they find one that agrees to do this. We once were approved by a client who had fired two last consultants who did not include their preferred recommendations in the strategy. We did not take them on as a client.”

Organizations starting their change journey now have the time to do things well, and make sure they have everything in place to deliver the change program. When the change program is delayed, organizations might be forced to rush the change or redo some part of the program as it did not meet the required targets. As many regulations become stricter every year, it is better to take proactive action and plan for the stricter regulations. This can save organizations resources in the long run. Participating consultants noted the following:

“They need to do these things sooner or later, so might as well follow the advice your expert consultants give you. This will save them needing to redo everything.”

“A good consultant helps their clients to be proactive and try to predict future changes in legislation. Everyone knows the trend - the requirements are not going to ease in the future.”

4.4 How can organizations prepare for environmentally focused sustainability change?

The purpose of this thesis was to generate knowledge about barriers to environmentally focused sustainability change in organizations from the external change agents' perspective. The research aimed to provide organizations with more information about potential barriers they might face in each phase, so they can plan resources accordingly. However, as the goal of this thesis is to increase the likelihood of permanent and successful environmental sustainability change in organizations, a discussion about how organizations can use this information and prepare for environmentally focused sustainability change was needed.

The research results suggest that the change planning phase is the most critical phase of the change process. Successful change planning can reduce the number of barriers faced at the later phases by preventing them, increasing the likelihood of successful implementation. Burnes (2009) explains that there are two approaches to change management: planned and emergent. Planned change management is typically deployed when decision-makers identify a need for change, while the emergent change approach is deployed under force as the operating context has changed. A planned approach enables effective change planning, which is critical for successful change implementation. Unfortunately, as global regulations change rapidly, more organizations are forced to take an emergent change approach as they have not had time to plan for the change program. This presents a significant risk for organizational change programs focusing on environmental sustainability. Organizations should therefore start the process, by exploring and planning as soon as possible. This does not necessarily mean they need to proceed with a full strategy, but to develop better understanding of their current situation and needs. This can help them also understand the scale of the task required and start identifying small steps they can take.

Most of the barriers identified are cross-cutting and could be observed across the change phases. Furthermore, the phases are linked, and some activities will move faster than others. This suggests that organizations can't take a staged approach when planning and preparing for them. Organizations should consider a lifecycle perspective when planning for the desired change. For example, when planning a communication strategy for the change program, the strategy must cover the planning, action, and implementation stages. The individual interventions should be consistent, tracked and have clear continuous between them. Organizations should not plan for communication for only the planning stage, then again for action and implementation. This created disruption and potentially mixed messaging, reducing the effectiveness, and resulting in unclear vision (another barrier). These activities

should be planned as early as possible, again highlighting the importance of the planning stage.

Organizational change involves changing its present state and moving towards a future state of operations. By definition, it consists of significant changes to the organization and its operations. Despite this, many organizations try implementing change within existing organizational structures. Organizations try to avoid making structural changes and implementing successful changes. However, as Burnes (2004) highlights, organizational change happens at all levels of the organization, and therefore it involves all employees within the organization. Organizations implementing environmentally focused sustainability change need to ensure environmental sustainability is integrated into all processes. It is not enough to publish a sustainability strategy unless all other internal strategies are aligned. This also includes external facing strategies, such as procurement and contracting strategies. For example, the sustainability strategy outlines activities to reduce carbon. In that case, all related strategies and operations should be updated to align with the sustainability strategy, including contract awarding and tender evaluations. Embedding environmental sustainability will also require changes to how organizations are incentives, which is one of the barriers identified. It should be one of the success metrics activities are evaluated against. If environmental sustainability activities are evaluated against traditional metrics, these interventions may perform poorly and be discontinued.

A key barrier often used as an excuse for lack of action is a shortage of financial resources. Shortage of funding is also often linked to other barriers to change, such as lack of capabilities (e.g. no funding to provide training), competing demands (e.g. no funding to support additional priorities), lack of employee involvement and commitment (e.g. no funding to involve employees & pay extra staff time) and poor communication (e.g. no resource to invest in comprehensive communication). Understandably, organizations need to allocate resources in the best possible way, which often means allocating funds to keep operating at the same level. Change programs can be expensive, especially environmental sustainability-related change. For example, transformation to a low-carbon and green economy involves a significant investment, which most organizations don't have available in the long-term (Ziolo & Sergi 2019). The costs associated with environmental activities make it harder to justify action and easier to postpone. Delaying environmental sustainability change may force organizations to take an emergent change approach, which can cause several challenges and barriers in the long run. This can end up costing the organizations more in the long term, potentially even their position in the market.

Overall, the themes highlighted in this section can be summarised into two things: organizations should start their environmentally focused sustainability change as soon as possible to ensure efficient time for planning and ensure to do it right the first time. When organizations invest time and effort into effective planning, including reviewing and assessing

potential barriers and mistakes, they can increase the likelihood of permanent and successful environmental sustainability change.

5 Conclusion and reflection

5.1 Conclusions

The aim of the thesis was to enhance the knowledge on environmentally focused sustainability change in organizations, focusing on the barriers that organizations face. The thesis explored typical barriers in organizations and in each phase of the change process by analyzing interview data with external change agents, who were represented by consultants. Interviewing consultants allowed a deeper understanding of the barriers, as all the consultants had experience in working with several organizations, not just one.

The research questions for this study were:

- What are the key barriers to sustainability change in organizations?
- Which phase of the change process is the most challenging?
- What are the most common barriers in each phase and why?

The study discovered that most of the typical barriers to organizational change are also applicable in environmentally focused sustainability change programs. However, the experts suggest edits to some of the barriers. It was also explained that while the barriers are the same, they have different nuances within this type of change program and that some of them might be harder to overcome in this type of change program compared to another type of change. This study did not try to rank the difficulties of these barriers. The experts recognized that environmental sustainability is one type of organizational change, and it should be treated the same way. This suggests that organizations going through this type of change could utilize typical change management practices and tools within their programs.

The study discovered that there are three additional barriers related to environmentally focused sustainability change programs, which organizations should be aware of. Addressing these barriers might require additional tools and management methods to ensure they don't block the successful implantation of the change activities.

Organizational change programs have different phases, and this study used a four-phase model by Bullock and Batten (1985). The experts identified the second phase, 'Planning Phase' as the most challenging phase. Jointly, the experts have observed 15 barriers during the planning phase. The experts explained that if the planning phase and related activities are done well, all the other stages that follow will be easier. Taking the time to do the planning phase properly can reduce the number of barriers the organization faces at the later

phases. Most of the barriers in the later phases can be traced back to poor planning during the planning phase. The experts also identified the 'Exploration Phase' as the easiest phase, which could be done in-house and does not require expert support. Before hiring expert help, organizations need to do some exploring, so they know what expertise they need.

The experts explained that it is difficult to identify the most common barriers in each phase, as there are several factors that impact which barriers any organization phases. Not all organizations will face the same barriers. Instead, the experts suggested looking at typical mistakes during the change process. This meant that this research could not answer one of the research questions. This study identified four typical mistakes organizations make when pursuing environmentally focused sustainability change. One of the mistakes identified was identified as a barrier in the literature and confirmed by the experts. The four mistakes represent lessons learned from other organizations, which other organizations can use when planning for their change.

The research results support the case for planned change approach, instead of delaying the necessary change and ultimately reacting to emergent changes. Based on the results and literature, planned change will be easier to manage.

The research process revealed how scarce the documented information is on environmentally focused organizational change. It is clear from the interviews that confusion around the concept and topic is an issue. As a new concept, most of the academic research has focused on new technical information on the subject, however the research on management side is lagging.

Overall, this thesis achieved its objectives of bridging the gap between academic frameworks and intuitive practices. Furthermore, the study results have the potential to help organizations increase the likelihood of permanent and successful change initiatives if used to plan for organizational change activities.

5.2 Reflections

Environmentally focused sustainability change in organizations is currently a popular topic, with most organizations wanting to show the world they are taking sustainability seriously. The high interest, however, has not translated into significant progress. The author was highly interested in learning more about the subject and potential reasons behind this. This aim was achieved, as the author considered to have learned valuable information about the change process and potential barriers.

This study provides a foundation for future research, as it validated existing literature and its relevant in an environmentally focused sustainability change context. Furthermore, the study results documented valuable insights from sustainability change experts. Consultants' views

are often commercially sensitive, and therefore documenting this information in a public document is valuable. While most consultants seem to have a clear view of the barriers to this type of change program, their views have not been centralized and recorded previously. By documenting their views in this study, consultants can also use this information in the future when discussing with their clients. It can also help consultants discussing a project approach, by providing a baseline for barriers to overcome.

The study participants were open about their experiences, sharing detailed examples from their experiences. These examples could not be recorded in this study due to confidentiality reasons. All the experts were highly passionate about the subject and motivated to share their knowledge, with the general view that sustainability concerns everyone. It is important that everyone understands the urgency to act, so that more people can become sustainability champions within their organizations. The study results provide supportive evidence for planned change and evidence why organizations should invest resource into the planning phase. Effective planning can unlock successful change implementation and reduce barriers in later stages and ultimately the failure rate. While the study did not focus on the planning phase, many of the consultants expressed that many organizations delay acting until competitors have taken action or regulations have changed. The experts articulated how they encourage clients to try to prevent the barriers and suggest ways forward, clients expressed they need time to think about what they want to do and secure additional funding. In many cases, other priorities take over, and sustainability initiatives remain only ambitions. The experts explained how the world is changing, and it's only a matter of time when organizations are required to change and if waited until then, organizations are not able to do it at their own terms. Organizations will be forced to react to emergent change, reducing the planning time. As a result, they may rush the change, which was identified both as a barrier and a mistake.

The research material did not reveal in-depth information about the barriers, such as practical examples and ways to mitigate barriers. While this was not the focus of this research, it became clearer during the interviews how important practical examples are. Consultants past experiences are extremely valuable to organizations, as they can hear how something worked in practice rather than in theory. As the subject can feel overwhelming to many organizations, it is important to provide relatable examples so organizations can visualize the situation. For example, the expert explained that poor communication is a cross-cutting barrier. Knowing this does not necessarily help organizations identify if they are delivering poor communication. Does poor communication mean infrequent communication, or that the method of communication is poor? So, what does poor communication mean? Instead of identifying the theme, Collecting and presenting practical examples of each barrier would be useful for organizations.

Another important point was that the interviews did not answer the third research question: “what are the most common barriers in each phase and why?”. While the experts explained reasons behind this, and suggested focusing on typical mistakes instead, this leaves organizations with a long list of potential barriers to watch out for. If there was a way to focus on the most common barriers, organizations could try to prevent them, but this can be more difficult with a long list of barriers. It is difficult for organizations to allocate resources to address all potential barriers, while at the same time they should not focus on barriers which are not relevant for them. Because of this, it is the authors' opinion that organizations should develop a comprehensive baseline of their activities, including shortcomings during the exploration phase. For example, if they discover they have a strong internal communication team and methods, these can be utilized to ensure the change communication is done well. This is less likely to become a barrier during the phases. However, if they discover they lack a professional development framework, this can indicate that lack of capabilities will become a barrier at later phases. That said, identifying mistakes was interesting, as it can also help organizations to learn from others' mistakes and avoid making the same mistakes.

While it was out of the scope of this research, the research process started to highlight clear differences between different organizational change types. Based on the literature, many organizations proceed with change programs to remain competitive in the market, to increase efficiency, or to achieve cost savings. This is especially true when talking about digital change programs. The research results highlighted that the motivation for environmentally focused change programs is very different. Organizations pursuing these types of change programs are either forced to change their operations, or they value long-term benefits. This highlighted a key difference, which would be interesting to explore further.

Overall, the selected research topic was a good starting point, however in many aspects it was too broad to record meaningful results. As the literature on environmentally focused sustainability changes in organizations is highly scarce, it was important to provide high-level information, which further studies could build on. Furthermore, because too many factors influence which barriers organizations face, it was difficult to narrow down the research topic further. This study should be used to narrow down future studies within the same research problem.

5.3 Ethical and legal considerations

Credible research requires the research to follow ethical research practices at all stages of the research. This research was conducted in alignment with best practice guidelines, such as the Finnish Advisory Board on Research Integrity (TENK)'s Responsible conduct of research (RCR) (2012) guidelines and Laurea's Prevention of fraudulent activity guidelines (2020). Both guidelines include ethical practices for researchers, covering topics from privacy, safety,

confidentiality, researcher's behavior and attitude, plagiarism, and data management. Key practices, which this research follows, include:

- Members of the higher education community respect the work of other researchers and cite their publications appropriately (Laurea 2020, 16).
- Researchers follow scientific standards in planning, conducting and reporting the research results (Laurea 2020, 16).
- Researchers withhold from evaluation and decision-making situations related to the research, when there is the possibility of a conflict of interest (Laurea 2020, 17).
- All research activities are conducted with integrity, meticulousness, and accuracy (Finnish Advisory Board on Research Integrity 2012, 32).
- Other researchers' work is respected by citing their publications appropriately and giving due credit and weight they deserve (Finnish Advisory Board on Research Integrity 2012, 30).

The ethical principles listed in the guidelines have been considered when designing this study, including when contacting participants, conducting the interviews, and analysing the results. The topic of this thesis was approved by the supervisor before commencing the data collection. All people involved in the research were adults who were aware of the research goals. The participants consented to take part in the research by accepting the meeting invite. This was confirmed before the meeting invites were sent. Furthermore, the guidelines were also considered when conducting the literature review, which consisted of quoting other researchers' work.

This thesis did not include any copyrighted, confidential or personal data. This was not done in collaboration with a partner, so no contract was necessary. The thesis is copyrighted by the writer. Ethical review was not needed, as the thesis does not include any specific personal data. There was no cost for this thesis. There are no conflicts of interests with this thesis.

The research material (interview transcripts, audio records, Miro boards and notes) was stored in the author's Google Drive storage for the duration of the research. Only the author had access to the Cloud Storage. After the study is published, the material is kept for three months and then deleted from the Cloud Storage, including trace files.

5.4 Research Limitations

Acknowledging research limitations is part of trustworthy research practices. This section presents the key limitations identified in this research.

One researcher collected and analyzed the data in this research, presenting limitations. Single researchers increase the chances of traceability and the potential for research bias.

(Birt et al. 2016). Furthermore, the author knew some participants, which could increase research bias.

There are thousands of consultants globally working on sustainability change in organizations. The small sample size included in this interview could limit the research results. The interview results identified may not be shared among all sustainability experts working in the change space. While several themes were repeated during multiple interviews, suggesting the size reached its saturation. Fusch & Ness (2015) claim that researchers can't assume data saturates if resources have been exhausted. This suggests new barriers and themes would be identified if additional interviews were conducted.

5.5 Recommendations for future research

Environmentally focused sustainability and organizational change present an extensive field for research and development. The initial literature review revealed that several gaps exist, while the research results highlighted the importance of effective change planning, which requires evidence. Due to the time and resource limitations, this research focused on validating the relevance of existing organizational change research within this context and generating knowledge of the change process, which organizations can use to plan better.

Further research is required into each phase of the change process, especially the planning stage. The phase contained a minimum of 15 barriers, validated and identified as part of this research. Additional research focusing on possible mitigation measures is critical to enable organizations at all scales and levels of resources to feel comfortable with starting a change process. In addition, the research should provide case studies from different types of organizations to allow organizations to relate to the case studies. For example, case studies explaining how the barriers look in the real world, how were they mitigated, and what the impact was, would be valuable. Starman (2013) argues that case studies are especially valuable in practice-oriented fields, including management and human resources.

The concept of planned and emergent change is worth exploring further. Making the case for planned change could encourage more organizations to start their change journey. Highlighting and documenting the impact of delaying this type of change program could be valuable.

Finally, this study reveals how there are typical mistakes organizations make. The subject of mistakes deserves attention, as informing organizations of mistakes which others have made can be powerful. Unfortunately, organizations often realize they have made a mistake when it's too late, which can set them back on their change journey. Coutu (2003) explains how some organizations isolate failure, find an individual to blame, and do not learn from mistakes. This can drain organizational resources, reducing the likelihood of successful

change implantation in the long run. Therefore, additional research into mistakes would also provide evidence to organizations who doubt their actions were mistakes.

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Figures

Figure 1: Literature review summary

Figure 2: Research approach

Figure 3: Blank 'virtual' board

Figure 4: Thematic analysis approach

Figure 5: Thematic map presenting additional barriers

Figure 6: Thematic map presenting typical mistakes

Tables

Table 1: Internal and external drivers for change (Wilson 1994; Murthy 2017)

Table 2: Research methods and analysis techniques

Table 3: Overview of participant consultants

Table 4: Overview of participant consultants (continued)

Table 5: Updated list of barriers to environmentally focused sustainability change

Table 6: Updated list of barriers to environmentally focused sustainability change (continued)

Table 8: Barriers observed in each change phase

Appendices

Appendix 1: Conversation aid topics

Appendix 2: Interview Invitation message

Appendix 1: Conversation aid topics

Conversation aid topics on each phase

Exploration

- What are the challenges related to becoming aware of the need for change?
- What needs to be taken into account when deciding the details of change programs?
- What are the most difficult tasks during this phase?
- What are the typical mistakes?
- How are barriers normally observed?

Planning phase

- How is the problem identified? Does it change as the change program proceeds?
- How important is the right importance and data for the change program?
- How are the goals and actions planned?
- Are there any difficulties related to defining goals and related actions?
- How easy is it to get decision makers approvals and support?
- What are the most difficult tasks during this phase?
- What are the typical mistakes?

Action phase

- What is the role of change management in the implementation?
- What are the typical challenges related to taking action? Why are these typical challenges?
- What are the most difficult tasks during this phase?
- What are the typical mistakes?

Integration phase

- What are the typical difficulties when moving towards change integration? Why is that?
- What are the typical mistakes organizations make?
- At what organizational level are the biggest barriers?
- When do you know the change has been successful?
- What are the most important responsibilities and tasks during this stage?

Appendix 2: Interview Invitation message

Hi [name],

I hope you are doing well.

In case you are not aware, I'm studying for a master's degree in 'Leading Transformational Change' at Laurea University of Applied Sciences (<https://www.laurea.fi/en/>) on my free time. I'm towards the end of my degree, and I'm currently writing my dissertation. My thesis focuses on the barriers to implementing sustainability change in organizations. I'm looking for sustainability experts who have experience working with organizations supporting them in any stage of their change process. It can be any type of organization, both public and private.

If you think you have relevant experience and are willing to share it, it would be great if we could connect sometime in late February/ early March.

The interview would take around 60 minutes and is very informal. The information you share will be completely anonymous as each interview will be assigned a number code to help ensure that personal identifiers are not revealed during the analysis and write-up of findings.

The meeting agenda is the following:

- 5 min - background questions
- 20 min - validating and identifying additional barriers
- 25 min - semi-structured interview
- 5 min - open discussion

There is no compensation for participating in this interview.

Let me know if you have any questions.

Krista Kontturi